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ENVIRONMENTAL
ASSESSMENT &
REMEDIATIONS

October 19, 2018

George Momberger, P.E.
New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau A
625 Broadway
Albany, NY 12233-7015

RE: Pall Corporation, 30-36 Sea Cliff Avenue, Glen Cove, NY; NYSDEC Site No. 130053B – Offsite Soil Vapor Intrusion Assessment

Dear Mr. Momberger:

This letter summarizes recent field activities conducted by Environmental Assessment & Remediations (EAR) at the above referenced site, in response to directives provided in New York State Department of Environmental Conservation (NYSDEC) Standby Contractor Authorization Form, Callout ID: 134372. The scope of work included soil vapor intrusion (SVI) sampling at 2 buildings adjacent to the subject site, located at 1 Arterial Highway South (Route 107), Glen Cove. The Glen Cove Child Day Care Center (GCCDC) currently operates as a day care facility. The other building, Glen Cove Boxing Club (GCBC), operates as an active boxing gym and training facility. The foundation construction at the GCCDC was identified as having a crawlspace, while the GCBC foundation construction was identified as slab-on-grade. A site location map has been provided as Figure 1 and a site layout is provided as Figure 2.

On August 9, 2018, EAR personnel were onsite to meet with representatives from the NYSDEC and the New York State Department of Health (NYSDOH) to assess current onsite conditions and establish air sample locations at both facilities. During the event, total volatile organic carbons (VOCs) and methane screening was conducted at each site, using a calibrated MultiRAE Plus multi-gas meter. Total VOCs and methane were not detected at any location during the site walk. Additionally, chemical inventories were compiled by an EAR chemist. Chemical product inventories and NYSDOH Indoor Air Quality Questionnaire forms are included as Appendix A. Field notes are provided as Appendix B.

Glen Cove Child Day Care Center

Between August 18 and August 19, 2018, EAR collected a total of eleven (11) ambient air samples (including 1 blind duplicate) from GCCDC. Eight (8) indoor air samples (including 1 blind duplicate) were collected from various locations within the building, two (2) samples were collected from crawl space areas beneath the building, and one (1) outdoor air sample was collected at a location upwind of the GCCDC

building. All sample locations were selected and approved by the NYSDEC and NYSDOH during the August 9, 2018 site visit. Sample locations are illustrated on Figure 3.

The following samples were collected:

Sample ID	Sample Type	Sample Location
GCCDC_Office_IA	Indoor Ambient Air	Education Offices
GCCDC_Class1_IA	Indoor Ambient Air	Classroom #1
GCCDC-Class5_IA	Indoor Ambient Air	Classroom #5
GCCDC_Class6_IA	Indoor Ambient Air	Classroom #6
GCCDC_Class7_IA	Indoor Ambient Air	Classroom #7
GCCDC_Class10C_IA	Indoor Ambient Air	Classroom #10C
GCCDC_Class10A_IA	Indoor Ambient Air	Classroom #10A
GCCDC_ClassX_IA	Indoor Ambient Air	Duplicate: Classroom #7
GCCDC_Class6_CS	Crawlspace Ambient Air	Crawlspace, beneath Classroom #6
GCCDC_Class10B_CS	Crawlspace Ambient Air	Crawlspace, beneath Classroom #10B
GCCDC_Entry_OD	Outdoor Ambient Air	North of GCCDC main entrance

In preparation for sampling, building ventilation systems were shut down on the evening of August 17, 2018 by GCCDC staff. Ventilation systems remained off during the sample collection period.

Samples were collected using individually-certified, 6-liter passivated SUMMA canisters (canisters) equipped with a vacuum gauge and mass flow valve calibrated by the laboratory to collect air samples over a 24-hour period. For indoor air samples, the canisters were placed at a height of approximately 3 feet above the floor during the sample collection period. Canisters for the crawlspace and outdoor air samples were placed on the floor/ground during the sample collection period. Field screening for VOCs and methane was conducted at the sampling locations using a calibrated MultiRAE Plus multi-gas meter and yielded no detections of VOCs or methane.

Following canister retrieval on August 19, 2018, air samples were submitted to Eurofins Lancaster Laboratories Environmental (Lancaster, PA) (Eurofins) for analysis of VOCs and methane, via EPA Methods TO-15 and 18/25 (modified), respectively. All samples were submitted for standard 10-day turnaround time, with NYSDEC ASP Category B deliverables requested.

Analytical results are summarized in Table 1. Laboratory reports have been provided in Appendix C. Field notes and sample log sheets are included in Appendix B. A relative percent difference analysis of blind duplicate samples collected is provided as Table 2.

Glen Cove Boxing Club

Between August 30 and August 31, 2018, EAR collected a total of three (3) air samples from the GCBC, including: one (1) sub-slab air sample, one (1) indoor air sample, and one (1) outdoor air sample. Sample locations are illustrated on Figure 4. All sample locations were selected and approved by the NYSDEC and NYSDOH during the August 9, 2018 site visit.

The following samples were collected:

Sample ID	Sample Type	Sample Location
GCBC_SS	Sub-Slab	Approximate center of facility
GCBC_IA	Indoor Ambient Air	Approximate center of facility

GCBC_OA	Outdoor Ambient Air	Approximately 90' north (upwind) of facility

The sub-slab air sample was obtained by drilling a 3/8-inch hole through the slab and inserting 0.25-inch diameter Teflon tubing to approximately 1-inch below the slab. The tubing penetration was then sealed using natural modeling clay. A polycarbonate test chamber was used to create an enclosed atmosphere around the sample point and was installed on plastic sheeting to provide a clean surface for test chamber installation. Sample tubing was introduced into the test chamber by inserting it through the center of the plastic sheet. Natural modeling clay was used to seal the test chamber in multiple locations, including contact points at: the plastic sheeting to the slab, the test chamber to the plastic sheeting, the sample tubing entry and exit points through the plastic sheeting, and the sample tubing exit point through the test chamber.

Utilizing ports installed on the test chamber, a tracer gas (helium) was introduced into the test chamber to a minimum concentration of 90%, prior to sampling. Once the maximum concentration of helium had been established, the ports were closed, and the test chamber was checked for leaks using a multi-gas detector (MGD 2002 Hydrogen/Helium Detector).

Prior to sampling, three volumes of air were purged from the sample tubing utilizing an SKC PCXR8 sampling pump, calibrated to maintain a low flow rate of less than 0.2 L/min. The air sampling pump was calibrated prior to use using a BIOS Defender 510® Flow Calibrator.

A calibrated MultiRAE Plus was used to measure ambient VOC concentrations at each location. Total VOC measurements were also recorded before and after purging the sample point, and upon completion of sampling. All field screening yielded no detections of VOCs. Sample tubing was then connected to the SUMMA canister using stainless steel compression fittings, the canister valve was opened, and sampling commenced. Upon completion of sampling, sub-slab test chambers were deconstructed, sample tubing was removed from the slab, and the slab was restored to grade with hydraulic cement.

Indoor and outdoor ambient air samples were collected concurrently with the sub-slab sample. The indoor air sample canister was placed at a height of approximately 3-feet above the floor. The outdoor air sample was collected from an upwind location, approximately 4 feet above grade and 90 feet north of GCBC. Field screening for total VOC concentrations, conducted prior to and upon completion of ambient air sampling, yielded no detections.

Air samples were collected using individually-certified, 6-liter passivated SUMMA canisters equipped with vacuum gauges and mass flow valves calibrated by the laboratory to collect air samples over a 24-hour period.

The sub-slab air sample was submitted to Eurofins for analysis of VOCs, methane, and helium. Analysis of VOCs and methane were completed via EPA Methods TO-15 and 18/25 (modified). Helium analysis was completed via ASTMD1946. Ambient air samples were submitted to Eurofins for analysis of VOCs and methane, via EPA Methods TO-15 and 18/25 (modified), respectively. All samples were submitted for a standard 10-day turnaround time with NYSDEC ASP Category B deliverables requested.

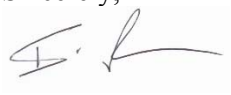
Analytical results are summarized in Table 3. Laboratory reports have been provided in Appendix C. Field notes and sample log sheets are included in Appendix B.

Data Usability Summary Reports

Data validation services were provided by an EAR chemist and included Data Usability Summary Report (DUSR) generation and EQuIS EDD file validation. The DUSR indicated no rejections of the data and reported the data as usable for intended purposes. DUSRs has been included in Appendix D. Laboratory analytical data is currently being compiled into an EQuIS EDD file package for submission to NYENVDATA.

Should you have any questions regarding the activities or data detailed in this report, please feel free to contact me at 631.241.8741 or via email at IHofmann@enviro-asmnt.com.

Sincerely,



Ian Hofmann
Project Manager

Cc:
Ancona, R. (EAR)
Lawrence, J. (EAR)
Martin, A. (NYSDOH)

Tables

Table 1: SVI Analytical Results (Glen Cove Child Day Care Center)
Table 2: Relative Percent Difference of Blind Duplicate Samples Collected
Table 3: SVI Analytical Results (Glen Cove Boxing Club)

Pall Corporation
30-36 Sea Cliff Avenue
Glen Cove, NY
Site No. 130053B

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

SVI Analytical Results (Glen Cove Child Day Care Center)
Eurofins Lancaster Laboratories Environmental
Methods: TO15 (ug/m3)

Sample ID	GCCDC-Class1_IA	GCCDC-Class10A_IA	GCCDC-Class10C_IA	GCCDC-Class5-IA	GCCDC-Class6_IA	GCCDC-Class7_IA	GCCDC-Office_IA	GCCDC-Class6_CS	GCCDC-Class10B_CS	GCCDC-Entry_OD
Location	Class 1 indoor	Class 10A indoor	Class 10C indoor	Class 5 indoor	Class 6 indoor	Class 7 indoor	Office indoor	Class 6 crawlspace	Class 10B crawlspace	Outdoor air
Date Collected	8/18/2018	8/18/2018	8/18/2018	8/18/2018	8/18/2018	8/18/2018	8/18/2018	8/18/2018	8/18/2018	8/18/2018
Time Collected	9:34 AM	10:31 AM	11:01 AM	9:56 AM	10:00 AM	10:09 AM	10:45 AM	11:17 AM	11:32 AM	2:28 PM
1,1 Dichloroethane	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36
1,1 Dichloroethene	<0.56	<0.56	<0.56	<0.56	<0.56	<0.56	<0.56	<0.56	<0.56	<0.56
1,1,1 Trichloroethane	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
1,1,1,2 Tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2 Trichloroethane	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65
1,1,2,2 Tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2 Dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2 Dichlorobenzene	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
1,2 Dichloroethane	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
1,2 Dichloropropane	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
1,2,3 Trichloropropane	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84
1,2,4 Trimethylbenzene	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4
1,3 Butadiene	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
1,3 Dichlorobenzene	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
1,3,5 Trimethylbenzene	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
1,4 Dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2,2,4-Trimethylpentane	1.30 J	1.50 J	1.70 J	2.10 J	2.10 J	2 J	1.10 J	<0.61	<0.61	<0.61
2-Hexanone	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74	<0.74
3-Chloropropene	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47
4-Ethyltoluene	<0.88	<0.88	<0.88	<0.88	<0.88	<0.88	<0.88	<0.88	<0.88	<0.88
4-Methyl-2-Pentanone	<0.61	<0.61	<0.61	1 J	<0.61	0.68 J	<0.61	<0.61	<0.61	<0.61
Acetone	23	21	24	33	30	29	27	9.30 J	12	20
Benzene	0.95 J	0.94 J	1 J	3.10 J	1.20 J	1.30 J	0.99 J	<0.35	0.52 J	0.45 J
Bromobenzene	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64
Bromodichloromethane	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Bromoform	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Bromomethane	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7
c 1,3 Dichloropropene	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45
Carbon Disulfide	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Carbon Tetrachloride	<0.88	<0.88	<0.88	<0.88	<0.88	<0.88	<0.88	<0.88	<0.88	<0.88
Chlorobenzene	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Chlorodifluoromethane	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53
Chloroethane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroform	<0.45	<0.45	<0.45	1.10 J	<0.45	<0.45	0.50 J	<0.45	<0.45	<0.45

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ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

SVI Analytical Results (Glen Cove Child Day Care Center)
Eurofins Lancaster Laboratories Environmental
Methods: TO15 (ug/m3)

Sample ID	GCCDC-Class1_IA	GCCDC-Class10A_IA	GCCDC-Class10C_IA	GCCDC-Class5-IA	GCCDC-Class6_IA	GCCDC-Class7_IA	GCCDC-Office_IA	GCCDC-Class6_CS	GCCDC-Class10B_CS	GCCDC-Entry_OD
Location	Class 1 indoor	Class 10A indoor	Class 10C indoor	Class 5 indoor	Class 6 indoor	Class 7 indoor	Office indoor	Class 6 crawlspace	Class 10B crawlspace	Outdoor air
Date Collected	8/18/2018	8/18/2018	8/18/2018	8/18/2018	8/18/2018	8/18/2018	8/18/2018	8/18/2018	8/18/2018	8/18/2018
Time Collected	9:34 AM	10:31 AM	11:01 AM	9:56 AM	10:00 AM	10:09 AM	10:45 AM	11:17 AM	11:32 AM	2:28 PM
Chloromethane	<0.5	<0.5	<0.5	<0.5	0.79 J	<0.5	0.69 J	<0.5	<0.5	<0.5
cis-1,2-Dichloroethene	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	0.76 J	<0.48
Dibromochloromethane	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	2.70 J	2.70 J	2.80 J	2.90 J	3 J	2.80 J	3.30 J	1.50 J	3.50 J	2.70 J
Dichlorofluoromethane	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46
Ethylbenzene	<0.83	0.89 J	1 J	0.95 J	1.10 J	1.10 J	1 J	<0.83	<0.83	<0.83
Freon 113	1.60 J	1.20 J	0.85 J	1.10 J	1.20 J	0.95 J	1.70 J	1.70 J	3.50 J	<0.84
Freon 114	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84
Heptane	1.60 J	1.50 J	2.20 J	3.80 J	2.10 J	2.60 J	2.70 J	<0.94	<0.94	<0.94
Hexachloroethane	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6
Hexane	1.80 J	2 J	2.10 J	2.10 J	2.60 J	2.60 J	<0.46	<0.46	<0.46	<0.46
Isopropylbenzene	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
m + p Xylene	2.20 J	2.70 J	3.10 J	3.20 J	3.60 J	3.50 J	2.90 J	<1.1	<1.1	<1.1
Methyl Ethyl Ketone	7.7	2.90 J	3	9.8	9	9.5	9.1	5.5	3.2	5.1
Methylene Chloride	2.50 J	<0.87	<0.87	<0.87	<0.87	<0.87	<0.87	<0.87	<0.87	<0.87
Octane	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9
o-Xylene	0.89 J	0.94 J	1.20 J	1.30 J	1.20 J	1.30 J	1.30 J	<0.83	<0.83	<0.83
Pentane	3.4	3.3	4.1	4.4	5.3	5	3.3	0.88 J	1.90 J	1.50 J
Styrene	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85
t 1,3 Dichloropropene	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54
t butylmethylether	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54
Tetrachloroethene	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	2.60 J	<1.7
Toluene	4.3	4.6	5.3	5.8	6.5	6.7	3.9	0.74 J	1.10 J	0.55 J
Total BTEX	6	n/a	n/a	8	n/a	9	6	0.2	n/a	0.28
trans-1,2-Dichloroethene	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34
Trichloroethylene	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97
Trichlorofluoromethane	1.80 J	1.50 J	1.40 J	1.70 J	2.10 J	1.80 J	2.30 J	<0.84	1.70 J	1.60 J
Vinyl Chloride	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31

Methods: E25M (mg/m3)

Methane	9.9	<3	<3	7.6	8.9	10 J	17	<3	<3	<3

Notes:
J - Indicates an estimated value below laboratory reporting limits.
Samples were collected in individually-certified, 6-liter passivated SUMMA canisters (canisters) calibrated by the laboratory to collect air samples over a 24-hour period

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ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Relative Percent Difference (RPD) of Blind Duplicates Collected
Eurofins Lancaster Laboratories Environmental
Methods: TO15 (ug/m3)

Sample ID	Parent Sample GCCDC-Class7_IA	Duplicate Sample GCCDC-ClassX_IA	RPD
1,1 Dichloroethane	<0.36	<0.36	0.0%
1,1 Dichloroethene	<0.56	<0.56	0.0%
1,1,1 Trichloroethane	<0.65	<0.65	0.0%
1,1,1,2 Tetrachloroethane	<1	<1	0.0%
1,1,2 Trichloroethane	<0.65	<0.65	0.0%
1,1,2,2 Tetrachloroethane	<1	<1	0.0%
1,2 Dibromoethane	<1	<1	0.0%
1,2 Dichlorobenzene	<1.2	<1.2	0.0%
1,2 Dichloroethane	<0.32	<0.32	0.0%
1,2 Dichloropropane	<0.6	<0.6	0.0%
1,2,3 Trichloropropane	<0.84	<0.84	0.0%
1,2,4 Trimethylbenzene	<1.4	<1.4	0.0%
1,3 Butadiene	<0.38	<0.38	0.0%
1,3 Dichlorobenzene	<1.1	<1.1	0.0%
1,3,5 Trimethylbenzene	<1.6	<1.6	0.0%
1,4 Dichlorobenzene	<1	<1	0.0%
2,2,4-Trimethylpentane	**2 J**	**2 J**	n/a
2-Hexanone	<0.74	<0.74	0.0%
3-Chloropropene	<0.47	<0.47	0.0%
4-Ethyltoluene	<0.88	<0.88	0.0%
4-Methyl-2-Pentanone	**0.68 J**	**0.70 J**	n/a
Acetone	**29**	**30**	**3.4%**
Benzene	**1.30 J**	**1.30 J**	n/a
Bromobenzene	<0.64	<0.64	0.0%
Bromodichloromethane	<0.8	<0.8	0.0%
Bromoform	<1.8	<1.8	0.0%
Bromomethane	<0.7	<0.7	0.0%
c 1,3 Dichloropropene	<0.45	<0.45	0.0%
Carbon Disulfide	<0.4	<0.4	0.0%
Carbon Tetrachloride	<0.88	<0.88	0.0%
Chlorobenzene	<0.6	<0.6	0.0%
Chlorodifluoromethane	<0.53	<0.53	0.0%
Chloroethane	<0.5	<0.5	0.0%
Chloroform	<0.45	<0.45	0.0%
Chloromethane	<0.5	<0.5	0.0%
cis-1,2-Dichloroethene	<0.48	<0.48	0.0%
Dibromochloromethane	<1.1	<1.1	0.0%
Dibromomethane	<1	<1	0.0%
Dichlorodifluoromethane	**2.80 J**	**2.80 J**	n/a
Dichlorofluoromethane	<0.46	<0.46	0.0%

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ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Relative Percent Difference (RPD) of Blind Duplicates Collected
Eurofins Lancaster Laboratories Environmental
Methods: TO15 (ug/m3)

Sample ID	Parent Sample GCCDC-Class7_IA	Duplicate Sample GCCDC-ClassX_IA	RPD
Ethylbenzene	**1.10 J**	**1.10 J**	n/a
Freon 113	**0.95 J**	**1.0 J**	n/a
Freon 114	<0.84	<0.84	0.0%
Heptane	**2.60 J**	**1.80 J**	n/a
Hexachloroethane	<2.6	<2.6	0.0%
Hexane	**2.60 J**	**2.30 J**	n/a
Isopropylbenzene	<1.2	<1.2	0.0%
m + p Xylene	**3.50 J**	**3.60 J**	n/a
Methyl Ethyl Ketone	**9.5**	**9.1**	**4.3%**
Methylene Chloride	<0.87	<0.87	0.0%
Octane	<1.9	<1.9	0.0%
o-Xylene	**1.30 J**	**1.10 J**	n/a
Pentane	**5**	**4.6**	**8.3%**
Styrene	<0.85	<0.85	0.0%
t 1,3 Dichloropropene	<0.54	<0.54	0.0%
t butylmethylether	<0.54	<0.54	0.0%
Tetrachloroethene	<1.7	<1.7	0.0%
Toluene	**6.7**	**7**	**4.4%**
trans-1,2-Dichloroethene	<0.34	<0.34	0.0%
Trichloroethylene	<0.97	<0.97	0.0%
Trichlorofluoromethane	**1.80 J**	**1.60 J**	n/a
Vinyl Chloride	<0.31	<0.31	0.0%

Methods: E25M (mg/m3)

Methane	**10 J**	**9**	n/a

Notes:
J - Indicates an estimated value below laboratory reporting limits.
n/a - not applicable

Pall Corporation
30-36 Sea Cliff Avenue
Glen Cove, NY
Site No. 130053B

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

SVI Analytical Results (Glen Cove Boxing Club)
Eurofins Lancaster Laboratories Environmental
Methods: TO15 (ug/m3)

Sample ID	GCBC_IA	GCBC_SS	GCBC_OA
Location	indoor air	sub-slab	outdoor air
Date Collected	8/30/2018	8/30/2018	8/30/2018
Time Collected	12:13 PM	11:55 AM	12:33 PM
1,1 Dichloroethane	**0.52 J**	**36 J**	<0.36
1,1 Dichloroethene	<0.56	<22	<0.56
1,1,1 Trichloroethane	<0.65	**39 J**	<0.65
1,1,1,2 Tetrachloroethane	<1	<41	<1
1,1,2 Trichloroethane	<0.65	<26	<0.65
1,1,2,2 Tetrachloroethane	<1	<41	<1
1,2 Dibromoethane	<1	<40	<1
1,2 Dichlorobenzene	<1.2	<48	<1.2
1,2 Dichloroethane	<0.32	<13	<0.32
1,2 Dichloropropane	<0.6	<24	<0.6
1,2,3 Trichloropropane	<0.84	<34	<0.84
1,2,4 Trimethylbenzene	**42**	<55	**2.10 J**
1,3 Butadiene	<0.38	<15	<0.38
1,3 Dichlorobenzene	<1.1	<46	<1.1
1,3,5 Trimethylbenzene	**11**	<63	<1.6
1,4 Dichlorobenzene	<1	<41	<1
2,2,4-Trimethylpentane	**1.10 J**	<24	**0.73 J**
2-Hexanone	**0.82 J**	<29	<0.74
3-Chloropropene	<0.47	<19	<0.47
4-Ethyltoluene	**11**	<35	<0.88
4-Methyl-2-Pentanone	**57**	**32 J**	<0.61
Acetone	**47**	**93 J**	**20**
Benzene	**7.1**	**130**	**0.43 J**
Bromobenzene	<0.64	<26	<0.64
Bromodichloromethane	<0.8	<32	<0.8
Bromoform	<1.8	<70	<1.8
Bromomethane	<0.7	<28	<0.7
c 1,3 Dichloropropene	<0.45	<18	<0.45
Carbon Disulfide	**5.4**	<16	<0.4
Carbon Tetrachloride	<0.88	<35	<0.88
Chlorobenzene	<0.6	<24	<0.6
Chlorodifluoromethane	<0.53	<21	<0.53
Chloroethane	<0.5	<20	<0.5
Chloroform	<0.45	<18	<0.45
Chloromethane	<0.5	<20	<0.5
cis-1,2-Dichloroethene	**0.85 J**	<19	<0.48
Dibromochloromethane	<1.1	<44	<1.1
Dibromomethane	<1	<40	<1
Dichlorodifluoromethane	**2.40 J**	**240**	**2.60 J**
Dichlorofluoromethane	<0.46	<19	<0.46
Ethylbenzene	**1.10 J**	<33	<0.83
Freon 113	<0.84	**14,000**	<0.84

Pall Corporation
30-36 Sea Cliff Avenue
Glen Cove, NY
Site No. 130053B

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

SVI Analytical Results (Glen Cove Boxing Club)
Eurofins Lancaster Laboratories Environmental
Methods: TO15 (ug/m3)

Sample ID	GCBC_IA	GCBC_SS	GCBC_OA
Location	indoor air	sub-slab	outdoor air
Date Collected	8/30/2018	8/30/2018	8/30/2018
Time Collected	12:13 PM	11:55 AM	12:33 PM
Freon 114	<0.84	<34	<0.84
Heptane	**1.50 J**	<38	<0.94
Hexachloroethane	<2.6	<100	<2.6
Hexane	**1.70 J**	<18	**0.84 J**
Isopropylbenzene	**1.70 J**	<47	<1.2
m + p Xylene	**150**	**930**	**2 J**
Methyl Ethyl Ketone	**5.7**	<25	**2.80 J**
Methylene Chloride	<0.87	<35	**1.50 J**
Octane	**1.90 J**	<75	<1.9
o-Xylene	**8.5**	<33	<0.83
Pentane	**3.9**	<15	**2.20 J**
Styrene	**0.86 J**	<34	<0.85
t 1,3 Dichloropropene	<0.54	<22	<0.54
t butylmethylether	<0.54	<22	<0.54
Tetrachloroethene	<1.7	**1,400**	<1.7
Toluene	**9.7**	**84 J**	**2.50 J**
Total BTEX	**47**	**1,144**	**5**
trans-1,2-Dichloroethene	<0.34	<14	<0.34
Trichloroethylene	<0.97	**320**	<0.97
Trichlorofluoromethane	**1.50 J**	<34	**1.50 J**
Vinyl Chloride	<0.31	<12	<0.31

Methods: E25M (mg/m3)

Methane	<1	<3	**3 J**

Notes:
J - Indicates an estimated value below laboratory reporting limits.
Samples were collected in individually-certified, 6-liter passivated SUMMA canisters (canisters) calibrated by the laboratory to collect air samples over a 24-hour period.

Figures

Figure 1: Site Location Map
Figure 2: Site Layout
Figure 3: Sampling Locations (Glen Cove Child Day Care Center)
Figure 4: Sampling Locations (Glen Cove Boxing Club)

not to scale

modified from 2018, Europa Technologies, Google

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Figure 1

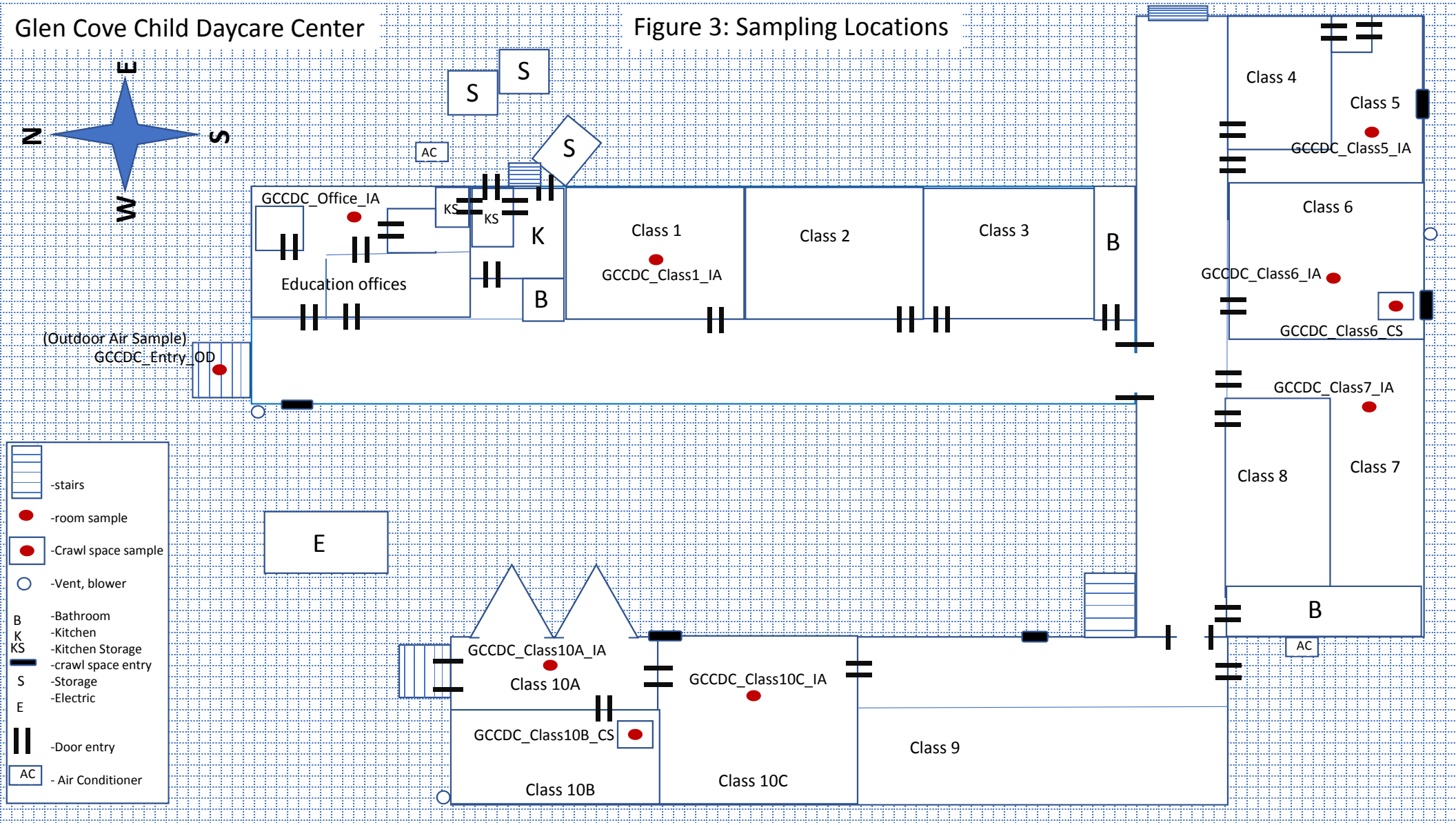
Site Location Map

Pall Corporation
30-36 Sea Cliff Avenue
Glen Cove, NY
Site No. 130053B

Figure 2
Site Layout
GLEN COVE CHILD DAY CARE CENTER
GLEN COVE BOXING CLUB
Google Earth
© 2018 Google
100 ft
N

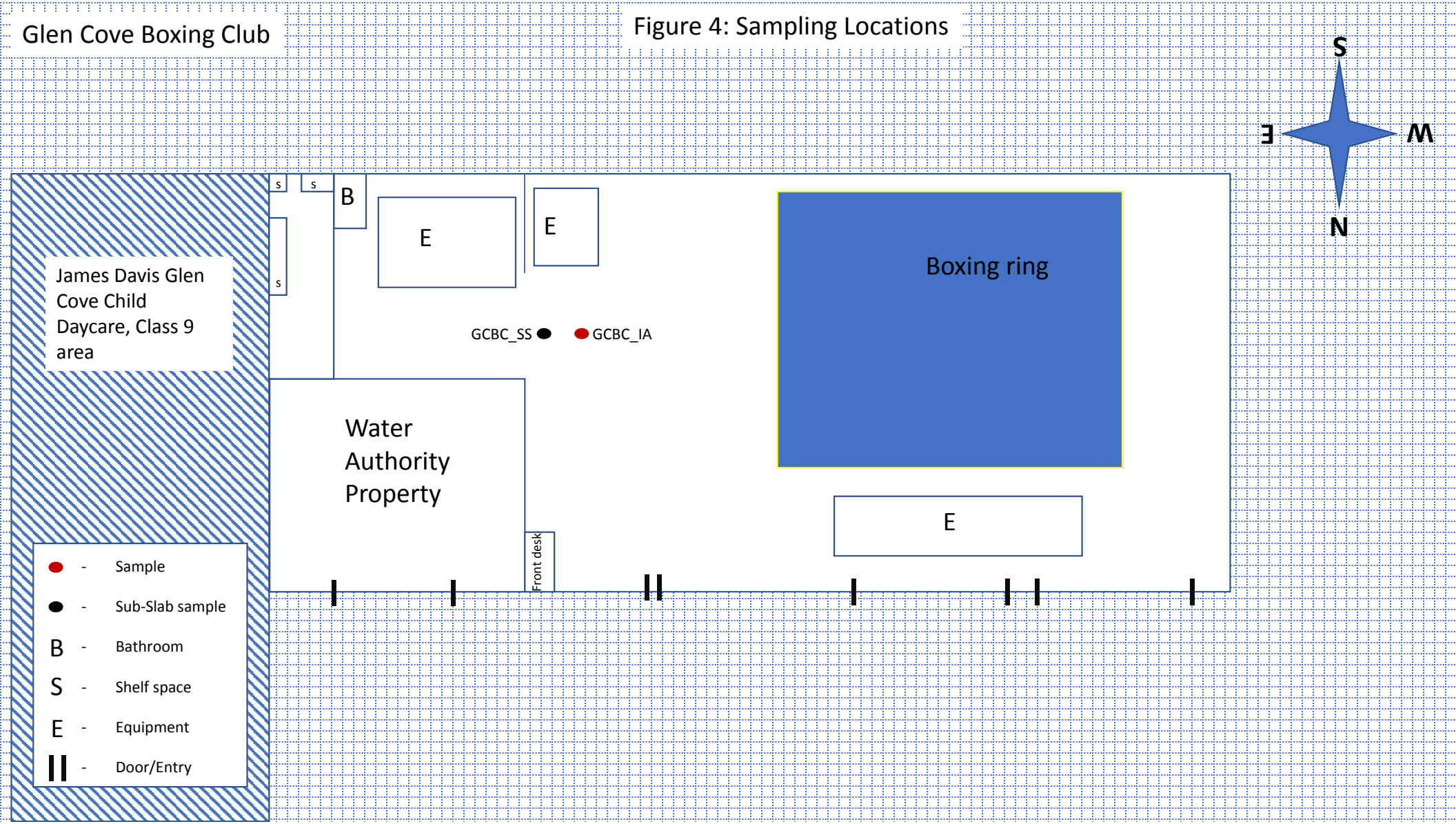
Glen Cove Child Daycare Center

Figure 3: Sampling Locations



Glen Cove Boxing Club

Figure 4: Sampling Locations



Appendix A: General Survey and Chemical Product Inventories

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name STEPHEN GOETZ Date/Time Prepared 8/30/18

Preparer's Affiliation DEC SUBCONTRACTOR Phone No. 631-447-6400

Purpose of Investigation _____

1. OCCUPANT:

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location _____ Age of Occupants _____

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential	School	Commercial/Multi-use
Industrial	Church	(Other: GARAGE CONVERTED TO BOXING GYM)

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) BOXING GYM, CITY OF GLEN COVE

Does it include residences (i.e., multi-use)? Y (N) If yes, how many? _____

Other characteristics:

Number of floors 1 Building age_____

Is the building insulated? Y (N) How air tight? Tight / Average / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

NA

Airflow near source

Outdoor air infiltration

Infiltration into air ducts

NA

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick (CINDER BLOCK)
b. Basement type:	full	crawlspace	slab	other NA
c. Basement floor:	concrete	dirt	stone	other NA (SLAB)
d. Basement floor:	uncovered	covered	covered with _____	
e. Concrete floor:	(unsealed)	sealed	sealed with _____	
f. Foundation walls:	poured	~~block~~	stone	other _____
g. Foundation walls:	unsealed	sealed	sealed with _____	(CONCRETE SLAB)
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: _____(feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

_____

_____

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard	
(Space Heaters) P	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
(Electric)	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: ELECTRICITY, LOCATED IN LOFT ABOVE LOCKER ROOM

Boiler/furnace located in: Basement Outdoors Main Floor Other_____

Air conditioning: Central Air Window units Open Windows (None)

Are there air distribution ducts present? Y (N)

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

7. OCCUPANCY

Is basement/lowest level occupied? Full-time (Occasionally) Seldom Almost Never

Level	General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)
Basement	NA
1st Floor	BOXING GYM / CITY OF GLEN COVE WATER AUTHORITY STORAGE
2nd Floor	NA
3rd Floor	NA
4th Floor	NA

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? (Y) / N

b. Does the garage have a separate heating unit? Y / N (NA)

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / NA UNKNOWN
Please specify_____

d. Has the building ever had a fire? Y / N When?_____

e. Is a kerosene or unvented gas space heater present? Y / (N) Where?_____

f. Is there a workshop or hobby/craft area? Y (N) Where & Type? _____

g. Is there smoking in the building? Y (N) How frequently? _____

h. Have cleaning products been used recently? (Y) / N When & Type? SEE INVENTORY

i. Have cosmetic products been used recently? Y / N When & Type? _____

j. Has painting/staining been done in the last 6 months? Y / N Where & When? _____

k. Is there new carpet, drapes or other textiles? Y / N Where & When? _____

l. Have air fresheners been used recently? (Y) / N When & Type? SEE INVENTORY

m. Is there a kitchen exhaust fan? Y / N If yes, where vented? _____

n. Is there a bathroom exhaust fan? Y / N If yes, where vented? _____

o. Is there a clothes dryer? Y / (N) If yes, is it vented outside? Y / N

p. Has there been a pesticide application? (Y) N When & Type? 8/29-8/30 (OVERNIGHT), INDOOR, OTC FOGGER (SEE INVENTORY)

Are there odors in the building? Y / N
If yes, please describe: _____

Do any of the building occupants use solvents at work? Y / N
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) No
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / N Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply:	Public Water	Drilled Well	Driven Well	Dug Well	Other: _____
Sewage Disposal:	Public Sewer	Septic Tank	Leach Field	Dry Well	Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? Y / N

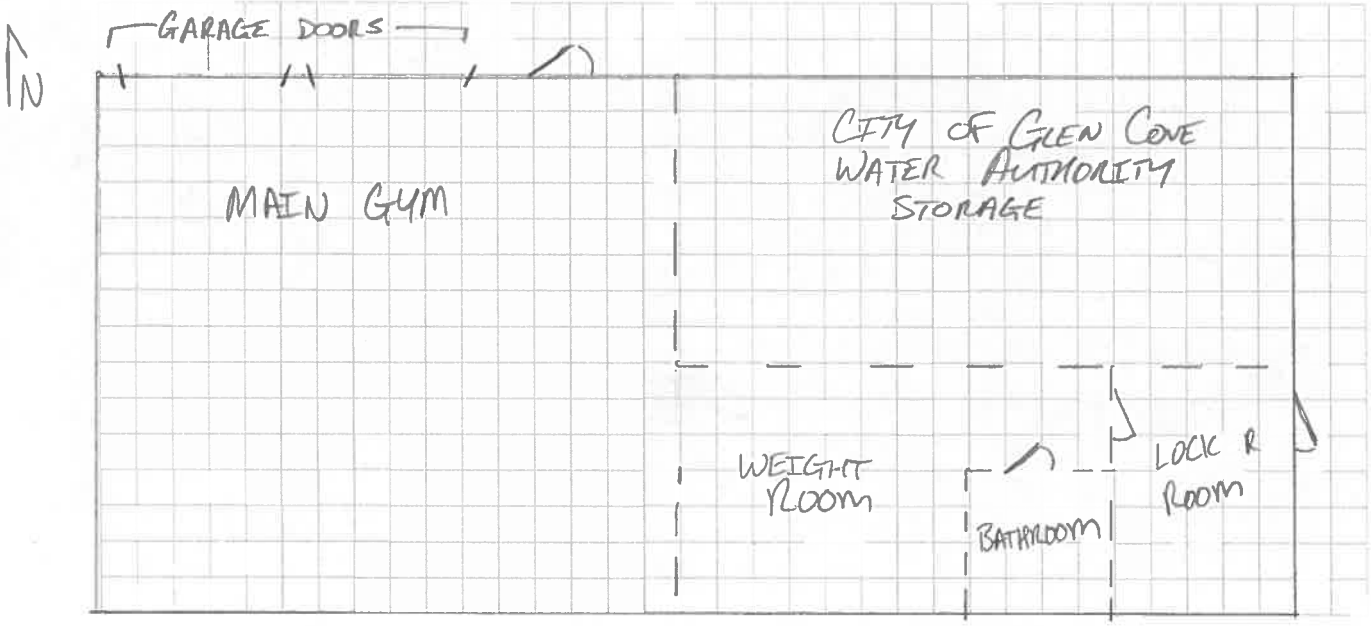
d. Relocation package provided and explained to residents? Y / N

11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement: NA

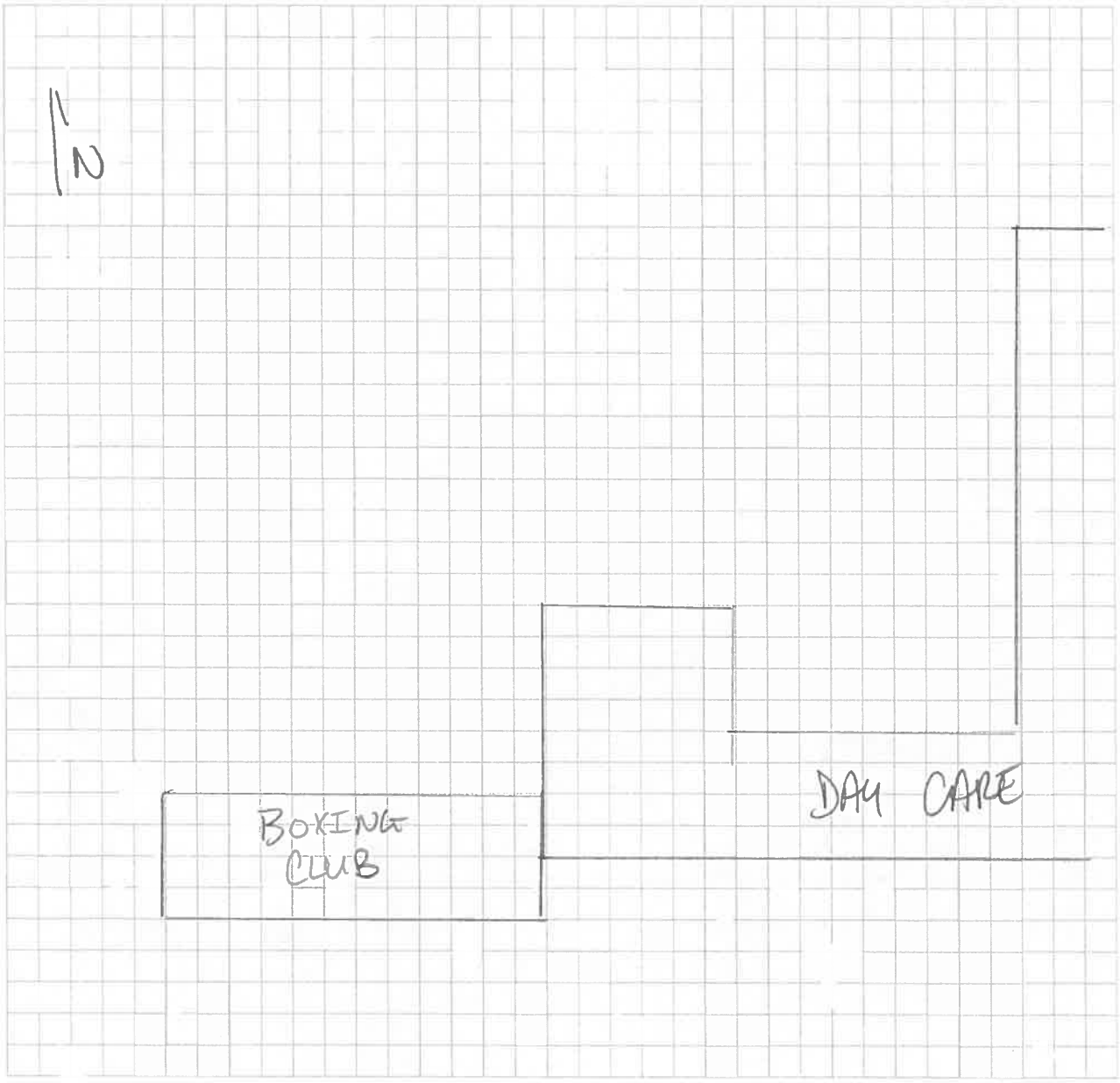
First Floor:



12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name STEPHEN GOETZ Date/Time Prepared _____

Preparer's Affiliation DEC ENVIRONMENTAL CONSULTANT Phone No. 631-447-6400 x152

Purpose of Investigation _____

1. OCCUPANT:

Interviewed: Y (N)

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location _____ Age of Occupants _____

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: Y (N)

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential	School	Commercial/Multi-use
Industrial	Church	Other: DAY CARE

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) DAY CARE

Does it include residences (i.e., multi-use)? Y / (N) If yes, how many? _____

Other characteristics:

Number of floors 1 Building age ~60

Is the building insulated? Y / N How air tight? Tight / (Average) / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

NA

Airflow near source

Outdoor air infiltration

Infiltration into air ducts

5. **BASEMENT AND CONSTRUCTION CHARACTERISTICS** (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab	other _____
c. Basement floor:	concrete	dirt	stone	other _____
d. Basement floor:	uncovered	covered	covered with _____	
e. Concrete floor:	unsealed	sealed	sealed with _____	
f. Foundation walls:	poured	block	stone	other _____
g. Foundation walls:	unsealed	sealed	sealed with _____	
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: _____(feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

_____

_____

6. **HEATING, VENTING and AIR CONDITIONING** (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: _____

Boiler/furnace located in:	Basement	Outdoors	Main Floor	Other_____
Air conditioning:	Central Air	Window units	Open Windows	None

Are there air distribution ducts present? (Y) N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom (Almost Never)

Level	General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)
Basement	
1st Floor	DAY CARE, M-F, NORMAL BUSINESS HOURS.
2nd Floor	
3rd Floor	
4th Floor	

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y / (N)

b. Does the garage have a separate heating unit? Y / N / (NA)

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / (NA) Please specify_____

d. Has the building ever had a fire? Y / N When?_____

e. Is a kerosene or unvented gas space heater present? Y / N Where?_____

f. Is there a workshop or hobby/craft area? Y / N Where & Type?_____

g. Is there smoking in the building? Y / (N) How frequently?_____

h. Have cleaning products been used recently? (Y) / N When & Type? REGULARLY, SEE INVENTORY

i. Have cosmetic products been used recently? (Y) / N When & Type? REGULARLY, SEE INVENTORY

j. Has painting/staining been done in the last 6 months? Y / N Where & When? _____

k. Is there new carpet, drapes or other textiles? Y / N Where & When? _____

l. Have air fresheners been used recently? (Y) / N When & Type? REGULARLY, SEE INVENTORY

m. Is there a kitchen exhaust fan? (Y) / N If yes, where vented? _____

n. Is there a bathroom exhaust fan? Y / N If yes, where vented? _____

o. Is there a clothes dryer? Y (N) If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y / N When & Type? _____

Are there odors in the building? Y (N)
If yes, please describe: _____

Do any of the building occupants use solvents at work? Y / N
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) No
Yes, use dry-cleaning infrequently (monthly or less) (Unknown)
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / N Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply:	Public Water	Drilled Well	Driven Well	Dug Well	Other: _____
Sewage Disposal:	Public Sewer	Septic Tank	Leach Field	Dry Well	Other: _____

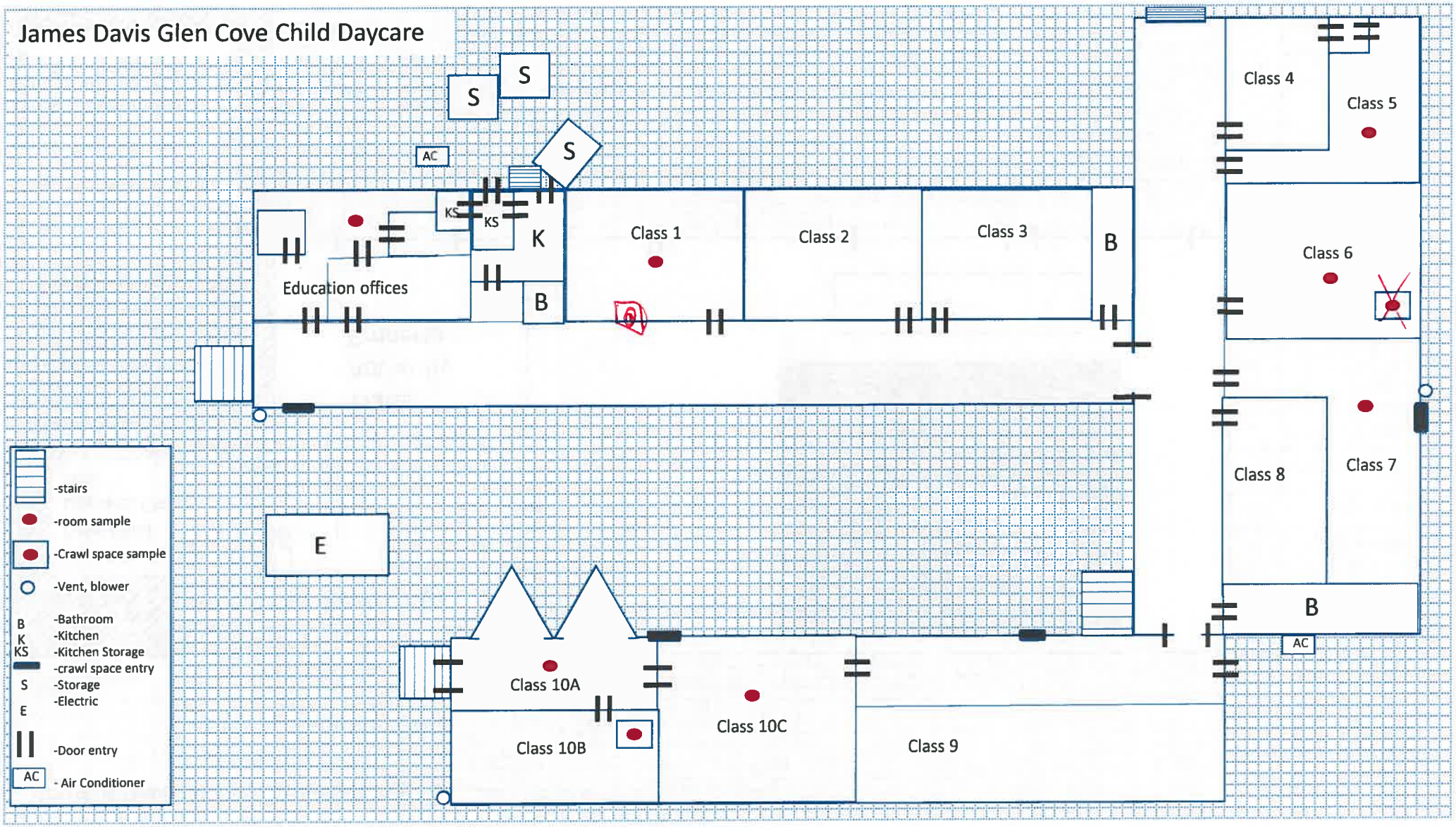
10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N


James Davis Glen Cove Child Daycare
S
S
S
AC
KS
KS
K
B
Education offices
Class 1
Class 2
Class 3
B
Class 4
Class 5
Class 6
Class 8
Class 7
B
AC
E
Class 10A
Class 10B
Class 10C
Class 9
-stairs
-room sample
-Crawl space sample
-Vent, blower
B -Bathroom
K -Kitchen
KS -Kitchen Storage
-crawl space entry
S -Storage
E -Electric
-Door entry
AC - Air Conditioner

Product Inventory Form
Glen Cove Child Day Care Center and Glen Cove Boxing Club

Location	Product Description	Size	Condition	Chemical Ingredients	VOC Screening (ppm)
Glen Cove Day Care Center Offices	Body spray	3 oz	Good, sealed	Fragrance(s), glycerin, ethanol, butyl-methoxydibenzoylmethane (Avobenzone)	0.0
" "	Perfume	3 oz	Good, sealed	Benzyl acetate, bornana-2-one, citral	0.0
" "	Sharpies	Pens	Good, sealed	Butanol, propanol, diacetone alcohol, ethanol, pigments, dye, additives	0.0
" "	Johnson Baby Oil	~16 oz	Good, sealed	Mineral oil, propylene glycol, fragrance	0.0
" "	Shea Butter Lotion	14.5 oz	Good, sealed	Shea butter	0.0
" "	WD-40	12 oz	Good, sealed	Aliphatic hydrocarbons, petroleum base oil, carbon dioxide	0.0
" "	Fire extinguisher	-	Good, sealed	Calcium carbonate, ammonium sulfate, ammonium phosphate	0.0
" "	Perfume	2-4 oz	Good, sealed	Benzyl acetate, bornana-2-one, citral	0.0
" "	Nivea hand lotion	2-4 oz	Good, sealed	Mineral oil, glycerin, Isopropyl Palmitate, Glyceryl Stearate SE, Cetearyl Alcohol, Tocopheryl Acetate, Lanolin Alcohol, Isopropyl Myristate, Fragrance, Carbomer, Hydroxypropyl Methylcellulose, Sodium Hydroxide, Phenoxyethanol, Methylparaben, Ethylparaben.	0.0
" "	Printer toner	Multiple boxes	Good, sealed	Polyester resin, iron oxide, resin, ferrite, paraffine wax, color pigments, titanium dioxide, amorphous silica	0.0
" "	White board eraser spray	2 oz	Good, sealed	3-butoxypropan-2-ol	0.0
" "	Aveeno lotion	2-4 oz	Good, sealed	Glycerin, Distearyldimonium Chloride	0.0

" "	Lemon-Air furniture polish	19 oz	Good, sealed	Mineral oil, Propane, N-Butane, Isobutane, Sodium Nitrite, Disodium phosphate	0.0
Glen Cove Day Care Center Kitchen	Ecolab Vanguard rinse/wash max	Soap Dispensing systems	-	Information on contents unavailable	0.0
" "	Palmolive	32 oz	Good, sealed	Lauramidopropyldimethylamine Oxide, Sodium chloride	0.0
" "	White board eraser	16 oz	Good, sealed	3-butoxypropan-2-ol	0.0
" "	Bic Wite Out	0.7 oz	Good, sealed	Titanium dioxide, naptha (petroleum) light alkalyte, naptha hydrotreated light	0.0
" "	Pryo Chem fire suppression	unknown	Good, sealed	Potassium carbonate	0.0
Glen Cove Day Care Center Kitchen (under sink)	Bleach	128 oz	Good, sealed	Sodium hypochlorite	0.0
" "	Clorox	~32 oz	Good, sealed	Sodium hypochlorite	0.0
" "	Mr Muscle Grill Cleaner	19 oz	Good, sealed	Monoethanolamine, Diethylene glycol butyl ether, Sodium hydroxide	0.0
" "	Ajax	~20 oz	Good, sealed	Limestone, sodium carbonate, sodium dodecyl benzene sulfonate	0.0
" "	Stainless Steel Cleaner	15 oz	Good, sealed	Hydrotreated Light Distillates, light mineral oil	0.0
" "	Dawn detergent	128 oz	Good, sealed	Amine oxides, C10-16-alkyldimethy, Poly(oxy-1,2-ethanediyl), alpha-sulfo-omega-hydroxy-, C10-16-alkyl ethers, sodium salts, ethanol	0.0
" "	Misty Dry deodorizer	7 oz	Good, sealed	Acetone, isobutane, propane	0.0
" "	Mean Green Degreaser	~20 oz	Good, sealed	Poly(oxy-1,2-ethanediyl), alpha-(4-nonylphenyl)-omega-hydroxy-, branched	0.0
" "	Signal low foam detergent	~5 gallons	Good, sealed	NONE-hazardous Per 29 CFR 1910.1200	0.0

" "	Semi-gloss paint can	128 oz	Partially open, paint on container exterior	Kaolin, Titanium dioxide, sodium C14-C16 olefin sulfonate	0.0
" "	Grease trap treatment	128 oz	Good, sealed	Sodium Nitrate, Dodecyl benzene sulfonic acid, Viable Bacteria Cultures	0.0
" "	Oasis Multi-Quat Sanitizer	2.5 gal	Good, sealed	Alkyl (C14 50%; C12 40%; C16 10%) dimethyl benzyl ammonium chloride, Octyl decyl dimethyl ammonium chloride, ethanol, Didecyl Dimethyl Ammonium Chloride	0.0
" "	3M multipurpose cleaner	~32 oz	Good, sealed	Non-ionic surfactants, surfactant, sodium carbonate, 1-octyl-2-pyrrolidinone, fragrance	0.0
" "	Bleach	128 oz	Good, sealed	Sodium hypochlorite	0.0
" "	Palmolive	~32 oz	Good, sealed	Lauramidopropyldimethylamine Oxide, Sodium chloride	0.0
" "	Windex Multipurpose	32 oz	Good, sealed	NONE-hazardous Per 29 CFR 1910.1200	0.0
" "	ECOLAB Solid Rinse DRY	~16 oz	Good, sealed	Sodium Xylenesulfonate, Surfactant	0.0
" "	Dial hand soap	~16 oz	Good, pump bottle	1-Propanaminium, 3-amino-N- (carboxymethyl)-N, N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts, Alcohols, C10-16, ethoxylated, sulfates, sodium salts, 2EO, Glycerol	0.0
Glen Cove Day Care Center - Bathrooms by kitchen	Dial soaps	16 oz	Good, pump bottle	1-Propanaminium, 3-amino-N- (carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts, Alcohols, C10-16, ethoxylated, sulfates, sodium salts, 2EO, Glycerol	0.0
" "	Fantastic	32 oz	Good, sealed	Propylene glycol monobutyl ether, Alkyl dimethyl benzyl ammonium chloride, Alkyl dimethyl ethyl benzyl ammonium	0.0
" "	Body Spray	2 oz	Good, sealed	Diethyl Phthalate Manufacturers Grade Only	0.0
Glen Cove Day Care	Washable liquid paint	Multiple 1-liter and	Good, sealed	Product has been certified as non-toxic by the art and creative materials institute,	0.0

Center Room 1		1-gal bottles		inc. and conforms to astm D-4236 standard practice for labeling art materials for acute and chronic adverse health hazards.	
" "	Washable markers	-	Good, sealed	Product has been certified as non-toxic by the art and creative materials institute, inc. and conforms to astm D-4236 standard practice for labeling art materials for acute and chronic adverse health hazards.	0.0
" "	Bubble solution	Multiple 4-oz and 64 oz containers	Good, sealed	Glycerin	0.0
" "	Sharpies	-	Good, sealed	Butanol, propanol, diacetone alcohol, ethanol, pigments, dye, additives	0.0
" "	Bleach	32 oz	Good, sealed	Sodium hypochlorite	0.0
" "	Soap & water mixture	32 oz	Good, sealed	Glycerin	0.0
" "	Comet with bleach	~32 oz	open	Sulfuric acid, monooctyl ester, sodium salt (1:1), Sulfuric acid monododecyl ester sodium salt (1:1), Sodium hypochlorite	0.0
Room 1 cabinet	Isopropyl alcohol	16 oz	Good, sealed	Isopropyl alcohol	0.0
" "	White board eraser	~20 oz	Good, sealed	3-butoxypropan-2-ol	0.0
Glen Cove Day Care Center Room 2	Glitter paint	Multiple 4-oz	Good, sealed	Product has been certified as non-toxic by the art and creative materials institute, inc. and conforms to astm D-4236 standard practice for labeling art materials for acute and chronic adverse health hazards	0.0
" "	Fabuloso cleaner	16.9 oz	Good, sealed	NOT given	0.0
" "	All purpose cleaner			Non-ionic surfactants, surfactant, sodium carbonate, 1-octyl-2-pyrrolidinone, fragrance	0.0

" "	Dry eraser spray	~20 oz	Good, sealed	3-butoxypropan-2-ol	0.0
" "	Shaving cream/gel	7 oz	Good, sealed	2-Methylpropane, propane	0.0
Room 2	Misc glues	-	Good, sealed	Non-Hazardous Components, cyclohexane, Hydroteated light naptha (petroleum), dimethyl ether, isobutane, propane, hexane	0.0
" "	Dial soap	16 oz	Good, pump bottle	1-Propanaminium, 3-amino-N- (carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts, Alcohols, C10-16, ethoxylated, sulfates, sodium salts, 2EO, Glycerol	0.0
" "	Vegetable oil	16 oz	Oil on container exterior	Vegetable oil	0.0
" "	Dry eraser spray	~20 oz	Good, sealed	3-butoxypropan-2-ol	0.0
" "	Sharpies	multiple	Good, sealed	Butanol, propanol, diacetone alcohol, ethanol, pigments, dye, additives	0.0
" "	White-out	0.7 oz	Good, sealed	Titanium dioxide, Naphtha (petroleum), light alkylate, Naphtha, petroleum, hydrotreated light	0.0
Room4	Markers & washable paints	multiple	Good, sealed	Product has been certified as non-toxic by the art and creative materials institute, inc. and conforms to astm D-4236 standard practice for labeling art materials for acute and chronic adverse health hazards	0.0
Room6	Dial soap	16 oz	Good, sealed	1-Propanaminium, 3-amino-N- (carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts, Alcohols, C10-16, ethoxylated, sulfates, sodium salts, 2EO, Glycerol	0.0
" "	Bleach	32 oz	Good, sealed	Sodium hypochlorite	0.0
" "	All-purpose cleaner	32 oz	Good, sealed	Non-ionic surfactants, surfactant, sodium carbonate, 1-octyl-2-pyrrolidinone, fragrance	0.0

" "	Washable Paints	multiple	Good, sealed	Product has been certified as non-toxic by the art and creative materials institute, inc. and conforms to astm D-4236 standard practice for labeling art materials for acute and chronic adverse health hazards	0.0
Room 8	Misc, insect repellent	Multiple ~8-oz	Good, sealed	Ethyl alcohol, N,N-Diethyl-m-toluamide	0.0
" "	All-purpose spray	32 oz	Good, sealed	Non-ionic surfactants, surfactant, sodium carbonate, 1-octyl-2-pyrrolidinone, fragrance	0.0
" "	Dial soap	16 oz	Good, pump bottle	1-Propanaminium, 3-amino-N- (carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts, Alcohols, C10-16, ethoxylated, sulfates, sodium salts, 2EO, Glycerol	0.0
" "	Bleach	32 oz	Good, sealed	Sodium hypochlorite	0.0
Room 10C	Bleach	32 oz	Good, sealed	Sodium hypochlorite	0.0
" "	Dial soap	16 oz	Good, sealed	1-Propanaminium, 3-amino-N- (carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts, Alcohols, C10-16, ethoxylated, sulfates, sodium salts, 2EO, Glycerol	0.0
" "	Washable paint	Multiple ~16 oz	Good, sealed	Product has been certified as non-toxic by the art and creative materials institute, inc. and conforms to astm D-4236 standard practice for labeling art materials for acute and chronic adverse health hazards	0.0
" "	Glue	multiple	Good, sealed	Product has been certified as non-toxic by the art and creative materials institute, inc. and conforms to astm D-4236 standard practice for labeling art materials for acute and chronic adverse health hazards	0.0
" "	Insect repellent	Multiple ~8 oz	Good, sealed	Ethyl alcohol, N,N-Diethyl-m-toluamide	0.0

" "	Perfumes			Fragrance(s), glycerin, ethanol, butyl methoxydibenzoylmethane (Avobenzone)	0.0
" "	Body lotion	Multiple ~8 oz	Good, sealed	Mineral oil, glycerin and scents	0.0
Boxing Club – back room	Clorox bleach	1 gallon	Good, sealed	Sodium hypochlorite	0.0
" "	Comet bathroom cleaner	32 oz	Good, sealed	Dipropylene Glycol Butoxy Ether, citric acid, 1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,N-dim ethyl-3-sulfo-, N-coco acyl derivs., inner salts, Benzenesulfonic acid, (1-methylethyl)-, sodium salt (1:1), Alcohols, C9-11, ethoxylated	0.0
" "	Ultra Dish soap	28 oz	Good, sealed	Sodium laureth sulfate, Cocamidopropylbetaine Ethanol, Isothiazolinones Ingredients determined not to be hazardous	0.0
" "	Blue & Bleach toilet cleaner	3.5 oz	Good, sealed	Organic salt	0.0
" "	Tilex	32 oz	Good, sealed	Sodium hypochlorite, Sodium hydroxide	0.0
" "	Pinalen Multi-Purpose Cleaner	~0.5 gal	Good, sealed	Pine oil, Lauric acid, sodium salt	0.0
" "	Maintex Anti-bacterial soap	128 oz	Good, sealed	Parachlorometaxylenol, Parachlorometaxilenol	0.0
" "	Black Flag Ant & Roach Killer	17.5 oz	Good, sealed	Lambda-cyhalothrin, Imiprothrin, Petroleum distillates, Diethylene glycol monobutyl ether, Isobutane, Propane	0.0
" "	Round-Up weed & grass killer	128 oz	Good, sealed	Isopropylamine salt of glyphosate, Diquat dibromide, Other ingredients (specific chemical identity is being withheld because it is	0.0

				trade secret information of Monsanto Company)	
" "	WD-40	8 oz	Good, sealed	Aliphatic Hydrocrabon, Petroleum Base Oil, LVP Aliphatic Hydrocarbon, Carbon Dioxide, Non-Hazardous Ingredients	0.0
" "	DAP app purpose calk plus silicone	10.1 oz	Good, sealed	Limestone, Dipropylene glycol dibenzoate, Petroleum distillates, Diethylene glycol dibenzoate, Titanium dioxide, Quartz, Carbon black	0.0
" "	Krylon Fuorescent color spray can	11 oz	Good, sealed	Acetone, propane, n-butyl acetate, butane, Lt. aliphatic hydrocarbon solvent, talc, ethyl 3-ethoxypropionate, xylene, barium sulfate, ethylbenzene, unsaturated fatty acids	0.0
" "	Windex multi-purpose	~32 oz	Good, sealed	NON-hazardous Per 29 CFR 1910.1200	0.0
" "	The Works toilet cleaner	32 oz	Good, sealed	Hydrogen chloride	0.0
" "	Alcapp glass cleaner	19 oz	Good, sealed	Liquified petroleum gas, ethyl alcohol, 2-butoxyethanol	0.0
" "	Great Value Multi-purpose cleaner	32 oz	Good, sealed	Sodium hypochlorite	0.0
" "	Odor Genie odor destroyer	32 oz	Good, Sealed	Octyl decyl dimethyl ammonium chloride, dioctyl dimethyl ammonium chloride, Alkyl, dimethyl benzyl ammonium chloride	0.0
" "	Stop & Shop glass cleaner	~32 oz	Good, sealed	Isopropyl alcohol, grese cutting solvent, ammonia, surfactant, coloant	0.0
" "	Mr. Clean	40 oz	Good, sealed	Alcohols, C9-11, ethoxylated, Tetramethyl Acetyloctahydronapthalenes	0.0
" "	Antibacterial hand soap with moisturizers	64 oz	Good, sealed	Benzalkonium chloride	0.0

" "	Arctic Ban-50 Antifreeze	128 oz	Good, sealed	Ethyl alcohol and glycol compound	0.0
" "	Paint cans	32 oz	Product on container exterior	Hydrotreated Light Distillate, Solvent Naphtha, Light Aromatic, Titanium Dioxide, Methyl Ethyl Ketoxime, Naphtha, Hydrotreated Heavy	0.0
" "	Ultra-Spec 500 paint can	128 oz	Product on container exterior	Titanium Dioxide, limestone, Diatomaceous earth	0.0
Exercise room	Paint can	128 oz	Product on container exterior	Barium sulfate, Titanium Dioxide, Carbon Black	0.0
Bathroom	Lysol All Purpose	~32 oz	Good, sealed	Quaternary ammonium compounds,benzyl-C12-16-alkyldimethyl, chloride, dodecyldimethlamine oxide	0.0
Back room	Gonzo air freshener	14 oz	open	Fragrance, Glycerin	0.0
" "	Pure Linen Air Fresheners	-	open	Sodium stearate, fragrance, glyceryl stearate, glycerin, sodium chloride, sodium bicarbonate	0.0
" "	Fire extinguisher	~2.5 lb	Good, sealed	Mono-ammonium phosphate, Ammonium sulfate, Attapulgite clay, Mica- potassium aluminum silicate, Silicone oil methyl hydrogen polysiloxane, Calcium carbonate, Amorphous silica, precipitated synthetic zeoliteghs, Yellow 14 pigment – diazo dye	0.0
By ring	Vasoline	~16 oz	Good, sealed	White petroleum	0.0
Front desk	Febreeze	16.9 oz	Good, sealed	Ethanol	0.0
" "	Fantastic	32 oz	Good, sealed	Propylene glycol monobutyl ether, Alkyl dimethyl benzyl ammonium chloride, Alkyl dimethyl ethyl benzyl ammonium	0.0

" "	Antibacterial Hand sanitizer	8 oz	Good, sealed	Ethanol, propan-2-ol	0.0
" "	Spectracide Carpenter Bee/Yellow Jacket Killer*	16 oz	used	Lambda-cyhalothrin, prallethrin, petroleum distillates (hydrotreated light), propane	0.0
Throughout Boxing Club	Hot Shot Insect Fogger*	Multiple 2-oz	used	Tetramethrin, cypermethrin	0.0

* - observed 8/31/18 during sample canister retrieval

Appendix B: Field Notes and Sample Log Sheets

DEC-GLENCOVE 30-36 8/9/18

START: 0945 ON: 1100 OFF: ~~1445~~ 1445 END: 1530
LUNCH: 1415-1445

PURPOSE: MEET DEC & NYSDOH REPS ONSITE TO CONDUCT SITE WALK FOR UPCOMING AIR SAMPLING EVENT.

EQUIP: 18 TRANSIT, RENTAL MULTI-RAE, DIG. CAMERA

ONSITE: EAR - SG/TE, GEO/CHEMIST

WEATHER: ~90°F, SUNNY, HUMID.

NOTES: 8/18 - 8/19

- SCHED FOR NEXT SAT/SUN. @ 0900 (AS DISC. W/ CHRISTINE)
- NEW FLOORING PROPOSED FOR AFTER SAMPLING (AS PER CHRISTINE)
- DEC/DOH ONSITE @ ~1115, OFFSITE ~~NOON~~ 1230

- VOC - 0.0 PPM, LEL - 0 (11RS)
- NE OFFICES, (5 OFF)
  VOC - 0.0 LEL - 0
- KITCHEN / STORAGE (3 ROOMS)
  VOC - 0.0 LEL - 0 (11RS)
- BATHROOM
  VOC - 0.0 LEL - 0
- SE (N)
  VOC - 0.0 LEL - 0
- SE (S)
  VOC - 0.0 LEL - 0
- 7 INDOOR
  2 CRAWL SPACE } DAY CARE
- 1 INDOOR
  1 SUB-SLAB } BOWLING
- AS APPROVED BY DOH & DEC
- TENT. SCHED. FOR 0930 8/18 W/ DAY CARE (JAMES)
- VOC & LEL READINGS ALL 0.0 THROUGHOUT SITE WALK & CRAWLSPACE INSPECTIONS

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Sample Log Sheet

Date: 8/18/2018 - 8/19/2018
Site ID: DCC-GlenCove 30-36
Address: Pall Corp. 30-36 Sea Cliff Ave., Glencove NY
Preparer's Name: Tracey Evans

Sampling Information

-Sample location (indicate subslab or indoor air): Indoor Class 1

-Sample name/location (as it appears on CoC): GCCDC-Class1-IA

-Laboratory and analysis: Euro Fins, VOC via To-15 + methane via EPA 18,

-Mass/flow regulator calibration information: 24 hr collector

1. Summa canister

Can #: 509

S.F.
0000931420
7 Micron

2. Mass flow valve:

p/n: 236964

s/n: SN7236964

model #: W0119828

3. Vacuum immediately before opening: 0 "Hg

Vacuum immediately after opening: -29 "Hg

Vacuum 15 minutes after opening: -29 "Hg

Vacuum immediately before closing: -4 "Hg

Vacuum immediately after closing: -4 "Hg

4. Sample collection start time (24 hr. clock): 9:34

Sample collection end time (24 hr. clock): ~~10:44~~ 9:30

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Sample Log Sheet

Date: 8/18/2018 - 8/19/2018
Site ID: DEC-Glencove 30-36
Address: Dall Corp. 30-36 Sea Cliff Ave, Glencove NY
Preparer's Name: Tracey Evans

Sampling Information

-Sample location (indicate subslab or indoor air): Indoor, Class 5

-Sample name/location (as it appears on CoC): GCCDC-Class5-IA

-Laboratory and analysis: Eurofins, TO-15 VOC Methane EPA 18/25

-Mass/flow regulator calibration information: 24 hr collection

1. Summa canister

Can #: 518

2. Mass flow valve:

p/n: 993910

s/n: A0239939-10

model #: H/L570523

S.F.
0000922979
7 Micron

3. Vacuum immediately before opening: 0 "Hg

Vacuum immediately after opening: -30 "Hg

Vacuum 15 minutes after opening: -29.8 "Hg

Vacuum immediately before closing: -6.3 "Hg

Vacuum immediately after closing: -5.0 "Hg

4. Sample collection start time (24 hr. clock): 10:00 9:56

Sample collection end time (24 hr. clock): 9:36

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Sample Log Sheet

Date: 8/18/2018 - 8/19/2018
Site ID: DEC-Glencove 30-36
Address: Dall Corp. 30-36 Sea Cliff Ave., Glencove NY
Preparer's Name: Tracey Evans

Sampling Information

-Sample location (indicate subslab or indoor air): Indoor, class 6

-Sample name/location (as it appears on CoC): GCCDC- Class 6-IA

-Laboratory and analysis: Eurofins, TO-15 VOC Methane EPA 8/25

-Mass/flow regulator calibration information: 24 hr collection

1. Summa canister

Can #: 525

S. F.
73650001
7 micron

2. Mass flow valve:

p/n: 236807

s/n: SN 7236807

model #: W0119827

3. Vacuum immediately before opening: 0 "Hg

Vacuum immediately after opening: -30 "Hg

Vacuum 15 minutes after opening: -29.9 "Hg

Vacuum immediately before closing: -3 "Hg

Vacuum immediately after closing: -3 "Hg

4. Sample collection start time (24 hr. clock): 10:00

Sample collection end time (24 hr. clock): 9:45

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Sample Log Sheet

Date: 8/18/2018 - 8/19/2018
Site ID: ~~DEC~~-Glen Cove 30-36
Address: Pall Corp. 30-36 Sea Cliff Ave., Glencove NY
Preparer's Name: Tracey Evans

Dup also this one

Sampling Information

-Sample location (indicate subslab or indoor air): Indoor, Class 7

-Sample name/location (as it appears on CoC): GCDC-Class 7-I A

-Laboratory and analysis: Eurofins, VOC TO-15 + Methane 18/25

-Mass/flow regulator calibration information: 24 hr collection

1. Summa canister

Can #: 820

2. Mass flow valve:

p/n: 5805~~0~~10

s/n: A0295805-10

model #: ~~H/L 5705~~ 800140

S. F.
0000387835
1micron

3. Vacuum immediately before opening: 0 "Hg

Vacuum immediately after opening: -30 "Hg

Vacuum 15 minutes after opening: -29.2 "Hg

Vacuum immediately before closing: 0 "Hg

Vacuum immediately after closing: 0 "Hg

4. Sample collection start time (24 hr. clock): 10:09

Sample collection end time (24 hr. clock): 9:48

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Sample Log Sheet

DUP

Class 7

Date: 8/18/2018 - 8/19/2018
Site ID: DEC - Glencove 30-36
Address: Pall Corp. 30-36 Sea Cliff Ave., Glen Cove NY
Preparer's Name: Tracey Evans

Sampling Information

-Sample location (indicate subslab or indoor air): Indoor, class 7 Duplicate
-Sample name/location (as it appears on CoC): GCCDC-doc class X I A
-Laboratory and analysis: Eurofins, TO-15 VOC + Methane EPA 18/25
-Mass/flow regulator calibration information: 24 hr collection

1. Summa canister

Can #: 1178

S.F
1000931394
7 MICRONS

2. Mass flow valve:

p/n: 675015
s/n: A0267501I-5
model #: N/L573406

3. Vacuum immediately before opening: 0 "Hg
Vacuum immediately after opening: -30 "Hg
Vacuum 15 minutes after opening: -29.7 "Hg
Vacuum immediately before closing: -5 "Hg
Vacuum immediately after closing: -4 "Hg

4. Sample collection start time (24 hr. clock): 10:09
Sample collection end time (24 hr. clock): 950

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Sample Log Sheet

Replacement for Class 10C

Date: 8/18/2018 - 8/19/2018
Site ID: DEC- Glencove 30-36
Address: Pall Corp. 30-36 Sea Cliff Ave., Glen Cove NY
Preparer's Name: Tracey EVANS

Sampling Information

-Sample location (indicate subslab or indoor air): Indoor, Class10C

-Sample name/location (as it appears on CoC): GCCDC-Class10C_IA

-Laboratory and analysis: Eurofins, VOC TO-15 + Methane EPA 18/25

-Mass/flow regulator calibration information: 24 hr collector

1. Summa canister

Can #: 1352

S.F.
00 00 35 21 7
7 micron

2. Mass flow valve:

p/n: 900083

s/n: A 0309 0 08-3

model #: 12/L 8001.35

3. Vacuum immediately before opening: 0 "Hg

Vacuum immediately after opening: -30 "Hg

Vacuum 15 minutes after opening: -29.9 "Hg

Vacuum immediately before closing: -6 "Hg

Vacuum immediately after closing: -4 "Hg

4. Sample collection start time (24 hr. clock): ~~10:48~~ 11:01

Sample collection end time (24 hr. clock): 9:58

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Sample Log Sheet

Date: 8/14/2018 - 8/19/2018
Site ID: DEC-Glencove 30-36
Address: Pall Corp. 30-36 SeaCliff Ave, Glen Cove NY
Preparer's Name: Tracey Evans

Sampling Information

-Sample location (indicate subslab or indoor air): Indoor, Class 10A

-Sample name/location (as it appears on CoC): GCCDC_Class 10A-I A

-Laboratory and analysis: Eurofins, VOC TO-15 Method EPA R/25

-Mass/flow regulator calibration information: 24 hr collection

1. Summa canister

Can #: 451

S.F.
0000922979
7 Micron

2. Mass flow valve:

p/n: 2348 34

s/n: SN72348 34

model #: W0119169

3. Vacuum immediately before opening: 0 "Hg

Vacuum immediately after opening: -30 "Hg

Vacuum 15 minutes after opening: -29.8 "Hg

Vacuum immediately before closing: -1 "Hg

Vacuum immediately after closing: -1 "Hg

4. Sample collection start time (24 hr. clock): 10:31

Sample collection end time (24 hr. clock): 10:00

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Sample Log Sheet

Date: 8/18/2018 - 8/19/2018
Site ID: DEC-Glen Cove 30-36
Address: Pall Corp. 30-36 Sea Cliff Ave, Glen Cove NY (site#130053B)
Preparer's Name: Tracey Evans

Sampling Information

-Sample location (indicate subslab or indoor air): Indoor Education Office

-Sample name/location (as it appears on CoC): GCCDC-Office-IA

-Laboratory and analysis: Eurofins, VOC TO-15 + Methane EPA 18/25

-Mass/flow regulator calibration information: 24 hr collection

1. Summa canister

Can #: 5084

2. Mass flow valve:

Swagelok Filter (S.F)

Flow Reg p/n: ID 337691 — 50348200l

s/n: 7337691 — 7 Micron

model #: 153851

3. Vacuum immediately before opening: 0 "Hg

Vacuum immediately after opening: ~~-32~~ ~~-29.4~~ -30 (-29.4) "Hg

Vacuum 15 minutes after opening: ~~-29.8~~ -29 "Hg

Vacuum immediately before closing: -6 "Hg

Vacuum immediately after closing: -6 "Hg

4. Sample collection start time (24 hr. clock): ~~9:56~~ 10:45

Sample collection end time (24 hr. clock): 10:06

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Sample Log Sheet

Date: 8/18/2018 - 8/19/2018
Site ID: DEC-Glencove 30-36
Address: Pall.Corp 30-36 Sea Cliff Ave., Glen Cove NY
Preparer's Name: Tracey EVANS

Sampling Information

-Sample location (indicate subslab or indoor air): Crawl space, class b
-Sample name/location (as it appears on CoC): GCCDC-Class b-CS
-Laboratory and analysis: Eurofins VOC TO-15 + Methane EPA 3C/25
-Mass/flow regulator calibration information: 24 Hr. collection

1. Summa canister

Can #: 894

S.F.
00009229 79
7 Micron

2. Mass flow valve:

p/n: 900063
s/n: A0309006-3
model #: H/L 800138

3. Vacuum immediately before opening: 0 "Hg
Vacuum immediately after opening: -30 "Hg
Vacuum 15 minutes after opening: -29.8 "Hg
Vacuum immediately before closing: -23 "Hg
Vacuum immediately after closing: -23 "Hg

4. Sample collection start time (24 hr. clock): 11:17
Sample collection end time (24 hr. clock): 10:31

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Sample Log Sheet

Date: 8/18/2018 - 8/19/2018
Site ID: GEC-Glencue 30-36
Address: Gall Corp. 30-36 Soa Cliff Ave. Glen Cue NY
Preparer's Name: Tracey Evans

Sampling Information

-Sample location (indicate subslab or indoor air): Crawl Space, Class 10B

-Sample name/location (as it appears on CoC): GCCD_Class10B_CS

-Laboratory and analysis: Eurofins, VOC via To-15 & methane via EPA 18/

-Mass/flow regulator calibration information: 24 hr collector

1. Summa canister

Can #: 1157

S.F.
00381217
7 Micron

2. Mass flow valve:

p/n: 994182

s/n: A02994778-2

model #: H/L 800132

3. Vacuum immediately before opening: 0 "Hg

Vacuum immediately after opening: 29.2 "Hg

Vacuum 15 minutes after opening: 29 "Hg

Vacuum immediately before closing: -3.5 "Hg

Vacuum immediately after closing: -3 "Hg

4. Sample collection start time (24 hr. clock): 11:32

Sample collection end time (24 hr. clock): 10:40

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Sample Log Sheet

Date: 8/18/2018
Site ID: DEC-Glencare 30-36
Address: Pall Corp. 30-36 Sea Cliff Avenue, Glen Cove NY
Preparer's Name: TE

Sampling Information

-Sample location (indicate subslab or indoor air): Outdoor, Entry porch
-Sample name/location (as it appears on CoC): GCDC-~~OD~~ Entry-OD
-Laboratory and analysis: Eurofins, VOC TO-15 + Methane EPA 18/25
-Mass/flow regulator calibration information: 24 hr collection

1. Summa canister

Can #: 1506

2. Mass flow valve:

p/n: 236813
s/n: ~~WO 11 9 SN~~ 7236813
model #: WO 11 982

S.F.
0000931420
7 microns

3. Vacuum immediately before opening: 0 "Hg
Vacuum immediately after opening: -30 "Hg
Vacuum 15 minutes after opening: -29.9 "Hg
Vacuum immediately before closing: -7 "Hg
Vacuum immediately after closing: -7 "Hg

4. Sample collection start time (24 hr. clock): 14:28
Sample collection end time (24 hr. clock): 10:45

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Trash Fan / Emp

Sample Log Sheet

Date: 8/18/2018
Site ID: DEC- Glen Cove 30-36
Address: Mall Corp. 30-36 Sea Cliff Ave., Glen Cove NY
Preparer's Name: Tracey Evans

Sampling Information

-Sample location (indicate subslab or indoor air): Indoor, Class 10C

-Sample name/location (as it appears on CoC): GCCDC-Class 10C-IA

-Laboratory and analysis: Eurofins

-Mass/flow regulator calibration information:

1. Summa canister

Can #: 856

2. Mass flow valve:

p/n: 415277
A0241527-7
H/L 570523

994782
A0299478-2
H/L 800182

S.F.
0000922979
Micron

were replaced / issue with regulator

3. Vacuum immediately before opening: 0 "Hg

Vacuum immediately after opening: -30 "Hg

Vacuum 15 minutes after opening: _____ "Hg

Vacuum immediately before closing: _____ "Hg

Vacuum immediately after closing: _____ "Hg

4. Sample collection start time (24 hr. clock): 10:23

Sample collection end time (24 hr. clock): _____

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Trash one Failed

Sample Log Sheet

Date: 8/16/2018
Site ID: DEC-Glencare 30-36
Address: Pall Corp. 30-36 Sea Cliff Ave. Glen Cove NY
Preparer's Name: Tracy Evans

Sampling Information

-Sample location (indicate subslab or indoor air): Crawl space, class 10B

-Sample name/location (as it appears on CoC): GCDC-Class10B-CS

-Laboratory and analysis: Eurofins

-Mass/flow regulator calibration information:

1. Summa canister

Can #: 1157

2. Mass flow valve:

p/n: 848467

s/n: A0284846-7

model #: H/L 800139

S.F.
0000561188
7micron

Issues replaced

3. Vacuum immediately before opening: _____ "Hg

Vacuum immediately after opening: _____ "Hg

Vacuum 15 minutes after opening: _____ "Hg

Vacuum immediately before closing: _____ "Hg

Vacuum immediately after closing: _____ "Hg

4. Sample collection start time (24 hr. clock): _____

Sample collection end time (24 hr. clock): _____

Summa Canister Field Test Data/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # _____ Group # _____ For Eurofins Lancaster Laboratories Environmental use only Sample # _____ Bottle Order (SCR) # 229777

Client Information

Client: _____ Account #: _____

Project Name/#: DEC-Glencove 30-36

Project Manager: Ian Hofmann P.O. #: _____

Sampler: T&PB Quote #: _____

Name of state where samples were collected: New York

Turnaround Time Requested (TAT) (circle one)

Standard Rush (specify) _____

Data Package Required? Yes No

EDD Required? Yes No

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

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)	Analyses Requested: EPA TO - 15	EPA 18	☐ MTBE	☐ BTEX	EPA 25 (select range below)	Helium as tracer	O2/CO2	Library Search
GCCDC-Office-IA	8/18/10:45	8/19/10:06	-29.4	-6	68	68	337691	504	6	3.5	X							
GCCDC-Class1-IA	8/18/9:34	8/19/9:30	-29	-4	68	68	236964	509	6	3.5								
GCCDC-Class5-IA	8/18/9:56	8/19/9:36	-30	-6.3	68	68	993516	518	6	3.5								
GCCDC-Class6-IA	8/18/10:00	8/19/9:45	-30	-3	68	68	236007	525	6	3.5								
GCCDC-Class7-IA	8/18/10:09	8/19/9:48	-30	0	68	68	580510	820	6	3.5								
GCCDC-Class10C-IA	8/18/11:01	8/19/9:58	-30	-6	68	68	900083	1352	6	3.5								
GCCDC-Class10A-IA	8/18/10:31	8/19/10:00	-30	-1	68	68	234834	851	6	3.5								
GCCDC-Class6-CS	8/18/11:17	8/19/10:31	-30	-23	77	69	900567	854	6	3.5								
GCCDC-Class10B-CS	8/18/14:32	8/19/10:40	-29.2	-3	77	69	994782	1187	6	3.5								
GCCDC-ClassX-IA	8/18/—	8/19/—	-30	-5	68	68	675015	1178	6	3.5								
GCCDC-Entry_OD	8/18/14:28	8/19/10:45	-30	-7	77	69	536813	1506	6	3.5								

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:
8/15/18	1600						
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:

Deflen Cave 30-36

Time on Site: 8:45

weather: Partly cloudy, drizzle

Temp: 72

wind: 7mph

direction: W S W

9 questions for Steve for James

Building Remodel 6 of 8

Class I Bear 509

measurements: 46' off wall, 187" overhang

soil/vap intrusion: no obvious cracks

space in floorboard near entrance

Start Vac: 29.91 "Hg

Corr File: ef00189.D

Clean Room: 8/14/2018 JEB 7445

Time:

Before opening valve: 0.0 Vac gauge

Start time: 0934 hrs

Vac -29

5-Gas Meter: No reading for VOC

Height: 40" from floor

After 15 min: @ 1011 hrs

Vac: -29 "Hg

JEB

1 of 5

CLASS ROOM: 5
SUMMA: 518
HEIGHT: 3'
MEASUREMENTS 93" FROM OUTER WALL (SOUTH)
137" FROM E WALL
SOIL/VAPOR INTRUSION: NO OBVIOUS CRACKS OR OPENINGS OBSERVED
START VAC: 29.91 "Hg
CERT FILE: ff00304.D
CLEAN/EVAC: 8/14/2018 JEB 744S
VALVE BEFORE OPENING: 0 "Hg
START TIME: 0956 HRS
VAC @ START: -30 "Hg
5-GAS: NO VOCs DETECTED

CLASS ROOM: 6 SUMMA: 525
HEIGHT 3' DISTANCE 79" OFF E WALL
188 OFF S WALL
SOIL VAPOR: NO OBVIOUS CRACKS OR OPENINGS

START VAC: 29.91 "Hg
CERT FILE: AA00305.D
CLEAN/VAC: 8/14/2018 JEB 744S
VALVE OPENING BEFORE: 0 "Hg
START TIME: 1000 HRS
VAC - -30 "Hg
5-GAS: 0.0 VOCs - NO VOCs DETECTED
2068

ORIG. MAN.
CLASS ROOM: 7 DUPLICATE CAN: 820 / 1178
HEIGHT: 3' DIM: 92" FROM S WALL
247" FROM W WALL
SOIL VAPOR INT. - NO OBVIOUS CRACKS/OPENING
START VAC: 29.91 "Hg } 820
CLEAN: 8/14/18 JEB 744S
CERT: ef00709.D
INITIAL VAC: 0 "Hg
START VAC: 29.91 "Hg } 1178
CLEAN: 8/14/18 JEB 744S
CERT: ef00242.D
INITIAL VAC: 0 "Hg
START TIME: 1009 HRS
820 - -30 "Hg 1178 - -30 "Hg
START VAC
5-GAS: NO VOCs DETECTED

CLASS ROOM: 8 SUMMA CAN: 856
HEIGHT: 3 DIMENSIONS: 47" N WALL (DR)
SOIL: NO OBV CRACKS/OPENING 197" E WALL (INNER PARTY)
INITIAL VAC: 29.91 "Hg
CLEAN: 8/14/2018 JEB 744S
CERT: ef00059.D
INITIAL VAC: 0 "Hg
START TIME 1023 HRS
START VAC: -30 "Hg
5-GAS: NO VOCs DETECTED

PB

ROOM LOC: 857 HEIGHT 34"
DIMENSION 77" FROM EAST WINDOW APEX
152" FROM NORTH WALL
SVI: EXIT DOOR ON NORTH WALL BUT
NO CRACKS OR OPENING - RESEALED

NOTE WEATHER @ 1029 77°F
HUMIDITY 87%
WIND 7 MPH W-SW
PRESSURE 29.8 "Hg
CLOUDY

EVAC PRESSURE: 29.91 "Hg
CLEAN: 8/14/12 JEB 7445
CERT: ef00240.d
INITIAL VAC: 0 "Hg (GAUGE)
START TIME: 1031 HRS
START VAC: -30 "Hg (GAUGE)
5-GAS NO VOC's DETECTED

4 of 8

Room 5 @ 1038
Summa 578 VAC READING -29.8 "Hg

Room # 6 @ 1036
Summa 525 VAC READING -29.9 "Hg

Room # 7 @ 1038
Summa 8220 VAC READING -29.2 "Hg
Summa 1178 VAC READING -29.9 "Hg
Room # 10 @ 1048 VAC READ: -[illegible] "Hg
Room # 10 @ 1049 VAC -29.8 "Hg
Summa # 857

Room: Education office (inner mid-office w/file cabinet)
Height: 91"
Off outer office 2' (3 doors meet)
Off wall toward kitchen 111"
EVAC: 29.91 "Hg
Clean 8/14/12 JEB 7445
Cert: ff00283.0
Starting VAC (Gauge): 0 "Hg
Start time: 1045 HRS
Start VAC: -29.4 "Hg

After 15 min. VAC Reading -29. "Hg

5 of 8

Replacement for 10C
Summa: C352
EVAC VAC: 29.91
CLEAN 8/14/18 JEB7445
CERT: ef000080.D
INITIAL GAUGE: 0 "Hg
START TIME: 1101 hrs
START GAUGE: -30 "Hg
5-Gas: NO VOCs DETECTED

CRAWL SPACE CLASS 6
Summa # 894 EVAC PRESS 29.91 "Hg
CLEAN 8/14/18 JEB7445
BATCH ef000226.D
INITIAL GAUGE = 0 "Hg
No alarm
Good oxygen level
Past Beam
Old Blacktop
CO went over to 1
Zero
11:17 -30 in Hg

6 of 8

Switching regulators 1107
crawl space 10B

reg Master dn 0 9 4 7 8 2
A 0 2 9 9 4 7 7 8 - 2
H / L 8 0 0 1 3 2

facility 8 4 8 4 6 7

cert: e 0 0 2 4 1 . D

SF 0 0 0 3 8 7 2 m m

Read 2 in
right in middle of bldg
open 11:32 -29.2
No VOC | good oxygen

~~checked~~

Forgot the outside
canister - have to
go back

7 of 8

went back to put in outdoor sample
tied to entry porch fence
Arrive 2:23

Summa 1506
Clean & Evacuated
8/14/18 JE B7445

ff00201.d

29.91" Hg

Inital 0 in Hg

Open 2:28
-30 in Hg
13min check
2:43 -29.9

Temp 85°C
Slightly cloudy
65% humidity
winds W SW 11mph

weather change 9pm

8 of 8 (RB)

(18)

arrived crawl 8:30 am
checked
Retrieved crawl space class 6
checked outside sample

Collection of Samples
Class 1 Can # @ 9:30,
-4 before closing
-4 after
Teams were added to room
Corner Balls, took pictures
Class 5 Can # 518 @ 9:36
-6.3 Before in Hg
-5 After

Class 6 Can # 525 @ 9:45
-3 before
-3 after

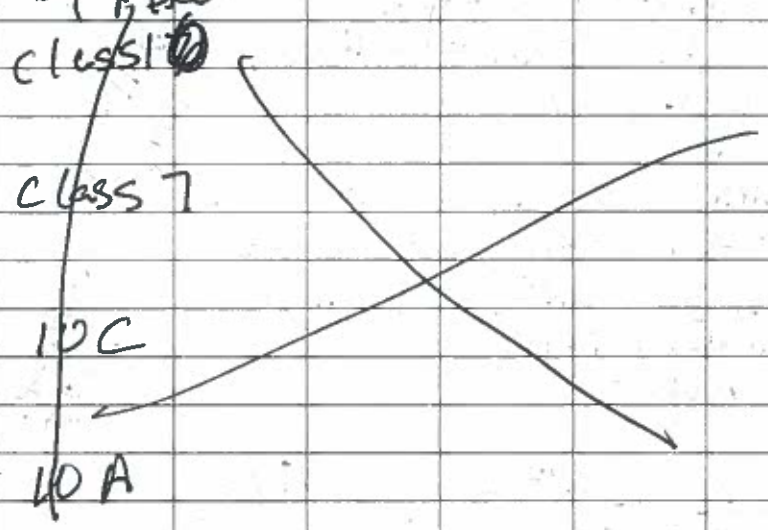
Class 7 Can # 820 @ 9:48
0
0

Dup of class 1 # 1178 @ 9:5
-5
-4

Build temp, humidity, check AC

1 of 3 (RB)

Class 10C can# 1352 @ 9:58
- 6 Befor
- 4 After
Class 10A can# 851 @ 10:00
- 1 Befor
- 1 After



Education room - open - people inside
can# 504 10:06
- 6 Before
- 6 dropping

Crawl Space Class 6
can# [illegible] @ 10:31 Before 23 After 33

Crawl Space class 10B
can# 1157 @ 10:40 Before 3.5 After 3

Out door sample
can# [illegible] @ [illegible] 10:45 Before 7 After 7
37.5 inch High
55 inch from entry wall

Weather
6.9°C
81% humidity
Win NE 12 mph

Packed up by 11 am
Finished paperwork 11:48
Leave @ 12 pm
arrive @ 12:55pm

DEC-GlenCove30-36 8/30/18

~~START~~: 0700 ON: 0930 OFF: ~~1245~~ 1315 END: 1345
LUNCH: 1245-1315

PURPOSE: SVI SAMPLE SETUP W/ INDOOR/OUTDOOR AIR SAMPLES

ON SITE: EAR-SG/JB, GEO/TECH

EQUIP: RENTAL PID, SKC, BIO ~~DEFENDER~~, MGD-2002; 16 TRANSIT; DIGITAL CAMERA, He TANK

WEATHER: ~~87°F, PARTLY CLOUDY, 60% HUMIDITY, WIND FROM NNW, 24.6 in~~ 87°F, PARTLY CLOUDY, 57% Hum., WIND from NW, 30.0 in Hg

NOTES: - RE-ZERO'D MULTI RAE PRIOR TO USE
- SLAB THICKNESS ~0.75" ft.
- PURGE RATE - 0.1679 L/min
- AMBIENT AIR IN GYM, 0.0 ppm (ALL ROOMS)
- INFORMED BY GYM DIRECTOR THAT INSECT FOGGER WERE USED W/IN 24 HRS TO ADDRESS BEES INSIDE GYM. PRODUCT HAS BEEN PHOTOGRAPHED & LOGGED.

TUBING = TEFLON, 1/4" x 3/8"
- 3.5' LONG
- VOL = $\pi r^2 h$, $r' = 0.01'$
$h = 3.5'$,
VOL = 0.0012 cuft = 0.0340 L
(1 cuft = 28.317 L)
3 VOL = 0.1019 L
PURGE RATE = 0.1679 L/m

$$\frac{0.1679\ L}{1\ min} = \frac{0.1019\ L}{X\ min}$$

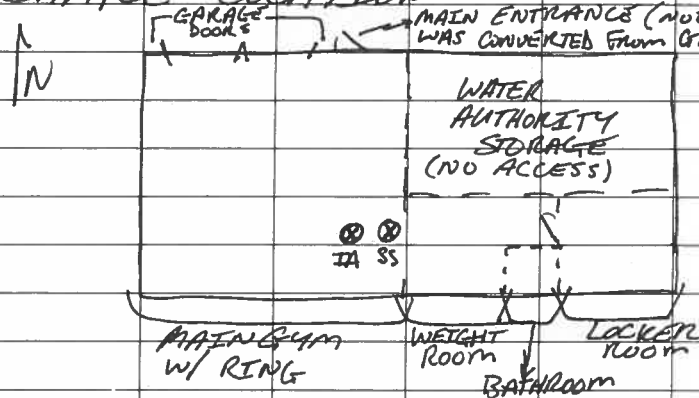
$$\frac{0.1019}{0.1679} = 0.6069\ min$$

3 VOL PURGE = 36.41 SEC
- PID PRE-PURGE - 0.0 ppm
- 2% He (1150) - 96.8%
- PURGE @ 1151
- SAMPLE START @ 1155

DEC-GC30-36 8/30/18

INDOOR AIR ~~IA~~

- START: 1213 (SAMPLE START, INDOOR AIR SAMPLE)
- PID @ 0.0 ppm IN BLDG DURING ENTIRE VISIT TO SITE. (THIS INCLUDES ALL ROOMS IN GYM).
- SAMPLE LOCATION:

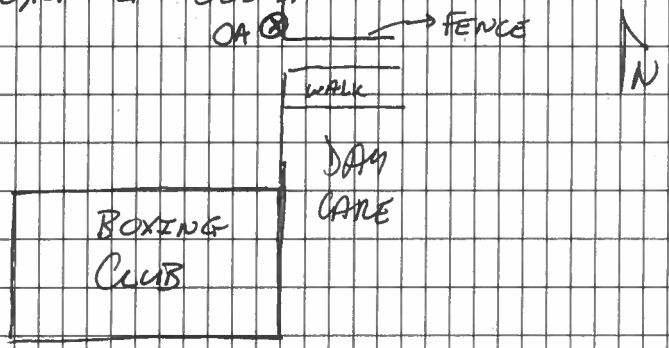


- IA = INDOOR AIR SAMPLE
- SS = SUB-SLAB AIR SAMPLE
- SAMPLE COLLECTED FROM ~3' ABOVE GRADE

DEC-GC30-36 8/30/18

OUTDOOR AIR

- WIND FROM NW, PROJECTED TO STAY FROM N+NW, USED CHAINLINK FENCE TO SECURE SAMPLE (~4' ABOVE GRADE) W/ CHAIN # 3753 LOCK
- SAMPLE LOCATED NNW OF BOXING CLUB:



DEC-GLENCOVE30-36 8/31/18

START: 1030 ON: 1130 OFF: 1300 END: 1500

- PURPOSE: COMPLETE AIR SAMPLING IN BOX TAG CLUB.
- EQUIP: 1/6 TRANSET, D. CAMERA, RENTAL-
- MULTI-RAE & MGD-2002
- ONSITE: EAM - SG, GEO
- WEATHER: ~77°F, CLOUDY, 62% HUM., 30.2 inHg., WIND FROM E.

NOTE:
- GUM DIRECTOR & GC PARKS REPS ONSITE UPON ARRIVAL
- BLDG PID - 0.0 ppm (1152)
- BLDG LEL - 0 (1152)

SS SAMPLE (SUB SLAB)
END: 1155
END He: 35.7 %
END PID: 0.0 ppm
END LEL: 0
- NOTE: CLAY DOES NOT APPEAR TO HAVE DRIED OUT SEALS APPEAR TO BE IN TACT.
- BOREHOLE THROUGH SLAB WAS BACKFILLED w/ HYDRAULIC CEMENT TO GRADE. AREA RESTORED TO MATCH EXISTING CONDITIONS.

INDOOR AIR
END: 1214
PID: 0.0 ppm
LEL: 0

OUTDOOR AIR
END: 1240
PID: 0.0 ppm
LEL: 0

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Sample Log Sheet

Date: 8/30/18 – 8/31/18
Site ID: DEC-GLEN COVE 30-36
Address: GLEN COVE BOXING CLUB, OFFSITE OF 30-36 SEA CLIFF AVE SITE.
Preparer's Name: SG/JB

Sampling Information

Sample name(as it appears on CoC): GCBC_SS

Sample location (include depth/elevation): SUB-SLAB, ~0.75" BGS, 2.5' W OF E INTERIOR WALL (BETWEEN MAIN & WEIGHT ROOMS) 12.1' N OF S INTERIOR WALL

Laboratory and analysis: eurofins Lancaster Laboratories environmental, TO-15+He, PLUS CH4

Purge Volume: ~~0.5~~ 0.1019 L

1. Summa Canister Information

Laboratory ID #: 1263

Cleaning/Certification Date: 8/14/2018

Batch #/Analyst: fec0117.d / JEB 7445

2. Flow Controller/Metering Valve Information

Laboratory ID #: 930841

s/n: A0213034-1

model/lot #: H/L800138

3. Diaphragm/Bellows Valve

Manufacturer: Swagelok

s/n or lot #: 000082480?

model #: SS-4H

4. Laboratory/Field Vacuums

Laboratory Vacuum (Before Sampling): 29.91 "Hg

Field Vacuum (Start Sampling): -30.0 "Hg

Field Vacuum (Stop Sampling): -3.5 "Hg

Laboratory Vacuum (After Sampling) ↓ "Hg

5. Collection Period

Sample collection start time (24 hr. clock): 8/30/18 11:55

Sample collection end time (24 hr. clock): 8/31/18 1155

IA

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Sample Log Sheet

Date: 8/30/18 - 8/31/18
Site ID: DEC- GLEN COVE 30-36
Address: GLEN COVE BOKING CLUB, OFFSITE OF 30-36 SEA CLIFF AVE SITE
Preparer's Name: SG/JB

Sampling Information

Sample name(as it appears on CoC): GCBC_IA

Sample location (include depth/elevation): ~3' ABOVE GRADE, 5.5' W OF E INTERIOR WALL (BETWEEN MAIN & WRIGHT ROOMS), 11.0' N OF S INTERIOR WALL

Laboratory and analysis: Eurofins TO-15 ~~+ Helium~~ + CH_4

Purge Volume: NA

1. Summa Canister Information

Laboratory ID #: 1176

Cleaning/Certification Date: 8/21/2018

Batch #/Analyst: fh00471.d / ADS7818

2. Flow Controller/Metering Valve Information

Laboratory ID #: 415304

s/n: A0241530-4

model/lot #: H/L570523

3. Diaphragm/Bellows Valve

Manufacturer: Swagelok

s/n or lot #: 0000582285

model #: SS-4H

4. Laboratory/Field Vacuums

Laboratory Vacuum (Before Sampling): -29.91 "Hg

Field Vacuum (Start Sampling): -30 "Hg

Field Vacuum (Stop Sampling): -8.0 "Hg

Laboratory Vacuum (After Sampling) _____ "Hg

5. Collection Period

Sample collection start time (24 hr. clock): 8/30/18 12:13

Sample collection end time (24 hr. clock): 8/31/18 12:14

OA

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Sample Log Sheet

Date: 8/30/18 – 8/31/18
Site ID: DEC – GLEN COVE 30-36
Address: GLEN COVE BOXING CLUB, OFFSITE OF 30-36 SEA CLIFF AVE SITE
Preparer's Name: SG / JB

Sampling Information

Sample name(as it appears on CoC): GCBC_OA

Sample location (include depth/elevation): NNE OF GCBC, ~ 4' ABOVE GRADE
7.5' OF W@ WALL (EXT. DAY CARE, WEST WING)
17' N OF N WALL (EXT. DAY CARE, WEST WING)

Laboratory and analysis: EUROFINS, TO-15 + CH4

Purge Volume: NA

1. Summa Canister Information

Laboratory ID #: 1374

Cleaning/Certification Date: 8/14/18

Batch #/Analyst: ef00081.d / JEB7445

2. Flow Controller/Metering Valve Information

Laboratory ID #: 339183

s/n: 152/291733 9183 #

model/lot #: H/L 550289

3. Diaphragm/Bellows Valve

Manufacturer: ENTECH

s/n or lot #: NA

model #: TOV-2

4. Laboratory/Field Vacuums

Laboratory Vacuum (Before Sampling): -29.91 "Hg

Field Vacuum (Start Sampling): -27.0 "Hg

Field Vacuum (Stop Sampling): -2.0 "Hg

Laboratory Vacuum (After Sampling) _____ "Hg

5. Collection Period

Sample collection start time (24 hr. clock): 8/30/18 1233

Sample collection end time (24 hr. clock): 8/31/18 1240

Appendix C: Laboratory Reports

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NYSDEC ASP Category B Data Package

Prepared for:

Sunoco c/o Enviro. Assessment
225 Atlantic Avenue
Patchogue NY 11772

Project: DEC-Glencove30-36
Air Sample Samples
Collected on 08/18/18-08/19/18

SDG# GLE01

GROUP	SAMPLE NUMBERS
1979096	9766344-9766354

PA Cert. # 36-00037
NY Cert. # 10670
NJ Cert. # PA011
NC Cert. # 521
TX Cert. # T104704194-18-27
AZ Cert. # AZ0780

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:** **10/10/2018**

Dana M. Kauffman
Manager

Any questions or concerns you might have regarding this data package should be directed to your client representative, Elizabeth Bauer at (717) 556-7290.

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

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Sample Reference List for SDG Number GLE01 with a Data Package Type of NYSDEC B

05936 - Sunoco c/o Enviro. Assessment

Project: DEC-Glencove30-36

Lab Sample Number	Client Sample ID	Collection Date	Date Received
9766344	GCCDC-Office-IA	08/18/2018 10:45	08/22/2018 10:05
9766345	GCCDC-Class1_IA	08/18/2018 09:34	08/22/2018 10:05
9766346	GCCDC-Class5_IA	08/18/2018 09:56	08/22/2018 10:05
9766347	GCCDC-Class6_IA	08/18/2018 10:00	08/22/2018 10:05
9766348	GCCDC-Class7_IA	08/18/2018 10:09	08/22/2018 10:05
9766349	GCCDC-Class10C_IA	08/18/2018 11:01	08/22/2018 10:05
9766350	GCCDC-Class10A_IA	08/18/2018 10:31	08/22/2018 10:05
9766351	GCCDC-Class6_CS	08/18/2018 11:17	08/22/2018 10:05
9766352	GCCDC-Class10B_CS	08/18/2018 11:32	08/22/2018 10:05
9766353	GCCDC-ClassX_IA	08/18/2018 00:00	08/22/2018 10:05
9766354	GCCDC-Entry_OD	08/18/2018 14:28	08/22/2018 10:05

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07090 BTEX/MTBE/Hydrocarbons by GC

Air samples are collected in Tedlar bags or passivated SUMMA canisters. The sample is introduced, using a gas-sampling loop, into a gas chromatograph equipped with a capillary column and interfaced directly to a flame ionization and photoionization detector (FID, PID). The FID is used for the determination of aliphatic hydrocarbons and the PID is used for determination of aromatic hydrocarbons.

Reference: 40 CFR Part 60, Appendix A, EPA Methods 18 & 25, July 1997

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

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ANALYSIS REPORT

Prepared by:

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

Prepared for:

Sunoco c/o Enviro. Assessment
225 Atlantic Avenue
Patchogue NY 11772

Report Date: September 18, 2018 14:02

Project: DEC-Glencove30-36

Account #: 05936
Group Number: 1979096
SDG: GLE01
PO Number: DEC-GLENCOVE 30-36
State of Sample Origin: NY

Electronic Copy To	Environmental Assessment & Rem	Attn: John Hofmann
Electronic Copy To	Environmental Assessment & Rem	Attn: Ian Hofmann

Respectfully Submitted,

Elizabeth M. Bauer
Project Manager

(717) 556-7290

To view our laboratory's current scopes of accreditation please go to http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ . Historical copies may be requested through your project manager.

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SAMPLE INFORMATION

Client Sample Description	Sample Collection Date/Time	ELLE#
GCCDC-Office-IA Air Sample	08/18/2018 10:45 - 08/19/2018 10:06	9766344
GCCDC-Class1_IA Air Sample	08/18/2018 09:34 - 08/19/2018 09:30	9766345
GCCDC-Class5_IA Air Sample	08/18/2018 09:56 - 08/19/2018 09:36	9766346
GCCDC-Class6_IA Air Sample	08/18/2018 10:00 - 08/19/2018 09:45	9766347
GCCDC-Class7_IA Air Sample	08/18/2018 10:09 - 08/19/2018 09:48	9766348
GCCDC-Class10C_IA Air Sample	08/18/2018 11:01 - 08/19/2018 09:58	9766349
GCCDC-Class10A_IA Air Sample	08/18/2018 10:31 - 08/19/2018 10:00	9766350
GCCDC-Class6_CS Air Sample	08/18/2018 11:17 - 08/19/2018 10:31	9766351
GCCDC-Class10B_CS Air Sample	08/18/2018 11:32 - 08/19/2018 10:40	9766352
GCCDC-ClassX_IA Air Sample	08/18/2018 - 08/19/2018	9766353
GCCDC-Entry_OD Air Sample	08/18/2018 14:28 - 08/19/2018 10:45	9766354

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

Sample Description: **GCCDC-Office-IA Air Sample**
SummaCan# 504
DEC-Glencove30-36

Project Name: **DEC-Glencove30-36**

Submittal Date/Time: 08/22/2018 10:05
Collection Date/Time: 08/18/2018 10:45 through 08/19/2018 10:06
SDG#: GLE01-01

Sunoco c/o Enviro. Assessment
ELLE Sample #: AQ 9766344
ELLE Group #: 1979096
Matrix: Air Sample

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA 18 mod/EPA 25 mod**		**ppm(v)**	**ppm(v)**	**mg/m3**	**mg/m3**	
07090	Methane	74-82-8	26	4	17	3	2
Volatiles in Air	**EPA TO-15**		**ug/m3**	**ug/m3**	**ppb(v)**	**ppb(v)**	
05298	Acetone	67-64-1	27	1.3	11	0.53	1
05298	Benzene	71-43-2	0.99 J	0.35	0.31 J	0.11	1
05298	Bromobenzene	108-86-1	N.D.	0.64	N.D.	0.10	1
05298	Bromodichloromethane	75-27-4	N.D.	0.80	N.D.	0.12	1
05298	Bromoform	75-25-2	N.D.	1.8	N.D.	0.17	1
05298	Bromomethane	74-83-9	N.D.	0.70	N.D.	0.18	1
05298	1,3-Butadiene	106-99-0	N.D.	0.38	N.D.	0.17	1
05298	2-Butanone	78-93-3	9.1	0.62	3.1	0.21	1
05298	Carbon Disulfide	75-15-0	N.D.	0.40	N.D.	0.13	1
05298	Carbon Tetrachloride	56-23-5	N.D.	0.88	N.D.	0.14	1
05298	Chlorobenzene	108-90-7	N.D.	0.60	N.D.	0.13	1
05298	Chlorodifluoromethane	75-45-6	N.D.	0.53	N.D.	0.15	1
05298	Chloroethane	75-00-3	N.D.	0.50	N.D.	0.19	1
05298	Chloroform	67-66-3	0.50 J	0.45	0.10 J	0.092	1
05298	Chloromethane	74-87-3	0.69 J	0.50	0.33 J	0.24	1
05298	3-Chloropropene	107-05-1	N.D.	0.47	N.D.	0.15	1
05298	Cumene	98-82-8	N.D.	1.2	N.D.	0.24	1
05298	Dibromochloromethane	124-48-1	N.D.	1.1	N.D.	0.13	1
05298	1,2-Dibromoethane	106-93-4	N.D.	1.0	N.D.	0.13	1
05298	Dibromomethane	74-95-3	N.D.	1.0	N.D.	0.14	1
05298	1,2-Dichlorobenzene	95-50-1	N.D.	1.2	N.D.	0.20	1
05298	1,3-Dichlorobenzene	541-73-1	N.D.	1.1	N.D.	0.19	1
05298	1,4-Dichlorobenzene	106-46-7	N.D.	1.0	N.D.	0.17	1
05298	Dichlorodifluoromethane	75-71-8	3.3 J	0.64	0.67 J	0.13	1
05298	1,1-Dichloroethane	75-34-3	N.D.	0.36	N.D.	0.089	1
05298	1,2-Dichloroethane	107-06-2	N.D.	0.32	N.D.	0.080	1
05298	1,1-Dichloroethene	75-35-4	N.D.	0.56	N.D.	0.14	1
05298	cis-1,2-Dichloroethene	156-59-2	N.D.	0.48	N.D.	0.12	1
05298	trans-1,2-Dichloroethene	156-60-5	N.D.	0.34	N.D.	0.086	1
05298	Dichlorofluoromethane	75-43-4	N.D.	0.46	N.D.	0.11	1
05298	1,2-Dichloropropane	78-87-5	N.D.	0.60	N.D.	0.13	1
05298	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.45	N.D.	0.10	1
05298	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.54	N.D.	0.12	1
05298	Ethylbenzene	100-41-4	1.0 J	0.83	0.23 J	0.19	1
05298	4-Ethyltoluene	622-96-8	N.D.	0.88	N.D.	0.18	1
05298	Freon 113	76-13-1	1.7 J	0.84	0.22 J	0.11	1
05298	Freon 114	76-14-2	N.D.	0.84	N.D.	0.12	1
05298	Heptane	142-82-5	2.7 J	0.94	0.66 J	0.23	1

Sample Description: **GCCDC-Office-IA Air Sample**
SummaCan# 504
DEC-Glencove30-36

Project Name: **DEC-Glencove30-36**

Submittal Date/Time: 08/22/2018 10:05
Collection Date/Time: 08/18/2018 10:45 through 08/19/2018 10:06
SDG#: GLE01-01

Sunoco c/o Enviro. Assessment
ELLE Sample #: AQ 9766344
ELLE Group #: 1979096
Matrix: Air Sample

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA TO-15**		**ug/m3**	**ug/m3**	**ppb(v)**	**ppb(v)**	
05298	Hexachloroethane	67-72-1	N.D.	2.6	N.D.	0.27	1
05298	Hexane	110-54-3	N.D.	0.46	N.D.	0.13	1
05298	2-Hexanone	591-78-6	N.D.	0.74	N.D.	0.18	1
05298	Isooctane	540-84-1	1.1 J	0.61	0.24 J	0.13	1
05298	Methyl t-Butyl Ether	1634-04-4	N.D.	0.54	N.D.	0.15	1
05298	4-Methyl-2-pentanone	108-10-1	N.D.	0.61	N.D.	0.15	1
05298	Methylene Chloride	75-09-2	N.D.	0.87	N.D.	0.25	1
05298	Octane	111-65-9	N.D.	1.9	N.D.	0.40	1
05298	Pentane	109-66-0	3.3	0.38	1.1	0.13	1
05298	Styrene	100-42-5	N.D.	0.85	N.D.	0.20	1
05298	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1.0	N.D.	0.15	1
05298	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1.0	N.D.	0.15	1
05298	Tetrachloroethene	127-18-4	N.D.	1.7	N.D.	0.25	1
05298	Toluene	108-88-3	3.9	0.45	1.0	0.12	1
05298	1,1,1-Trichloroethane	71-55-6	N.D.	0.65	N.D.	0.12	1
05298	1,1,2-Trichloroethane	79-00-5	N.D.	0.65	N.D.	0.12	1
05298	Trichloroethene	79-01-6	N.D.	0.97	N.D.	0.18	1
05298	Trichlorofluoromethane	75-69-4	2.3 J	0.84	0.40 J	0.15	1
05298	1,2,3-Trichloropropane	96-18-4	N.D.	0.84	N.D.	0.14	1
05298	1,2,4-Trimethylbenzene	95-63-6	N.D.	1.4	N.D.	0.28	1
05298	1,3,5-Trimethylbenzene	108-67-8	N.D.	1.6	N.D.	0.32	1
05298	Vinyl Chloride	75-01-4	N.D.	0.31	N.D.	0.12	1
05298	m/p-Xylene	179601-23-1	2.9 J	1.1	0.67 J	0.26	1
05298	o-Xylene	95-47-6	1.3 J	0.83	0.31 J	0.19	1

MDL = Method Detection Limit

Sample Comments

State of New York Certification No. 10670

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07090	Methane	EPA 18 mod/EPA 25 mod	1	M1825730AA	09/14/2018 19:23	Alexander D Sechrist	2
05298	TO-15 Standard List	EPA TO-15	1	F1823930AA	08/27/2018 16:11	Jacob E Bailey	1

Sample Description: **GCCDC-Class1_IA Air Sample**
SummaCan# 509
DEC-Glencove30-36

Project Name: **DEC-Glencove30-36**

Submittal Date/Time: 08/22/2018 10:05
Collection Date/Time: 08/18/2018 09:34 through 08/19/2018 09:30
SDG#: GLE01-02

Sunoco c/o Enviro. Assessment
ELLE Sample #: AQ 9766345
ELLE Group #: 1979096
Matrix: Air Sample

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA 18 mod/EPA 25 mod**		**ppm(v)**	**ppm(v)**	**mg/m3**	**mg/m3**	
07090	Methane	74-82-8	15	4	9.9	3	2
Volatiles in Air	**EPA TO-15**		**ug/m3**	**ug/m3**	**ppb(v)**	**ppb(v)**	
05298	Acetone	67-64-1	23	1.3	9.7	0.53	1
05298	Benzene	71-43-2	0.95 J	0.35	0.30 J	0.11	1
05298	Bromobenzene	108-86-1	N.D.	0.64	N.D.	0.10	1
05298	Bromodichloromethane	75-27-4	N.D.	0.80	N.D.	0.12	1
05298	Bromoform	75-25-2	N.D.	1.8	N.D.	0.17	1
05298	Bromomethane	74-83-9	N.D.	0.70	N.D.	0.18	1
05298	1,3-Butadiene	106-99-0	N.D.	0.38	N.D.	0.17	1
05298	2-Butanone	78-93-3	7.7	0.62	2.6	0.21	1
05298	Carbon Disulfide	75-15-0	N.D.	0.40	N.D.	0.13	1
05298	Carbon Tetrachloride	56-23-5	N.D.	0.88	N.D.	0.14	1
05298	Chlorobenzene	108-90-7	N.D.	0.60	N.D.	0.13	1
05298	Chlorodifluoromethane	75-45-6	N.D.	0.53	N.D.	0.15	1
05298	Chloroethane	75-00-3	N.D.	0.50	N.D.	0.19	1
05298	Chloroform	67-66-3	N.D.	0.45	N.D.	0.092	1
05298	Chloromethane	74-87-3	N.D.	0.50	N.D.	0.24	1
05298	3-Chloropropene	107-05-1	N.D.	0.47	N.D.	0.15	1
05298	Cumene	98-82-8	N.D.	1.2	N.D.	0.24	1
05298	Dibromochloromethane	124-48-1	N.D.	1.1	N.D.	0.13	1
05298	1,2-Dibromoethane	106-93-4	N.D.	1.0	N.D.	0.13	1
05298	Dibromomethane	74-95-3	N.D.	1.0	N.D.	0.14	1
05298	1,2-Dichlorobenzene	95-50-1	N.D.	1.2	N.D.	0.20	1
05298	1,3-Dichlorobenzene	541-73-1	N.D.	1.1	N.D.	0.19	1
05298	1,4-Dichlorobenzene	106-46-7	N.D.	1.0	N.D.	0.17	1
05298	Dichlorodifluoromethane	75-71-8	2.7 J	0.64	0.54 J	0.13	1
05298	1,1-Dichloroethane	75-34-3	N.D.	0.36	N.D.	0.089	1
05298	1,2-Dichloroethane	107-06-2	N.D.	0.32	N.D.	0.080	1
05298	1,1-Dichloroethene	75-35-4	N.D.	0.56	N.D.	0.14	1
05298	cis-1,2-Dichloroethene	156-59-2	N.D.	0.48	N.D.	0.12	1
05298	trans-1,2-Dichloroethene	156-60-5	N.D.	0.34	N.D.	0.086	1
05298	Dichlorofluoromethane	75-43-4	N.D.	0.46	N.D.	0.11	1
05298	1,2-Dichloropropane	78-87-5	N.D.	0.60	N.D.	0.13	1
05298	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.45	N.D.	0.10	1
05298	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.54	N.D.	0.12	1
05298	Ethylbenzene	100-41-4	N.D.	0.83	N.D.	0.19	1
05298	4-Ethyltoluene	622-96-8	N.D.	0.88	N.D.	0.18	1
05298	Freon 113	76-13-1	1.6 J	0.84	0.21 J	0.11	1
05298	Freon 114	76-14-2	N.D.	0.84	N.D.	0.12	1
05298	Heptane	142-82-5	1.6 J	0.94	0.38 J	0.23	1

Sample Description: **GCCDC-Class1_IA Air Sample**
SummaCan# 509
DEC-Glencove30-36

Project Name: **DEC-Glencove30-36**

Sunoco c/o Enviro. Assessment
ELLE Sample #: AQ 9766345
ELLE Group #: 1979096
Matrix: Air Sample

Submittal Date/Time: 08/22/2018 10:05
Collection Date/Time: 08/18/2018 09:34 through 08/19/2018 09:30
SDG#: GLE01-02

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA TO-15**		**ug/m3**	**ug/m3**	**ppb(v)**	**ppb(v)**	
05298	Hexachloroethane	67-72-1	N.D.	2.6	N.D.	0.27	1
05298	Hexane	110-54-3	1.8 J	0.46	0.50 J	0.13	1
05298	2-Hexanone	591-78-6	N.D.	0.74	N.D.	0.18	1
05298	Isooctane	540-84-1	1.3 J	0.61	0.27 J	0.13	1
05298	Methyl t-Butyl Ether	1634-04-4	N.D.	0.54	N.D.	0.15	1
05298	4-Methyl-2-pentanone	108-10-1	N.D.	0.61	N.D.	0.15	1
05298	Methylene Chloride	75-09-2	2.5 J	0.87	0.72 J	0.25	1
05298	Octane	111-65-9	N.D.	1.9	N.D.	0.40	1
05298	Pentane	109-66-0	3.4	0.38	1.2	0.13	1
05298	Styrene	100-42-5	N.D.	0.85	N.D.	0.20	1
05298	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1.0	N.D.	0.15	1
05298	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1.0	N.D.	0.15	1
05298	Tetrachloroethene	127-18-4	N.D.	1.7	N.D.	0.25	1
05298	Toluene	108-88-3	4.3	0.45	1.1	0.12	1
05298	1,1,1-Trichloroethane	71-55-6	N.D.	0.65	N.D.	0.12	1
05298	1,1,2-Trichloroethane	79-00-5	N.D.	0.65	N.D.	0.12	1
05298	Trichloroethene	79-01-6	N.D.	0.97	N.D.	0.18	1
05298	Trichlorofluoromethane	75-69-4	1.8 J	0.84	0.33 J	0.15	1
05298	1,2,3-Trichloropropane	96-18-4	N.D.	0.84	N.D.	0.14	1
05298	1,2,4-Trimethylbenzene	95-63-6	N.D.	1.4	N.D.	0.28	1
05298	1,3,5-Trimethylbenzene	108-67-8	N.D.	1.6	N.D.	0.32	1
05298	Vinyl Chloride	75-01-4	N.D.	0.31	N.D.	0.12	1
05298	m/p-Xylene	179601-23-1	2.2 J	1.1	0.51 J	0.26	1
05298	o-Xylene	95-47-6	0.89 J	0.83	0.21 J	0.19	1

MDL = Method Detection Limit

Sample Comments

State of New York Certification No. 10670

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07090	Methane	EPA 18 mod/EPA 25 mod	1	M1825730AA	09/14/2018 19:51	Alexander D Sechrist	2
05298	TO-15 Standard List	EPA TO-15	1	F1823930AA	08/27/2018 16:42	Jacob E Bailey	1

Sample Description: **GCCDC-Class5_IA Air Sample**
SummaCan# 518
DEC-Glencove30-36

Project Name: **DEC-Glencove30-36**

Submittal Date/Time: 08/22/2018 10:05
Collection Date/Time: 08/18/2018 09:56 through 08/19/2018 09:36
SDG#: GLE01-03

Sunoco c/o Enviro. Assessment
ELLE Sample #: AQ 9766346
ELLE Group #: 1979096
Matrix: Air Sample

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA 18 mod/EPA 25 mod**		**ppm(v)**	**ppm(v)**	**mg/m3**	**mg/m3**	
07090	Methane	74-82-8	12	4	7.6	3	2
Volatiles in Air	**EPA TO-15**		**ug/m3**	**ug/m3**	**ppb(v)**	**ppb(v)**	
05298	Acetone	67-64-1	33	1.3	14	0.53	1
05298	Benzene	71-43-2	3.1 J	0.35	0.96 J	0.11	1
05298	Bromobenzene	108-86-1	N.D.	0.64	N.D.	0.10	1
05298	Bromodichloromethane	75-27-4	N.D.	0.80	N.D.	0.12	1
05298	Bromoform	75-25-2	N.D.	1.8	N.D.	0.17	1
05298	Bromomethane	74-83-9	N.D.	0.70	N.D.	0.18	1
05298	1,3-Butadiene	106-99-0	N.D.	0.38	N.D.	0.17	1
05298	2-Butanone	78-93-3	9.8	0.62	3.3	0.21	1
05298	Carbon Disulfide	75-15-0	N.D.	0.40	N.D.	0.13	1
05298	Carbon Tetrachloride	56-23-5	N.D.	0.88	N.D.	0.14	1
05298	Chlorobenzene	108-90-7	N.D.	0.60	N.D.	0.13	1
05298	Chlorodifluoromethane	75-45-6	N.D.	0.53	N.D.	0.15	1
05298	Chloroethane	75-00-3	N.D.	0.50	N.D.	0.19	1
05298	Chloroform	67-66-3	1.1 J	0.45	0.22 J	0.092	1
05298	Chloromethane	74-87-3	N.D.	0.50	N.D.	0.24	1
05298	3-Chloropropene	107-05-1	N.D.	0.47	N.D.	0.15	1
05298	Cumene	98-82-8	N.D.	1.2	N.D.	0.24	1
05298	Dibromochloromethane	124-48-1	N.D.	1.1	N.D.	0.13	1
05298	1,2-Dibromoethane	106-93-4	N.D.	1.0	N.D.	0.13	1
05298	Dibromomethane	74-95-3	N.D.	1.0	N.D.	0.14	1
05298	1,2-Dichlorobenzene	95-50-1	N.D.	1.2	N.D.	0.20	1
05298	1,3-Dichlorobenzene	541-73-1	N.D.	1.1	N.D.	0.19	1
05298	1,4-Dichlorobenzene	106-46-7	N.D.	1.0	N.D.	0.17	1
05298	Dichlorodifluoromethane	75-71-8	2.9 J	0.64	0.59 J	0.13	1
05298	1,1-Dichloroethane	75-34-3	N.D.	0.36	N.D.	0.089	1
05298	1,2-Dichloroethane	107-06-2	N.D.	0.32	N.D.	0.080	1
05298	1,1-Dichloroethene	75-35-4	N.D.	0.56	N.D.	0.14	1
05298	cis-1,2-Dichloroethene	156-59-2	N.D.	0.48	N.D.	0.12	1
05298	trans-1,2-Dichloroethene	156-60-5	N.D.	0.34	N.D.	0.086	1
05298	Dichlorofluoromethane	75-43-4	N.D.	0.46	N.D.	0.11	1
05298	1,2-Dichloropropane	78-87-5	N.D.	0.60	N.D.	0.13	1
05298	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.45	N.D.	0.10	1
05298	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.54	N.D.	0.12	1
05298	Ethylbenzene	100-41-4	0.95 J	0.83	0.22 J	0.19	1
05298	4-Ethyltoluene	622-96-8	N.D.	0.88	N.D.	0.18	1
05298	Freon 113	76-13-1	1.1 J	0.84	0.15 J	0.11	1
05298	Freon 114	76-14-2	N.D.	0.84	N.D.	0.12	1
05298	Heptane	142-82-5	3.8 J	0.94	0.92 J	0.23	1

Sample Description: **GCCDC-Class5_IA Air Sample**
SummaCan# 518
DEC-Glencove30-36

Project Name: **DEC-Glencove30-36**

Sunoco c/o Enviro. Assessment
ELLE Sample #: AQ 9766346
ELLE Group #: 1979096
Matrix: Air Sample

Submittal Date/Time: 08/22/2018 10:05
Collection Date/Time: 08/18/2018 09:56 through 08/19/2018 09:36
SDG#: GLE01-03

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA TO-15**		**ug/m3**	**ug/m3**	**ppb(v)**	**ppb(v)**	
05298	Hexachloroethane	67-72-1	N.D.	2.6	N.D.	0.27	1
05298	Hexane	110-54-3	2.1 J	0.46	0.60 J	0.13	1
05298	2-Hexanone	591-78-6	N.D.	0.74	N.D.	0.18	1
05298	Isooctane	540-84-1	2.1 J	0.61	0.45 J	0.13	1
05298	Methyl t-Butyl Ether	1634-04-4	N.D.	0.54	N.D.	0.15	1
05298	4-Methyl-2-pentanone	108-10-1	1.0 J	0.61	0.25 J	0.15	1
05298	Methylene Chloride	75-09-2	N.D.	0.87	N.D.	0.25	1
05298	Octane	111-65-9	N.D.	1.9	N.D.	0.40	1
05298	Pentane	109-66-0	4.4	0.38	1.5	0.13	1
05298	Styrene	100-42-5	N.D.	0.85	N.D.	0.20	1
05298	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1.0	N.D.	0.15	1
05298	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1.0	N.D.	0.15	1
05298	Tetrachloroethene	127-18-4	N.D.	1.7	N.D.	0.25	1
05298	Toluene	108-88-3	5.8	0.45	1.6	0.12	1
05298	1,1,1-Trichloroethane	71-55-6	N.D.	0.65	N.D.	0.12	1
05298	1,1,2-Trichloroethane	79-00-5	N.D.	0.65	N.D.	0.12	1
05298	Trichloroethene	79-01-6	N.D.	0.97	N.D.	0.18	1
05298	Trichlorofluoromethane	75-69-4	1.7 J	0.84	0.31 J	0.15	1
05298	1,2,3-Trichloropropane	96-18-4	N.D.	0.84	N.D.	0.14	1
05298	1,2,4-Trimethylbenzene	95-63-6	N.D.	1.4	N.D.	0.28	1
05298	1,3,5-Trimethylbenzene	108-67-8	N.D.	1.6	N.D.	0.32	1
05298	Vinyl Chloride	75-01-4	N.D.	0.31	N.D.	0.12	1
05298	m/p-Xylene	179601-23-1	3.2 J	1.1	0.73 J	0.26	1
05298	o-Xylene	95-47-6	1.3 J	0.83	0.30 J	0.19	1

MDL = Method Detection Limit

Sample Comments

State of New York Certification No. 10670

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07090	Methane	EPA 18 mod/EPA 25 mod	1	M1825730AA	09/14/2018 20:20	Alexander D Sechrist	2
05298	TO-15 Standard List	EPA TO-15	1	F1823930AA	08/27/2018 17:12	Jacob E Bailey	1

Sample Description: **GCCDC-Class6_IA Air Sample**
SummaCan# 525
DEC-Glencove30-36

Project Name: **DEC-Glencove30-36**

Submittal Date/Time: 08/22/2018 10:05
Collection Date/Time: 08/18/2018 10:00 through 08/19/2018 09:45
SDG#: GLE01-04

Sunoco c/o Enviro. Assessment
ELLE Sample #: AQ 9766347
ELLE Group #: 1979096
Matrix: Air Sample

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA 18 mod/EPA 25 mod**		**ppm(v)**	**ppm(v)**	**mg/m3**	**mg/m3**	
07090	Methane	74-82-8	14	4	8.9	3	2
Volatiles in Air	**EPA TO-15**		**ug/m3**	**ug/m3**	**ppb(v)**	**ppb(v)**	
05298	Acetone	67-64-1	30	1.3	13	0.53	1
05298	Benzene	71-43-2	1.2 J	0.35	0.39 J	0.11	1
05298	Bromobenzene	108-86-1	N.D.	0.64	N.D.	0.10	1
05298	Bromodichloromethane	75-27-4	N.D.	0.80	N.D.	0.12	1
05298	Bromoform	75-25-2	N.D.	1.8	N.D.	0.17	1
05298	Bromomethane	74-83-9	N.D.	0.70	N.D.	0.18	1
05298	1,3-Butadiene	106-99-0	N.D.	0.38	N.D.	0.17	1
05298	2-Butanone	78-93-3	9.0	0.62	3.1	0.21	1
05298	Carbon Disulfide	75-15-0	N.D.	0.40	N.D.	0.13	1
05298	Carbon Tetrachloride	56-23-5	N.D.	0.88	N.D.	0.14	1
05298	Chlorobenzene	108-90-7	N.D.	0.60	N.D.	0.13	1
05298	Chlorodifluoromethane	75-45-6	N.D.	0.53	N.D.	0.15	1
05298	Chloroethane	75-00-3	N.D.	0.50	N.D.	0.19	1
05298	Chloroform	67-66-3	N.D.	0.45	N.D.	0.092	1
05298	Chloromethane	74-87-3	0.79 J	0.50	0.38 J	0.24	1
05298	3-Chloropropene	107-05-1	N.D.	0.47	N.D.	0.15	1
05298	Cumene	98-82-8	N.D.	1.2	N.D.	0.24	1
05298	Dibromochloromethane	124-48-1	N.D.	1.1	N.D.	0.13	1
05298	1,2-Dibromoethane	106-93-4	N.D.	1.0	N.D.	0.13	1
05298	Dibromomethane	74-95-3	N.D.	1.0	N.D.	0.14	1
05298	1,2-Dichlorobenzene	95-50-1	N.D.	1.2	N.D.	0.20	1
05298	1,3-Dichlorobenzene	541-73-1	N.D.	1.1	N.D.	0.19	1
05298	1,4-Dichlorobenzene	106-46-7	N.D.	1.0	N.D.	0.17	1
05298	Dichlorodifluoromethane	75-71-8	3.0 J	0.64	0.61 J	0.13	1
05298	1,1-Dichloroethane	75-34-3	N.D.	0.36	N.D.	0.089	1
05298	1,2-Dichloroethane	107-06-2	N.D.	0.32	N.D.	0.080	1
05298	1,1-Dichloroethene	75-35-4	N.D.	0.56	N.D.	0.14	1
05298	cis-1,2-Dichloroethene	156-59-2	N.D.	0.48	N.D.	0.12	1
05298	trans-1,2-Dichloroethene	156-60-5	N.D.	0.34	N.D.	0.086	1
05298	Dichlorofluoromethane	75-43-4	N.D.	0.46	N.D.	0.11	1
05298	1,2-Dichloropropane	78-87-5	N.D.	0.60	N.D.	0.13	1
05298	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.45	N.D.	0.10	1
05298	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.54	N.D.	0.12	1
05298	Ethylbenzene	100-41-4	1.1 J	0.83	0.25 J	0.19	1
05298	4-Ethyltoluene	622-96-8	N.D.	0.88	N.D.	0.18	1
05298	Freon 113	76-13-1	1.2 J	0.84	0.16 J	0.11	1
05298	Freon 114	76-14-2	N.D.	0.84	N.D.	0.12	1
05298	Heptane	142-82-5	2.1 J	0.94	0.52 J	0.23	1

Sample Description: **GCCDC-Class6_IA Air Sample**
SummaCan# 525
DEC-Glencove30-36

Project Name: **DEC-Glencove30-36**

Sunoco c/o Enviro. Assessment
ELLE Sample #: AQ 9766347
ELLE Group #: 1979096
Matrix: Air Sample

Submittal Date/Time: 08/22/2018 10:05
Collection Date/Time: 08/18/2018 10:00 through 08/19/2018 09:45
SDG#: GLE01-04

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA TO-15**		**ug/m3**	**ug/m3**	**ppb(v)**	**ppb(v)**	
05298	Hexachloroethane	67-72-1	N.D.	2.6	N.D.	0.27	1
05298	Hexane	110-54-3	2.6 J	0.46	0.75 J	0.13	1
05298	2-Hexanone	591-78-6	N.D.	0.74	N.D.	0.18	1
05298	Isooctane	540-84-1	2.1 J	0.61	0.45 J	0.13	1
05298	Methyl t-Butyl Ether	1634-04-4	N.D.	0.54	N.D.	0.15	1
05298	4-Methyl-2-pentanone	108-10-1	N.D.	0.61	N.D.	0.15	1
05298	Methylene Chloride	75-09-2	N.D.	0.87	N.D.	0.25	1
05298	Octane	111-65-9	N.D.	1.9	N.D.	0.40	1
05298	Pentane	109-66-0	5.3	0.38	1.8	0.13	1
05298	Styrene	100-42-5	N.D.	0.85	N.D.	0.20	1
05298	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1.0	N.D.	0.15	1
05298	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1.0	N.D.	0.15	1
05298	Tetrachloroethene	127-18-4	N.D.	1.7	N.D.	0.25	1
05298	Toluene	108-88-3	6.5	0.45	1.7	0.12	1
05298	1,1,1-Trichloroethane	71-55-6	N.D.	0.65	N.D.	0.12	1
05298	1,1,2-Trichloroethane	79-00-5	N.D.	0.65	N.D.	0.12	1
05298	Trichloroethene	79-01-6	N.D.	0.97	N.D.	0.18	1
05298	Trichlorofluoromethane	75-69-4	2.1 J	0.84	0.37 J	0.15	1
05298	1,2,3-Trichloropropane	96-18-4	N.D.	0.84	N.D.	0.14	1
05298	1,2,4-Trimethylbenzene	95-63-6	N.D.	1.4	N.D.	0.28	1
05298	1,3,5-Trimethylbenzene	108-67-8	N.D.	1.6	N.D.	0.32	1
05298	Vinyl Chloride	75-01-4	N.D.	0.31	N.D.	0.12	1
05298	m/p-Xylene	179601-23-1	3.6 J	1.1	0.83 J	0.26	1
05298	o-Xylene	95-47-6	1.2 J	0.83	0.27 J	0.19	1

MDL = Method Detection Limit

Sample Comments

State of New York Certification No. 10670

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07090	Methane	EPA 18 mod/EPA 25 mod	1	M1825730AA	09/14/2018 20:49	Alexander D Sechrist	2
05298	TO-15 Standard List	EPA TO-15	1	F1823930AA	08/27/2018 17:43	Jacob E Bailey	1

Sample Description: **GCCDC-Class7_IA Air Sample**
SummaCan# 820
DEC-Glencove30-36

Project Name: **DEC-Glencove30-36**

Submittal Date/Time: 08/22/2018 10:05
Collection Date/Time: 08/18/2018 10:09 through 08/19/2018 09:48
SDG#: GLE01-05

Sunoco c/o Enviro. Assessment
ELLE Sample #: AQ 9766348
ELLE Group #: 1979096
Matrix: Air Sample

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA 18 mod/EPA 25 mod**		**ppm(v)**	**ppm(v)**	**mg/m3**	**mg/m3**	
07090	Methane	74-82-8	15 J	8	10 J	5	4
Volatiles in Air	**EPA TO-15**		**ug/m3**	**ug/m3**	**ppb(v)**	**ppb(v)**	
05298	Acetone	67-64-1	29	1.3	12	0.53	1
05298	Benzene	71-43-2	1.3 J	0.35	0.40 J	0.11	1
05298	Bromobenzene	108-86-1	N.D.	0.64	N.D.	0.10	1
05298	Bromodichloromethane	75-27-4	N.D.	0.80	N.D.	0.12	1
05298	Bromoform	75-25-2	N.D.	1.8	N.D.	0.17	1
05298	Bromomethane	74-83-9	N.D.	0.70	N.D.	0.18	1
05298	1,3-Butadiene	106-99-0	N.D.	0.38	N.D.	0.17	1
05298	2-Butanone	78-93-3	9.5	0.62	3.2	0.21	1
05298	Carbon Disulfide	75-15-0	N.D.	0.40	N.D.	0.13	1
05298	Carbon Tetrachloride	56-23-5	N.D.	0.88	N.D.	0.14	1
05298	Chlorobenzene	108-90-7	N.D.	0.60	N.D.	0.13	1
05298	Chlorodifluoromethane	75-45-6	N.D.	0.53	N.D.	0.15	1
05298	Chloroethane	75-00-3	N.D.	0.50	N.D.	0.19	1
05298	Chloroform	67-66-3	N.D.	0.45	N.D.	0.092	1
05298	Chloromethane	74-87-3	N.D.	0.50	N.D.	0.24	1
05298	3-Chloropropene	107-05-1	N.D.	0.47	N.D.	0.15	1
05298	Cumene	98-82-8	N.D.	1.2	N.D.	0.24	1
05298	Dibromochloromethane	124-48-1	N.D.	1.1	N.D.	0.13	1
05298	1,2-Dibromoethane	106-93-4	N.D.	1.0	N.D.	0.13	1
05298	Dibromomethane	74-95-3	N.D.	1.0	N.D.	0.14	1
05298	1,2-Dichlorobenzene	95-50-1	N.D.	1.2	N.D.	0.20	1
05298	1,3-Dichlorobenzene	541-73-1	N.D.	1.1	N.D.	0.19	1
05298	1,4-Dichlorobenzene	106-46-7	N.D.	1.0	N.D.	0.17	1
05298	Dichlorodifluoromethane	75-71-8	2.8 J	0.64	0.57 J	0.13	1
05298	1,1-Dichloroethane	75-34-3	N.D.	0.36	N.D.	0.089	1
05298	1,2-Dichloroethane	107-06-2	N.D.	0.32	N.D.	0.080	1
05298	1,1-Dichloroethene	75-35-4	N.D.	0.56	N.D.	0.14	1
05298	cis-1,2-Dichloroethene	156-59-2	N.D.	0.48	N.D.	0.12	1
05298	trans-1,2-Dichloroethene	156-60-5	N.D.	0.34	N.D.	0.086	1
05298	Dichlorofluoromethane	75-43-4	N.D.	0.46	N.D.	0.11	1
05298	1,2-Dichloropropane	78-87-5	N.D.	0.60	N.D.	0.13	1
05298	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.45	N.D.	0.10	1
05298	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.54	N.D.	0.12	1
05298	Ethylbenzene	100-41-4	1.1 J	0.83	0.26 J	0.19	1
05298	4-Ethyltoluene	622-96-8	N.D.	0.88	N.D.	0.18	1
05298	Freon 113	76-13-1	0.95 J	0.84	0.12 J	0.11	1
05298	Freon 114	76-14-2	N.D.	0.84	N.D.	0.12	1
05298	Heptane	142-82-5	2.6 J	0.94	0.65 J	0.23	1

Sample Description: **GCCDC-Class7_IA Air Sample**
SummaCan# 820
DEC-Glencove30-36

Sunoco c/o Enviro. Assessment
ELLE Sample #: AQ 9766348
ELLE Group #: 1979096
Matrix: Air Sample

Project Name: **DEC-Glencove30-36**

Submittal Date/Time: 08/22/2018 10:05
Collection Date/Time: 08/18/2018 10:09 through 08/19/2018 09:48
SDG#: GLE01-05

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA TO-15**		**ug/m3**	**ug/m3**	**ppb(v)**	**ppb(v)**	
05298	Hexachloroethane	67-72-1	N.D.	2.6	N.D.	0.27	1
05298	Hexane	110-54-3	2.6 J	0.46	0.73 J	0.13	1
05298	2-Hexanone	591-78-6	N.D.	0.74	N.D.	0.18	1
05298	Isooctane	540-84-1	2.0 J	0.61	0.43 J	0.13	1
05298	Methyl t-Butyl Ether	1634-04-4	N.D.	0.54	N.D.	0.15	1
05298	4-Methyl-2-pentanone	108-10-1	0.68 J	0.61	0.17 J	0.15	1
05298	Methylene Chloride	75-09-2	N.D.	0.87	N.D.	0.25	1
05298	Octane	111-65-9	N.D.	1.9	N.D.	0.40	1
05298	Pentane	109-66-0	5.0	0.38	1.7	0.13	1
05298	Styrene	100-42-5	N.D.	0.85	N.D.	0.20	1
05298	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1.0	N.D.	0.15	1
05298	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1.0	N.D.	0.15	1
05298	Tetrachloroethene	127-18-4	N.D.	1.7	N.D.	0.25	1
05298	Toluene	108-88-3	6.7	0.45	1.8	0.12	1
05298	1,1,1-Trichloroethane	71-55-6	N.D.	0.65	N.D.	0.12	1
05298	1,1,2-Trichloroethane	79-00-5	N.D.	0.65	N.D.	0.12	1
05298	Trichloroethene	79-01-6	N.D.	0.97	N.D.	0.18	1
05298	Trichlorofluoromethane	75-69-4	1.8 J	0.84	0.32 J	0.15	1
05298	1,2,3-Trichloropropane	96-18-4	N.D.	0.84	N.D.	0.14	1
05298	1,2,4-Trimethylbenzene	95-63-6	N.D.	1.4	N.D.	0.28	1
05298	1,3,5-Trimethylbenzene	108-67-8	N.D.	1.6	N.D.	0.32	1
05298	Vinyl Chloride	75-01-4	N.D.	0.31	N.D.	0.12	1
05298	m/p-Xylene	179601-23-1	3.5 J	1.1	0.81 J	0.26	1
05298	o-Xylene	95-47-6	1.3 J	0.83	0.30 J	0.19	1

MDL = Method Detection Limit

Sample Comments

State of New York Certification No. 10670

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07090	Methane	EPA 18 mod/EPA 25 mod	1	M1825730AA	09/14/2018 21:17	Alexander D Sechrist	4
05298	TO-15 Standard List	EPA TO-15	1	F1823930AA	08/27/2018 18:14	Jacob E Bailey	1

Sample Description: **GCCDC-Class10C_IA Air Sample**
SummaCan# 1352
DEC-Glencove30-36

Project Name: **DEC-Glencove30-36**

Submittal Date/Time: 08/22/2018 10:05
Collection Date/Time: 08/18/2018 11:01 through 08/19/2018 09:58
SDG#: GLE01-06

Sunoco c/o Enviro. Assessment
ELLE Sample #: AQ 9766349
ELLE Group #: 1979096
Matrix: Air Sample

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA 18 mod/EPA 25 mod**		**ppm(v)**	**ppm(v)**	**mg/m3**	**mg/m3**	
07090	Methane	74-82-8	N.D.	4	N.D.	3	2
Volatiles in Air	**EPA TO-15**		**ug/m3**	**ug/m3**	**ppb(v)**	**ppb(v)**	
05298	Acetone	67-64-1	24	1.3	10	0.53	1
05298	Benzene	71-43-2	1.0 J	0.35	0.33 J	0.11	1
05298	Bromobenzene	108-86-1	N.D.	0.64	N.D.	0.10	1
05298	Bromodichloromethane	75-27-4	N.D.	0.80	N.D.	0.12	1
05298	Bromoform	75-25-2	N.D.	1.8	N.D.	0.17	1
05298	Bromomethane	74-83-9	N.D.	0.70	N.D.	0.18	1
05298	1,3-Butadiene	106-99-0	N.D.	0.38	N.D.	0.17	1
05298	2-Butanone	78-93-3	3.0	0.62	1.0	0.21	1
05298	Carbon Disulfide	75-15-0	N.D.	0.40	N.D.	0.13	1
05298	Carbon Tetrachloride	56-23-5	N.D.	0.88	N.D.	0.14	1
05298	Chlorobenzene	108-90-7	N.D.	0.60	N.D.	0.13	1
05298	Chlorodifluoromethane	75-45-6	N.D.	0.53	N.D.	0.15	1
05298	Chloroethane	75-00-3	N.D.	0.50	N.D.	0.19	1
05298	Chloroform	67-66-3	N.D.	0.45	N.D.	0.092	1
05298	Chloromethane	74-87-3	N.D.	0.50	N.D.	0.24	1
05298	3-Chloropropene	107-05-1	N.D.	0.47	N.D.	0.15	1
05298	Cumene	98-82-8	N.D.	1.2	N.D.	0.24	1
05298	Dibromochloromethane	124-48-1	N.D.	1.1	N.D.	0.13	1
05298	1,2-Dibromoethane	106-93-4	N.D.	1.0	N.D.	0.13	1
05298	Dibromomethane	74-95-3	N.D.	1.0	N.D.	0.14	1
05298	1,2-Dichlorobenzene	95-50-1	N.D.	1.2	N.D.	0.20	1
05298	1,3-Dichlorobenzene	541-73-1	N.D.	1.1	N.D.	0.19	1
05298	1,4-Dichlorobenzene	106-46-7	N.D.	1.0	N.D.	0.17	1
05298	Dichlorodifluoromethane	75-71-8	2.8 J	0.64	0.56 J	0.13	1
05298	1,1-Dichloroethane	75-34-3	N.D.	0.36	N.D.	0.089	1
05298	1,2-Dichloroethane	107-06-2	N.D.	0.32	N.D.	0.080	1
05298	1,1-Dichloroethene	75-35-4	N.D.	0.56	N.D.	0.14	1
05298	cis-1,2-Dichloroethene	156-59-2	N.D.	0.48	N.D.	0.12	1
05298	trans-1,2-Dichloroethene	156-60-5	N.D.	0.34	N.D.	0.086	1
05298	Dichlorofluoromethane	75-43-4	N.D.	0.46	N.D.	0.11	1
05298	1,2-Dichloropropane	78-87-5	N.D.	0.60	N.D.	0.13	1
05298	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.45	N.D.	0.10	1
05298	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.54	N.D.	0.12	1
05298	Ethylbenzene	100-41-4	1.0 J	0.83	0.23 J	0.19	1
05298	4-Ethyltoluene	622-96-8	N.D.	0.88	N.D.	0.18	1
05298	Freon 113	76-13-1	0.85 J	0.84	0.11 J	0.11	1
05298	Freon 114	76-14-2	N.D.	0.84	N.D.	0.12	1
05298	Heptane	142-82-5	2.2 J	0.94	0.54 J	0.23	1

Sample Description: **GCCDC-Class10C_IA Air Sample**
SummaCan# 1352
DEC-Glencove30-36

Project Name: **DEC-Glencove30-36**

Submittal Date/Time: 08/22/2018 10:05
Collection Date/Time: 08/18/2018 11:01 through 08/19/2018 09:58
SDG#: GLE01-06

Sunoco c/o Enviro. Assessment
ELLE Sample #: AQ 9766349
ELLE Group #: 1979096
Matrix: Air Sample

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA TO-15**		**ug/m3**	**ug/m3**	**ppb(v)**	**ppb(v)**	
05298	Hexachloroethane	67-72-1	N.D.	2.6	N.D.	0.27	1
05298	Hexane	110-54-3	2.1 J	0.46	0.60 J	0.13	1
05298	2-Hexanone	591-78-6	N.D.	0.74	N.D.	0.18	1
05298	Isooctane	540-84-1	1.7 J	0.61	0.37 J	0.13	1
05298	Methyl t-Butyl Ether	1634-04-4	N.D.	0.54	N.D.	0.15	1
05298	4-Methyl-2-pentanone	108-10-1	N.D.	0.61	N.D.	0.15	1
05298	Methylene Chloride	75-09-2	N.D.	0.87	N.D.	0.25	1
05298	Octane	111-65-9	N.D.	1.9	N.D.	0.40	1
05298	Pentane	109-66-0	4.1	0.38	1.4	0.13	1
05298	Styrene	100-42-5	N.D.	0.85	N.D.	0.20	1
05298	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1.0	N.D.	0.15	1
05298	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1.0	N.D.	0.15	1
05298	Tetrachloroethene	127-18-4	N.D.	1.7	N.D.	0.25	1
05298	Toluene	108-88-3	5.3	0.45	1.4	0.12	1
05298	1,1,1-Trichloroethane	71-55-6	N.D.	0.65	N.D.	0.12	1
05298	1,1,2-Trichloroethane	79-00-5	N.D.	0.65	N.D.	0.12	1
05298	Trichloroethene	79-01-6	N.D.	0.97	N.D.	0.18	1
05298	Trichlorofluoromethane	75-69-4	1.4 J	0.84	0.26 J	0.15	1
05298	1,2,3-Trichloropropane	96-18-4	N.D.	0.84	N.D.	0.14	1
05298	1,2,4-Trimethylbenzene	95-63-6	N.D.	1.4	N.D.	0.28	1
05298	1,3,5-Trimethylbenzene	108-67-8	N.D.	1.6	N.D.	0.32	1
05298	Vinyl Chloride	75-01-4	N.D.	0.31	N.D.	0.12	1
05298	m/p-Xylene	179601-23-1	3.1 J	1.1	0.72 J	0.26	1
05298	o-Xylene	95-47-6	1.2 J	0.83	0.27 J	0.19	1

MDL = Method Detection Limit

Sample Comments

State of New York Certification No. 10670

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07090	Methane	EPA 18 mod/EPA 25 mod	1	M1825730AA	09/14/2018 21:46	Alexander D Sechrist	2
05298	TO-15 Standard List	EPA TO-15	1	F1823930AA	08/27/2018 18:44	Jacob E Bailey	1

Sample Description: **GCCDC-Class10A_IA Air Sample**
SummaCan# 851
DEC-Glencove30-36

Project Name: **DEC-Glencove30-36**

Submittal Date/Time: 08/22/2018 10:05
Collection Date/Time: 08/18/2018 10:31 through 08/19/2018 10:00
SDG#: GLE01-07

Sunoco c/o Enviro. Assessment
ELLE Sample #: AQ 9766350
ELLE Group #: 1979096
Matrix: Air Sample

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA 18 mod/EPA 25 mod**		**ppm(v)**	**ppm(v)**	**mg/m3**	**mg/m3**	
07090	Methane	74-82-8	N.D.	4	N.D.	3	2
Volatiles in Air	**EPA TO-15**		**ug/m3**	**ug/m3**	**ppb(v)**	**ppb(v)**	
05298	Acetone	67-64-1	21	1.3	9.0	0.53	1
05298	Benzene	71-43-2	0.94 J	0.35	0.29 J	0.11	1
05298	Bromobenzene	108-86-1	N.D.	0.64	N.D.	0.10	1
05298	Bromodichloromethane	75-27-4	N.D.	0.80	N.D.	0.12	1
05298	Bromoform	75-25-2	N.D.	1.8	N.D.	0.17	1
05298	Bromomethane	74-83-9	N.D.	0.70	N.D.	0.18	1
05298	1,3-Butadiene	106-99-0	N.D.	0.38	N.D.	0.17	1
05298	2-Butanone	78-93-3	2.9 J	0.62	0.98 J	0.21	1
05298	Carbon Disulfide	75-15-0	N.D.	0.40	N.D.	0.13	1
05298	Carbon Tetrachloride	56-23-5	N.D.	0.88	N.D.	0.14	1
05298	Chlorobenzene	108-90-7	N.D.	0.60	N.D.	0.13	1
05298	Chlorodifluoromethane	75-45-6	N.D.	0.53	N.D.	0.15	1
05298	Chloroethane	75-00-3	N.D.	0.50	N.D.	0.19	1
05298	Chloroform	67-66-3	N.D.	0.45	N.D.	0.092	1
05298	Chloromethane	74-87-3	N.D.	0.50	N.D.	0.24	1
05298	3-Chloropropene	107-05-1	N.D.	0.47	N.D.	0.15	1
05298	Cumene	98-82-8	N.D.	1.2	N.D.	0.24	1
05298	Dibromochloromethane	124-48-1	N.D.	1.1	N.D.	0.13	1
05298	1,2-Dibromoethane	106-93-4	N.D.	1.0	N.D.	0.13	1
05298	Dibromomethane	74-95-3	N.D.	1.0	N.D.	0.14	1
05298	1,2-Dichlorobenzene	95-50-1	N.D.	1.2	N.D.	0.20	1
05298	1,3-Dichlorobenzene	541-73-1	N.D.	1.1	N.D.	0.19	1
05298	1,4-Dichlorobenzene	106-46-7	N.D.	1.0	N.D.	0.17	1
05298	Dichlorodifluoromethane	75-71-8	2.7 J	0.64	0.54 J	0.13	1
05298	1,1-Dichloroethane	75-34-3	N.D.	0.36	N.D.	0.089	1
05298	1,2-Dichloroethane	107-06-2	N.D.	0.32	N.D.	0.080	1
05298	1,1-Dichloroethene	75-35-4	N.D.	0.56	N.D.	0.14	1
05298	cis-1,2-Dichloroethene	156-59-2	N.D.	0.48	N.D.	0.12	1
05298	trans-1,2-Dichloroethene	156-60-5	N.D.	0.34	N.D.	0.086	1
05298	Dichlorofluoromethane	75-43-4	N.D.	0.46	N.D.	0.11	1
05298	1,2-Dichloropropane	78-87-5	N.D.	0.60	N.D.	0.13	1
05298	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.45	N.D.	0.10	1
05298	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.54	N.D.	0.12	1
05298	Ethylbenzene	100-41-4	0.89 J	0.83	0.20 J	0.19	1
05298	4-Ethyltoluene	622-96-8	N.D.	0.88	N.D.	0.18	1
05298	Freon 113	76-13-1	1.2 J	0.84	0.16 J	0.11	1
05298	Freon 114	76-14-2	N.D.	0.84	N.D.	0.12	1
05298	Heptane	142-82-5	1.5 J	0.94	0.38 J	0.23	1

Sample Description: **GCCDC-Class10A_IA Air Sample**
SummaCan# 851
DEC-Glencove30-36

Project Name: **DEC-Glencove30-36**

Submittal Date/Time: 08/22/2018 10:05
Collection Date/Time: 08/18/2018 10:31 through 08/19/2018 10:00
SDG#: GLE01-07

Sunoco c/o Enviro. Assessment
ELLE Sample #: AQ 9766350
ELLE Group #: 1979096
Matrix: Air Sample

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA TO-15**		**ug/m3**	**ug/m3**	**ppb(v)**	**ppb(v)**	
05298	Hexachloroethane	67-72-1	N.D.	2.6	N.D.	0.27	1
05298	Hexane	110-54-3	2.0 J	0.46	0.56 J	0.13	1
05298	2-Hexanone	591-78-6	N.D.	0.74	N.D.	0.18	1
05298	Isooctane	540-84-1	1.5 J	0.61	0.33 J	0.13	1
05298	Methyl t-Butyl Ether	1634-04-4	N.D.	0.54	N.D.	0.15	1
05298	4-Methyl-2-pentanone	108-10-1	N.D.	0.61	N.D.	0.15	1
05298	Methylene Chloride	75-09-2	N.D.	0.87	N.D.	0.25	1
05298	Octane	111-65-9	N.D.	1.9	N.D.	0.40	1
05298	Pentane	109-66-0	3.3	0.38	1.1	0.13	1
05298	Styrene	100-42-5	N.D.	0.85	N.D.	0.20	1
05298	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1.0	N.D.	0.15	1
05298	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1.0	N.D.	0.15	1
05298	Tetrachloroethene	127-18-4	N.D.	1.7	N.D.	0.25	1
05298	Toluene	108-88-3	4.6	0.45	1.2	0.12	1
05298	1,1,1-Trichloroethane	71-55-6	N.D.	0.65	N.D.	0.12	1
05298	1,1,2-Trichloroethane	79-00-5	N.D.	0.65	N.D.	0.12	1
05298	Trichloroethene	79-01-6	N.D.	0.97	N.D.	0.18	1
05298	Trichlorofluoromethane	75-69-4	1.5 J	0.84	0.26 J	0.15	1
05298	1,2,3-Trichloropropane	96-18-4	N.D.	0.84	N.D.	0.14	1
05298	1,2,4-Trimethylbenzene	95-63-6	N.D.	1.4	N.D.	0.28	1
05298	1,3,5-Trimethylbenzene	108-67-8	N.D.	1.6	N.D.	0.32	1
05298	Vinyl Chloride	75-01-4	N.D.	0.31	N.D.	0.12	1
05298	m/p-Xylene	179601-23-1	2.7 J	1.1	0.62 J	0.26	1
05298	o-Xylene	95-47-6	0.94 J	0.83	0.22 J	0.19	1

MDL = Method Detection Limit

Sample Comments

State of New York Certification No. 10670

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07090	Methane	EPA 18 mod/EPA 25 mod	1	M1825730AA	09/14/2018 22:15	Alexander D Sechrist	2
05298	TO-15 Standard List	EPA TO-15	1	F1823930AA	08/27/2018 19:49	Jacob E Bailey	1

Sample Description: **GCCDC-Class6_CS Air Sample**
SummaCan# 894
DEC-Glencove30-36

Project Name: **DEC-Glencove30-36**

Submittal Date/Time: 08/22/2018 10:05
Collection Date/Time: 08/18/2018 11:17 through 08/19/2018 10:31
SDG#: GLE01-08

Sunoco c/o Enviro. Assessment
ELLE Sample #: AQ 9766351
ELLE Group #: 1979096
Matrix: Air Sample

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA 18 mod/EPA 25 mod**		**ppm(v)**	**ppm(v)**	**mg/m3**	**mg/m3**	
07090	Methane	74-82-8	N.D.	4	N.D.	3	2
Volatiles in Air	**EPA TO-15**		**ug/m3**	**ug/m3**	**ppb(v)**	**ppb(v)**	
05298	Acetone	67-64-1	9.3 J	1.3	3.9 J	0.53	1
05298	Benzene	71-43-2	N.D.	0.35	N.D.	0.11	1
05298	Bromobenzene	108-86-1	N.D.	0.64	N.D.	0.10	1
05298	Bromodichloromethane	75-27-4	N.D.	0.80	N.D.	0.12	1
05298	Bromoform	75-25-2	N.D.	1.8	N.D.	0.17	1
05298	Bromomethane	74-83-9	N.D.	0.70	N.D.	0.18	1
05298	1,3-Butadiene	106-99-0	N.D.	0.38	N.D.	0.17	1
05298	2-Butanone	78-93-3	5.5	0.62	1.9	0.21	1
05298	Carbon Disulfide	75-15-0	N.D.	0.40	N.D.	0.13	1
05298	Carbon Tetrachloride	56-23-5	N.D.	0.88	N.D.	0.14	1
05298	Chlorobenzene	108-90-7	N.D.	0.60	N.D.	0.13	1
05298	Chlorodifluoromethane	75-45-6	N.D.	0.53	N.D.	0.15	1
05298	Chloroethane	75-00-3	N.D.	0.50	N.D.	0.19	1
05298	Chloroform	67-66-3	N.D.	0.45	N.D.	0.092	1
05298	Chloromethane	74-87-3	N.D.	0.50	N.D.	0.24	1
05298	3-Chloropropene	107-05-1	N.D.	0.47	N.D.	0.15	1
05298	Cumene	98-82-8	N.D.	1.2	N.D.	0.24	1
05298	Dibromochloromethane	124-48-1	N.D.	1.1	N.D.	0.13	1
05298	1,2-Dibromoethane	106-93-4	N.D.	1.0	N.D.	0.13	1
05298	Dibromomethane	74-95-3	N.D.	1.0	N.D.	0.14	1
05298	1,2-Dichlorobenzene	95-50-1	N.D.	1.2	N.D.	0.20	1
05298	1,3-Dichlorobenzene	541-73-1	N.D.	1.1	N.D.	0.19	1
05298	1,4-Dichlorobenzene	106-46-7	N.D.	1.0	N.D.	0.17	1
05298	Dichlorodifluoromethane	75-71-8	1.5 J	0.64	0.31 J	0.13	1
05298	1,1-Dichloroethane	75-34-3	N.D.	0.36	N.D.	0.089	1
05298	1,2-Dichloroethane	107-06-2	N.D.	0.32	N.D.	0.080	1
05298	1,1-Dichloroethene	75-35-4	N.D.	0.56	N.D.	0.14	1
05298	cis-1,2-Dichloroethene	156-59-2	N.D.	0.48	N.D.	0.12	1
05298	trans-1,2-Dichloroethene	156-60-5	N.D.	0.34	N.D.	0.086	1
05298	Dichlorofluoromethane	75-43-4	N.D.	0.46	N.D.	0.11	1
05298	1,2-Dichloropropane	78-87-5	N.D.	0.60	N.D.	0.13	1
05298	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.45	N.D.	0.10	1
05298	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.54	N.D.	0.12	1
05298	Ethylbenzene	100-41-4	N.D.	0.83	N.D.	0.19	1
05298	4-Ethyltoluene	622-96-8	N.D.	0.88	N.D.	0.18	1
05298	Freon 113	76-13-1	1.7 J	0.84	0.22 J	0.11	1
05298	Freon 114	76-14-2	N.D.	0.84	N.D.	0.12	1
05298	Heptane	142-82-5	N.D.	0.94	N.D.	0.23	1

Sample Description: **GCCDC-Class6_CS Air Sample**
SummaCan# 894
DEC-Glencove30-36

Project Name: **DEC-Glencove30-36**

Submittal Date/Time: 08/22/2018 10:05
Collection Date/Time: 08/18/2018 11:17 through 08/19/2018 10:31
SDG#: GLE01-08

Sunoco c/o Enviro. Assessment
ELLE Sample #: AQ 9766351
ELLE Group #: 1979096
Matrix: Air Sample

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA TO-15**		**ug/m3**	**ug/m3**	**ppb(v)**	**ppb(v)**	
05298	Hexachloroethane	67-72-1	N.D.	2.6	N.D.	0.27	1
05298	Hexane	110-54-3	N.D.	0.46	N.D.	0.13	1
05298	2-Hexanone	591-78-6	N.D.	0.74	N.D.	0.18	1
05298	Isooctane	540-84-1	N.D.	0.61	N.D.	0.13	1
05298	Methyl t-Butyl Ether	1634-04-4	N.D.	0.54	N.D.	0.15	1
05298	4-Methyl-2-pentanone	108-10-1	N.D.	0.61	N.D.	0.15	1
05298	Methylene Chloride	75-09-2	N.D.	0.87	N.D.	0.25	1
05298	Octane	111-65-9	N.D.	1.9	N.D.	0.40	1
05298	Pentane	109-66-0	0.88 J	0.38	0.30 J	0.13	1
05298	Styrene	100-42-5	N.D.	0.85	N.D.	0.20	1
05298	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1.0	N.D.	0.15	1
05298	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1.0	N.D.	0.15	1
05298	Tetrachloroethene	127-18-4	N.D.	1.7	N.D.	0.25	1
05298	Toluene	108-88-3	0.74 J	0.45	0.20 J	0.12	1
05298	1,1,1-Trichloroethane	71-55-6	N.D.	0.65	N.D.	0.12	1
05298	1,1,2-Trichloroethane	79-00-5	N.D.	0.65	N.D.	0.12	1
05298	Trichloroethene	79-01-6	N.D.	0.97	N.D.	0.18	1
05298	Trichlorofluoromethane	75-69-4	N.D.	0.84	N.D.	0.15	1
05298	1,2,3-Trichloropropane	96-18-4	N.D.	0.84	N.D.	0.14	1
05298	1,2,4-Trimethylbenzene	95-63-6	N.D.	1.4	N.D.	0.28	1
05298	1,3,5-Trimethylbenzene	108-67-8	N.D.	1.6	N.D.	0.32	1
05298	Vinyl Chloride	75-01-4	N.D.	0.31	N.D.	0.12	1
05298	m/p-Xylene	179601-23-1	N.D.	1.1	N.D.	0.26	1
05298	o-Xylene	95-47-6	N.D.	0.83	N.D.	0.19	1

MDL = Method Detection Limit

Sample Comments

State of New York Certification No. 10670

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07090	Methane	EPA 18 mod/EPA 25 mod	1	M1825730AA	09/14/2018 23:00	Alexander D Sechrist	2
05298	TO-15 Standard List	EPA TO-15	1	F1823930AA	08/27/2018 20:20	Jacob E Bailey	1

Sample Description: **GCCDC-Class10B_CS Air Sample**
SummaCan# 1157
DEC-Glencove30-36

Project Name: **DEC-Glencove30-36**

Submittal Date/Time: 08/22/2018 10:05
Collection Date/Time: 08/18/2018 11:32 through 08/19/2018 10:40
SDG#: GLE01-09

Sunoco c/o Enviro. Assessment
ELLE Sample #: AQ 9766352
ELLE Group #: 1979096
Matrix: Air Sample

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA 18 mod/EPA 25 mod**		**ppm(v)**	**ppm(v)**	**mg/m3**	**mg/m3**	
07090	Methane	74-82-8	N.D.	4	N.D.	3	2
Volatiles in Air	**EPA TO-15**		**ug/m3**	**ug/m3**	**ppb(v)**	**ppb(v)**	
05298	Acetone	67-64-1	12	1.3	5.1	0.53	1
05298	Benzene	71-43-2	0.52 J	0.35	0.16 J	0.11	1
05298	Bromobenzene	108-86-1	N.D.	0.64	N.D.	0.10	1
05298	Bromodichloromethane	75-27-4	N.D.	0.80	N.D.	0.12	1
05298	Bromoform	75-25-2	N.D.	1.8	N.D.	0.17	1
05298	Bromomethane	74-83-9	N.D.	0.70	N.D.	0.18	1
05298	1,3-Butadiene	106-99-0	N.D.	0.38	N.D.	0.17	1
05298	2-Butanone	78-93-3	3.2	0.62	1.1	0.21	1
05298	Carbon Disulfide	75-15-0	N.D.	0.40	N.D.	0.13	1
05298	Carbon Tetrachloride	56-23-5	N.D.	0.88	N.D.	0.14	1
05298	Chlorobenzene	108-90-7	N.D.	0.60	N.D.	0.13	1
05298	Chlorodifluoromethane	75-45-6	N.D.	0.53	N.D.	0.15	1
05298	Chloroethane	75-00-3	N.D.	0.50	N.D.	0.19	1
05298	Chloroform	67-66-3	N.D.	0.45	N.D.	0.092	1
05298	Chloromethane	74-87-3	N.D.	0.50	N.D.	0.24	1
05298	3-Chloropropene	107-05-1	N.D.	0.47	N.D.	0.15	1
05298	Cumene	98-82-8	N.D.	1.2	N.D.	0.24	1
05298	Dibromochloromethane	124-48-1	N.D.	1.1	N.D.	0.13	1
05298	1,2-Dibromoethane	106-93-4	N.D.	1.0	N.D.	0.13	1
05298	Dibromomethane	74-95-3	N.D.	1.0	N.D.	0.14	1
05298	1,2-Dichlorobenzene	95-50-1	N.D.	1.2	N.D.	0.20	1
05298	1,3-Dichlorobenzene	541-73-1	N.D.	1.1	N.D.	0.19	1
05298	1,4-Dichlorobenzene	106-46-7	N.D.	1.0	N.D.	0.17	1
05298	Dichlorodifluoromethane	75-71-8	3.5 J	0.64	0.71 J	0.13	1
05298	1,1-Dichloroethane	75-34-3	N.D.	0.36	N.D.	0.089	1
05298	1,2-Dichloroethane	107-06-2	N.D.	0.32	N.D.	0.080	1
05298	1,1-Dichloroethene	75-35-4	N.D.	0.56	N.D.	0.14	1
05298	cis-1,2-Dichloroethene	156-59-2	0.76 J	0.48	0.19 J	0.12	1
05298	trans-1,2-Dichloroethene	156-60-5	N.D.	0.34	N.D.	0.086	1
05298	Dichlorofluoromethane	75-43-4	N.D.	0.46	N.D.	0.11	1
05298	1,2-Dichloropropane	78-87-5	N.D.	0.60	N.D.	0.13	1
05298	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.45	N.D.	0.10	1
05298	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.54	N.D.	0.12	1
05298	Ethylbenzene	100-41-4	N.D.	0.83	N.D.	0.19	1
05298	4-Ethyltoluene	622-96-8	N.D.	0.88	N.D.	0.18	1
05298	Freon 113	76-13-1	3.5 J	0.84	0.45 J	0.11	1
05298	Freon 114	76-14-2	N.D.	0.84	N.D.	0.12	1
05298	Heptane	142-82-5	N.D.	0.94	N.D.	0.23	1

Sample Description: **GCCDC-Class10B_CS Air Sample**
SummaCan# 1157
DEC-Glencove30-36

Project Name: **DEC-Glencove30-36**

Submittal Date/Time: 08/22/2018 10:05
Collection Date/Time: 08/18/2018 11:32 through 08/19/2018 10:40
SDG#: GLE01-09

Sunoco c/o Enviro. Assessment
ELLE Sample #: AQ 9766352
ELLE Group #: 1979096
Matrix: Air Sample

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA TO-15**		**ug/m3**	**ug/m3**	**ppb(v)**	**ppb(v)**	
05298	Hexachloroethane	67-72-1	N.D.	2.6	N.D.	0.27	1
05298	Hexane	110-54-3	N.D.	0.46	N.D.	0.13	1
05298	2-Hexanone	591-78-6	N.D.	0.74	N.D.	0.18	1
05298	Isooctane	540-84-1	N.D.	0.61	N.D.	0.13	1
05298	Methyl t-Butyl Ether	1634-04-4	N.D.	0.54	N.D.	0.15	1
05298	4-Methyl-2-pentanone	108-10-1	N.D.	0.61	N.D.	0.15	1
05298	Methylene Chloride	75-09-2	N.D.	0.87	N.D.	0.25	1
05298	Octane	111-65-9	N.D.	1.9	N.D.	0.40	1
05298	Pentane	109-66-0	1.9 J	0.38	0.64 J	0.13	1
05298	Styrene	100-42-5	N.D.	0.85	N.D.	0.20	1
05298	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1.0	N.D.	0.15	1
05298	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1.0	N.D.	0.15	1
05298	Tetrachloroethene	127-18-4	2.6 J	1.7	0.39 J	0.25	1
05298	Toluene	108-88-3	1.1 J	0.45	0.30 J	0.12	1
05298	1,1,1-Trichloroethane	71-55-6	N.D.	0.65	N.D.	0.12	1
05298	1,1,2-Trichloroethane	79-00-5	N.D.	0.65	N.D.	0.12	1
05298	Trichloroethene	79-01-6	N.D.	0.97	N.D.	0.18	1
05298	Trichlorofluoromethane	75-69-4	1.7 J	0.84	0.30 J	0.15	1
05298	1,2,3-Trichloropropane	96-18-4	N.D.	0.84	N.D.	0.14	1
05298	1,2,4-Trimethylbenzene	95-63-6	N.D.	1.4	N.D.	0.28	1
05298	1,3,5-Trimethylbenzene	108-67-8	N.D.	1.6	N.D.	0.32	1
05298	Vinyl Chloride	75-01-4	N.D.	0.31	N.D.	0.12	1
05298	m/p-Xylene	179601-23-1	N.D.	1.1	N.D.	0.26	1
05298	o-Xylene	95-47-6	N.D.	0.83	N.D.	0.19	1

MDL = Method Detection Limit

Sample Comments

State of New York Certification No. 10670

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07090	Methane	EPA 18 mod/EPA 25 mod	1	M1825730AA	09/14/2018 23:28	Alexander D Sechrist	2
05298	TO-15 Standard List	EPA TO-15	1	F1823930AA	08/27/2018 20:51	Jacob E Bailey	1

Sample Description: **GCCDC-ClassX_IA Air Sample**
SummaCan# 1178
DEC-Glencove30-36

Project Name: **DEC-Glencove30-36**

Submittal Date/Time: 08/22/2018 10:05
Collection Date/Time: 08/18/2018 through 08/19/2018
SDG#: GLE01-10

Sunoco c/o Enviro. Assessment
ELLE Sample #: AQ 9766353
ELLE Group #: 1979096
Matrix: Air Sample

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA 18 mod/EPA 25 mod**		**ppm(v)**	**ppm(v)**	**mg/m3**	**mg/m3**	
07090	Methane	74-82-8	14	4	9.0	3	2
Volatiles in Air	**EPA TO-15**		**ug/m3**	**ug/m3**	**ppb(v)**	**ppb(v)**	
05298	Acetone	67-64-1	30	1.3	13	0.53	1
05298	Benzene	71-43-2	1.3 J	0.35	0.41 J	0.11	1
05298	Bromobenzene	108-86-1	N.D.	0.64	N.D.	0.10	1
05298	Bromodichloromethane	75-27-4	N.D.	0.80	N.D.	0.12	1
05298	Bromoform	75-25-2	N.D.	1.8	N.D.	0.17	1
05298	Bromomethane	74-83-9	N.D.	0.70	N.D.	0.18	1
05298	1,3-Butadiene	106-99-0	N.D.	0.38	N.D.	0.17	1
05298	2-Butanone	78-93-3	9.1	0.62	3.1	0.21	1
05298	Carbon Disulfide	75-15-0	N.D.	0.40	N.D.	0.13	1
05298	Carbon Tetrachloride	56-23-5	N.D.	0.88	N.D.	0.14	1
05298	Chlorobenzene	108-90-7	N.D.	0.60	N.D.	0.13	1
05298	Chlorodifluoromethane	75-45-6	N.D.	0.53	N.D.	0.15	1
05298	Chloroethane	75-00-3	N.D.	0.50	N.D.	0.19	1
05298	Chloroform	67-66-3	N.D.	0.45	N.D.	0.092	1
05298	Chloromethane	74-87-3	N.D.	0.50	N.D.	0.24	1
05298	3-Chloropropene	107-05-1	N.D.	0.47	N.D.	0.15	1
05298	Cumene	98-82-8	N.D.	1.2	N.D.	0.24	1
05298	Dibromochloromethane	124-48-1	N.D.	1.1	N.D.	0.13	1
05298	1,2-Dibromoethane	106-93-4	N.D.	1.0	N.D.	0.13	1
05298	Dibromomethane	74-95-3	N.D.	1.0	N.D.	0.14	1
05298	1,2-Dichlorobenzene	95-50-1	N.D.	1.2	N.D.	0.20	1
05298	1,3-Dichlorobenzene	541-73-1	N.D.	1.1	N.D.	0.19	1
05298	1,4-Dichlorobenzene	106-46-7	N.D.	1.0	N.D.	0.17	1
05298	Dichlorodifluoromethane	75-71-8	2.8 J	0.64	0.57 J	0.13	1
05298	1,1-Dichloroethane	75-34-3	N.D.	0.36	N.D.	0.089	1
05298	1,2-Dichloroethane	107-06-2	N.D.	0.32	N.D.	0.080	1
05298	1,1-Dichloroethene	75-35-4	N.D.	0.56	N.D.	0.14	1
05298	cis-1,2-Dichloroethene	156-59-2	N.D.	0.48	N.D.	0.12	1
05298	trans-1,2-Dichloroethene	156-60-5	N.D.	0.34	N.D.	0.086	1
05298	Dichlorofluoromethane	75-43-4	N.D.	0.46	N.D.	0.11	1
05298	1,2-Dichloropropane	78-87-5	N.D.	0.60	N.D.	0.13	1
05298	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.45	N.D.	0.10	1
05298	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.54	N.D.	0.12	1
05298	Ethylbenzene	100-41-4	1.1 J	0.83	0.25 J	0.19	1
05298	4-Ethyltoluene	622-96-8	N.D.	0.88	N.D.	0.18	1
05298	Freon 113	76-13-1	1.0 J	0.84	0.13 J	0.11	1
05298	Freon 114	76-14-2	N.D.	0.84	N.D.	0.12	1
05298	Heptane	142-82-5	1.8 J	0.94	0.44 J	0.23	1

Sample Description: **GCCDC-ClassX_IA Air Sample**
SummaCan# 1178
DEC-Glencove30-36

Project Name: **DEC-Glencove30-36**

Submittal Date/Time: 08/22/2018 10:05
Collection Date/Time: 08/18/2018 through 08/19/2018
SDG#: GLE01-10

Sunoco c/o Enviro. Assessment
ELLE Sample #: AQ 9766353
ELLE Group #: 1979096
Matrix: Air Sample

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA TO-15**		**ug/m3**	**ug/m3**	**ppb(v)**	**ppb(v)**	
05298	Hexachloroethane	67-72-1	N.D.	2.6	N.D.	0.27	1
05298	Hexane	110-54-3	2.3 J	0.46	0.65 J	0.13	1
05298	2-Hexanone	591-78-6	N.D.	0.74	N.D.	0.18	1
05298	Isooctane	540-84-1	2.0 J	0.61	0.43 J	0.13	1
05298	Methyl t-Butyl Ether	1634-04-4	N.D.	0.54	N.D.	0.15	1
05298	4-Methyl-2-pentanone	108-10-1	0.70 J	0.61	0.17 J	0.15	1
05298	Methylene Chloride	75-09-2	N.D.	0.87	N.D.	0.25	1
05298	Octane	111-65-9	N.D.	1.9	N.D.	0.40	1
05298	Pentane	109-66-0	4.6	0.38	1.6	0.13	1
05298	Styrene	100-42-5	N.D.	0.85	N.D.	0.20	1
05298	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1.0	N.D.	0.15	1
05298	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1.0	N.D.	0.15	1
05298	Tetrachloroethene	127-18-4	N.D.	1.7	N.D.	0.25	1
05298	Toluene	108-88-3	7.0	0.45	1.8	0.12	1
05298	1,1,1-Trichloroethane	71-55-6	N.D.	0.65	N.D.	0.12	1
05298	1,1,2-Trichloroethane	79-00-5	N.D.	0.65	N.D.	0.12	1
05298	Trichloroethene	79-01-6	N.D.	0.97	N.D.	0.18	1
05298	Trichlorofluoromethane	75-69-4	1.6 J	0.84	0.29 J	0.15	1
05298	1,2,3-Trichloropropane	96-18-4	N.D.	0.84	N.D.	0.14	1
05298	1,2,4-Trimethylbenzene	95-63-6	N.D.	1.4	N.D.	0.28	1
05298	1,3,5-Trimethylbenzene	108-67-8	N.D.	1.6	N.D.	0.32	1
05298	Vinyl Chloride	75-01-4	N.D.	0.31	N.D.	0.12	1
05298	m/p-Xylene	179601-23-1	3.6 J	1.1	0.84 J	0.26	1
05298	o-Xylene	95-47-6	1.1 J	0.83	0.26 J	0.19	1

MDL = Method Detection Limit

Sample Comments

State of New York Certification No. 10670

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07090	Methane	EPA 18 mod/EPA 25 mod	1	M1825730AA	09/14/2018 23:57	Alexander D Sechrist	2
05298	TO-15 Standard List	EPA TO-15	1	F1823930AA	08/27/2018 21:21	Jacob E Bailey	1

Sample Description: **GCCDC-Entry_OD Air Sample**
SummaCan# 1506
DEC-Glencove30-36

Project Name: **DEC-Glencove30-36**

Submittal Date/Time: 08/22/2018 10:05
Collection Date/Time: 08/18/2018 14:28 through 08/19/2018 10:45
SDG#: GLE01-11

Sunoco c/o Enviro. Assessment
ELLE Sample #: AQ 9766354
ELLE Group #: 1979096
Matrix: Air Sample

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA 18 mod/EPA 25 mod**		**ppm(v)**	**ppm(v)**	**mg/m3**	**mg/m3**	
07090	Methane	74-82-8	N.D.	4	N.D.	3	2
Volatiles in Air	**EPA TO-15**		**ug/m3**	**ug/m3**	**ppb(v)**	**ppb(v)**	
05298	Acetone	67-64-1	20	1.3	8.2	0.53	1
05298	Benzene	71-43-2	0.45 J	0.35	0.14 J	0.11	1
05298	Bromobenzene	108-86-1	N.D.	0.64	N.D.	0.10	1
05298	Bromodichloromethane	75-27-4	N.D.	0.80	N.D.	0.12	1
05298	Bromoform	75-25-2	N.D.	1.8	N.D.	0.17	1
05298	Bromomethane	74-83-9	N.D.	0.70	N.D.	0.18	1
05298	1,3-Butadiene	106-99-0	N.D.	0.38	N.D.	0.17	1
05298	2-Butanone	78-93-3	5.1	0.62	1.7	0.21	1
05298	Carbon Disulfide	75-15-0	N.D.	0.40	N.D.	0.13	1
05298	Carbon Tetrachloride	56-23-5	N.D.	0.88	N.D.	0.14	1
05298	Chlorobenzene	108-90-7	N.D.	0.60	N.D.	0.13	1
05298	Chlorodifluoromethane	75-45-6	N.D.	0.53	N.D.	0.15	1
05298	Chloroethane	75-00-3	N.D.	0.50	N.D.	0.19	1
05298	Chloroform	67-66-3	N.D.	0.45	N.D.	0.092	1
05298	Chloromethane	74-87-3	N.D.	0.50	N.D.	0.24	1
05298	3-Chloropropene	107-05-1	N.D.	0.47	N.D.	0.15	1
05298	Cumene	98-82-8	N.D.	1.2	N.D.	0.24	1
05298	Dibromochloromethane	124-48-1	N.D.	1.1	N.D.	0.13	1
05298	1,2-Dibromoethane	106-93-4	N.D.	1.0	N.D.	0.13	1
05298	Dibromomethane	74-95-3	N.D.	1.0	N.D.	0.14	1
05298	1,2-Dichlorobenzene	95-50-1	N.D.	1.2	N.D.	0.20	1
05298	1,3-Dichlorobenzene	541-73-1	N.D.	1.1	N.D.	0.19	1
05298	1,4-Dichlorobenzene	106-46-7	N.D.	1.0	N.D.	0.17	1
05298	Dichlorodifluoromethane	75-71-8	2.7 J	0.64	0.55 J	0.13	1
05298	1,1-Dichloroethane	75-34-3	N.D.	0.36	N.D.	0.089	1
05298	1,2-Dichloroethane	107-06-2	N.D.	0.32	N.D.	0.080	1
05298	1,1-Dichloroethene	75-35-4	N.D.	0.56	N.D.	0.14	1
05298	cis-1,2-Dichloroethene	156-59-2	N.D.	0.48	N.D.	0.12	1
05298	trans-1,2-Dichloroethene	156-60-5	N.D.	0.34	N.D.	0.086	1
05298	Dichlorofluoromethane	75-43-4	N.D.	0.46	N.D.	0.11	1
05298	1,2-Dichloropropane	78-87-5	N.D.	0.60	N.D.	0.13	1
05298	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.45	N.D.	0.10	1
05298	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.54	N.D.	0.12	1
05298	Ethylbenzene	100-41-4	N.D.	0.83	N.D.	0.19	1
05298	4-Ethyltoluene	622-96-8	N.D.	0.88	N.D.	0.18	1
05298	Freon 113	76-13-1	N.D.	0.84	N.D.	0.11	1
05298	Freon 114	76-14-2	N.D.	0.84	N.D.	0.12	1
05298	Heptane	142-82-5	N.D.	0.94	N.D.	0.23	1

Sample Description: **GCCDC-Entry_OD Air Sample**
SummaCan# 1506
DEC-Glencove30-36

Project Name: **DEC-Glencove30-36**

Submittal Date/Time: 08/22/2018 10:05
Collection Date/Time: 08/18/2018 14:28 through 08/19/2018 10:45
SDG#: GLE01-11

Sunoco c/o Enviro. Assessment
ELLE Sample #: AQ 9766354
ELLE Group #: 1979096
Matrix: Air Sample

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA TO-15**		**ug/m3**	**ug/m3**	**ppb(v)**	**ppb(v)**	
05298	Hexachloroethane	67-72-1	N.D.	2.6	N.D.	0.27	1
05298	Hexane	110-54-3	N.D.	0.46	N.D.	0.13	1
05298	2-Hexanone	591-78-6	N.D.	0.74	N.D.	0.18	1
05298	Isooctane	540-84-1	N.D.	0.61	N.D.	0.13	1
05298	Methyl t-Butyl Ether	1634-04-4	N.D.	0.54	N.D.	0.15	1
05298	4-Methyl-2-pentanone	108-10-1	N.D.	0.61	N.D.	0.15	1
05298	Methylene Chloride	75-09-2	N.D.	0.87	N.D.	0.25	1
05298	Octane	111-65-9	N.D.	1.9	N.D.	0.40	1
05298	Pentane	109-66-0	1.5 J	0.38	0.51 J	0.13	1
05298	Styrene	100-42-5	N.D.	0.85	N.D.	0.20	1
05298	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1.0	N.D.	0.15	1
05298	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1.0	N.D.	0.15	1
05298	Tetrachloroethene	127-18-4	N.D.	1.7	N.D.	0.25	1
05298	Toluene	108-88-3	0.55 J	0.45	0.14 J	0.12	1
05298	1,1,1-Trichloroethane	71-55-6	N.D.	0.65	N.D.	0.12	1
05298	1,1,2-Trichloroethane	79-00-5	N.D.	0.65	N.D.	0.12	1
05298	Trichloroethene	79-01-6	N.D.	0.97	N.D.	0.18	1
05298	Trichlorofluoromethane	75-69-4	1.6 J	0.84	0.28 J	0.15	1
05298	1,2,3-Trichloropropane	96-18-4	N.D.	0.84	N.D.	0.14	1
05298	1,2,4-Trimethylbenzene	95-63-6	N.D.	1.4	N.D.	0.28	1
05298	1,3,5-Trimethylbenzene	108-67-8	N.D.	1.6	N.D.	0.32	1
05298	Vinyl Chloride	75-01-4	N.D.	0.31	N.D.	0.12	1
05298	m/p-Xylene	179601-23-1	N.D.	1.1	N.D.	0.26	1
05298	o-Xylene	95-47-6	N.D.	0.83	N.D.	0.19	1

MDL = Method Detection Limit

Sample Comments

State of New York Certification No. 10670

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07090	Methane	EPA 18 mod/EPA 25 mod	1	M1825730AA	09/15/2018 00:26	Alexander D Sechrist	2
05298	TO-15 Standard List	EPA TO-15	1	F1823930AA	08/27/2018 21:52	Jacob E Bailey	1

Quality Control Summary

Client Name: Sunoco c/o Enviro. Assessment Group Number: 1979096
Reported: 09/18/2018 14:02

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.

Method Blank

Analysis Name	Result	MDL	Result	MDL
	ppm(v)	ppm(v)	mg/m3	mg/m3
Batch number: M1825730AA	Sample number(s): 9766344-9766354			
Methane	N.D.	2	N.D.	1
	ug/m3	ug/m3	ppb(v)	ppb(v)
Batch number: F1823930AA	Sample number(s): 9766344-9766354			
Acetone	N.D.	1.3	N.D.	0.53
Benzene	N.D.	0.35	N.D.	0.11
Bromobenzene	N.D.	0.64	N.D.	0.10
Bromodichloromethane	N.D.	0.80	N.D.	0.12
Bromoform	N.D.	1.8	N.D.	0.17
Bromomethane	N.D.	0.70	N.D.	0.18
1,3-Butadiene	N.D.	0.38	N.D.	0.17
2-Butanone	N.D.	0.62	N.D.	0.21
Carbon Disulfide	N.D.	0.40	N.D.	0.13
Carbon Tetrachloride	N.D.	0.88	N.D.	0.14
Chlorobenzene	N.D.	0.60	N.D.	0.13
Chlorodifluoromethane	N.D.	0.53	N.D.	0.15
Chloroethane	N.D.	0.50	N.D.	0.19
Chloroform	N.D.	0.45	N.D.	0.092
Chloromethane	N.D.	0.50	N.D.	0.24
3-Chloropropene	N.D.	0.47	N.D.	0.15
Cumene	N.D.	1.2	N.D.	0.24
Dibromochloromethane	N.D.	1.1	N.D.	0.13
1,2-Dibromoethane	N.D.	1.0	N.D.	0.13
Dibromomethane	N.D.	1.0	N.D.	0.14
1,2-Dichlorobenzene	N.D.	1.2	N.D.	0.20
1,3-Dichlorobenzene	N.D.	1.1	N.D.	0.19
1,4-Dichlorobenzene	N.D.	1.0	N.D.	0.17
Dichlorodifluoromethane	N.D.	0.64	N.D.	0.13
1,1-Dichloroethane	N.D.	0.36	N.D.	0.089
1,2-Dichloroethane	N.D.	0.32	N.D.	0.080
1,1-Dichloroethene	N.D.	0.56	N.D.	0.14
cis-1,2-Dichloroethene	N.D.	0.48	N.D.	0.12
trans-1,2-Dichloroethene	N.D.	0.34	N.D.	0.086
Dichlorofluoromethane	N.D.	0.46	N.D.	0.11
1,2-Dichloropropane	N.D.	0.60	N.D.	0.13
cis-1,3-Dichloropropene	N.D.	0.45	N.D.	0.10
trans-1,3-Dichloropropene	N.D.	0.54	N.D.	0.12
Ethylbenzene	N.D.	0.83	N.D.	0.19
4-Ethyltoluene	N.D.	0.88	N.D.	0.18

*- 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: Sunoco c/o Enviro. Assessment
Reported: 09/18/2018 14:02

Group Number: 1979096

Method Blank (continued)

Analysis Name	Result ug/m3	MDL ug/m3	Result ppb(v)	MDL ppb(v)
Freon 113	N.D.	0.84	N.D.	0.11
Freon 114	N.D.	0.84	N.D.	0.12
Heptane	N.D.	0.94	N.D.	0.23
Hexachloroethane	N.D.	2.6	N.D.	0.27
Hexane	N.D.	0.46	N.D.	0.13
2-Hexanone	N.D.	0.74	N.D.	0.18
Isooctane	N.D.	0.61	N.D.	0.13
Methyl t-Butyl Ether	N.D.	0.54	N.D.	0.15
4-Methyl-2-pentanone	N.D.	0.61	N.D.	0.15
Methylene Chloride	N.D.	0.87	N.D.	0.25
Octane	N.D.	1.9	N.D.	0.40
Pentane	N.D.	0.38	N.D.	0.13
Styrene	N.D.	0.85	N.D.	0.20
1,1,1,2-Tetrachloroethane	N.D.	1.0	N.D.	0.15
1,1,2,2-Tetrachloroethane	N.D.	1.0	N.D.	0.15
Tetrachloroethene	N.D.	1.7	N.D.	0.25
Toluene	N.D.	0.45	N.D.	0.12
1,1,1-Trichloroethane	N.D.	0.65	N.D.	0.12
1,1,2-Trichloroethane	N.D.	0.65	N.D.	0.12
Trichloroethene	N.D.	0.97	N.D.	0.18
Trichlorofluoromethane	N.D.	0.84	N.D.	0.15
1,2,3-Trichloropropane	N.D.	0.84	N.D.	0.14
1,2,4-Trimethylbenzene	N.D.	1.4	N.D.	0.28
1,3,5-Trimethylbenzene	N.D.	1.6	N.D.	0.32
Vinyl Chloride	N.D.	0.31	N.D.	0.12
m/p-Xylene	N.D.	1.1	N.D.	0.26
o-Xylene	N.D.	0.83	N.D.	0.19

LCS/LCSD

Analysis Name	LCS Spike Added ug/m3	LCS Conc ug/m3	LCSD Spike Added ug/m3	LCSD Conc ug/m3	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: F1823930AA	Sample number(s): 9766344-9766354								
Acetone	23.76	26.36	23.76	27.11	111	114	71-136	3	25
Benzene	31.95	32.02	31.95	32.53	100	102	76-123	2	25
Bromobenzene	64.22	56.54	64.22	56.49	88	88	74-118	0	25
Bromodichloromethane	67.01	66.66	67.01	64.69	99	97	75-134	3	25
Bromoform	103.37	98.03	103.37	85.41	95	83	69-128	14	25
Bromomethane	38.83	44.9	38.83	45.63	116	118	71-133	2	25
1,3-Butadiene	22.12	23.31	22.12	23.05	105	104	72-122	1	25
2-Butanone	29.49	31.2	29.49	31.22	106	106	75-126	0	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: Sunoco c/o Enviro. Assessment
Reported: 09/18/2018 14:02

Group Number: 1979096

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/m3	LCS Conc ug/m3	LCSD Spike Added ug/m3	LCSD Conc ug/m3	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Carbon Disulfide	31.14	33.85	31.14	33.81	109	109	72-128	0	25
Carbon Tetrachloride	62.91	65.16	62.91	65.17	104	104	72-127	0	25
Chlorobenzene	46.04	41.43	46.04	40.68	90	88	76-117	2	25
Chlorodifluoromethane	35.37	39.09	35.37	38.33	111	108	70-138	2	25
Chloroethane	26.38	30.6	26.38	30.14	116	114	76-129	2	25
Chloroform	48.83	51.98	48.83	52.59	106	108	75-127	1	25
Chloromethane	20.65	21.46	20.65	21.87	104	106	65-140	2	25
3-Chloropropene	31.3	41.61	31.3	42.62	133	136	67-141	2	25
Cumene	49.16	44.79	49.16	44.47	91	90	80-133	1	25
Dibromochloromethane	85.19	83.93	85.19	76.65	99	90	74-131	9	25
1,2-Dibromoethane	76.83	70.83	76.83	68.72	92	89	73-121	3	25
Dibromomethane	71.1	71.7	71.1	69.51	101	98	76-124	3	25
1,2-Dichlorobenzene	60.12	47.31	60.12	47.39	79	79	71-126	0	25
1,3-Dichlorobenzene	60.12	48.64	60.12	47.85	81	80	75-129	2	25
1,4-Dichlorobenzene	60.12	48.52	60.12	46.9	81	78	74-123	3	25
Dichlorodifluoromethane	49.45	55.01	49.45	53.87	111	109	74-133	2	25
1,1-Dichloroethane	40.47	42.46	40.47	42.75	105	106	74-129	1	25
1,2-Dichloroethane	40.47	41.27	40.47	41.98	102	104	72-138	2	25
1,1-Dichloroethene	39.65	43.73	39.65	44.81	110	113	70-129	2	25
cis-1,2-Dichloroethene	39.65	41.62	39.65	43.05	105	109	76-126	3	25
trans-1,2-Dichloroethene	39.65	43.42	39.65	43.95	110	111	77-128	1	25
Dichlorofluoromethane	42.09	48.92	42.09	48.3	116	115	75-137	1	25
1,2-Dichloropropane	46.21	44.47	46.21	44.79	96	97	75-127	1	25
cis-1,3-Dichloropropene	45.39	43.94	45.39	44.4	97	98	51-120	1	25
trans-1,3-Dichloropropene	45.39	45.4	45.39	42.7	100	94	72-119	6	25
Ethylbenzene	43.42	39.52	43.42	39.27	91	90	77-117	1	25
4-Ethyltoluene	49.16	42.21	49.16	43.47	86	88	73-130	3	25
Freon 113	76.64	74.64	76.64	73.71	97	96	66-119	1	25
Freon 114	69.91	75.03	69.91	75.71	107	108	66-126	1	25
Heptane	40.98	41.79	40.98	42.71	102	104	74-122	2	25
Hexachloroethane	96.83	84.91	96.83	76.38	88	79	59-135	11	25
Hexane	35.25	35.96	35.25	36.53	102	104	70-118	2	25
2-Hexanone	40.97	39.53	40.97	37.26	97	91	63-144	6	25
Isooctane	46.72	48.71	46.72	49.35	104	106	74-127	1	25
Methyl t-Butyl Ether	36.05	37.22	36.05	37.85	103	105	71-119	2	25
4-Methyl-2-pentanone	40.97	38.4	40.97	37.77	94	92	68-133	2	25
Methylene Chloride	34.74	40.54	34.74	41.92	117	121	69-128	3	25
Octane	46.72	46.86	46.72	45.44	100	97	73-122	3	25
Pentane	29.51	30.13	29.51	30.67	102	104	69-125	2	25
Styrene	42.6	41.17	42.6	39.16	97	92	76-127	5	25
1,1,1,2-Tetrachloroethane	68.65	62.48	68.65	58.73	91	86	73-124	6	25
1,1,2,2-Tetrachloroethane	68.65	58.17	68.65	56.91	85	83	72-133	2	25
Tetrachloroethene	67.82	63.59	67.82	62.69	94	92	68-123	1	25
Toluene	37.69	35.63	37.69	34.89	95	93	78-119	2	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: Sunoco c/o Enviro. Assessment
Reported: 09/18/2018 14:02

Group Number: 1979096

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/m3	LCS Conc ug/m3	LCSD Spike Added ug/m3	LCSD Conc ug/m3	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,1,1-Trichloroethane	54.56	54.38	54.56	55.43	100	102	74-122	2	25
1,1,2-Trichloroethane	54.56	50.98	54.56	48.85	93	90	76-127	4	25
Trichloroethene	53.74	54.81	53.74	54.93	102	102	76-118	0	25
Trichlorofluoromethane	56.18	57.33	56.18	57.36	102	102	73-132	0	25
1,2,3-Trichloropropane	60.3	51.21	60.3	49.27	85	82	71-127	4	25
1,2,4-Trimethylbenzene	49.16	43.45	49.16	43.85	88	89	70-138	1	25
1,3,5-Trimethylbenzene	49.16	43.69	49.16	44.22	89	90	72-130	1	25
Vinyl Chloride	25.56	29.53	25.56	28.7	116	112	75-130	3	25
m/p-Xylene	43.42	39.66	43.42	39.82	91	92	78-119	0	25
o-Xylene	43.42	39.26	43.42	39.3	90	91	78-121	0	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. # 59360 Group # 19-1886 For Eurofins Lancaster Laboratories Environmental use only Sample # 176344-354 Bottle Order (SCR) # 229777

Client Information

Client: EAR
Account #:
Project Name/#: DEC-Glencove 30-36
Project Manager: Ian Hofmann
P.O. #: DEC-Glencove 30-36
Sampler: TE+PB
Quote #:
Name of state where samples were collected: New York

Turnaround Time Requested (TAT) (circle one)

Standard | Rush (specify) 10 Day

Data Package Required? Yes / No

EDD Required? Yes / No

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

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	EPA 18	EPA 25 (select range below)	Helium as tracer	O2/CO2	Library Search
GCCDC-Office-IA	8/18/10:45	8/19/10:06	-29.4	-6	68	68	337641	504	6	3.5	X	X	X			
GCCDC-Class1-IA	8/18/9:34	8/19/9:30	-29	-4	68	68	236964	509	6	3.5						
GCCDC-Class5-IA	8/18/9:56	8/19/9:36	-30	-6.3	68	68	993910	518	6	3.5						
GCCDC-Class6-IA	8/18/10:00	8/19/9:45	-30	-3	68	68	236807	525	6	3.5						
GCCDC-Class7-IA	8/18/10:09	8/19/9:48	-30	0	68	68	580510	820	6	3.5						
GCCDC-Class10C-IA	8/18/11:01	8/19/9:58	-30	-6	68	68	900083	1352	6	3.5						
GCCDC-Class10A-IA	8/18/10:31	8/19/10:00	-30	-1	68	68	234834	851	6	3.5						
GCCDC-Class6-CS	8/18/11:17	8/19/10:31	-30	-23	77	69	900863	894	6	3.5						
GCCDC-Class10B-CS	8/18/11:32	8/19/10:40	-29.2	-3	77	69	994782	1187	6	3.5						
GCCDC-ClassX-IA	8/18/—	8/19/—	-30	-5	68	68	675015	1178	6	3.5						
GCCDC-Entry-OD	8/18/14:28	8/19/10:05	-30	-7	77	69	236813	1506	6	3.5						

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:
8/14/18	16:00	EAR	8/16/1200	TE	8/19/18 1300	EAR Stecknum	8/19/18 1810
Relinquished by: EAR Stecknum	Date/Time: 8/20/2pm	Received by: TE	Date/Time: 8/20/2pm	Relinquished by: TE	Date/Time: 8/20/18	Received by: Fed Ex Corner	Date/Time: 8/20
Relinquished by:	Date/Time:	Received by:	Date/Time:	Relinquished by:	Date/Time:	Received by:	Date/Time: 8/22/18 10:05

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Sample Log Sheet

Date: 8/18/2018 - 8/19/2018
Site ID: DCC-GlenCove 30-30
Address: Pall Corp. 30-36 Sea Cliff Ave., Glencove NY
Preparer's Name: Tracey Evans

Sampling Information

-Sample location (indicate subslab or indoor air): Indoor Class 1

-Sample name/location (as it appears on CoC): GCCDC-Class1-IA

-Laboratory and analysis: Euro Fins, VOC via TO-15 & methane via EPA 18/25

-Mass/flow regulator calibration information: 24 hr collection

1. Summa canister

Can #: 509

S.F.

2. Mass flow valve:

p/n: 236964

s/n: SN7236964

model #: W0119828

0000931420

7 Micron

3. Vacuum immediately before opening: 0 "Hg

Vacuum immediately after opening: -29 "Hg

Vacuum 15 minutes after opening: -29 "Hg

Vacuum immediately before closing: -4 "Hg

Vacuum immediately after closing: -4 "Hg

4. Sample collection start time (24 hr. clock): 9:34

Sample collection end time (24 hr. clock): ~~10:11~~ 9:30

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Sample Log Sheet

Date: 8/18/2018 - 8/19/2018
Site ID: DEC-Glencove 30-36
Address: Dall Corp. 30-36 Seacliff Ave, Glencove NY
Preparer's Name: Tracey Evans

Sampling Information

-Sample location (indicate subslab or indoor air): Indoor, Class 5

-Sample name/location (as it appears on CoC): GCCDC-Class5-IA

-Laboratory and analysis: Eurofins, To-15 VOC Methane EPA 18/25

-Mass/flow regulator calibration information: 24 hr collection

1. Summa canister

Can #: 518

2. Mass flow valve:

p/n: 993910 S.F.

s/n: A0239939-10 0000922979

model #: H/L570523 7 micron

3. Vacuum immediately before opening: 0 "Hg

Vacuum immediately after opening: -30 "Hg

Vacuum 15 minutes after opening: -29.8 "Hg

Vacuum immediately before closing: -6.3 "Hg

Vacuum immediately after closing: -5.0 "Hg

4. Sample collection start time (24 hr. clock): 10:00 9:56

Sample collection end time (24 hr. clock): 9:36

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Sample Log Sheet

Date: 8/18/2018 - 8/19/2018
Site ID: DEC-Glencove 30-36
Address: Dall Corp. 30-36 Sea Cliff Ave., Glen Cove NY
Preparer's Name: Tracey Evans

Sampling Information

-Sample location (indicate subslab or indoor air): Indoor, class 6

-Sample name/location (as it appears on CoC): GCCDC- Class 6 - IA

-Laboratory and analysis: Eurofins, TO-15 VOC Methane 8/25

-Mass/flow regulator calibration information: 24 hr collection

1. Summa canister

Can #: 525

S. F.
73650001
7 micron

2. Mass flow valve:

p/n: 236807

s/n: SN 7236807

model #: WO119827

3. Vacuum immediately before opening: 0 "Hg

Vacuum immediately after opening: -30 "Hg

Vacuum 15 minutes after opening: -29.9 "Hg

Vacuum immediately before closing: -3 "Hg

Vacuum immediately after closing: -3 "Hg

4. Sample collection start time (24 hr. clock): 10:00

Sample collection end time (24 hr. clock): 9:45

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Sample Log Sheet

Date: 8/18/2018 - 8/19/2018
Site ID: DEC-Glen Cove 30-36
Address: Pall Corp. 30-36 Sea Cliff Ave., Glencove NY
Preparer's Name: Tracey Evans

Dup ~~not~~ this one

Sampling Information

-Sample location (indicate subslab or indoor air): Indoor, Class 7

-Sample name/location (as it appears on CoC): GCCDC-Class 7-I A

-Laboratory and analysis: Eurofins, VOC TO-15 + Methane 18/25

-Mass/flow regulator calibration information: 24 hr collection

1. Summa canister

Can #: 820

2. Mass flow valve:

p/n: 5805~~10~~ 510

s/n: A0295805-10

model #: ~~H/L 5705~~ 800140

S. F.
0000387835
1micron

3. Vacuum immediately before opening: 0 "Hg

Vacuum immediately after opening: -30 "Hg

Vacuum 15 minutes after opening: -29.2 "Hg

Vacuum immediately before closing: 0 "Hg

Vacuum immediately after closing: 0 "Hg

4. Sample collection start time (24 hr. clock): 10:09

Sample collection end time (24 hr. clock): 9:48

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Sample Log Sheet

Replacement for Class 10C

Date: 8/18/2018 - 8/19/2018
Site ID: DEC- Glencove 30-36
Address: Pall Corp. 30-36 Sea Cliff Ave., Glen Cove NY
Preparer's Name: Tracey Evans

Sampling Information

-Sample location (indicate subslab or indoor air): Indoor, Class10C

-Sample name/location (as it appears on CoC): GCCDC-Class10C_IA

-Laboratory and analysis: Eurofins, VOC TO-15 + Methane EPA 18/25

-Mass/flow regulator calibration information: 24 hr collector

1. Summa canister

Can #: 1352

S.F.
00 00 35 217
7 micron

2. Mass flow valve:

p/n: 900083

s/n: A03090 08-3

model #: 12/L 8001.35

3. Vacuum immediately before opening: 0 "Hg

Vacuum immediately after opening: -30 "Hg

Vacuum 15 minutes after opening: -29.9 "Hg

Vacuum immediately before closing: -6 "Hg

Vacuum immediately after closing: -4 "Hg

4. Sample collection start time (24 hr. clock): ~~10:48~~ 11:01

Sample collection end time (24 hr. clock): 9:58

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Sample Log Sheet

Date: 8/14/2018 - 8/19/2018
Site ID: DEC-Glencove 30-36
Address: Pall Corp. 30-36 SeaCliff Ave, Glencove NY
Preparer's Name: Tracey Evans

Sampling Information

-Sample location (indicate subslab or indoor air): Indoor, Class 10A

-Sample name/location (as it appears on CoC): GCCDC_Class 10A_IA

-Laboratory and analysis: EuroFins, VOC TO-15 Method EPA R/25

-Mass/flow regulator calibration information: 24 hr collection

1. Summa canister

Can #: 451

S.F.

2. Mass flow valve:

p/n: 2348 34

s/n: SN12348 34

model #: W0119169

0000922979

7 Micron

3. Vacuum immediately before opening: 0 "Hg

Vacuum immediately after opening: -30 "Hg

Vacuum 15 minutes after opening: -29.8 "Hg

Vacuum immediately before closing: -1 "Hg

Vacuum immediately after closing: -1 "Hg

4. Sample collection start time (24 hr. clock): 10:31

Sample collection end time (24 hr. clock): 10:00

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Sample Log Sheet

Date: 8/18/2018 - 8/19/2018
Site ID: DEC-Glencove 30-36
Address: Pall Corp. 30-36 Sea Cliff Ave, Glencove NY (site#130053B)
Preparer's Name: Tracey Evans

Sampling Information

-Sample location (indicate subslab or indoor air): Indoor Education Office

-Sample name/location (as it appears on CoC): GCCDC-OFFice-IA

-Laboratory and analysis: Eurofins, VOC TO-15 + Methane EPA 18/25

-Mass/flow regulator calibration information: 24 hr collection

1. Summa canister

Can #: 5054

2. Mass flow valve:

Swagelok Filter (S.F)
503482001
7 Micron

Flow Reg p/n: ID 337691

s/n: 7337691

model #: 153851

3. Vacuum immediately before opening: 0 "Hg

Vacuum immediately after opening: ~~-30~~ ~~29.4~~ -30 (-29.4) "Hg

Vacuum 15 minutes after opening: ~~29.8~~ -29 "Hg

Vacuum immediately before closing: -6 "Hg

Vacuum immediately after closing: -6 "Hg

4. Sample collection start time (24 hr. clock): ~~9:56~~ 10:45

Sample collection end time (24 hr. clock): 10:06

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Sample Log Sheet

Date: 8/18/2018 - 8/19/2018
Site ID: DEC-Glencove 30-36
Address: Pall Corp 30-36 Sea Cliff Ave., Glen Cove NY
Preparer's Name: Tracy EVANS

Sampling Information

-Sample location (indicate subslab or indoor air): Crawl space, class b
-Sample name/location (as it appears on CoC): GCDC-Class b-CS
-Laboratory and analysis: Eurofins VOC TO-15 & EPA 3C/25 Methane
-Mass/flow regulator calibration information: 24 hr. collection

1. Summa canister

Can #: 894

S.F.
0000922979
7 Micron

2. Mass flow valve:

p/n: 400063
s/n: A0309006-3
model #: H/L 800138

3. Vacuum immediately before opening: 0 "Hg
Vacuum immediately after opening: -30 "Hg
Vacuum 15 minutes after opening: -29.8 "Hg
Vacuum immediately before closing: -23 "Hg
Vacuum immediately after closing: -23 "Hg

4. Sample collection start time (24 hr. clock): 11:17
Sample collection end time (24 hr. clock): 10:31

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Sample Log Sheet

Date: 8/18/2018 - 8/19/2018
Site ID: GEC-Glencove 30-36
Address: all Corp. 30-36 Soa Cliff Ave. Glen Cove NY
Preparer's Name: Tracey Evans

Sampling Information

-Sample location (indicate subslab or indoor air): Crawl Space, Class 10B

-Sample name/location (as it appears on CoC): GCCD-Class10B-CS

-Laboratory and analysis: Eurofins, VOC via To-15 & Methane via EPA 18/2

-Mass/flow regulator calibration information: 24 hr collector

1. Summa canister

Can #: 1157

S.F.
00381217
7M'cron

2. Mass flow valve:

p/n: 994782

s/n: A02994778-2

model #: H/L 800132

3. Vacuum immediately before opening: 0 "Hg

Vacuum immediately after opening: 29.2 "Hg

Vacuum 15 minutes after opening: 29 "Hg

Vacuum immediately before closing: -3.5 "Hg

Vacuum immediately after closing: -3 "Hg

4. Sample collection start time (24 hr. clock): 11:32

Sample collection end time (24 hr. clock): 10:40

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Sample Log Sheet

Date: 8/18/2018
Site ID: DEC-Glenaire 30-36
Address: Pall Corp. 30-36 Sea Cliff Avenue, Glen Cove NY
Preparer's Name: TC

Sampling Information

-Sample location (indicate subslab or indoor air): Outdoor, entry porch
-Sample name/location (as it appears on CoC): GCCDC-~~OA~~ Entry -OD
-Laboratory and analysis: Eurofins, VOC TO-15 + Methane EPA 18/25
-Mass/flow regulator calibration information: 24 hr collection

1. Summa canister

Can #: 1506

S.F.
0000931420
7 microns

2. Mass flow valve:

p/n: 236813
s/n: ~~WO 11 9 SN~~ 7236813
model #: WO 11 482

3. Vacuum immediately before opening: 0 "Hg
Vacuum immediately after opening: -30 "Hg
Vacuum 15 minutes after opening: -29.9 "Hg
Vacuum immediately before closing: -7 "Hg
Vacuum immediately after closing: -7 "Hg

4. Sample collection start time (24 hr. clock): 14:28
Sample collection end time (24 hr. clock): 10:45

ENVIRONMENTAL ASSESSMENT & REMEDIATIONS

Sample Log Sheet

Date: 8/18/2018 - 8/19/2018
Site ID: DEC-Glen Cove 30-36
Address: Pall Corp. 30-36 Sea Cliff Ave., Glen Cove NY
Preparer's Name: Tracey Evans

Sampling Information

Sample name(as it appears on CoC): Indoor, Blind Duplicate

Sample location (include depth/elevation): GCCDC-ClassX_IA

Laboratory and analysis: Eurofins, VOC TO-15, Methane EPA 18/25

Purge Volume:

1. Summa Canister Information

Laboratory ID #: 1178

Cleaning/Certification Date: 8/14/18 JEB 7445, ep00242.d

Batch #/Analyst:

2. Flow Controller/Metering Valve Information

Laboratory ID #: 675015

s/n: A0267 5011-S

model/lot #: H/L 57 3408

3. Diaphragm/Bellows Valve

Manufacturer:

s/n or lot #:

model #:

4. Laboratory/Field Vacuums

Laboratory Vacuum (Before Sampling): 0 "Hg

Field Vacuum (Start Sampling): -30 "Hg

Field Vacuum (Stop Sampling): -5 "Hg

~~Laboratory Vacuum (After Sampling)~~ -4 "Hg

~~15 min af~~
After sample is closed

5. Collection Period

Sample collection start time (24 hr. clock): [redacted]

Sample collection end time (24 hr. clock): [redacted]

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Sample Administration Receipt Documentation Log

Doc Log ID: 224846

Group Number(s): 1979096

Client: EAR

DEC-Glencove

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Timestamp:	08/22/2018 10:05
Number of Packages:	4	Number of Projects:	1
State/Province of Origin:	NY		

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:	11
Discrepancy in Container Qty on COC:	No	Air Quality Returns:	Yes
		Summa Canisters:	856

Unpacked by Katie Hartlove (2114) at 12:25 on 08/22/2018

General Comments:	2 flow controllers say they aren't working.

2425 New Holland Pike
Lancaster, PA 17601-5925
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:

BMQL	Below Minimum Quantitation Level	**mL**	milliliter(s)
C	degrees Celsius	**MPN**	Most Probable Number
cfu	colony forming units	**N.D.**	non-detect
CP Units	cobalt-chloroplatinate units	**ng**	nanogram(s)
F	degrees Fahrenheit	**NTU**	nephelometric turbidity units
g	gram(s)	**pg/L**	picogram/liter
IU	International Units	**RL**	Reporting Limit
kg	kilogram(s)	**TNTC**	Too Numerous To Count
L	liter(s)	**µg**	microgram(s)
lb.	pound(s)	**µL**	microliter(s)
m3	cubic meter(s)	**umhos/cm**	micromhos/cm
meq	milliequivalents	**MCL**	Maximum Contamination Limit
mg	milligram(s)		

<	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.

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.

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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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Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
K1	Initial Calibration Blank is above the QC limit and the sample result is ND
K2	Continuing Calibration Blank is above the QC limit and the sample result is ND
K3	Initial Calibration Verification is above the QC limit and the sample result is ND
K4	Continuing Calibration Verification is above the QC limit and the sample result is ND
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.
P^	Concentration difference between the primary and confirmation column > 40%. The higher 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.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

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.

Volatile Organics in Air by GC Data

Case Narrative/Conformance Summary

Volatile Organics in Air by GC

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Case Narrative/Conformance Summary

CLIENT: Sunoco c/o Enviro. Assessment
SDG: GLE01

Volatiles in Air

Fraction: Volatile Organics in Air by GC

Sample #	Client ID	DF	Comments
9766344	GCCDC-Office-IA	2	
9766345	GCCDC-Class1_IA	2	
9766346	GCCDC-Class5_IA	2	
9766347	GCCDC-Class6_IA	2	
9766348	GCCDC-Class7_IA	4	
9766349	GCCDC-Class10C_IA	1; 2	
9766350	GCCDC-Class10A_IA	2	
9766351	GCCDC-Class6_CS	2	
9766352	GCCDC-Class10B_CS	2	
9766353	GCCDC-ClassX_IA	2	
9766354	GCCDC-Entry_OD	2	

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

The target analyte is not a component of the spiking solution, therefore, LCS data is not reported.

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

Case Narrative/Conformance Summary

CLIENT: Sunoco c/o Enviro. Assessment
SDG: GLE01

Volatiles in Air

Fraction: Volatile Organics in Air by GC

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	

Calculations

A response factor for each calibration compound is determined for each calibration level as follows:

$$Response\ Factor = \frac{Area\ Counts}{Conc\ (Volume)}$$

Where:

Area Counts = Integrated area of the chromatographic peak of interest

Conc x Volume = Concentration in ppm(v) of compound in the calibration standard x sample volume in µL (nominal volume is 100 µL)

The average response factor for each calibration compound is calculated as the mean of the three individual response factors:

$$Average\ RF = \frac{(RF1 + RF2 + RF3 \ldots RF6)}{6}$$

Where:

RF1, RF2, and RF3... RF6 are the response factors from the six calibration levels.

Concentration of a single compound in a sample is calculated as follows:

$$Conc\ (x) = \frac{Area\ (x)}{Average\ RF\ (x)} \times \frac{Nominal\ Volume\ (\mu L)}{Loop\ size\ (\mu L)}$$

Where:

Conc (x) = Concentration of compound(x) in the sample

Area (x) = Integrated area for compound(x) in the sample analysis

Average RF (x) = The average response factor for compound(x) from the initial calibration

Nominal Volume = 100 µL, the volume of sample upon which the calibration is based

Loop size (µL) = The size of the sample loop used to introduce the sample, in µL

Concentration of a range of compounds in a sample is calculated as follows:

$$Conc\,(x) = \frac{Area\,(x_1 + x_2 + x_3 + x_n)}{Average\,RF\,(x)} \times \frac{Nominal\,Volume\,(\mu\mu L}{Loop\,size\,(\mu\mu L}$$

Where:

Conc (x) = Concentration of a range of compounds(x) in the sample

Area (x) = Sum of integrated areas for a range of compounds(x) in the sample analysis

Average RF (x) = The average response factor for the chosen compound(x) from the initial calibration

Nominal Volume = 100 µL, the volume of sample upon which the calibration is based

Loop size (µL) = The size of the sample loop used to introduce the sample, in µL

The % RSD, relative standard deviation over the three calibration levels for each compound, is calculated as follows:

$$\%RSD = \frac{SD_{RRF}}{\overline{RRF}} \times 100$$

Where:

SD_{RRF} = Standard deviation of six response factors

$\overline{RRF}$ = Mean Initial Calibration Relative Response Factor per compound

The % Difference for a compound in the continuing calibration standard is calculated as:

$$\%\ Difference\ (x) = \frac{|(Average\,RF\,(x) - CCRF\,(x))|}{Average\,RF\,(x)} \times 100$$

Where:

Average RF (x) = The average response factor for compound (x) from the initial calibration

CCRF (x) = The response factor for compound(x) in the continuing calibration standard analysis

Quality Control and Calibration Summary Forms

Volatile Organics in Air by GC

Quality Control Forms

Volatile Organics in Air by GC

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Quality Control Reference List
Volatiles in Air

CLIENT: Sunoco c/o Enviro. Assessment
SDG: GLE01

Fraction: Volatile Organics in Air by GC

Analysis	Batch Number	Sample Number	Analysis Date
Methane	M1825730AA	VBLK257B	09/14/2018 16:26
		9766344	09/14/2018 19:23
		9766345	09/14/2018 19:51
		9766346	09/14/2018 20:20
		9766347	09/14/2018 20:49
		9766348	09/14/2018 21:17
		9766349	09/14/2018 21:46
		9766350	09/14/2018 22:15
		9766351	09/14/2018 23:00
		9766352	09/14/2018 23:28
		9766353	09/14/2018 23:57
		9766354	09/15/2018 00:26

Quality Control Summary
Method Blank
Volatiles in Air
SDG: GLE01
Matrix: AIR

Fraction: Volatile Organics in Air by GC

M1825730AA / VBLK257B Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Methane	09/14/18	N.D.	ppm(v)	2	5

Fraction: Volatile Organics in Air by GC

07090: Methane Analyte Name	Default MDL	Default LOQ	Units
Methane	2	5	ppm(v)

Theoretical Standard Concentrations for EPA Methods 18 and 25 / TO-3 (modified)

Compound Name	MDL0.2 [ppm(v)]	VSTD001 [ppm(v)]	VSTD005 [ppm(v)]	VSTD010 [ppm(v)]	VSTD025 [ppm(v)]	VSTD100 [ppm(v)]	VSTD500 [ppm(v)]
Methane	0.2	1	5	10	25	100	500
Ethane	0.2	1	5	10	25	100	n/a
Propane	0.2	1	5	10	25	100	n/a
Butane	0.2	1	5	10	25	100	n/a
Pentane	0.2	1	5	10	25	100	n/a
Methyl t-butyl Ether	0.2	1	5	10	25	100	n/a
Hexane	0.2	1	5	10	25	100	n/a
Decane	0.04	0.2	1	2	5	20	n/a
Octane	0.2	1	5	10	25	100	n/a
Benzene	0.2	1	5	10	25	100	n/a
Toluene	0.2	1	5	10	25	100	n/a
Ethylbenzene	0.2	1	5	10	25	100	n/a
m/p-Xylene	0.4	2	10	20	50	200	n/a
o-Xylene	0.2	1	5	10	25	100	n/a

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FORM 06
VOLATILE ORGANICS IN AIR
INITIAL CALIBRATION DATA

SDG No.:

Instrument ID: 58309 Cal. Start Date: 09/14/2018 Cal. End Date: 09/14/2018

Cal. Start Time: 11:23 Cal. End Time: 14:49

FID File IDs:

RF 1 =	RF 5 =	RF 10 =	RF 25 =	RF 100 =	RF 500 =
18257.0008.d	18257.0007.d	18257.0006.d	18257.0005.d	18257.0004.d	18257.0009.d

PID File IDs:

RF 1 =	RF 5 =	RF 10 =	RF 25 =	RF 100 =	RF 500 =
18257B.0008.d	18257B.0007.d	18257B.0006.d	18257B.0005.d	18257B.0004.d	18257B.0009.d

	COMPOUND		RF 1	RF 5	RF 10	RF 25	RF 100	RF 500	$\overline{RF}$	% RSD	Cal. Method	
	Methane		****	15808	17423	14730	17025	14936	15984	8	AVG	
	Ethane		38616	27955	33099	27748	32260	****	31936	14	AVG	
	Propane		45203	41015	48601	40880	47450	****	44630	8	AVG	
	Butane		53809	52445	64687	54542	63217	****	57740	10	AVG	
	Pentane		65590	61875	76597	64756	76069	****	68978	10	AVG	
+	MTBE		11362	10654	12603	10705	12341	****	11533	8	AVG	
	Hexane		74465	71280	88042	74917	88139	****	79369	10	AVG	
+	Benzene		18330	16189	19951	16869	19194	****	18107	9	AVG	
+	Toluene		11852	10572	14184	11695	14287	****	12518	13	AVG	
	Octane		86119	80847	110837	88719	104875	****	94279	14	AVG	
+	Ethylbenzene		9767	8241	11272	9045	11101	****	9885	13	AVG	
+	m/p-Xylene		15505	11617	15546	12052	14757	****	13895	14	AVG	
+	o-Xylene		14590	9499	13315	10071	13455	****	12186	19	AVG	
	Decane	#	75245	43041	69815	44656	56137	****	57779	25	AVG	#

Average % RSD: 12

* Maximum %RSD = 25%.
\+ Compound reported from PID file
\# Decane is used as a retention time marker only.

Sample Data

Volatile Organics in Air by GC

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	Tedlar	Lab Sample ID:	9766344
Canister ID:	N/A	FID File ID:	18257.0018.d
Injection Volume:	100 cc	PID File ID:	
Instrument ID:	58309	Date Collected:	08/18/2018
Analyzed Date:	09/14/2018	Date Received:	08/22/2018
Analyzed Time:	19:23	Dilution Factor	2

Concentration Units: ppm(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
74-82-8	Methane	26	

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.
- Compounds MTBE, Benzene, Toluene, Ethylbenzene, m/p-Xylene, o-Xylene and Xylene (total)are reported from PID file

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

9766344

FID Data file: /chem/A58309.i/18sep14.b/18257.0018.d Injection date and time: **14-SEP-2018 19:23**
FID Data file Sample Info. Line: 9766344 Instrument ID: **A58309.i** Batch: **M1825730AA**
Date, time and analyst ID of latest FID file update: 17-Sep-2018 08:27 ads07818

FID Blank Data file reference: **/chem/A58309.i/18sep14.b/18257B.0012.d**

FID Method used: /chem/A58309.i/18sep14.b/gc_fid.m FID Sublist used: **6626**
FID Calibration date and time (Last Method Edit): 17-SEP-2018 08:23
FID Mid Level Daily Calibration Standard Reference: **/chem/A58309.i/18sep14.b/18257.0006.d**

Sampling Media: Tedlar Bag Bottle code: N/A Matrix: AIR On-Column Amount units: ppm(v) In Sample Concentration units: ppm(v)

Sample Concentration Formula: On-Column Amount * DF * IVn/IVa Dilution Factor (DF): 2
Nominal Injection Volume (IVn): 100 cc Actual injection Volume (IVa): 100 cc

Analysis Comments:

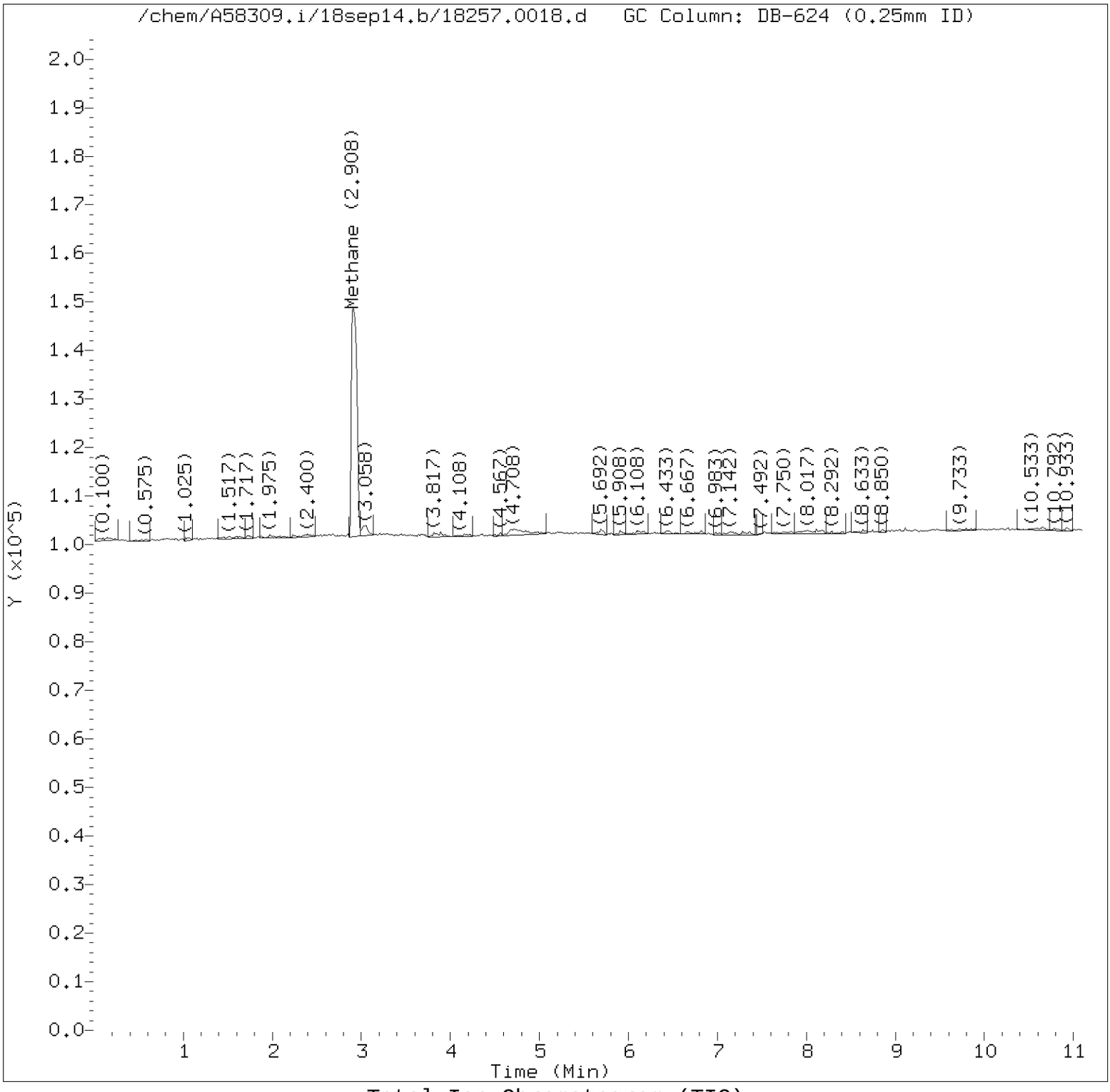
Single Component, Summary, and Range Target Compounds	Expected RT(±window)	RT Low Limit	RT	RT High Limit	Area	On-Column Concentration (ppm(v))	In Sample Concentration (ppm(v))	Blank Conc.	Qual.	Reporting Limit (on-column)	LOQ
1) Methane	2.908(±0.03)	2.878	2.908	2.938	204612M	12.801	25.60			2	5

M = Compound was manually integrated. NIB = Compound not in referenced method blank sublist.

Total number of FID targets = 1 Total number of PID targets = None Scheduled for Reporting

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30. Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:27. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

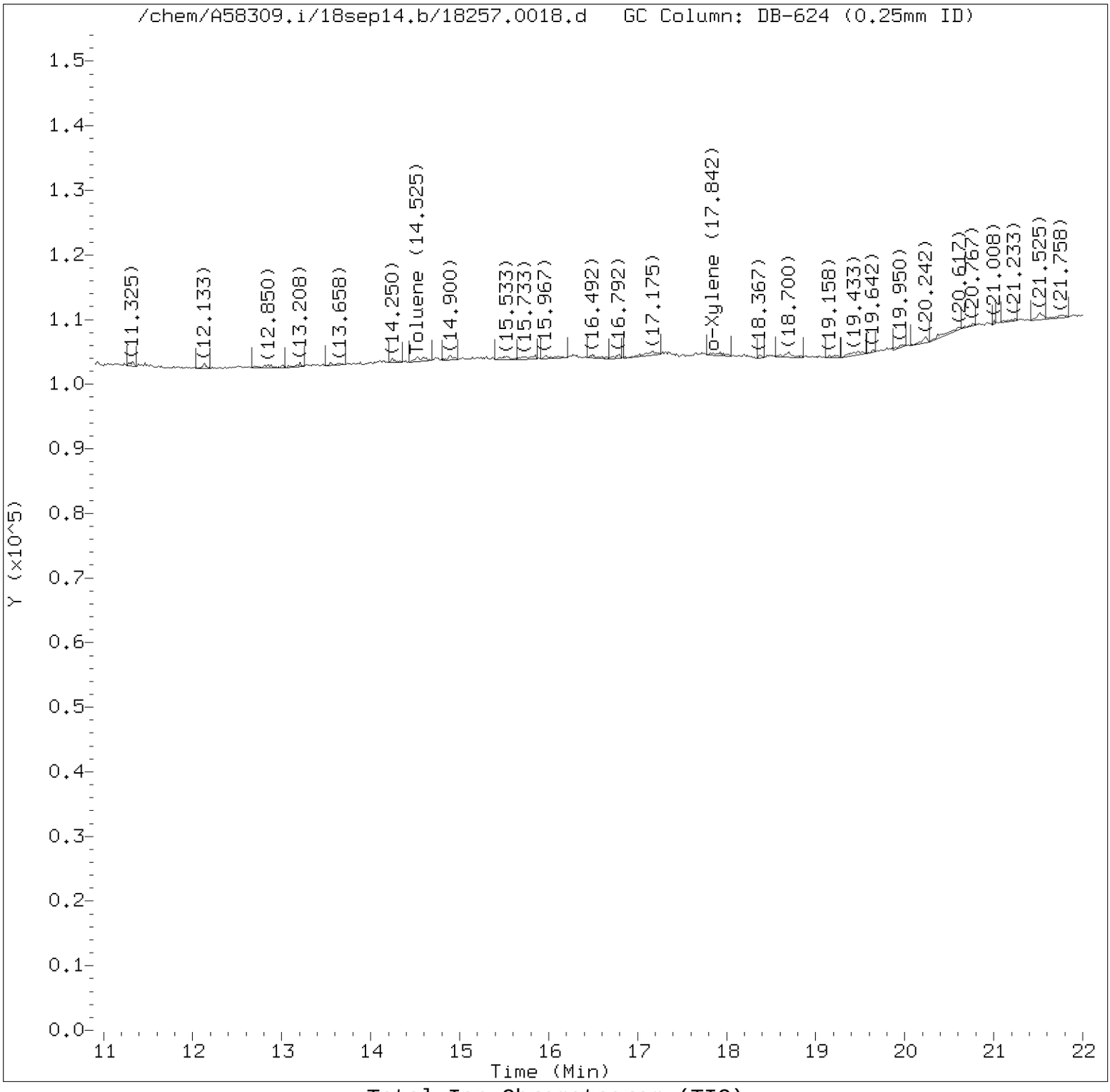
Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0018.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 19:23 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766344 Lab Sample ID: 9766344

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0018.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 19:23 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766344 Lab Sample ID: 9766344

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0018.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 19:23 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

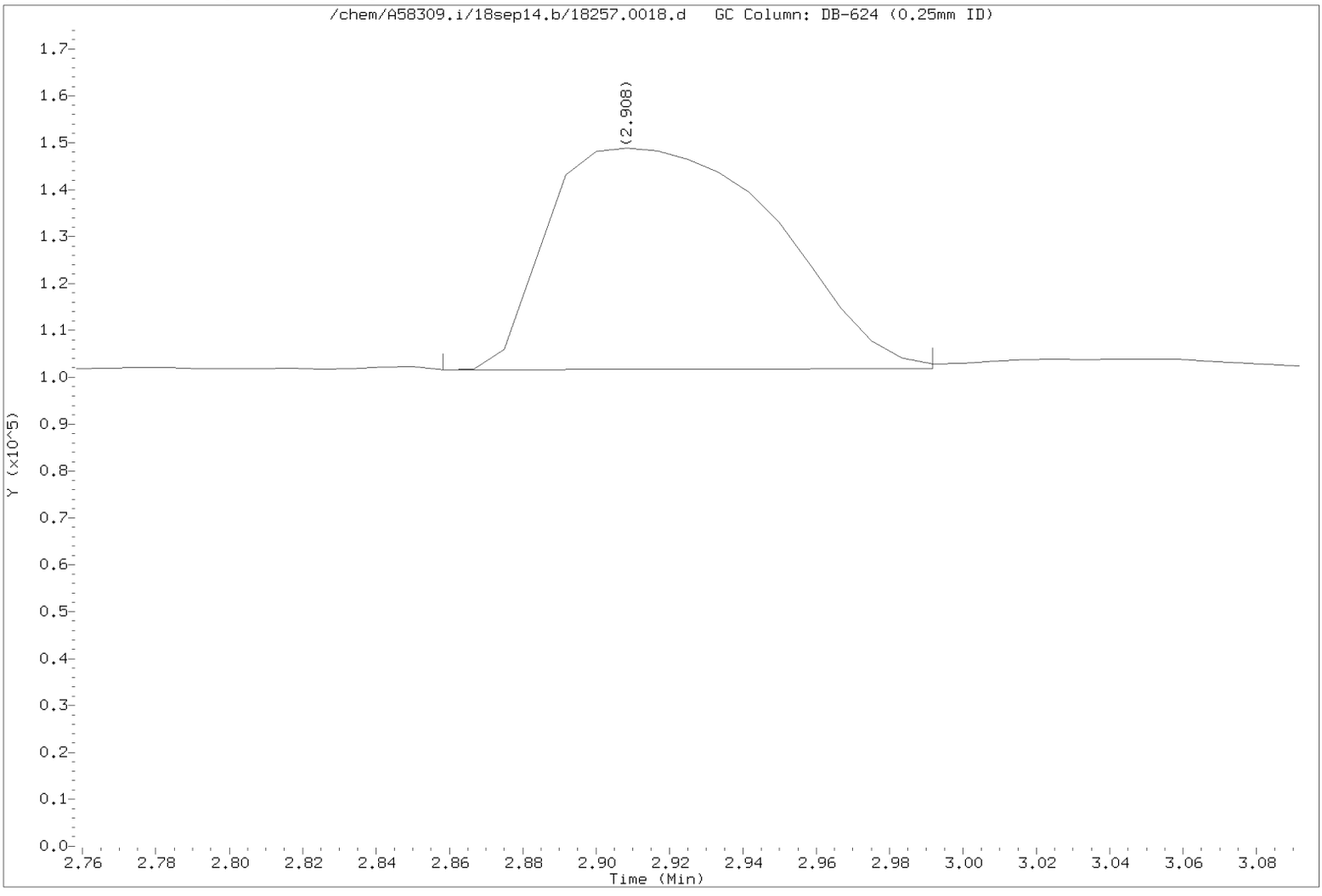
Sample Name: 9766344 Lab Sample ID: 9766344

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) Methane	2.908(±0.03)	2.908	204612M	12.801

M = Compound was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257.0018.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 19:23 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766344 Lab Sample ID: 9766344

Compound Number : 1
Compound Name : Methane
Retention Time (minutes): 2.908
Area (flag) : 204612M
Concentration (ppm(v)) : 12.8009
Integration start time : 2.858 Integration stop time: 2.992
Y at integration start : 101595 Y at integration end: 101818

Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:27.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257.0018.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 19:23 Analyst ID:

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:25
Date, time and analyst ID of latest file update: 14-Sep-2018 19:50 Unknown

Sample Name: 9766344 Lab Sample ID: 9766344

Compound Number : 1
Compound Name : Methane
Retention Time (minutes): 2.908
Area : 214169
Concentration (ppm(v)) : 13.3988
Integration start time : 2.858 Integration stop time: 3.133
Y at integration start : 101595 Y at integration end: 102053

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: 01781869

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0018.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 19:23 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766344 Lab Sample ID: 9766344

RT	Area	Peak Label(s) and Range	Compound #s
0.100	5354		
0.575	2341		
1.025	1820		
1.517	5025		
1.717	2172		
1.975	4779		
2.400	4036		
2.908	204613M	Methane	
3.058	10046M		
3.817	6312		
4.108	3618		
4.567	1663		
4.708	16616		
5.692	3829		
5.908	2488		
6.108	4857		
6.433	3236		
6.667	3979		
6.983	1601		
7.142	7670		
7.492	508		
7.750	3393		
8.017	9695		
8.292	2472		
8.633	2682		
8.850	1487		
9.733	3672		
10.533	5008		
10.792	2141		
10.933	2080		
11.325	2397		
12.133	2410		
12.850	4798		
13.208	2594		
13.658	2327		
14.250	2393		
14.525	5305	Toluene	
14.900	3021		
15.533	3669		
15.733	4189		

M = Peak was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0018.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 19:23 Analyst ID: ADS07818

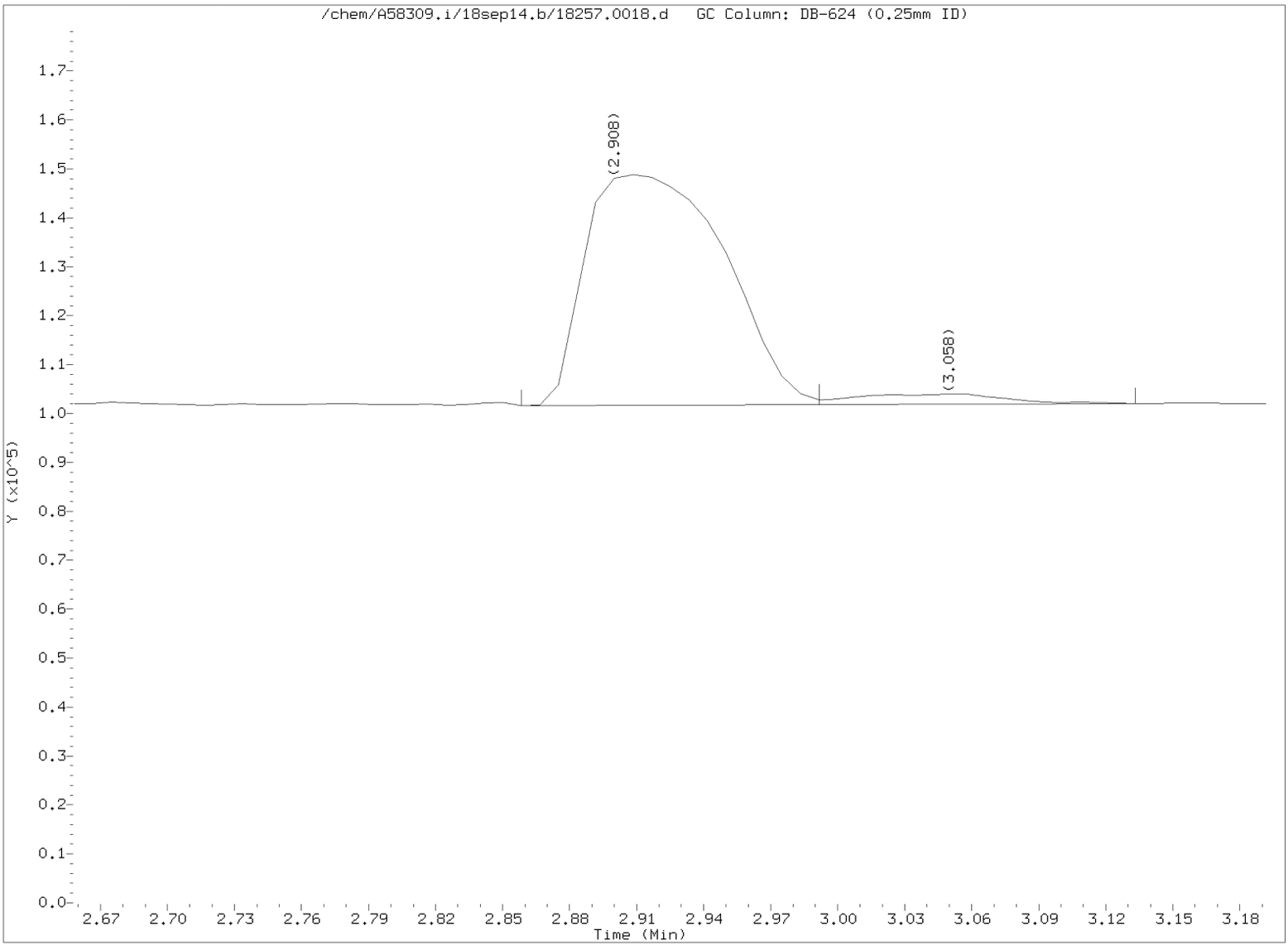
Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766344 Lab Sample ID: 9766344

RT	Area	Peak Label(s) and Range	Compound #s
15.967	3600		
16.492	3410		
16.792	2741		
17.175	6263		
17.842	3809	o-Xylene	
18.050	3809		
18.367	1106		
18.700	5605		
19.158	2194		
19.433	5673		
19.642	897		
19.950	2086		
20.242	4168		
20.617	6166		
20.767	1544		
21.008	688		
21.233	2247		
21.525	5154		
21.758	4273		

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257.0018.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 19:23 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766344 Lab Sample ID: 9766344

Retention Time (minutes): 2.908
Area (flag) : 204613M
Integration start time : 2.858 Integration stop time: 2.992
Y at integration start : 101595 Y at integration end: 101818

Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:27.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257.0018.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 19:23 Analyst ID:

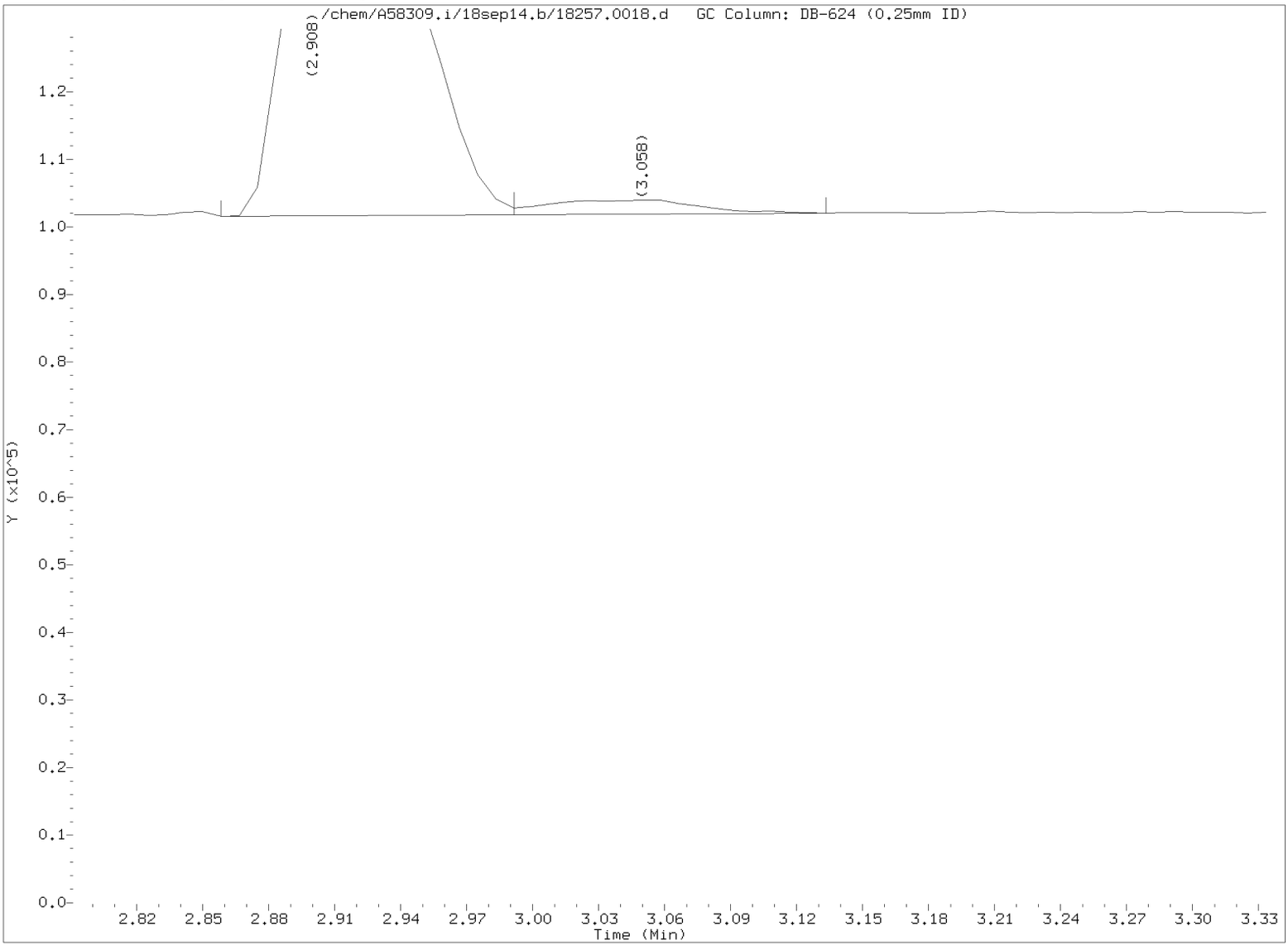
Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:25
Date, time and analyst ID of latest file update: 14-Sep-2018 19:50 Unknown

Sample Name: 9766344 Lab Sample ID: 9766344

No signal was originally integrated at 2.908 minutes.

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: 07873

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257.0018.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 19:23 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766344 Lab Sample ID: 9766344

Retention Time (minutes): 3.058
Area (flag) : 10046M
Integration start time : 2.992 Integration stop time: 3.133
Y at integration start : 101818 Y at integration end: 102053

Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:27.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257.0018.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 19:23 Analyst ID:

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:25
Date, time and analyst ID of latest file update: 14-Sep-2018 19:50 Unknown

Sample Name: 9766344 Lab Sample ID: 9766344

No signal was originally integrated at 3.058 minutes.

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: 07187

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	Tedlar	Lab Sample ID:	9766345
Canister ID:	N/A	FID File ID:	18257.0019.d
Injection Volume:	100 cc	PID File ID:	
Instrument ID:	58309	Date Collected:	08/18/2018
Analyzed Date:	09/14/2018	Date Received:	08/22/2018
Analyzed Time:	19:51	Dilution Factor	2

Concentration Units: ppm(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
74-82-8	Methane	15	

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.
- Compounds MTBE, Benzene, Toluene, Ethylbenzene, m/p-Xylene, o-Xylene and Xylene (total)are reported from PID file

Analysis Summary for GC Volatiles in Air

FID Data file: /chem/A58309.i/18sep14.b/18257.0019.d Injection date and time: **14-SEP-2018 19:51**
FID Data file Sample Info. Line: 9766345 Instrument ID: **A58309.i** Batch: **M1825730AA**
Date, time and analyst ID of latest FID file update: 17-Sep-2018 08:27 ads07818

FID Blank Data file reference: **/chem/A58309.i/18sep14.b/18257B.0012.d**

FID Method used: /chem/A58309.i/18sep14.b/gc_fid.m FID Sublist used: **6626**
FID Calibration date and time (Last Method Edit): 17-SEP-2018 08:23
FID Mid Level Daily Calibration Standard Reference: **/chem/A58309.i/18sep14.b/18257.0006.d**

Sampling Media: Tedlar Bag Bottle code: N/A Matrix: AIR On-Column Amount units: ppm(v) In Sample Concentration units: ppm(v)

Sample Concentration Formula: On-Column Amount * DF * IVn/IVa Dilution Factor (DF): 2
Nominal Injection Volume (IVn): 100 cc Actual injection Volume (IVa): 100 cc

Analysis Comments:

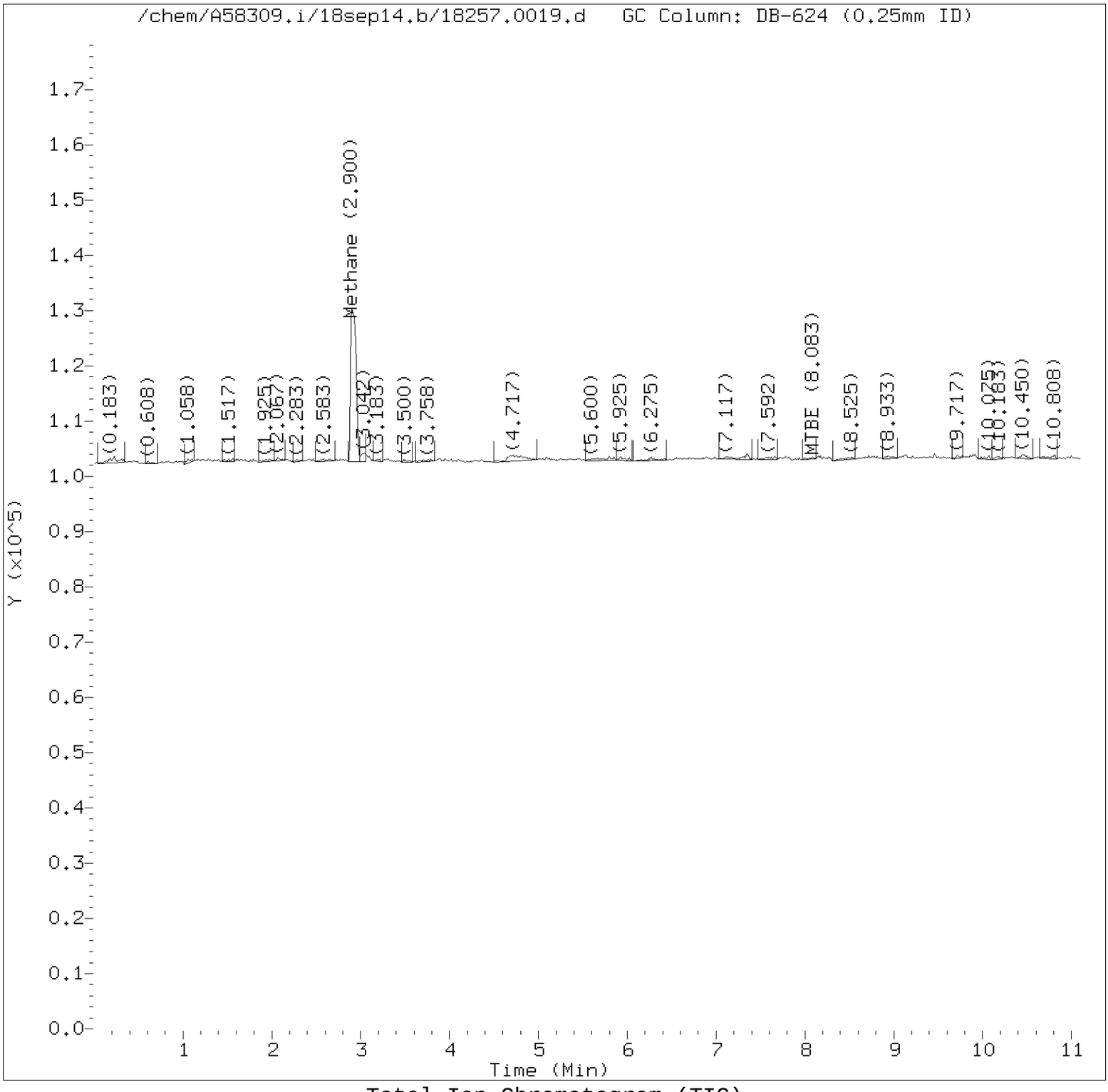
Single Component, Summary, and Range Target Compounds	Expected RT(±window)	RT Low Limit	RT	RT High Limit	Area	On-Column Concentration (ppm(v))	In Sample Concentration (ppm(v))	Blank Conc.	Qual.	Reporting Limit (on-column)	LOQ
1) Methane	2.908(±0.03)	2.878	2.900	2.938	120992M	7.569	15.14			2	5

M = Compound was manually integrated. NIB = Compound not in referenced method blank sublist.

Total number of FID targets = 1 Total number of PID targets = None Scheduled for Reporting

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30. Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:27. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

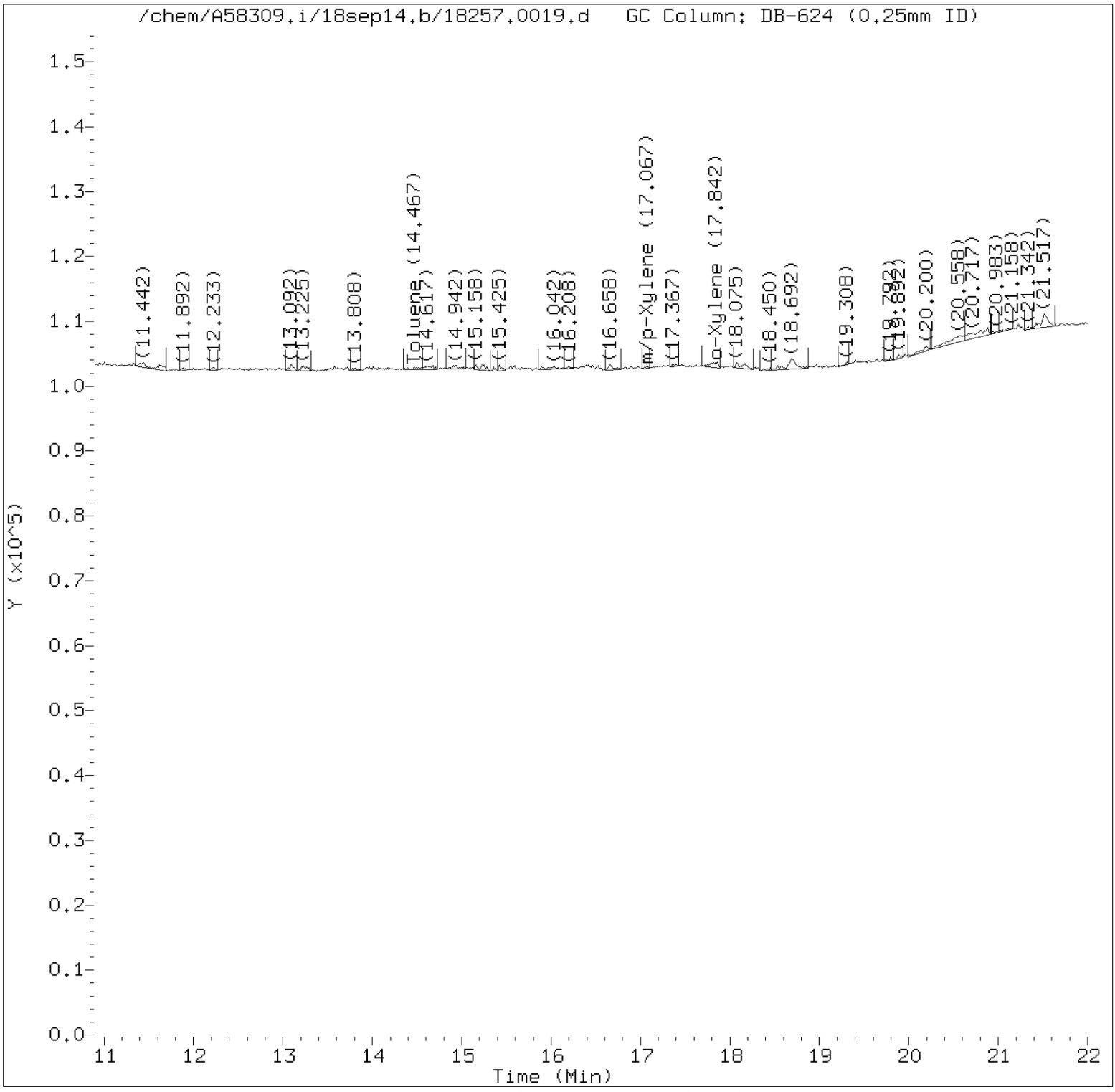
Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0019.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 19:51 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766345 Lab Sample ID: 9766345

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0019.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 19:51 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766345 Lab Sample ID: 9766345

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0019.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 19:51 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

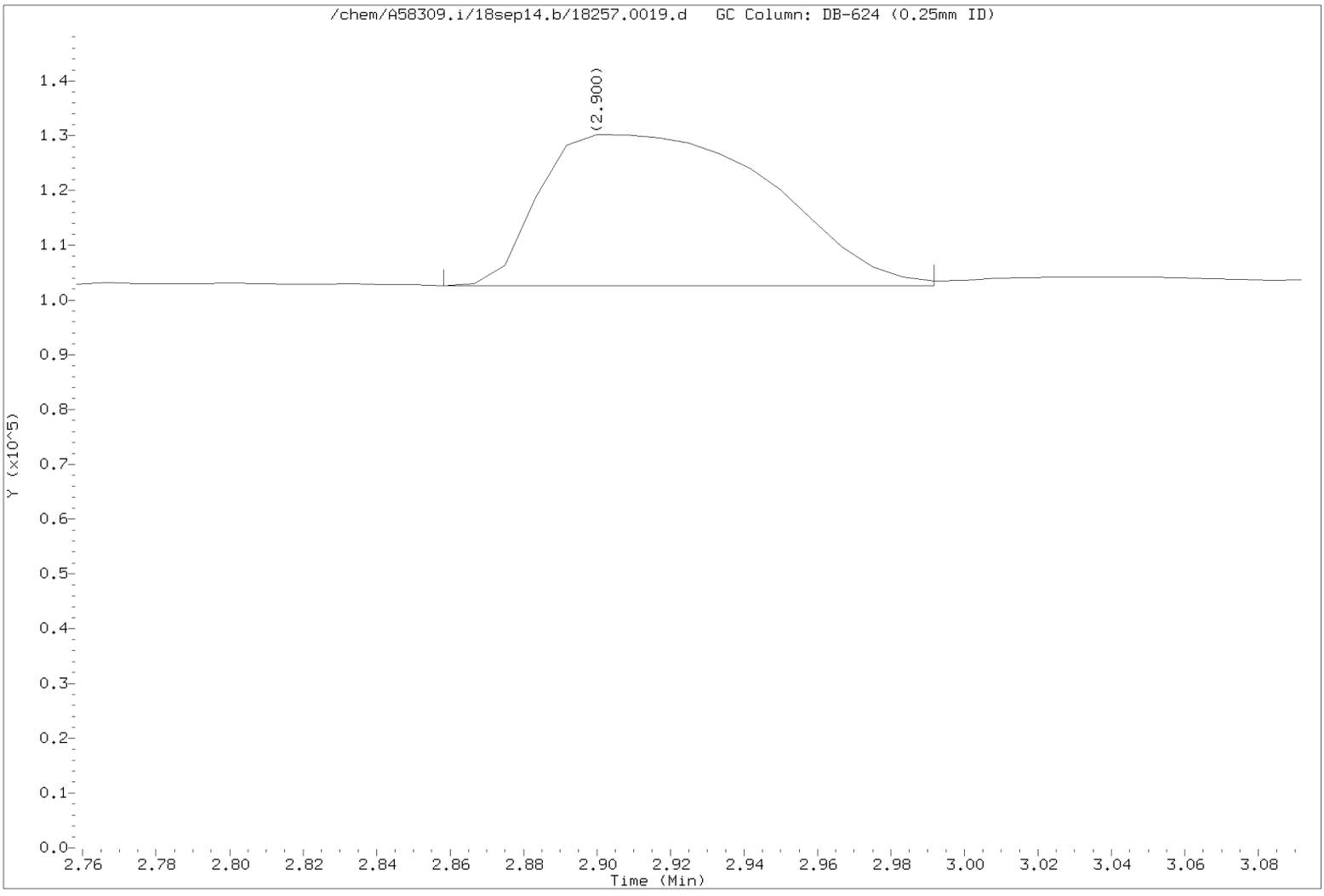
Sample Name: 9766345 Lab Sample ID: 9766345

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) Methane	2.908(±0.03)	2.900	120992M	7.569

M = Compound was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257.0019.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 19:51 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766345 Lab Sample ID: 9766345

Compound Number : 1
Compound Name : Methane
Retention Time (minutes): 2.900
Area (flag) : 120992M
Concentration (ppm(v)) : 7.5695
Integration start time : 2.858 Integration stop time: 2.992
Y at integration start : 102643 Y at integration end: 102643

Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:27.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257.0019.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 19:51 Analyst ID:

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:25
Date, time and analyst ID of latest file update: 14-Sep-2018 20:19 Unknown

Sample Name: 9766345 Lab Sample ID: 9766345

Compound Number : 1
Compound Name : Methane
Retention Time (minutes): 2.900
Area : 29509
Concentration (ppm(v)) : 1.8461
Integration start time : 2.842 Integration stop time: 2.900
Y at integration start : 102815 Y at integration end: 102729

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: 07181

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0019.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 19:51 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766345 Lab Sample ID: 9766345

RT	Area	Peak Label(s) and Range	Compound #s
0.183	6934		
0.608	1743		
1.058	2355		
1.517	2039		
1.925	2712		
2.067	1648		
2.283	1234		
2.583	2586		
2.900	120992M	Methane	
3.042	6038M		
3.183	1490		
3.500	1534		
3.758	2823		
4.717	13773		
5.600	6431		
5.925	3509		
6.275	4267		
7.117	7148		
7.592	3047		
8.083	1794	MTBE	
8.525	3088		
8.933	2593		
9.717	1441		
10.075	2399		
10.183	1942		
10.450	4189		
10.808	3470		
11.442	7656		
11.892	1381		
12.233	1185		
13.092	3022		
13.225	3991		
13.808	1276		
14.467	2143	Toluene	
14.617	3173		
14.942	3026		
15.158	4874		
15.425	2143		
16.042	3485		
16.208	1134		

M = Peak was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0019.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 19:51 Analyst ID: ADS07818

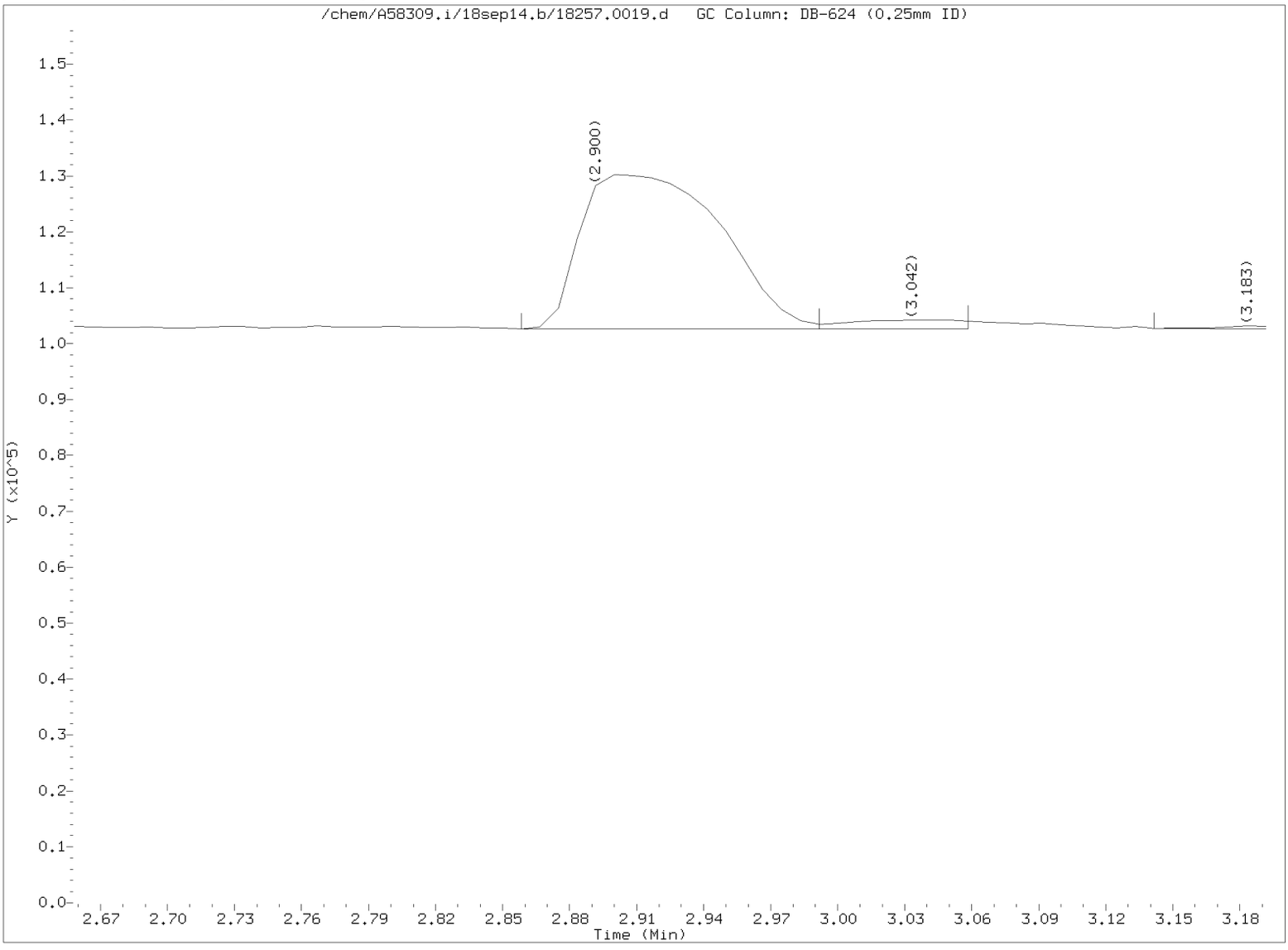
Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766345 Lab Sample ID: 9766345

RT	Area	Peak Label(s) and Range	Compound #s
16.658	3091		
17.067	761	m/p-Xylene	
17.367	947		
17.842	5042	o-Xylene	
18.050	5803		
18.075	4524		
18.450	1321		
18.692	12204		
19.308	1184		
19.792	1156		
19.892	1345		
20.200	4267		
20.558	11754		
20.717	13205		
20.983	1128		
21.158	1058		
21.342	1202		
21.517	12157		

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257.0019.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 19:51 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766345 Lab Sample ID: 9766345

Retention Time (minutes): 2.900
Area (flag) : 120992M
Integration start time : 2.858 Integration stop time: 2.992
Y at integration start : 102643 Y at integration end: 102643

Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:27.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257.0019.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 19:51 Analyst ID:

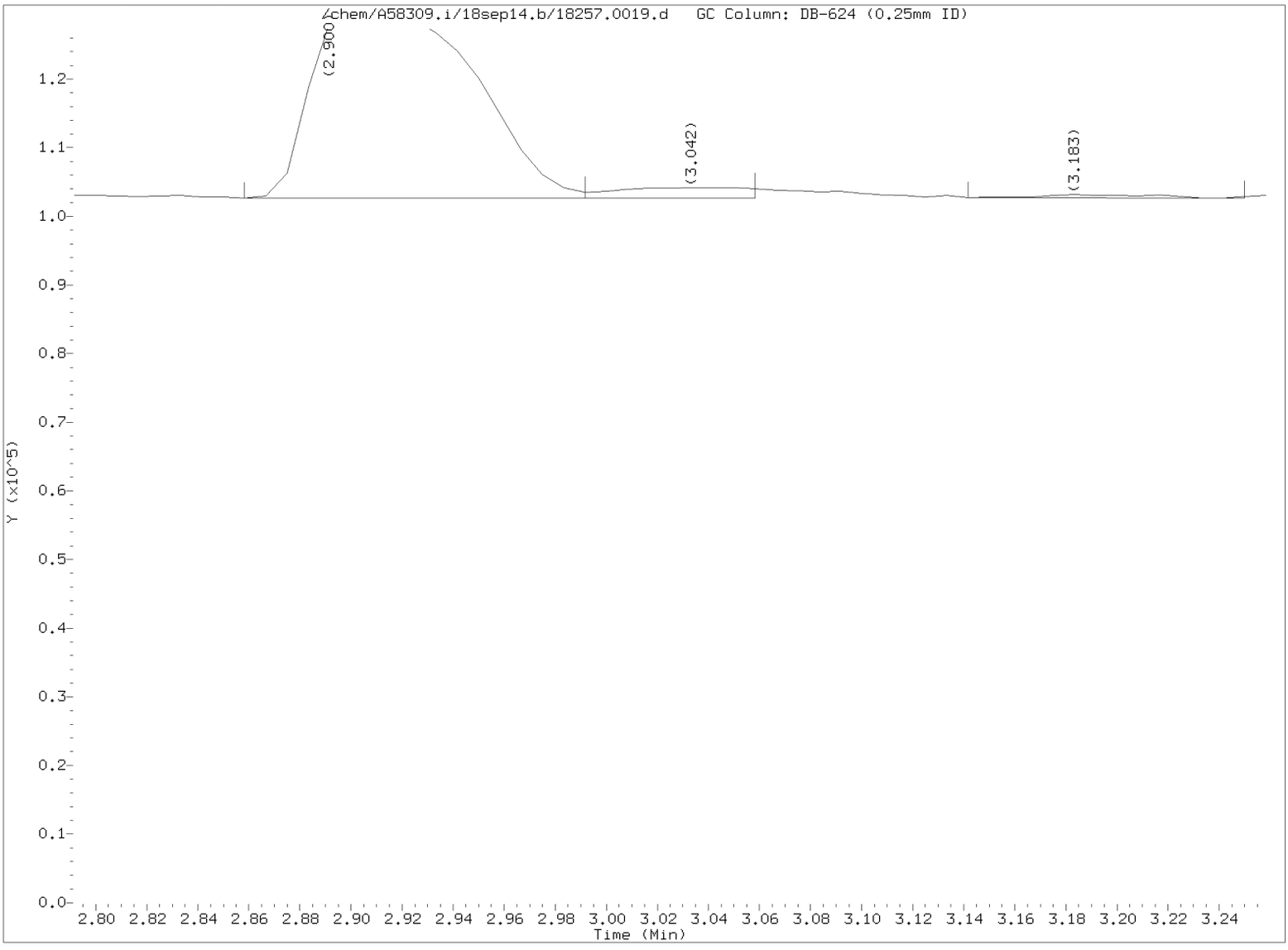
Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:25
Date, time and analyst ID of latest file update: 14-Sep-2018 20:19 Unknown

Sample Name: 9766345 Lab Sample ID: 9766345

No signal was originally integrated at 2.900 minutes.

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ASECHRIST

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257.0019.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 19:51 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766345 Lab Sample ID: 9766345

Retention Time (minutes): 3.042
Area (flag) : 6038M
Integration start time : 2.992 Integration stop time: 3.058
Y at integration start : 102643 Y at integration end: 102643

Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:27.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257.0019.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 19:51 Analyst ID:

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:25
Date, time and analyst ID of latest file update: 14-Sep-2018 20:19 Unknown

Sample Name: 9766345 Lab Sample ID: 9766345

No signal was originally integrated at 3.042 minutes.

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: 501781888

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	Tedlar	Lab Sample ID:	9766346
Canister ID:	N/A	FID File ID:	18257.0020.d
Injection Volume:	100 cc	PID File ID:	
Instrument ID:	58309	Date Collected:	08/18/2018
Analyzed Date:	09/14/2018	Date Received:	08/22/2018
Analyzed Time:	20:20	Dilution Factor	2

Concentration Units: ppm(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
74-82-8	Methane	12	

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.
- Compounds MTBE, Benzene, Toluene, Ethylbenzene, m/p-Xylene, o-Xylene and Xylene (total)are reported from PID file

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

9766346

FID Data file: /chem/A58309.i/18sep14.b/18257.0020.d Injection date and time: **14-SEP-2018 20:20**
FID Data file Sample Info. Line: 9766346 Instrument ID: **A58309.i** Batch: **M1825730AA**
Date, time and analyst ID of latest FID file update: 17-Sep-2018 08:27 ads07818

FID Blank Data file reference: **/chem/A58309.i/18sep14.b/18257B.0012.d**

FID Method used: /chem/A58309.i/18sep14.b/gc_fid.m FID Sublist used: **6626**
FID Calibration date and time (Last Method Edit): 17-SEP-2018 08:23
FID Mid Level Daily Calibration Standard Reference: **/chem/A58309.i/18sep14.b/18257.0006.d**

Sampling Media: Tedlar Bag Bottle code: N/A Matrix: AIR On-Column Amount units: ppm(v) In Sample Concentration units: ppm(v)

Sample Concentration Formula: On-Column Amount * DF * IVn/IVa Dilution Factor (DF): 2
Nominal Injection Volume (IVn): 100 cc Actual injection Volume (IVa): 100 cc

Analysis Comments:

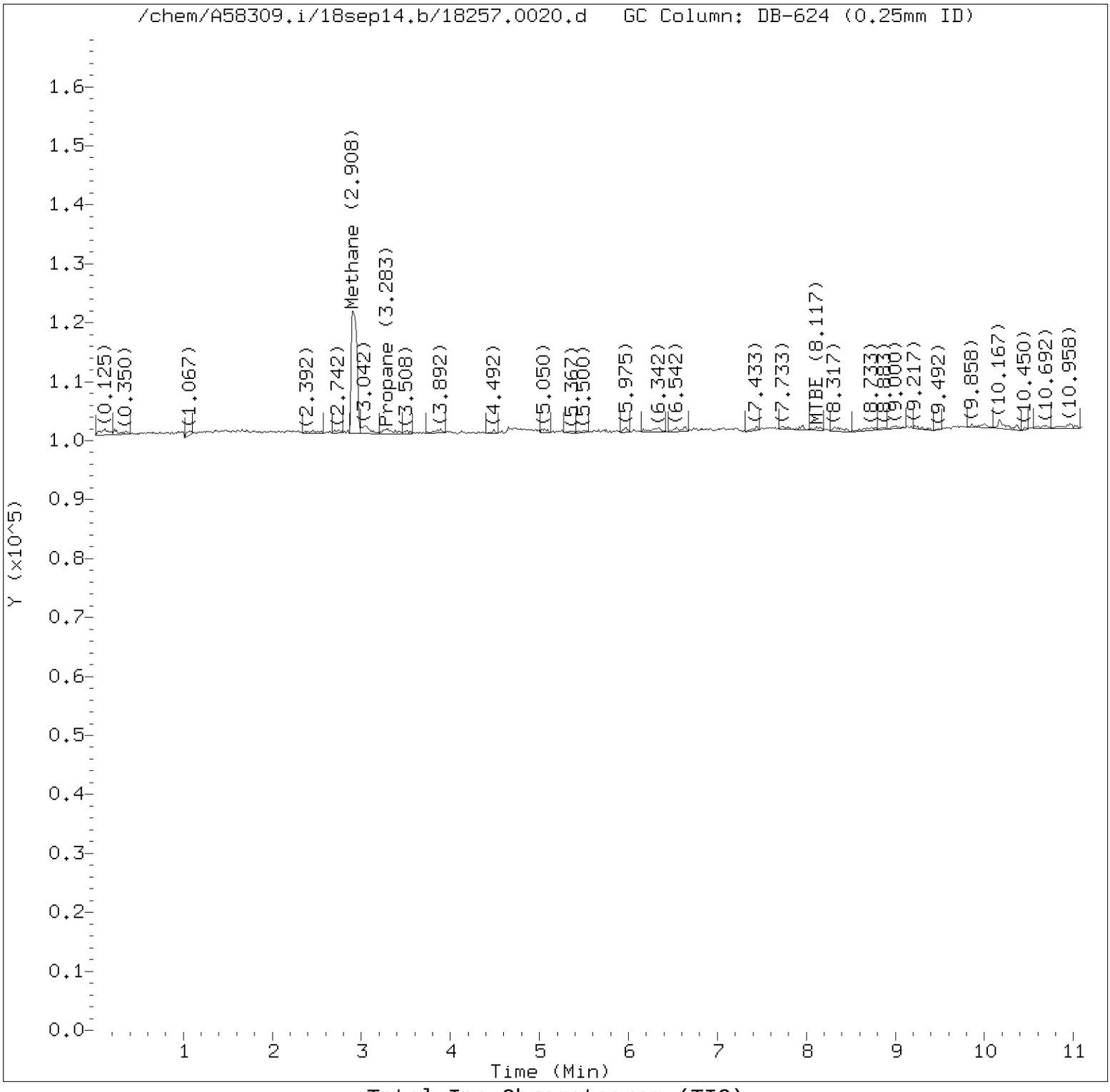
Single Component, Summary, and Range Target Compounds	Expected RT(±window)	RT Low Limit	RT	RT High Limit	Area	On-Column Concentration (ppm(v))	In Sample Concentration (ppm(v))	Blank Conc.	Qual.	Reporting Limit (on-column)	LOQ
1) Methane	2.908(±0.03)	2.878	2.908	2.938	92680M	5.798	11.60			2	5

M = Compound was manually integrated. NIB = Compound not in referenced method blank sublist.

Total number of FID targets = 1 Total number of PID targets = None Scheduled for Reporting

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30. Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:27. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

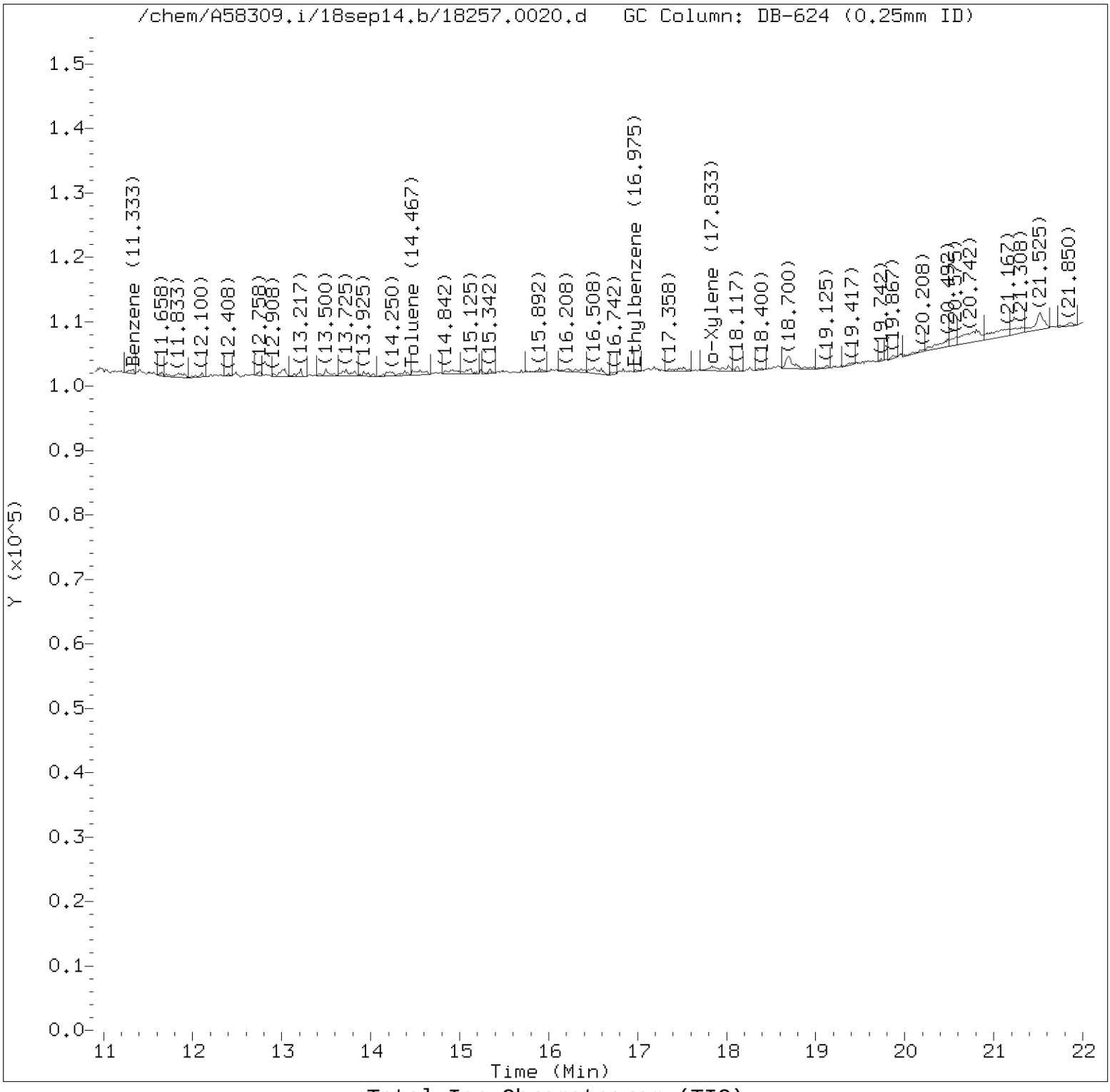
Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0020.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 20:20 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766346 Lab Sample ID: 9766346

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0020.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 20:20 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766346 Lab Sample ID: 9766346

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0020.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 20:20 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

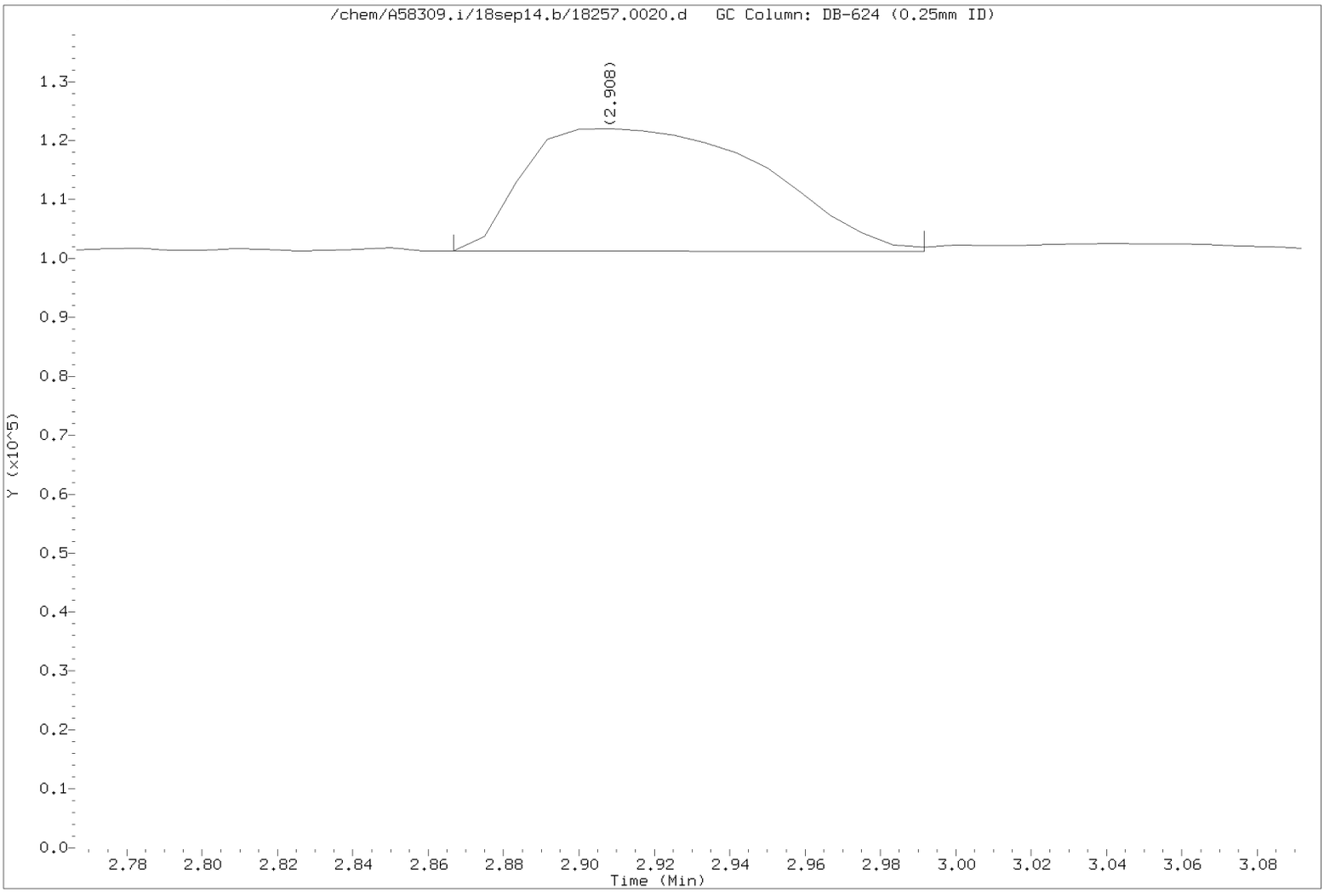
Sample Name: 9766346 Lab Sample ID: 9766346

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) Methane	2.908(±0.03)	2.908	92680M	5.798

M = Compound was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257.0020.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 20:20 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766346 Lab Sample ID: 9766346

Compound Number : 1
Compound Name : Methane
Retention Time (minutes): 2.908
Area (flag) : 92680M
Concentration (ppm(v)) : 5.7982
Integration start time : 2.867 Integration stop time: 2.992
Y at integration start : 101247 Y at integration end: 101221

Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:27.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257.0020.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 20:20 Analyst ID:

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:25
Date, time and analyst ID of latest file update: 14-Sep-2018 20:48 Unknown

Sample Name: 9766346 Lab Sample ID: 9766346

Compound Number : 1
Compound Name : Methane
Retention Time (minutes): 2.908
Area : 100972
Concentration (ppm(v)) : 6.3170
Integration start time : 2.867 Integration stop time: 3.200
Y at integration start : 101247 Y at integration end: 101177

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: 01781895

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0020.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 20:20 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766346 Lab Sample ID: 9766346

RT	Area	Peak Label(s) and Range	Compound #s
0.125	6883		
0.350	4102		
1.067	2692		
2.392	3505		
2.742	2270		
2.908	92680M	Methane	
3.042	8662M		
3.283	7185	Propane	
3.508	2607		
3.892	3274		
4.492	1843		
5.050	2511		
5.367	1406		
5.500	1966		
5.975	2668		
6.342	5334		
6.542	4590		
7.433	2733		
7.733	5458		
8.117	3294	MTBE	
8.317	5469		
8.733	4470		
8.883	1540		
9.000	3022		
9.217	3622		
9.492	476		
9.858	5412		
10.167	9769		
10.450	874		
10.692	3430		
10.958	7526		
11.333	2580	Benzene	
11.658	1399		
11.833	6384		
12.100	2706		
12.408	805		
12.758	1704		
12.908	6271		
13.217	4035		
13.500	4659		

M = Peak was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0020.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 20:20 Analyst ID: ADS07818

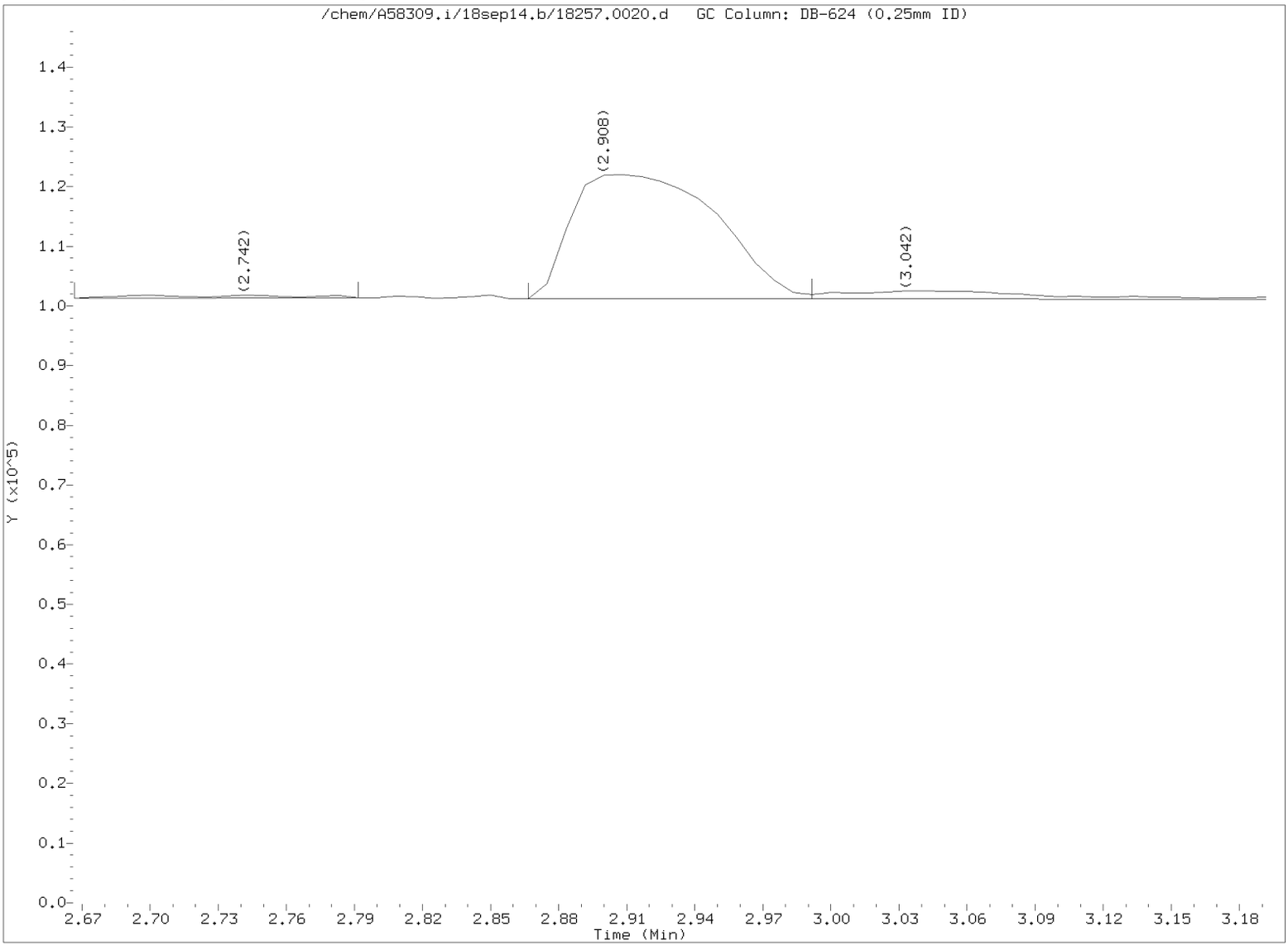
Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766346 Lab Sample ID: 9766346

RT	Area	Peak Label(s) and Range	Compound #s
13.725	6531		
13.925	3857		
14.250	8381		
14.467	6434	Toluene	
14.842	4764		
15.125	4439		
15.342	2368		
15.892	2853		
16.208	4849		
16.508	7516		
16.742	1436		
16.975	851	Ethylbenzene	
17.358	4816		
17.833	8660	o-Xylene	
18.050	8660		
18.117	2380		
18.400	1156		
18.700	12136		
19.125	1854		
19.417	1748		
19.742	527		
19.867	1443		
20.208	2656		
20.492	10291		
20.575	6123		
20.742	23754		
21.167	16342		
21.308	8225		
21.525	17187		
21.850	3163		

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257.0020.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 20:20 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766346 Lab Sample ID: 9766346

Retention Time (minutes): 2.908
Area (flag) : 92680M
Integration start time : 2.867 Integration stop time: 2.992
Y at integration start : 101247 Y at integration end: 101221

Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:27.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257.0020.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 20:20 Analyst ID:

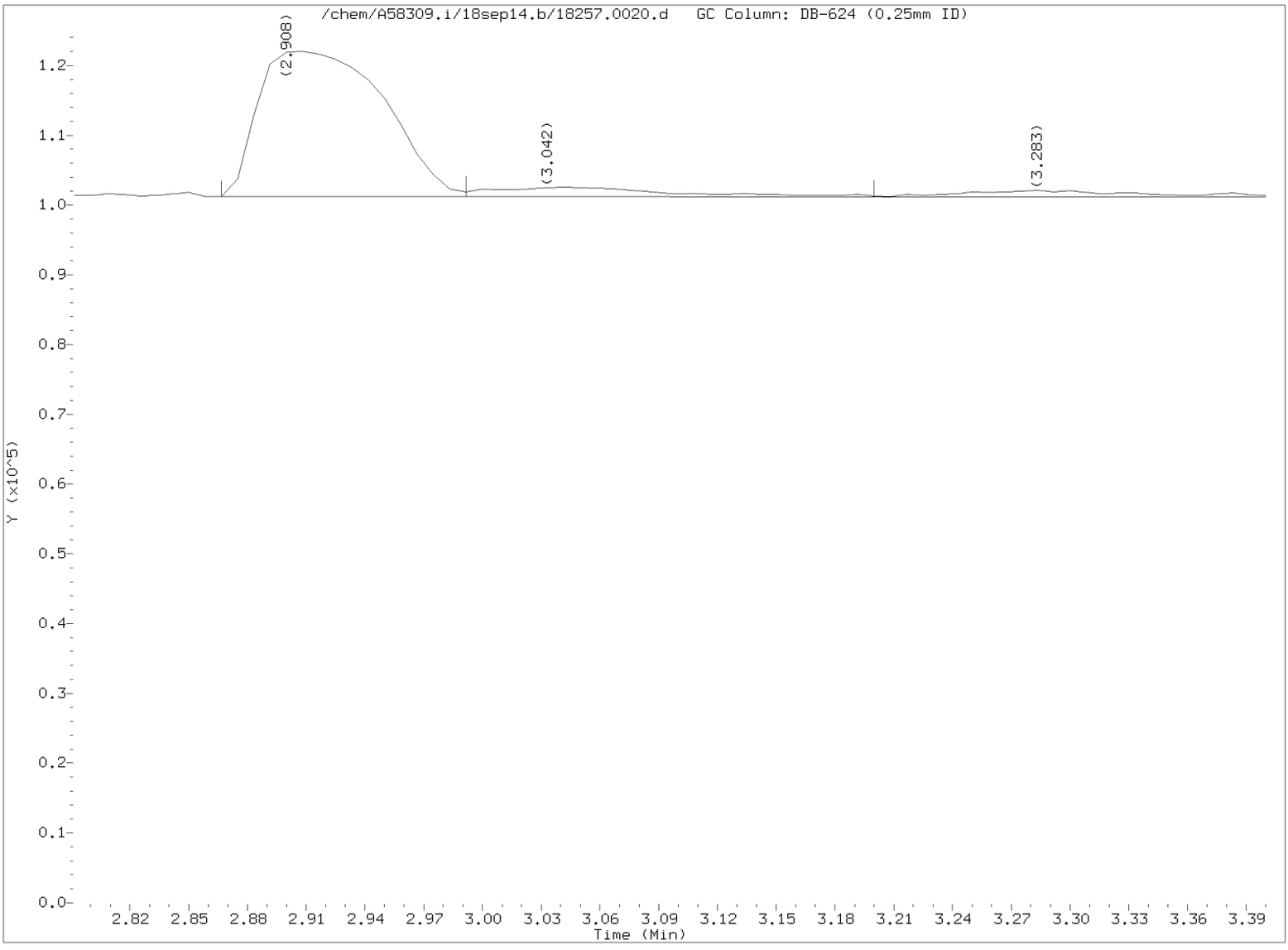
Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:25
Date, time and analyst ID of latest file update: 14-Sep-2018 20:48 Unknown

Sample Name: 9766346 Lab Sample ID: 9766346

No signal was originally integrated at 2.908 minutes.

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: LEO07899

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257.0020.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 20:20 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766346 Lab Sample ID: 9766346

Retention Time (minutes): 3.042
Area (flag) : 8662M
Integration start time : 2.992 Integration stop time: 3.200
Y at integration start : 101221 Y at integration end: 101177

Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:27.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257.0020.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 20:20 Analyst ID:

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:25
Date, time and analyst ID of latest file update: 14-Sep-2018 20:48 Unknown

Sample Name: 9766346 Lab Sample ID: 9766346

No signal was originally integrated at 3.042 minutes.

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ASECHRIST

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	Tedlar	Lab Sample ID:	9766347
Canister ID:	N/A	FID File ID:	18257.0021.d
Injection Volume:	100 cc	PID File ID:	
Instrument ID:	58309	Date Collected:	08/18/2018
Analyzed Date:	09/14/2018	Date Received:	08/22/2018
Analyzed Time:	20:49	Dilution Factor	2

Concentration Units: ppm(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
74-82-8	Methane	14	

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.
- Compounds MTBE, Benzene, Toluene, Ethylbenzene, m/p-Xylene, o-Xylene and Xylene (total)are reported from PID file

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

9766347

FID Data file: /chem/A58309.i/18sep14.b/18257.0021.d Injection date and time: **14-SEP-2018 20:49**
FID Data file Sample Info. Line: 9766347 Instrument ID: **A58309.i** Batch: **M1825730AA**
Date, time and analyst ID of latest FID file update: 17-Sep-2018 08:27 ads07818

FID Blank Data file reference: **/chem/A58309.i/18sep14.b/18257B.0012.d**

FID Method used: /chem/A58309.i/18sep14.b/gc_fid.m FID Sublist used: **6626**
FID Calibration date and time (Last Method Edit): 17-SEP-2018 08:23
FID Mid Level Daily Calibration Standard Reference: **/chem/A58309.i/18sep14.b/18257.0006.d**

Sampling Media: Tedlar Bag Bottle code: N/A Matrix: AIR On-Column Amount units: ppm(v) In Sample Concentration units: ppm(v)

Sample Concentration Formula: On-Column Amount * DF * IVn/IVa Dilution Factor (DF): 2
Nominal Injection Volume (IVn): 100 cc Actual injection Volume (IVa): 100 cc

Analysis Comments:

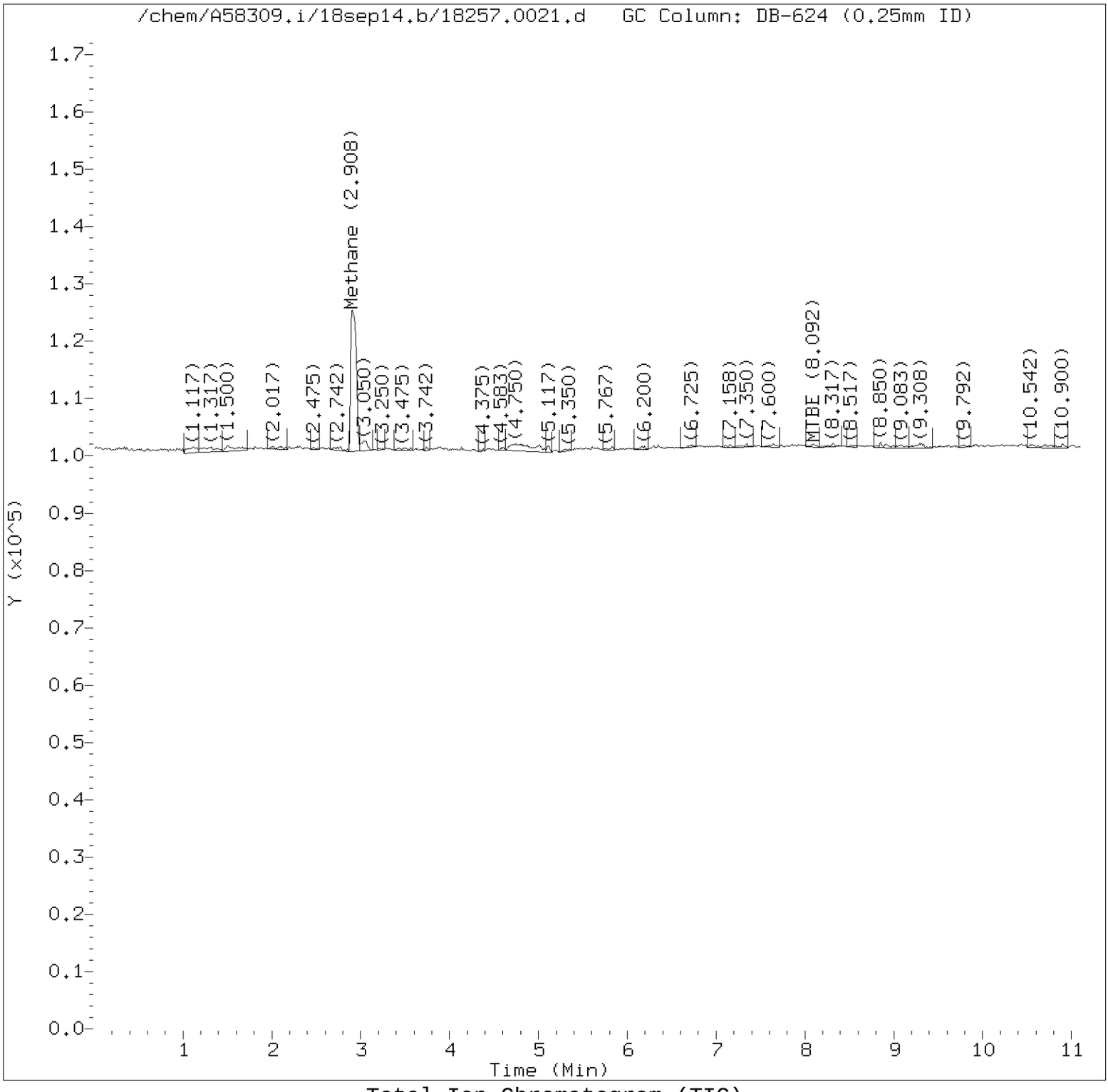
Single Component, Summary, and Range Target Compounds	Expected RT(±window)	RT Low Limit	RT	RT High Limit	Area	On-Column Concentration (ppm(v))	In Sample Concentration (ppm(v))	Blank Conc.	Qual.	Reporting Limit (on-column)	LOQ
1) Methane	2.908(±0.03)	2.878	2.908	2.938	108629M	6.796	13.59			2	5

M = Compound was manually integrated. NIB = Compound not in referenced method blank sublist.

Total number of FID targets = 1 Total number of PID targets = None Scheduled for Reporting

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30. Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:27. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

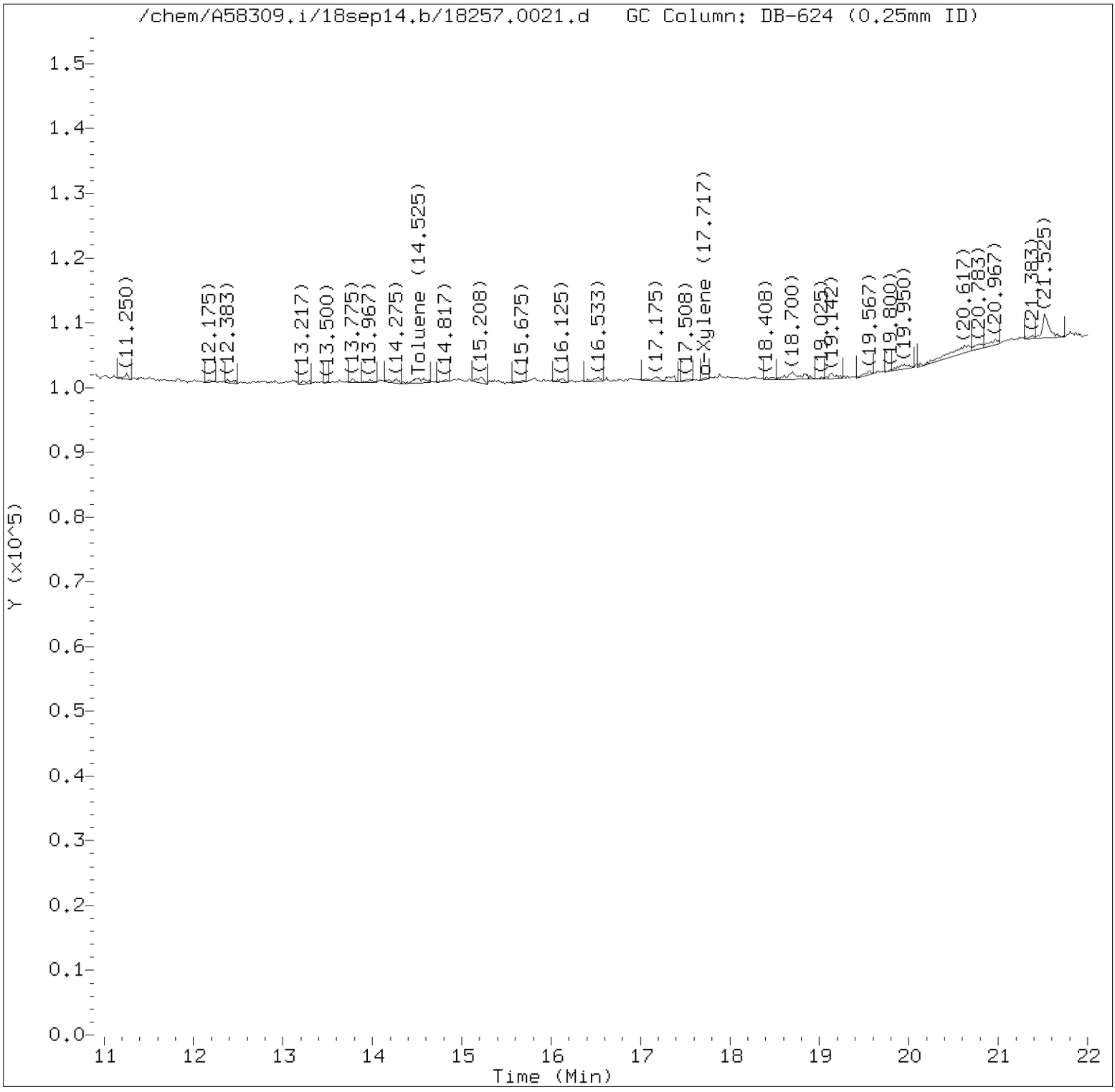
Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0021.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 20:49 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766347 Lab Sample ID: 9766347

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0021.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 20:49 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766347 Lab Sample ID: 9766347

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0021.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 20:49 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

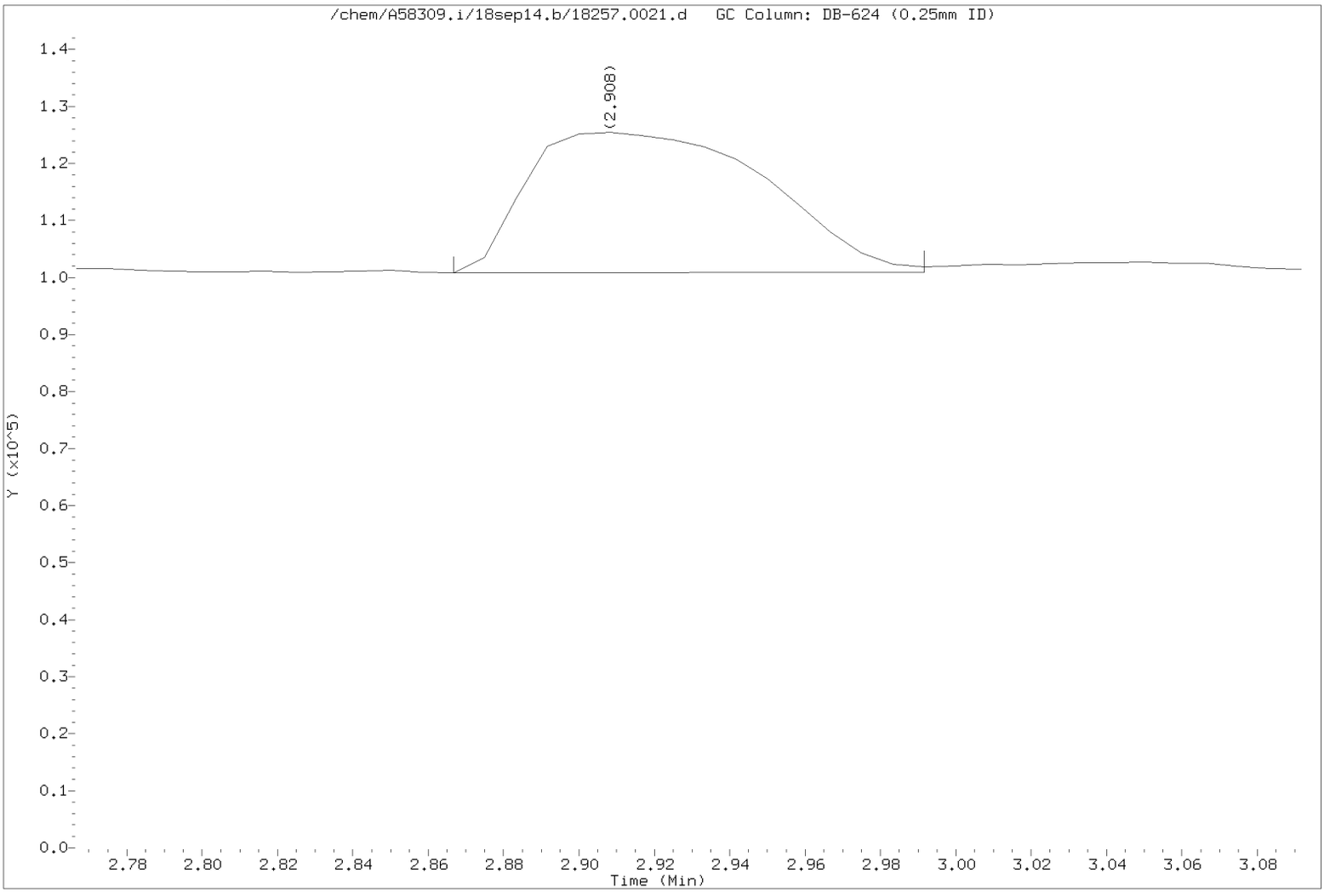
Sample Name: 9766347 Lab Sample ID: 9766347

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) Methane	2.908(±0.03)	2.908	108629M	6.796

M = Compound was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257.0021.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 20:49 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766347 Lab Sample ID: 9766347

Compound Number : 1
Compound Name : Methane
Retention Time (minutes): 2.908
Area (flag) : 108629M
Concentration (ppm(v)) : 6.7960
Integration start time : 2.867 Integration stop time: 2.992
Y at integration start : 100818 Y at integration end: 100897

Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:27.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257.0021.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 20:49 Analyst ID:

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:25
Date, time and analyst ID of latest file update: 14-Sep-2018 21:17 Unknown

Sample Name: 9766347 Lab Sample ID: 9766347

Compound Number : 1
Compound Name : Methane
Retention Time (minutes): 2.908
Area : 116749
Concentration (ppm(v)) : 7.3040
Integration start time : 2.867 Integration stop time: 3.133
Y at integration start : 100818 Y at integration end: 100988

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: asechrist

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0021.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 20:49 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766347 Lab Sample ID: 9766347

RT	Area	Peak Label(s) and Range	Compound #s
1.117	7299		
1.317	9044		
1.500	7721		
2.017	3511		
2.475	1163		
2.742	3527		
2.908	108630M	Methane	
3.050	8586M		
3.250	830		
3.475	2630		
3.742	1098		
4.375	814		
4.583	1211		
4.750	22513		
5.117	2237		
5.350	1276		
5.767	2502		
6.200	1958		
6.725	1741		
7.158	1836		
7.350	2718		
7.600	2910		
8.092	2164	MTBE	
8.317	3014		
8.517	1500		
8.850	4904		
9.083	2847		
9.308	5734		
9.792	1616		
10.542	6320		
10.900	3031		
11.250	2302		
12.175	1366		
12.383	2536		
13.217	2632		
13.500	532		
13.775	1933		
13.967	1673		
14.275	3267		
14.525	6864	Toluene	

M = Peak was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0021.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 20:49 Analyst ID: ADS07818

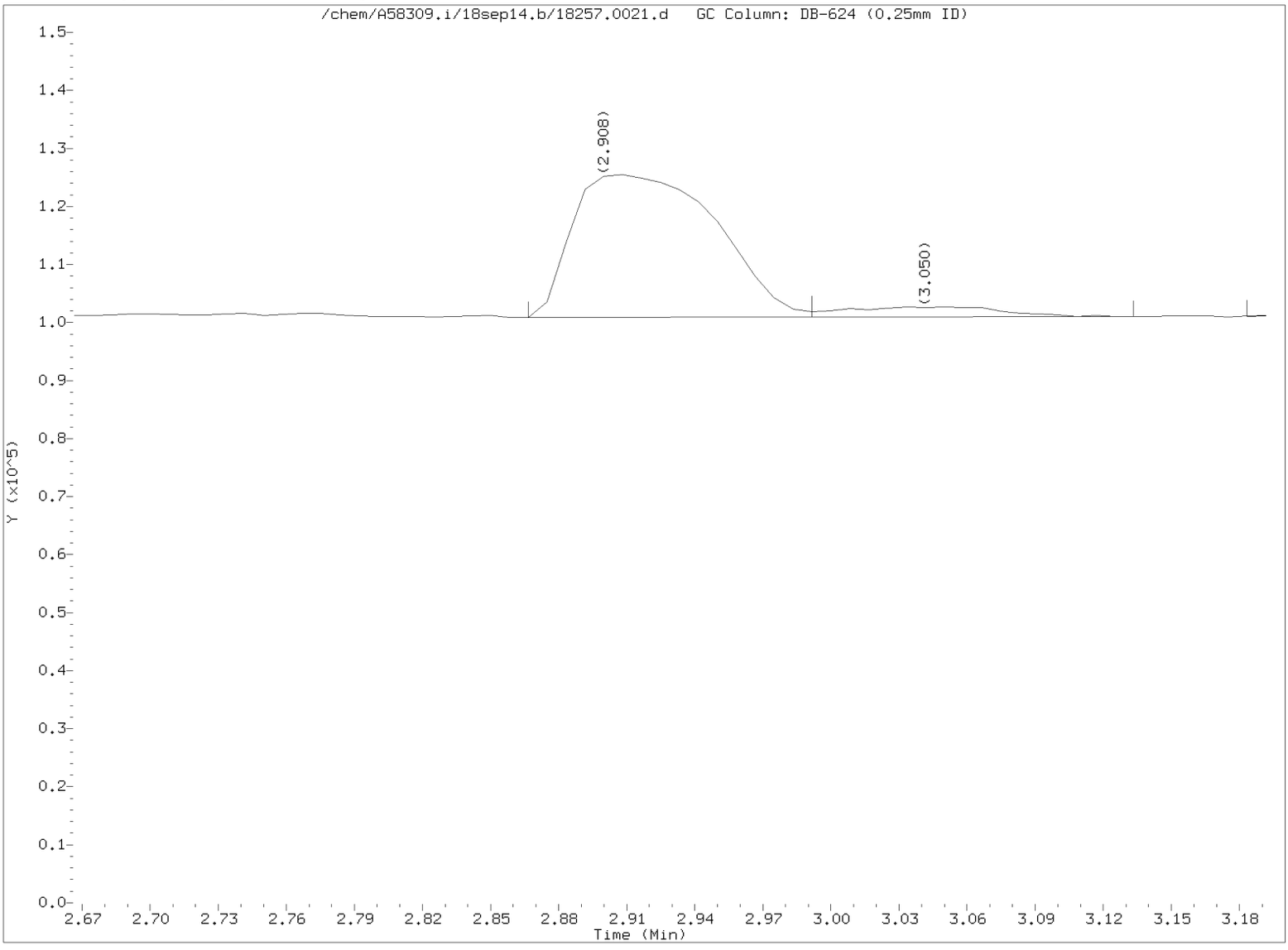
Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766347 Lab Sample ID: 9766347

RT	Area	Peak Label(s) and Range	Compound #s
14.817	1163		
15.208	4774		
15.675	1195		
16.125	2673		
16.533	3331		
17.175	8907		
17.508	1500		
17.717	918	o-Xylene	
18.050	918		
18.408	1830		
18.700	12702		
19.025	969		
19.142	5102		
19.567	3119		
19.800	555		
19.950	5227		
20.617	19903		
20.783	5128		
20.967	5738		
21.383	1874		
21.525	19374		

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257.0021.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 20:49 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766347 Lab Sample ID: 9766347

Retention Time (minutes): 2.908
Area (flag) : 108630M
Integration start time : 2.867 Integration stop time: 2.992
Y at integration start : 100818 Y at integration end: 100897

Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:27.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257.0021.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 20:49 Analyst ID:

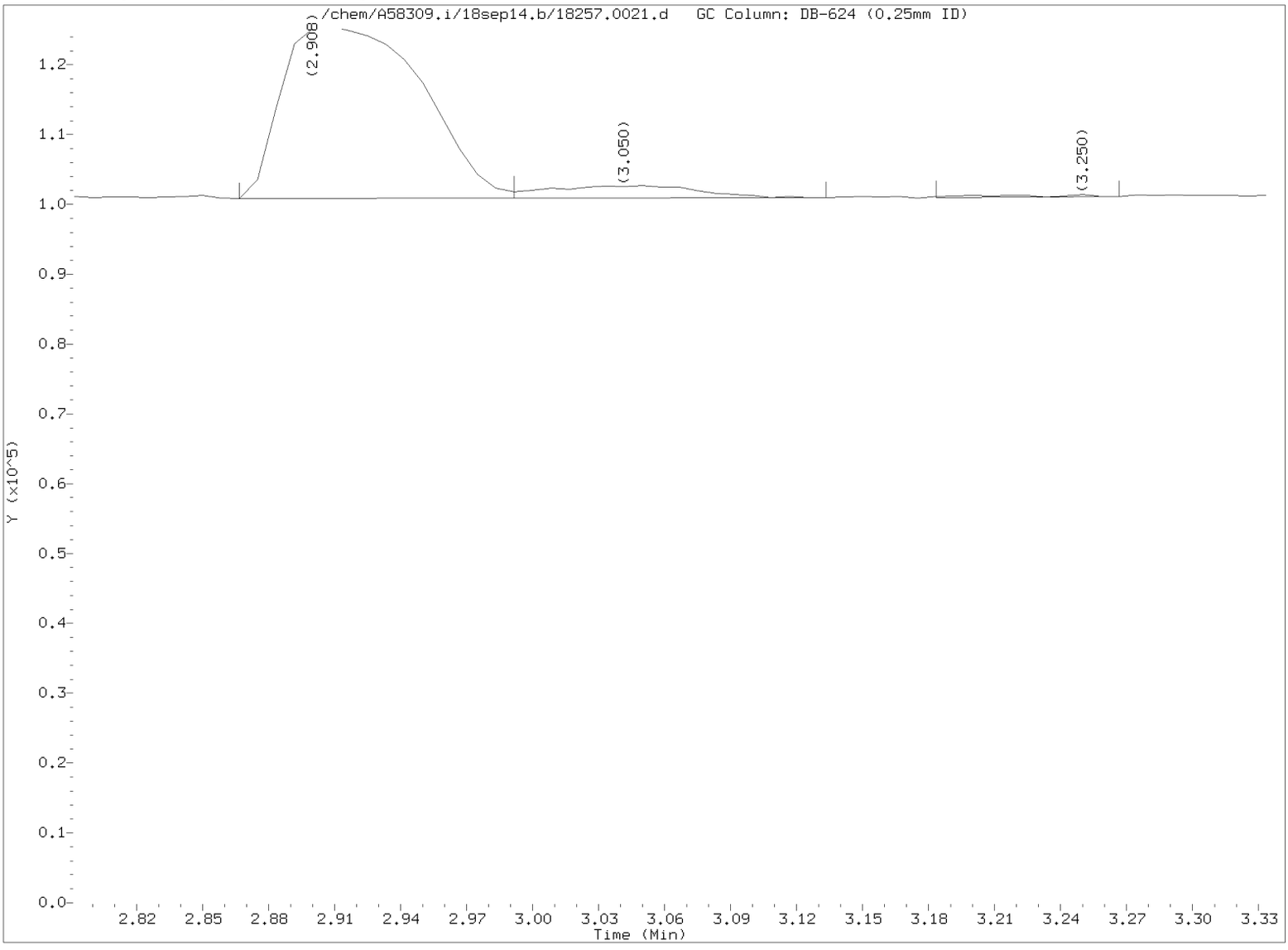
Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:25
Date, time and analyst ID of latest file update: 14-Sep-2018 21:17 Unknown

Sample Name: 9766347 Lab Sample ID: 9766347

No signal was originally integrated at 2.908 minutes.

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ASECHRIST

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257.0021.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 20:49 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766347 Lab Sample ID: 9766347

Retention Time (minutes): 3.050
Area (flag) : 8586M
Integration start time : 2.992 Integration stop time: 3.133
Y at integration start : 100897 Y at integration end: 100988

Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:27.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257.0021.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 20:49 Analyst ID:

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:25
Date, time and analyst ID of latest file update: 14-Sep-2018 21:17 Unknown

Sample Name: 9766347 Lab Sample ID: 9766347

No signal was originally integrated at 3.050 minutes.

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ASechrist

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	Tedlar	Lab Sample ID:	9766348
Canister ID:	N/A	FID File ID:	18257.0022.d
Injection Volume:	100 cc	PID File ID:	
Instrument ID:	58309	Date Collected:	08/18/2018
Analyzed Date:	09/14/2018	Date Received:	08/22/2018
Analyzed Time:	21:17	Dilution Factor	4

Concentration Units: ppm(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
74-82-8	Methane	15	J

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.
- Compounds MTBE, Benzene, Toluene, Ethylbenzene, m/p-Xylene, o-Xylene and Xylene (total)are reported from PID file

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

9766348

FID Data file: /chem/A58309.i/18sep14.b/18257.0022.d Injection date and time: **14-SEP-2018 21:17**
FID Data file Sample Info. Line: 9766348 Instrument ID: **A58309.i** Batch: **M1825730AA**
Date, time and analyst ID of latest FID file update: 17-Sep-2018 08:27 ads07818

FID Blank Data file reference: **/chem/A58309.i/18sep14.b/18257B.0012.d**

FID Method used: /chem/A58309.i/18sep14.b/gc_fid.m FID Sublist used: **6626**
FID Calibration date and time (Last Method Edit): 17-SEP-2018 08:23
FID Mid Level Daily Calibration Standard Reference: **/chem/A58309.i/18sep14.b/18257.0006.d**

Sampling Media: Tedlar Bag Bottle code: N/A Matrix: AIR On-Column Amount units: ppm(v) In Sample Concentration units: ppm(v)

Sample Concentration Formula: On-Column Amount * DF * IVn/IVa Dilution Factor (DF): 4
Nominal Injection Volume (IVn): 100 cc Actual injection Volume (IVa): 100 cc

Analysis Comments:

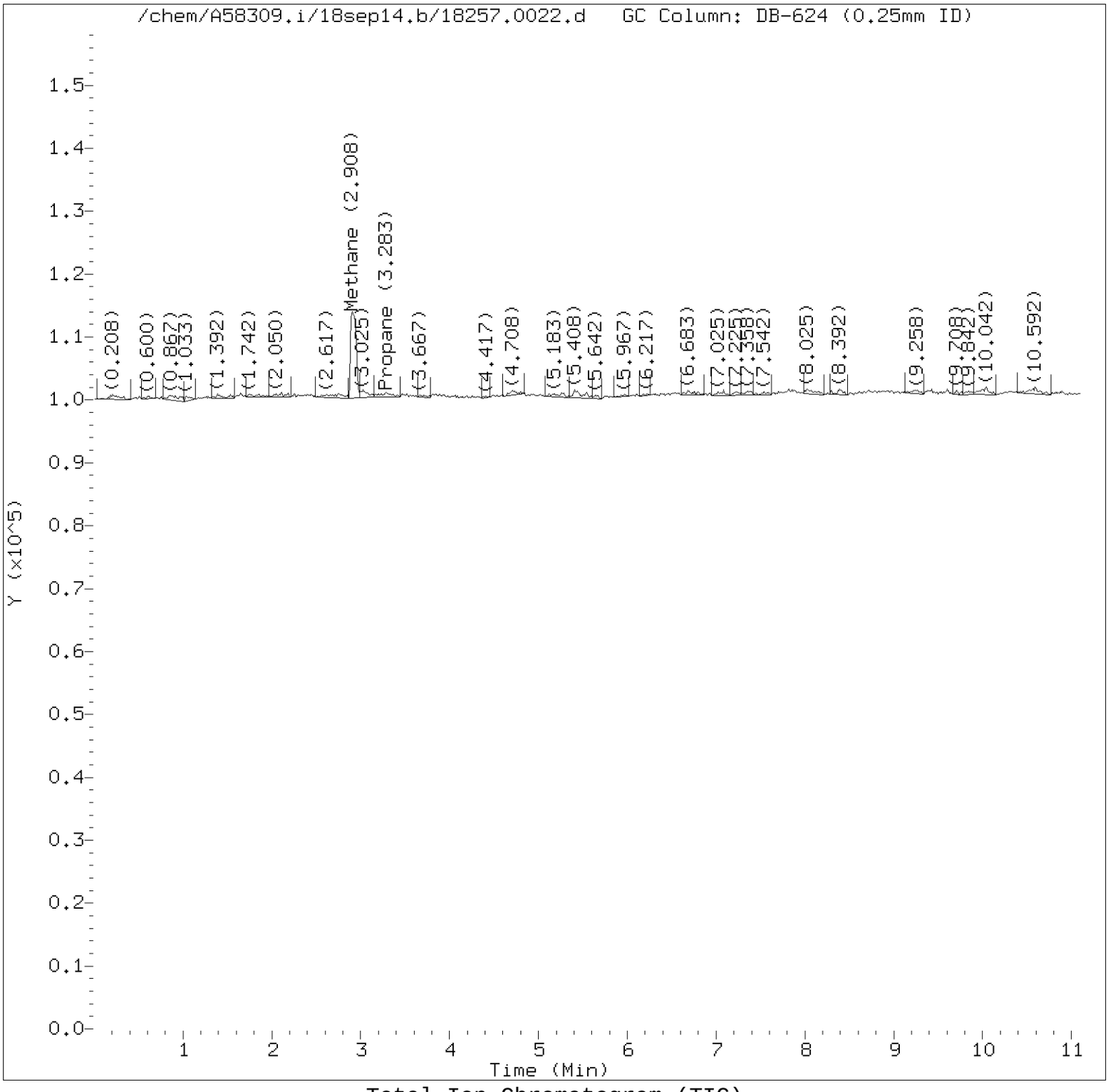
Single Component, Summary, and Range Target Compounds	Expected RT(±window)	RT Low Limit	RT	RT High Limit	Area	On-Column Concentration (ppm(v))	In Sample Concentration (ppm(v))	Blank Conc.	Qual.	Reporting Limit (on-column)	LOQ
1) Methane	2.908(±0.03)	2.878	2.908	2.938	61524M	3.849	15.40		J	2	5

M = Compound was manually integrated. NIB = Compound not in referenced method blank sublist.

Total number of FID targets = 1 Total number of PID targets = None Scheduled for Reporting

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30. Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:27. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

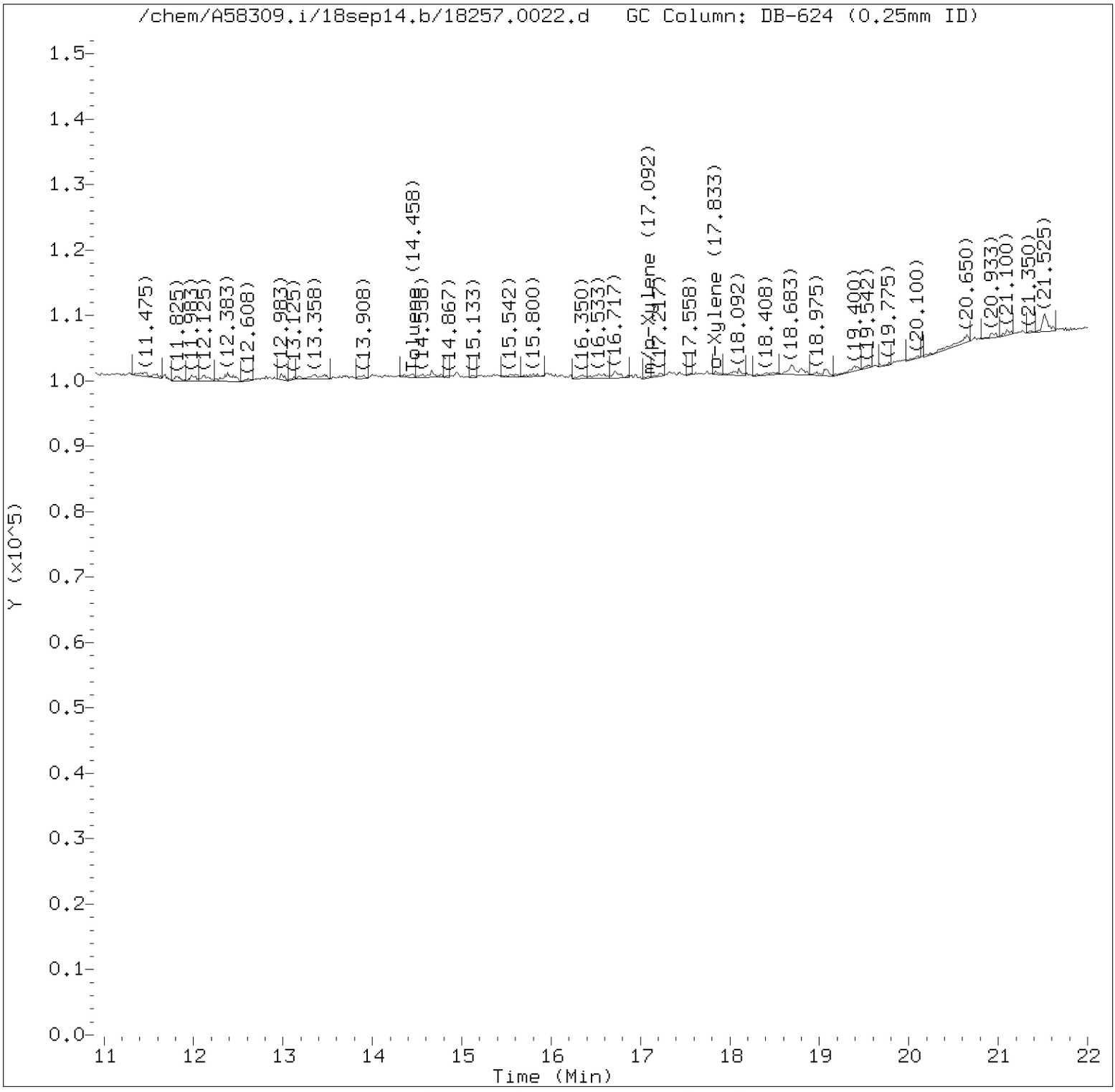
Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0022.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 21:17 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766348 Lab Sample ID: 9766348

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0022.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 21:17 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766348 Lab Sample ID: 9766348

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0022.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 21:17 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

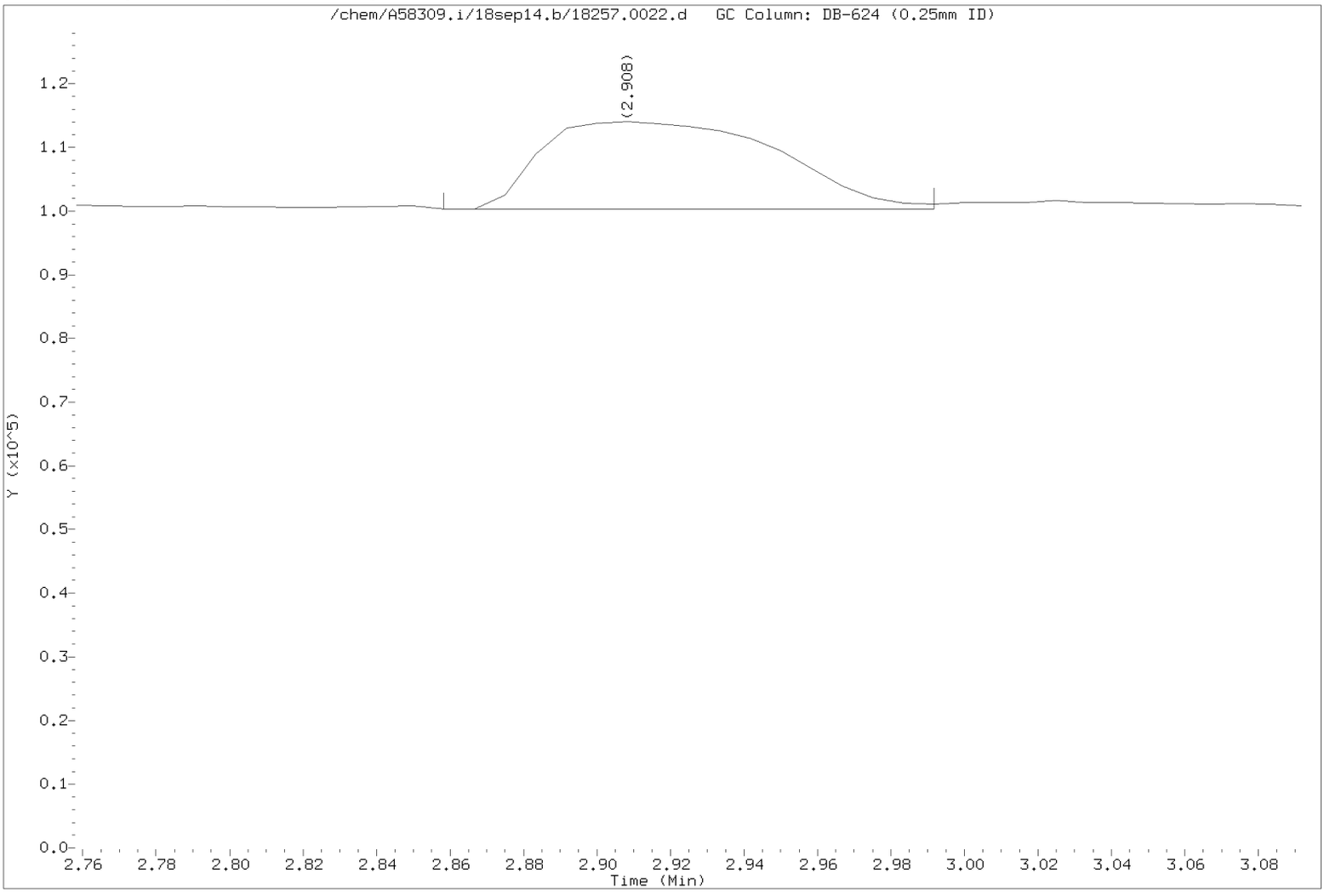
Sample Name: 9766348 Lab Sample ID: 9766348

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) Methane	2.908(±0.03)	2.908	61524M	3.849

M = Compound was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257.0022.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 21:17 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766348 Lab Sample ID: 9766348

Compound Number : 1
Compound Name : Methane
Retention Time (minutes): 2.908
Area (flag) : 61524M
Concentration (ppm(v)) : 3.8490
Integration start time : 2.858 Integration stop time: 2.992
Y at integration start : 100300 Y at integration end: 100365

Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:27.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257.0022.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 21:17 Analyst ID:

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:25
Date, time and analyst ID of latest file update: 14-Sep-2018 21:45 Unknown

Sample Name: 9766348 Lab Sample ID: 9766348

Compound Number : 1
Compound Name : Methane
Retention Time (minutes): 2.908
Area : 68138
Concentration (ppm(v)) : 4.2629
Integration start time : 2.858 Integration stop time: 3.150
Y at integration start : 100300 Y at integration end: 100442

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: asechrist

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0022.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 21:17 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766348 Lab Sample ID: 9766348

RT	Area	Peak Label(s) and Range	Compound #s
0.208	6801		
0.600	1691		
0.867	6954		
1.033	2955		
1.392	4091		
1.742	3262		
2.050	4381		
2.617	7410		
2.908	61524M	Methane	
3.025	7058M		
3.283	7166	Propane	
3.667	1805		
4.417	791		
4.708	4775		
5.183	4519		
5.408	8470		
5.642	1833		
5.967	1468		
6.217	927		
6.683	4576		
7.025	3664		
7.225	2482		
7.358	3362		
7.542	2617		
8.025	5481		
8.392	4515		
9.258	4108		
9.708	1741		
9.842	2640		
10.042	7949		
10.592	8872		
11.475	6526		
11.825	3062		
11.983	3684		
12.125	4585		
12.383	9836		
12.608	1657		
12.983	2809		
13.125	959		
13.358	7743		

M = Peak was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0022.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 21:17 Analyst ID: ADS07818

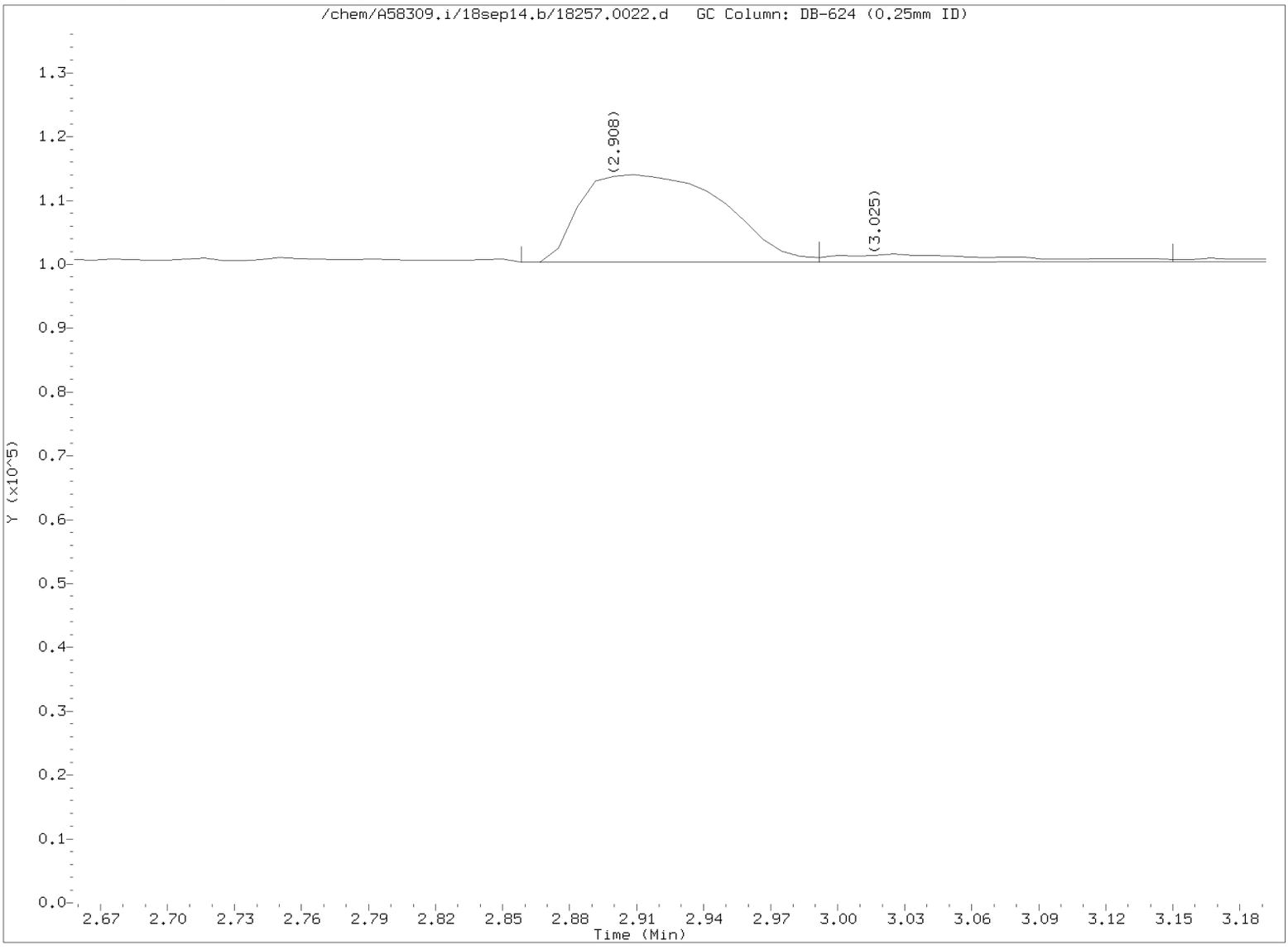
Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766348 Lab Sample ID: 9766348

RT	Area	Peak Label(s) and Range	Compound #s
13.908	2144		
14.458	3010	Toluene	
14.558	7116		
14.867	673		
15.133	929		
15.542	2857		
15.800	2974		
16.350	2910		
16.533	6249		
16.717	6098		
17.092	1204	m/p-Xylene	
17.217	2346		
17.558	494		
17.833	1677	o-Xylene	
18.050	2882		
18.092	5972		
18.408	3272		
18.683	11918		
18.975	5755		
19.400	4686		
19.542	1833		
19.775	1222		
20.100	1523		
20.650	11707		
20.933	3284		
21.100	3008		
21.350	973		
21.525	12515		

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257.0022.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 21:17 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766348 Lab Sample ID: 9766348

Retention Time (minutes): 2.908
Area (flag) : 61524M
Integration start time : 2.858 Integration stop time: 2.992
Y at integration start : 100300 Y at integration end: 100365

Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:27.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257.0022.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 21:17 Analyst ID:

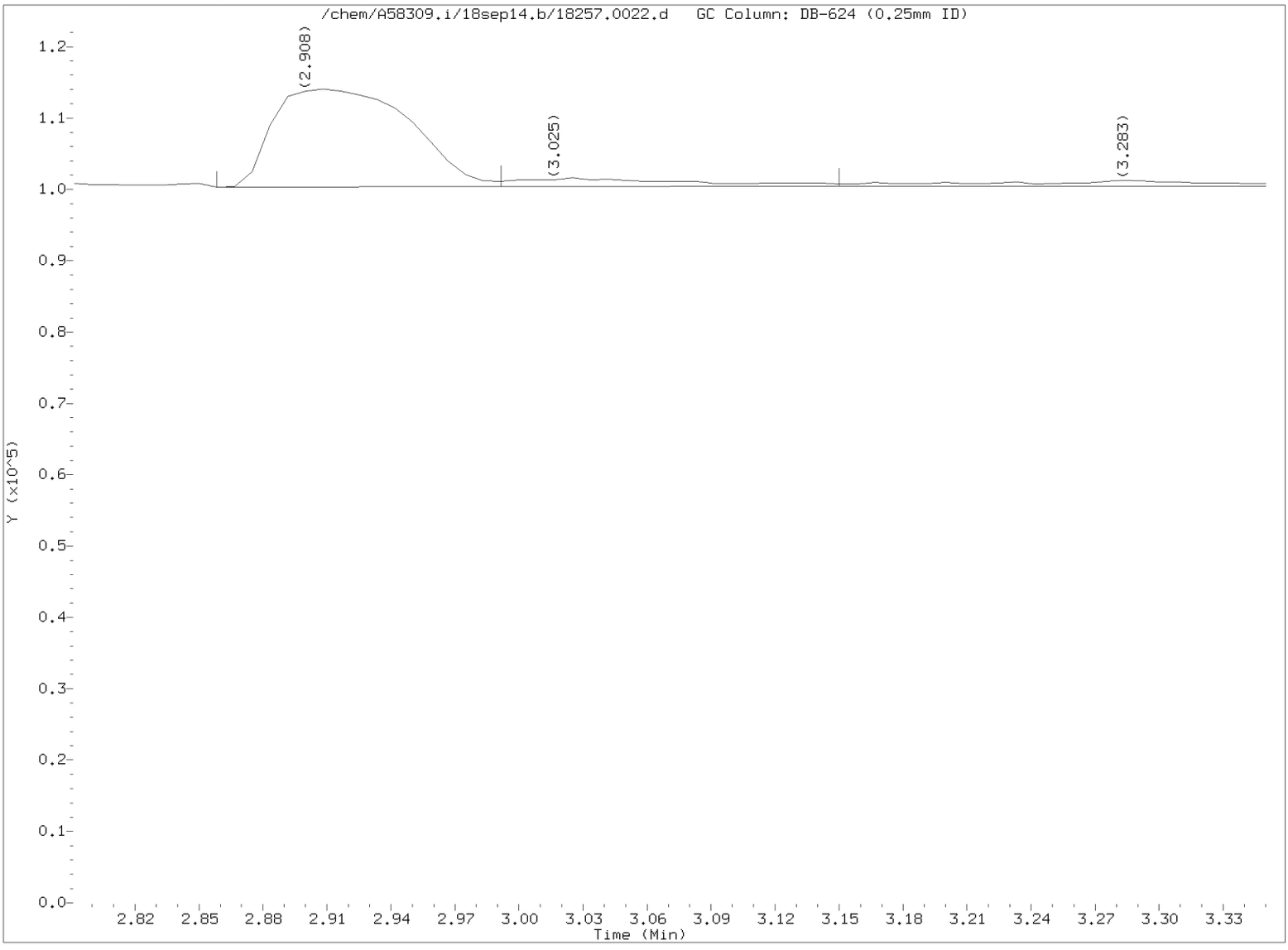
Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:25
Date, time and analyst ID of latest file update: 14-Sep-2018 21:45 Unknown

Sample Name: 9766348 Lab Sample ID: 9766348

No signal was originally integrated at 2.908 minutes.

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ASECHRIST

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257.0022.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 21:17 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766348 Lab Sample ID: 9766348

Retention Time (minutes): 3.025
Area (flag) : 7058M
Integration start time : 2.992 Integration stop time: 3.150
Y at integration start : 100365 Y at integration end: 100442

Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:27.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257.0022.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 21:17 Analyst ID:

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:25
Date, time and analyst ID of latest file update: 14-Sep-2018 21:45 Unknown

Sample Name: 9766348 Lab Sample ID: 9766348

No signal was originally integrated at 3.025 minutes.

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ASECHRIST

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	Tedlar	Lab Sample ID:	9766349
Canister ID:	N/A	FID File ID:	18257.0023.d
Injection Volume:	100 cc	PID File ID:	
Instrument ID:	58309	Date Collected:	08/18/2018
Analyzed Date:	09/14/2018	Date Received:	08/22/2018
Analyzed Time:	21:46	Dilution Factor	2

Concentration Units: ppm(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
74-82-8	Methane	4	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.
- Compounds MTBE, Benzene, Toluene, Ethylbenzene, m/p-Xylene, o-Xylene and Xylene (total)are reported from PID file

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

9766349

FID Data file: /chem/A58309.i/18sep14.b/18257.0023.d Injection date and time: **14-SEP-2018 21:46**
FID Data file Sample Info. Line: 9766349 Instrument ID: **A58309.i** Batch: **M1825730AA**
Date, time and analyst ID of latest FID file update: 17-Sep-2018 08:27 ads07818

FID Blank Data file reference: **/chem/A58309.i/18sep14.b/18257B.0012.d**

FID Method used: /chem/A58309.i/18sep14.b/gc_fid.m FID Sublist used: **6626**
FID Calibration date and time (Last Method Edit): 17-SEP-2018 08:23
FID Mid Level Daily Calibration Standard Reference: **/chem/A58309.i/18sep14.b/18257.0006.d**

Sampling Media: Tedlar Bag Bottle code: N/A Matrix: AIR On-Column Amount units: ppm(v) In Sample Concentration units: ppm(v)

Sample Concentration Formula: On-Column Amount * DF * IVn/IVa Dilution Factor (DF): 2
Nominal Injection Volume (IVn): 100 cc Actual injection Volume (IVa): 100 cc

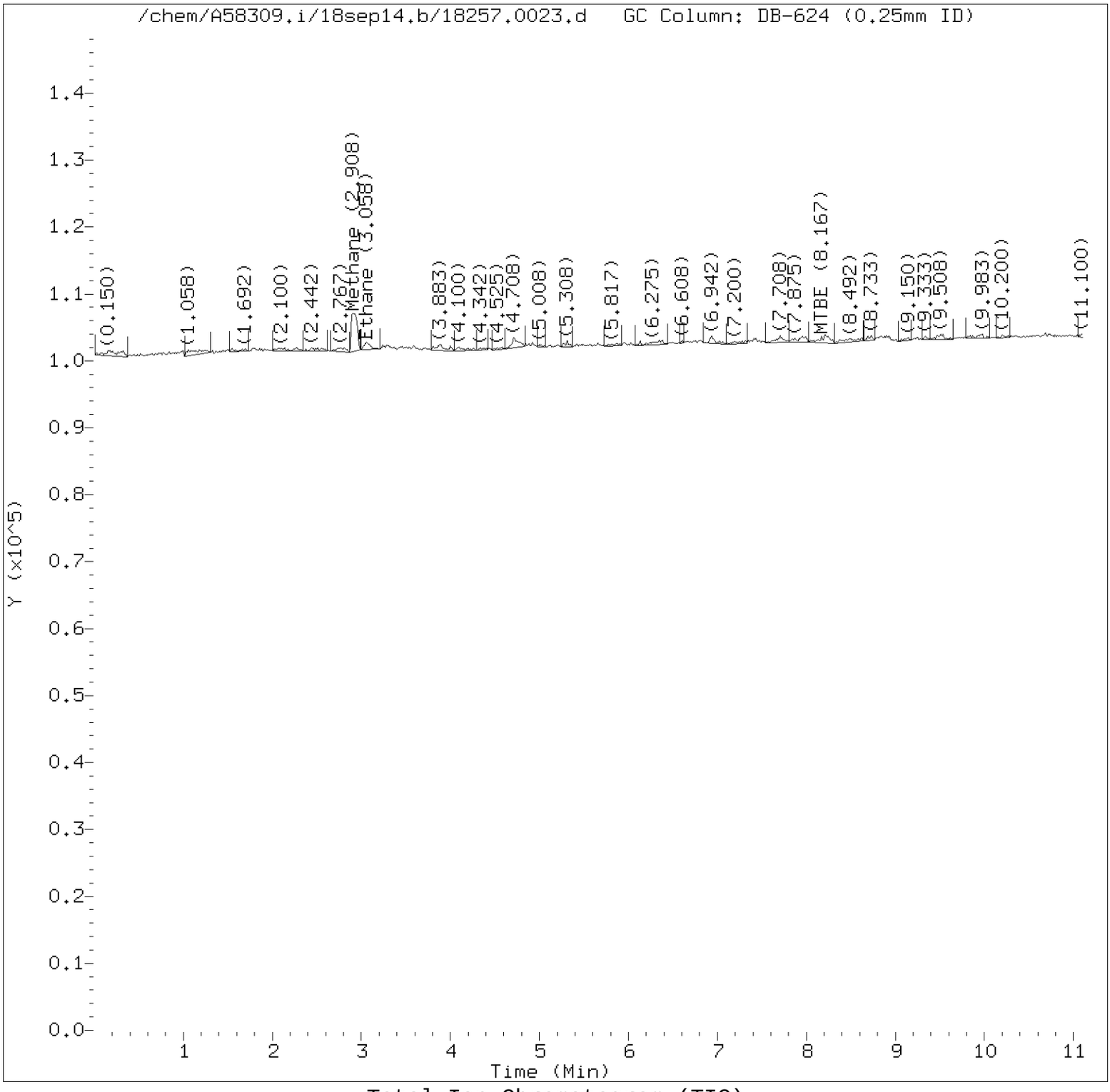
Analysis Comments:

Single Component, Summary, and Range Target Compounds	Expected RT(±window)	RT Low Limit	RT	RT High Limit	Area	On-Column Concentration (ppm(v))	In Sample Concentration (ppm(v))	Blank Conc.	Qual.	Reporting Limit (on-column)	LOQ
1) Methane	2.908(±0.03)	2.878	N.D.	2.938		Not Detected				2	5

Total number of FID targets = 1 Total number of PID targets = None Scheduled for Reporting

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30. Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:27. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

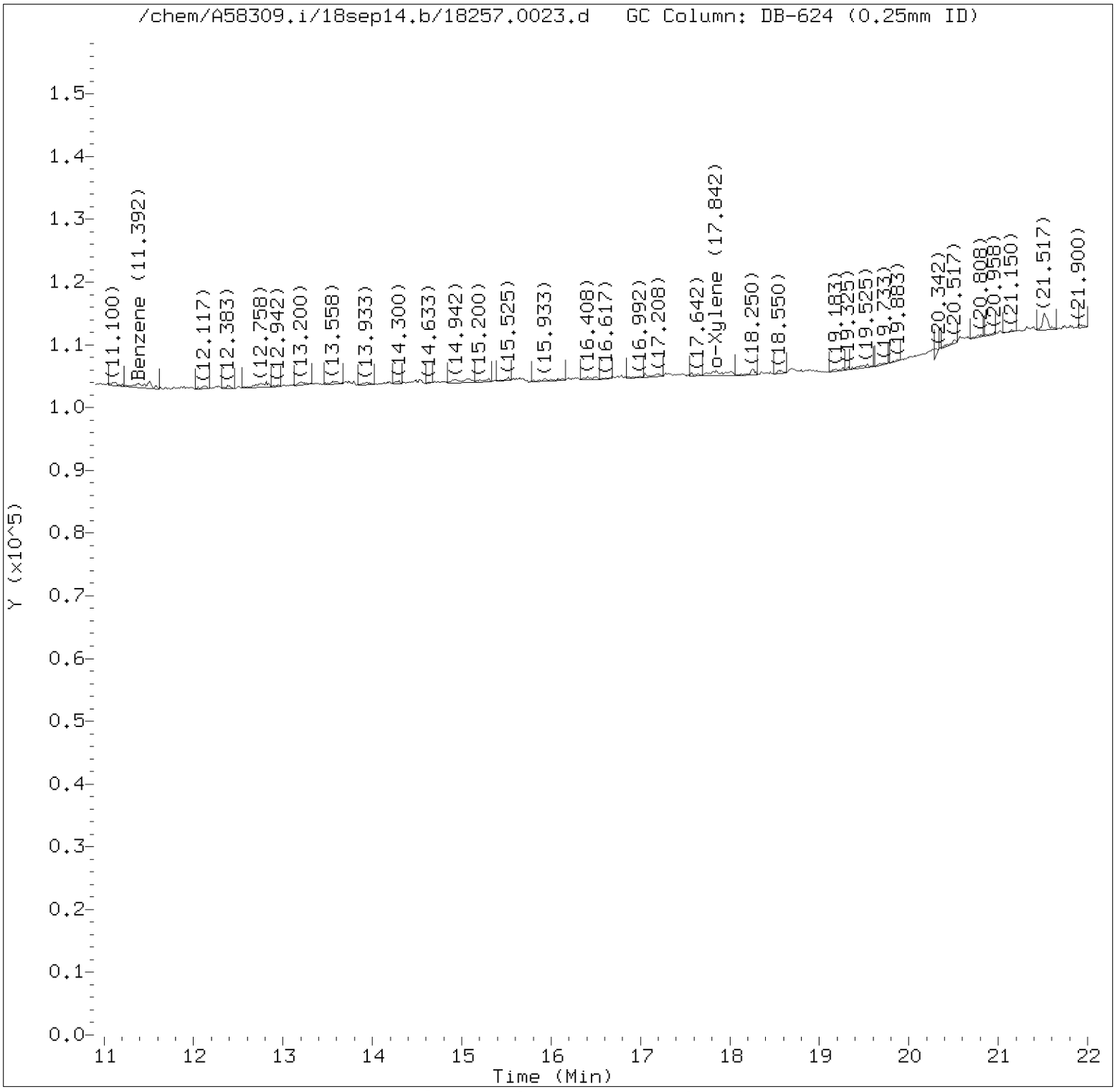
Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0023.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 21:46 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766349 Lab Sample ID: 9766349

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0023.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 21:46 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766349 Lab Sample ID: 9766349

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0023.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 21:46 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766349 Lab Sample ID: 9766349

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))

No integrated signals resulted in on-column concentrations above the reporting limit.

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0023.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 21:46 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766349 Lab Sample ID: 9766349

RT	Area	Peak Label(s) and Range	Compound #s
0.150	9977		
1.058	8739		
1.692	2325		
2.100	5012		
2.442	4138		
2.767	4470		
2.908	26611	Methane	
3.058	5530	Ethane	
3.883	6456		
4.100	4048		
4.342	1540		
4.525	1588		
4.708	8022		
5.008	946		
5.308	3035		
5.817	2127		
6.275	5802		
6.608	603		
6.942	5200		
7.200	2997		
7.708	4966		
7.875	6082		
8.167	8848	MTBE	
8.492	5661		
8.733	2168		
9.150	1658		
9.333	1241		
9.508	5141		
9.983	4410		
10.200	1948		
11.100	2913		
11.392	8568	Benzene	
12.117	2329		
12.383	1611		
12.758	5763		
12.942	1255		
13.200	2944		
13.558	2761		
13.933	2185		
14.300	1593		

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0023.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 21:46 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766349 Lab Sample ID: 9766349

RT	Area	Peak Label(s) and Range	Compound #s
14.633	582		
14.942	5689		
15.200	2496		
15.525	1511		
15.933	4973		
16.408	3530		
16.617	1162		
16.992	1553		
17.208	3381		
17.642	1894		
17.842	9918	o-Xylene	
18.050	9918		
18.250	4383		
18.550	2020		
19.183	2342		
19.325	884		
19.525	3943		
19.733	1384		
19.883	1039		
20.342	2837		
20.517	2357		
20.808	1623		
20.958	1174		
21.150	923		
21.517	10880		
21.900	1655		

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	Tedlar	Lab Sample ID:	9766350
Canister ID:	N/A	FID File ID:	18257.0024.d
Injection Volume:	100 cc	PID File ID:	
Instrument ID:	58309	Date Collected:	08/18/2018
Analyzed Date:	09/14/2018	Date Received:	08/22/2018
Analyzed Time:	22:15	Dilution Factor	2

Concentration Units: ppm(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
74-82-8	Methane	4	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.
- Compounds MTBE, Benzene, Toluene, Ethylbenzene, m/p-Xylene, o-Xylene and Xylene (total)are reported from PID file

Analysis Summary for GC Volatiles in Air

FID Data file: /chem/A58309.i/18sep14.b/18257.0024.d Injection date and time: **14-SEP-2018 22:15**
FID Data file Sample Info. Line: 9766350 Instrument ID: **A58309.i** Batch: **M1825730AA**
Date, time and analyst ID of latest FID file update: 17-Sep-2018 08:27 ads07818

FID Blank Data file reference: **/chem/A58309.i/18sep14.b/18257B.0012.d**

FID Method used: /chem/A58309.i/18sep14.b/gc_fid.m FID Sublist used: **6626**
FID Calibration date and time (Last Method Edit): 17-SEP-2018 08:23
FID Mid Level Daily Calibration Standard Reference: **/chem/A58309.i/18sep14.b/18257.0006.d**

Sampling Media: Tedlar Bag Bottle code: N/A Matrix: AIR On-Column Amount units: ppm(v) In Sample Concentration units: ppm(v)

Sample Concentration Formula: On-Column Amount * DF * IVn/IVa Dilution Factor (DF): 2
Nominal Injection Volume (IVn): 100 cc Actual injection Volume (IVa): 100 cc

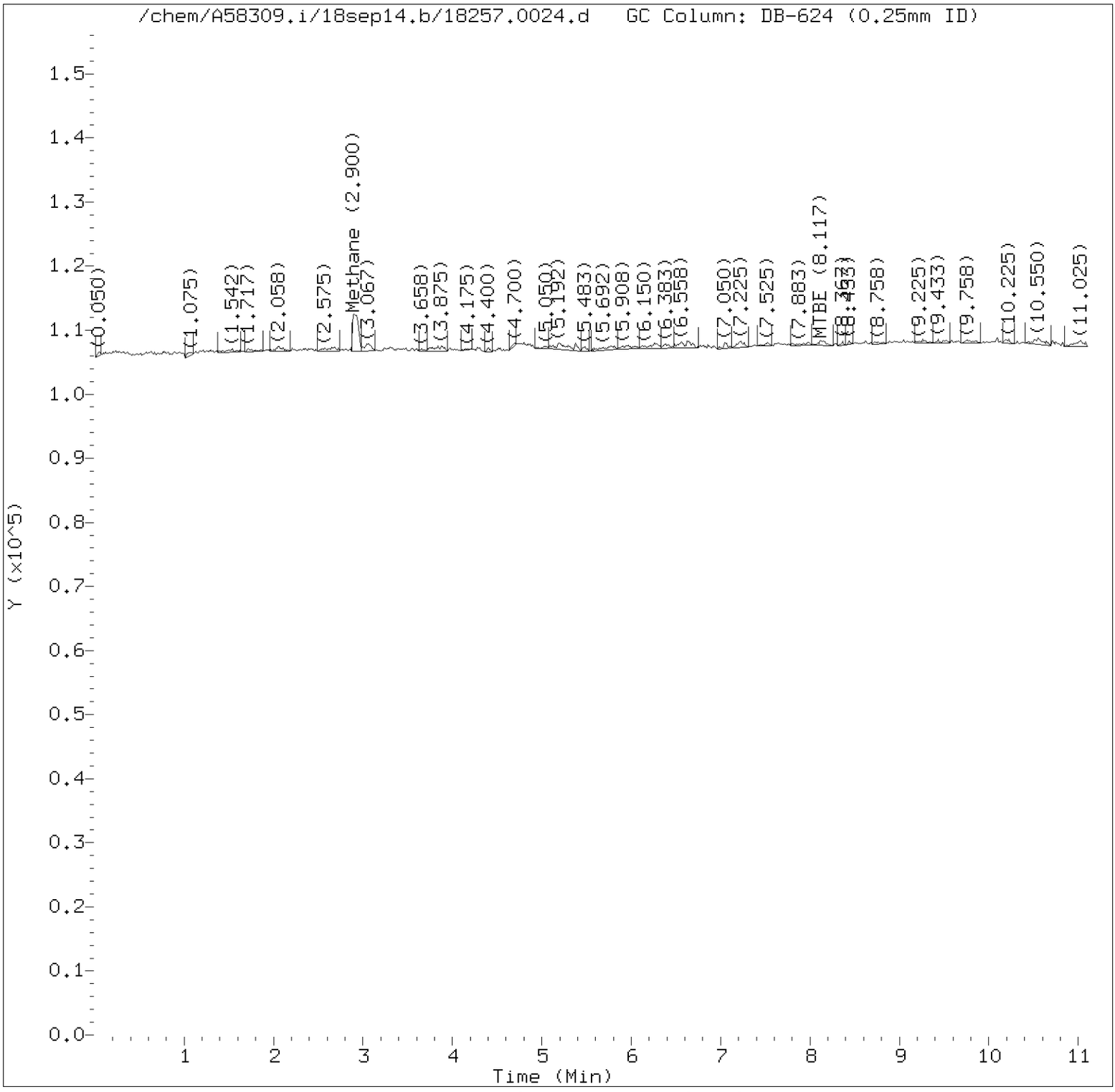
Analysis Comments:

Single Component, Summary, and Range Target Compounds	Expected RT(±window)	RT Low Limit	RT	RT High Limit	Area	On-Column Concentration (ppm(v))	In Sample Concentration (ppm(v))	Blank Conc.	Qual.	Reporting Limit (on-column)	LOQ
1) Methane	2.908(±0.03)	2.878	N.D.	2.938		Not Detected				2	5

Total number of FID targets = 1 Total number of PID targets = None Scheduled for Reporting

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30. Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:27. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

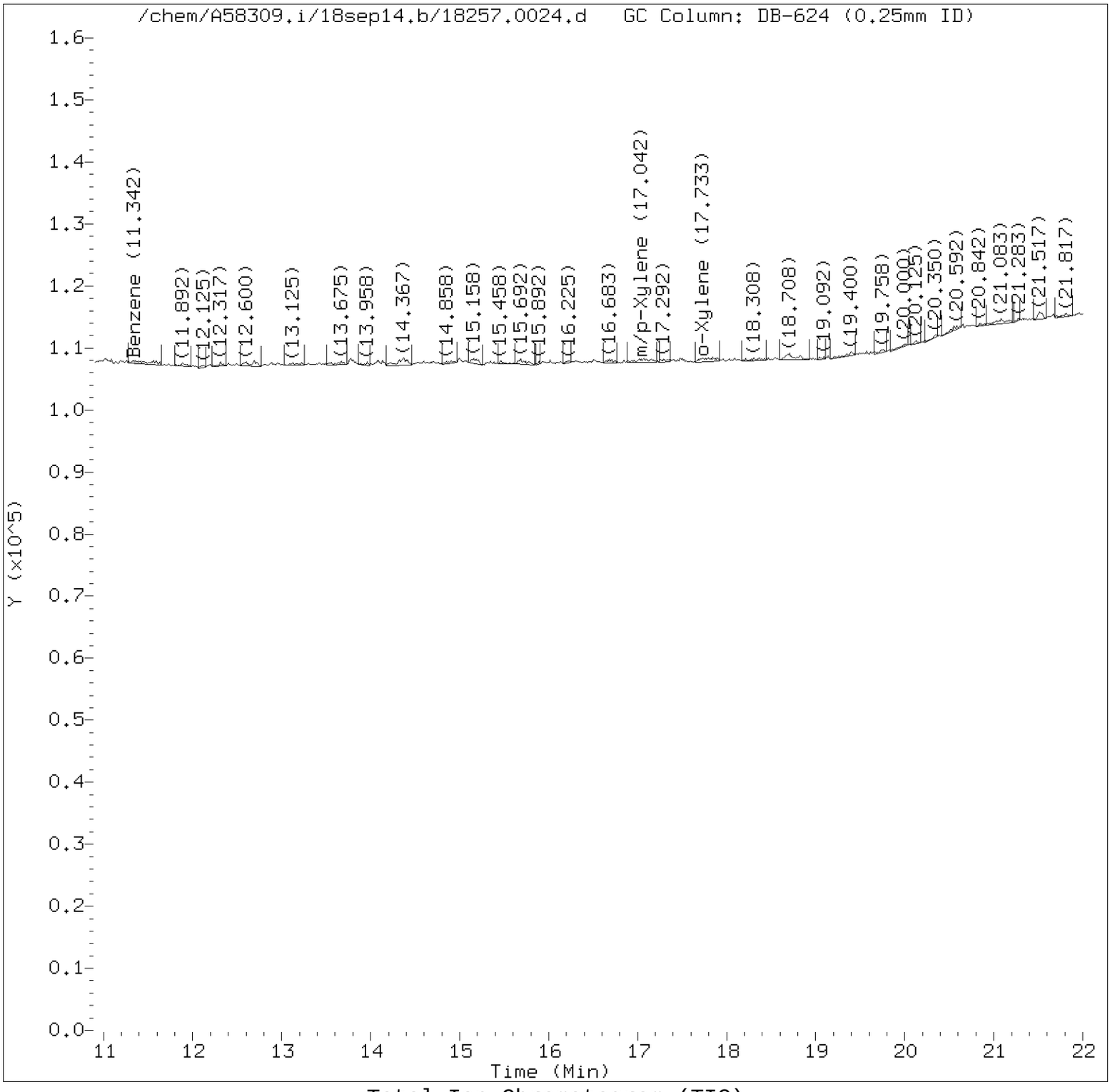
Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0024.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 22:15 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766350 Lab Sample ID: 9766350

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0024.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 22:15 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766350 Lab Sample ID: 9766350

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0024.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 22:15 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766350 Lab Sample ID: 9766350

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))

No integrated signals resulted in on-column concentrations above the reporting limit.

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0024.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 22:15 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766350 Lab Sample ID: 9766350

RT	Area	Peak Label(s) and Range	Compound #s
0.050	1026		
1.075	1992		
1.542	3364		
1.717	2828		
2.058	4235		
2.575	4640		
2.900	26344M	Methane	
3.067	6041M		
3.658	1134		
3.875	6309		
4.175	902		
4.400	1413		
4.700	1063		
5.050	1625		
5.192	11740		
5.483	2211		
5.692	5307		
5.908	3861		
6.150	5367		
6.383	3143		
6.558	9178		
7.050	3046		
7.225	4845		
7.525	2239		
7.883	2929		
8.117	4291	MTBE	
8.367	1273		
8.433	1118		
8.758	1927		
9.225	3122		
9.433	2732		
9.758	3285		
10.225	2241		
10.550	7323		
11.025	6466		
11.342	6970	Benzene	
11.892	2564		
12.125	956		
12.317	1671		
12.600	4798		

M = Peak was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0024.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 22:15 Analyst ID: ADS07818

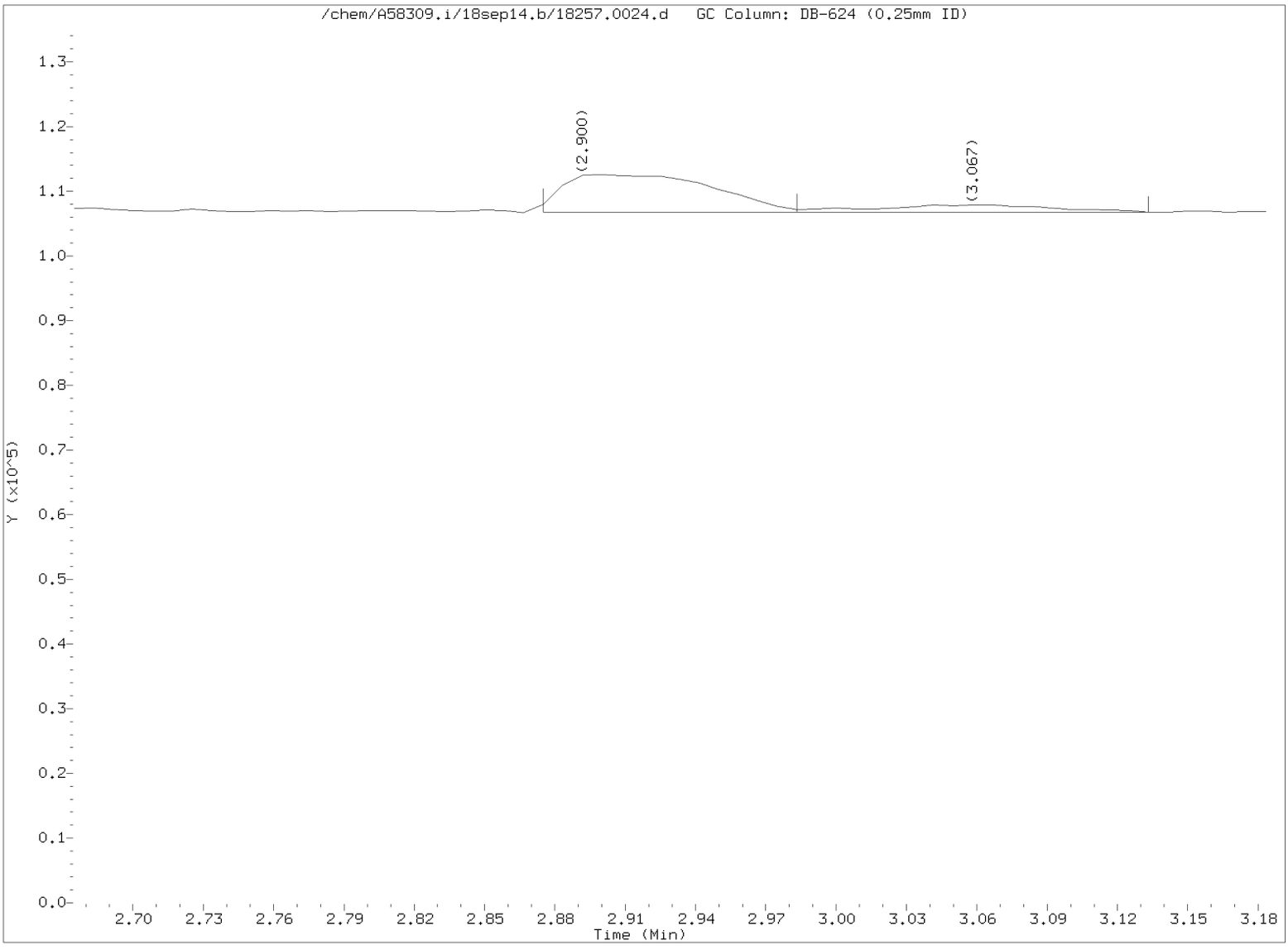
Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766350 Lab Sample ID: 9766350

RT	Area	Peak Label(s) and Range	Compound #s
13.125	2676		
13.675	3216		
13.958	1372		
14.367	7757		
14.858	2329		
15.158	4264		
15.458	1691		
15.692	4845		
15.892	496		
16.225	723		
16.683	2802		
17.042	5536	m/p-Xylene	
17.292	2068		
17.733	6657	o-Xylene	
18.050	12193		
18.308	3457		
18.708	6714		
19.092	1195		
19.400	3325		
19.758	1817		
20.000	1807		
20.125	1544		
20.350	1488		
20.592	3534		
20.842	1478		
21.083	6621		
21.283	739		
21.517	4343		
21.817	2763		

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257.0024.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 22:15 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766350 Lab Sample ID: 9766350

Retention Time (minutes): 2.900
Area (flag) : 26344M
Integration start time : 2.875 Integration stop time: 2.983
Y at integration start : 106760 Y at integration end: 106767

Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:27.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257.0024.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 22:15 Analyst ID:

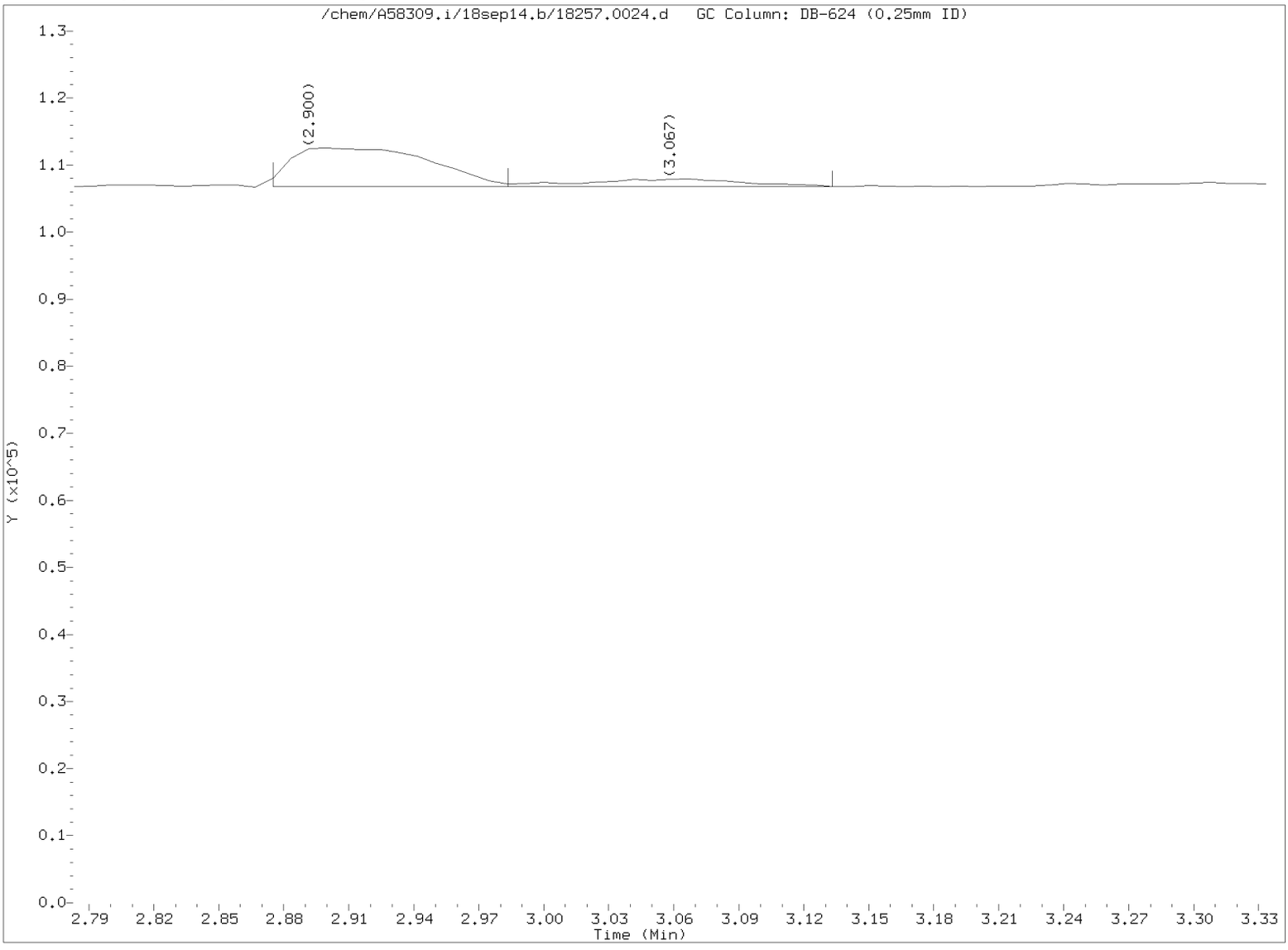
Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:25
Date, time and analyst ID of latest file update: 14-Sep-2018 22:43 Unknown

Sample Name: 9766350 Lab Sample ID: 9766350

No signal was originally integrated at 2.900 minutes.

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ASECHRIST

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257.0024.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 22:15 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766350 Lab Sample ID: 9766350

Retention Time (minutes): 3.067
Area (flag) : 6041M
Integration start time : 2.983 Integration stop time: 3.133
Y at integration start : 106767 Y at integration end: 106779

Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:27.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257.0024.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 22:15 Analyst ID:

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:25
Date, time and analyst ID of latest file update: 14-Sep-2018 22:43 Unknown

Sample Name: 9766350 Lab Sample ID: 9766350

No signal was originally integrated at 3.067 minutes.

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ASECHRIST

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	Tedlar	Lab Sample ID:	9766351
Canister ID:	N/A	FID File ID:	18257.0025.d
Injection Volume:	100 cc	PID File ID:	
Instrument ID:	58309	Date Collected:	08/18/2018
Analyzed Date:	09/14/2018	Date Received:	08/22/2018
Analyzed Time:	23:00	Dilution Factor	2

Concentration Units: ppm(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
74-82-8	Methane	4	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.
- Compounds MTBE, Benzene, Toluene, Ethylbenzene, m/p-Xylene, o-Xylene and Xylene (total)are reported from PID file

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

9766351

FID Data file: /chem/A58309.i/18sep14.b/18257.0025.d Injection date and time: **14-SEP-2018 23:00**
FID Data file Sample Info. Line: 9766351 Instrument ID: **A58309.i** Batch: **M1825730AA**
Date, time and analyst ID of latest FID file update: 17-Sep-2018 08:27 ads07818

FID Blank Data file reference: **/chem/A58309.i/18sep14.b/18257B.0012.d**

FID Method used: /chem/A58309.i/18sep14.b/gc_fid.m FID Sublist used: **6626**
FID Calibration date and time (Last Method Edit): 17-SEP-2018 08:23
FID Mid Level Daily Calibration Standard Reference: **/chem/A58309.i/18sep14.b/18257.0006.d**

Sampling Media: Tedlar Bag Bottle code: N/A Matrix: AIR On-Column Amount units: ppm(v) In Sample Concentration units: ppm(v)

Sample Concentration Formula: On-Column Amount * DF * IVn/IVa Dilution Factor (DF): 2
Nominal Injection Volume (IVn): 100 cc Actual injection Volume (IVa): 100 cc

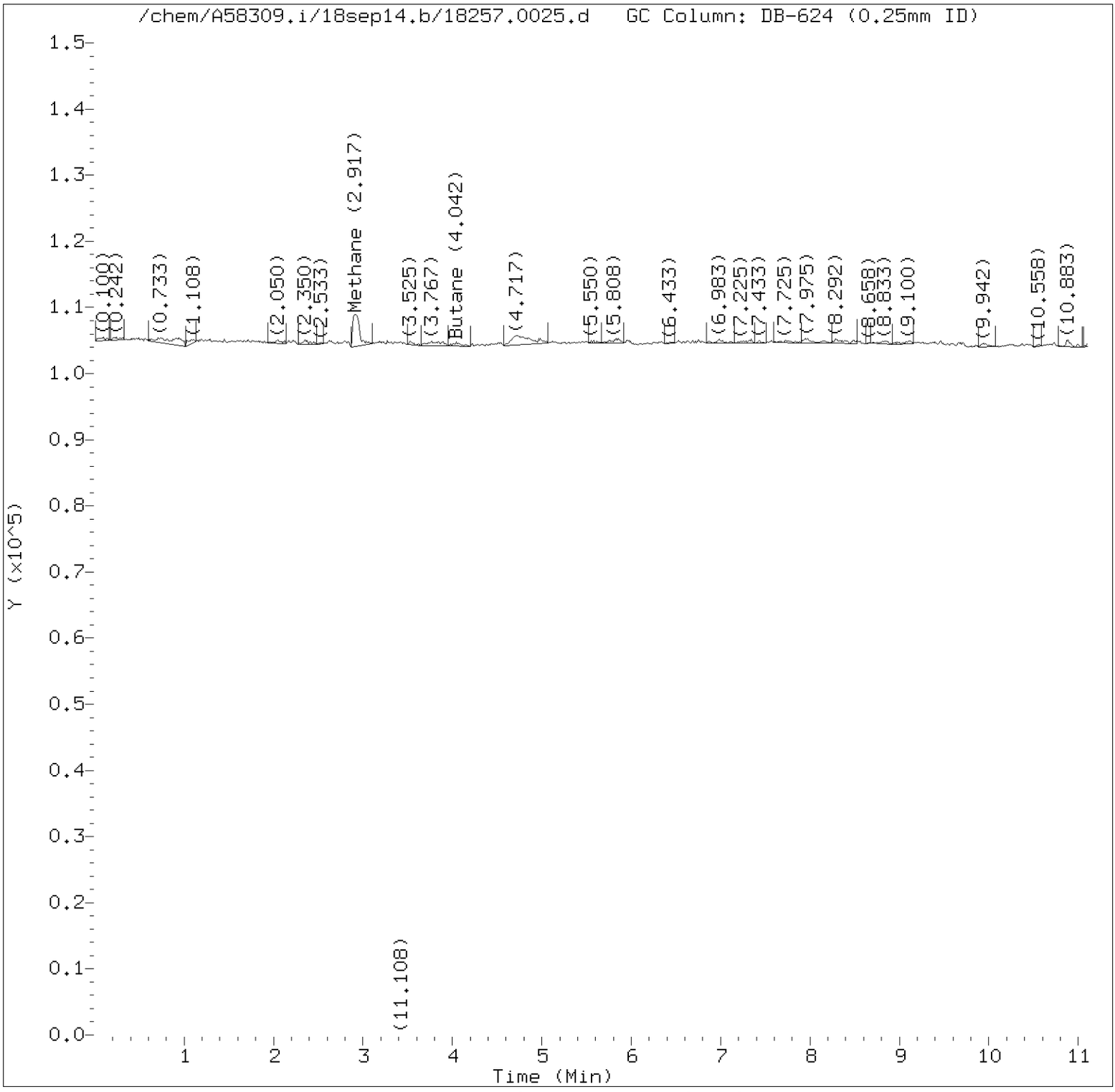
Analysis Comments:

Single Component, Summary, and Range Target Compounds	Expected RT(±window)	RT Low Limit	RT	RT High Limit	Area	On-Column Concentration (ppm(v))	In Sample Concentration (ppm(v))	Blank Conc.	Qual.	Reporting Limit (on-column)	LOQ
1) Methane	2.908(±0.03)	2.878	N.D.	2.938		Not Detected				2	5

Total number of FID targets = 1 Total number of PID targets = None Scheduled for Reporting

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30. Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:27. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

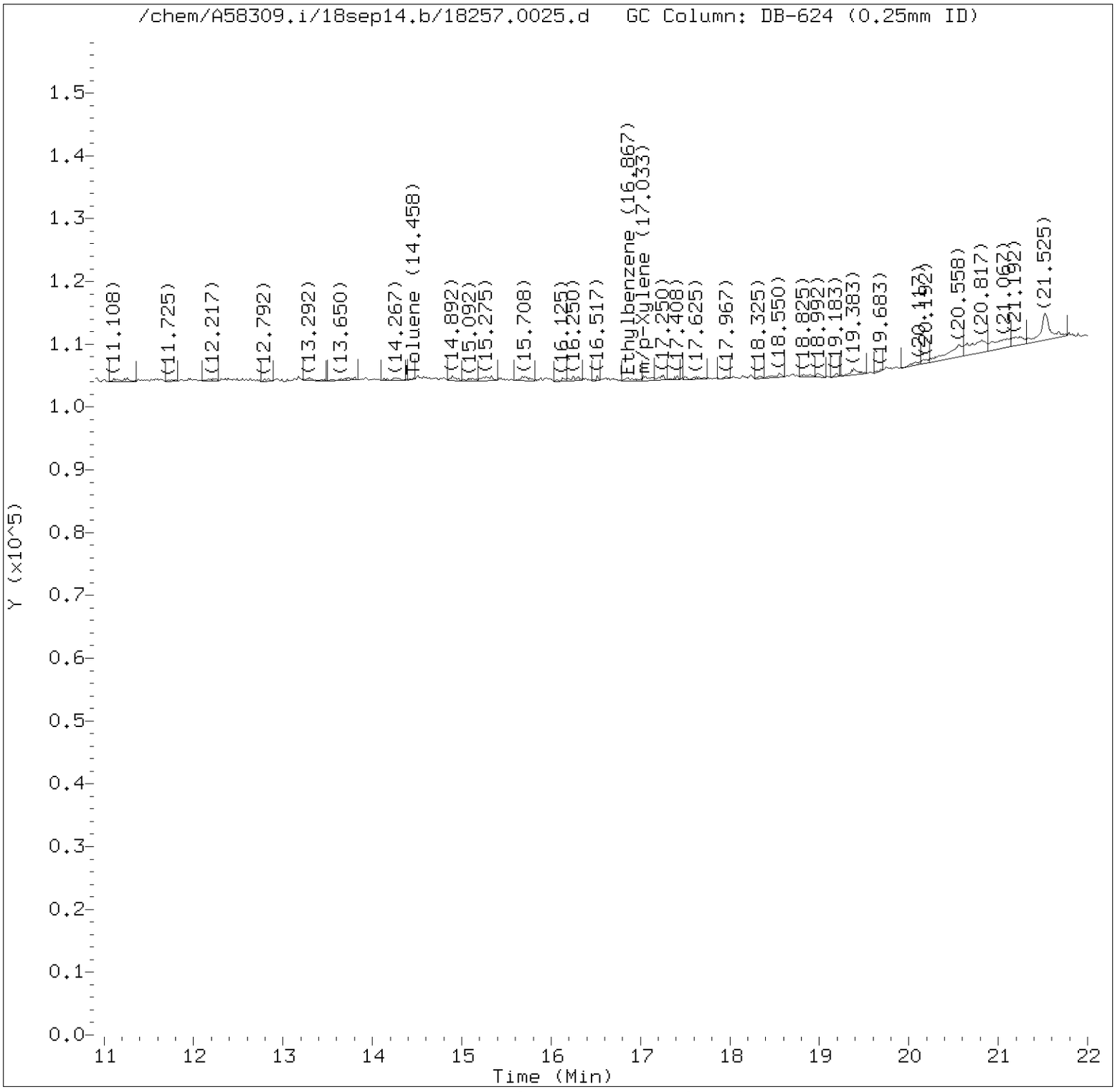
Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0025.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 23:00 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766351 Lab Sample ID: 9766351

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0025.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 23:00 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766351 Lab Sample ID: 9766351

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0025.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 23:00 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766351 Lab Sample ID: 9766351

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))

No integrated signals resulted in on-column concentrations above the reporting limit.

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0025.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 23:00 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766351 Lab Sample ID: 9766351

RT	Area	Peak Label(s) and Range	Compound #s
0.100	2537		
0.242	1934		
0.733	14742		
1.108	3814		
2.050	2854		
2.350	4042		
2.533	672		
2.917	25904	Methane	
3.525	1852		
3.767	7276		
4.042	3663	Butane	
4.717	20425		
5.550	1261		
5.808	4088		
6.433	863		
6.983	3782		
7.225	3540		
7.433	1250		
7.725	2894		
7.975	5075		
8.292	5761		
8.658	266		
8.833	3222		
9.100	3399		
9.942	2730		
10.558	896		
10.883	4790		
11.108	4630		
11.725	1527		
12.217	2363		
12.792	1731		
13.292	2633		
13.650	3681		
14.267	3277		
14.458	615	Toluene	
14.892	2998		
15.092	2505		
15.275	4842		
15.708	4809		
16.125	1936		

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on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0025.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 23:00 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766351 Lab Sample ID: 9766351

RT	Area	Peak Label(s) and Range	Compound #s
16.250	3641		
16.517	1397		
16.867	3531	Ethylbenzene	
17.033	3514	m/p-Xylene	
17.250	3262		
17.408	1854		
17.625	3248		
17.967	1497		
18.050	3514		
18.325	1616		
18.550	4196		
18.825	2515		
18.992	2364		
19.183	1432		
19.383	6088		
19.683	1079		
20.117	3561		
20.192	3140		
20.558	23184		
20.817	26622		
21.067	18963		
21.192	11800		
21.525	31735		

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on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	Tedlar	Lab Sample ID:	9766352
Canister ID:	N/A	FID File ID:	18257.0026.d
Injection Volume:	100 cc	PID File ID:	
Instrument ID:	58309	Date Collected:	08/18/2018
Analyzed Date:	09/14/2018	Date Received:	08/22/2018
Analyzed Time:	23:28	Dilution Factor	2

Concentration Units: ppm(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
74-82-8	Methane	4	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.
- Compounds MTBE, Benzene, Toluene, Ethylbenzene, m/p-Xylene, o-Xylene and Xylene (total)are reported from PID file

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

9766352

FID Data file: /chem/A58309.i/18sep14.b/18257.0026.d Injection date and time: **14-SEP-2018 23:28**
FID Data file Sample Info. Line: 9766352 Instrument ID: **A58309.i** Batch: **M1825730AA**
Date, time and analyst ID of latest FID file update: 17-Sep-2018 08:27 ads07818

FID Blank Data file reference: **/chem/A58309.i/18sep14.b/18257B.0012.d**

FID Method used: /chem/A58309.i/18sep14.b/gc_fid.m FID Sublist used: **6626**
FID Calibration date and time (Last Method Edit): 17-SEP-2018 08:23
FID Mid Level Daily Calibration Standard Reference: **/chem/A58309.i/18sep14.b/18257.0006.d**

Sampling Media: Tedlar Bag Bottle code: N/A Matrix: AIR On-Column Amount units: ppm(v) In Sample Concentration units: ppm(v)

Sample Concentration Formula: On-Column Amount * DF * IVn/IVa Dilution Factor (DF): 2
Nominal Injection Volume (IVn): 100 cc Actual injection Volume (IVa): 100 cc

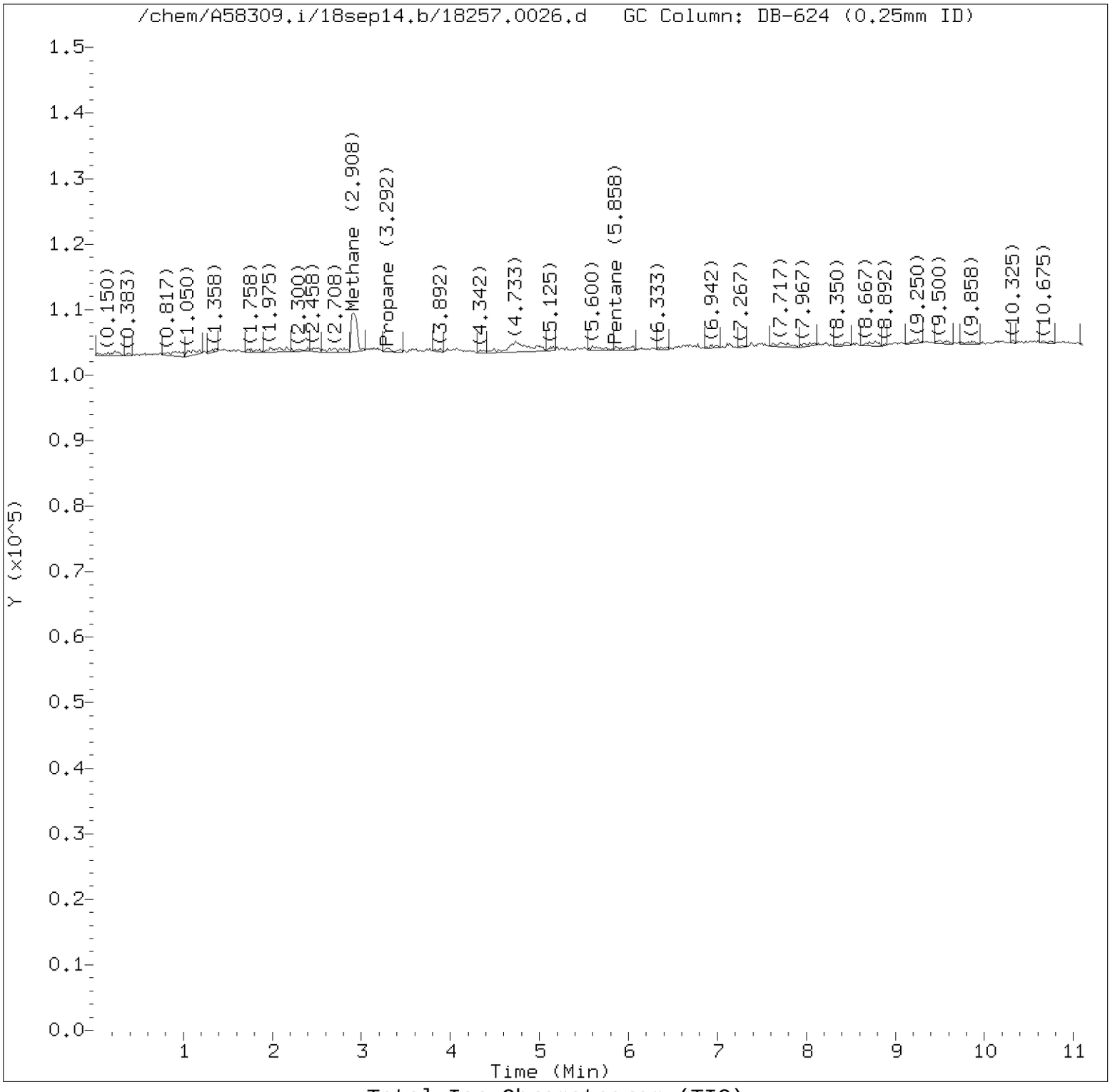
Analysis Comments:

Single Component, Summary, and Range Target Compounds	Expected RT(±window)	RT Low Limit	RT	RT High Limit	Area	On-Column Concentration (ppm(v))	In Sample Concentration (ppm(v))	Blank Conc.	Qual.	Reporting Limit (on-column)	LOQ
1) Methane	2.908(±0.03)	2.878	N.D.	2.938		Not Detected				2	5

Total number of FID targets = 1 Total number of PID targets = None Scheduled for Reporting

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30. Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:27. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

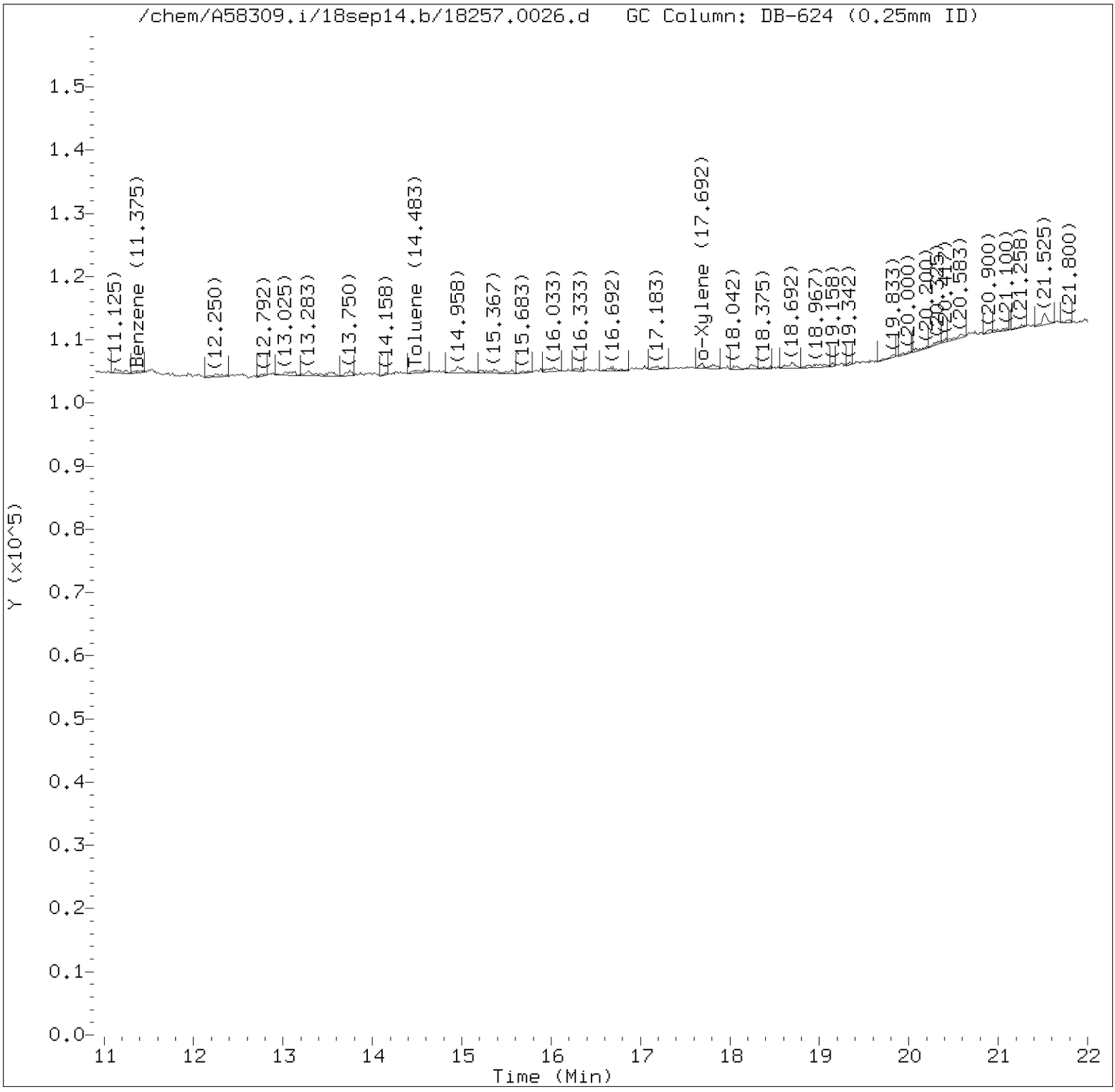
Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0026.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 23:28 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766352 Lab Sample ID: 9766352

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0026.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 23:28 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766352 Lab Sample ID: 9766352

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0026.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 23:28 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766352 Lab Sample ID: 9766352

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))

No integrated signals resulted in on-column concentrations above the reporting limit.

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0026.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 23:28 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766352 Lab Sample ID: 9766352

RT	Area	Peak Label(s) and Range	Compound #s
0.150	5846		
0.383	1072		
0.817	6883		
1.050	6092		
1.358	2170		
1.758	3231		
1.975	6632		
2.300	2993		
2.458	3226		
2.708	7849		
2.908	27798	Methane	
3.292	3787	Propane	
3.892	1850		
4.342	1885		
4.733	25805		
5.125	2016		
5.600	5010		
5.858	4719	Pentane	
6.333	1953		
6.942	2792		
7.267	997		
7.717	6904		
7.967	4308		
8.350	3395		
8.667	5296		
8.892	372		
9.250	3132		
9.500	3161		
9.858	3004		
10.325	1092		
10.675	1928		
11.125	4228		
11.375	2250	Benzene	
12.250	4283		
12.792	1583		
13.025	5112		
13.283	9402		
13.750	3478		
14.158	1008		
14.483	3946	Toluene	

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0026.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 23:28 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766352 Lab Sample ID: 9766352

RT	Area	Peak Label(s) and Range	Compound #s
14.958	8105		
15.367	8173		
15.683	2020		
16.033	4434		
16.333	2296		
16.692	3958		
17.183	3551		
17.692	6192	o-Xylene	
18.042	5291		
18.050	6192		
18.375	1938		
18.692	5100		
18.967	5838		
19.158	1280		
19.342	982		
19.833	2090		
20.000	1346		
20.200	2105		
20.325	2218		
20.417	1603		
20.583	3469		
20.900	2062		
21.100	2270		
21.258	1759		
21.525	7503		
21.800	2079		

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on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	Tedlar	Lab Sample ID:	9766353
Canister ID:	N/A	FID File ID:	18257.0027.d
Injection Volume:	100 cc	PID File ID:	
Instrument ID:	58309	Date Collected:	08/18/2018
Analyzed Date:	09/14/2018	Date Received:	08/22/2018
Analyzed Time:	23:57	Dilution Factor	2

Concentration Units: ppm(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
74-82-8	Methane	14	

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.
- Compounds MTBE, Benzene, Toluene, Ethylbenzene, m/p-Xylene, o-Xylene and Xylene (total)are reported from PID file

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

9766353

FID Data file: /chem/A58309.i/18sep14.b/18257.0027.d Injection date and time: **14-SEP-2018 23:57**
FID Data file Sample Info. Line: 9766353 Instrument ID: **A58309.i** Batch: **M1825730AA**
Date, time and analyst ID of latest FID file update: 17-Sep-2018 08:27 ads07818

FID Blank Data file reference: **/chem/A58309.i/18sep14.b/18257B.0012.d**

FID Method used: /chem/A58309.i/18sep14.b/gc_fid.m FID Sublist used: **6626**
FID Calibration date and time (Last Method Edit): 17-SEP-2018 08:23
FID Mid Level Daily Calibration Standard Reference: **/chem/A58309.i/18sep14.b/18257.0006.d**

Sampling Media: Tedlar Bag Bottle code: N/A Matrix: AIR On-Column Amount units: ppm(v) In Sample Concentration units: ppm(v)

Sample Concentration Formula: On-Column Amount * DF * IVn/IVa Dilution Factor (DF): 2
Nominal Injection Volume (IVn): 100 cc Actual injection Volume (IVa): 100 cc

Analysis Comments:

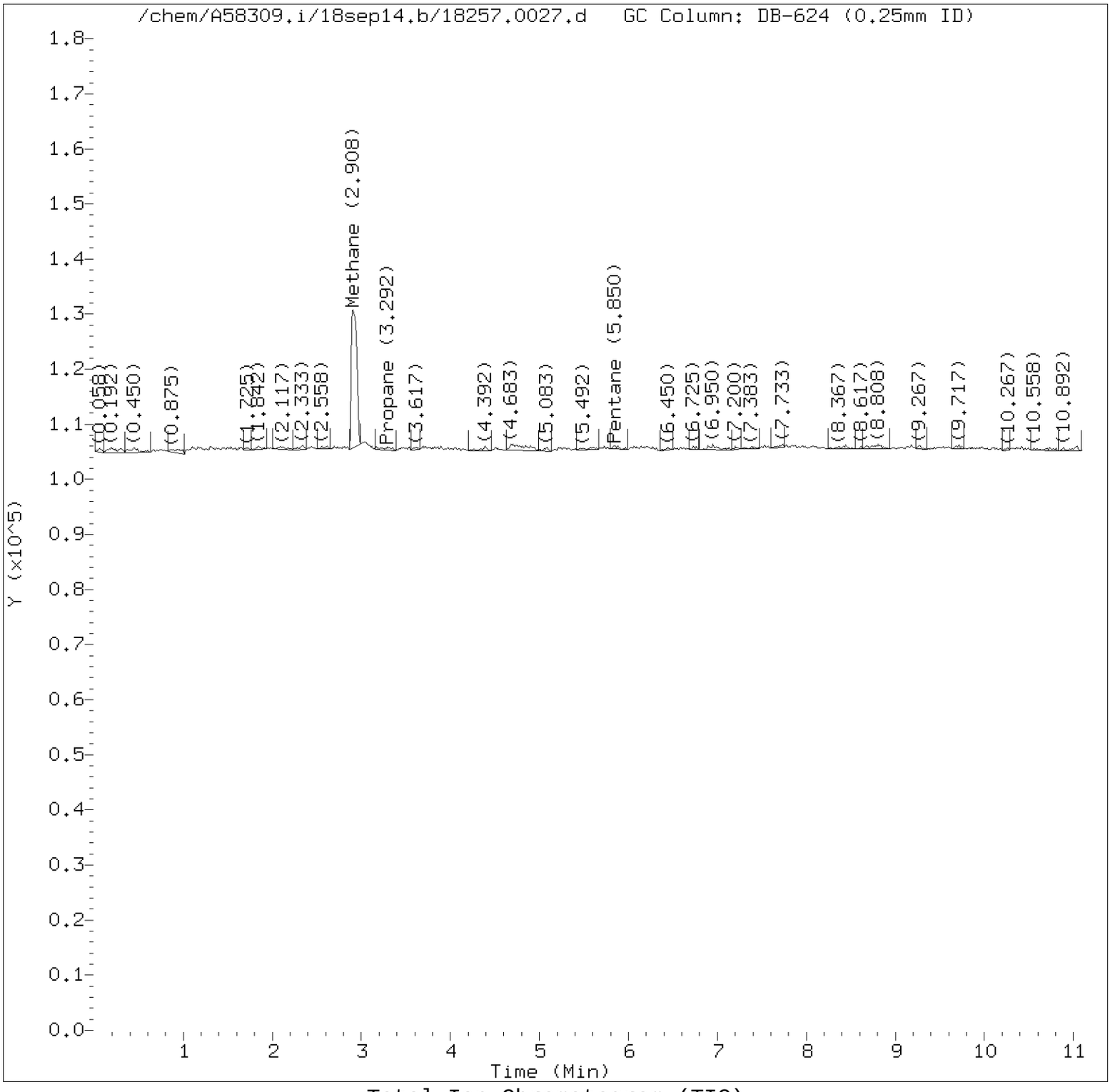
Single Component, Summary, and Range Target Compounds	Expected RT(±window)	RT Low Limit	RT	RT High Limit	Area	On-Column Concentration (ppm(v))	In Sample Concentration (ppm(v))	Blank Conc.	Qual.	Reporting Limit (on-column)	LOQ
1) Methane	2.908(±0.03)	2.878	2.908	2.938	109100	6.825	13.65			2	5

NIB = Compound not in referenced method blank sublist.

Total number of FID targets = 1 Total number of PID targets = None Scheduled for Reporting

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30. Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:27. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

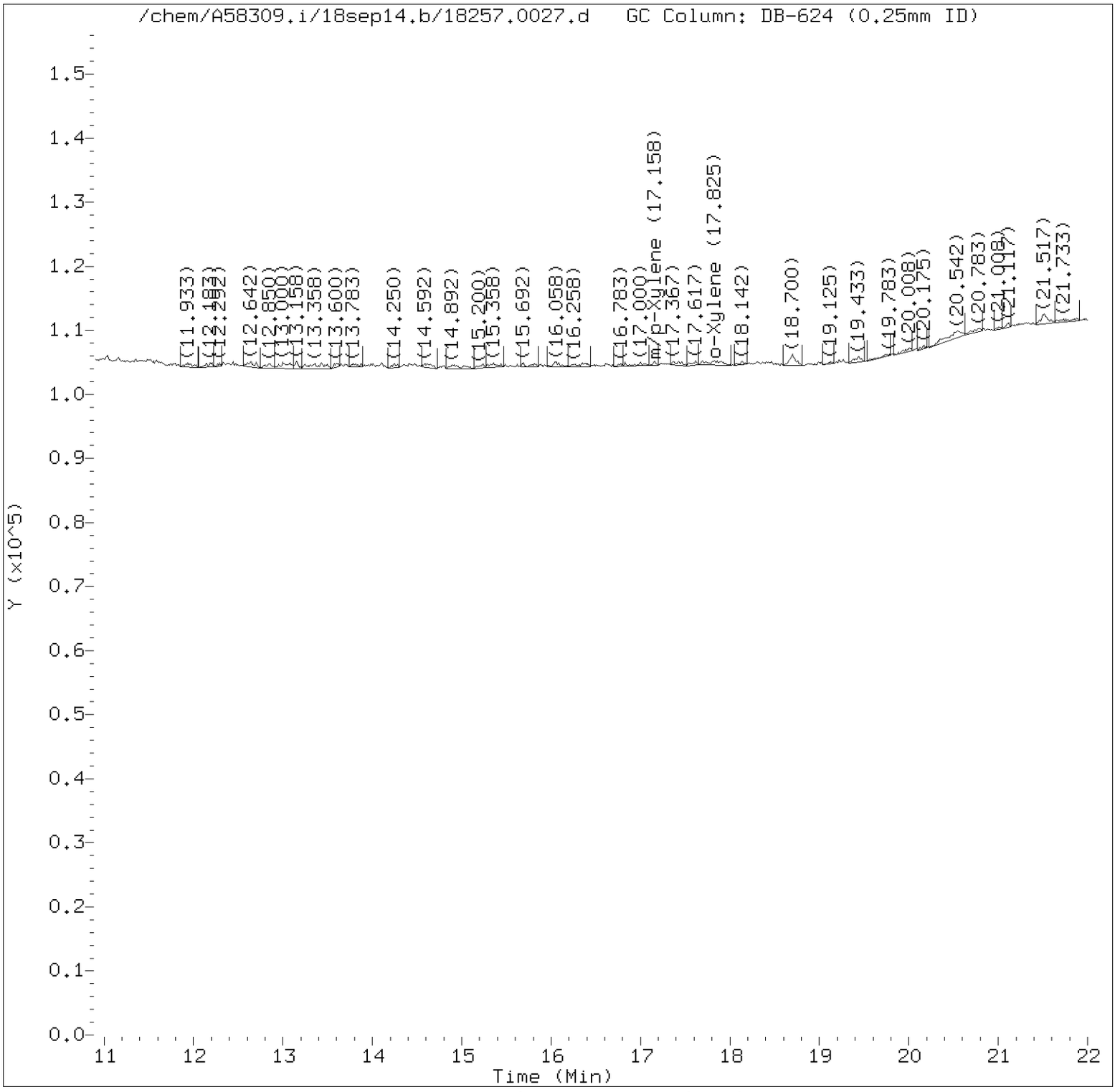
Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0027.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 23:57 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766353 Lab Sample ID: 9766353

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0027.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 23:57 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766353 Lab Sample ID: 9766353

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0027.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 23:57 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766353 Lab Sample ID: 9766353

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) Methane	2.908(±0.03)	2.908	109100	6.825

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0027.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 23:57 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766353 Lab Sample ID: 9766353

RT	Area	Peak Label(s) and Range	Compound #s
0.058	2006		
0.192	7328		
0.450	6378		
0.875	5355		
1.725	1179		
1.842	2262		
2.117	3362		
2.333	3113		
2.558	2223		
2.908	109100	Methane	
3.292	4045	Propane	
3.617	1359		
4.392	4125		
4.683	14308		
5.083	2969		
5.492	3813		
5.850	3201	Pentane	
6.450	1730		
6.725	1765		
6.950	6447		
7.200	1391		
7.383	1858		
7.733	2331		
8.367	4416		
8.617	939		
8.808	6907		
9.267	1764		
9.717	2385		
10.267	934		
10.558	4031		
10.892	4928		
11.933	3418		
12.183	2680		
12.292	1122		
12.642	4621		
12.850	3391		
13.000	6450		
13.158	3288		
13.358	9051		
13.600	1782		

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0027.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 23:57 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766353 Lab Sample ID: 9766353

RT	Area	Peak Label(s) and Range	Compound #s
13.783	2408		
14.250	2340		
14.592	4252		
14.892	6062		
15.200	2664		
15.358	4276		
15.692	3418		
16.058	4174		
16.258	4356		
16.783	1258		
17.000	3532		
17.158	1546	m/p-Xylene	
17.367	3849		
17.617	2452		
17.825	7485	o-Xylene	
18.050	9031		
18.142	1870		
18.700	8385		
19.125	1152		
19.433	4460		
19.783	2227		
20.008	2876		
20.175	1656		
20.542	13254		
20.783	3894		
21.008	1043		
21.117	1687		
21.517	8449		
21.733	5310		

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	Tedlar	Lab Sample ID:	9766354
Canister ID:	N/A	FID File ID:	18257.0028.d
Injection Volume:	100 cc	PID File ID:	
Instrument ID:	58309	Date Collected:	08/18/2018
Analyzed Date:	09/15/2018	Date Received:	08/22/2018
Analyzed Time:	00:26	Dilution Factor	2

Concentration Units: ppm(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
74-82-8	Methane	4	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.
- Compounds MTBE, Benzene, Toluene, Ethylbenzene, m/p-Xylene, o-Xylene and Xylene (total)are reported from PID file

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

9766354

FID Data file: /chem/A58309.i/18sep14.b/18257.0028.d Injection date and time: **15-SEP-2018 00:26**
FID Data file Sample Info. Line: 9766354 Instrument ID: **A58309.i** Batch: **M1825730AA**
Date, time and analyst ID of latest FID file update: 17-Sep-2018 08:27 ads07818

FID Blank Data file reference: **/chem/A58309.i/18sep14.b/18257B.0012.d**

FID Method used: /chem/A58309.i/18sep14.b/gc_fid.m FID Sublist used: **6626**
FID Calibration date and time (Last Method Edit): 17-SEP-2018 08:23
FID Mid Level Daily Calibration Standard Reference: **/chem/A58309.i/18sep14.b/18257.0006.d**

Sampling Media: Tedlar Bag Bottle code: N/A Matrix: AIR On-Column Amount units: ppm(v) In Sample Concentration units: ppm(v)

Sample Concentration Formula: On-Column Amount * DF * IVn/IVa Dilution Factor (DF): 2
Nominal Injection Volume (IVn): 100 cc Actual injection Volume (IVa): 100 cc

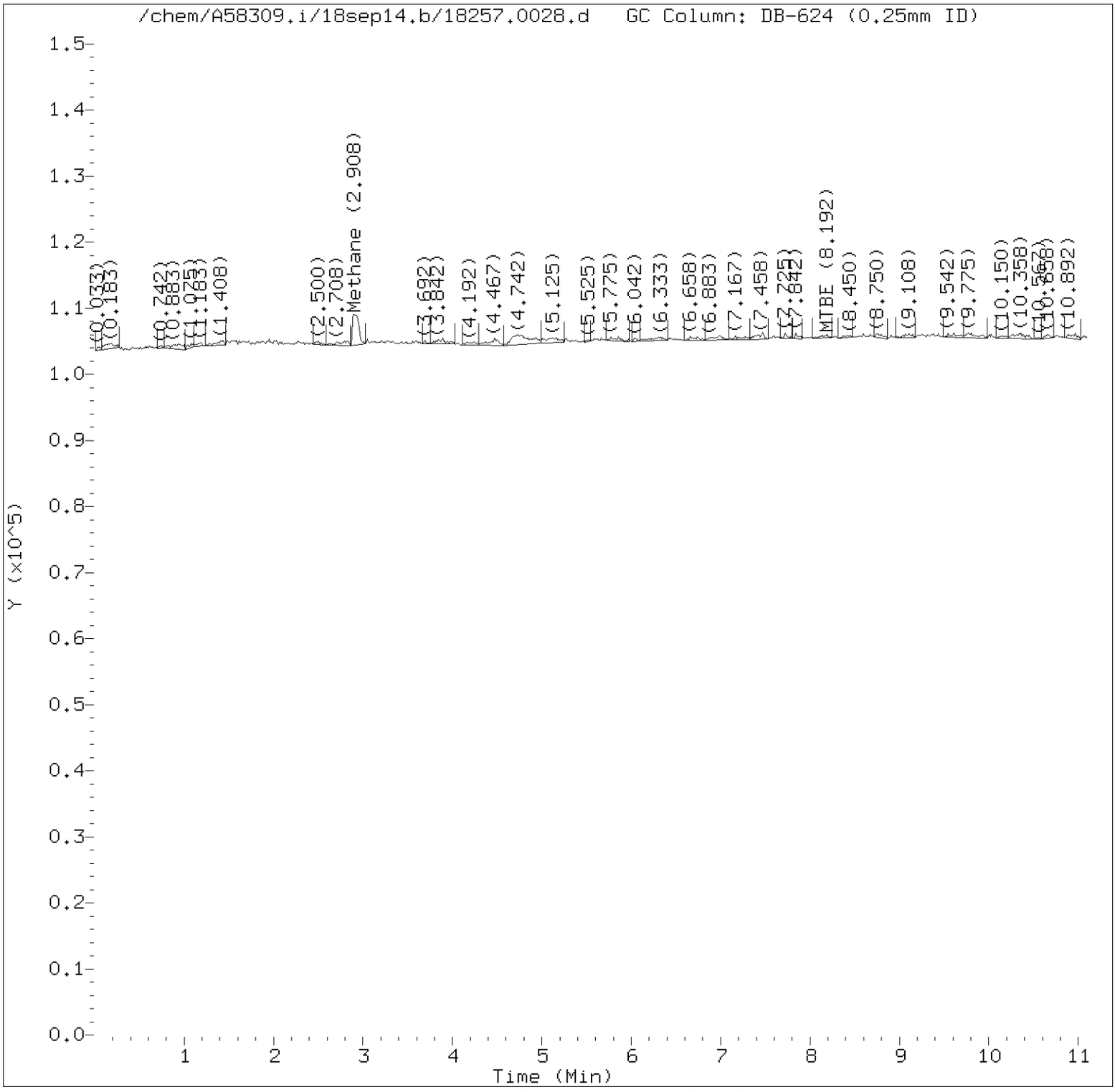
Analysis Comments:

Single Component, Summary, and Range Target Compounds	Expected RT(±window)	RT Low Limit	RT	RT High Limit	Area	On-Column Concentration (ppm(v))	In Sample Concentration (ppm(v))	Blank Conc.	Qual.	Reporting Limit (on-column)	LOQ
1) Methane	2.908(±0.03)	2.878	N.D.	2.938		Not Detected				2	5

Total number of FID targets = 1 Total number of PID targets = None Scheduled for Reporting

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:30. Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:27. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

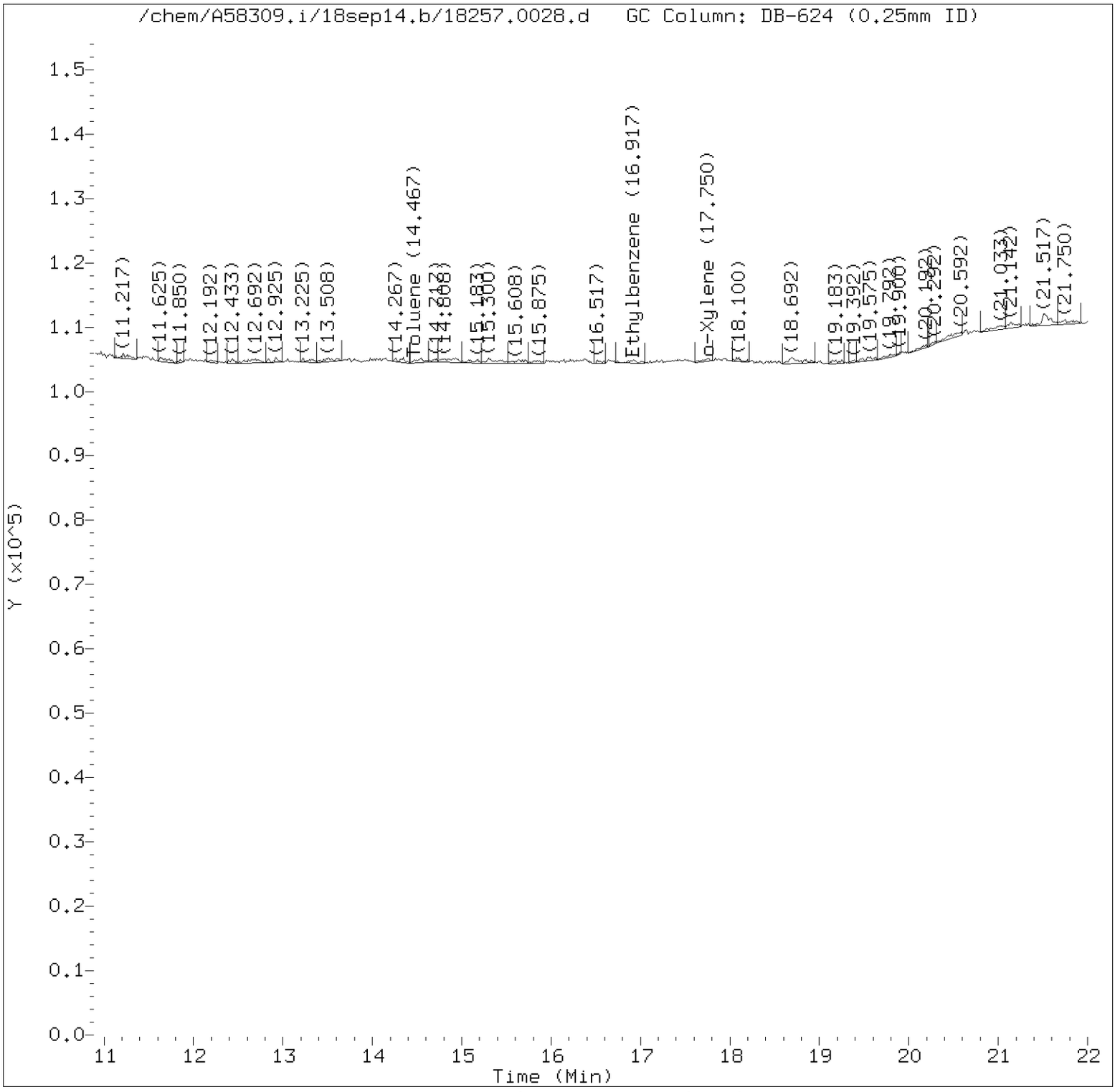
Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0028.d Instrument ID: A58309.i
Injection date and time: 15-SEP-2018 00:26 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766354 Lab Sample ID: 9766354

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0028.d Instrument ID: A58309.i
Injection date and time: 15-SEP-2018 00:26 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766354 Lab Sample ID: 9766354

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0028.d Instrument ID: A58309.i
Injection date and time: 15-SEP-2018 00:26 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766354 Lab Sample ID: 9766354

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))

No integrated signals resulted in on-column concentrations above the reporting limit.

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on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0028.d Instrument ID: A58309.i
Injection date and time: 15-SEP-2018 00:26 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766354 Lab Sample ID: 9766354

RT	Area	Peak Label(s) and Range	Compound #s
0.033	1128		
0.183	5878		
0.742	1140		
0.883	7256		
1.075	2446		
1.183	2287		
1.408	4364		
2.500	1945		
2.708	5244		
2.908	22748	Methane	
3.692	1080		
3.842	5112		
4.192	3362		
4.467	7207		
4.742	20934		
5.125	7533		
5.525	708		
5.775	4025		
6.042	1136		
6.333	4938		
6.658	3942		
6.883	4920		
7.167	3962		
7.458	5320		
7.725	1678		
7.842	2131		
8.192	2874	MTBE	
8.450	1550		
8.750	3256		
9.108	3297		
9.542	3933		
9.775	5737		
10.150	1917		
10.358	7171		
10.567	609		
10.658	2280		
10.892	4332		
11.217	4533		
11.625	4944		
11.850	1194		

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0028.d Instrument ID: A58309.i
Injection date and time: 15-SEP-2018 00:26 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 08:23
Date, time and analyst ID of latest file update: 17-Sep-2018 08:27 ads07818

Sample Name: 9766354 Lab Sample ID: 9766354

RT	Area	Peak Label(s) and Range	Compound #s
12.192	1810		
12.433	2696		
12.692	6374		
12.925	3079		
13.225	3414		
13.508	4777		
14.267	3567		
14.467	3982	Toluene	
14.717	1826		
14.808	6633		
15.183	3161		
15.300	5849		
15.608	4044		
15.875	2675		
16.517	1802		
16.917	4443	Ethylbenzene	
17.750	2807	o-Xylene	
18.050	2807		
18.100	2818		
18.692	8798		
19.183	3459		
19.392	1037		
19.575	4234		
19.792	2481		
19.900	458		
20.192	2329		
20.292	1394		
20.592	6689		
21.033	5604		
21.142	5058		
21.517	11625		
21.750	6000		

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:30.
Target 3.5 esignature user ID: ads07818

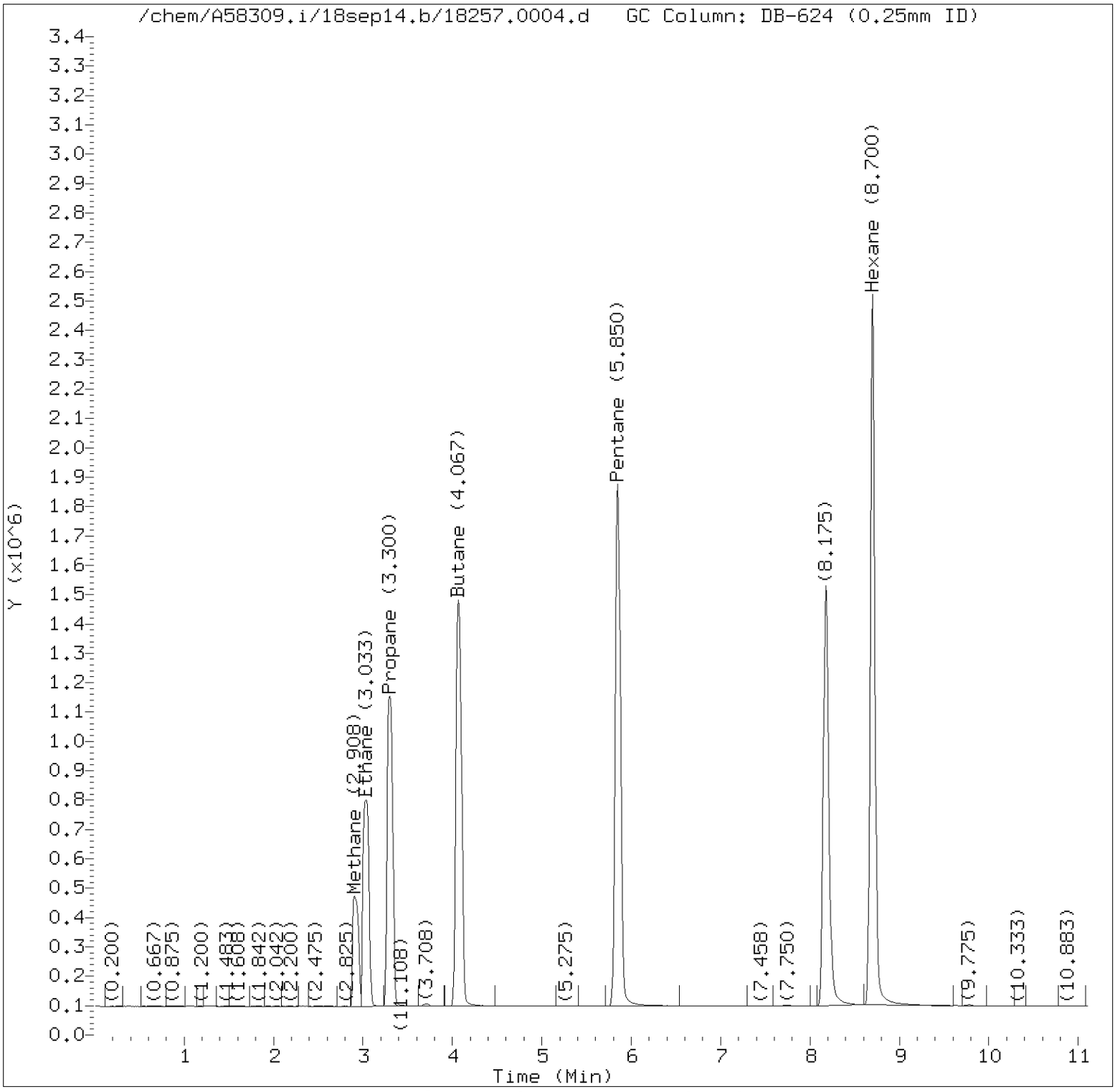
Standards Data

Volatile Organics in Air by GC

Lancaster Laboratories
Volatiles in Air
Runlog for Hewlett Packard GC/FID/PID System A58309

Data Directory Path is - C:\CP\DATA1

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
	18257.0000.d	CBLK	09/14/2018	09:06	M1825730AA	
	18257B.0000.d	CBLK	09/14/2018	09:06	M1825730AA	
	18257.0001.d	CBLK	09/14/2018	09:35	M1825730AA	
	18257B.0001.d	CBLK	09/14/2018	09:35	M1825730AA	
	18257.0002.d	CBLK	09/14/2018	10:03	M1825730AA	
	18257B.0002.d	CBLK	09/14/2018	10:03	M1825730AA	
	18257.0003.d	CBLK	09/14/2018	10:32	M1825730AA	
	18257B.0003.d	CBLK	09/14/2018	10:32	M1825730AA	
	18257.0004.d	VSTD100	09/14/2018	11:23		
	18257B.0004.d	VSTD100	09/14/2018	11:23		
	18257.0005.d	VSTD025	09/14/2018	12:01		
	18257B.0005.d	VSTD025	09/14/2018	12:01		
	18257.0006.d	VSTD010	09/14/2018	12:31		
	18257B.0006.d	VSTD010	09/14/2018	12:31		
	18257.0007.d	VSTD005	09/14/2018	13:00		
	18257B.0007.d	VSTD005	09/14/2018	13:00		
	18257.0008.d	VSTD001	09/14/2018	13:34		
	18257B.0008.d	VSTD001	09/14/2018	13:34		
	18257.0009.d	VSTD500	09/14/2018	14:49		
	18257B.0009.d	VSTD500	09/14/2018	14:49		
	18257.0010.d	VBLK257	09/14/2018	15:17	M1825730AA	
	18257B.0010.d	VBLK257	09/14/2018	15:17	M1825730AA	
	18257.0011.d	VBLK257	09/14/2018	15:46	M1825730AA	
	18257B.0011.d	VBLK257	09/14/2018	15:46	M1825730AA	
	18257.0012.d	VBLK257	09/14/2018	16:26	M1825730AA	
	18257B.0012.d	VBLK257	09/14/2018	16:26	M1825730AA	
	18257.0013.d	LCS257	09/14/2018	16:54	M1825730AA	
	18257B.0013.d	LCS257	09/14/2018	16:54	M1825730AA	
	18257.0014.d	LCSD257	09/14/2018	17:27	M1825730AA	
	18257B.0014.d	LCSD257	09/14/2018	17:27	M1825730AA	
	18257.0015.d	9759302	09/14/2018	17:57	M1825730AA	
	18257B.0015.d	9759302	09/14/2018	17:57	M1825730AA	
	18257.0016.d	9763280	09/14/2018	18:25	M1825730AA	
	18257B.0016.d	9763280	09/14/2018	18:25	M1825730AA	
	18257.0017.d	9763281	09/14/2018	18:54	M1825730AA	
	18257B.0017.d	9763281	09/14/2018	18:54	M1825730AA	
	18257.0018.d	9766344	09/14/2018	19:23	M1825730AA	
	18257B.0018.d	9766344	09/14/2018	19:23	M1825730AA	
	18257.0019.d	9766345	09/14/2018	19:51	M1825730AA	
	18257B.0019.d	9766345	09/14/2018	19:51	M1825730AA	
	18257.0020.d	9766346	09/14/2018	20:20	M1825730AA	
	18257B.0020.d	9766346	09/14/2018	20:20	M1825730AA	
	18257.0021.d	9766347	09/14/2018	20:49	M1825730AA	
	18257B.0021.d	9766347	09/14/2018	20:49	M1825730AA	
	18257.0022.d	9766348	09/14/2018	21:17	M1825730AA	
	18257B.0022.d	9766348	09/14/2018	21:17	M1825730AA	
	18257.0023.d	9766349	09/14/2018	21:46	M1825730AA	
	18257B.0023.d	9766349	09/14/2018	21:46	M1825730AA	
	18257.0024.d	9766350	09/14/2018	22:15	M1825730AA	
	18257B.0024.d	9766350	09/14/2018	22:15	M1825730AA	
	18257.0025.d	9766351	09/14/2018	23:00	M1825730AA	
	18257B.0025.d	9766351	09/14/2018	23:00	M1825730AA	
	18257.0026.d	9766352	09/14/2018	23:28	M1825730AA	
	18257B.0026.d	9766352	09/14/2018	23:28	M1825730AA	
	18257.0027.d	9766353	09/14/2018	23:57	M1825730AA	
	18257B.0027.d	9766353	09/14/2018	23:57	M1825730AA	
	18257.0028.d	9766354	09/15/2018	00:26	M1825730AA	
	18257B.0028.d	9766354	09/15/2018	00:26	M1825730AA	
	18257.0029.d	9775563	09/15/2018	00:54	M1825730AA	
	18257B.0029.d	9775563	09/15/2018	00:54	M1825730AA	
	18257.0030.d	9775564	09/15/2018	01:23	M1825730AA	
	18257B.0030.d	9775564	09/15/2018	01:23	M1825730AA	
	18257.0031.d	9781639	09/15/2018	01:52	M1825730AA	
	18257B.0031.d	9781639	09/15/2018	01:52	M1825730AA	
	18257.0032.d	9791064	09/15/2018	02:20	M1825730AA	
	18257B.0032.d	9791064	09/15/2018	02:20	M1825730AA	
	18257.0033.d	9791065	09/15/2018	02:49	M1825730AA	
	18257B.0033.d	9791065	09/15/2018	02:49	M1825730AA	
	18257.0034.d	9791066	09/15/2018	03:17	M1825730AA	
	18257B.0034.d	9791066	09/15/2018	03:17	M1825730AA	
	18257.0035.d	CBLK	09/17/2018	07:55	M1825730AA	
	18257B.0035.d	CBLK	09/17/2018	07:55	M1825730AA	
	18257.0036.d	CBLK	09/17/2018	08:24	M1825730AA	
	18257B.0036.d	CBLK	09/17/2018	08:24	M1825730AA	
	18257.0037.d	CBLK	09/17/2018	08:52	M1825730AA	
	18257B.0037.d	CBLK	09/17/2018	08:52	M1825730AA	



Total Ion Chromatogram (TIC)

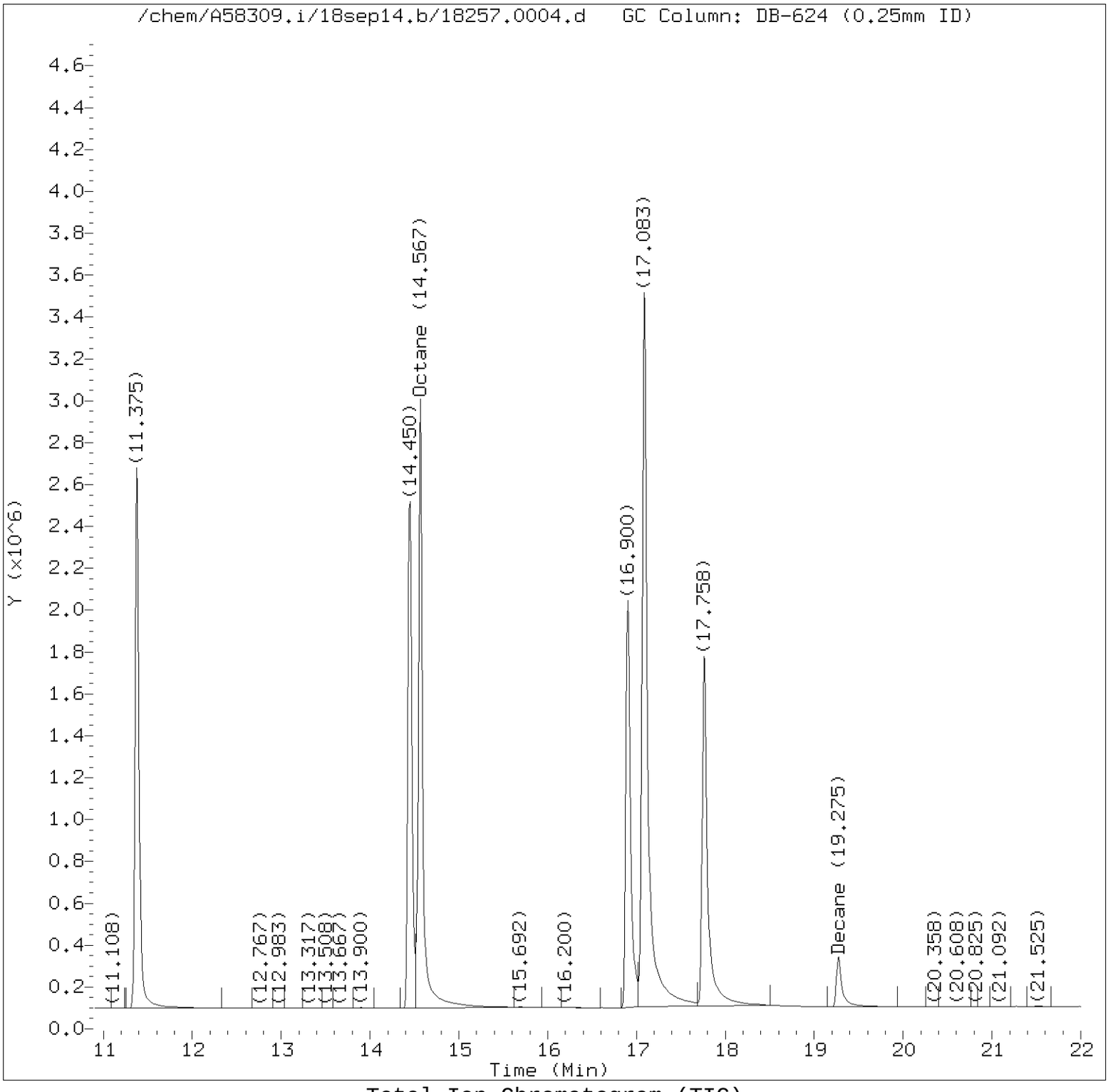
Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0004.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 11:23 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

Sample Name: VSTD100 Lab Sample ID: VSTD100

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0004.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 11:23 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

Sample Name: VSTD100 Lab Sample ID: VSTD100

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0004.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 11:23 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

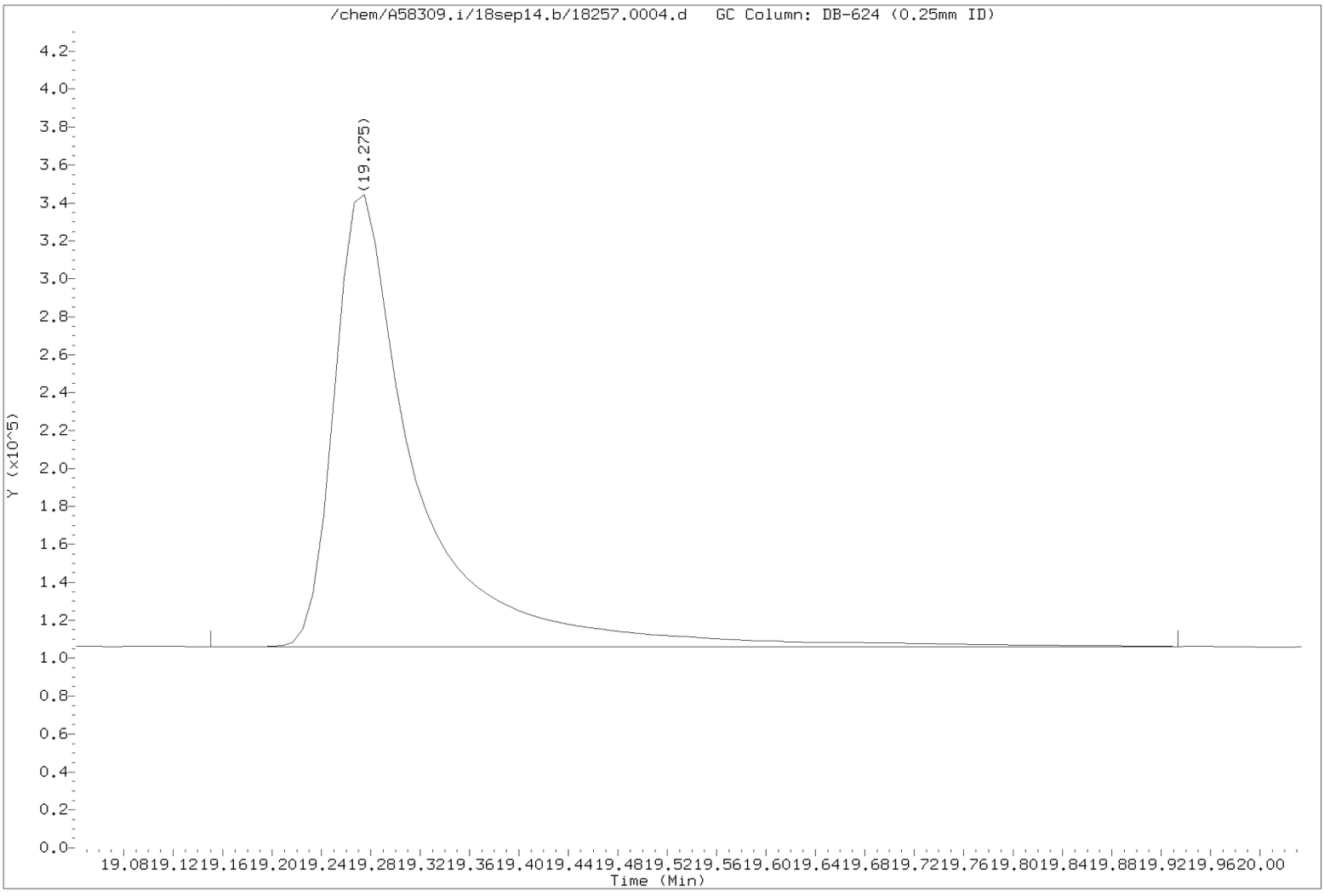
Sample Name: VSTD100 Lab Sample ID: VSTD100

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) Methane	2.908(±0.03)	2.908	1702495	100.000
2) Ethane	3.042(±0.03)	3.033	3226032	100.000
3) Propane	3.300(±0.03)	3.300	4744997	100.000
4) Butane	4.067(±0.03)	4.067	6321733	100.000
5) Pentane	5.850(±0.03)	5.850	7606938	100.000
7) Hexane	8.700(±0.03)	8.700	8813930	100.000
10) Octane	14.567(±0.03)	14.567	10487462	100.000
15) Decane	19.283(±0.03)	19.275	1122747M	20.000

M = Compound was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257.0004.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 11:23 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

Sample Name: VSTD100 Lab Sample ID: VSTD100

Compound Number : 15
Compound Name : Decane
Retention Time (minutes): 19.275
Area (flag) : 1122747M
Concentration (ppm(v)) : 20.0000
Integration start time : 19.150 Integration stop time: 19.933
Y at integration start : 106001 Y at integration end: 106104

Reason for manual integration: missed peak

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:12.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257.0004.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 11:23 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:05
Date, time and analyst ID of latest file update: 14-Sep-2018 15:05 jbs01304

Sample Name: VSTD100 Lab Sample ID: VSTD100

Compound Number : 15
Compound Name : Decane
Expected RT (minutes) : 19.283
Quant Ion : 100.00

Digitally signed by Alexander D. Sechrist on 09/14/2018 at 15:25.

Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0004.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 11:23 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

Sample Name: VSTD100 Lab Sample ID: VSTD100

RT	Area	Peak Label(s) and Range	Compound #s
0.200	2321		
0.667	5923		
0.875	7570		
1.200	1052		
1.483	2157		
1.608	5032		
1.842	2991		
2.042	3466		
2.200	3081		
2.475	7781		
2.825	3546		
2.908	1702495	Methane	
3.033	3226032	Ethane	
3.300	4744997	Propane	
3.708	39194		
4.067	6321734	Butane	
5.275	8390		
5.850	7606938	Pentane	
7.458	4676		
7.750	27940		
8.175	6378939		
8.700	8813930	Hexane	
9.775	13440		
10.333	2173		
10.883	6396		
11.108	2200		
11.375	8507612		
12.767	4427		
12.983	1068		
13.317	3015		
13.508	5026		
13.667	7478		
13.900	12066		
14.450	7559608		
14.567	10487463	Octane	
15.692	27116		
16.200	6058		
16.900	7129936		
17.083	15524388		
17.758	7465836		

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

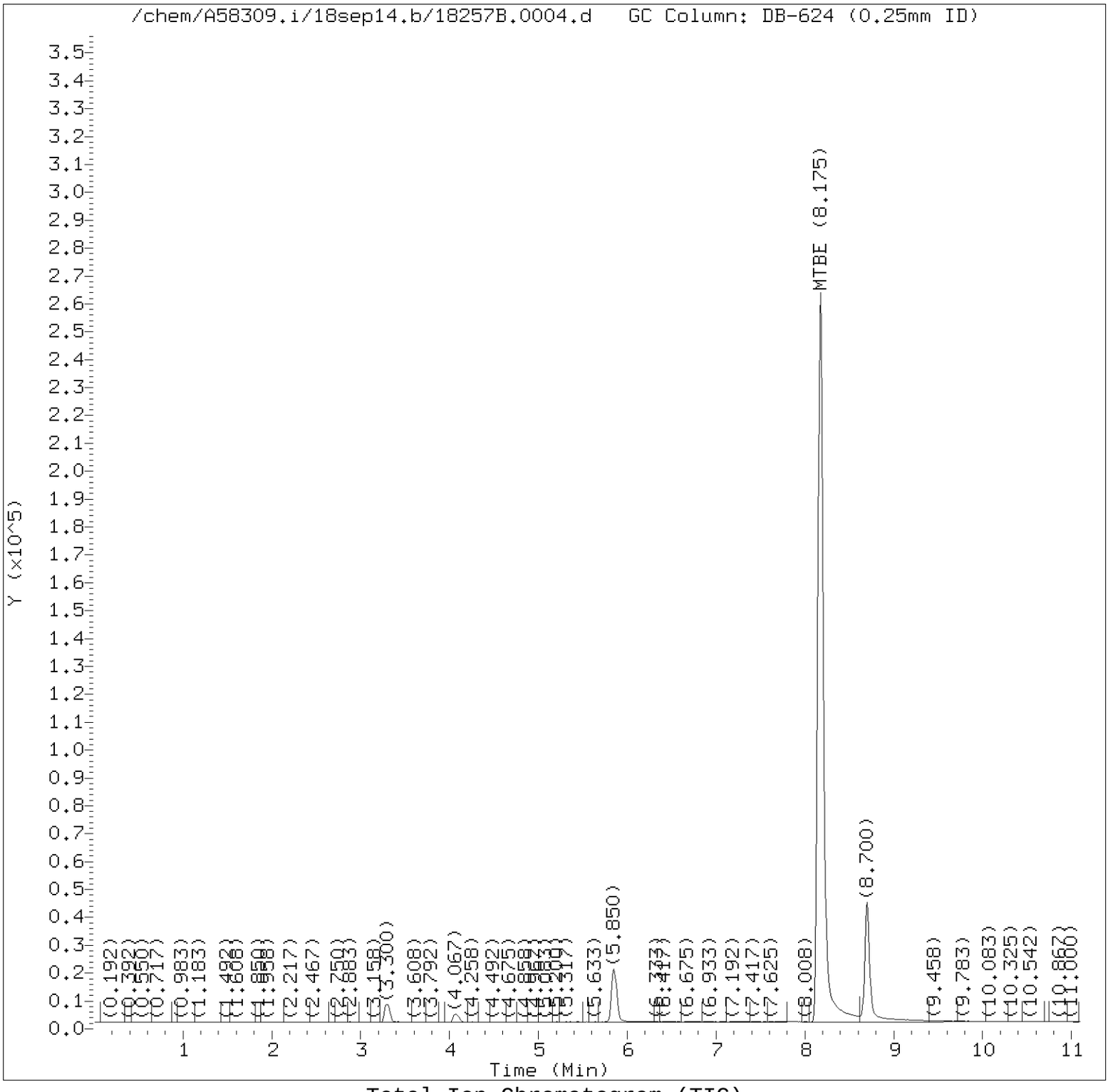
Data File: /chem/A58309.i/18sep14.b/18257.0004.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 11:23 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

Sample Name: VSTD100 Lab Sample ID: VSTD100

RT	Area	Peak Label(s) and Range	Compound #s
19.275	1122747	Decane	
20.358	1533		
20.608	6606		
20.825	672		
21.092	3099		
21.525	6265		

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

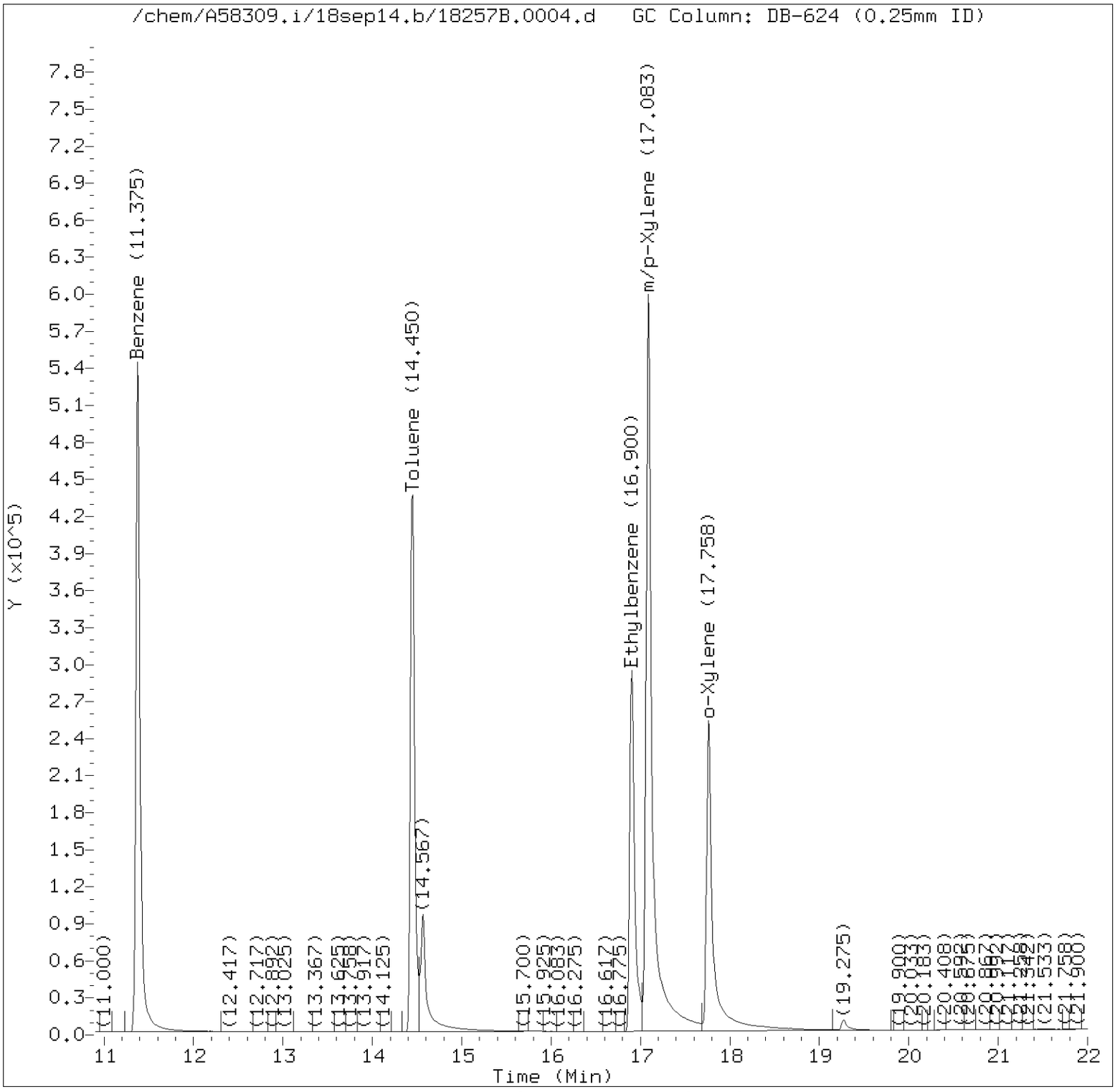
Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0004.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 11:23 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:10 ads07818

Sample Name: VSTD100 Lab Sample ID: VSTD100

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0004.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 11:23 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:10 ads07818

Sample Name: VSTD100 Lab Sample ID: VSTD100

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0004.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 11:23 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:10 ads07818

Sample Name: VSTD100 Lab Sample ID: VSTD100

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) MTBE	8.183(±0.03)	8.175	1234131	107.009
2) Benzene	11.383(±0.06)	11.375	1919418	106.007
3) Toluene	14.450(±0.03)	14.450	1428686	114.152
4) Ethylbenzene	16.900(±0.04)	16.900	1110111	112.299
5) m/p-Xylene	17.092(±0.04)	17.083	2951434	212.404
6) o-Xylene	17.767(±0.04)	17.758	1345462	110.411
7) Xylene (total)			4296896	322.815

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0004.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 11:23 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:10 ads07818

Sample Name: VSTD100 Lab Sample ID: VSTD100

RT	Area	Peak Label(s) and Range	Compound #s
0.192	977		
0.392	270		
0.550	662		
0.717	970		
0.983	998		
1.183	1470		
1.492	484		
1.608	1404		
1.850	392		
1.958	1063		
2.217	1195		
2.467	777		
2.750	487		
2.883	726		
3.158	301		
3.300	30146		
3.608	508		
3.792	352		
4.067	14189		
4.258	576		
4.492	547		
4.675	384		
4.858	325		
4.967	306		
5.083	417		
5.200	265		
5.317	977		
5.633	343		
5.850	86886		
6.333	372		
6.417	1267		
6.675	1172		
6.933	1128		
7.192	1037		
7.417	543		
7.625	813		
8.008	299		
8.175	1234132	MTBE	
8.700	201796		
9.458	6365		

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0004.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 11:23 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:10 ads07818

Sample Name: VSTD100 Lab Sample ID: VSTD100

RT	Area	Peak Label(s) and Range	Compound #s
9.783	3944		
10.083	1591		
10.325	669		
10.542	524		
10.867	660		
11.000	266		
11.375	1919419	Benzene	
12.417	4323		
12.717	1014		
12.892	485		
13.025	540		
13.367	1066		
13.625	552		
13.758	460		
13.917	1158		
14.125	313		
14.450	1428686	Toluene	
14.567	515313		
15.700	936		
15.925	638		
16.083	606		
16.275	293		
16.617	448		
16.775	347		
16.900	1110112	Ethylbenzene	
17.083	2951434	m/p-Xylene	
17.758	1345462	o-Xylene	
18.050	4296896		
19.275	48382		
19.900	291		
20.033	543		
20.183	277		
20.408	280		
20.592	897		
20.675	1155		
20.867	1311		
20.992	871		
21.117	1090		
21.258	988		
21.342	828		

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on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0004.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 11:23 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:10 ads07818

Sample Name: VSTD100 Lab Sample ID: VSTD100

RT	Area	Peak Label(s) and Range	Compound #s
21.533	3985		
21.758	391		
21.900	438		

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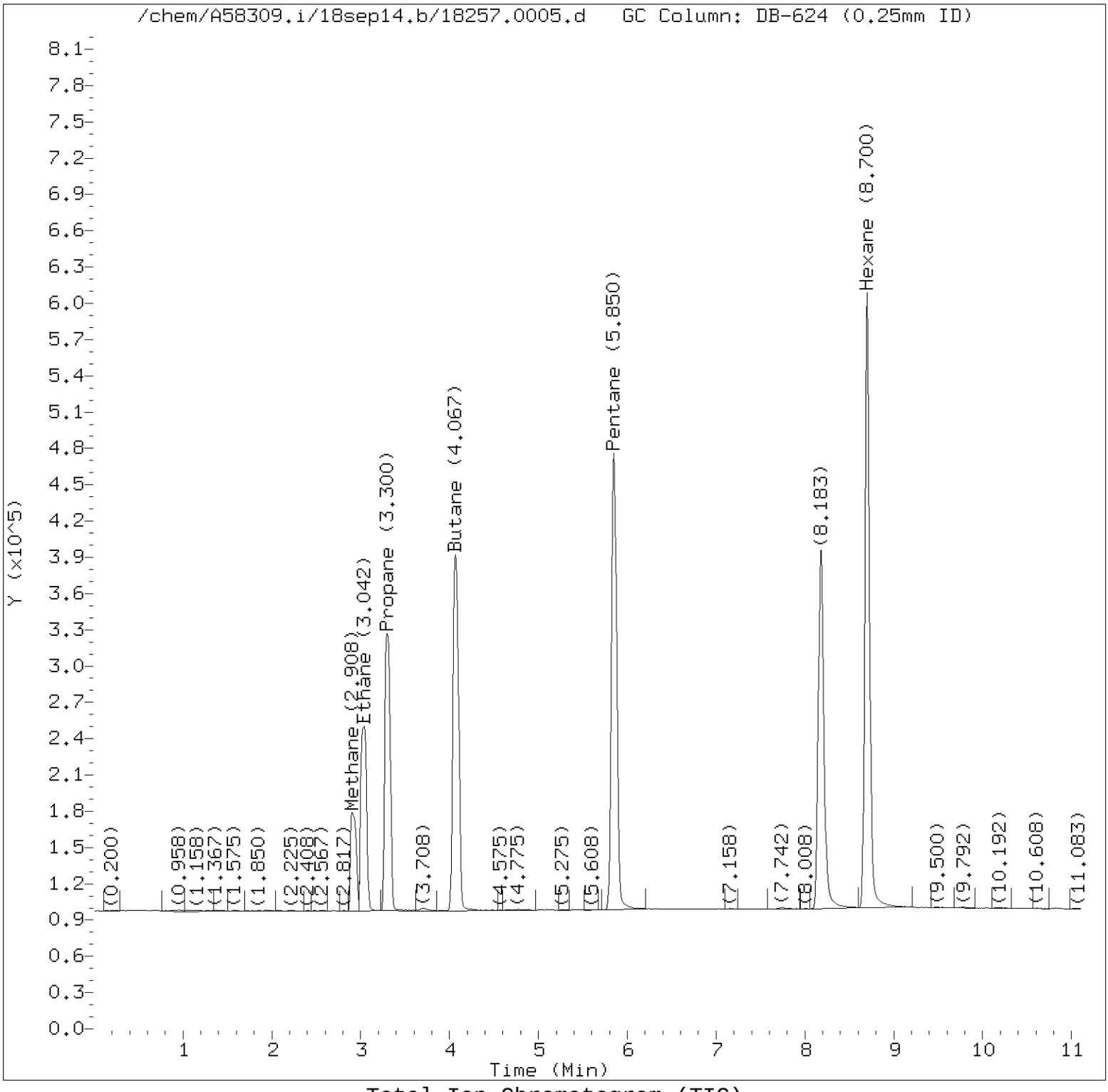
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0005.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:01 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

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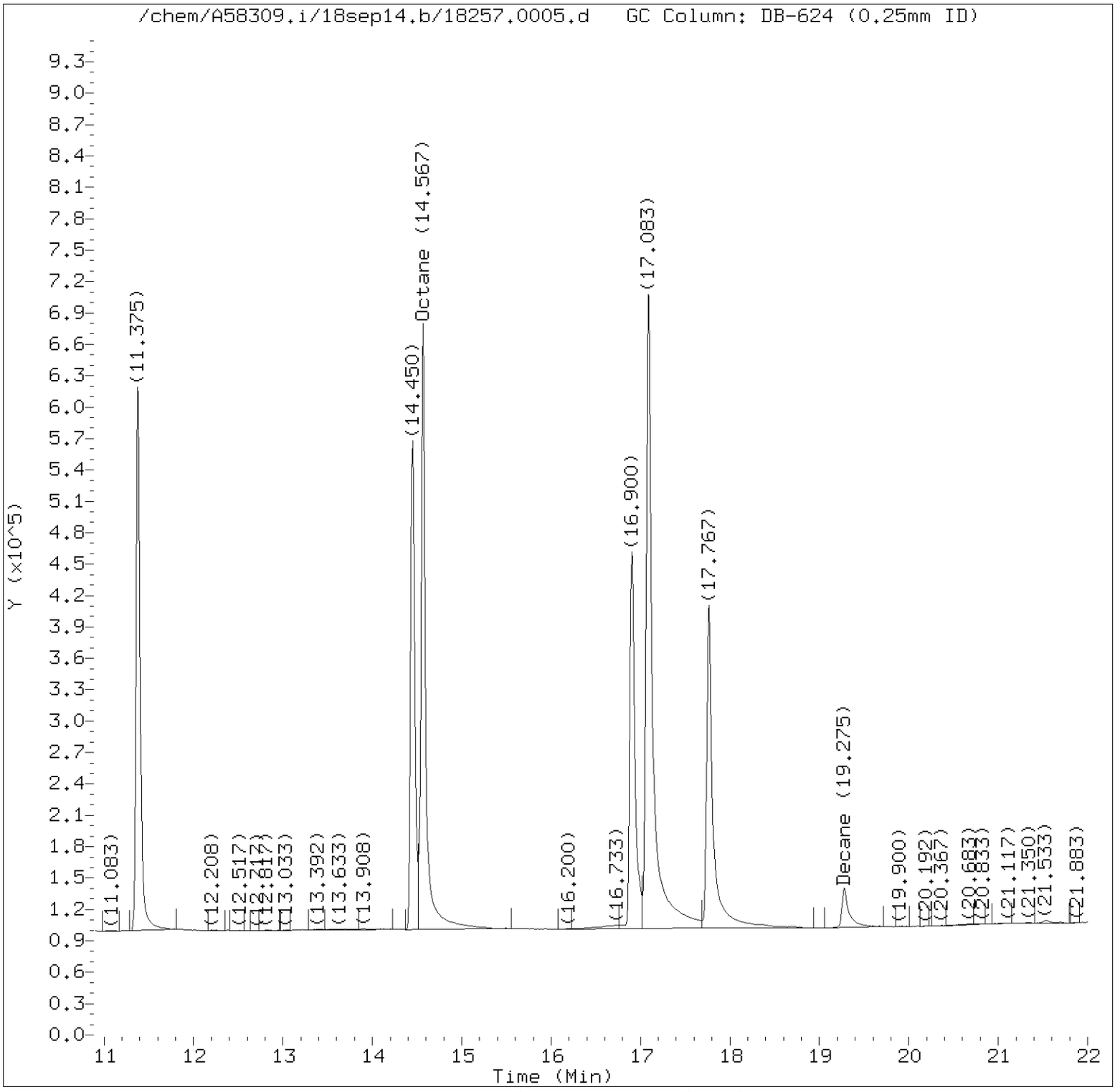
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0005.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:01 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0005.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:01 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

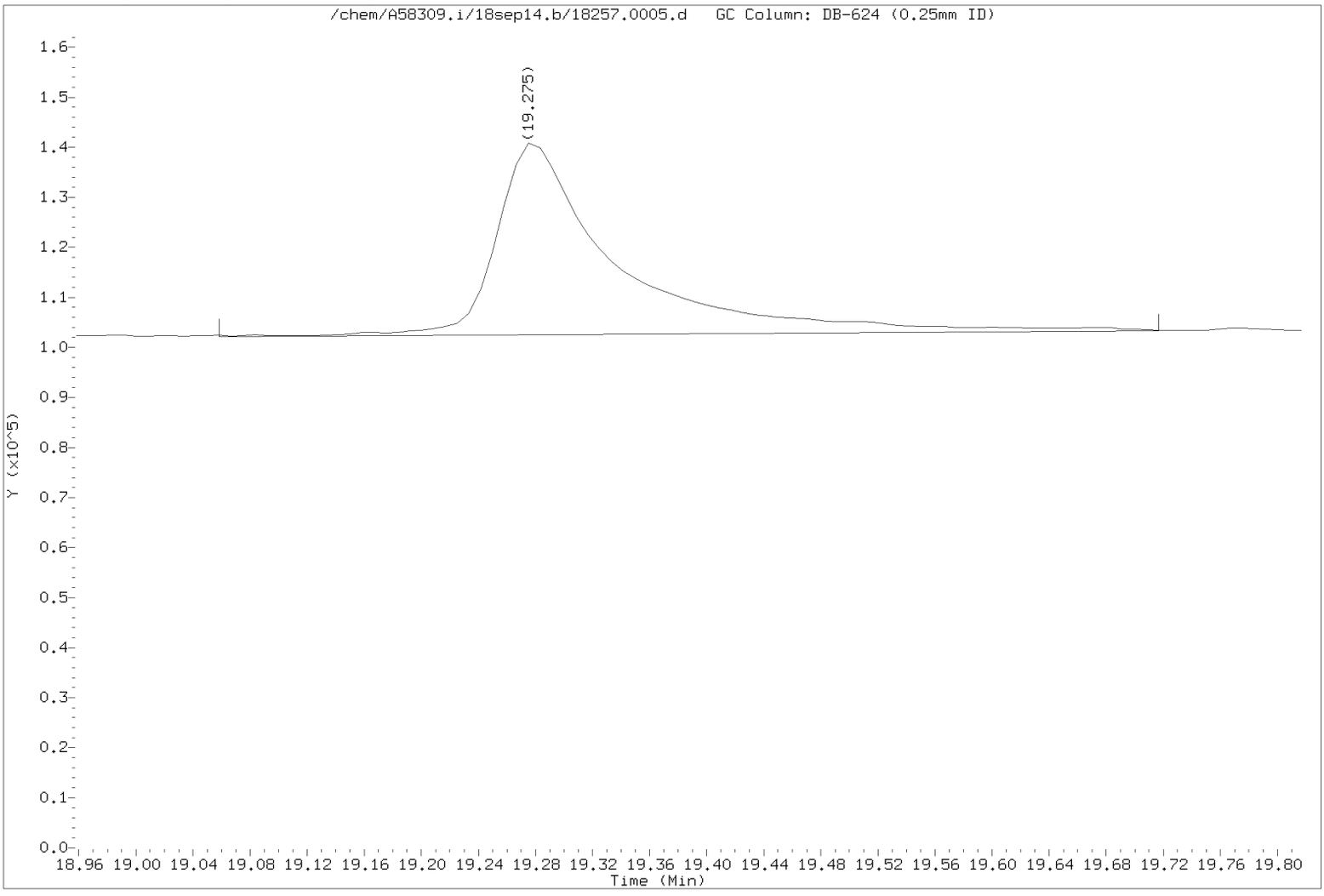
Sample Name: VSTD025 Lab Sample ID: VSTD025

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) Methane	2.908(±0.03)	2.908	368243	23.193
2) Ethane	3.042(±0.03)	3.042	693690	23.120
3) Propane	3.300(±0.03)	3.300	1021996	23.140
4) Butane	4.067(±0.03)	4.067	1363553	23.158
5) Pentane	5.850(±0.03)	5.850	1618902	22.992
7) Hexane	8.700(±0.03)	8.700	1872927	22.973
10) Octane	14.567(±0.03)	14.567	2217975	22.914
15) Decane	19.283(±0.03)	19.275	223282M	4.430

M = Compound was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257.0005.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:01 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compound Number : 15
Compound Name : Decane
Retention Time (minutes): 19.275
Area (flag) : 223282M
Concentration (ppm(v)) : 4.4305
Integration start time : 19.058 Integration stop time: 19.717
Y at integration start : 102183 Y at integration end: 103349

Reason for manual integration: missed peak

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:12.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257.0005.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:01 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:05
Date, time and analyst ID of latest file update: 14-Sep-2018 15:05 jbs01304

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compound Number : 15
Compound Name : Decane
Expected RT (minutes) : 19.283
Quant Ion : 100.00

Digitally signed by Alexander D. Sechrist on 09/14/2018 at 15:25.

Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0005.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:01 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

RT	Area	Peak Label(s) and Range	Compound #s
0.200	2937		
0.958	8687		
1.158	14907		
1.367	7127		
1.575	6154		
1.850	11840		
2.225	9244		
2.408	2195		
2.567	4962		
2.817	1820		
2.908	368243	Methane	
3.042	693690	Ethane	
3.300	1021996	Propane	
3.708	13960		
4.067	1363554	Butane	
4.575	1331		
4.775	11650		
5.275	1618		
5.608	1479		
5.850	1618903	Pentane	
7.158	2374		
7.742	9278		
8.008	1350		
8.183	1351213		
8.700	1872927	Hexane	
9.500	4892		
9.792	4178		
10.192	4255		
10.608	2232		
11.083	3977		
11.375	1754407		
12.208	3065		
12.517	1349		
12.717	779		
12.817	2824		
13.033	994		
13.392	3726		
13.633	11379		
13.908	9313		
14.450	1497289		

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

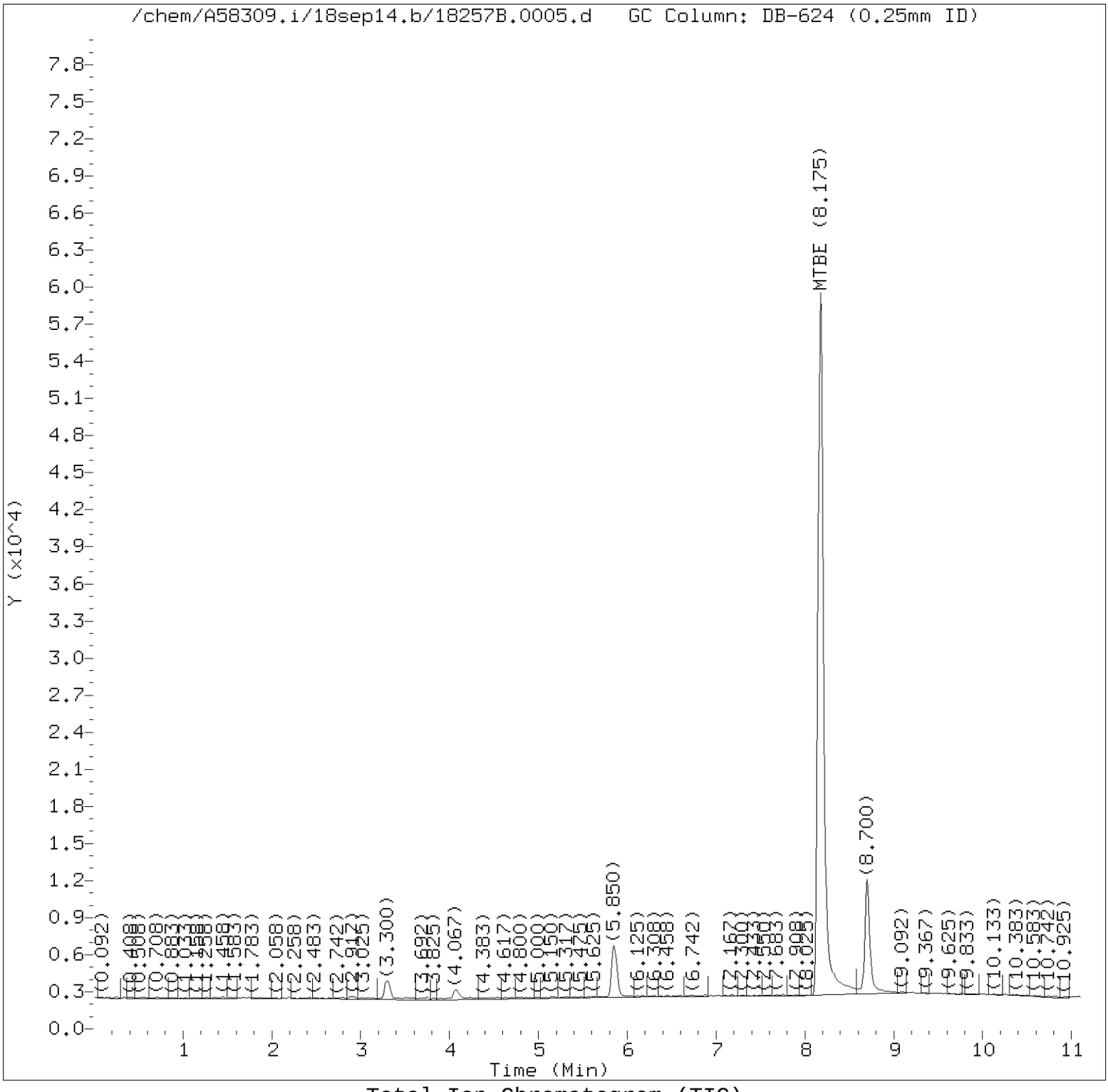
Data File: /chem/A58309.i/18sep14.b/18257.0005.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:01 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

RT	Area	Peak Label(s) and Range	Compound #s
14.567	2217975	Octane	
16.200	2451		
16.733	54200		
16.900	1446739		
17.083	3215615		
17.767	1610262		
19.275	223282	Decane	
19.900	2798		
20.192	1182		
20.367	1473		
20.683	5380		
20.833	1737		
21.117	2158		
21.350	5091		
21.533	17864		
21.883	700		

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

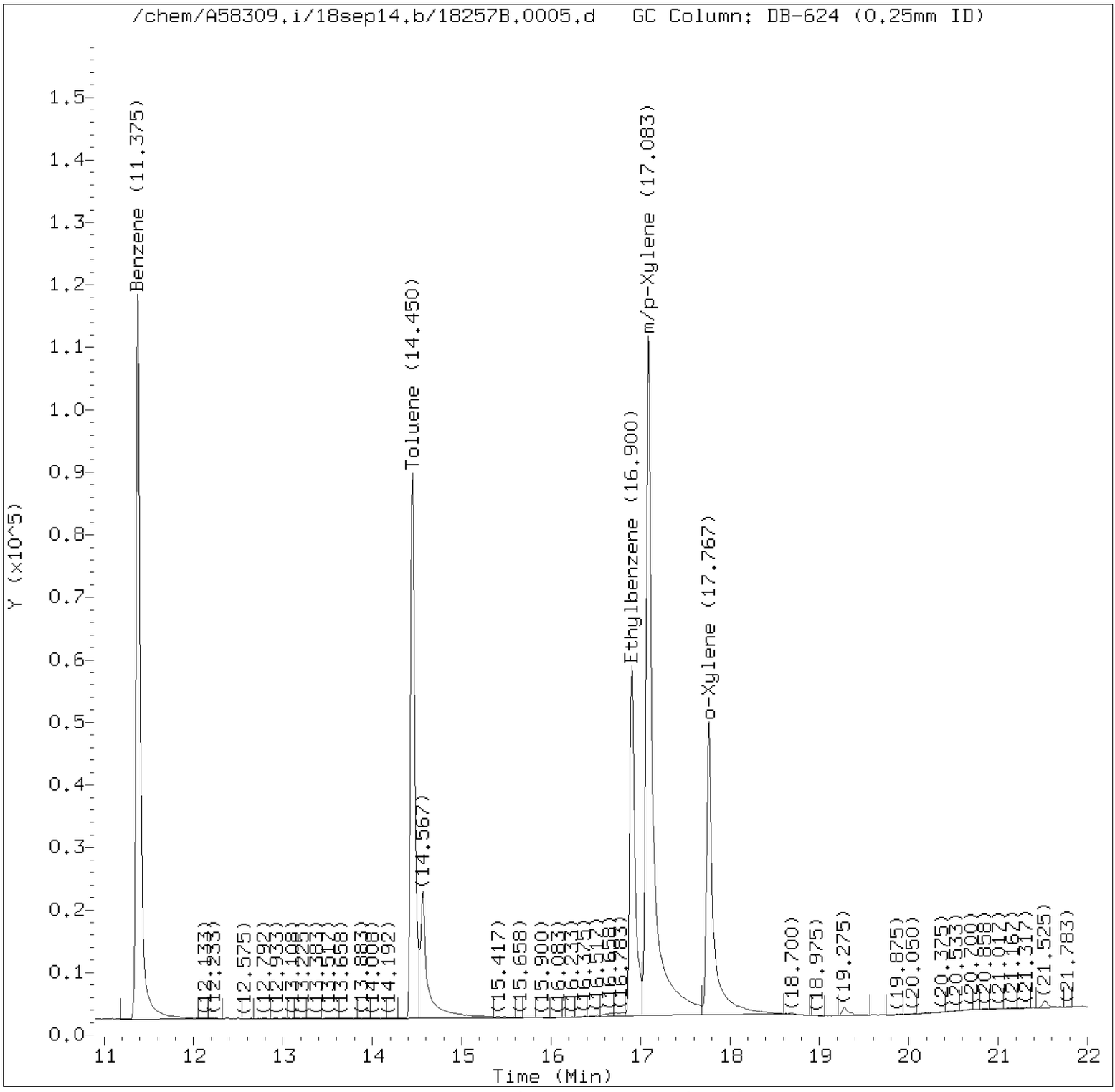
Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0005.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:01 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:10 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0005.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:01 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:10 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0005.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:01 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:10 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) MTBE	8.183(±0.03)	8.175	267616	23.204
2) Benzene	11.383(±0.06)	11.375	421722	23.291
3) Toluene	14.450(±0.03)	14.450	292377	23.361
4) Ethylbenzene	16.900(±0.04)	16.900	226121	22.875
5) m/p-Xylene	17.092(±0.04)	17.083	602618	43.368
6) o-Xylene	17.767(±0.04)	17.767	251786	20.662
7) Xylene (total)			854404	64.030

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0005.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:01 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:10 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

RT	Area	Peak Label(s) and Range	Compound #s
0.092	1019		
0.408	467		
0.508	608		
0.708	753		
0.883	363		
1.033	312		
1.158	484		
1.258	304		
1.458	812		
1.583	486		
1.783	658		
2.058	290		
2.258	732		
2.483	787		
2.742	751		
2.917	1027		
3.025	1286		
3.300	9141		
3.692	1300		
3.825	433		
4.067	6497		
4.383	1698		
4.617	783		
4.800	1031		
5.000	341		
5.150	810		
5.317	542		
5.475	630		
5.625	535		
5.850	19844		
6.125	642		
6.308	480		
6.458	1088		
6.742	1040		
7.167	570		
7.300	257		
7.433	383		
7.550	334		
7.683	621		
7.908	309		

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0005.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:01 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:10 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

RT	Area	Peak Label(s) and Range	Compound #s
8.025	279		
8.175	267616	MTBE	
8.700	40822		
9.092	525		
9.367	278		
9.625	407		
9.833	298		
10.133	304		
10.383	740		
10.583	545		
10.742	860		
10.925	418		
11.375	421722	Benzene	
12.133	891		
12.233	859		
12.575	386		
12.792	742		
12.933	819		
13.108	333		
13.225	601		
13.383	820		
13.517	1059		
13.658	1264		
13.883	841		
14.008	849		
14.192	413		
14.450	292377	Toluene	
14.567	121244		
15.417	2504		
15.658	592		
15.900	527		
16.083	399		
16.233	336		
16.375	398		
16.517	1325		
16.658	3188		
16.783	3644		
16.900	226122	Ethylbenzene	
17.083	602618	m/p-Xylene	
17.767	251786	o-Xylene	

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

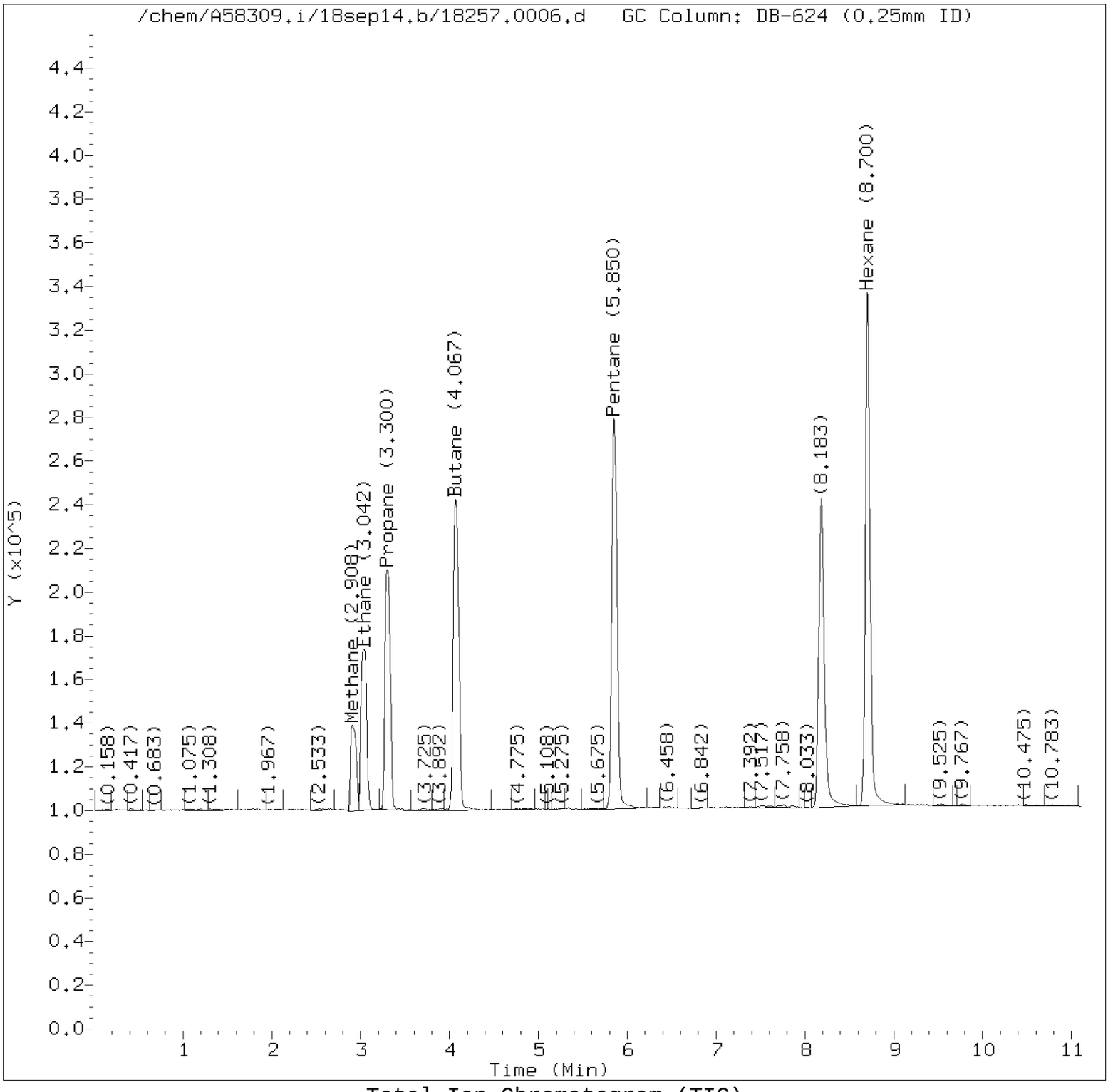
Data File: /chem/A58309.i/18sep14.b/18257B.0005.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:01 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:10 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

RT	Area	Peak Label(s) and Range	Compound #s
18.050	854405		
18.700	1210		
18.975	373		
19.275	7446		
19.875	471		
20.050	420		
20.375	1031		
20.533	530		
20.700	520		
20.858	282		
21.017	502		
21.167	547		
21.317	437		
21.525	5138		
21.783	278		

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

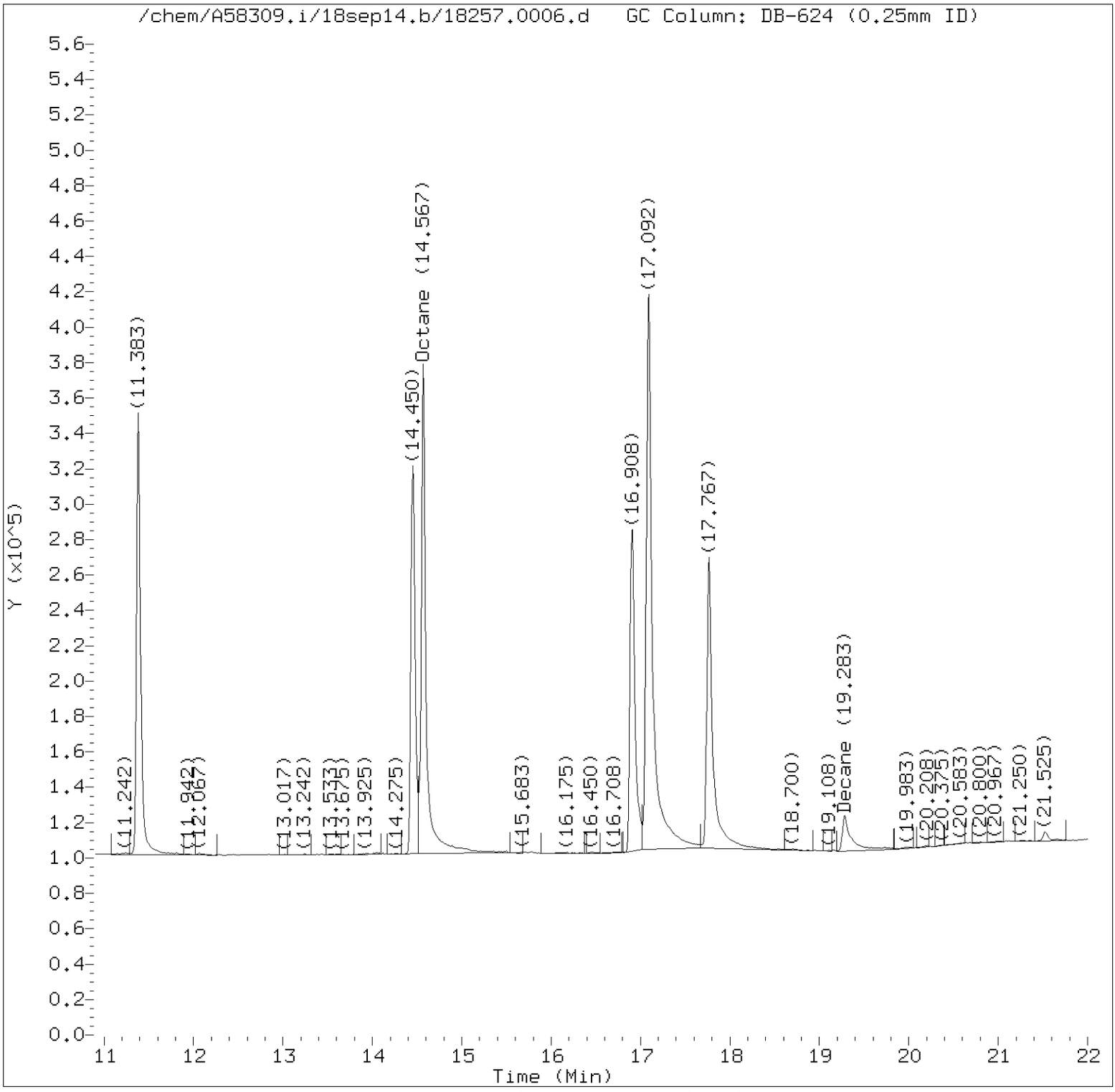
Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0006.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:31 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0006.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:31 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0006.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:31 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

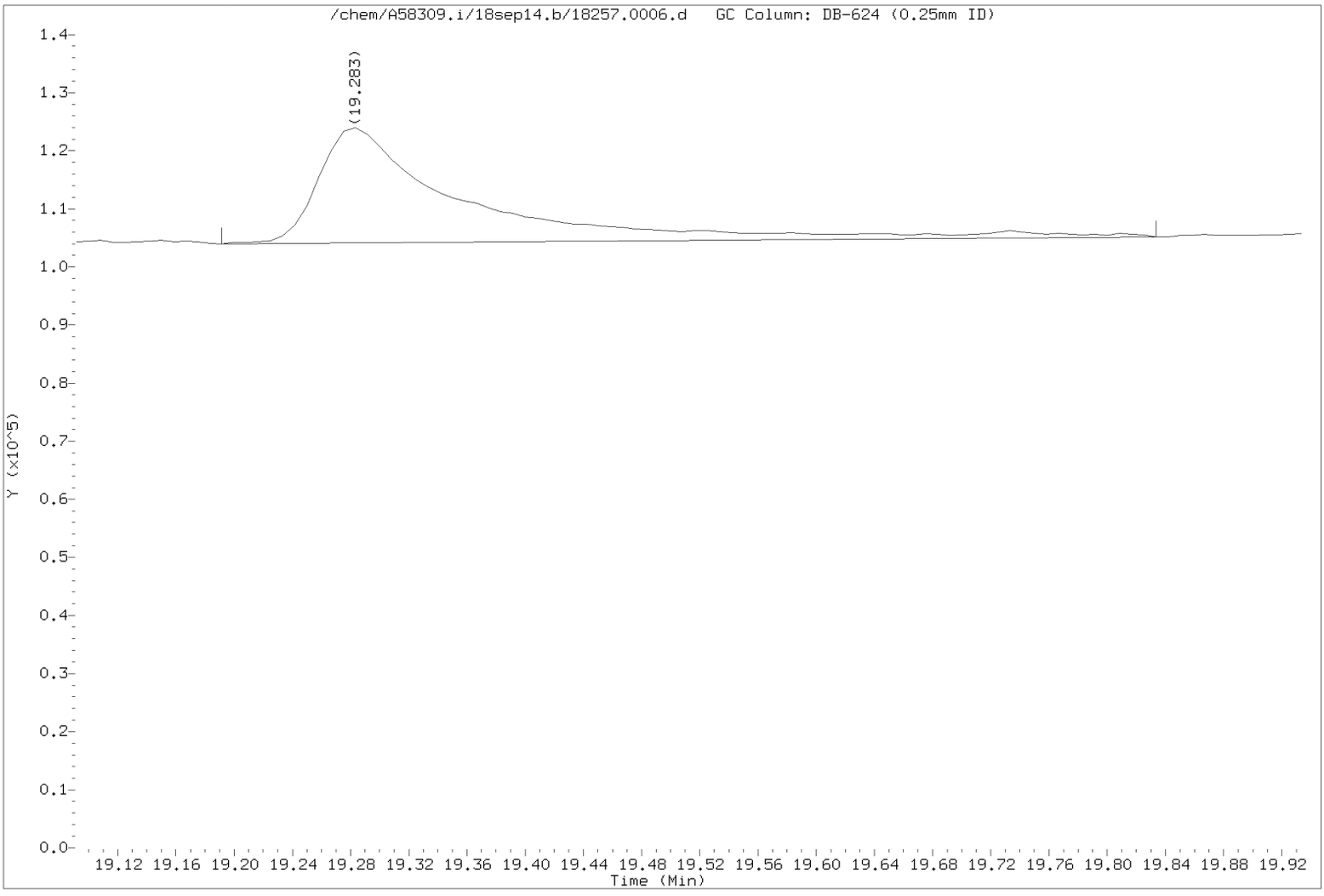
Sample Name: VSTD010 Lab Sample ID: VSTD010

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) Methane	2.908(±0.03)	2.908	174226	10.628
2) Ethane	3.042(±0.03)	3.042	330988	10.665
3) Propane	3.300(±0.03)	3.300	486012	10.648
4) Butane	4.067(±0.03)	4.067	646874	10.637
5) Pentane	5.850(±0.03)	5.850	765973	10.569
7) Hexane	8.700(±0.03)	8.700	880424	10.519
10) Octane	14.567(±0.03)	14.567	1108370	10.922
15) Decane	19.283(±0.03)	19.283	139629M	2.455

M = Compound was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257.0006.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:31 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 15
Compound Name : Decane
Retention Time (minutes): 19.283
Area (flag) : 139629M
Concentration (ppm(v)) : 2.4553
Integration start time : 19.192 Integration stop time: 19.833
Y at integration start : 103973 Y at integration end: 105131

Reason for manual integration: missed peak

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:12.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257.0006.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:31 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:05
Date, time and analyst ID of latest file update: 14-Sep-2018 15:05 jbs01304

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 15
Compound Name : Decane
Expected RT (minutes) : 19.283
Quant Ion : 100.00

Digitally signed by Alexander D. Sechrist on 09/14/2018 at 15:25.

Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0006.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:31 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

RT	Area	Peak Label(s) and Range	Compound #s
0.158	4533		
0.417	4124		
0.683	1732		
1.075	6571		
1.308	6513		
1.967	2652		
2.533	6229		
2.908	174226	Methane	
3.042	330988	Ethane	
3.300	486012	Propane	
3.725	7142		
3.892	4406		
4.067	646875	Butane	
4.775	4794		
5.108	336		
5.275	1485		
5.675	3626		
5.850	765973	Pentane	
6.458	3039		
6.842	2114		
7.392	1733		
7.517	6259		
7.758	10024		
8.033	917		
8.183	634974		
8.700	880425	Hexane	
9.525	5196		
9.767	4072		
10.475	3498		
10.783	6093		
11.242	6424		
11.383	844822		
11.942	2584		
12.067	5621		
13.017	1054		
13.242	2769		
13.533	3611		
13.675	1341		
13.925	8040		
14.275	2005		

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

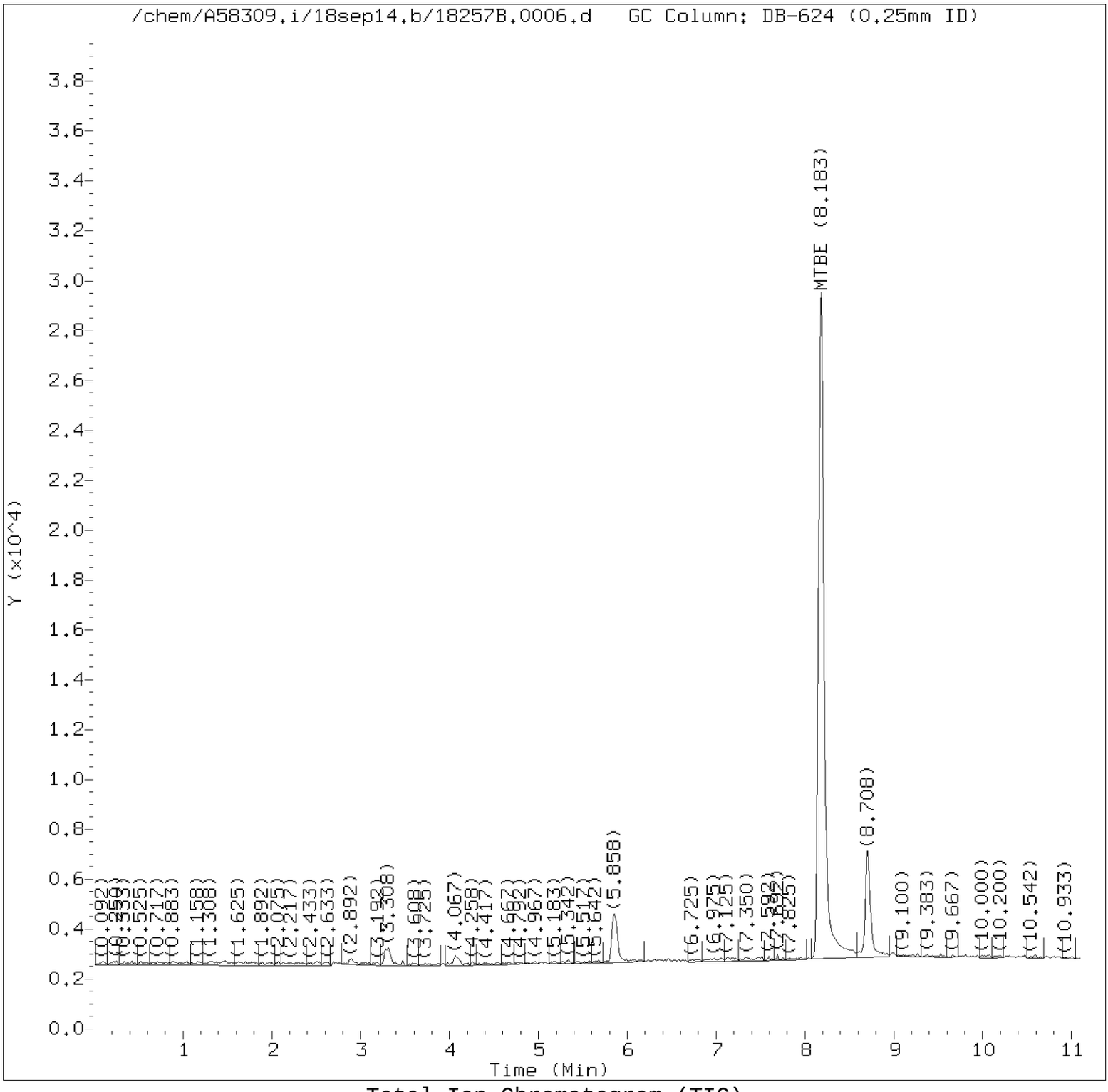
Data File: /chem/A58309.i/18sep14.b/18257.0006.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:31 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

RT	Area	Peak Label(s) and Range	Compound #s
14.450	714700		
14.567	1108371	Octane	
15.683	2494		
16.175	8911		
16.450	4274		
16.708	3143		
16.908	702124		
17.092	1594738		
17.767	790710		
18.700	5244		
19.108	1474		
19.283	139630	Decane	
19.983	3922		
20.208	1983		
20.375	1116		
20.583	2032		
20.800	2328		
20.967	2678		
21.250	4223		
21.525	25361		

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

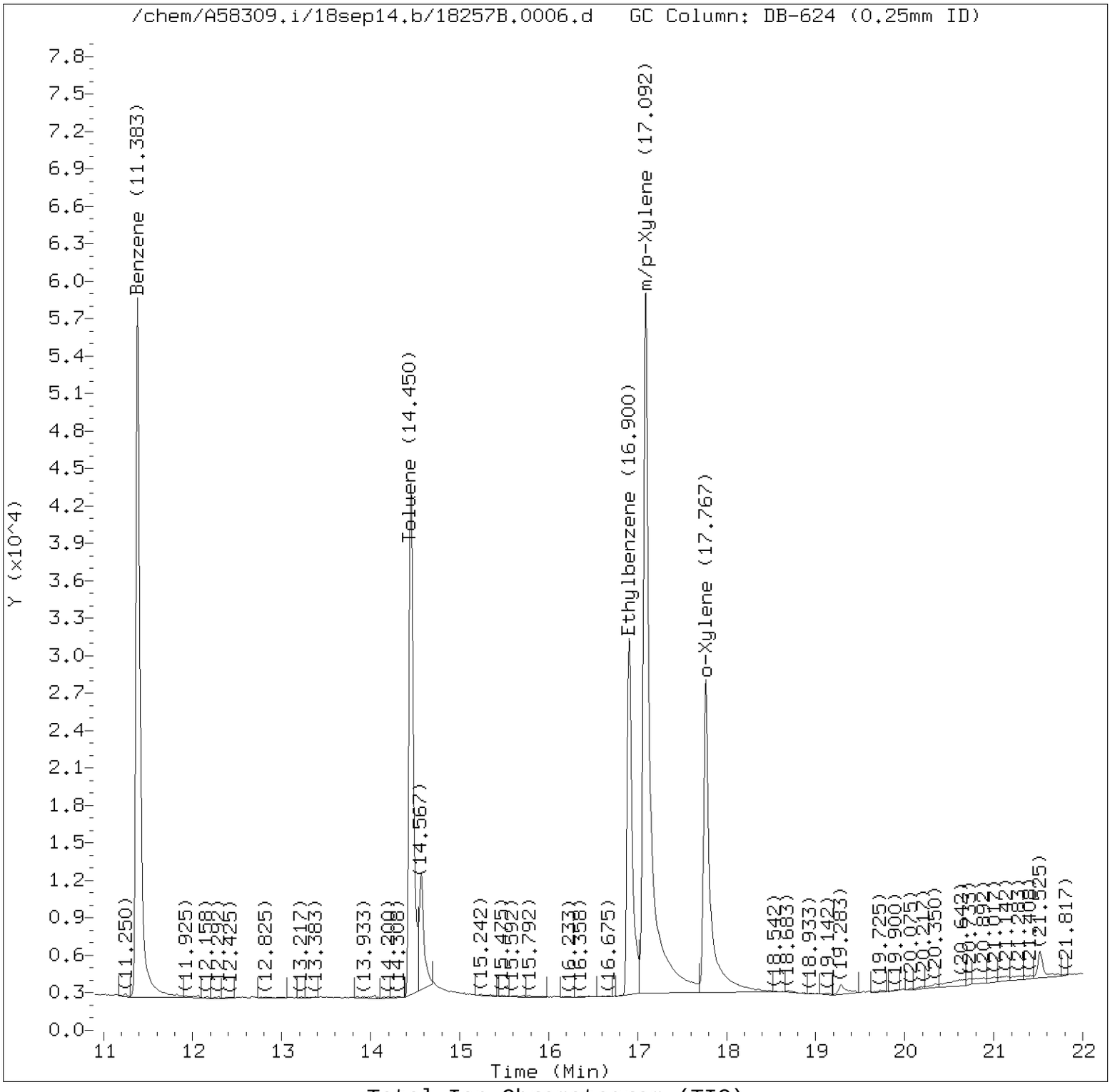
Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0006.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:31 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:11 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0006.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:31 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:11 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0006.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:31 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:11 ads07818

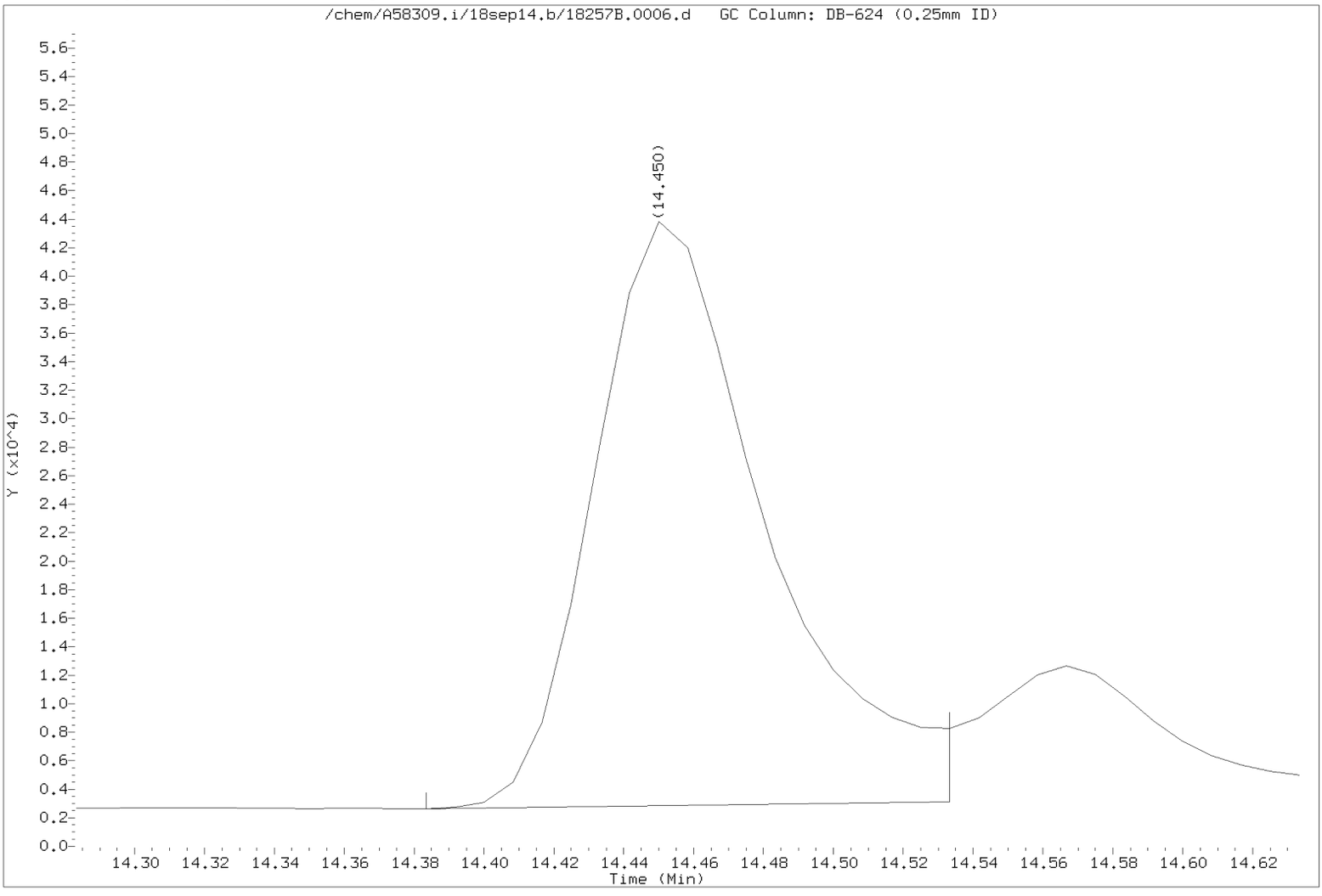
Sample Name: VSTD010 Lab Sample ID: VSTD010

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) MTBE	8.183(±0.03)	8.183	126032	10.928
2) Benzene	11.383(±0.06)	11.383	199505	11.018
3) Toluene	14.450(±0.03)	14.450	141835M	9.995
4) Ethylbenzene	16.900(±0.04)	16.900	112722	11.403
5) m/p-Xylene	17.092(±0.04)	17.092	310916	22.375
6) o-Xylene	17.767(±0.04)	17.767	133147	10.926
7) Xylene (total)			444063	33.302

M = Compound was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257B.0006.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:31 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:11 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 3
Compound Name : Toluene
Retention Time (minutes): 14.450
Area (flag) : 141835M
Concentration (ppm(v)) : 9.9951
Integration start time : 14.383 Integration stop time: 14.533
Y at integration start : 2627 Y at integration end: 3131

Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:12.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257B.0006.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:31 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:10 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 3
Compound Name : Toluene
Retention Time (minutes): 14.450
Area : 176817
Concentration (ppm(v)) : 13.3786
Integration start time : 14.383 Integration stop time: 14.700
Y at integration start : 2627 Y at integration end: 3718

Digitally signed by Alexander D. Sechrist on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0006.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:31 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:11 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

RT	Area	Peak Label(s) and Range	Compound #s
0.092	530		
0.250	693		
0.333	889		
0.525	737		
0.717	1212		
0.883	1380		
1.158	894		
1.308	2444		
1.625	1816		
1.892	955		
2.075	403		
2.217	1745		
2.433	1106		
2.633	691		
2.892	1741		
3.192	489		
3.308	4252		
3.608	521		
3.725	816		
4.067	2408		
4.258	298		
4.417	814		
4.667	376		
4.792	361		
4.967	371		
5.183	442		
5.342	529		
5.517	531		
5.642	405		
5.858	10012		
6.725	682		
6.975	1225		
7.125	834		
7.350	1597		
7.592	385		
7.692	487		
7.825	698		
8.183	126032	MTBE	
8.708	18939		
9.100	789		

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0006.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:31 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:11 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

RT	Area	Peak Label(s) and Range	Compound #s
9.383	965		
9.667	260		
10.000	620		
10.200	383		
10.542	537		
10.933	272		
11.250	663		
11.383	199506	Benzene	
11.925	1019		
12.158	321		
12.292	478		
12.425	473		
12.825	690		
13.217	277		
13.383	276		
13.933	1480		
14.200	476		
14.308	481		
14.450	141836M	Toluene	
14.567	37711M		
15.242	756		
15.475	431		
15.592	873		
15.792	751		
16.233	382		
16.358	654		
16.675	395		
16.900	112722	Ethylbenzene	
17.092	310916	m/p-Xylene	
17.767	133148	o-Xylene	
18.050	444063		
18.542	355		
18.683	1098		
18.933	342		
19.142	575		
19.283	4726		
19.725	552		
19.900	267		
20.075	378		
20.217	961		

M = Peak was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0006.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:31 Analyst ID: ADS07818

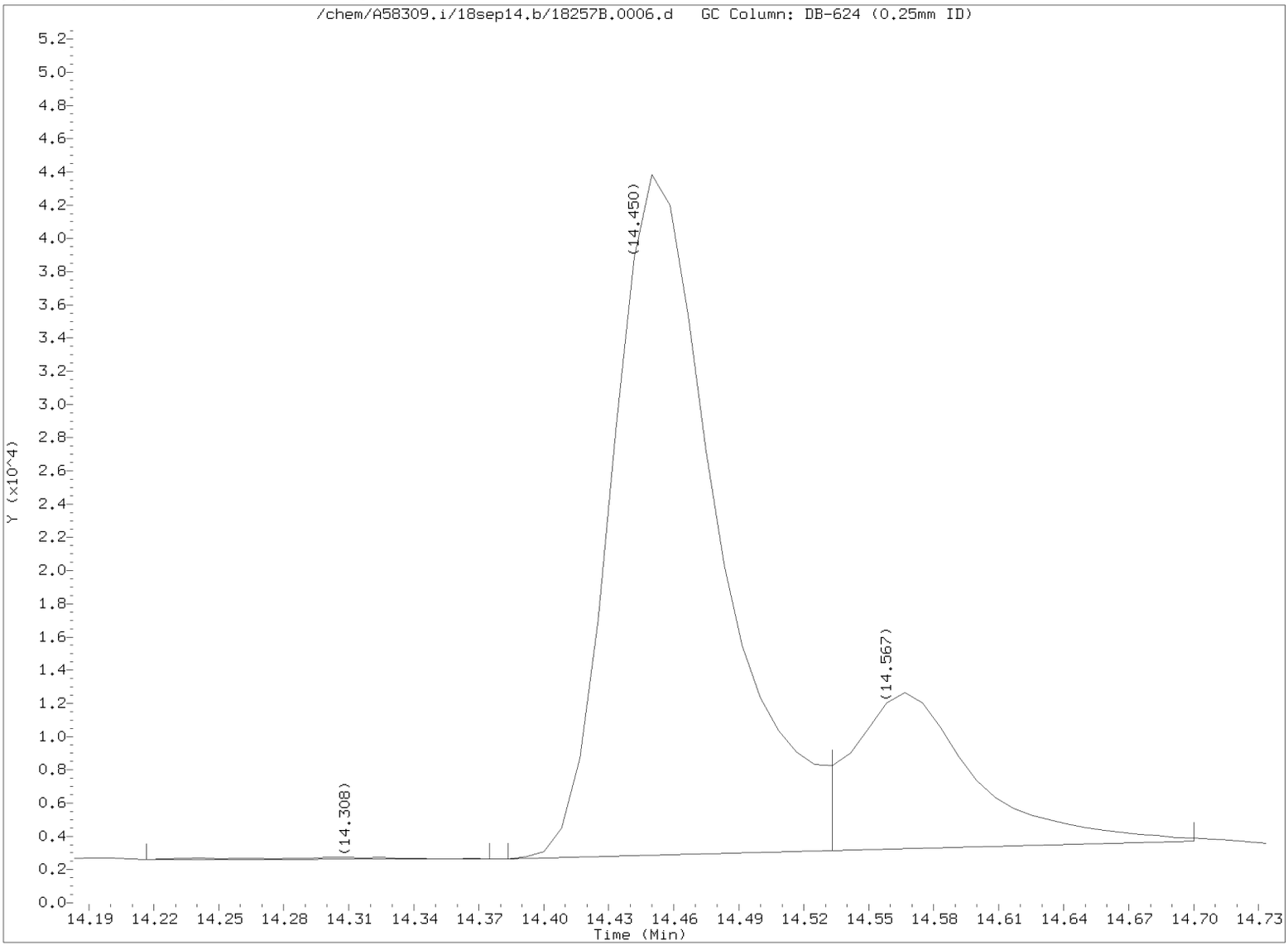
Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:11 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

RT	Area	Peak Label(s) and Range	Compound #s
20.350	1960		
20.642	7045		
20.733	1786		
20.892	3906		
21.017	2566		
21.142	2917		
21.283	2520		
21.408	1648		
21.525	10193		
21.817	429		

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257B.0006.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:31 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:11 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Retention Time (minutes): 14.450
Area (flag) : 141836M
Integration start time : 14.383 Integration stop time: 14.533
Y at integration start : 2627 Y at integration end: 3131

Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:12.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257B.0006.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:31 Analyst ID: ADS07818

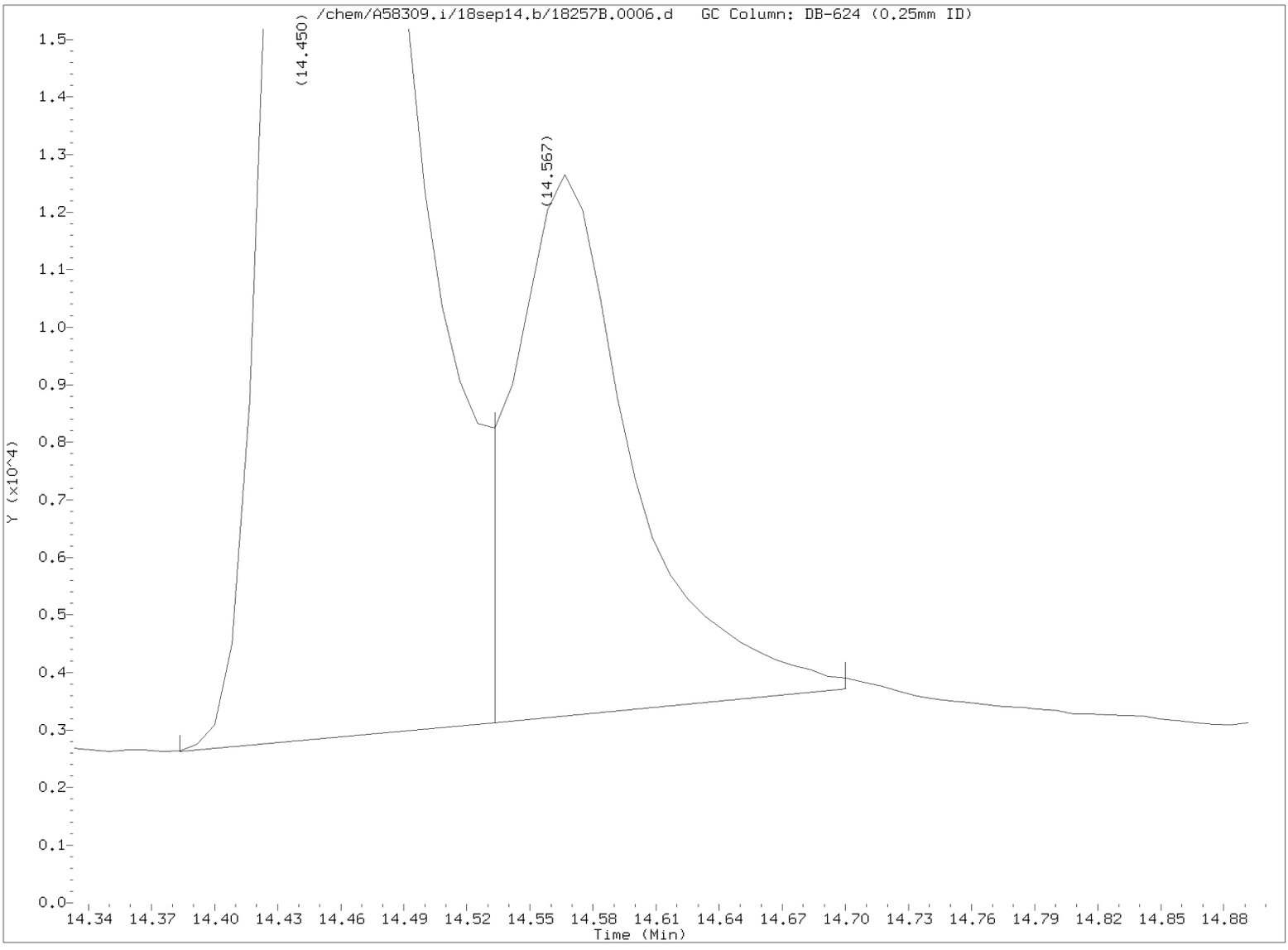
Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:10 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

No signal was originally integrated at 14.450 minutes.

Digitally signed by Alexander D. Sechrist on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257B.0006.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:31 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:11 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Retention Time (minutes): 14.567
Area (flag) : 37711M
Integration start time : 14.533 Integration stop time: 14.700
Y at integration start : 3131 Y at integration end: 3718

Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:12.
PARALLAX ID: jbs01304

Original Integration of Signal

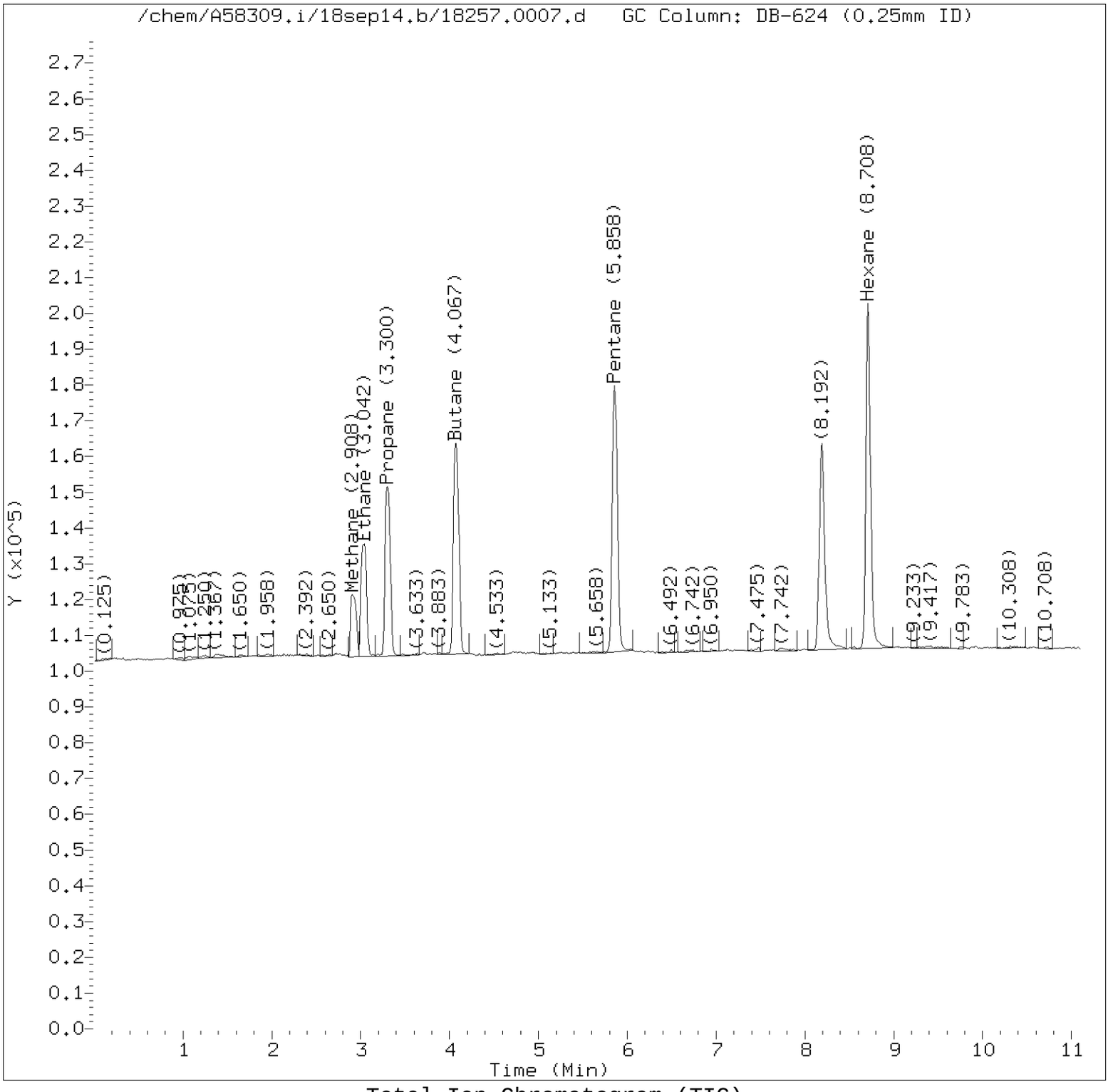
Data File: /chem/A58309.i/18sep14.b/18257B.0006.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 12:31 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:10 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

No signal was originally integrated at 14.567 minutes.

Digitally signed by Alexander D. Sechrist on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

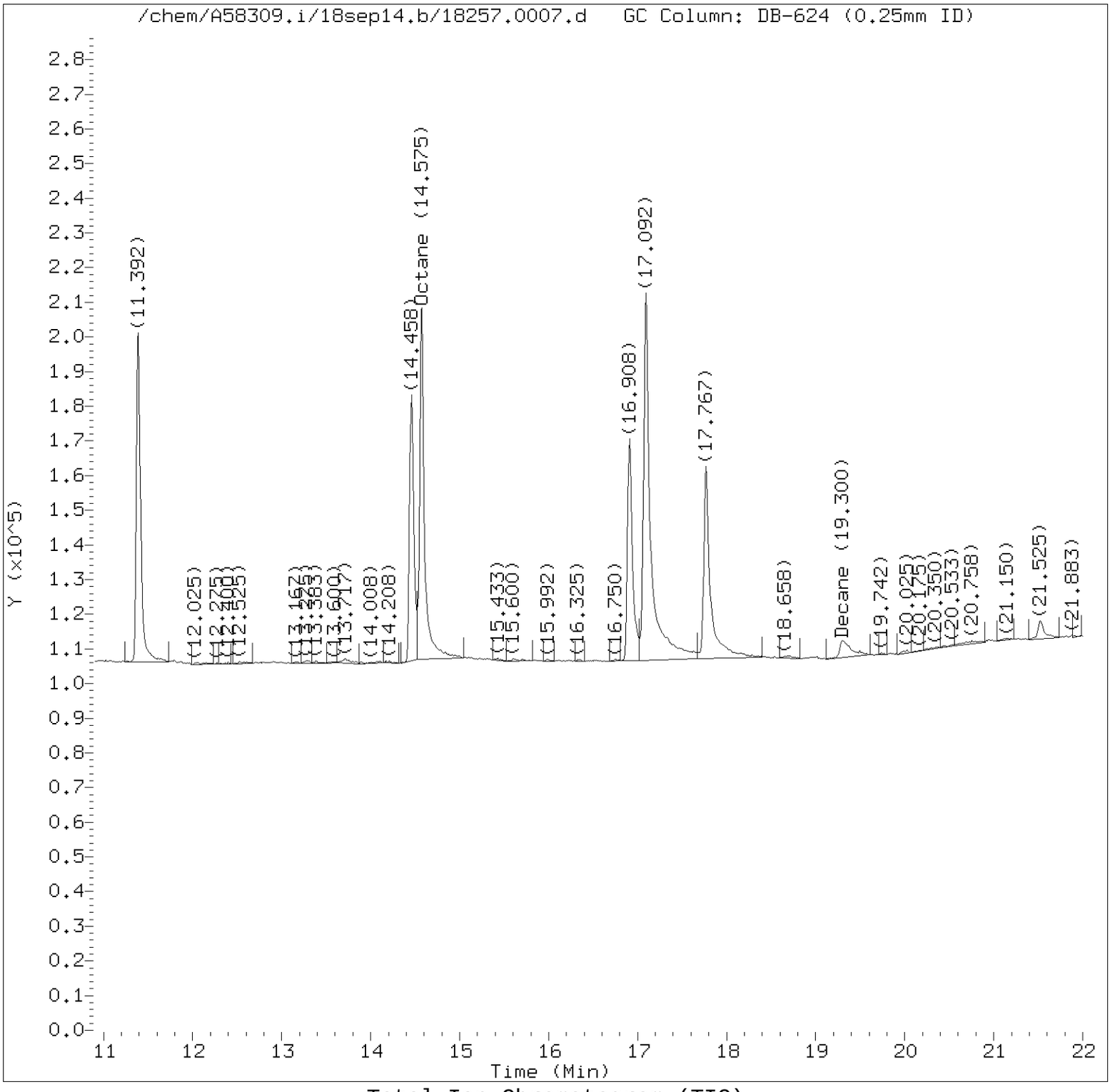
Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0007.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:00 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0007.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:00 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0007.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:00 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

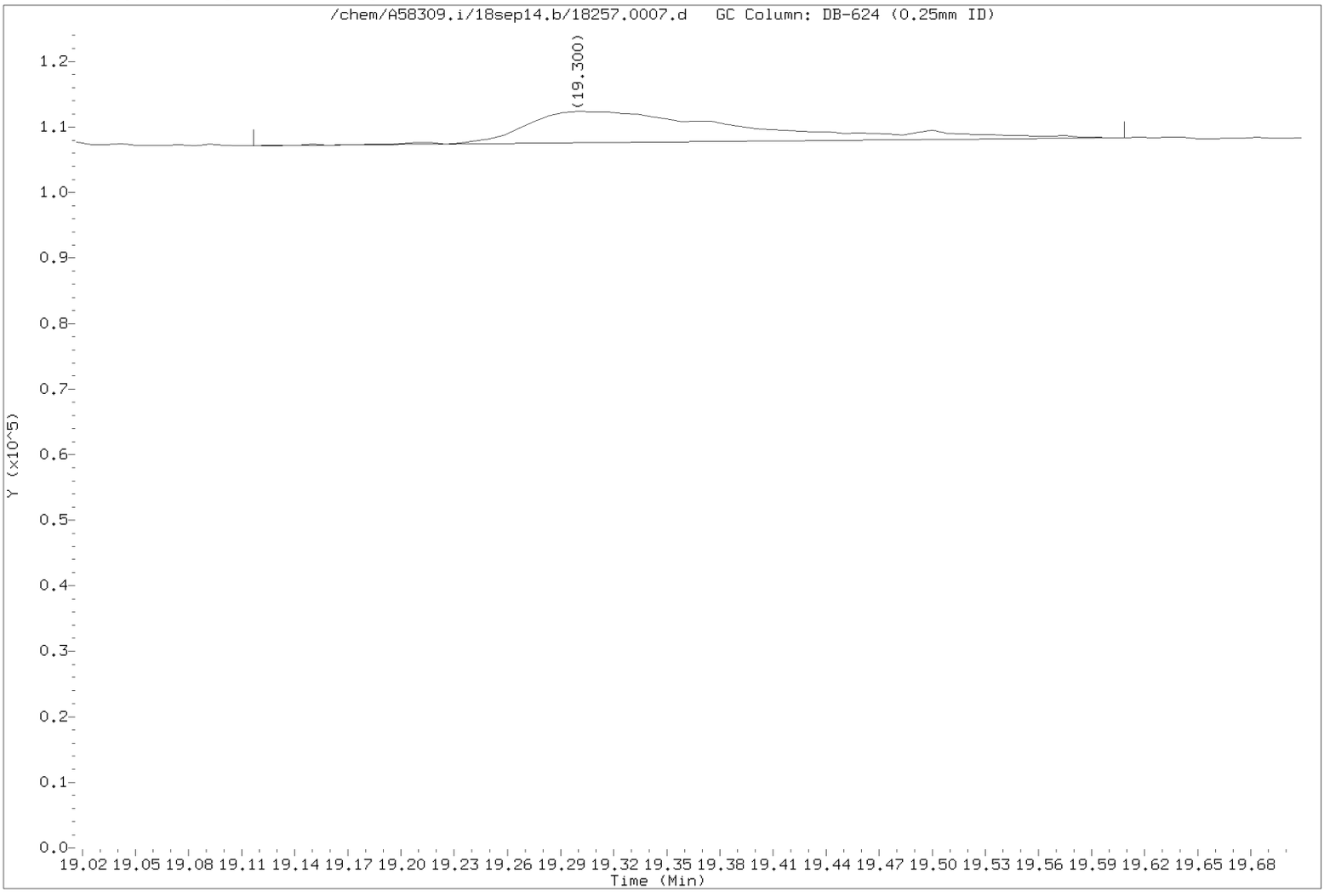
Sample Name: VSTD005 Lab Sample ID: VSTD005

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) Methane	2.908(±0.03)	2.908	79038	4.865
2) Ethane	3.042(±0.03)	3.042	139777	4.618
3) Propane	3.300(±0.03)	3.300	205074	4.610
4) Butane	4.067(±0.03)	4.067	262225	4.465
5) Pentane	5.850(±0.03)	5.858	309376	4.431
7) Hexane	8.700(±0.03)	8.708	356400	4.422
10) Octane	14.567(±0.03)	14.575	404233	4.197
15) Decane	19.283(±0.03)	19.300	43041M	0.806

M = Compound was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257.0007.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:00 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compound Number : 15
Compound Name : Decane
Retention Time (minutes): 19.300
Area (flag) : 43041M
Concentration (ppm(v)) : 0.8058
Integration start time : 19.117 Integration stop time: 19.608
Y at integration start : 107118 Y at integration end: 108351

Reason for manual integration: missed peak

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:12.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257.0007.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:00 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:05
Date, time and analyst ID of latest file update: 14-Sep-2018 15:05 jbs01304

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compound Number : 15
Compound Name : Decane
Expected RT (minutes) : 19.283
Quant Ion : 100.00

Digitally signed by Alexander D. Sechrist on 09/14/2018 at 15:25.

Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0007.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:00 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

RT	Area	Peak Label(s) and Range	Compound #s
0.125	3338		
0.975	3289		
1.075	5583		
1.250	3657		
1.367	7316		
1.650	2241		
1.958	3554		
2.392	2300		
2.650	1594		
2.908	79038	Methane	
3.042	139778	Ethane	
3.300	205074	Propane	
3.633	2672		
3.883	1015		
4.067	262225	Butane	
4.533	1895		
5.133	1632		
5.658	3438		
5.858	309376	Pentane	
6.492	2934		
6.742	4420		
6.950	2811		
7.475	4190		
7.742	5514		
8.192	257599		
8.708	356401	Hexane	
9.233	662		
9.417	8238		
9.783	2067		
10.308	5004		
10.708	1950		
11.392	332762		
12.025	4887		
12.275	687		
12.400	1415		
12.525	3245		
13.167	1280		
13.275	2986		
13.383	1889		
13.600	1200		

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

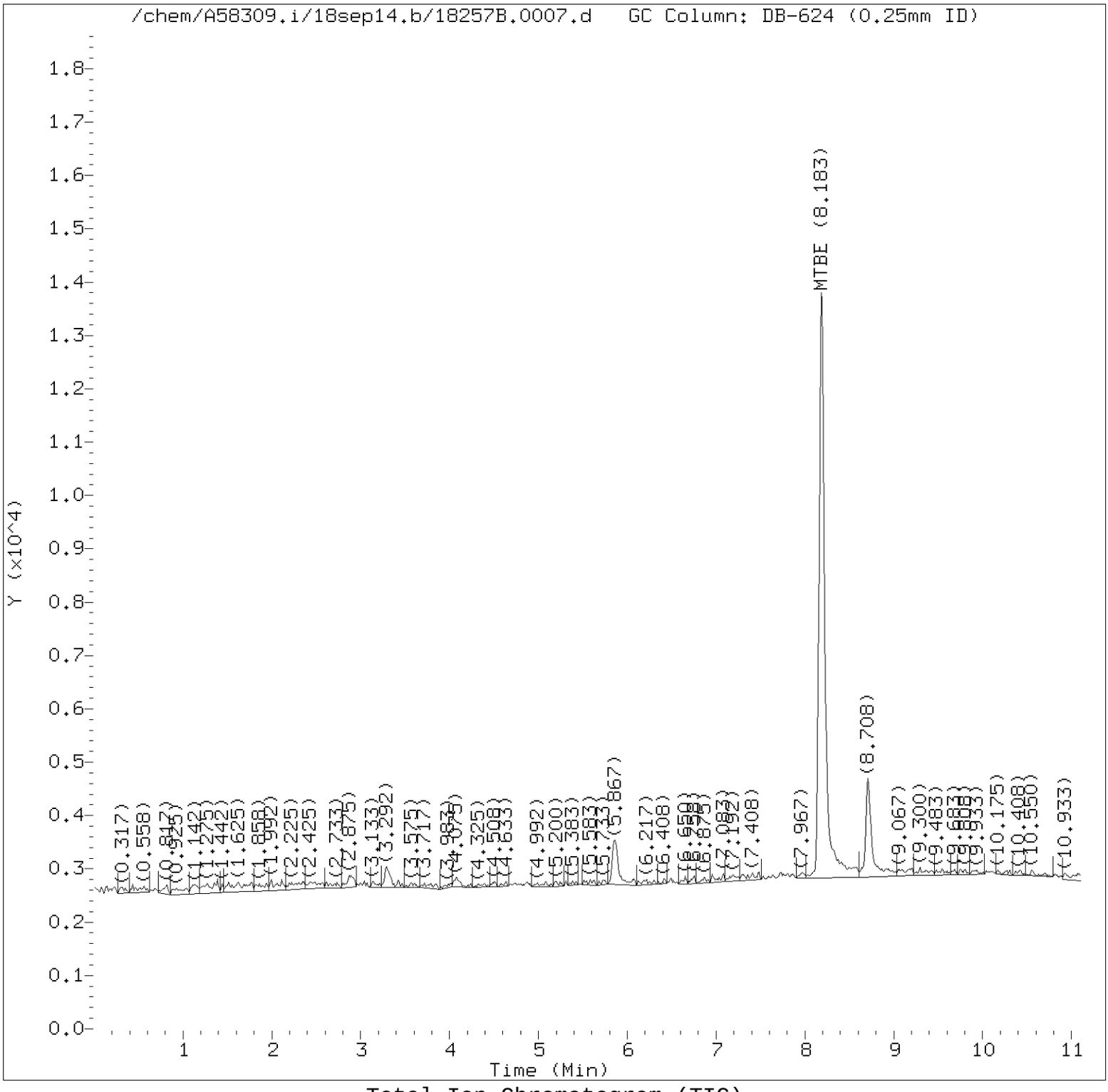
Data File: /chem/A58309.i/18sep14.b/18257.0007.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:00 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

RT	Area	Peak Label(s) and Range	Compound #s
13.717	8842		
14.008	4007		
14.208	2663		
14.458	262156		
14.575	404233	Octane	
15.433	2792		
15.600	4768		
15.992	1759		
16.325	1668		
16.750	2045		
16.908	251780		
17.092	608572		
17.767	300732		
18.658	5084		
19.300	43041	Decane	
19.742	1284		
20.025	3750		
20.175	953		
20.350	2920		
20.533	2050		
20.758	9015		
21.150	2736		
21.525	26724		
21.883	989		

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

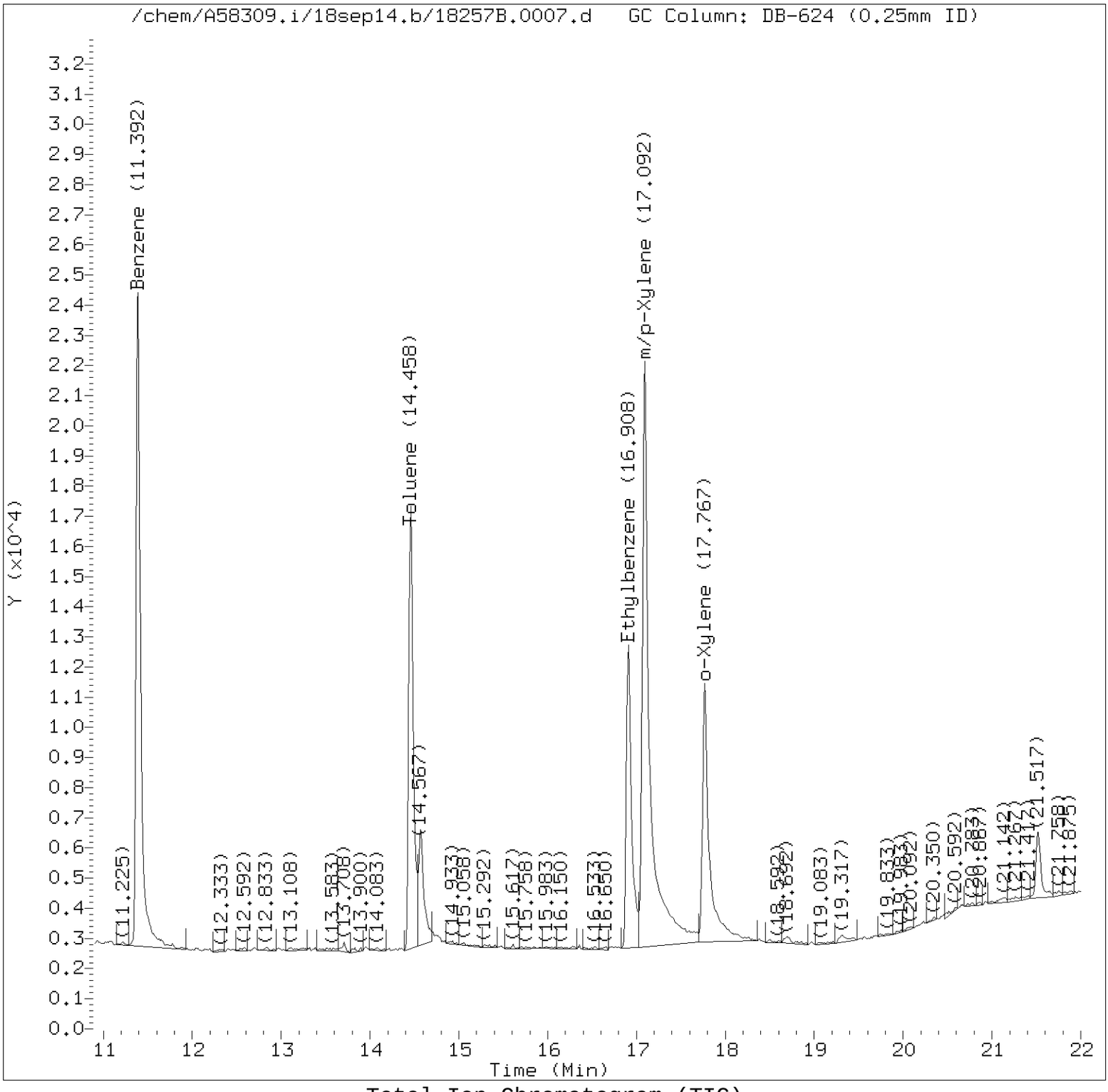
Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0007.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:00 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:11 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0007.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:00 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:11 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0007.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:00 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:11 ads07818

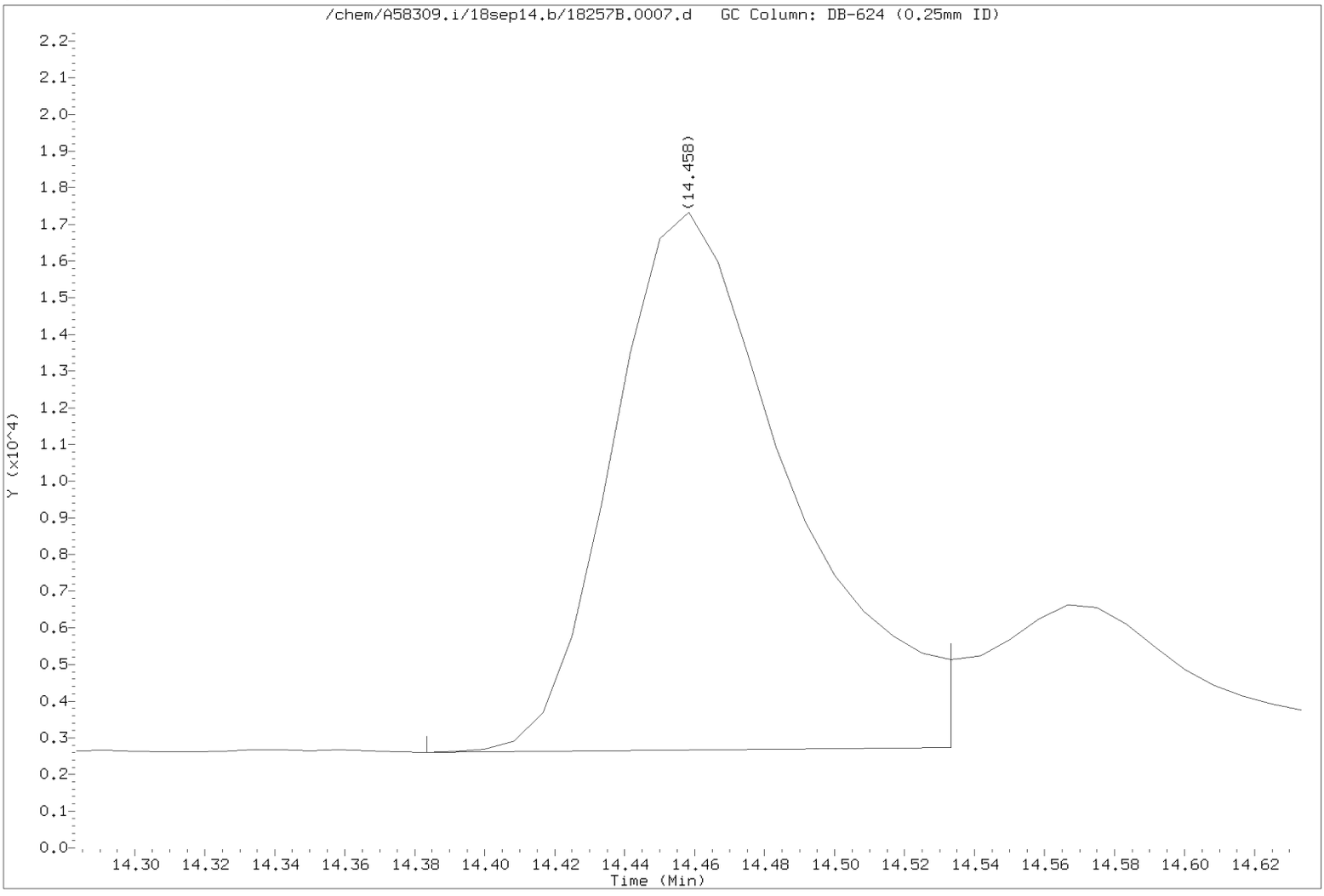
Sample Name: VSTD005 Lab Sample ID: VSTD005

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) MTBE	8.183(±0.03)	8.183	53269	4.619
2) Benzene	11.383(±0.06)	11.392	80947	4.471
3) Toluene	14.450(±0.03)	14.458	52862M	3.908
4) Ethylbenzene	16.900(±0.04)	16.908	41207	4.169
5) m/p-Xylene	17.092(±0.04)	17.092	116166	8.360
6) o-Xylene	17.767(±0.04)	17.767	47494	3.897
7) Xylene (total)			163660	12.257

M = Compound was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257B.0007.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:00 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:11 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compound Number : 3
Compound Name : Toluene
Retention Time (minutes): 14.458
Area (flag) : 52862M
Concentration (ppm(v)) : 3.9077
Integration start time : 14.383 Integration stop time: 14.533
Y at integration start : 2598 Y at integration end: 2742

Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:12.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257B.0007.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:00 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:10 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compound Number : 3
Compound Name : Toluene
Retention Time (minutes): 14.458
Area : 69436
Concentration (ppm(v)) : 5.0024
Integration start time : 14.383 Integration stop time: 14.700
Y at integration start : 2598 Y at integration end: 2911

Digitally signed by Alexander D. Sechrist on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0007.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:00 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:11 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

RT	Area	Peak Label(s) and Range	Compound #s
0.317	492		
0.558	960		
0.817	628		
0.925	1064		
1.142	939		
1.275	1902		
1.442	284		
1.625	2541		
1.858	986		
1.992	1230		
2.225	1354		
2.425	1235		
2.733	726		
2.875	1234		
3.133	518		
3.292	2115		
3.575	417		
3.717	740		
3.983	376		
4.075	977		
4.325	355		
4.508	302		
4.633	314		
4.992	571		
5.200	357		
5.383	286		
5.583	502		
5.733	345		
5.867	4490		
6.217	707		
6.408	284		
6.650	381		
6.758	416		
6.875	455		
7.083	808		
7.192	711		
7.408	1074		
7.967	376		
8.183	53270	MTBE	
8.708	9518		

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0007.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:00 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:11 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

RT	Area	Peak Label(s) and Range	Compound #s
9.067	1196		
9.300	1008		
9.483	672		
9.683	281		
9.808	446		
9.933	407		
10.175	510		
10.408	418		
10.550	567		
10.933	986		
11.225	402		
11.392	80948	Benzene	
12.333	346		
12.592	455		
12.833	436		
13.108	663		
13.583	804		
13.708	916		
13.900	613		
14.083	437		
14.458	52862M	Toluene	
14.567	17886M		
14.933	451		
15.058	516		
15.292	416		
15.617	459		
15.758	488		
15.983	371		
16.150	560		
16.533	521		
16.650	392		
16.908	41207	Ethylbenzene	
17.092	116166	m/p-Xylene	
17.767	47495	o-Xylene	
18.050	163660		
18.592	496		
18.692	1445		
19.083	642		
19.317	1639		
19.833	444		

M = Peak was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0007.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:00 Analyst ID: ADS07818

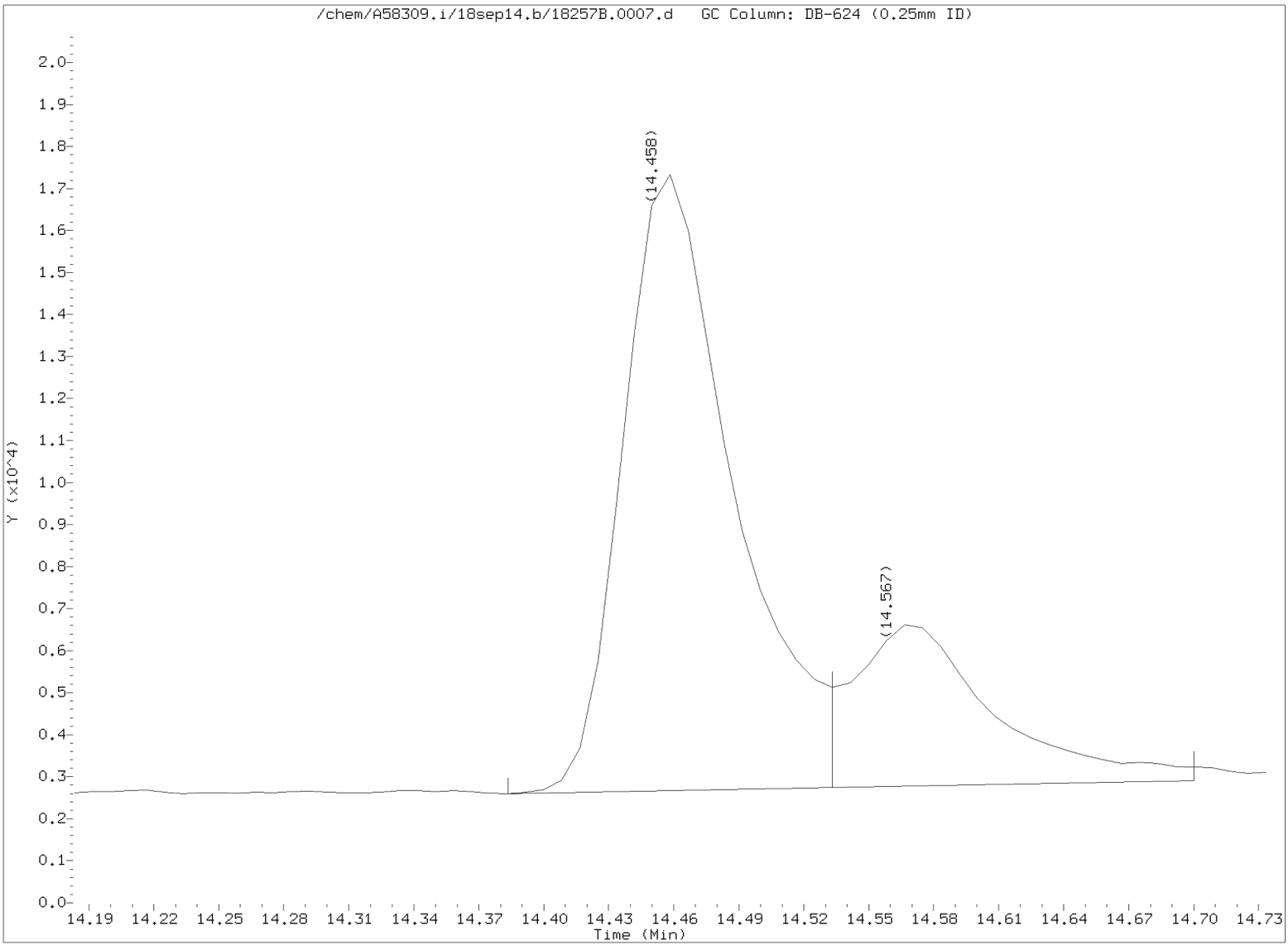
Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:11 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

RT	Area	Peak Label(s) and Range	Compound #s
19.983	261		
20.092	331		
20.350	253		
20.592	685		
20.783	440		
20.867	283		
21.142	1121		
21.267	838		
21.417	508		
21.517	8913		
21.758	648		
21.875	512		

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257B.0007.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:00 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:11 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

Retention Time (minutes): 14.458
Area (flag) : 52862M
Integration start time : 14.383 Integration stop time: 14.533
Y at integration start : 2598 Y at integration end: 2742

Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:12.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257B.0007.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:00 Analyst ID: ADS07818

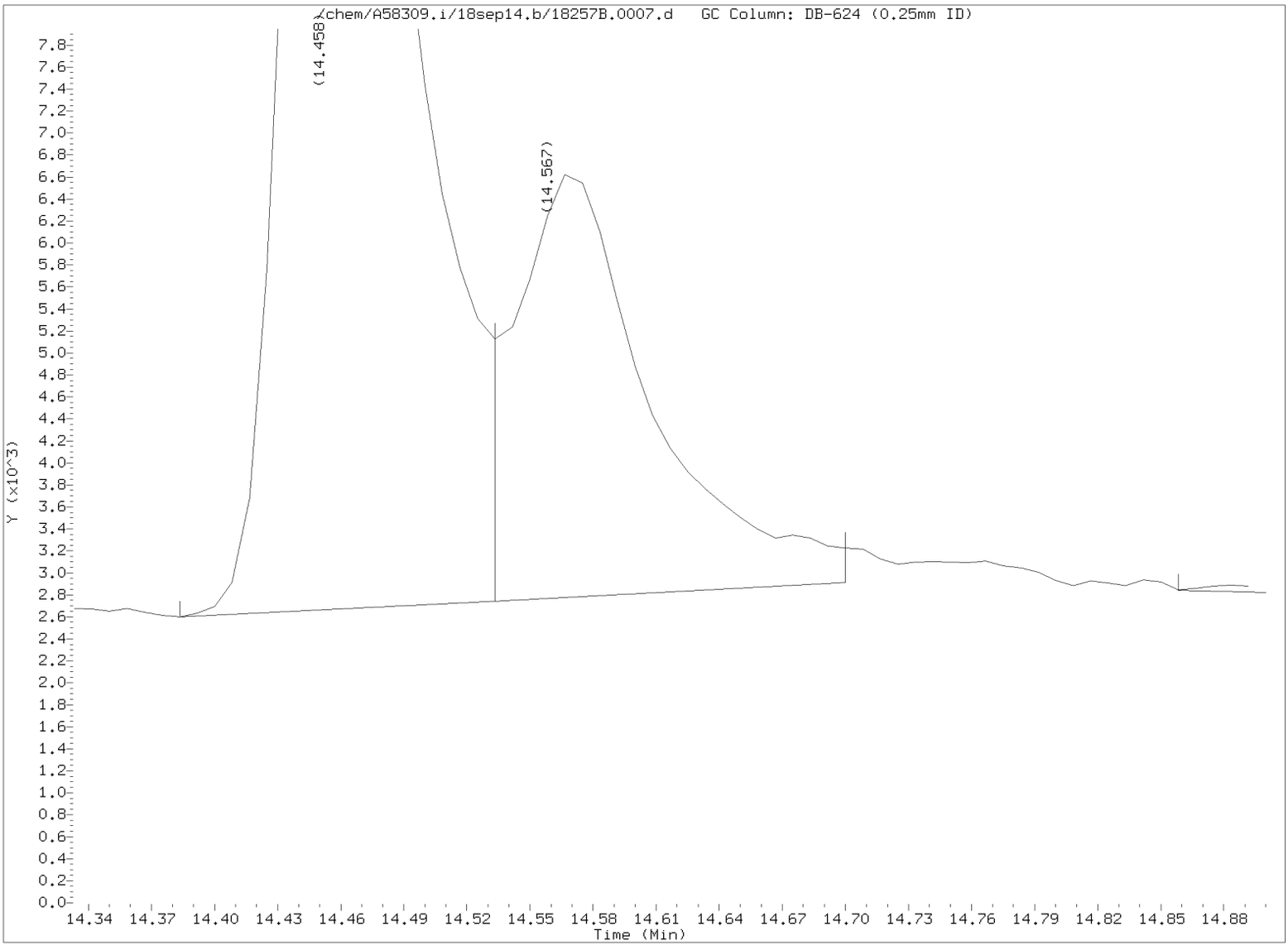
Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:10 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

No signal was originally integrated at 14.458 minutes.

Digitally signed by Alexander D. Sechrist on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257B.0007.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:00 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:11 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

Retention Time (minutes): 14.567
Area (flag) : 17886M
Integration start time : 14.533 Integration stop time: 14.700
Y at integration start : 2742 Y at integration end: 2911

Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:12.
PARALLAX ID: jbs01304

Original Integration of Signal

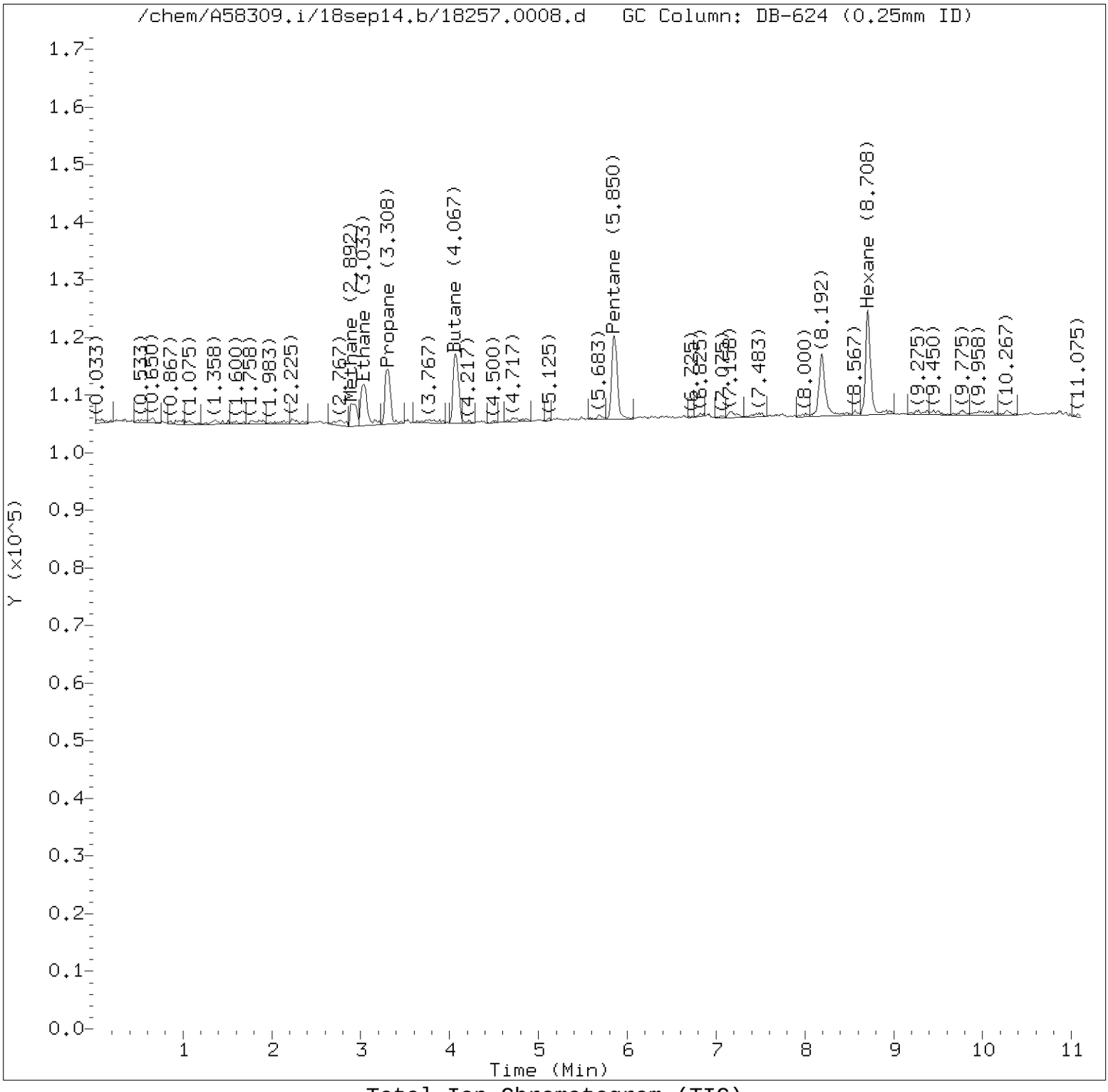
Data File: /chem/A58309.i/18sep14.b/18257B.0007.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:00 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:10 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

No signal was originally integrated at 14.567 minutes.

Digitally signed by Alexander D. Sechrist on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

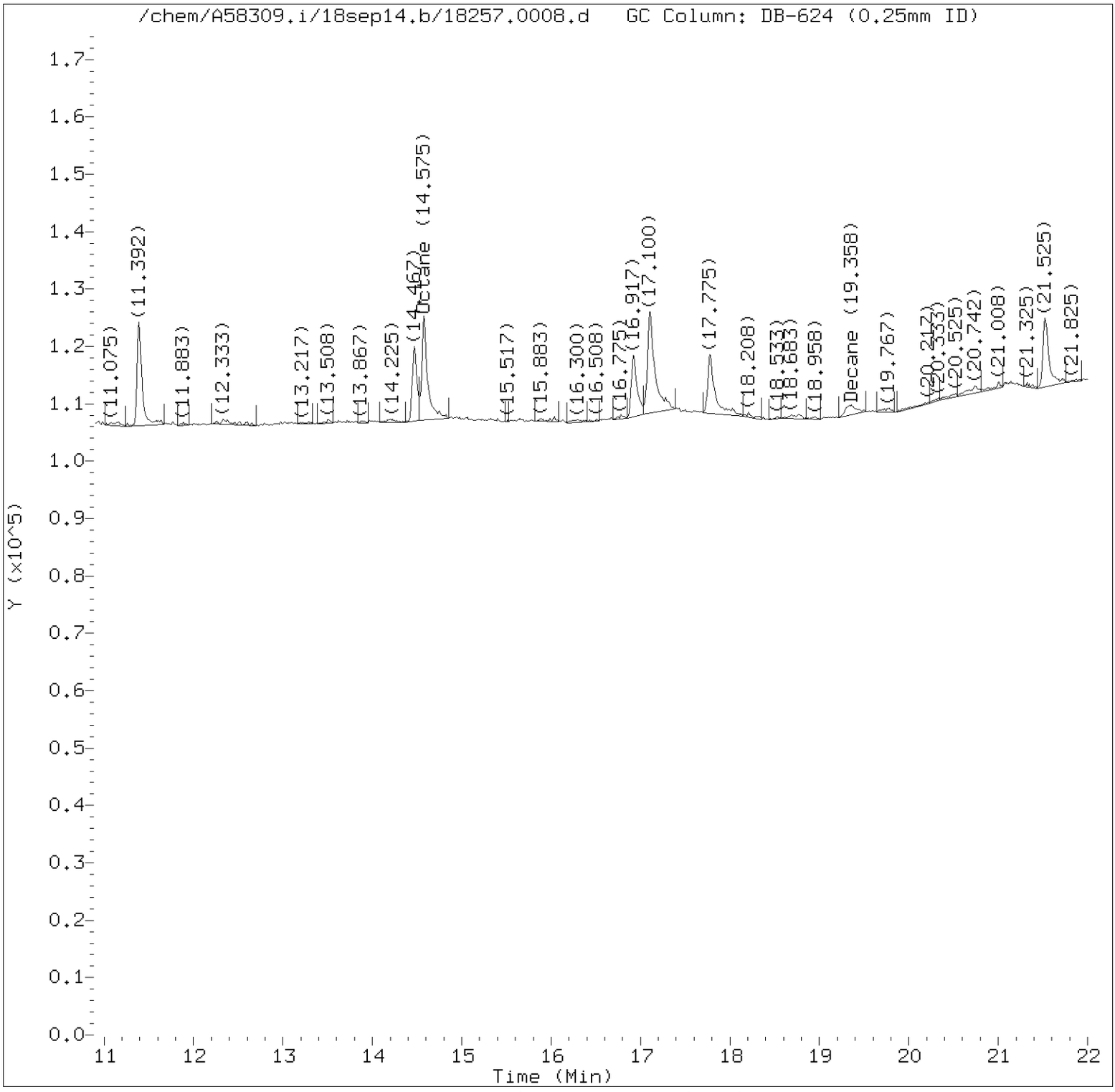
Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0008.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:34 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0008.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:34 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0008.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:34 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

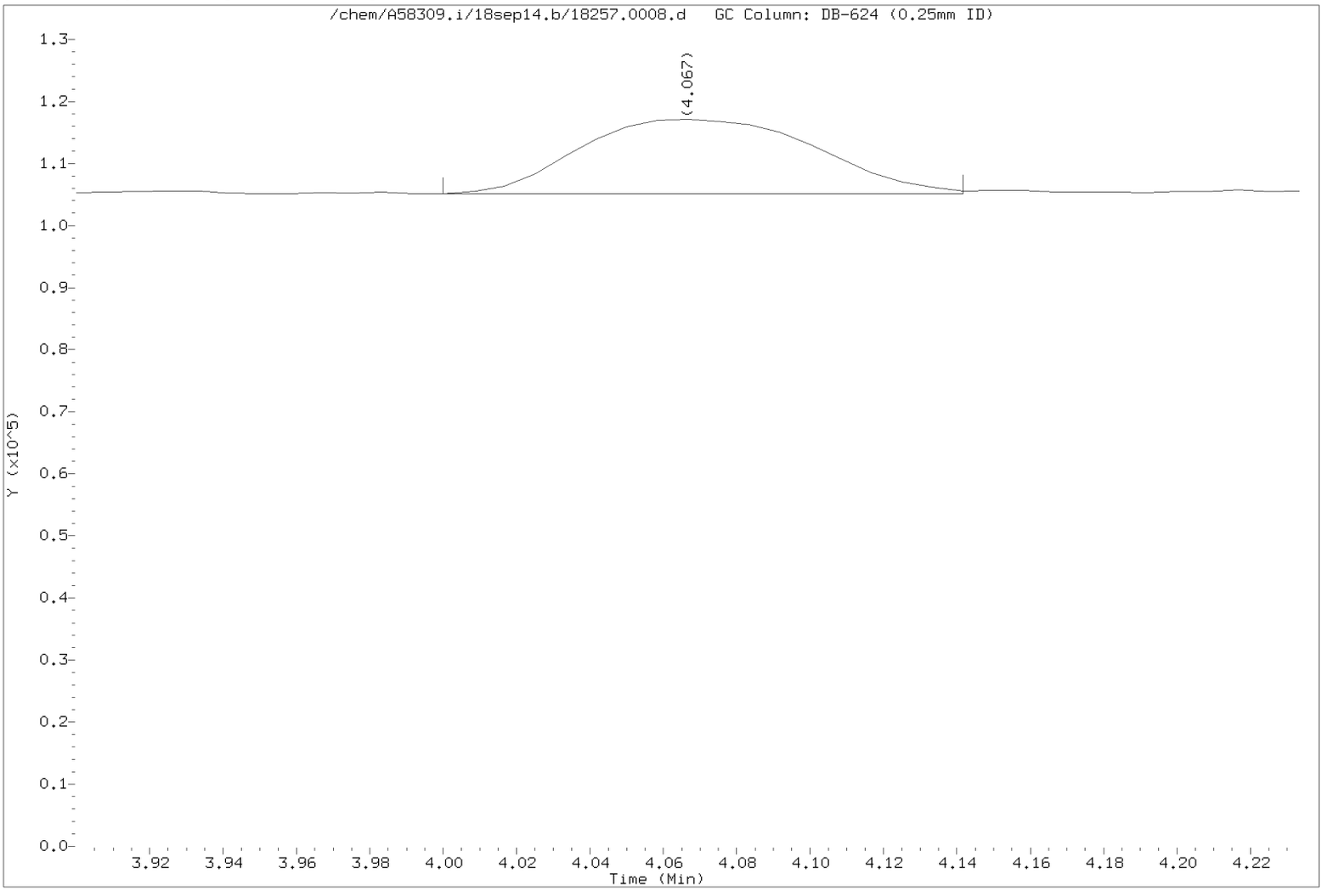
Sample Name: VSTD001 Lab Sample ID: VSTD001

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) Methane	2.908(±0.03)	2.892	21184	1.304
2) Ethane	3.042(±0.03)	3.033	38616	1.209
3) Propane	3.300(±0.03)	3.308	45203	1.013
4) Butane	4.067(±0.03)	4.067	53809M	0.932
5) Pentane	5.850(±0.03)	5.850	65590	0.951
7) Hexane	8.700(±0.03)	8.708	74465	0.938
10) Octane	14.567(±0.03)	14.575	86119	0.913
15) Decane	19.283(±0.03)	#19.358#	15049	0.260

M = Compound was manually integrated.
# = Compound retention time outside defined window.

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257.0008.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:34 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 4
Compound Name : Butane
Retention Time (minutes): 4.067
Area (flag) : 53809M
Concentration (ppm(v)) : 0.9319
Integration start time : 4.000 Integration stop time: 4.142
Y at integration start : 105116 Y at integration end: 105116

Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:12.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257.0008.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:34 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:05
Date, time and analyst ID of latest file update: 14-Sep-2018 15:05 jbs01304

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 4
Compound Name : Butane
Retention Time (minutes): 4.067
Area : 24434
Concentration (ppm(v)) : 0.4711
Integration start time : 3.950 Integration stop time: 4.067
Y at integration start : 105140 Y at integration end: 105116

Digitally signed by Alexander D. Sechrist on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ADS07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0008.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:34 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

RT	Area	Peak Label(s) and Range	Compound #s
0.033	4060		
0.533	3312		
0.650	3777		
0.867	5073		
1.075	3401		
1.358	6531		
1.600	3067		
1.758	5584		
1.983	4422		
2.225	4782		
2.767	8259		
2.892	21185	Methane	
3.033	38616	Ethane	
3.308	45203	Propane	
3.767	7043		
4.067	53810M	Butane	
4.217	2592M		
4.500	1321		
4.717	6681		
5.125	850		
5.683	3778		
5.850	65591	Pentane	
6.725	621		
6.825	1790		
7.075	1327		
7.158	6311		
7.483	4166		
8.000	2867		
8.192	57146		
8.567	2306		
8.708	74466	Hexane	
9.275	6334		
9.450	4685		
9.775	4374		
9.958	8902		
10.267	4832		
11.075	4156		
11.392	71104		
11.883	1716		
12.333	9965		

M = Peak was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0008.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:34 Analyst ID: ADS07818

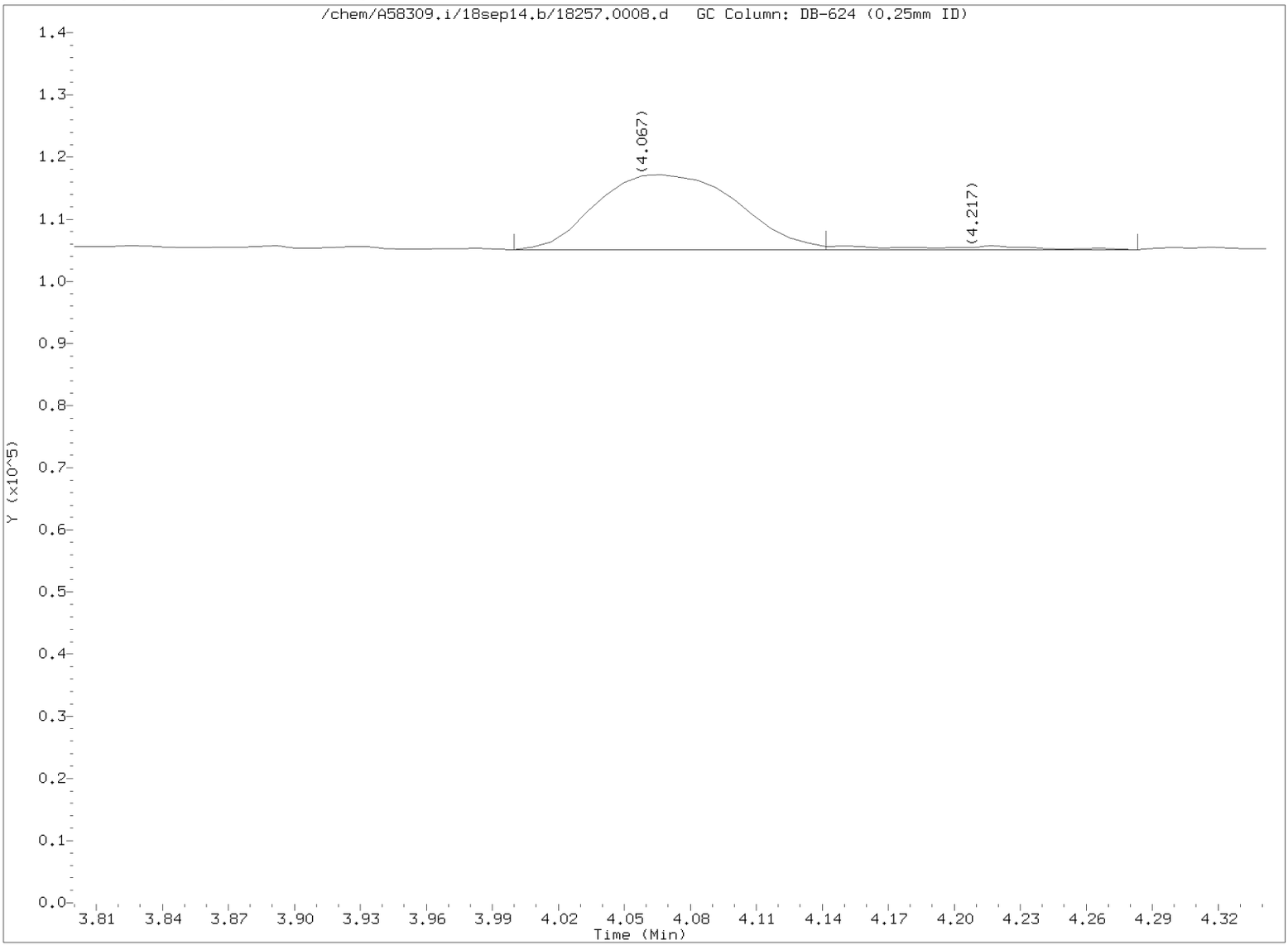
Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

RT	Area	Peak Label(s) and Range	Compound #s
13.217	1812		
13.508	2724		
13.867	1464		
14.225	4351		
14.467	47453		
14.575	86119	Octane	
15.517	267		
15.883	4529		
16.300	3489		
16.508	1002		
16.775	2928		
16.917	48752		
17.100	107007		
17.775	60079		
18.208	3860		
18.533	1370		
18.683	7080		
18.958	2041		
19.358	15050	Decane	
19.767	4864		
20.217	4320		
20.333	1671		
20.525	3616		
20.742	9579		
21.008	5246		
21.325	2861		
21.525	56523		
21.825	2281		

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257.0008.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:34 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Retention Time (minutes): 4.067
Area (flag) : 53810M
Integration start time : 4.000 Integration stop time: 4.142
Y at integration start : 105116 Y at integration end: 105116

Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:12.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257.0008.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:34 Analyst ID: ADS07818

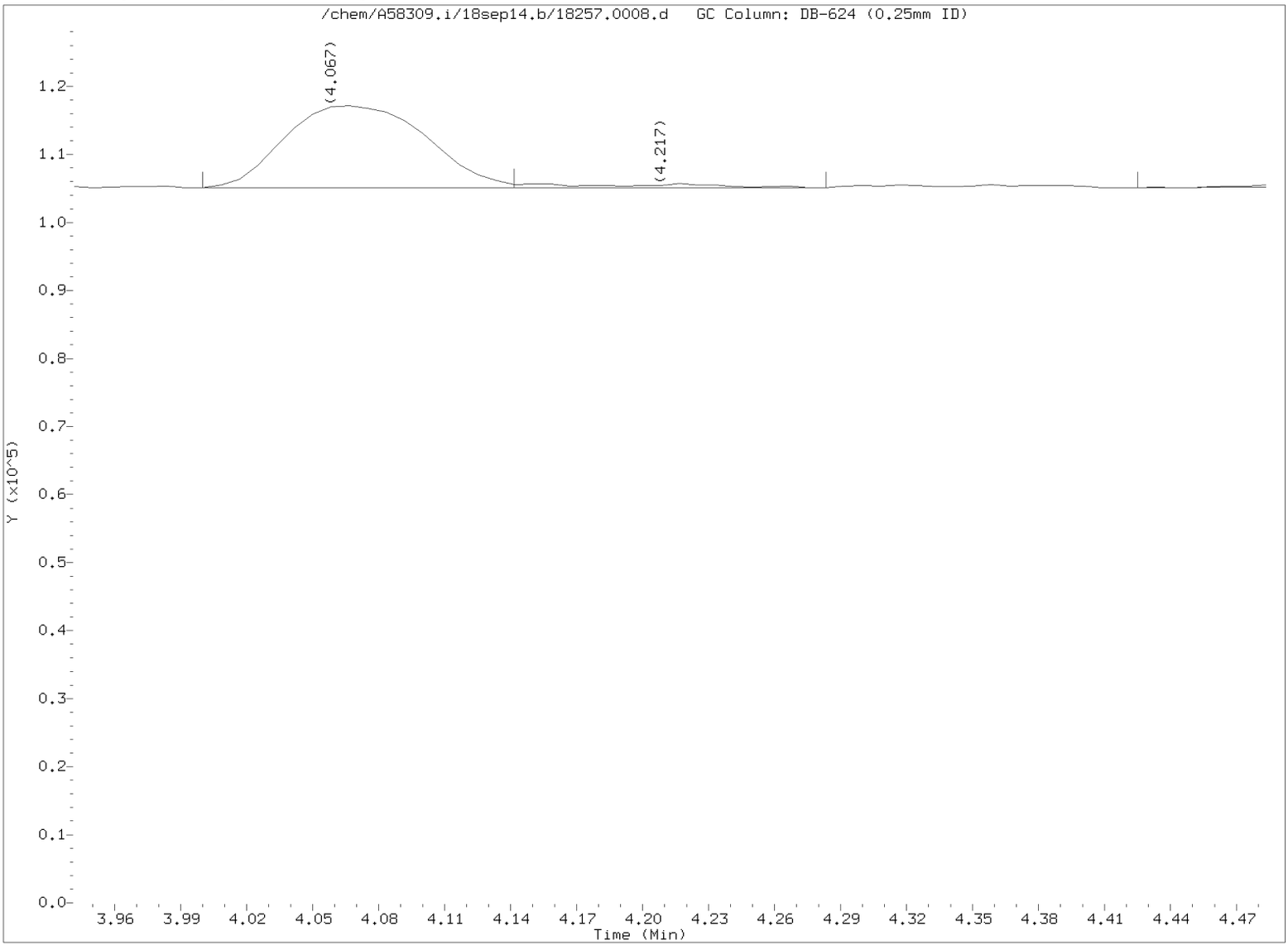
Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:05
Date, time and analyst ID of latest file update: 14-Sep-2018 15:05 jbs01304

Sample Name: VSTD001 Lab Sample ID: VSTD001

No signal was originally integrated at 4.067 minutes.

Digitally signed by Alexander D. Sechrist on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ADS07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257.0008.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:34 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:15
Date, time and analyst ID of latest file update: 14-Sep-2018 15:15 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Retention Time (minutes): 4.217
Area (flag) : 2592M
Integration start time : 4.142 Integration stop time: 4.283
Y at integration start : 105116 Y at integration end: 105116

Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:12.
PARALLAX ID: jbs01304

Original Integration of Signal

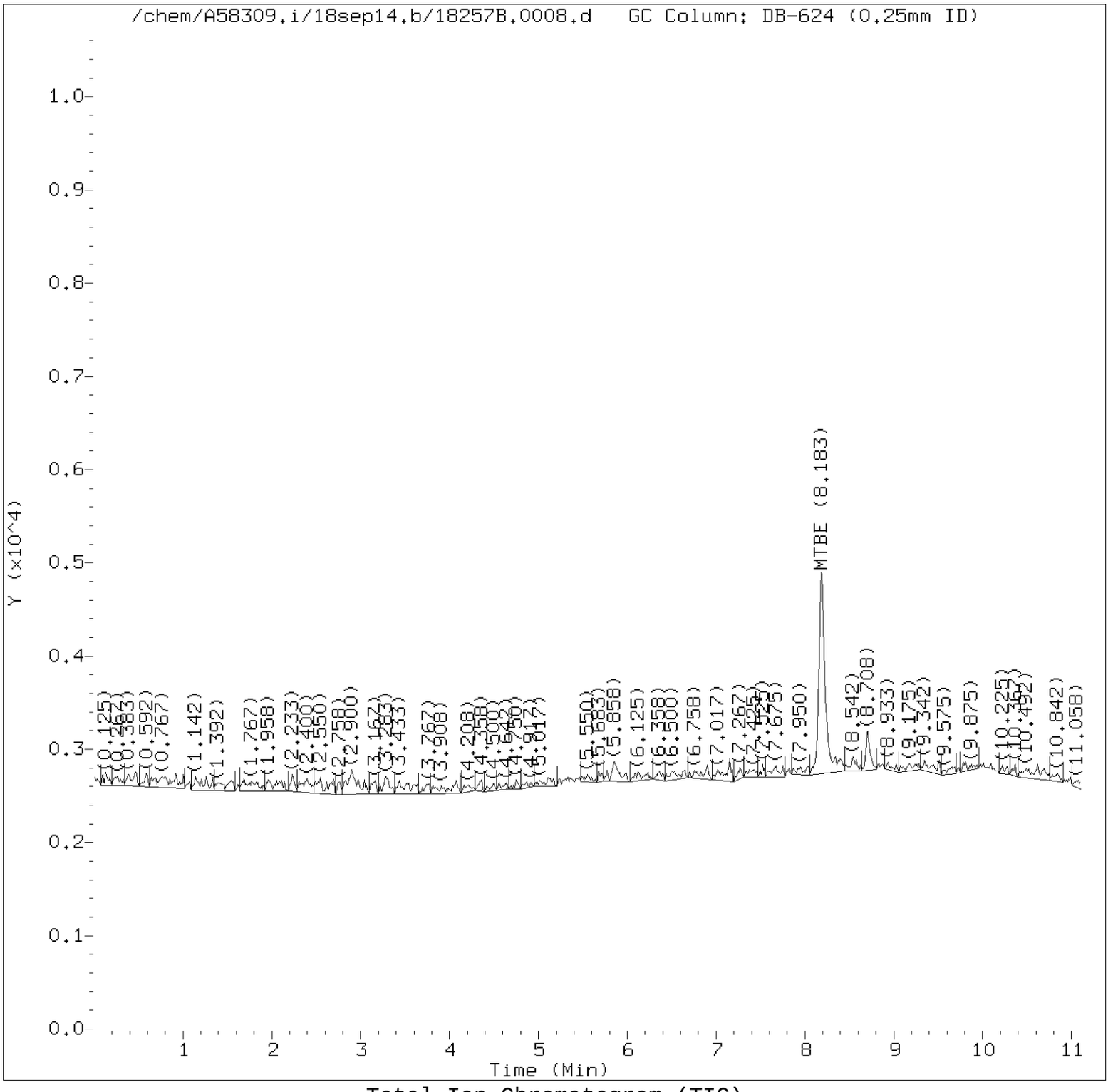
Data File: /chem/A58309.i/18sep14.b/18257.0008.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:34 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 14-SEP-2018 15:05
Date, time and analyst ID of latest file update: 14-Sep-2018 15:05 jbs01304

Sample Name: VSTD001 Lab Sample ID: VSTD001

No signal was originally integrated at 4.217 minutes.

Digitally signed by Alexander D. Sechrist on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ADS07818



Total Ion Chromatogram (TIC)

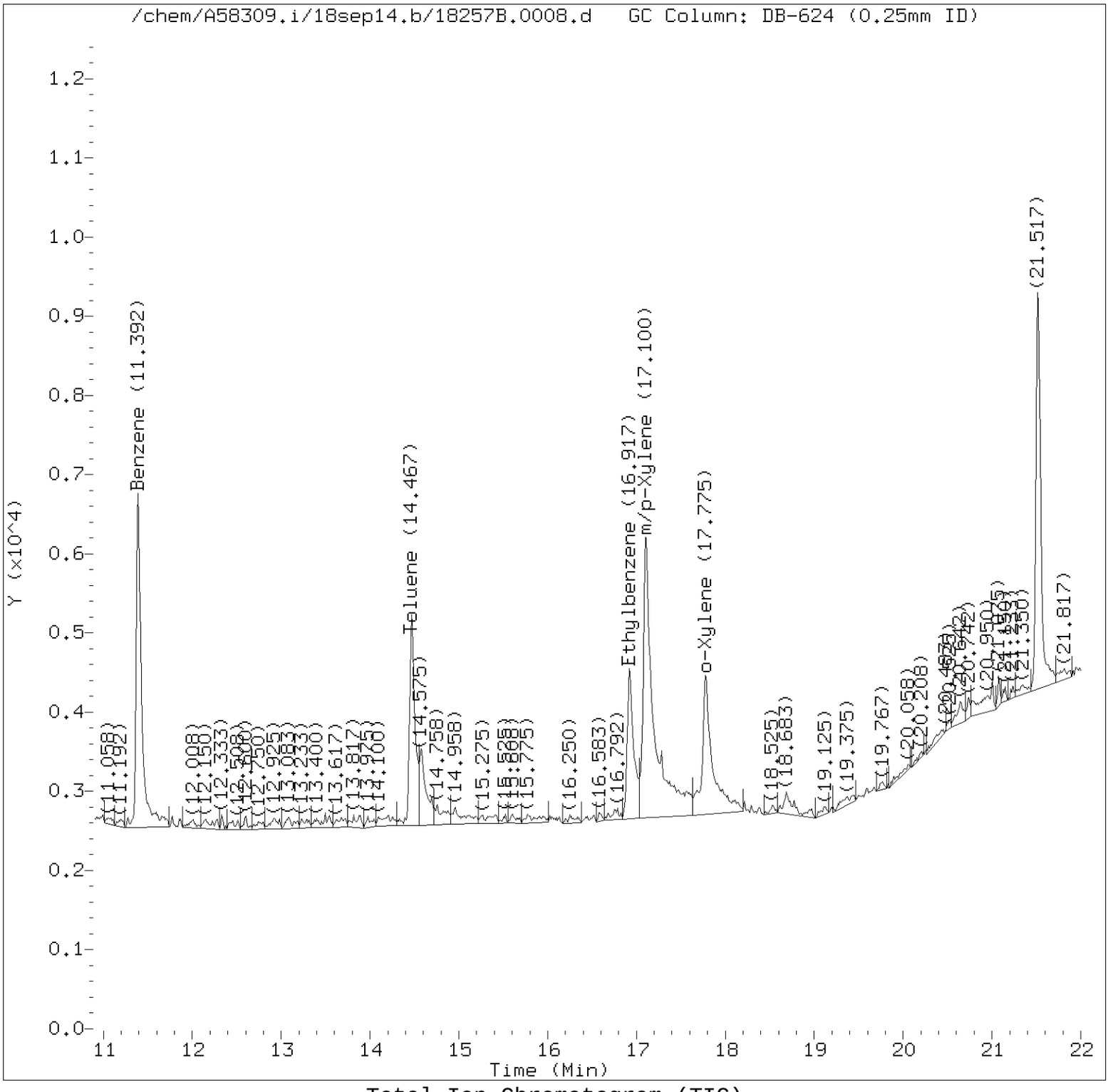
Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0008.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:34 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:12 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0008.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:34 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:12 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0008.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:34 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:12 ads07818

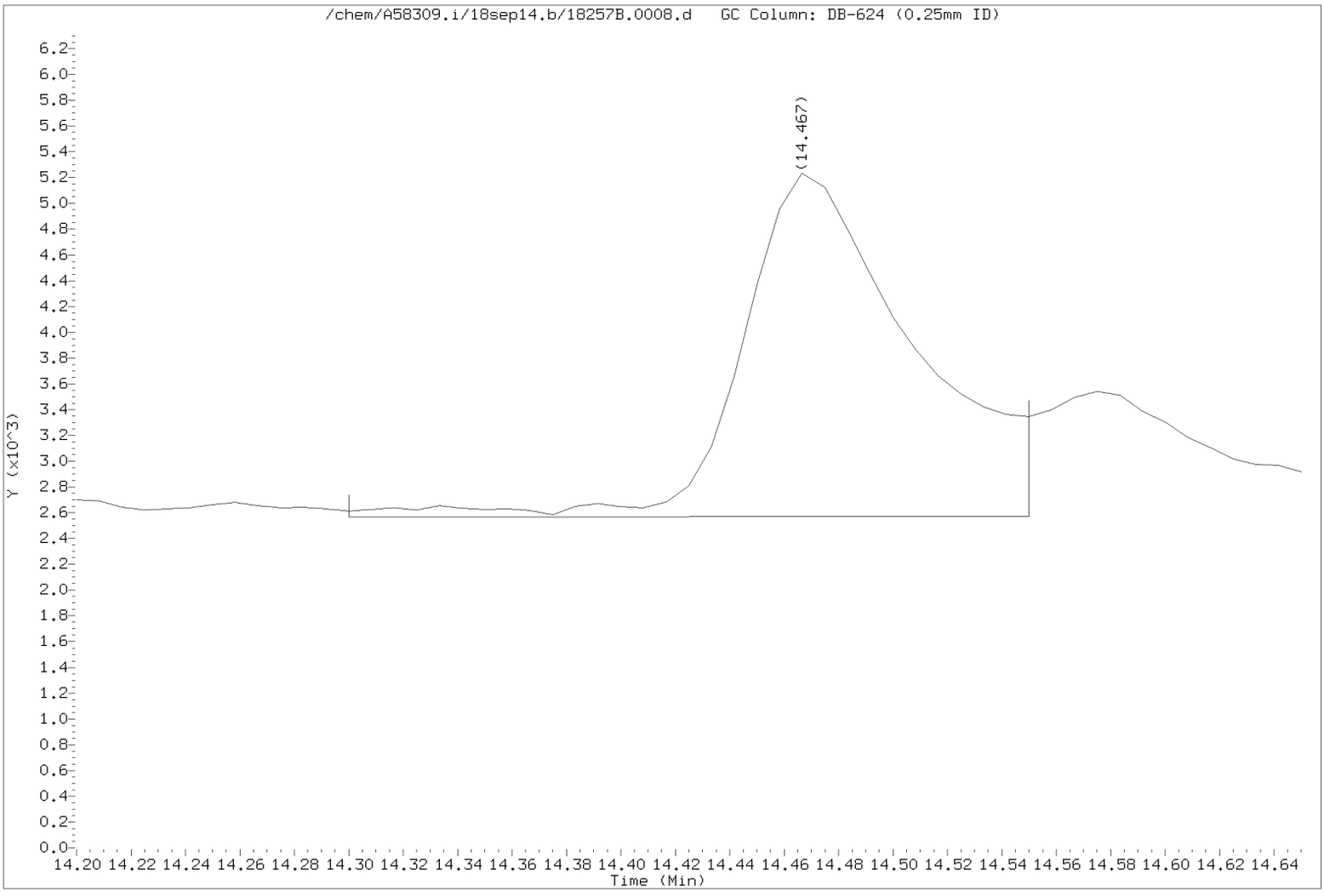
Sample Name: VSTD001 Lab Sample ID: VSTD001

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) MTBE	8.183(±0.03)	8.183	11362	0.985
2) Benzene	11.383(±0.06)	11.392	18330	1.012
3) Toluene	14.450(±0.03)	14.467	11852M	0.947
4) Ethylbenzene	16.900(±0.04)	16.917	9767	0.988
5) m/p-Xylene	17.092(±0.04)	17.100	31010	2.232
6) o-Xylene	17.767(±0.04)	17.775	14590	1.197
7) Xylene (total)			45600	3.429

M = Compound was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257B.0008.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:34 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:12 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 3
Compound Name : Toluene
Retention Time (minutes): 14.467
Area (flag) : 11852M
Concentration (ppm(v)) : 0.9468
Integration start time : 14.300 Integration stop time: 14.550
Y at integration start : 2566 Y at integration end: 2571

Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:12.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257B.0008.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:34 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:10 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 3
Compound Name : Toluene
Retention Time (minutes): 14.467
Area : 16900
Concentration (ppm(v)) : 1.1350
Integration start time : 14.300 Integration stop time: 14.717
Y at integration start : 2566 Y at integration end: 2576

Digitally signed by Alexander D. Sechrist on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0008.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:34 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:12 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

RT	Area	Peak Label(s) and Range	Compound #s
0.125	542		
0.267	549		
0.383	776		
0.592	450		
0.767	1942		
1.142	1186		
1.392	1002		
1.767	1176		
1.958	1119		
2.233	505		
2.400	1059		
2.550	1377		
2.758	369		
2.900	2109		
3.167	552		
3.283	998		
3.433	1182		
3.767	462		
3.908	1183		
4.208	403		
4.358	351		
4.500	329		
4.642	369		
4.750	292		
4.917	282		
5.017	732		
5.550	456		
5.683	294		
5.858	1353		
6.125	697		
6.358	442		
6.500	852		
6.758	850		
7.017	1261		
7.267	408		
7.425	546		
7.525	303		
7.675	821		
7.950	663		
8.183	11363	MTBE	

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0008.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:34 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:12 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

RT	Area	Peak Label(s) and Range	Compound #s
8.542	767		
8.708	1429		
8.933	379		
9.175	639		
9.342	850		
9.575	504		
9.875	492		
10.225	349		
10.367	299		
10.492	1549		
10.842	442		
11.058	398		
11.192	408		
11.392	18330	Benzene	
12.008	510		
12.150	925		
12.333	308		
12.508	618		
12.600	465		
12.750	530		
12.925	831		
13.083	852		
13.233	642		
13.400	1201		
13.617	796		
13.817	990		
13.975	592		
14.100	1224		
14.467	11852M	Toluene	
14.575	5511M		
14.758	1901		
14.958	1914		
15.275	1075		
15.525	292		
15.608	554		
15.775	1030		
16.250	603		
16.583	341		
16.792	868		
16.917	9768	Ethylbenzene	

M = Peak was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257B.0008.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:34 Analyst ID: ADS07818

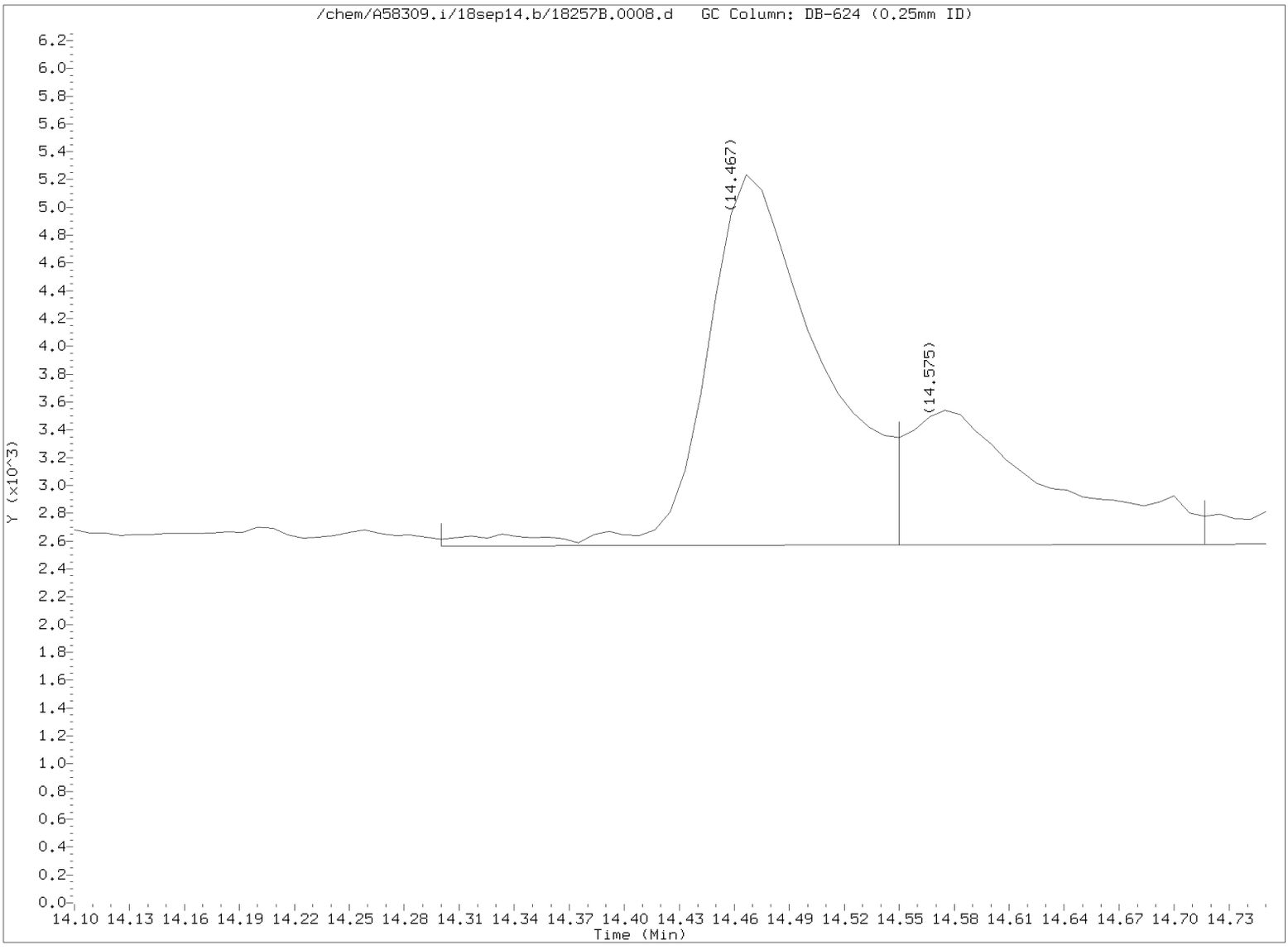
Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:12 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

RT	Area	Peak Label(s) and Range	Compound #s
17.100	31010	m/p-Xylene	
17.775	14590	o-Xylene	
18.050	45600		
18.525	389		
18.683	2409		
19.125	472		
19.375	1003		
19.767	321		
20.058	648		
20.208	303		
20.483	804		
20.525	278		
20.642	1446		
20.742	727		
20.950	2917		
21.075	748		
21.150	435		
21.233	384		
21.350	786		
21.517	19014		
21.817	994		

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257B.0008.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:34 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:12 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Retention Time (minutes): 14.467
Area (flag) : 11852M
Integration start time : 14.300 Integration stop time: 14.550
Y at integration start : 2566 Y at integration end: 2571

Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:12.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep14.b/18257B.0008.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:34 Analyst ID: ADS07818

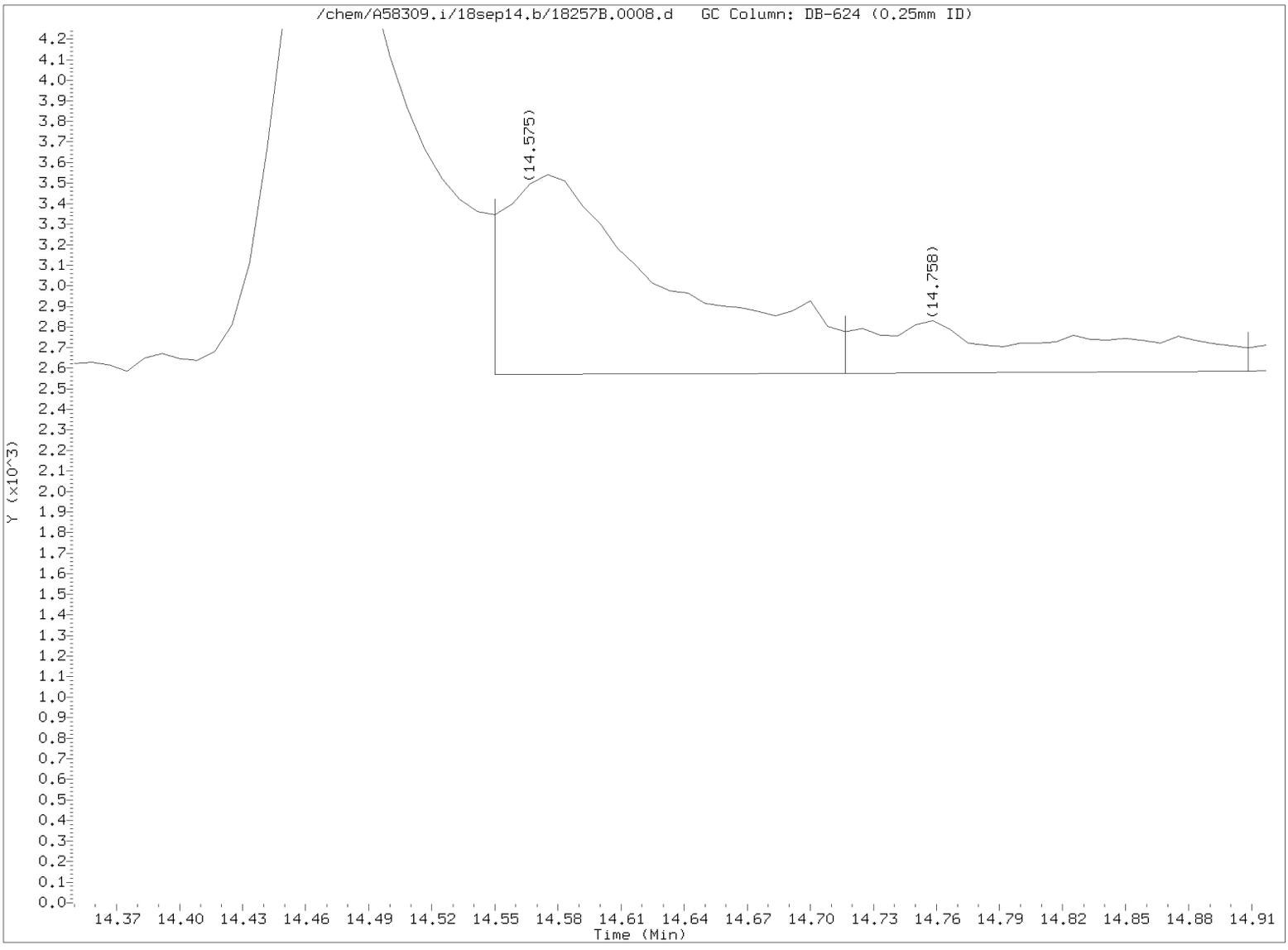
Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:10 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

No signal was originally integrated at 14.467 minutes.

Digitally signed by Alexander D. Sechrist on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep14.b/18257B.0008.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:34 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:12 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Retention Time (minutes): 14.575
Area (flag) : 5511M
Integration start time : 14.550 Integration stop time: 14.717
Y at integration start : 2571 Y at integration end: 2576

Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:12.
PARALLAX ID: jbs01304

Original Integration of Signal

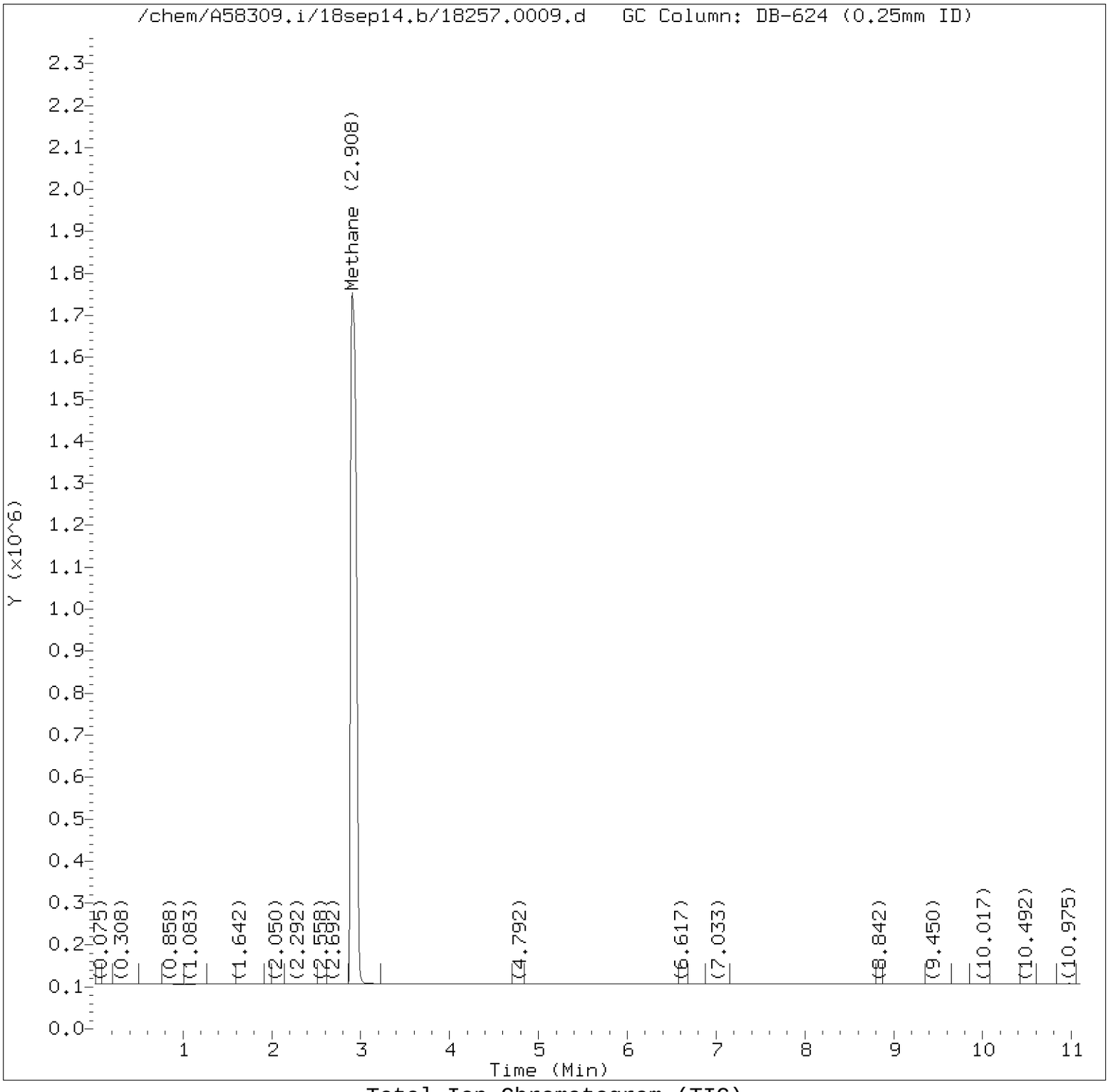
Data File: /chem/A58309.i/18sep14.b/18257B.0008.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 13:34 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_pid.m Sublist used: 07090
Calibration date and time: 14-SEP-2018 15:10
Date, time and analyst ID of latest file update: 14-Sep-2018 15:10 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

No signal was originally integrated at 14.575 minutes.

Digitally signed by Alexander D. Sechrist on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

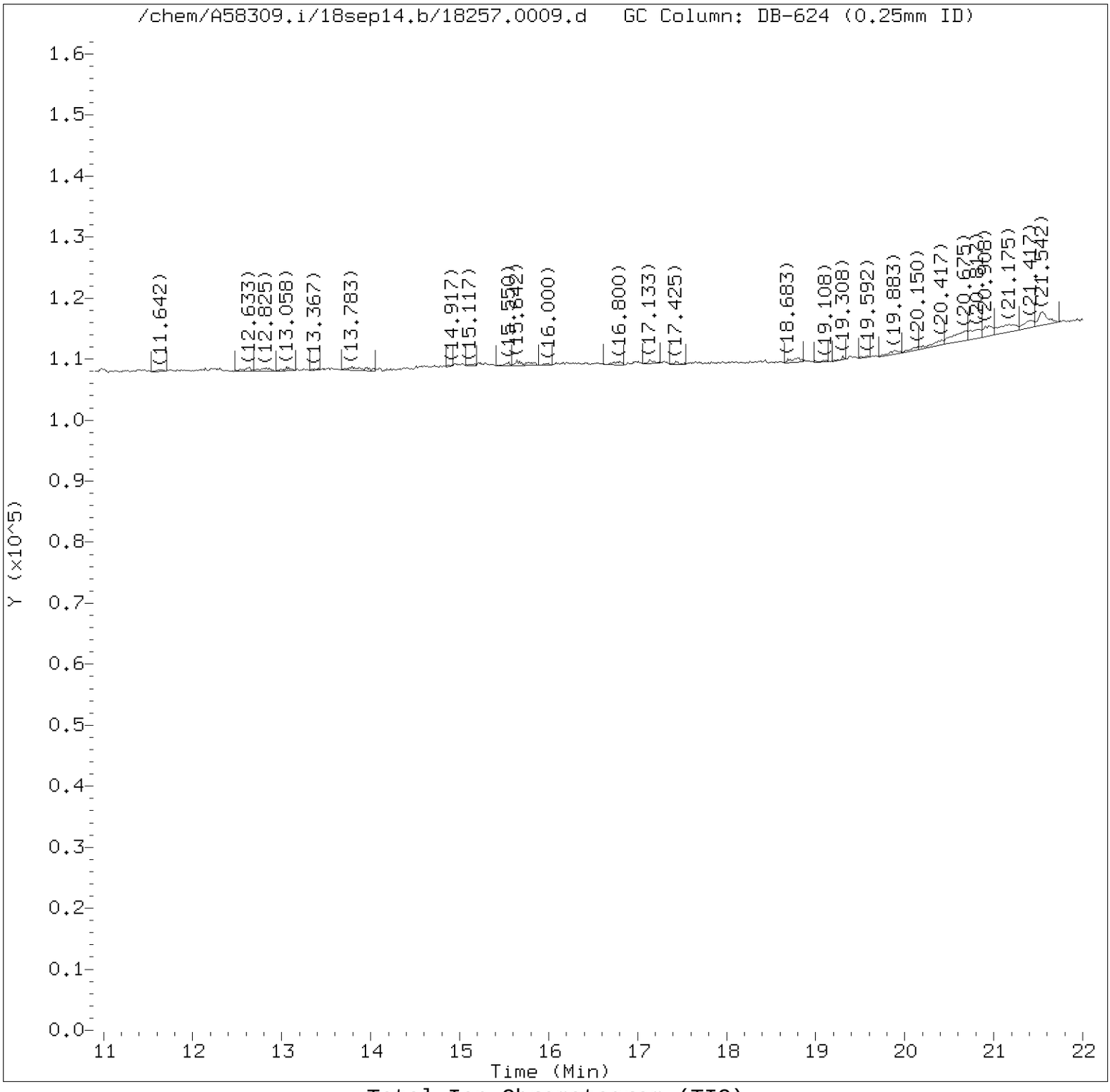
Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0009.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 14:49 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICALmethaneonly
Calibration date and time: 14-SEP-2018 15:24
Date, time and analyst ID of latest file update: 14-Sep-2018 15:24 ads07818

Sample Name: VSTD500 Lab Sample ID: VSTD500

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0009.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 14:49 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICALmethaneonly
Calibration date and time: 14-SEP-2018 15:24
Date, time and analyst ID of latest file update: 14-Sep-2018 15:24 ads07818

Sample Name: VSTD500 Lab Sample ID: VSTD500

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0009.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 14:49 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICALmethaneonly
Calibration date and time: 14-SEP-2018 15:24
Date, time and analyst ID of latest file update: 14-Sep-2018 15:24 ads07818

Sample Name: VSTD500 Lab Sample ID: VSTD500

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) Methane	2.908(±0.03)	2.908	7468109	467.218

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0009.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 14:49 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICALmethaneonly
Calibration date and time: 14-SEP-2018 15:24
Date, time and analyst ID of latest file update: 14-Sep-2018 15:24 ads07818

Sample Name: VSTD500 Lab Sample ID: VSTD500

RT	Area	Peak Label(s) and Range	Compound #s
0.075	1111		
0.308	4002		
0.858	6716		
1.083	8133		
1.642	5132		
2.050	2106		
2.292	6731		
2.558	796		
2.692	4741		
2.908	7468110	Methane	
4.792	2100		
6.617	1016		
7.033	2269		
8.842	978		
9.450	5972		
10.017	2691		
10.492	1973		
10.975	3274		
11.642	1505		
12.633	3524		
12.825	4208		
13.058	3510		
13.367	1093		
13.783	6914		
14.917	758		
15.117	1589		
15.550	2326		
15.642	7125		
16.000	1374		
16.800	4022		
17.133	2466		
17.425	1963		
18.683	5046		
19.108	1276		
19.308	1789		
19.592	1123		
19.883	4674		
20.150	3020		
20.417	7673		
20.675	18962		

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0009.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 14:49 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: ICALmethaneonly
Calibration date and time: 14-SEP-2018 15:24
Date, time and analyst ID of latest file update: 14-Sep-2018 15:24 ads07818

Sample Name: VSTD500 Lab Sample ID: VSTD500

RT	Area	Peak Label(s) and Range	Compound #s
20.817	12861		
20.908	11660		
21.175	17213		
21.417	9808		
21.542	16840		

Digitally signed by Alexander D. Sechrist
on 09/14/2018 at 15:25.
Target 3.5 esignature user ID: ads07818

Raw QC Data

Volatile Organics in Air by GC

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

VBLK257

FID Data file: /chem/A58309.i/18sep14.b/18257.0012.d Injection date and time: **14-SEP-2018 16:26**
FID Data file Sample Info. Line: VBLK257 Instrument ID: **A58309.i** Batch: **M1825730AA**
Date, time and analyst ID of latest FID file update: 17-Sep-2018 08:11 ads07818

FID Blank Data file reference: **/chem/A58309.i/18sep14.b/18257.0012.d**

FID Method used: /chem/A58309.i/18sep14.b/gc_fid.m FID Sublist used: **blank**
FID Calibration date and time (Last Method Edit): 14-SEP-2018 15:25
FID Mid Level Daily Calibration Standard Reference: **/chem/A58309.i/18sep14.b/18257.0006.d**

PID Data file: /chem/A58309.i/18sep14.b/18257B.0012.d Injection date and time: **14-SEP-2018 16:26**
PID Data file Sample Info. Line: VBLK257 Instrument ID: **A58309.i** Batch: **M1825730AA**
Date, time and analyst ID of latest PID file update: 17-Sep-2018 08:12 ads07818

PID Blank Data file reference: **/chem/A58309.i/18sep14.b/18257B.0012.d**

PID Method used: /chem/A58309.i/18sep14.b/gc_pid.m PID Sublist used: **07090**
PID Calibration date and time (Last Method Edit): 14-SEP-2018 15:25
PID Mid Level Daily Calibration Standard Reference: **/chem/A58309.i/18sep14.b/18257B.0006.d**

Sampling Media: Tedlar Bag Bottle code: N/A Matrix: AIR On-Column Amount units: ppm(v) In Sample Concentration units: ppm(v)

Sample Concentration Formula: On-Column Amount * DF * IVn/IVa Dilution Factor (DF): 1
Nominal Injection Volume (IVn): 100 cc Actual injection Volume (IVa): 100 cc

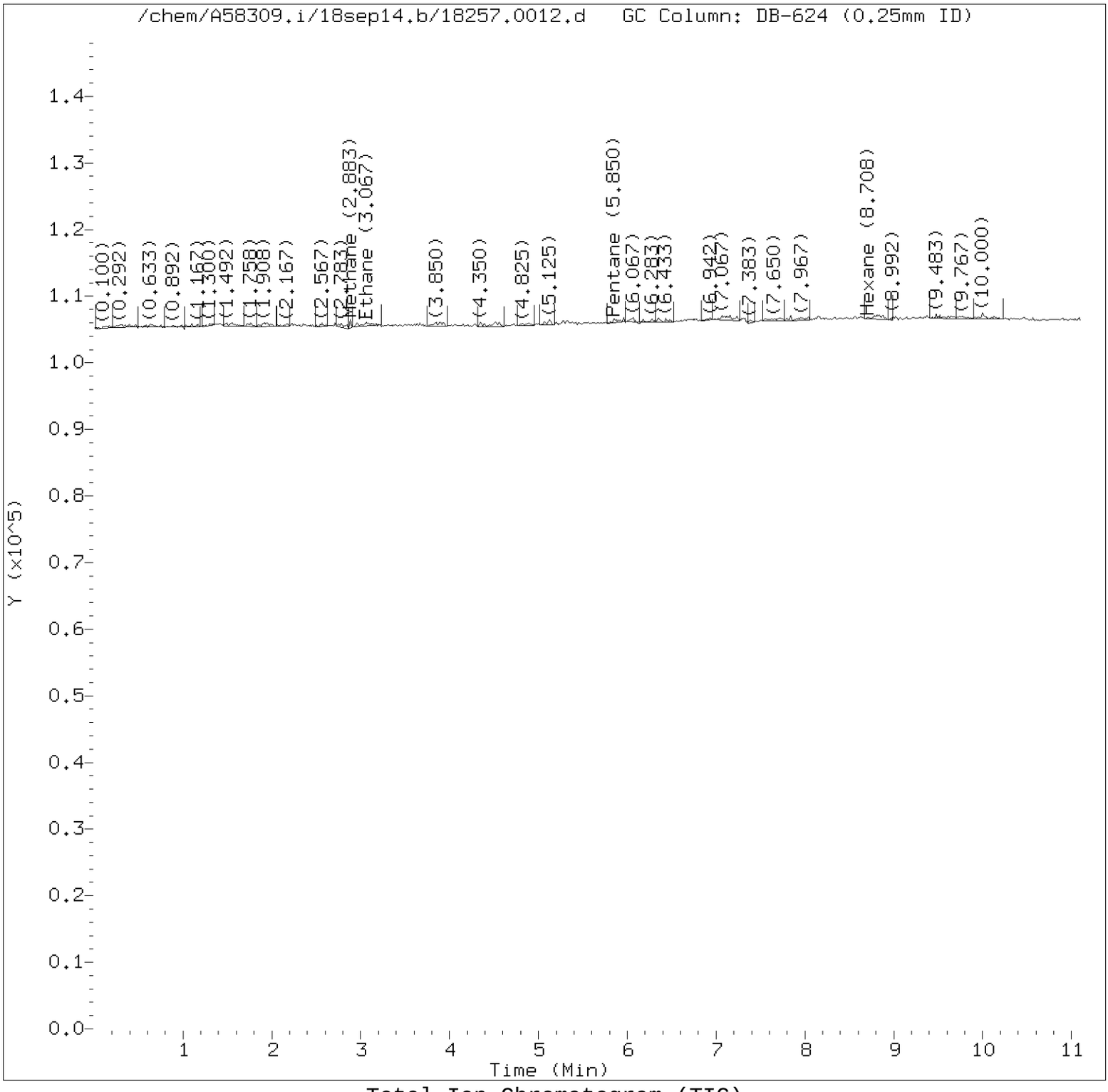
Analysis Comments:

Single Component, Summary, and Range Target Compounds	Expected RT(±window)	RT Low Limit	RT	RT High Limit	Area	On-Column Concentration (ppm(v))	In Sample Concentration (ppm(v))	Blank Conc.	Qual.	Reporting Limit (on-column)	LOQ
1) Methane	2.908(±0.03)	2.878	N.D.	2.938		Not Detected				2	5
2) Ethane	3.042(±0.03)	3.012	N.D.	3.072		Not Detected				0.5	0.5
3) Propane	3.300(±0.03)	3.270	N.D.	3.330		Not Detected				0.2	1
4) Butane	4.067(±0.03)	4.037	N.D.	4.097		Not Detected				0.3	1
5) Pentane	5.850(±0.03)	5.820	N.D.	5.880		Not Detected				0.3	1
7) Hexane	8.700(±0.03)	8.670	N.D.	8.730		Not Detected				0.2	1
16) C2-C10 Hydrocarbons as methane	3.012		19.313		135532	8.479	8.479		J	5	10
17) C2-C10 Hydrocarbons as propane	3.012		19.313			Not Detected				5	10
18) C2-C10 Hydrocarbons as hexane	3.012		19.313			Not Detected				5	10
19) C2-C4 Hydrocarbons as methane	3.012		4.097			Not Detected				5	10
20) C2-C4 Hydrocarbons as propane	3.012		4.097			Not Detected				5	10
21) C2-C4 Hydrocarbons as hexane	3.012		4.097			Not Detected				5	10
22) C1-C10 Hydrocarbons as methane	2.878		19.313		137022	8.572	8.572		J	5	10
23) C1-C10 Hydrocarbons as propane	2.878		19.313			Not Detected				5	10
24) C1-C10 Hydrocarbons as hexane	2.878		19.313			Not Detected				5	10
25) C1-C4 Hydrocarbons as methane	2.878		4.097			Not Detected				5	10
26) C1-C4 Hydrocarbons as propane	2.878		4.097			Not Detected				5	10
27) C1-C4 Hydrocarbons as hexane	2.878		4.097			Not Detected				5	10
28) >C4-C10 Hydrocarbons methane	4.097		19.313		127109	7.952	7.952		J	5	10
29) >C4-C10 Hydrocarbons propane	4.097		19.313			Not Detected				5	10
30) >C4-C10 Hydrocarbons hexane	4.097		19.313			Not Detected				5	10
1) MTBE	8.183(±0.03)	8.153	N.D.	8.213		Not Detected				0.5	1
2) Benzene	11.383(±0.06)	11.323	N.D.	11.443		Not Detected				0.5	1
3) Toluene	14.450(±0.03)	14.420	N.D.	14.480		Not Detected				0.8	1
4) Ethylbenzene	16.900(±0.04)	16.860	N.D.	16.940		Not Detected				0.4	1
5) m/p-Xylene	17.092(±0.04)	17.052	N.D.	17.132		Not Detected				0.7	2
6) o-Xylene	17.767(±0.04)	17.727	N.D.	17.807		Not Detected				0.7	2
7) Xylene (total)						Not Detected				0.7	2

Total number of FID targets = 21 Total number of PID targets = 7

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 08:29. Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 13:30. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

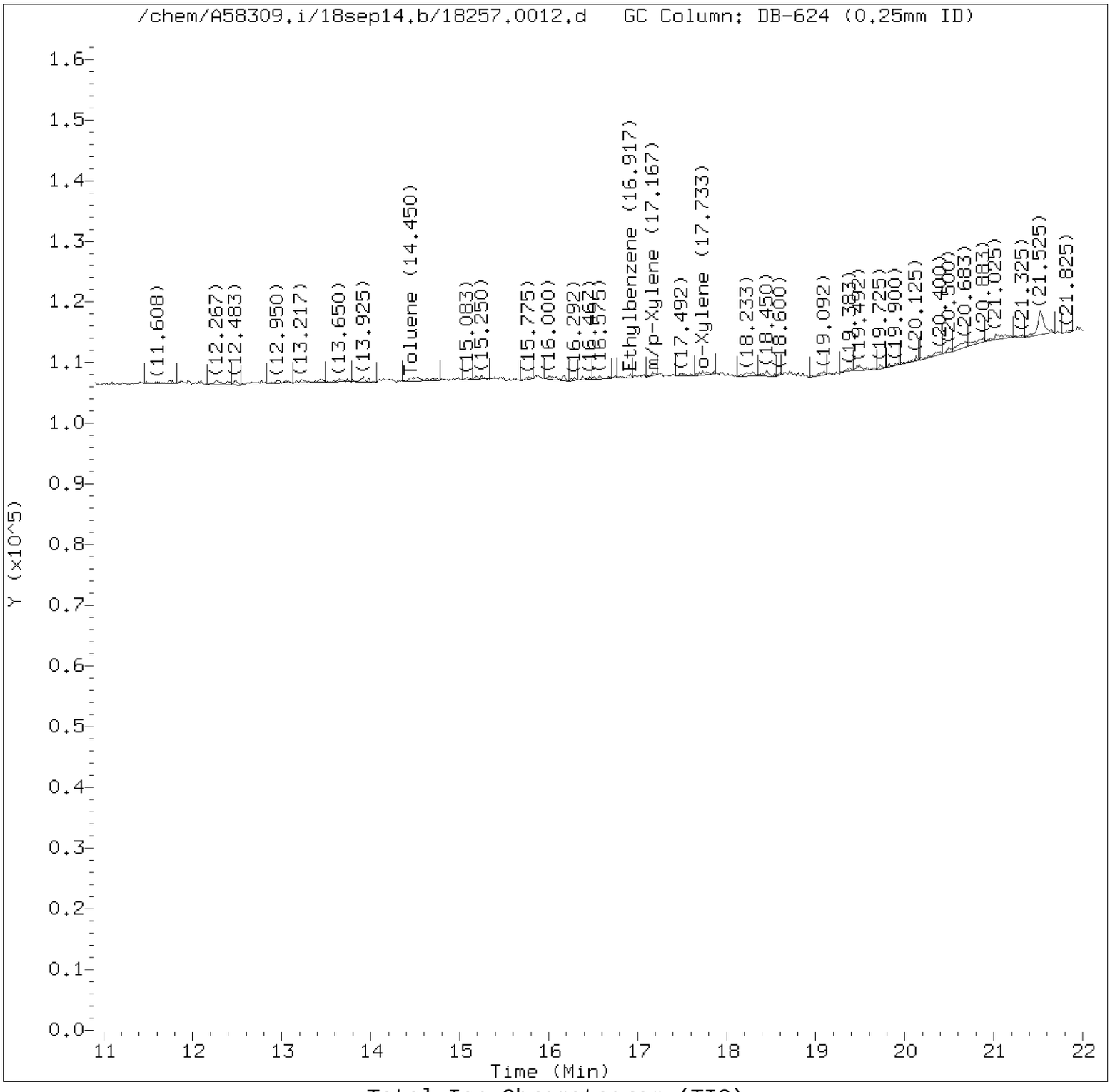
Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0012.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 16:26 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: blank
Calibration date and time: 14-SEP-2018 15:25
Date, time and analyst ID of latest file update: 17-Sep-2018 08:11 ads07818

Sample Name: VBLK257 Lab Sample ID: VBLK257

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:29.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0012.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 16:26 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: blank
Calibration date and time: 14-SEP-2018 15:25
Date, time and analyst ID of latest file update: 17-Sep-2018 08:11 ads07818

Sample Name: VBLK257 Lab Sample ID: VBLK257

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:29.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0012.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 16:26 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: blank
Calibration date and time: 14-SEP-2018 15:25
Date, time and analyst ID of latest file update: 17-Sep-2018 08:11 ads07818

Sample Name: VBLK257 Lab Sample ID: VBLK257

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))

No integrated signals resulted in on-column concentrations above the reporting limit.

Range Target Compounds	Range Start RT	Range End RT	Area	On-Column Concentration (ppm(v))
16) C2-C10 Hydrocarbons as methane	3.012	19.313	135532	8.479
22) C1-C10 Hydrocarbons as methane	2.878	19.313	137022	8.572
28) >C4-C10 Hydrocarbons methane	4.097	19.313	127109	7.952

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:29.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0012.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 16:26 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: blank
Calibration date and time: 14-SEP-2018 15:25
Date, time and analyst ID of latest file update: 17-Sep-2018 08:11 ads07818

Sample Name: VBLK257 Lab Sample ID: VBLK257

RT	Area	Peak Label(s) and Range	Compound #s
0.100	1621		
0.292	3780		
0.633	2623		
0.892	726		
1.167	1942		
1.300	1149		
1.492	3059		
1.758	1874		
1.908	3672		
2.167	1457		
2.567	1515		
2.783	2781		
2.883	1490	Methane	22 23 24 25 26 27
3.067	4007	Ethane	16 17 18 19 20 21 22 23 24 25 26 27
3.850	4417		16 17 18 19 20 21 22 23 24 25 26 27
4.350	5876		16 17 18 22 23 24 28 29 30
4.825	2187		16 17 18 22 23 24 28 29 30
5.125	2877		16 17 18 22 23 24 28 29 30
5.850	2949	Pentane	16 17 18 22 23 24 28 29 30
6.067	1824		16 17 18 22 23 24 28 29 30
6.283	1389		16 17 18 22 23 24 28 29 30
6.433	2742		16 17 18 22 23 24 28 29 30
6.942	898		16 17 18 22 23 24 28 29 30
7.067	6119		16 17 18 22 23 24 28 29 30
7.383	920		16 17 18 22 23 24 28 29 30
7.650	3585		16 17 18 22 23 24 28 29 30
7.967	4405		16 17 18 22 23 24 28 29 30
8.708	5410	Hexane	16 17 18 22 23 24 28 29 30
8.992	435		16 17 18 22 23 24 28 29 30
9.483	3814		16 17 18 22 23 24 28 29 30
9.767	2496		16 17 18 22 23 24 28 29 30
10.000	4563		16 17 18 22 23 24 28 29 30
11.608	3669		16 17 18 22 23 24 28 29 30
12.267	5520		16 17 18 22 23 24 28 29 30
12.483	2418		16 17 18 22 23 24 28 29 30
12.950	3228		16 17 18 22 23 24 28 29 30
13.217	4848		16 17 18 22 23 24 28 29 30
13.650	3064		16 17 18 22 23 24 28 29 30
13.925	5098		16 17 18 22 23 24 28 29 30
14.450	6859	Toluene	16 17 18 22 23 24 28 29 30

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:29.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep14.b/18257.0012.d Instrument ID: A58309.i
Injection date and time: 14-SEP-2018 16:26 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep14.b/gc_fid.m Sublist used: blank
Calibration date and time: 14-SEP-2018 15:25
Date, time and analyst ID of latest file update: 17-Sep-2018 08:11 ads07818

Sample Name: VBLK257 Lab Sample ID: VBLK257

RT	Area	Peak Label(s) and Range Compound #s
15.083	978	16 17 18 22 23 24 28 29 30
15.250	2193	16 17 18 22 23 24 28 29 30
15.775	1876	16 17 18 22 23 24 28 29 30
16.000	5477	16 17 18 22 23 24 28 29 30
16.292	1460	16 17 18 22 23 24 28 29 30
16.467	1690	16 17 18 22 23 24 28 29 30
16.575	2902	16 17 18 22 23 24 28 29 30
16.917	2272	Ethylbenzene 16 17 18 22 23 24 28 29 30
17.167	1560	m/p-Xylene 16 17 18 22 23 24 28 29 30
17.492	2543	16 17 18 22 23 24 28 29 30
17.733	4533	o-Xylene 16 17 18 22 23 24 28 29 30
18.050	6092	
18.233	4739	16 17 18 22 23 24 28 29 30
18.450	4016	16 17 18 22 23 24 28 29 30
18.600	749	16 17 18 22 23 24 28 29 30
19.092	2926	16 17 18 22 23 24 28 29 30
19.383	1201	
19.492	5588	
19.725	1853	
19.900	1882	
20.125	3015	
20.400	4282	
20.500	2783	
20.683	7630	
20.883	5385	
21.025	5623	
21.325	1020	
21.525	19320	
21.825	1296	

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 08:29.
Target 3.5 esignature user ID: ads07818

Volatile Organics in Air by GC/MS Data

Case Narrative/Conformance Summary

Volatile Organics in Air by GC/MS

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Case Narrative/Conformance Summary

CLIENT: Sunoco c/o Enviro. Assessment
SDG: GLE01

Volatiles in Air

Fraction: Volatile Organics in Air by GC/MS

Sample #	Client ID	DF	Comments
9766344	GCCDC-Office-IA	1	
9766345	GCCDC-Class1_IA	1	
9766346	GCCDC-Class5_IA	1	
9766347	GCCDC-Class6_IA	1	
9766348	GCCDC-Class7_IA	1	
9766349	GCCDC-Class10C_IA	1	
9766350	GCCDC-Class10A_IA	1	
9766351	GCCDC-Class6_CS	1	
9766352	GCCDC-Class10B_CS	1	
9766353	GCCDC-ClassX_IA	1	
9766354	GCCDC-Entry_OD	1	

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:

All QC is within specification.

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

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	

1. Relative Response Factor (RRF)

$$RRF = \frac{AX}{Ais} \quad \frac{Cis}{Cx}$$

Where:

Ax = Area of the characteristic ion for the compound to be measured
Ais = Area of the characteristic ion for the specific internal standard to be measured
Cis = Concentration of the internal standard
Cx = Concentration of the compound to be measured

2. % Relative Standard Deviation (%RSD)

$$\%RSD = \frac{standard\ deviation}{Mean} \times 100$$

3. % Difference

$$\%D = \frac{RRFc - RRFi}{RRFi} \times 100$$

Where:

RRFc = Relative response factor from the continuing calibration standard
RRFi = Mean relative response factor from the initial calibration

4. Concentration

$$X_a = \frac{(A_x)(I_s)(Df)}{(A_{is})(RRF)}$$

Where:

X_a = target compound concentration, ppb(v)

A_x = Area of the quantitation ion for the target compound to be measured

A_{is} = Area of quantitation ion for the specific internal standard

I_s = Concentration of internal standard, ppb(v)

RRF = Average relative response factor from initial or continuing calibration

Df = Dilution factor

5. % Recovery

$$\%Rec = \frac{SSR - SR}{SA} \times 100$$

Where:

SSR = Spiked sample result
SR = Sample result
SA = Spike added

QC Summary

Volatile Organics in Air by GC/MS

eurofins | Lancaster Laboratories Environmental

Quality Control Reference List
Volatiles in Air

CLIENT: Sunoco c/o Enviro. Assessment
SDG: GLE01

Fraction: Volatile Organics in Air by GC/MS

Analysis	Batch Number	Sample Number	Analysis Date
TO-15 Standard List	F1823930AA	VBLKF32B	08/27/2018 13:55
		LCSF32Q	08/27/2018 14:41
		LCSDF32Y	08/27/2018 15:11
		9766344	08/27/2018 16:11
		9766345	08/27/2018 16:42
		9766346	08/27/2018 17:12
		9766347	08/27/2018 17:43
		9766348	08/27/2018 18:14
		9766349	08/27/2018 18:44
		9766349	08/27/2018 19:18
		9766350	08/27/2018 19:49
		9766351	08/27/2018 20:20
		9766352	08/27/2018 20:51
		9766353	08/27/2018 21:21
		9766354	08/27/2018 21:52

Fraction: Volatile Organics in Air by GC/MS

F1823930AA / VBLKF32B Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Dichlorodifluoromethane	08/27/18	N.D.	ug/m3	0.64	4.9
Chlorodifluoromethane	08/27/18	N.D.	ug/m3	0.53	3.5
Chloromethane	08/27/18	N.D.	ug/m3	0.50	2.1
Freon 114	08/27/18	N.D.	ug/m3	0.84	7.0
Vinyl Chloride	08/27/18	N.D.	ug/m3	0.31	2.6
1,3-Butadiene	08/27/18	N.D.	ug/m3	0.38	2.2
Bromomethane	08/27/18	N.D.	ug/m3	0.70	3.9
Chloroethane	08/27/18	N.D.	ug/m3	0.50	2.6
Dichlorofluoromethane	08/27/18	N.D.	ug/m3	0.46	4.2
Trichlorofluoromethane	08/27/18	N.D.	ug/m3	0.84	5.6
Pentane	08/27/18	N.D.	ug/m3	0.38	3.0
1,1-Dichloroethene	08/27/18	N.D.	ug/m3	0.56	4.0
Freon 113	08/27/18	N.D.	ug/m3	0.84	7.7
Acetone	08/27/18	N.D.	ug/m3	1.3	12
Carbon Disulfide	08/27/18	N.D.	ug/m3	0.40	3.1
3-Chloropropene	08/27/18	N.D.	ug/m3	0.47	3.1
Methylene Chloride	08/27/18	N.D.	ug/m3	0.87	6.9
trans-1,2-Dichloroethene	08/27/18	N.D.	ug/m3	0.34	4.0
Methyl t-Butyl Ether	08/27/18	N.D.	ug/m3	0.54	3.6
Hexane	08/27/18	N.D.	ug/m3	0.46	3.5
1,1-Dichloroethane	08/27/18	N.D.	ug/m3	0.36	4.0
cis-1,2-Dichloroethene	08/27/18	N.D.	ug/m3	0.48	4.0
2-Butanone	08/27/18	N.D.	ug/m3	0.62	2.9
Chloroform	08/27/18	N.D.	ug/m3	0.45	4.9
1,1,1-Trichloroethane	08/27/18	N.D.	ug/m3	0.65	5.5
Carbon Tetrachloride	08/27/18	N.D.	ug/m3	0.88	6.3
1,2-Dichloroethane	08/27/18	N.D.	ug/m3	0.32	4.0
Benzene	08/27/18	N.D.	ug/m3	0.35	3.2
Isooctane	08/27/18	N.D.	ug/m3	0.61	4.7
Heptane	08/27/18	N.D.	ug/m3	0.94	4.1
Trichloroethene	08/27/18	N.D.	ug/m3	0.97	5.4
1,2-Dichloropropane	08/27/18	N.D.	ug/m3	0.60	4.6
Dibromomethane	08/27/18	N.D.	ug/m3	1.0	7.1
Bromodichloromethane	08/27/18	N.D.	ug/m3	0.80	6.7
cis-1,3-Dichloropropene	08/27/18	N.D.	ug/m3	0.45	4.5
4-Methyl-2-pentanone	08/27/18	N.D.	ug/m3	0.61	4.1
Toluene	08/27/18	N.D.	ug/m3	0.45	3.8
Octane	08/27/18	N.D.	ug/m3	1.9	9.3
trans-1,3-Dichloropropene	08/27/18	N.D.	ug/m3	0.54	4.5
1,1,2-Trichloroethane	08/27/18	N.D.	ug/m3	0.65	5.5
Tetrachloroethene	08/27/18	N.D.	ug/m3	1.7	14
2-Hexanone	08/27/18	N.D.	ug/m3	0.74	4.1
Dibromochloromethane	08/27/18	N.D.	ug/m3	1.1	8.5
1,2-Dibromoethane	08/27/18	N.D.	ug/m3	1.0	7.7
Chlorobenzene	08/27/18	N.D.	ug/m3	0.60	4.6

Fraction: Volatile Organics in Air by GC/MS

F1823930AA / VBLKF32B Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
1,1,1,2-Tetrachloroethane	08/27/18	N.D.	ug/m3	1.0	6.9
Ethylbenzene	08/27/18	N.D.	ug/m3	0.83	4.3
m/p-Xylene	08/27/18	N.D.	ug/m3	1.1	8.7
o-Xylene	08/27/18	N.D.	ug/m3	0.83	4.3
Styrene	08/27/18	N.D.	ug/m3	0.85	4.3
Bromoform	08/27/18	N.D.	ug/m3	1.8	10
Cumene	08/27/18	N.D.	ug/m3	1.2	4.9
1,1,2,2-Tetrachloroethane	08/27/18	N.D.	ug/m3	1.0	6.9
1,2,3-Trichloropropane	08/27/18	N.D.	ug/m3	0.84	6.0
Bromobenzene	08/27/18	N.D.	ug/m3	0.64	6.4
4-Ethyltoluene	08/27/18	N.D.	ug/m3	0.88	4.9
1,3,5-Trimethylbenzene	08/27/18	N.D.	ug/m3	1.6	9.8
1,2,4-Trimethylbenzene	08/27/18	N.D.	ug/m3	1.4	9.8
1,3-Dichlorobenzene	08/27/18	N.D.	ug/m3	1.1	6.0
1,4-Dichlorobenzene	08/27/18	N.D.	ug/m3	1.0	6.0
1,2-Dichlorobenzene	08/27/18	N.D.	ug/m3	1.2	6.0
Hexachloroethane	08/27/18	N.D.	ug/m3	2.6	19

Quality Control Summary
Laboratory Control Standard (LCS)
Laboratory Control Standard Duplicate(LCSD)

SDG: GLE01
Matrix: AIR

Volatiles in Air

Fraction: Volatile Organics in Air by GC/MS

LCS: LCSF32Q LCSD: LCSDF32Y **Analyte**	Batch: **F1823930AA** (Sample number(s): 9766344-9766354)							
	Spike Added ug/m3	**LCS Conc ug/m3**	**LCSD Conc ug/m3**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Dichlorodifluoromethane	49.45	55.01	53.87	111	109	74-133	2	25
Chlorodifluoromethane	35.37	39.09	38.33	111	108	70-138	2	25
Chloromethane	20.65	21.46	21.87	104	106	65-140	2	25
Freon 114	69.91	75.03	75.71	107	108	66-126	1	25
Vinyl Chloride	25.56	29.53	28.7	116	112	75-130	3	25
1,3-Butadiene	22.12	23.31	23.05	105	104	72-122	1	25
Bromomethane	38.83	44.9	45.63	116	118	71-133	2	25
Chloroethane	26.38	30.6	30.14	116	114	76-129	2	25
Dichlorofluoromethane	42.09	48.92	48.3	116	115	75-137	1	25
Trichlorofluoromethane	56.18	57.33	57.36	102	102	73-132	0	25
Pentane	29.51	30.13	30.67	102	104	69-125	2	25
1,1-Dichloroethene	39.65	43.73	44.81	110	113	70-129	2	25
Freon 113	76.64	74.64	73.71	97	96	66-119	1	25
Acetone	23.76	26.36	27.11	111	114	71-136	3	25
Carbon Disulfide	31.14	33.85	33.81	109	109	72-128	0	25
3-Chloropropene	31.3	41.61	42.62	133	136	67-141	2	25
Methylene Chloride	34.74	40.54	41.92	117	121	69-128	3	25
trans-1,2-Dichloroethene	39.65	43.42	43.95	110	111	77-128	1	25
Methyl t-Butyl Ether	36.05	37.22	37.85	103	105	71-119	2	25
Hexane	35.25	35.96	36.53	102	104	70-118	2	25
1,1-Dichloroethane	40.47	42.46	42.75	105	106	74-129	1	25
cis-1,2-Dichloroethene	39.65	41.62	43.05	105	109	76-126	3	25
2-Butanone	29.49	31.2	31.22	106	106	75-126	0	25
Chloroform	48.83	51.98	52.59	106	108	75-127	1	25
1,1,1-Trichloroethane	54.56	54.38	55.43	100	102	74-122	2	25
Carbon Tetrachloride	62.91	65.16	65.17	104	104	72-127	0	25
1,2-Dichloroethane	40.47	41.27	41.98	102	104	72-138	2	25
Benzene	31.95	32.02	32.53	100	102	76-123	2	25
Isooctane	46.72	48.71	49.35	104	106	74-127	1	25
Heptane	40.98	41.79	42.71	102	104	74-122	2	25
Trichloroethene	53.74	54.81	54.93	102	102	76-118	0	25
1,2-Dichloropropane	46.21	44.47	44.79	96	97	75-127	1	25
Dibromomethane	71.1	71.7	69.51	101	98	76-124	3	25
Bromodichloromethane	67.01	66.66	64.69	99	97	75-134	3	25
cis-1,3-Dichloropropene	45.39	43.94	44.4	97	98	51-120	1	25
4-Methyl-2-pentanone	40.96	38.4	37.77	94	92	68-133	2	25
Toluene	37.68	35.63	34.89	95	93	78-119	2	25
Octane	46.72	46.86	45.44	100	97	73-122	3	25
trans-1,3-Dichloropropene	45.39	45.4	42.7	100	94	72-119	6	25
1,1,2-Trichloroethane	54.56	50.98	48.85	93	90	76-127	4	25
Tetrachloroethene	67.82	63.59	62.69	94	92	68-123	1	25
2-Hexanone	40.96	39.53	37.26	97	91	63-144	6	25

Quality Control Summary
Laboratory Control Standard (LCS)
Laboratory Control Standard Duplicate(LCSD)

SDG: GLE01
Matrix: AIR

Volatiles in Air

Fraction: Volatile Organics in Air by GC/MS

LCS: LCSF32Q LCSD: LCSDF32Y **Analyte**	Batch: **F1823930AA** (Sample number(s): 9766344-9766354)							
	Spike Added ug/m3	**LCS Conc ug/m3**	**LCSD Conc ug/m3**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Dibromochloromethane	85.19	83.93	76.65	99	90	74-131	9	25
1,2-Dibromoethane	76.83	70.83	68.72	92	89	73-121	3	25
Chlorobenzene	46.04	41.43	40.68	90	88	76-117	2	25
1,1,1,2-Tetrachloroethane	68.65	62.48	58.73	91	86	73-124	6	25
Ethylbenzene	43.42	39.52	39.27	91	90	77-117	1	25
m/p-Xylene	43.42	39.66	39.82	91	92	78-119	0	25
o-Xylene	43.42	39.26	39.3	90	91	78-121	0	25
Styrene	42.6	41.17	39.16	97	92	76-127	5	25
Bromoform	103.37	98.03	85.41	95	83	69-128	14	25
Cumene	49.16	44.79	44.47	91	90	80-133	1	25
1,1,2,2-Tetrachloroethane	68.65	58.17	56.91	85	83	72-133	2	25
1,2,3-Trichloropropane	60.3	51.21	49.27	85	82	71-127	4	25
Bromobenzene	64.22	56.54	56.49	88	88	74-118	0	25
4-Ethyltoluene	49.16	42.21	43.47	86	88	73-130	3	25
1,3,5-Trimethylbenzene	49.16	43.69	44.22	89	90	72-130	1	25
1,2,4-Trimethylbenzene	49.16	43.45	43.85	88	89	70-138	1	25
1,3-Dichlorobenzene	60.12	48.64	47.85	81	80	75-129	2	25
1,4-Dichlorobenzene	60.12	48.52	46.9	81	78	74-123	3	25
1,2-Dichlorobenzene	60.12	47.31	47.39	79	79	71-126	0	25
Hexachloroethane	96.83	84.91	76.38	88	79	59-135	11	25

Fraction: Volatile Organics in Air by GC/MS

05298: TO-15 Standard List Analyte Name	Default MDL	Default LOQ	Units
Dichlorodifluoromethane	0.64	4.9	ug/m3
Chlorodifluoromethane	0.53	3.5	ug/m3
Freon 114	0.84	7.0	ug/m3
Chloromethane	0.50	2.1	ug/m3
Vinyl Chloride	0.31	2.6	ug/m3
1,3-Butadiene	0.38	2.2	ug/m3
Bromomethane	0.70	3.9	ug/m3
Chloroethane	0.50	2.6	ug/m3
Dichlorofluoromethane	0.46	4.2	ug/m3
Trichlorofluoromethane	0.84	5.6	ug/m3
Pentane	0.38	3.0	ug/m3
1,1-Dichloroethene	0.56	4.0	ug/m3
Freon 113	0.84	7.7	ug/m3
Acetone	1.3	12	ug/m3
Carbon Disulfide	0.40	3.1	ug/m3
3-Chloropropene	0.47	3.1	ug/m3
Methylene Chloride	0.87	6.9	ug/m3
trans-1,2-Dichloroethene	0.34	4.0	ug/m3
Methyl t-Butyl Ether	0.54	3.6	ug/m3
Hexane	0.46	3.5	ug/m3
1,1-Dichloroethane	0.36	4.0	ug/m3
cis-1,2-Dichloroethene	0.48	4.0	ug/m3
2-Butanone	0.62	2.9	ug/m3
Chloroform	0.45	4.9	ug/m3
1,1,1-Trichloroethane	0.65	5.5	ug/m3
Carbon Tetrachloride	0.88	6.3	ug/m3
1,2-Dichloroethane	0.32	4.0	ug/m3
Benzene	0.35	3.2	ug/m3
Isooctane	0.61	4.7	ug/m3
Heptane	0.94	4.1	ug/m3
Trichloroethene	0.97	5.4	ug/m3
1,2-Dichloropropane	0.60	4.6	ug/m3
Dibromomethane	1.0	7.1	ug/m3
Bromodichloromethane	0.80	6.7	ug/m3
cis-1,3-Dichloropropene	0.45	4.5	ug/m3
4-Methyl-2-pentanone	0.61	4.1	ug/m3
Toluene	0.45	3.8	ug/m3
Octane	1.9	9.3	ug/m3
trans-1,3-Dichloropropene	0.54	4.5	ug/m3
1,1,2-Trichloroethane	0.65	5.5	ug/m3
Tetrachloroethene	1.7	14	ug/m3
2-Hexanone	0.74	4.1	ug/m3
Dibromochloromethane	1.1	8.5	ug/m3
1,2-Dibromoethane	1.0	7.7	ug/m3
Chlorobenzene	0.60	4.6	ug/m3
1,1,1,2-Tetrachloroethane	1.0	6.9	ug/m3
Ethylbenzene	0.83	4.3	ug/m3

Fraction: Volatile Organics in Air by GC/MS

05298: TO-15 Standard List Analyte Name	Default MDL	Default LOQ	Units
m/p-Xylene	1.1	8.7	ug/m3
o-Xylene	0.83	4.3	ug/m3
Styrene	0.85	4.3	ug/m3
Bromoform	1.8	10	ug/m3
Cumene	1.2	4.9	ug/m3
1,1,2,2-Tetrachloroethane	1.0	6.9	ug/m3
1,2,3-Trichloropropane	0.84	6.0	ug/m3
Bromobenzene	0.64	6.4	ug/m3
4-Ethyltoluene	0.88	4.9	ug/m3
1,3,5-Trimethylbenzene	1.6	9.8	ug/m3
1,2,4-Trimethylbenzene	1.4	9.8	ug/m3
1,3-Dichlorobenzene	1.1	6.0	ug/m3
1,4-Dichlorobenzene	1.0	6.0	ug/m3
1,2-Dichlorobenzene	1.2	6.0	ug/m3
Hexachloroethane	2.6	19	ug/m3

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

SDG No.:

Lab File ID: fh00570.d

BFB Injection Date: 08/24/2018

Instrument ID: 26379

BFB Injection Time: 15:03

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0% - 40.0% of mass 95	35.64
75	30.0% - 66.0% of mass 95	48.42
95	Base peak, 100% relative abundance	100.00
96	5.0% - 9.0% of mass 95	6.86
173	< 2.0% of mass 174	0.59 (0.76)
174	> 50.0% of mass 95	76.93
175	4.0% - 9.0% of mass 174	4.95 (6.44)
176	93.0% - 101.0% of mass 174	73.07 (94.98)
177	5.0% - 9.0% of mass 176	4.21 (5.76)

THIS CHECK APPLIES TO THE FOLLOWING:

LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD010	fh00571.d	08/24/2018	15:57
VSTD005	fh00572.d	08/24/2018	16:27
VSTD002	fh00573.d	08/24/2018	16:58
VSTD001	fh00574.d	08/24/2018	17:29
VSTD025	fh00575.d	08/24/2018	17:59
VSTD070	fh00576.d	08/24/2018	18:30
VBLKF30	fh00580.d	08/24/2018	20:33
LCSF30	fh00581.d	08/24/2018	21:03
LCSDF30	fh00582.d	08/24/2018	21:34
mdlv0.5	fh00583.d	08/24/2018	22:04
mdlv0.2	fh00584.d	08/24/2018	22:35

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

SDG No.:

Lab File ID: fh00620.d

BFB Injection Date: 08/27/2018

Instrument ID: 26379

BFB Injection Time: 12:20

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0% - 40.0% of mass 95	37.35
75	30.0% - 66.0% of mass 95	50.23
95	Base peak, 100% relative abundance	100.00
96	5.0% - 9.0% of mass 95	6.68
173	< 2.0% of mass 174	0.58 (0.80)
174	> 50.0% of mass 95	72.93
175	4.0% - 9.0% of mass 174	5.07 (6.95)
176	93.0% - 101.0% of mass 174	70.03 (96.03)
177	5.0% - 9.0% of mass 176	4.79 (6.84)

THIS CHECK APPLIES TO THE FOLLOWING:

LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD010	fh00621.d	08/27/2018	13:07
VBLKF32	fh00622.d	08/27/2018	13:55
LCSF32	fh00623.d	08/27/2018	14:41
LCSDF32	fh00624.d	08/27/2018	15:11
9766344	fh00625.d	08/27/2018	16:11
9766345	fh00626.d	08/27/2018	16:42
9766346	fh00627.d	08/27/2018	17:12
9766347	fh00628.d	08/27/2018	17:43
9766348	fh00629.d	08/27/2018	18:14
9766349	fh00630.d	08/27/2018	18:44
9766349	fh00631.d	08/27/2018	19:18
9766350	fh00632.d	08/27/2018	19:49
9766351	fh00633.d	08/27/2018	20:20
9766352	fh00634.d	08/27/2018	20:51
9766353	fh00635.d	08/27/2018	21:21
9766354	fh00636.d	08/27/2018	21:52
9767476	fh00637.d	08/27/2018	22:23
9765349	fh00638.d	08/27/2018	22:54
9765349DL	fh00639.d	08/27/2018	23:25
9765352	fh00640.d	08/27/2018	23:56
9765352DL	fh00641.d	08/28/2018	00:27

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	1.00	2.00	5.00	10.00	25.00	70.0
Dichlorodifluoromethane	75-71-8	1.00	2.00	5.00	10.00	25.00	
Chlorodifluoromethane	75-45-6	1.00	2.00	5.00	10.00	25.00	
Freon 114	76-14-2	1.00	2.00	5.00	10.00	25.00	
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	1.00	2.00	5.00	10.00	25.00	
Bromomethane	74-83-9	1.00	2.00	5.00	10.00	25.00	
Chloroethane	75-00-3	1.00	2.00	5.00	10.00	25.00	
Bromoethene	593-60-2	1.00	2.00	5.00	10.00	25.00	
Dichlorofluoromethane	75-43-4	1.00	2.00	5.00	10.00	25.00	
Trichlorofluoromethane	75-69-4	1.00	2.00	5.00	10.00	25.00	
Pentane	109-66-0	1.00	2.00	5.00	10.00	25.00	70.0
Ethanol	9003-99-0	1.00	2.00	5.00	10.00	25.00	
Acrolein	107-02-8	1.00	2.00	5.00	10.00	25.00	
1,1-Dichloroethene	75-35-4	1.00	2.00	5.00	10.00	25.00	70.0
Freon 113	76-13-1	1.00	2.00	5.00	10.00	25.00	
Acetone	67-64-1	1.00	2.00	5.00	10.00	25.00	70.0
Methyl Iodide	74-88-4	1.00	2.00	5.00	10.00	25.00	
Carbon Disulfide	75-15-0	1.00	2.00	5.00	10.00	25.00	
Acetonitrile	75-05-8	1.00	2.00	5.00	10.00	25.00	
3-Chloropropene	107-05-1	1.00	2.00	5.00	10.00	25.00	
Methylene Chloride	75-09-2	1.00	2.00	5.00	10.00	25.00	70.0
tert-Butyl Alcohol	75-65-0	1.12	2.24	5.60	11.20	28.00	78.4
Acrylonitrile	107-13-1	1.00	2.00	5.00	10.00	25.00	
trans-1,2-Dichloroethene	156-60-5	1.00	2.00	5.00	10.00	25.00	70.0
Methyl t-Butyl Ether	1634-04-4	1.00	2.00	5.00	10.00	25.00	
Hexane	110-54-3	1.00	2.00	5.00	10.00	25.00	70.0
1,1-Dichloroethane	75-34-3	1.00	2.00	5.00	10.00	25.00	70.0
Vinyl Acetate	108-05-4	1.00	2.00	5.00	10.00	25.00	
Di-Isopropyl Ether	108-20-3	1.00	2.00	5.00	10.00	25.00	
Ethyl Tert-Butyl Ether	637-92-3	1.00	2.00	5.00	10.00	25.00	
cis-1,2-Dichloroethene	156-59-2	1.00	2.00	5.00	10.00	25.00	70.0
2-Butanone	78-93-3	1.00	2.00	5.00	10.00	25.00	70.0
Ethyl Acetate	141-78-6	1.00	2.00	5.00	10.00	25.00	
Methyl Acrylate	96-33-3	1.00	2.00	5.00	10.00	25.00	
Tetrahydrofuran	77392-70-2	1.00	2.00	5.00	10.00	25.00	
Chloroform	67-66-3	1.00	2.00	5.00	10.00	25.00	
1,1,1-Trichloroethane	71-55-6	1.00	2.00	5.00	10.00	25.00	70.0
Cyclohexane	68411-77-8	1.00	2.00	5.00	10.00	25.00	
Carbon Tetrachloride	56-23-5	1.00	2.00	5.00	10.00	25.00	70.0
1,4-Difluorobenzene	540-36-3	10.00	10.00	10.00	10.00	10.00	10.00
1,2-Dichloroethane	107-06-2	1.00	2.00	5.00	10.00	25.00	70.0
Benzene	71-43-2	1.00	2.00	5.00	10.00	25.00	70.0
Isooctane	540-84-1	1.00	2.00	5.00	10.00	25.00	70.0
Tert Amyl Methyl Ether	64257-84-7	1.00	2.00	5.00	10.00	25.00	
Heptane	142-82-5	1.00	2.00	5.00	10.00	25.00	70.0

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

Trichloroethene	79-01-6	1.00	2.00	5.00	10.00	25.00	70.0
Ethyl Acrylate	140-88-5	1.00	2.00	5.00	10.00	25.00	
1,2-Dichloropropane	78-87-5	1.00	2.00	5.00	10.00	25.00	
Methyl Methacrylate	80-62-6	1.00	2.00	5.00	10.00	25.00	
Dibromomethane	74-95-3	1.00	2.00	5.00	10.00	25.00	
1,4-Dioxane	123-91-1	1.00	2.00	5.00	10.00	25.00	
Bromodichloromethane	75-27-4	1.00	2.00	5.00	10.00	25.00	
cis-1,3-Dichloropropene	10061-01-5	1.00	2.00	5.00	10.00	25.00	
4-Methyl-2-Pentanone	108-10-1	1.00	2.00	5.00	10.00	25.00	
Chlorobenzene d5	3114-55-4	10.00	10.00	10.00	10.00	10.00	10.00
Toluene	108-88-3	1.00	2.00	5.00	10.00	25.00	70.0
Octane	111-65-9	1.00	2.00	5.00	10.00	25.00	
trans-1,3-Dichloropropene	10061-02-6	1.00	2.00	5.00	10.00	25.00	
Ethyl Methacrylate	97-63-2	1.00	2.00	5.00	10.00	25.00	
1,1,2-Trichloroethane	79-00-5	1.00	2.00	5.00	10.00	25.00	70.0
Tetrachloroethene	127-18-4	1.00	2.00	5.00	10.00	25.00	70.0
2-Hexanone	591-78-6	1.00	2.00	5.00	10.00	25.00	
Dibromochloromethane	124-48-1	1.00	2.00	5.00	10.00	25.00	
1,2-Dibromoethane	106-93-4	1.00	2.00	5.00	10.00	25.00	
Chlorobenzene	108-90-7	1.00	2.00	5.00	10.00	25.00	
1,1,1,2-Tetrachloroethane	630-20-6	1.00	2.00	5.00	10.00	25.00	
Ethylbenzene	100-41-4	1.00	2.00	5.00	10.00	25.00	70.0
m/p-Xylene	1330-20-7	1.00	2.00	5.00	10.00	25.00	70.0
o-Xylene	95-47-6	1.00	2.00	5.00	10.00	25.00	70.0
Styrene	100-42-5	1.00	2.00	5.00	10.00	25.00	
Bromoform	75-25-2	1.00	2.00	5.00	10.00	25.00	
Cumene	98-82-8	1.00	2.00	5.00	10.00	25.00	
1,1,2,2-Tetrachloroethane	79-34-5	1.00	2.00	5.00	10.00	25.00	
1,2,3-Trichloropropane	96-18-4	1.00	2.00	5.00	10.00	25.00	
n-Propylbenzene	74296-31-4	1.00	2.00	5.00	10.00	25.00	
2-Chlorotoluene	95-49-8	1.00	2.00	5.00	10.00	25.00	
Bromobenzene	108-86-1	1.00	2.00	5.00	10.00	25.00	
4-Ethyltoluene	622-96-8	1.00	2.00	5.00	10.00	25.00	
1,3,5-Trimethylbenzene	108-67-8	1.00	2.00	5.00	10.00	25.00	
Alpha Methyl Styrene	611-15-1	1.00	2.00	5.00	10.00	25.00	
tert-Butylbenzene	98-06-6	1.00	2.00	5.00	10.00	25.00	
1,2,4-Trimethylbenzene	95-63-6	1.00	2.00	5.00	10.00	25.00	
sec-Butylbenzene	68411-44-9	1.00	2.00	5.00	10.00	25.00	
1,3-Dichlorobenzene	541-73-1	1.00	2.00	5.00	10.00	25.00	
1,4-Dichlorobenzene	106-46-7	1.00	2.00	5.00	10.00	25.00	
p-Isopropyltoluene	99-87-6	1.00	2.00	5.00	10.00	25.00	
Benzyl chloride	100-44-7	1.00	2.00	5.00	10.00	25.00	
1,2-Dichlorobenzene	95-50-1	1.00	2.00	5.00	10.00	25.00	
n-Butylbenzene	74296-32-5	1.00	2.00	5.00	10.00	25.00	
Hexachloroethane	67-72-1	1.00	2.00	5.00	10.00	25.00	
1,2-Dibromo-3-Chloropropane	96-12-8	1.00	2.00	5.00	10.00	25.00	
1,2,4-Trichlorobenzene	120-82-1	1.00	2.00	5.00	10.00	25.00	
Hexachlorobutadiene	87-68-3	1.00	2.00	5.00	10.00	25.00	
Naphthalene	91-20-3	1.00	2.00	5.00	10.00	25.00	

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FORM 06
VOLATILE ORGANICS IN AIR
INITIAL CALIBRATION DATA

SDG No.:

Instrument ID: 26379 Calibration Start Date: 08/24/2018 Calibration End Date: 08/24/2018

Calibration Start Time: 15:57 Calibration End Time: 18:30

LAB FILE IDs:
RRF 1 = fh00574.d RRF 2 = fh00573.d RRF 5 = fh00572.d RRF 10 = fh00571.d RRF 25 = fh00575.d
RRF 70 = fh00576.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	___ RRF	% RSD	CAL. METHOD
Propene	1.375	1.709	1.750	1.805	1.751	1.902	1.715	10	AVG
Dichlorodifluoromethane	2.493	3.051	3.546	3.801	3.437	3.710	3.340	15	AVG
Chlorodifluoromethane	3.670	3.981	4.099	4.476	4.043	4.060	4.055	6	AVG
Freon 114	3.385	3.342	3.659	3.898	3.442	3.690	3.569	6	AVG
Chloromethane	2.037	2.127	2.279	2.274	2.139	2.136	2.165	4	AVG
Vinyl Chloride	1.342	1.657	1.738	1.888	1.766	1.797	1.698	11	AVG
1,3-Butadiene	1.646	1.602	1.621	1.762	1.612	1.679	1.654	4	AVG
Bromomethane	0.823	0.868	1.046	1.174	1.058	1.193	1.027	15	AVG
Chloroethane	0.626	0.868	1.016	1.059	1.003	1.086	0.943	18	AVG
Bromoethene	0.669	0.950	1.062	1.101	1.062	1.207	1.008	18	AVG
Dichlorofluoromethane	2.504	3.089	3.482	3.777	3.444	3.595	3.315	14	AVG
Trichlorofluoromethane	3.445	3.235	3.223	3.412	3.122	3.235	3.279	4	AVG
Pentane	2.972	3.581	3.490	3.794	3.852	4.057	3.625	10	AVG
Ethanol	0.668	0.709	0.687	0.719	0.742	0.862	0.731	9	AVG
Freon123a	3.428	3.370	3.138	3.365	3.069	3.139	3.251	5	AVG
Acrolein	0.577	0.685	0.767	0.861	0.880	1.000	0.795	19	AVG
1,1-Dichloroethene	2.430	2.809	3.047	3.295	3.173	3.503	3.043	12	AVG
Freon 113	2.165	2.107	1.880	1.926	1.818	1.778	1.946	8	AVG
Acetone	2.481	3.007	3.264	3.617	3.327	3.503	3.200	13	AVG
Methyl Iodide	1.752	2.215	2.677	2.496	2.692	2.560	2.399	15	AVG
Carbon Disulfide	2.668	3.338	3.724	4.180	3.873	4.108	3.648	16	AVG
Isopropanol	2.505	2.661	3.051	3.259	3.284	3.873	3.106	16	AVG
Acetonitrile	1.429	1.713	1.846	2.035	1.961	2.062	1.841	13	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: 26379 Calibration Start Date: 08/24/2018 Calibration End Date: 08/24/2018

Calibration Start Time: 15:57 Calibration End Time: 18:30

LAB FILE IDs:
RRF 1 = fh00574.d RRF 2 = fh00573.d RRF 5 = fh00572.d RRF 10 = fh00571.d RRF 25 = fh00575.d
RRF 70 = fh00576.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	___ RRF	% RSD	CAL. METHOD
3-Chloropropene	1.791	2.137	2.423	2.678	2.684	2.978	2.448	18	AVG
Methylene Chloride	0.944	1.008	1.145	1.244	1.137	1.225	1.117	11	AVG
tert-Butyl Alcohol	3.609	3.776	3.772	3.851	3.962	4.419	3.898	7	AVG
Acrylonitrile	1.455	1.631	1.842	1.975	1.965	2.165	1.839	14	AVG
trans-1,2-Dichloroethene	2.162	2.545	2.901	3.155	3.021	3.297	2.847	15	AVG
Methyl t-Butyl Ether	3.186	3.278	3.387	3.735	3.722	3.950	3.543	9	AVG
Hexane	2.353	2.120	2.177	2.396	2.360	2.432	2.306	5	AVG
1,1-Dichloroethane	3.420	3.476	3.758	4.044	3.730	3.992	3.737	7	AVG
Vinyl Acetate	4.243	4.764	5.334	5.979	6.162	6.614	5.516	16	AVG
Di-Isopropyl Ether	6.140	6.545	6.481	7.037	7.485	7.908	6.933	10	AVG
Ethyl Tert-Butyl Ether	4.836	5.366	5.804	6.410	6.774	7.238	6.071	15	AVG
cis-1,2-Dichloroethene	2.172	2.435	2.701	2.937	2.825	3.181	2.709	13	AVG
2-Butanone	4.256	4.229	4.407	4.804	4.637	4.918	4.542	6	AVG
Ethyl Acetate	4.481	4.526	4.692	5.154	5.111	5.459	4.904	8	AVG
Methyl Acrylate	2.972	3.326	3.706	4.189	4.230	4.640	3.844	16	AVG
Tetrahydrofuran	1.917	2.059	2.253	2.536	2.485	2.749	2.333	13	AVG
Chloroform	2.648	2.765	2.970	3.147	2.930	3.068	2.921	6	AVG
1,1,1-Trichloroethane	2.873	2.792	2.807	2.964	2.858	2.958	2.875	3	AVG
Cyclohexane	3.148	3.157	3.140	3.469	3.729	3.995	3.440	10	AVG
Carbon Tetrachloride	2.640	2.389	2.351	2.421	2.480	2.688	2.495	6	AVG
Benzene	1.229	1.282	1.283	1.380	1.309	1.269	1.292	4	AVG
1,2-Dichloroethane	0.787	0.824	0.849	0.901	0.856	0.836	0.842	4	AVG
Isooctane	2.263	2.718	2.852	3.182	3.294	3.104	2.902	13	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: 26379 Calibration Start Date: 08/24/2018 Calibration End Date: 08/24/2018

Calibration Start Time: 15:57 Calibration End Time: 18:30

LAB FILE IDs:
RRF 1 = fh00574.d RRF 2 = fh00573.d RRF 5 = fh00572.d RRF 10 = fh00571.d RRF 25 = fh00575.d
RRF 70 = fh00576.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	___ RRF	% RSD	CAL. METHOD
Tert-Amyl Methyl Ether	0.905	0.942	0.967	1.047	1.102	****	0.993	8	AVG
Heptane	0.360	0.368	0.400	0.443	0.467	0.468	0.418	12	AVG
Trichloroethene	0.408	0.440	0.452	0.467	0.450	0.457	0.446	5	AVG
Ethyl Acrylate	1.268	1.302	1.325	1.433	1.536	1.579	1.407	9	AVG
1,2-Dichloropropane	0.725	0.801	0.727	0.779	0.741	0.699	0.745	5	AVG
Dibromomethane	0.422	0.419	0.428	0.463	0.429	0.427	0.431	4	AVG
1,4-Dioxane	0.258	0.241	0.254	0.277	0.290	0.292	0.269	8	AVG
Methyl Methacrylate	0.375	0.371	0.392	0.422	0.448	0.486	0.416	11	AVG
Bromodichloromethane	0.838	0.887	0.871	0.928	0.879	0.863	0.878	3	AVG
cis-1,3-Dichloropropene	0.664	0.717	0.703	0.775	0.764	0.798	0.737	7	AVG
4-Methyl-2-Pentanone	1.728	1.707	1.598	1.715	1.725	1.595	1.678	4	AVG
Toluene	1.532	1.432	1.442	1.493	1.486	1.477	1.477	2	AVG
Octane	1.448	1.455	1.533	1.722	1.828	1.713	1.616	10	AVG
trans-1,3-Dichloropropene	0.620	0.606	0.637	0.693	0.705	0.741	0.667	8	AVG
Ethyl Methacrylate	0.693	0.641	0.681	0.751	0.791	0.869	0.737	11	AVG
1,1,2-Trichloroethane	0.666	0.576	0.582	0.598	0.555	0.548	0.588	7	AVG
Tetrachloroethene	0.739	0.700	0.683	0.734	0.686	0.660	0.700	4	AVG
2-Hexanone	1.477	1.467	1.495	1.644	1.704	1.664	1.575	7	AVG
Dibromochloromethane	0.557	0.600	0.577	0.606	0.596	0.627	0.594	4	AVG
1,2-Dibromoethane	0.863	0.780	0.798	0.844	0.782	0.806	0.812	4	AVG
Chlorobenzene	1.395	1.263	1.210	1.245	1.189	1.158	1.243	7	AVG
1,1,1,2-Tetrachloroethane	0.649	0.602	0.577	0.588	0.564	0.561	0.590	6	AVG
Ethylbenzene	2.073	1.952	1.938	2.084	2.033	****	2.016	3	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: 26379 Calibration Start Date: 08/24/2018 Calibration End Date: 08/24/2018

Calibration Start Time: 15:57 Calibration End Time: 18:30

LAB FILE IDs:
RRF 1 = fh00574.d RRF 2 = fh00573.d RRF 5 = fh00572.d RRF 10 = fh00571.d RRF 25 = fh00575.d
RRF 70 = fh00576.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	___ RRF	% RSD	CAL. METHOD
m/p-Xylene	1.429	1.347	1.380	1.500	1.510	1.528	1.449	5	AVG
o-Xylene	1.350	1.285	1.350	1.465	1.488	1.537	1.412	7	AVG
Styrene	0.879	0.886	1.011	1.083	1.122	1.154	1.023	12	AVG
Bromoform	0.717	0.720	0.717	0.718	0.751	0.800	0.737	5	AVG
Cumene	1.889	1.812	1.905	2.081	2.043	****	1.946	6	AVG
Bromobenzene	0.741	0.678	0.708	0.728	0.671	0.656	0.697	5	AVG
1,1,2,2-Tetrachloroethane	1.666	1.448	1.407	1.442	1.299	1.246	1.418	10	AVG
1,2,3-Trichloropropane	0.414	0.395	0.377	0.398	0.352	0.360	0.383	6	AVG
n-Propylbenzene	0.541	0.521	0.534	0.603	0.588	0.602	0.565	7	AVG
2-Chlorotoluene	0.473	0.508	0.546	0.553	0.518	0.520	0.520	5	AVG
4-Ethyltoluene	1.925	1.878	2.011	2.173	2.113	****	2.020	6	AVG
1,3,5-Trimethylbenzene	1.598	1.580	1.756	1.911	1.830	****	1.735	8	AVG
Alpha Methyl Styrene	0.736	0.735	0.718	0.844	0.871	****	0.781	9	AVG
tert-Butylbenzene	1.396	1.405	1.580	1.751	1.614	****	1.549	10	AVG
1,2,4-Trimethylbenzene	1.510	1.508	1.711	1.838	1.812	****	1.676	10	AVG
sec-Butylbenzene	2.374	2.417	2.607	2.847	2.693	****	2.588	8	AVG
1,3-Dichlorobenzene	1.312	1.206	1.229	1.264	1.183	****	1.239	4	AVG
1,4-Dichlorobenzene	1.276	1.189	1.211	1.238	1.193	****	1.221	3	AVG
p-Isopropyltoluene	1.770	1.770	1.977	2.203	2.103	****	1.965	10	AVG
Benzyl Chloride	0.252	0.250	0.263	0.282	0.307	****	0.271	9	AVG
1,2-Dichlorobenzene	1.233	1.131	1.160	1.194	1.101	1.087	1.151	5	AVG
n-Butylbenzene	1.081	1.117	1.296	1.415	1.414	****	1.264	13	AVG
Hexachloroethane	0.511	0.522	0.491	0.505	0.582	0.682	0.549	13	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: 26379 Calibration Start Date: 08/24/2018 Calibration End Date: 08/24/2018

Calibration Start Time: 15:57 Calibration End Time: 18:30

LAB FILE IDs:
RRF 1 = fh00574.d RRF 2 = fh00573.d RRF 5 = fh00572.d RRF 10 = fh00571.d RRF 25 = fh00575.d
RRF 70 = fh00576.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
1,2-Dibromo-3-chloropropane	0.565	0.577	0.554	0.567	0.539	0.579	0.564	3	AVG
1,2,4-Trichlorobenzene	0.751	0.819	0.811	0.790	0.737	0.810	0.786	4	AVG
Hexachlorobutadiene	0.772	0.770	0.748	0.727	0.640	0.671	0.721	8	AVG
Naphthalene	1.417	1.410	1.616	1.666	1.594	****	1.540	8	AVG

Average % RSD: 9

* 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.

Internal Standard
Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP26379.i/18aug24.b/fh00571.d VSTD010
/chem/HP26379.i/18aug24.b/fh00572.d VSTD005
/chem/HP26379.i/18aug24.b/fh00573.d VSTD002
/chem/HP26379.i/18aug24.b/fh00574.d VSTD001
/chem/HP26379.i/18aug24.b/fh00575.d VSTD025
/chem/HP26379.i/18aug24.b/fh00576.d VSTD070

Area Summary

Internal Standard Name	File ID: fh00571.d	fh00572.d	fh00573.d	fh00574.d	fh00575.d	fh00576.d	Avg. Area	%RSD	In Spec
Bromochloromethane	405127	429439	403797	393632	419358	432604	413993	4	Yes
1,4-Difluorobenzene	1404671	1468568	1334256	1317797	1438484	1618536	1430385	8	Yes
Chlorobenzene-d5	1373592	1409935	1350358	1266943	1379092	1498163	1379680	5	Yes

%RSD of internal standard area is flagged out of spec if greater than 30.

RT Summary

Internal Standard Name	File ID: fh00571.d	fh00572.d	fh00573.d	fh00574.d	fh00575.d	fh00576.d	Avg. RT
Bromochloromethane	11.101	11.100	11.101	11.101	11.101	11.108	11.102
1,4-Difluorobenzene	13.393	13.393	13.393	13.393	13.393	13.393	13.393
Chlorobenzene-d5	18.228	18.235	18.228	18.228	18.228	18.228	18.229

Comments:_____

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Report generated on 08/26/2018 at 16:57

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 LCS File ID: fh00581.d LCSD File ID: fh00582.d

Batch: F1823630AA LCS Injected: 08/24/2018 LCSD Injected: 08/24/2018

Method: EPA TO-15 LCS Client ID: LCSF30 LCSD Client ID: LCSDF30

Dilution Factor: 1

COMPOUND	SPIKE LEVEL	LCS CONC. (ppb(v))	LCSD CONC. (ppb(v))	LCS %REC	LCSD %REC	RANGE	%RPD	RPD MAX	IN SPEC
Dichlorodifluoromethane	10.00	10.94	11.36	109	114	74-133	4	25	YES
Chlorodifluoromethane	10.00	10.86	11.10	109	111	70-138	2	25	YES
Freon 114	10.00	10.50	10.74	105	107	66-126	2	25	YES
Chloromethane	10.00	10.34	10.81	103	108	65-140	4	25	YES
Vinyl Chloride	10.00	10.89	11.34	109	113	75-130	4	25	YES
1,3-Butadiene	10.00	10.25	10.47	103	105	72-122	2	25	YES
Bromomethane	10.00	11.30	11.74	113	117	71-133	4	25	YES
Chloroethane	10.00	11.18	11.56	112	116	76-129	3	25	YES
Dichlorofluoromethane	10.00	11.33	11.70	113	117	75-137	3	25	YES
Trichlorofluoromethane	10.00	10.17	10.33	102	103	73-132	1	25	YES
Pentane	10.00	9.85	10.31	99	103	69-125	4	25	YES
1,1-Dichloroethene	10.00	10.49	11.09	105	111	70-129	6	25	YES
Freon 113	10.00	9.61	9.69	96	97	66-119	1	25	YES
Acetone	10.00	11.00	11.36	110	114	71-136	3	25	YES
Carbon Disulfide	10.00	10.64	10.93	106	109	72-128	3	25	YES
3-Chloropropene	10.00	13.25	13.89	133	139	67-141	5	25	YES
Methylene Chloride	10.00	12.25	11.91	123	119	69-128	3	25	YES
trans-1,2-Dichloroethene	10.00	10.62	10.96	106	110	77-128	3	25	YES
Methyl t-Butyl Ether	10.00	10.09	10.46	101	105	71-119	4	25	YES
Hexane	10.00	10.09	10.25	101	102	70-118	2	25	YES
1,1-Dichloroethane	10.00	10.46	10.72	105	107	74-129	2	25	YES
cis-1,2-Dichloroethene	10.00	10.04	10.80	100	108	76-126	7	25	YES
2-Butanone	10.00	10.34	10.79	103	108	75-126	4	25	YES
Chloroform	10.00	10.59	10.54	106	105	75-127	0	25	YES
1,1,1-Trichloroethane	10.00	10.05	9.93	101	99	74-122	1	25	YES
Carbon Tetrachloride	10.00	9.98	10.34	100	103	72-127	4	25	YES
1,2-Dichloroethane	10.00	11.05	10.99	110	110	72-138	1	25	YES
Benzene	10.00	10.60	10.38	106	104	76-123	2	25	YES
Isooctane	10.00	10.63	10.68	106	107	74-127	0	25	YES
Heptane	10.00	10.67	10.62	107	106	74-122	1	25	YES
Trichloroethene	10.00	10.46	10.29	105	103	76-118	2	25	YES
1,2-Dichloropropane	10.00	10.38	10.35	104	103	75-127	0	25	YES
Dibromomethane	10.00	10.75	10.84	108	108	76-124	1	25	YES
Bromodichloromethane	10.00	10.33	10.45	103	104	75-134	1	25	YES
cis-1,3-Dichloropropene	10.00	10.31	9.98	103	100	51-120	3	25	YES
4-Methyl-2-Pentanone	10.00	10.00	9.97	100	100	79-131	0	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 LCS File ID: fh00581.d LCSD File ID: fh00582.d

Batch: F1823630AA LCS Injected: 08/24/2018 LCSD Injected: 08/24/2018

Method: EPA TO-15 LCS Client ID: LCSF30 LCSD Client ID: LCSDF30

Dilution Factor: 1

COMPOUND	SPIKE LEVEL	LCS CONC. (ppb(v))	LCSD CONC. (ppb(v))	LCS %REC	LCSD %REC	RANGE	%RPD	RPD MAX	IN SPEC
Toluene	10.00	9.70	9.63	97	96	78-119	1	25	YES
Octane	10.00	10.28	10.15	103	101	73-122	1	25	YES
trans-1,3-Dichloropropene	10.00	10.12	10.08	101	101	76-131	0	25	YES
1,1,2-Trichloroethane	10.00	9.73	9.67	97	97	76-127	1	25	YES
Tetrachloroethene	10.00	9.97	9.99	100	100	68-123	0	25	YES
2-Hexanone	10.00	9.63	9.55	96	95	74-134	1	25	YES
Dibromochloromethane	10.00	9.96	9.85	100	99	74-131	1	25	YES
1,2-Dibromoethane	10.00	9.55	9.43	96	94	73-121	1	25	YES
Chlorobenzene	10.00	9.46	9.18	95	92	76-117	3	25	YES
1,1,1,2-Tetrachloroethane	10.00	9.84	9.36	98	94	73-137	5	25	YES
Ethylbenzene	10.00	9.45	9.47	94	95	77-117	0	25	YES
m/p-Xylene	10.00	9.15	9.10	92	91	78-119	1	25	YES
o-Xylene	10.00	9.30	9.19	93	92	78-121	1	25	YES
Styrene	10.00	9.80	9.93	98	99	77-143	1	25	YES
Bromoform	10.00	9.65	9.63	97	96	58-144	0	25	YES
Cumene	10.00	9.29	9.28	93	93	80-133	0	25	YES
1,1,2,2-Tetrachloroethane	10.00	9.06	8.83	91	88	72-133	3	25	YES
1,2,3-Trichloropropane	10.00	9.03	8.61	90	86	71-127	5	25	YES
Bromobenzene	10.00	9.54	9.11	95	91	74-118	5	25	YES
4-Ethyltoluene	10.00	9.06	8.99	91	90	73-130	1	25	YES
1,3,5-Trimethylbenzene	10.00	9.37	9.02	94	90	72-130	4	25	YES
1,2,4-Trimethylbenzene	10.00	9.25	8.99	93	90	70-138	3	25	YES
1,3-Dichlorobenzene	10.00	8.73	8.53	87	85	75-129	2	25	YES
1,4-Dichlorobenzene	10.00	8.65	8.55	86	85	74-123	1	25	YES
1,2-Dichlorobenzene	10.00	8.51	8.36	85	84	71-126	2	25	YES
Hexachloroethane	10.00	9.08	9.32	91	93	59-135	3	25	YES
Propene	10.00	9.90	10.23	99	102	78-126	3	25	YES
Bromoethene	10.00	10.61	11.30	106	113	77-123	6	25	YES
Ethanol	10.00	9.61	9.49	96	95	56-149	1	25	YES
Acrolein	10.00	10.91	11.17	109	112	54-132	2	25	YES
Methyl Iodide	10.00	10.33	10.63	103	106	72-127	3	25	YES
Isopropanol	10.00	10.48	11.06	105	111	69-160	5	25	YES
Acetonitrile	10.00	10.41	10.76	104	108	56-136	3	25	YES
tert-Butyl Alcohol	10.00	10.73	11.48	107	115	71-154	7	25	YES
Acrylonitrile	10.00	10.48	10.86	105	109	68-135	4	25	YES
Vinyl Acetate	10.00	12.08	12.56	121	126	75-161	4	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 LCS File ID: fh00581.d LCSD File ID: fh00582.d

Batch: F1823630AA LCS Injected: 08/24/2018 LCSD Injected: 08/24/2018

Method: EPA TO-15 LCS Client ID: LCSF30 LCSD Client ID: LCSDF30

Dilution Factor: 1

COMPOUND	SPIKE LEVEL	LCS CONC. (ppb(v))	LCSD CONC. (ppb(v))	LCS %REC	LCSD %REC	RANGE	%RPD	RPD MAX	IN SPEC
Di-Isopropyl Ether	10.00	9.90	10.42	99	104	71-122	5	25	YES
Ethyl Tert-Butyl Ether	10.00	10.06	10.26	101	103	68-121	2	25	YES
Ethyl Acetate	10.00	9.99	10.36	100	104	73-124	4	25	YES
Methyl Acrylate	10.00	10.54	10.81	105	108	75-125	3	25	YES
Tetrahydrofuran	10.00	10.71	10.99	107	110	67-127	3	25	YES
Cyclohexane	10.00	9.91	10.33	99	103	70-118	4	25	YES
Tert-Amyl Methyl Ether	10.00	10.55	10.45	105	105	78-124	1	25	YES
Ethyl Acrylate	10.00	10.33	10.39	103	104	71-126	1	25	YES
1,4-Dioxane	10.00	10.25	9.85	103	98	76-124	4	25	YES
Methyl Methacrylate	10.00	9.94	9.87	99	99	73-117	1	25	YES
Ethyl Methacrylate	10.00	9.50	9.26	95	93	69-137	3	25	YES
Xylene (total)	20.00	18.45	18.29	92	91	79-120	1	25	YES
n-Propylbenzene	10.00	9.09	8.87	91	89	73-120	2	25	YES
2-Chlorotoluene	10.00	9.68	8.98	97	90	74-123	7	25	YES
Alpha Methyl Styrene	10.00	9.12	8.94	91	89	71-138	2	25	YES
tert-Butylbenzene	10.00	9.24	9.02	92	90	78-138	2	25	YES
sec-Butylbenzene	10.00	9.12	8.91	91	89	79-139	2	25	YES
p-Isopropyltoluene	10.00	8.96	8.71	90	87	75-145	3	25	YES
Benzyl Chloride	10.00	9.73	9.05	97	90	49-163	7	25	YES
n-Butylbenzene	10.00	8.90	8.49	89	85	72-143	5	25	YES
1,2-Dibromo-3-chloropropane	10.00	8.25	7.97	82	80	52-156	3	25	YES
1,2,4-Trichlorobenzene	10.00	7.24	7.13	72	71	45-156	2	25	YES
Hexachlorobutadiene	10.00	7.36	7.16	74	72	49-154	3	25	YES
Naphthalene	10.00	7.56	7.61	76	76	39-152	1	25	YES

COMMENTS:

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: fh00621.d

Calibration Date: 08/27/2018

Instrument ID: 26379

Calibration Time: 13:07

Init. Calib. Date(s): 08/24/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
Propene	1.715	1.733	10.103	10	1
Dichlorodifluoromethane	3.340	3.574	10.700	10	7
Chlorodifluoromethane	4.055	4.262	10.512	10	5
Freon 114	3.569	3.586	10.048	10	0
Chloromethane	2.165	2.140	9.883	10	-1
Vinyl Chloride	1.698	1.755	10.337	10	3
1,3-Butadiene	1.654	1.709	10.334	10	3
Bromomethane	1.027	1.180	11.487	10	15
Chloroethane	0.943	1.028	10.903	10	9
Bromoethene	1.008	1.086	10.767	10	8
Dichlorofluoromethane	3.315	3.532	10.655	10	7
Trichlorofluoromethane	3.279	3.264	9.956	10	0
Pentane	3.625	3.731	10.295	10	3
Ethanol	0.731	0.688	9.404	10	-6
Freon123a	3.251	3.155	10.771	11.1	-3
Acrolein	0.795	0.817	10.276	10	3
1,1-Dichloroethene	3.043	3.229	10.612	10	6
Freon 113	1.946	1.826	9.386	10	-6
Acetone	3.200	3.491	10.912	10	9
Methyl Iodide	2.399	2.289	9.544	10	-5
Carbon Disulfide	3.648	3.972	10.887	10	9
Isopropanol	3.106	3.177	10.231	10	2
Acetonitrile	1.841	1.955	10.618	10	6
3-Chloropropene	2.448	2.669	12.098	11.1	9
Methylene Chloride	1.117	1.202	11.945	11.1	8
tert-Butyl Alcohol	3.898	3.800	10.820	11.1	-3
Acrylonitrile	1.839	1.984	10.788	10	8
trans-1,2-Dichloroethene	2.847	3.044	10.691	10	7
Methyl t-Butyl Ether	3.543	3.550	10.019	10	0
Hexane	2.306	2.299	9.969	10	0
1,1-Dichloroethane	3.737	3.881	10.386	10	4
Vinyl Acetate	5.516	5.892	11.963	11.2	7
Di-Isopropyl Ether	6.933	7.026	10.135	10	1
Ethyl Tert-Butyl Ether	6.071	6.239	10.277	10	3
cis-1,2-Dichloroethene	2.709	2.842	10.491	10	5
2-Butanone	4.542	4.665	10.271	10	3
Ethyl Acetate	4.904	5.148	10.498	10	5
Methyl Acrylate	3.844	4.085	10.627	10	6
Tetrahydrofuran	2.333	2.507	10.747	10	7

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: fh00621.d

Calibration Date: 08/27/2018

Instrument ID: 26379

Calibration Time: 13:07

Init. Calib. Date(s): 08/24/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
Chloroform	2.921	3.122	10.686	10	7
1,1,1-Trichloroethane	2.875	2.837	9.867	10	-1
Cyclohexane	3.440	3.430	9.972	10	0
Carbon Tetrachloride	2.495	2.391	9.586	10	-4
Benzene	1.292	1.290	9.983	10	0
1,2-Dichloroethane	0.842	0.860	10.213	10	2
Isooctane	2.902	3.043	10.486	10	5
Tert-Amyl Methyl Ether	0.993	1.022	10.290	10	3
Heptane	0.418	0.436	10.429	10	4
Trichloroethene	0.446	0.458	10.274	10	3
Ethyl Acrylate	1.407	1.353	9.613	10	-4
1,2-Dichloropropane	0.745	0.724	9.720	10	-3
Dibromomethane	0.431	0.429	9.936	10	-1
1,4-Dioxane	0.269	0.280	10.414	10	4
Methyl Methacrylate	0.416	0.412	9.911	10	-1
Bromodichloromethane	0.878	0.861	9.812	10	-2
cis-1,3-Dichloropropene	0.737	0.735	9.980	10	0
4-Methyl-2-Pentanone	1.678	1.606	9.569	10	-4
Toluene	1.477	1.454	9.840	10	-2
Octane	1.616	1.660	10.271	10	3
trans-1,3-Dichloropropene	0.667	0.670	10.046	10	0
Ethyl Methacrylate	0.737	0.717	9.728	10	-3
1,1,2-Trichloroethane	0.588	0.561	9.553	10	-4
Tetrachloroethene	0.700	0.718	10.253	10	3
2-Hexanone	1.575	1.570	9.965	10	0
Dibromochloromethane	0.594	0.567	9.538	10	-5
1,2-Dibromoethane	0.812	0.797	9.809	10	-2
Chlorobenzene	1.243	1.209	9.726	10	-3
1,1,1,2-Tetrachloroethane	0.590	0.546	9.260	10	-7
Ethylbenzene	2.016	2.005	9.944	10	-1
m/p-Xylene	1.449	1.482	10.225	10	2
o-Xylene	1.412	1.438	10.179	10	2
Styrene	1.023	1.060	10.369	10	4
Bromoform	0.737	0.677	9.187	10	-8
Cumene	1.946	2.033	10.446	10	4
Bromobenzene	0.697	0.697	9.999	10	0
1,1,2,2-Tetrachloroethane	1.418	1.347	9.498	10	-5
1,2,3-Trichloropropane	0.383	0.380	9.927	10	-1
n-Propylbenzene	0.565	0.599	10.610	10	6

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: fh00621.d

Calibration Date: 08/27/2018

Instrument ID: 26379

Calibration Time: 13:07

Init. Calib. Date(s): 08/24/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
2-Chlorotoluene	0.520	0.517	9.947	10	-1
4-Ethyltoluene	2.020	2.136	10.577	10	6
1,3,5-Trimethylbenzene	1.735	1.853	10.677	10	7
Alpha Methyl Styrene	0.781	0.787	10.083	10	1
tert-Butylbenzene	1.549	1.682	10.857	10	9
1,2,4-Trimethylbenzene	1.676	1.799	10.737	10	7
sec-Butylbenzene	2.588	2.803	10.832	10	8
1,3-Dichlorobenzene	1.239	1.189	9.595	10	-4
1,4-Dichlorobenzene	1.221	1.199	9.816	10	-2
p-Isopropyltoluene	1.965	2.149	10.937	10	9
Benzyl Chloride	0.271	0.279	10.299	10	3
1,2-Dichlorobenzene	1.151	1.112	9.659	10	-3
n-Butylbenzene	1.264	1.402	11.088	10	11
Hexachloroethane	0.549	0.532	9.688	10	-3
1,2-Dibromo-3-chloropropane	0.564	0.555	9.846	10	-2
1,2,4-Trichlorobenzene	0.786	0.772	9.823	10	-2
Hexachlorobutadiene	0.721	0.681	9.434	10	-6
Naphthalene	1.540	1.640	10.646	10	6

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

Continuing Calibration
Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP26379.i/18aug24.b/fh00571.d
/chem/HP26379.i/18aug24.b/fh00572.d
/chem/HP26379.i/18aug24.b/fh00573.d
/chem/HP26379.i/18aug24.b/fh00574.d
/chem/HP26379.i/18aug24.b/fh00575.d
/chem/HP26379.i/18aug24.b/fh00576.d

** ICAL Area and RT are the average from the above standards.

Current Continuing Calibration Standard:

/chem/HP26379.i/18aug27.b/fh00621.d

Area Summary

Internal Standard Name	File ID: fh00621.d	ICAL Area	Low Limit	High Limit	In Spec
Bromochloromethane	425833	413993	248396	579590	Yes
1,4-Difluorobenzene	1510324	1430385	858231	2002539	Yes
Chlorobenzene-d5	1472740	1379680	827808	1931552	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

RT Summary

Internal Standard Name	File ID: fh00621.d	ICAL RT	In Spec
Bromochloromethane	11.093	11.102	Yes
1,4-Difluorobenzene	13.393	13.393	Yes
Chlorobenzene-d5	18.235	18.229	Yes

A "No" indicates the retention time is greater than 30 seconds from the RT of the referenced ICAL average.

Comments:_____

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Page 1 of 1

Report generated on 08/27/2018 at 13:38

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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: 08/27/2018

Lab File ID: fh00621.d Analyzed Time: 13:07

Instrument ID: 26379

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	R.T.	Area	R.T.	Area	R.T.
24 HOUR STANDARD	425833	11.09	1510324	13.39	1472740	18.23
UPPER LIMIT	596166	11.42	2114454	13.72	2061836	18.56
LOWER LIMIT	255500	10.76	906194	13.06	883644	17.90
LAB SAMPLE ID						
VBLKF32	433951	11.10	1459839	13.39	1449873	18.23
LCSF32	415819	11.10	1487515	13.39	1428463	18.23
LCSDF32	410394	11.11	1474427	13.40	1500741	18.23
9766344	357727	11.10	1434451	13.39	1439272	18.23
9766345	381856	11.11	1395611	13.39	1410255	18.23
9766346	374629	11.12	1349302	13.39	1302975	18.23
9766347	325966	11.10	1286231	13.40	1300061	18.23
9766348	374830	11.11	1272181	13.40	1317269	18.23
9766349	360742	11.12	1232097	13.40	1276285	18.23
9766349	364648	11.11	1256828	13.39	1233407	18.23
9766350	370516	11.11	1244519	13.40	1293541	18.23
9766351	354952	11.11	1170792	13.40	1229272	18.23
9766352	357390	11.11	1200809	13.40	1231606	18.23
9766353	349883	11.11	1133791	13.39	1176862	18.23
9766354	339893	11.11	1123194	13.40	1152201	18.23
9767476	317126	11.12	1129028	13.40	1180853	18.24
9765349	348828	11.11	1364462	13.39	1146060	18.23
9765349DL	371150	11.11	1348228	13.39	1184960	18.24
9765352	355647	11.11	1525960	13.39	1520773	18.23
9765352DL	359474	11.11	1653349	13.40	1587937	18.23

* = 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 09
VOLATILE ORGANICS IN AIR
DUPLICATE SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 Method: EPA TO-15

Batch: F1823930A

BKG Lab Sample ID(s): 9766349 BKG Injected: 08/27/2018

DUP Lab Sample ID(s): 9766349 DUP Injected: 08/27/2018

BKG File ID(s): fh00630.d

DUP File ID(s): fh00631.d

Concentration Units: ppb(v) Limt: MDL

COMPOUND	BKG CONC.	Q	DUP CONC.	Q	RPD	RPD MAX	IN SPEC
Dichlorodifluoromethane	0.56	J	0.59	J	5	25	YES
Chlorodifluoromethane	0.15	U	0.15	U		25	YES
Freon 114	0.12	U	0.12	U		25	YES
Chloromethane	0.24	U	0.24	U		25	YES
Vinyl Chloride	0.12	U	0.12	U		25	YES
1,3-Butadiene	0.17	U	0.17	U		25	YES
Bromomethane	0.18	U	0.18	U		25	YES
Chloroethane	0.19	U	0.19	U		25	YES
Dichlorofluoromethane	0.11	U	0.11	U		25	YES
Trichlorofluoromethane	0.26	J	0.23	J	12	25	YES
Pentane	1.4		1.2		15	25	YES
1,1-Dichloroethene	0.14	U	0.14	U		25	YES
Freon 113	0.11	J	0.14	J	24	25	YES
Acetone	10		9.7		3	25	YES
Carbon Disulfide	0.13	U	0.13	U		25	YES
3-Chloropropene	0.15	U	0.15	U		25	YES
Methylene Chloride	0.25	U	0.25	U		25	YES
trans-1,2-Dichloroethene	0.086	U	0.086	U		25	YES
Methyl t-Butyl Ether	0.15	U	0.15	U		25	YES
Hexane	0.60	J	0.60	J	0	25	YES
1,1-Dichloroethane	0.089	U	0.089	U		25	YES
cis-1,2-Dichloroethene	0.12	U	0.12	U		25	YES
2-Butanone	1.0	J	1.1		10	25	YES
Chloroform	0.092	U	0.092	U		25	YES
1,1,1-Trichloroethane	0.12	U	0.12	U		25	YES
Carbon Tetrachloride	0.14	U	0.14	U		25	YES
Benzene	0.33	J	0.29	J	13	25	YES

COMMENTS:

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Abbreviations:
BKG = Background sample
DUP = Duplicate sample
D = Analysis of diluted sample.
U = The compound is less than the limit being reported
J = The result is between the MDL and LOQ

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FORM 09
VOLATILE ORGANICS IN AIR
DUPLICATE SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 Method: EPA TO-15

Batch: F1823930A

BKG Lab Sample ID(s): 9766349 BKG Injected: 08/27/2018

DUP Lab Sample ID(s): 9766349 DUP Injected: 08/27/2018

BKG File ID(s): fh00630.d

DUP File ID(s): fh00631.d

Concentration Units: ppb(v) Limt: MDL

COMPOUND	BKG CONC.	Q	DUP CONC.	Q	RPD	RPD MAX	IN SPEC
1,2-Dichloroethane	0.080	U	0.080	U		25	YES
Isooctane	0.37	J	0.37	J	0	25	YES
Heptane	0.54	J	0.49	J	10	25	YES
Trichloroethene	0.18	U	0.18	U		25	YES
1,2-Dichloropropane	0.13	U	0.13	U		25	YES
Dibromomethane	0.14	U	0.14	U		25	YES
Bromodichloromethane	0.12	U	0.12	U		25	YES
cis-1,3-Dichloropropene	0.10	U	0.10	U		25	YES
4-Methyl-2-Pentanone	0.15	U	0.15	U		25	YES
Toluene	1.4		1.4		0	25	YES
Octane	0.40	U	0.40	U		25	YES
trans-1,3-Dichloropropene	0.12	U	0.12	U		25	YES
1,1,2-Trichloroethane	0.12	U	0.12	U		25	YES
Tetrachloroethene	0.25	U	0.25	U		25	YES
2-Hexanone	0.18	U	0.18	U		25	YES
Dibromochloromethane	0.13	U	0.13	U		25	YES
1,2-Dibromoethane	0.13	U	0.13	U		25	YES
Chlorobenzene	0.13	U	0.13	U		25	YES
1,1,1,2-Tetrachloroethane	0.15	U	0.15	U		25	YES
Ethylbenzene	0.23	J	0.24	J	4	25	YES
m/p-Xylene	0.72	J	0.72	J	0	25	YES
o-Xylene	0.27	J	0.25	J	8	25	YES
Styrene	0.20	U	0.20	U		25	YES
Bromoform	0.17	U	0.17	U		25	YES
Cumene	0.24	U	0.24	U		25	YES
Bromobenzene	0.10	U	0.10	U		25	YES
1,1,2,2-Tetrachloroethane	0.15	U	0.15	U		25	YES

COMMENTS:

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Abbreviations:
BKG = Background sample
DUP = Duplicate sample
D = Analysis of diluted sample.
U = The compound is less than the limit being reported
J = The result is between the MDL and LOQ

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FORM 09
VOLATILE ORGANICS IN AIR
DUPLICATE SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 Method: EPA TO-15

Batch: F1823930A

BKG Lab Sample ID(s): 9766349 BKG Injected: 08/27/2018

DUP Lab Sample ID(s): 9766349 DUP Injected: 08/27/2018

BKG File ID(s): fh00630.d

DUP File ID(s): fh00631.d

Concentration Units: ppb(v) Limt: MDL

COMPOUND	BKG CONC.	Q	DUP CONC.	Q	RPD	RPD MAX	IN SPEC
1,2,3-Trichloropropane	0.14	U	0.14	U		25	YES
4-Ethyltoluene	0.18	U	0.18	U		25	YES
1,3,5-Trimethylbenzene	0.32	U	0.32	U		25	YES
1,2,4-Trimethylbenzene	0.28	U	0.28	U		25	YES
1,3-Dichlorobenzene	0.19	U	0.19	U		25	YES
1,4-Dichlorobenzene	0.17	U	0.17	U		25	YES
1,2-Dichlorobenzene	0.20	U	0.20	U		25	YES
Hexachloroethane	0.27	U	0.27	U		25	YES

COMMENTS:

Abbreviations:
BKG = Background sample
DUP = Duplicate sample
D = Analysis of diluted sample.
U = The compound is less than the limit being reported
J = The result is between the MDL and LOQ

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FORM 09
VOLATILE ORGANICS IN AIR
DUPLICATE SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 Method: EPA TO-15

Batch: F1823930A

BKG Lab Sample ID(s): 9766349 BKG Injected: 08/27/2018

DUP Lab Sample ID(s): 9766349 DUP Injected: 08/27/2018

BKG File ID(s): fh00630.d

DUP File ID(s): fh00631.d

Concentration Units: ppb(v) Limt: MDL

COMPOUND	BKG CONC.	Q	DUP CONC.	Q	RPD	RPD MAX	IN SPEC
Dichlorodifluoromethane	0.56	J	0.59	J	5	25	YES
Chlorodifluoromethane	0.15	U	0.15	U		25	YES
Freon 114	0.12	U	0.12	U		25	YES
Chloromethane	0.24	U	0.24	U		25	YES
Vinyl Chloride	0.12	U	0.12	U		25	YES
1,3-Butadiene	0.17	U	0.17	U		25	YES
Bromomethane	0.18	U	0.18	U		25	YES
Chloroethane	0.19	U	0.19	U		25	YES
Dichlorofluoromethane	0.11	U	0.11	U		25	YES
Trichlorofluoromethane	0.26	J	0.23	J	12	25	YES
Pentane	1.4		1.2		15	25	YES
1,1-Dichloroethene	0.14	U	0.14	U		25	YES
Freon 113	0.11	J	0.14	J	24	25	YES
Acetone	10		9.7		3	25	YES
Carbon Disulfide	0.13	U	0.13	U		25	YES
3-Chloropropene	0.15	U	0.15	U		25	YES
Methylene Chloride	0.25	U	0.25	U		25	YES
trans-1,2-Dichloroethene	0.086	U	0.086	U		25	YES
Methyl t-Butyl Ether	0.15	U	0.15	U		25	YES
Hexane	0.60	J	0.60	J	0	25	YES
1,1-Dichloroethane	0.089	U	0.089	U		25	YES
cis-1,2-Dichloroethene	0.12	U	0.12	U		25	YES
2-Butanone	1.0	J	1.1		10	25	YES
Chloroform	0.092	U	0.092	U		25	YES
1,1,1-Trichloroethane	0.12	U	0.12	U		25	YES
Carbon Tetrachloride	0.14	U	0.14	U		25	YES
Benzene	0.33	J	0.29	J	13	25	YES

COMMENTS:

_____

_____

Abbreviations:
BKG = Background sample
DUP = Duplicate sample
D = Analysis of diluted sample.
U = The compound is less than the limit being reported
J = The result is between the MDL and LOQ

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FORM 09
VOLATILE ORGANICS IN AIR
DUPLICATE SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 Method: EPA TO-15

Batch: F1823930A

BKG Lab Sample ID(s): 9766349 BKG Injected: 08/27/2018

DUP Lab Sample ID(s): 9766349 DUP Injected: 08/27/2018

BKG File ID(s): fh00630.d

DUP File ID(s): fh00631.d

Concentration Units: ppb(v) Limt: MDL

COMPOUND	BKG CONC.	Q	DUP CONC.	Q	RPD	RPD MAX	IN SPEC
1,2-Dichloroethane	0.080	U	0.080	U		25	YES
Isooctane	0.37	J	0.37	J	0	25	YES
Heptane	0.54	J	0.49	J	10	25	YES
Trichloroethene	0.18	U	0.18	U		25	YES
1,2-Dichloropropane	0.13	U	0.13	U		25	YES
Dibromomethane	0.14	U	0.14	U		25	YES
Bromodichloromethane	0.12	U	0.12	U		25	YES
cis-1,3-Dichloropropene	0.10	U	0.10	U		25	YES
4-Methyl-2-Pentanone	0.15	U	0.15	U		25	YES
Toluene	1.4		1.4		0	25	YES
Octane	0.40	U	0.40	U		25	YES
trans-1,3-Dichloropropene	0.12	U	0.12	U		25	YES
1,1,2-Trichloroethane	0.12	U	0.12	U		25	YES
Tetrachloroethene	0.25	U	0.25	U		25	YES
2-Hexanone	0.18	U	0.18	U		25	YES
Dibromochloromethane	0.13	U	0.13	U		25	YES
1,2-Dibromoethane	0.13	U	0.13	U		25	YES
Chlorobenzene	0.13	U	0.13	U		25	YES
1,1,1,2-Tetrachloroethane	0.15	U	0.15	U		25	YES
Ethylbenzene	0.23	J	0.24	J	4	25	YES
m/p-Xylene	0.72	J	0.72	J	0	25	YES
o-Xylene	0.27	J	0.25	J	8	25	YES
Styrene	0.20	U	0.20	U		25	YES
Bromoform	0.17	U	0.17	U		25	YES
Cumene	0.24	U	0.24	U		25	YES
Bromobenzene	0.10	U	0.10	U		25	YES
1,1,2,2-Tetrachloroethane	0.15	U	0.15	U		25	YES

COMMENTS:

_____

_____

Abbreviations:
BKG = Background sample
DUP = Duplicate sample
D = Analysis of diluted sample.
U = The compound is less than the limit being reported
J = The result is between the MDL and LOQ

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FORM 09
VOLATILE ORGANICS IN AIR
DUPLICATE SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 Method: EPA TO-15

Batch: F1823930A

BKG Lab Sample ID(s): 9766349 BKG Injected: 08/27/2018

DUP Lab Sample ID(s): 9766349 DUP Injected: 08/27/2018

BKG File ID(s): fh00630.d

DUP File ID(s): fh00631.d

Concentration Units: ppb(v) Limt: MDL

COMPOUND	BKG CONC.	Q	DUP CONC.	Q	RPD	RPD MAX	IN SPEC
1,2,3-Trichloropropane	0.14	U	0.14	U		25	YES
4-Ethyltoluene	0.18	U	0.18	U		25	YES
1,3,5-Trimethylbenzene	0.32	U	0.32	U		25	YES
1,2,4-Trimethylbenzene	0.28	U	0.28	U		25	YES
1,3-Dichlorobenzene	0.19	U	0.19	U		25	YES
1,4-Dichlorobenzene	0.17	U	0.17	U		25	YES
1,2-Dichlorobenzene	0.20	U	0.20	U		25	YES
Hexachloroethane	0.27	U	0.27	U		25	YES

COMMENTS:

Abbreviations:
BKG = Background sample
DUP = Duplicate sample
D = Analysis of diluted sample.
U = The compound is less than the limit being reported
J = The result is between the MDL and LOQ

Sample Data

Volatile Organics in Air by GC/MS

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766344
Canister ID:	504	Lab File ID:	fh00625.d
Pressure Received:	11.5 psia	Date Collected:	08/18/2018
Final Pressure:	22.9 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	16:11
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	3.3	J
75-45-6	Chlorodifluoromethane	0.53	U
76-14-2	Freon 114	0.84	U
74-87-3	Chloromethane	0.69	J
75-01-4	Vinyl Chloride	0.31	U
106-99-0	1,3-Butadiene	0.38	U
74-83-9	Bromomethane	0.70	U
75-00-3	Chloroethane	0.50	U
75-43-4	Dichlorofluoromethane	0.46	U
75-69-4	Trichlorofluoromethane	2.3	J
109-66-0	Pentane	3.3	
75-35-4	1,1-Dichloroethene	0.56	U
76-13-1	Freon 113	1.7	J
67-64-1	Acetone	27	
75-15-0	Carbon Disulfide	0.40	U
107-05-1	3-Chloropropene	0.47	U
75-09-2	Methylene Chloride	0.87	U
156-60-5	trans-1,2-Dichloroethene	0.34	U
1634-04-4	Methyl t-Butyl Ether	0.54	U
110-54-3	Hexane	0.46	U
75-34-3	1,1-Dichloroethane	0.36	U
156-59-2	cis-1,2-Dichloroethene	0.48	U
78-93-3	2-Butanone	9.1	
67-66-3	Chloroform	0.50	J

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766344
Canister ID:	504	Lab File ID:	fh00625.d
Pressure Received:	11.5 psia	Date Collected:	08/18/2018
Final Pressure:	22.9 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	16:11
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
71-55-6	1,1,1-Trichloroethane	0.65	U
56-23-5	Carbon Tetrachloride	0.88	U
71-43-2	Benzene	0.99	J
107-06-2	1,2-Dichloroethane	0.32	U
540-84-1	Isooctane	1.1	J
142-82-5	Heptane	2.7	J
79-01-6	Trichloroethene	0.97	U
78-87-5	1,2-Dichloropropane	0.60	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	0.80	U
10061-01-5	cis-1,3-Dichloropropene	0.45	U
108-10-1	4-Methyl-2-Pentanone	0.61	U
108-88-3	Toluene	3.9	
111-65-9	Octane	1.9	U
10061-02-6	trans-1,3-Dichloropropene	0.54	U
79-00-5	1,1,2-Trichloroethane	0.65	U
127-18-4	Tetrachloroethene	1.7	U
591-78-6	2-Hexanone	0.74	U
124-48-1	Dibromochloromethane	1.1	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	0.60	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	J
179601-23-1	m/p-Xylene	2.9	J

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766344
Canister ID:	504	Lab File ID:	fh00625.d
Pressure Received:	11.5 psia	Date Collected:	08/18/2018
Final Pressure:	22.9 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	16:11
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
95-47-6	o-Xylene	1.3	J
100-42-5	Styrene	0.85	U
75-25-2	Bromoform	1.8	U
98-82-8	Cumene	1.2	U
108-86-1	Bromobenzene	0.64	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	0.84	U
622-96-8	4-Ethyltoluene	0.88	U
108-67-8	1,3,5-Trimethylbenzene	1.6	U
95-63-6	1,2,4-Trimethylbenzene	1.4	U
541-73-1	1,3-Dichlorobenzene	1.1	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.2	U
67-72-1	Hexachloroethane	2.6	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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

Data file: /chem/HP26379.i/18aug27.b/fh00625.d Injection date and time: **27-AUG-2018 16:11**
Data file Sample Info. Line: 9766344;400;F1823930AA;504--;0;0;SAMPLE; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 28-Aug-2018 12:40 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.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): 22.9 psia Canister Pressure before dilution (Ya): 11.5 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 400 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.101(-0.007)	1021	130	357727 (-16)	10.00		255500 - 596166
52) 1,4-Difluorobenzene	13.393(0.000)	1341	114	1434451 (-5)	10.00		906195 - 2114453
71) Chlorobenzene-d5	18.228(0.007)	2016	117	1439272 (-2)	10.00		883644 - 2061835

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)	4.002(0.000)	85	80552M	0.674	0.67		J	0.13	1
3) Chlorodifluoromethane	(1)			Not Detected					0.15	1
4) Freon 114	(1)			Not Detected					0.12	1
5) Chloromethane	(1)	4.446(0.001)	50	25739	0.332	0.33		J	0.24	1
6) Vinyl Chloride	(1)			Not Detected					0.12	1
7) 1,3-Butadiene	(1)			Not Detected					0.17	1
8) Bromomethane	(1)			Not Detected					0.18	1
9) Chloroethane	(1)			Not Detected					0.19	1
13) Dichlorofluoromethane	(1)			Not Detected					0.11	1
12) Trichlorofluoromethane	(1)	5.872(0.000)	101	47335M	0.404	0.40		J	0.15	1
11) Pentane	(1)	5.864(0.000)	43	143068	1.103	1.10			0.13	1
16) 1,1-Dichloroethene	(1)			Not Detected					0.14	1
17) Freon 113	(1)	6.917(-0.000)	103	15346	0.220	0.22		J	0.11	1
24) Acetone	(1)	8.085(-0.001)	43	1305787	11.408	11.41			0.53	5
18) Carbon Disulfide	(1)			Not Detected					0.13	1
22) 3-Chloropropene	(1)			Not Detected					0.15	1
23) Methylene Chloride	(1)			Not Detected					0.25	2
25) trans-1,2-Dichloroethene	(1)			Not Detected					0.086	1
27) Methyl t-Butyl Ether	(1)			Not Detected					0.15	1
26) Hexane	(1)			Not Detected					0.13	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.089	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.12	1
45) 2-Butanone	(1)	11.810(0.000)	43	499949	3.077	3.08			0.21	1
39) Chloroform	(1)	11.230(-0.000)	83	10672	0.102	0.10		J	0.092	1
44) 1,1,1-Trichloroethane	(1)			Not Detected					0.12	1
42) Carbon Tetrachloride	(1)			Not Detected					0.14	1
48) Benzene	(2)	12.325(-0.000)	78	57634	0.311	0.31		J	0.11	1
50) 1,2-Dichloroethane	(2)			Not Detected					0.08	1
46) Isooctane	(2)	12.053(-0.000)	57	100362	0.241	0.24		J	0.13	1
47) Heptane	(2)	12.204(-0.000)	71	39682	0.662	0.66		J	0.23	1
51) Trichloroethene	(2)			Not Detected					0.18	1
55) 1,2-Dichloropropane	(2)			Not Detected					0.13	1
53) Dibromomethane	(2)			Not Detected					0.14	1
56) Bromodichloromethane	(2)			Not Detected					0.12	1
59) cis-1,3-Dichloropropene	(2)			Not Detected					0.1	1
62) 4-Methyl-2-Pentanone	(2)			Not Detected					0.15	1
61) Toluene	(3)	15.792(0.000)	91	219364	1.032	1.03			0.12	1
60) Octane	(3)			Not Detected					0.4	2
64) trans-1,3-Dichloropropene	(3)			Not Detected					0.12	1
67) 1,1,2-Trichloroethane	(3)			Not Detected					0.12	1
63) Tetrachloroethene	(3)			Not Detected					0.25	2
70) 2-Hexanone	(3)			Not Detected					0.18	1
68) Dibromochloromethane	(3)			Not Detected					0.13	1

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:57. Target 3.5 esignature user ID: jeb07445

Lancaster Laboratories, Inc.

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18aug27.b/fh00625.d Injection date and time: **27-AUG-2018 16:11**
Data file Sample Info. Line: 9766344;400;F1823930AA;504--;0;0;SAMPLE; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 28-Aug-2018 12:40 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.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): 22.9 psia Canister Pressure before dilution (Ya): 11.5 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 400 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
69) 1,2-Dibromoethane	(3)			Not Detected					0.13	1
72) Chlorobenzene	(3)			Not Detected					0.13	1
74) 1,1,1,2-Tetrachloroethane	(3)			Not Detected					0.15	1
73) Ethylbenzene	(3)	18.264(0.000)	91	68086	0.235	0.23		J	0.19	1
75) m/p-Xylene	(3)	18.493(-0.000)	91	140054	0.672	0.67		J	0.26	2
76) o-Xylene	(3)	19.180(-0.000)	91	62474	0.307	0.31		J	0.19	1
78) Styrene	(3)			Not Detected					0.2	1
79) Bromoform	(3)			Not Detected					0.17	1
80) Cumene	(3)			Not Detected					0.24	1
82) Bromobenzene	(3)			Not Detected					0.1	1
83) 1,1,2,2-Tetrachloroethane	(3)			Not Detected					0.15	1
87) 1,2,3-Trichloropropane	(3)			Not Detected					0.14	1
84) 4-Ethyltoluene	(3)			Not Detected					0.18	1
86) 1,3,5-Trimethylbenzene	(3)			Not Detected					0.32	2
90) 1,2,4-Trimethylbenzene	(3)			Not Detected					0.28	2
93) 1,3-Dichlorobenzene	(3)			Not Detected					0.19	1
94) 1,4-Dichlorobenzene	(3)			Not Detected					0.17	1
98) 1,2-Dichlorobenzene	(3)			Not Detected					0.2	1
97) Hexachloroethane	(3)			Not Detected					0.27	2

Total number of targets = 62

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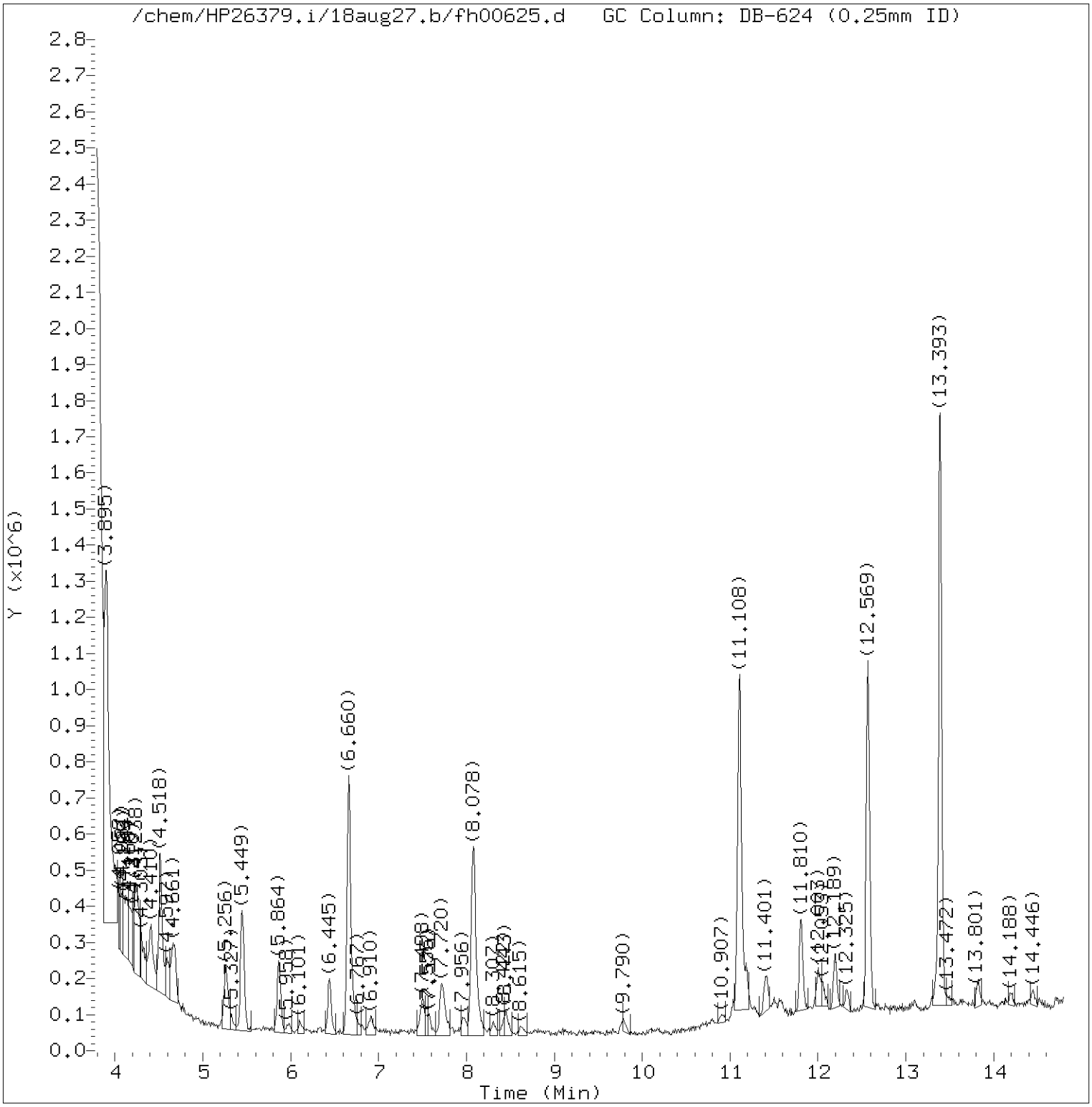
Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:40. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

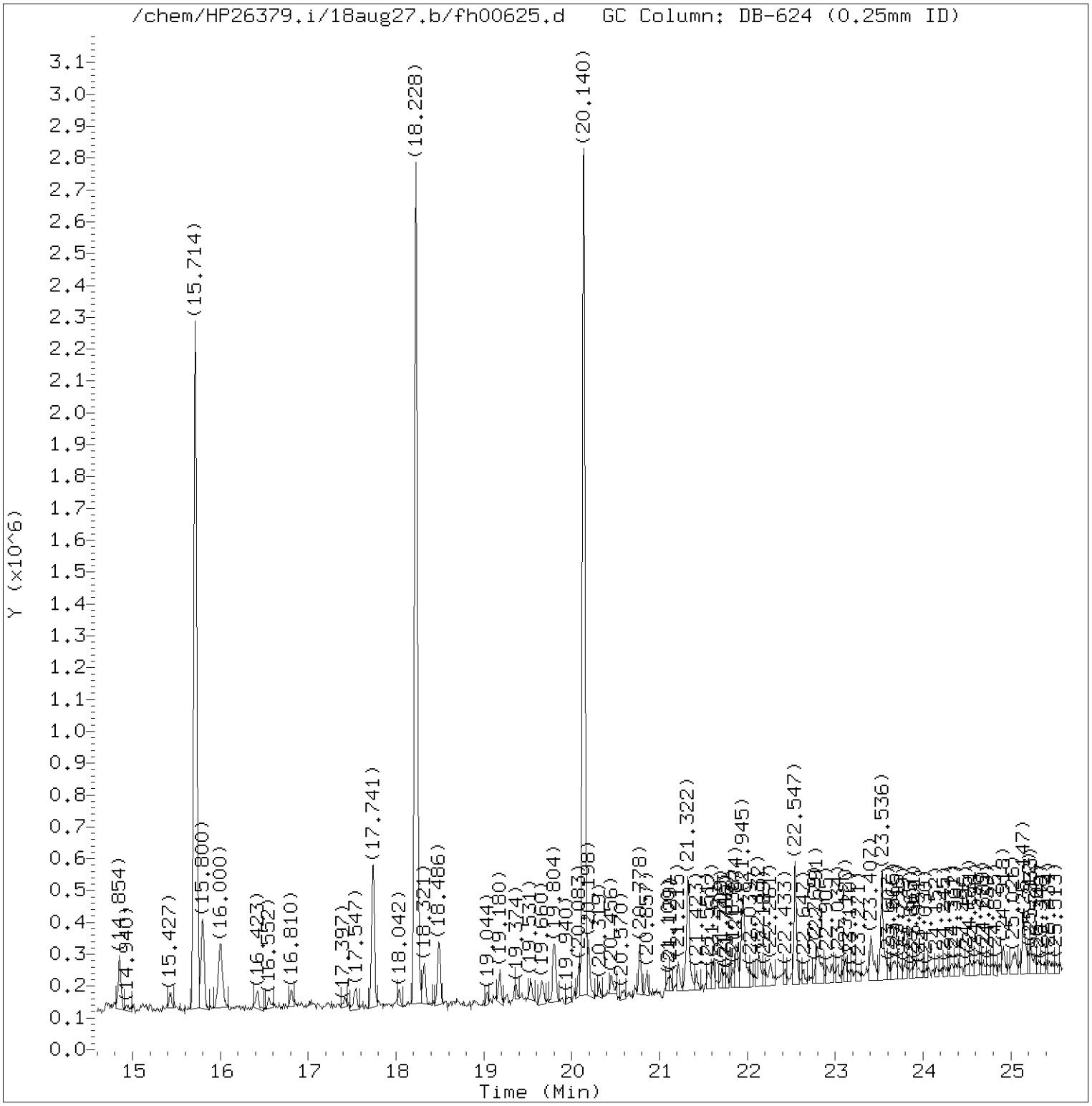
Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00625.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:11 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:40 jeb07445

Sample Name: 504-- Lab Sample ID: 9766344

Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:57.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00625.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:11 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:40 jeb07445

Sample Name: 504-- Lab Sample ID: 9766344

Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:57.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00625.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:11 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:40 jeb07445

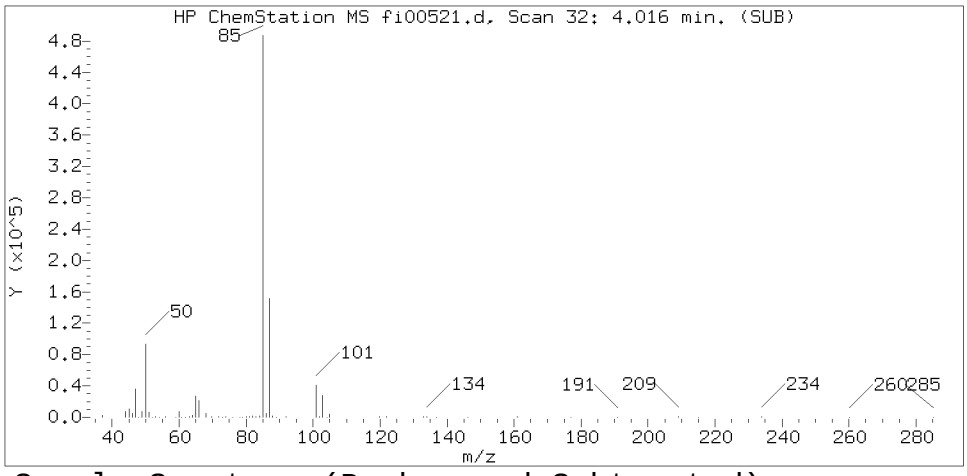
Sample Name: 504-- Lab Sample ID: 9766344

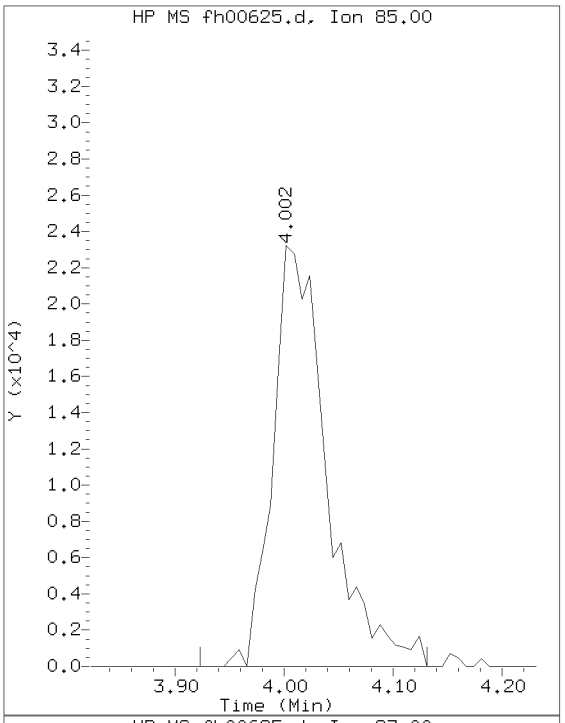
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
2) Dichlorodifluoromethane	(1)	4.002	85	80552M	0.674
5) Chloromethane	(1)	4.446	50	25739	0.332
11) Pentane	(1)	5.864	43	143068	1.103
12) Trichlorofluoromethane	(1)	5.872	101	47335M	0.404
17) Freon 113	(1)	6.917	103	15346	0.220
24) Acetone	(1)	8.085	43	1305787	11.408
37)*Bromochloromethane	(1)	11.101	130	357727	10.000
39) Chloroform	(1)	11.230	83	10672	0.102
45) 2-Butanone	(1)	11.810	43	499949	3.077
46) Isooctane	(2)	12.053	57	100362	0.241
47) Heptane	(2)	12.204	71	39682	0.662
48) Benzene	(2)	12.325	78	57634	0.311
52)*1,4-Difluorobenzene	(2)	13.393	114	1434451	10.000
61) Toluene	(3)	15.792	91	219364	1.032
71)*Chlorobenzene-d5	(3)	18.228	117	1439272	10.000
73) Ethylbenzene	(3)	18.264	91	68086	0.235
75) m/p-Xylene	(3)	18.493	91	140054	0.672
76) o-Xylene	(3)	19.180	91	62474	0.307

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

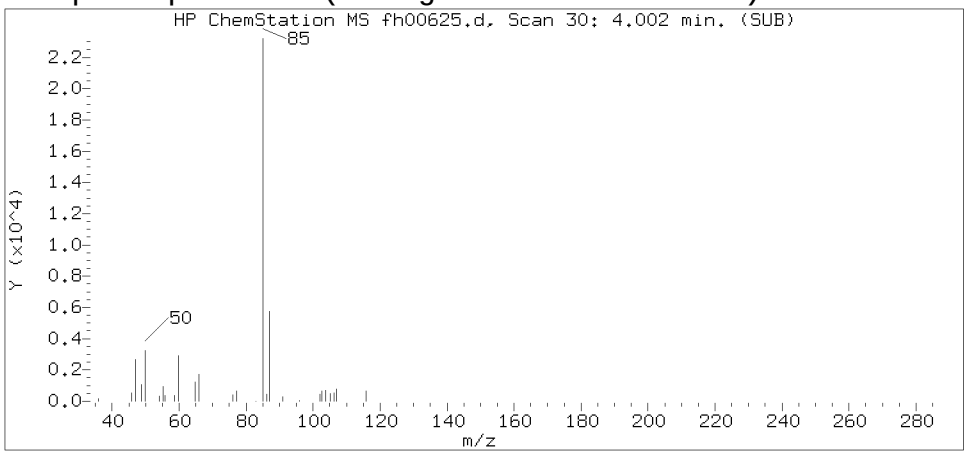
Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:57.
Target 3.5 esignature user ID: jeb07445

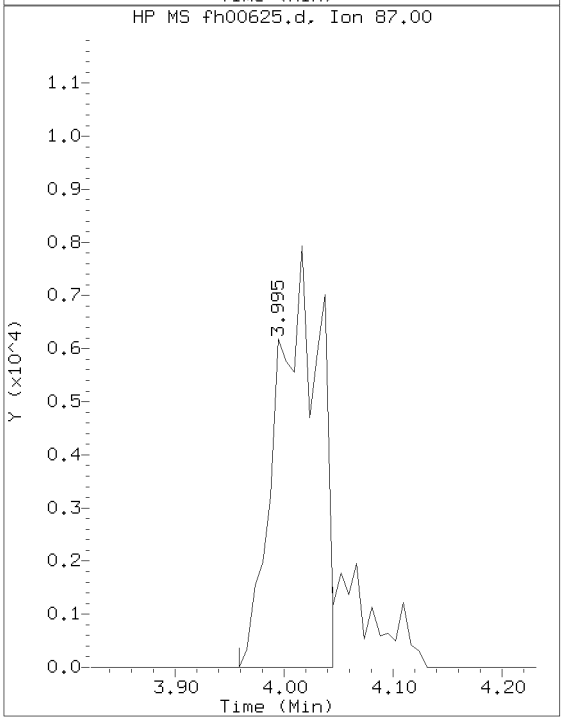
Reference Standard Spectrum for Dichlorodifluoromethane



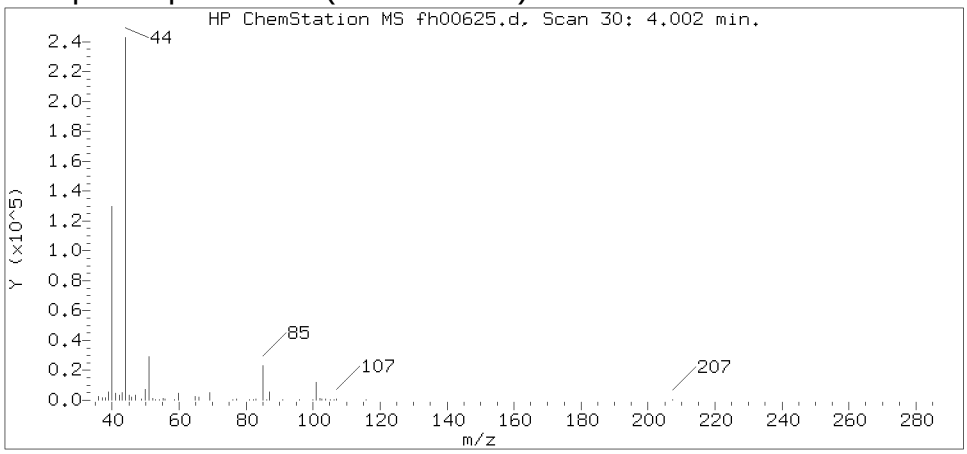


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00625.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:11 Analyst ID: jeb07445

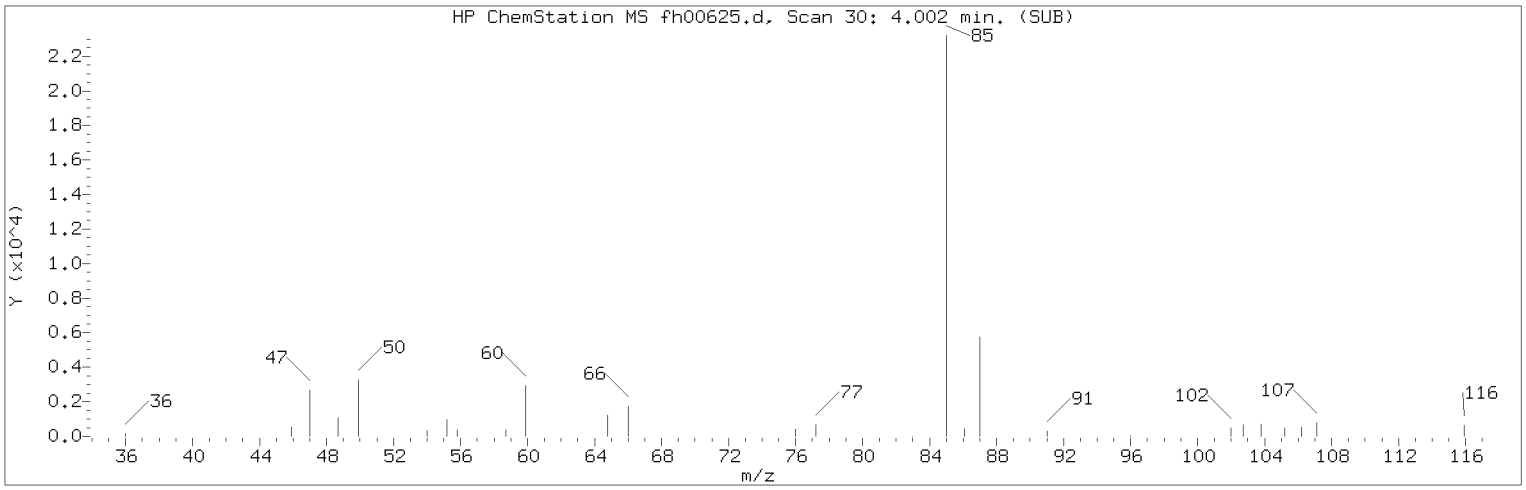
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:40 jeb07445

Sample Name: 504-- Lab Sample ID: 9766344

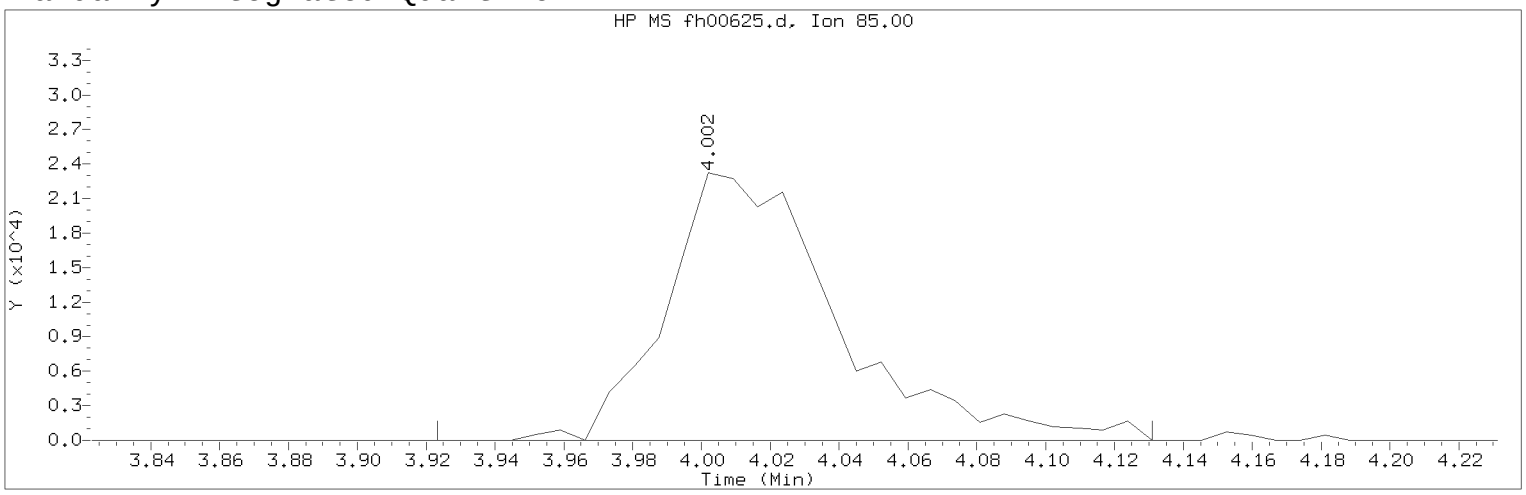
Compound Number	: 2
Compound Name	: Dichlorodifluoromethane
Scan Number	: 30
Retention Time (minutes)	: 4.002
Relative Retention Time	: 0.00023
Quant Ion	: 85.00
Area (flag)	: 80552M
Concentration (ppb(v))	: 0.6743

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:57.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug27.b/fh00625.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:11 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:40 jeb07445

Sample Name: 504-- Lab Sample ID: 9766344

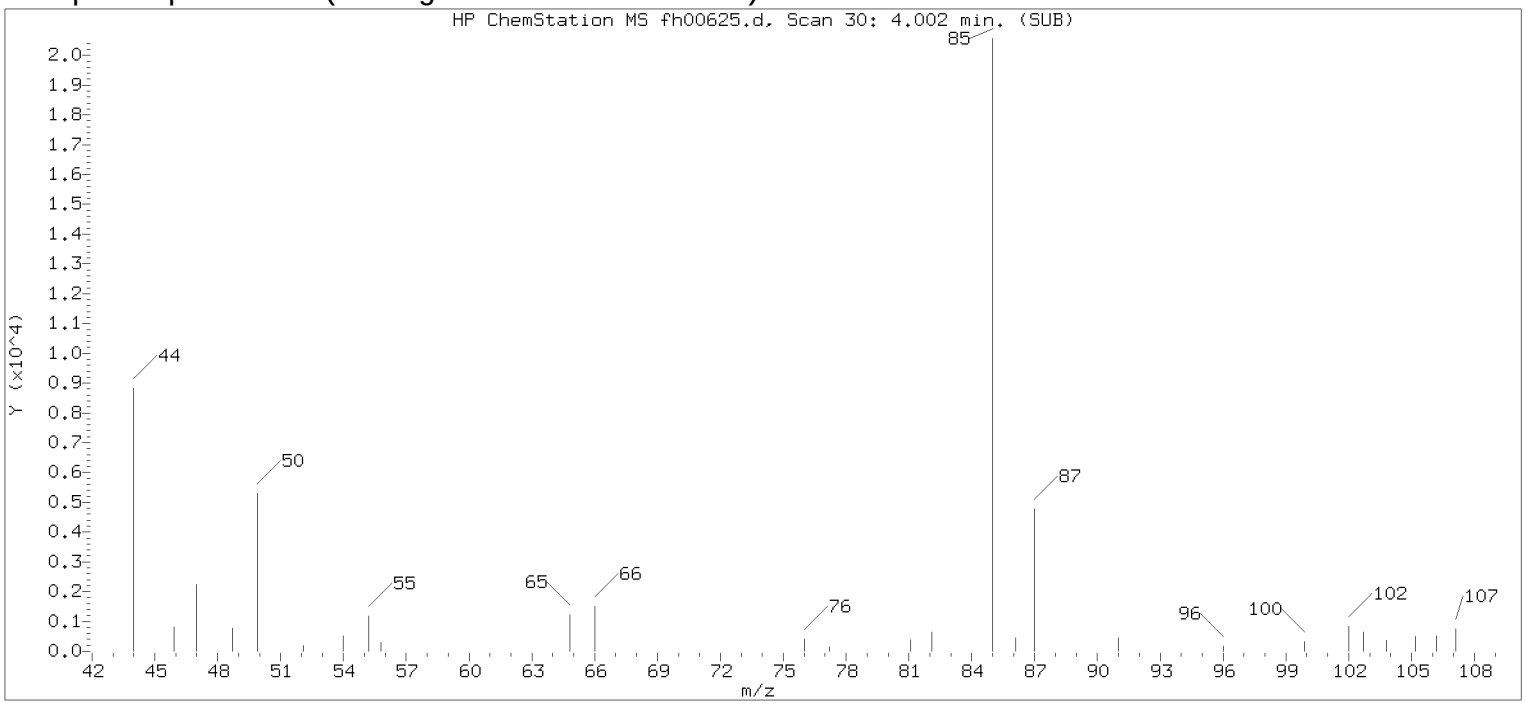
Compound Number : 2
Compound Name : Dichlorodifluoromethane
Scan Number : 30
Retention Time (minutes): 4.002
Quant Ion : 85.00
Area (flag) : 80552M
Concentration (ppb(v)) : 0.6743
Integration start scan : 18 Integration stop scan: 47
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

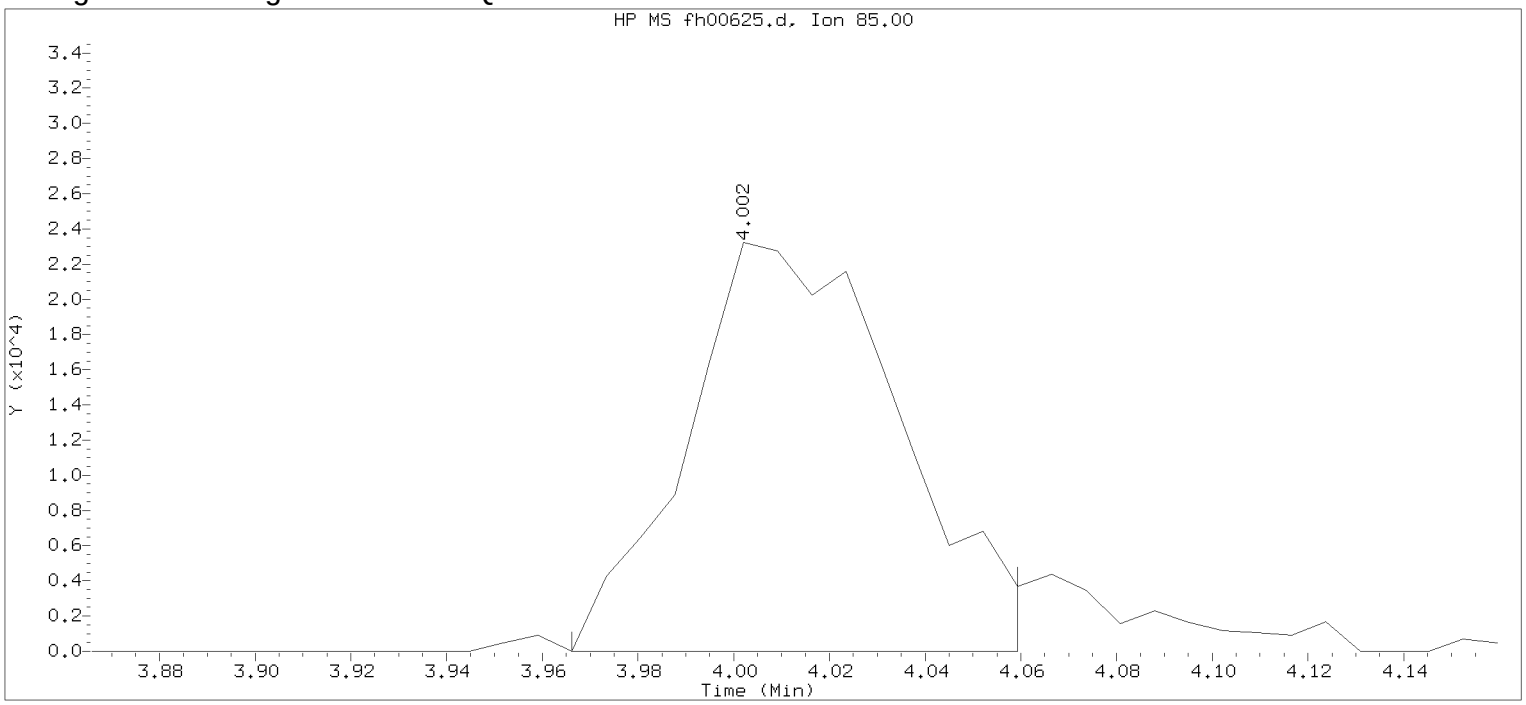
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:57.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:40.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug27.b/fh00625.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:11 Analyst ID: jeb07445

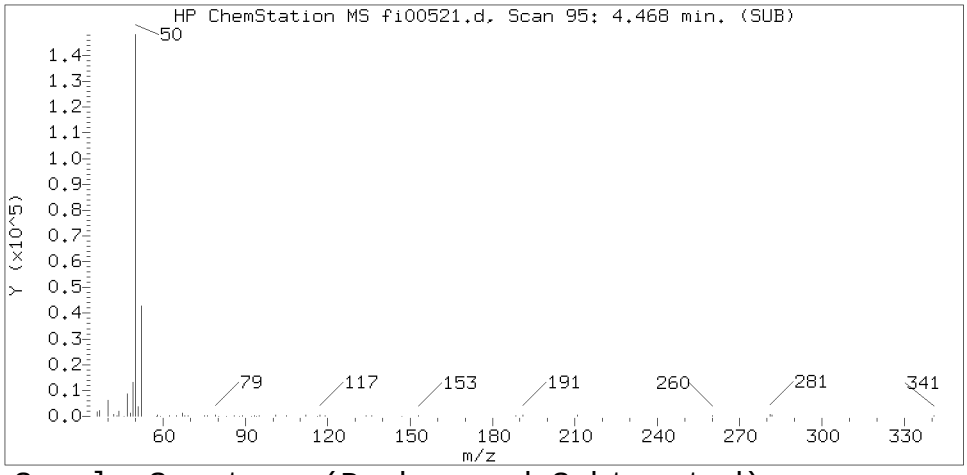
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 16:41 Unknown

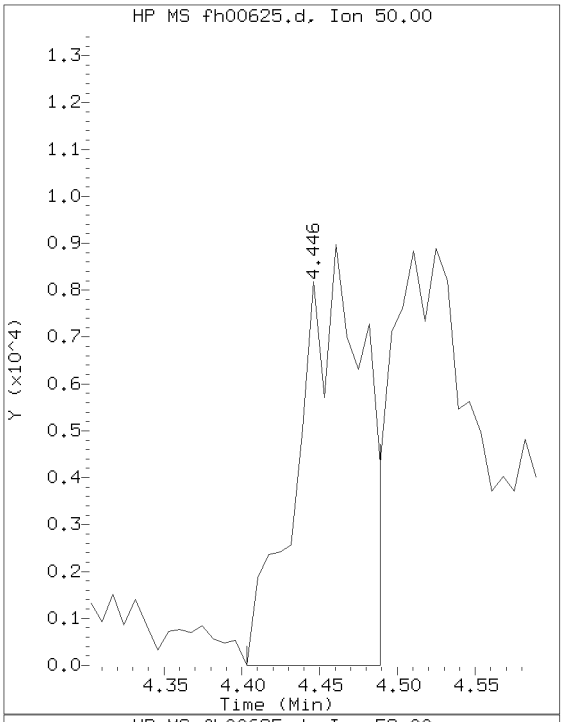
Sample Name: 504-- Lab Sample ID: 9766344

Compound Number	: 2		
Compound Name	: Dichlorodifluoromethane		
Scan Number	: 30		
Retention Time (minutes)	: 4.002		
Quant Ion	: 85.00		
Area	: 71357		
Concentration (ppb(v))	: 0.5973		
Integration start scan	: 24	Integration stop scan:	37
Y at integration start	: 0	Y at integration end:	0

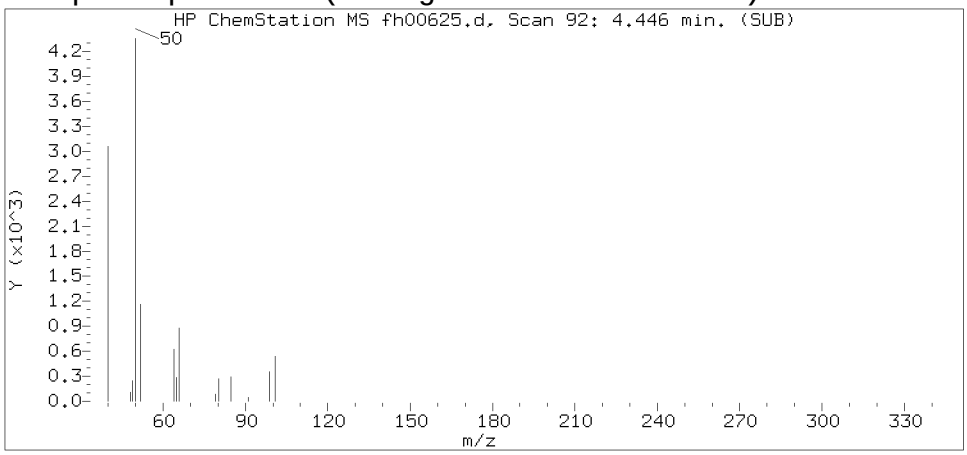
Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:57.
Target 3.5 esignature user ID: jeb07445

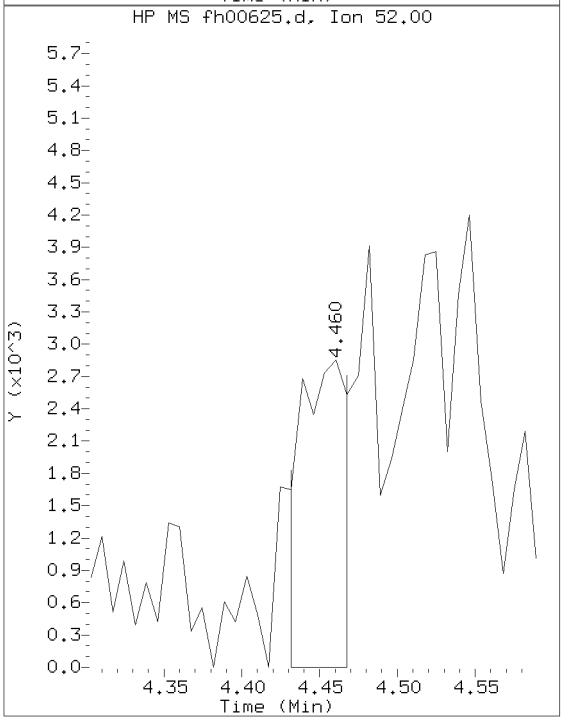
Reference Standard Spectrum for Chloromethane



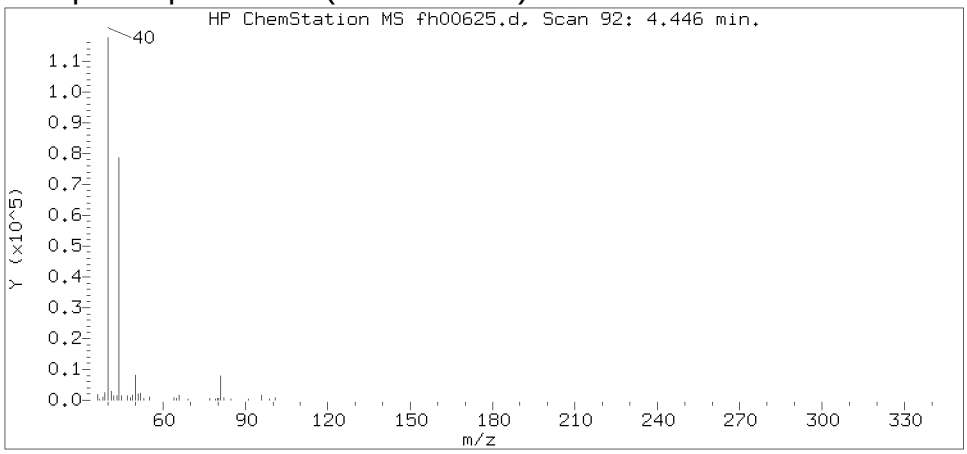


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00625.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:11 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:40 jeb07445

Sample Name: 504-- Lab Sample ID: 9766344

Compound Number : 5
Compound Name : Chloromethane
Scan Number : 92
Retention Time (minutes): 4.446
Relative Retention Time : 0.00155
Quant Ion : 50.00
Area (flag) : 25739
Concentration (ppb(v)) : 0.3323

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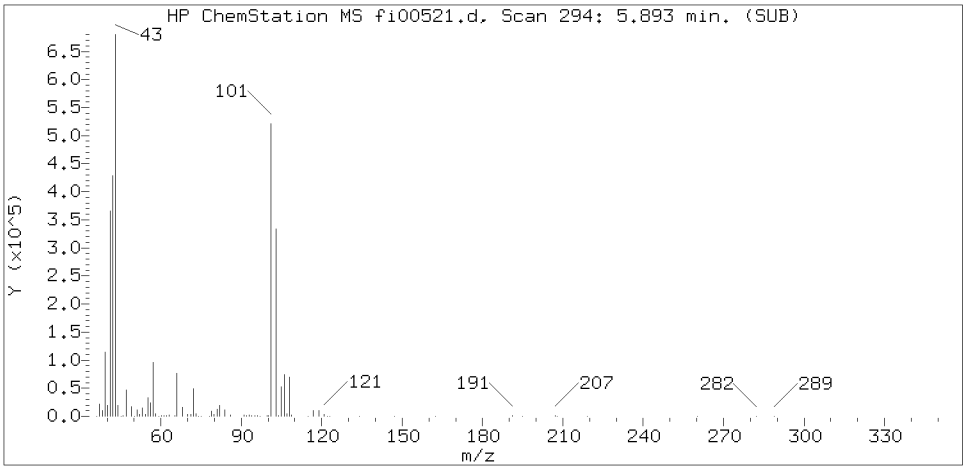
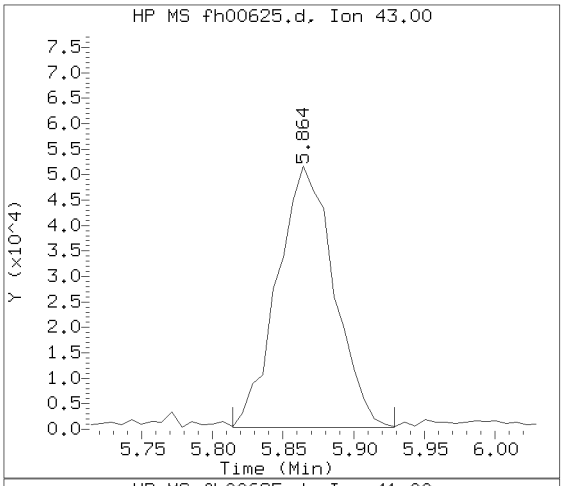
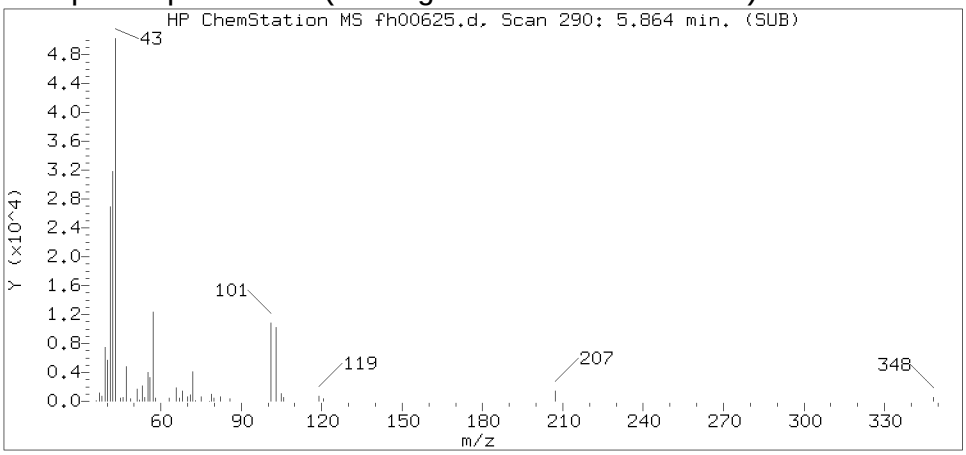
Target 3.5 esignature user ID: jeb07445

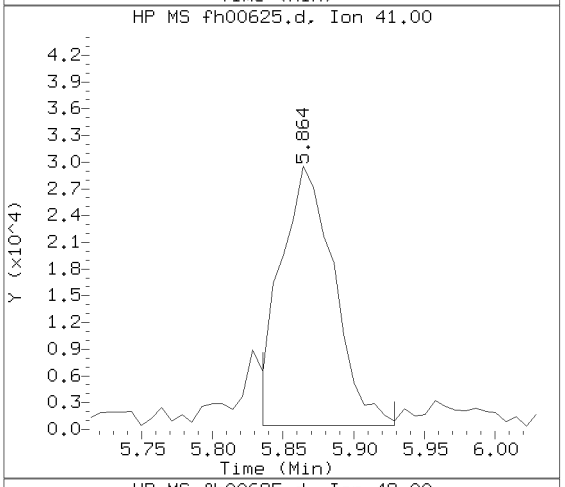
Reference Standard Spectrum for Pentane



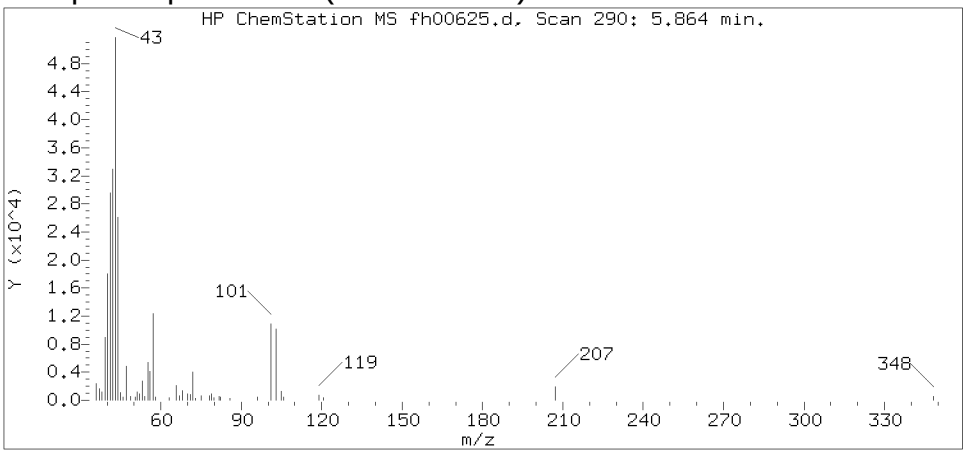


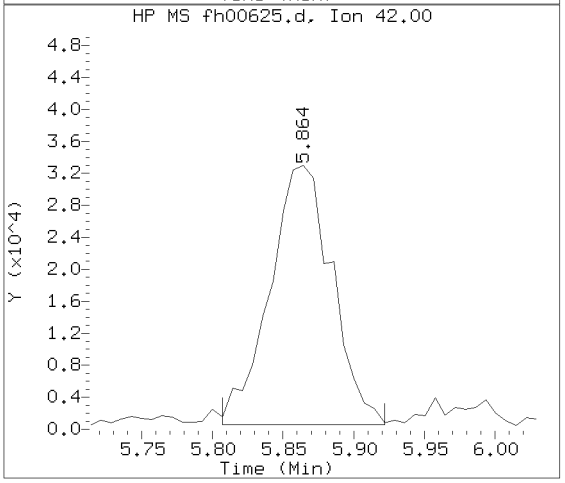
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00625.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:11 Analyst ID: jeb07445

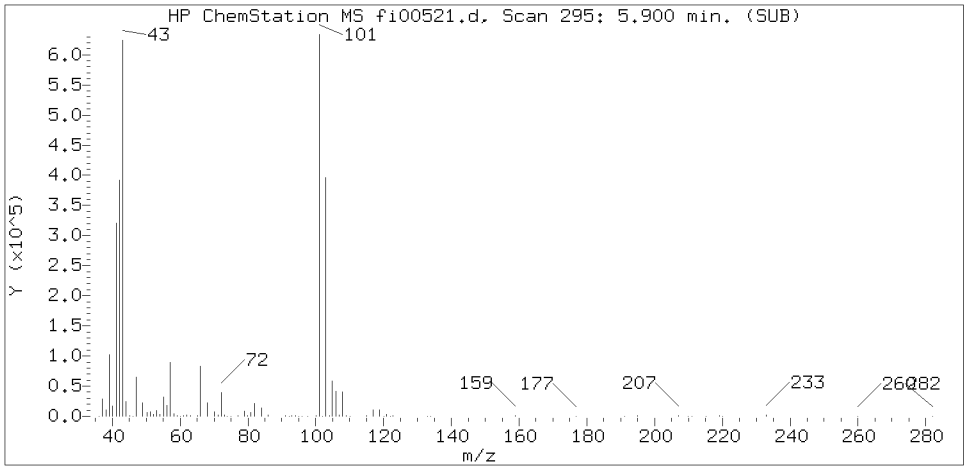
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:40 jeb07445

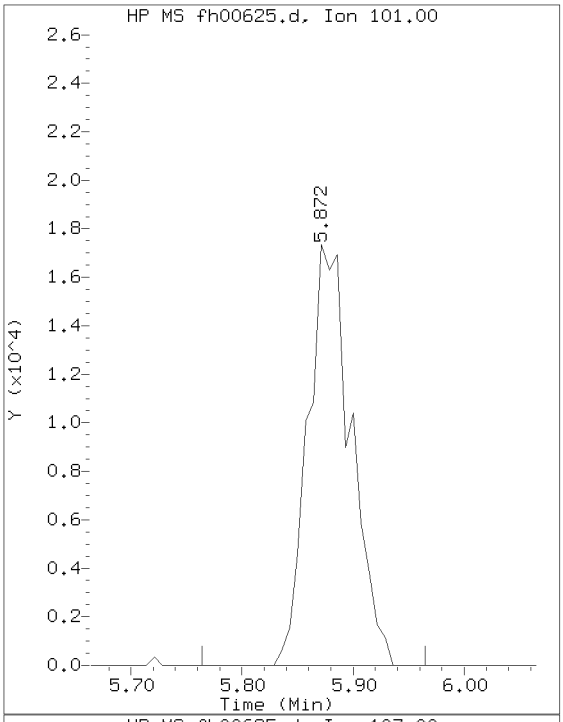
Sample Name: 504-- Lab Sample ID: 9766344

Compound Number	: 11
Compound Name	: Pentane
Scan Number	: 290
Retention Time (minutes)	: 5.864
Relative Retention Time	: 0.00034
Quant Ion	: 43.00
Area (flag)	: 143068
Concentration (ppb(v))	: 1.1034

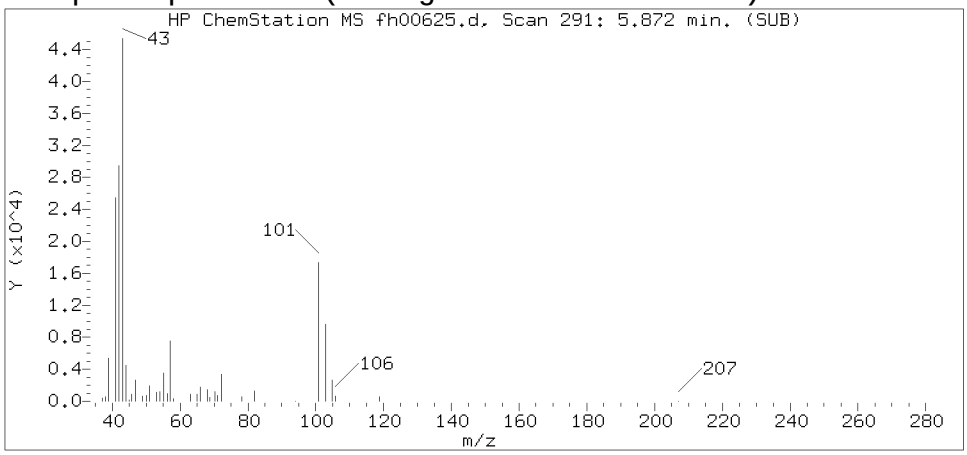
Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:57.
Target 3.5 esignature user ID: jeb07445

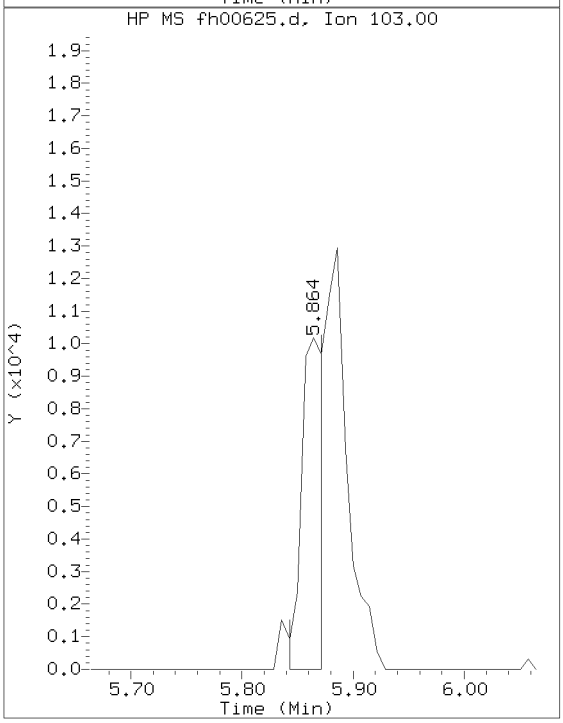
Reference Standard Spectrum for Trichlorofluoromethane



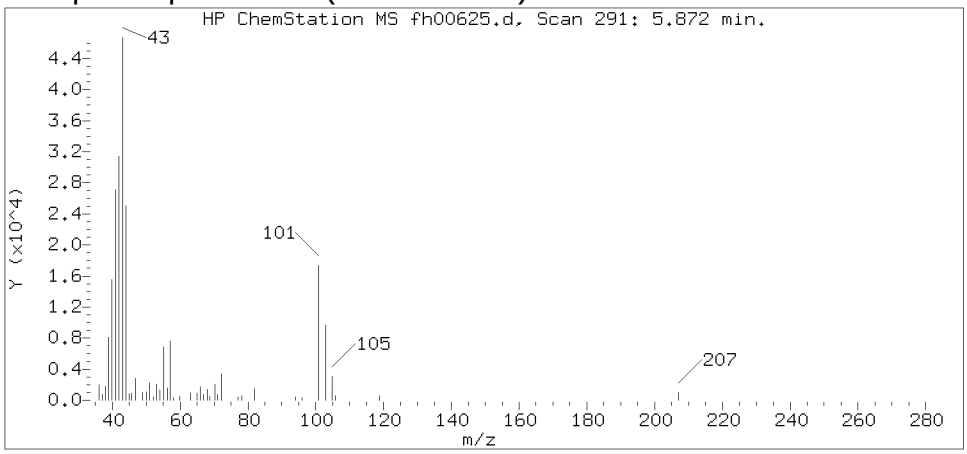


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00625.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:11 Analyst ID: jeb07445

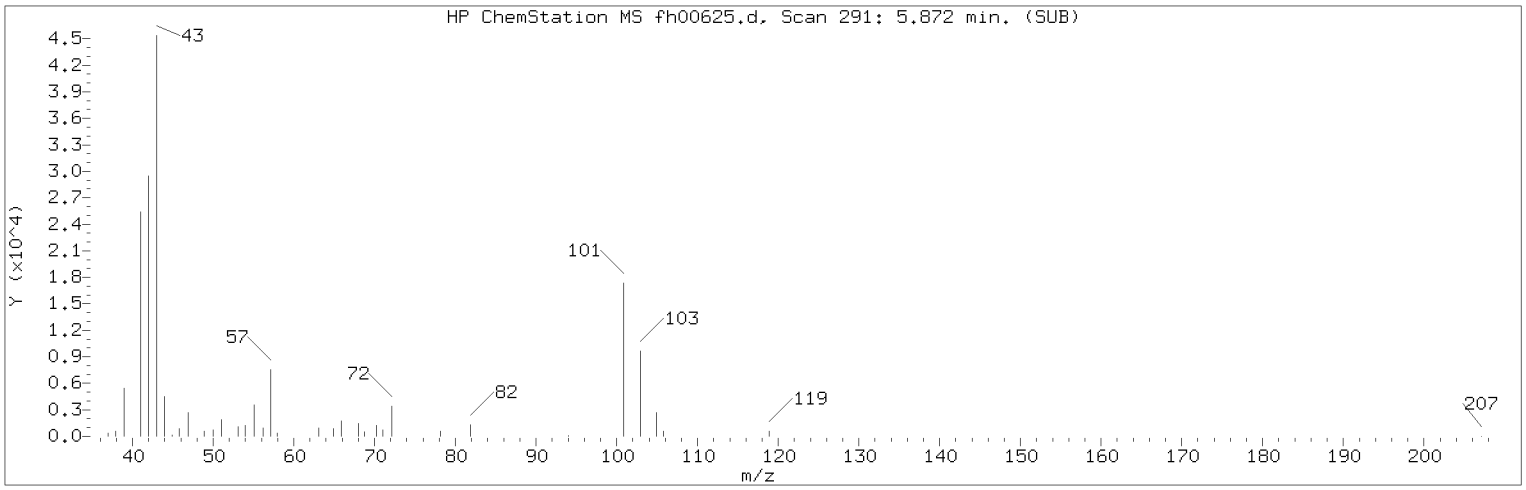
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:40 jeb07445

Sample Name: 504-- Lab Sample ID: 9766344

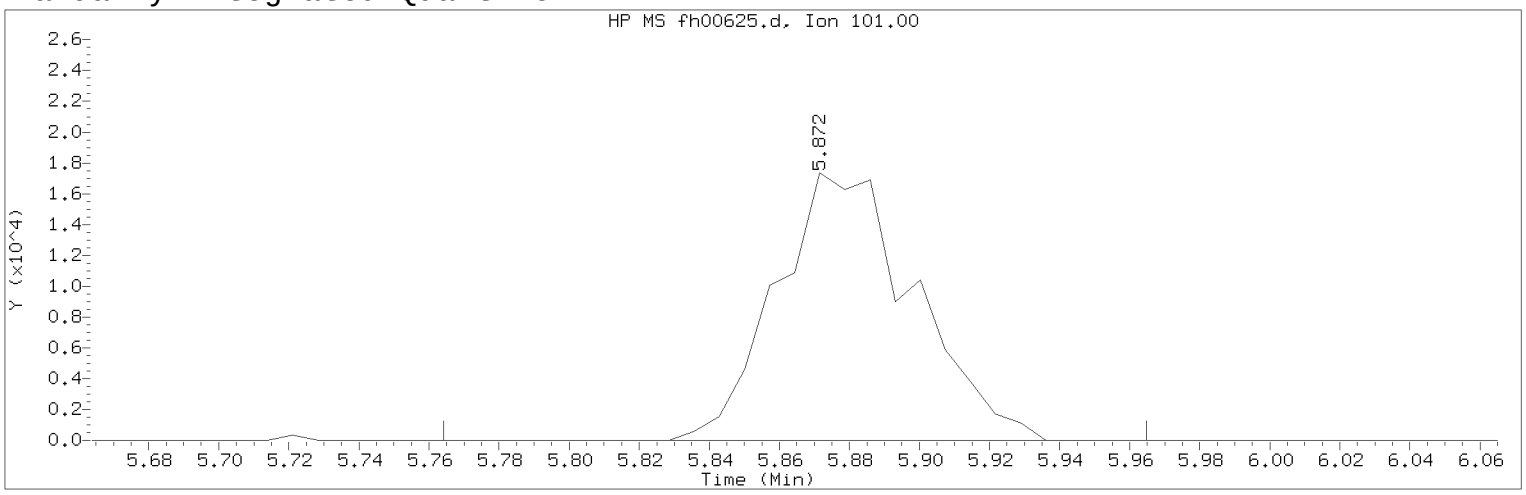
Compound Number	: 12
Compound Name	: Trichlorofluoromethane
Scan Number	: 291
Retention Time (minutes)	: 5.872
Relative Retention Time	: 0.00034
Quant Ion	: 101.00
Area (flag)	: 47335M
Concentration (ppb(v))	: 0.4036

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:57.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug27.b/fh00625.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:11 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:40 jeb07445

Sample Name: 504-- Lab Sample ID: 9766344

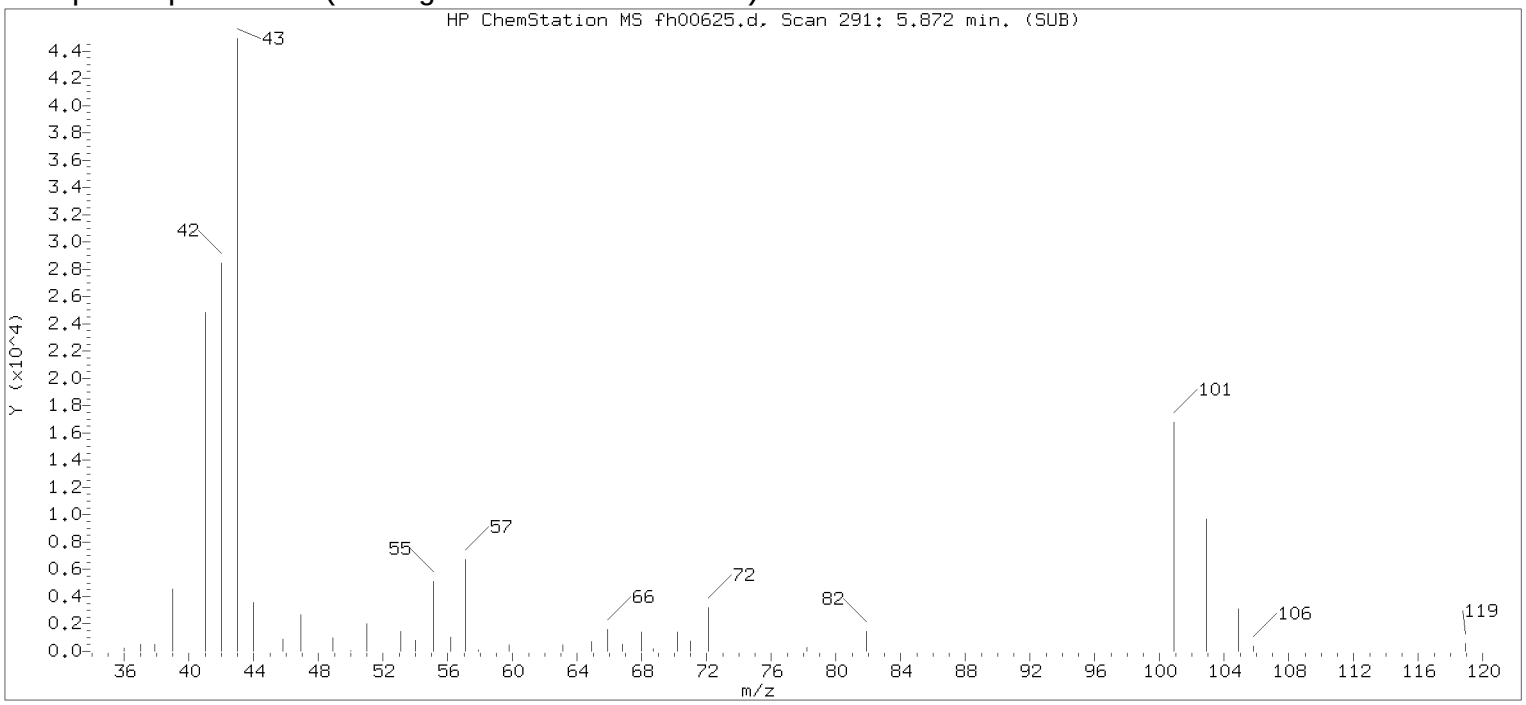
Compound Number : 12
Compound Name : Trichlorofluoromethane
Scan Number : 291
Retention Time (minutes): 5.872
Quant Ion : 101.00
Area (flag) : 47335M
Concentration (ppb(v)) : 0.4036
Integration start scan : 275 Integration stop scan: 303
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

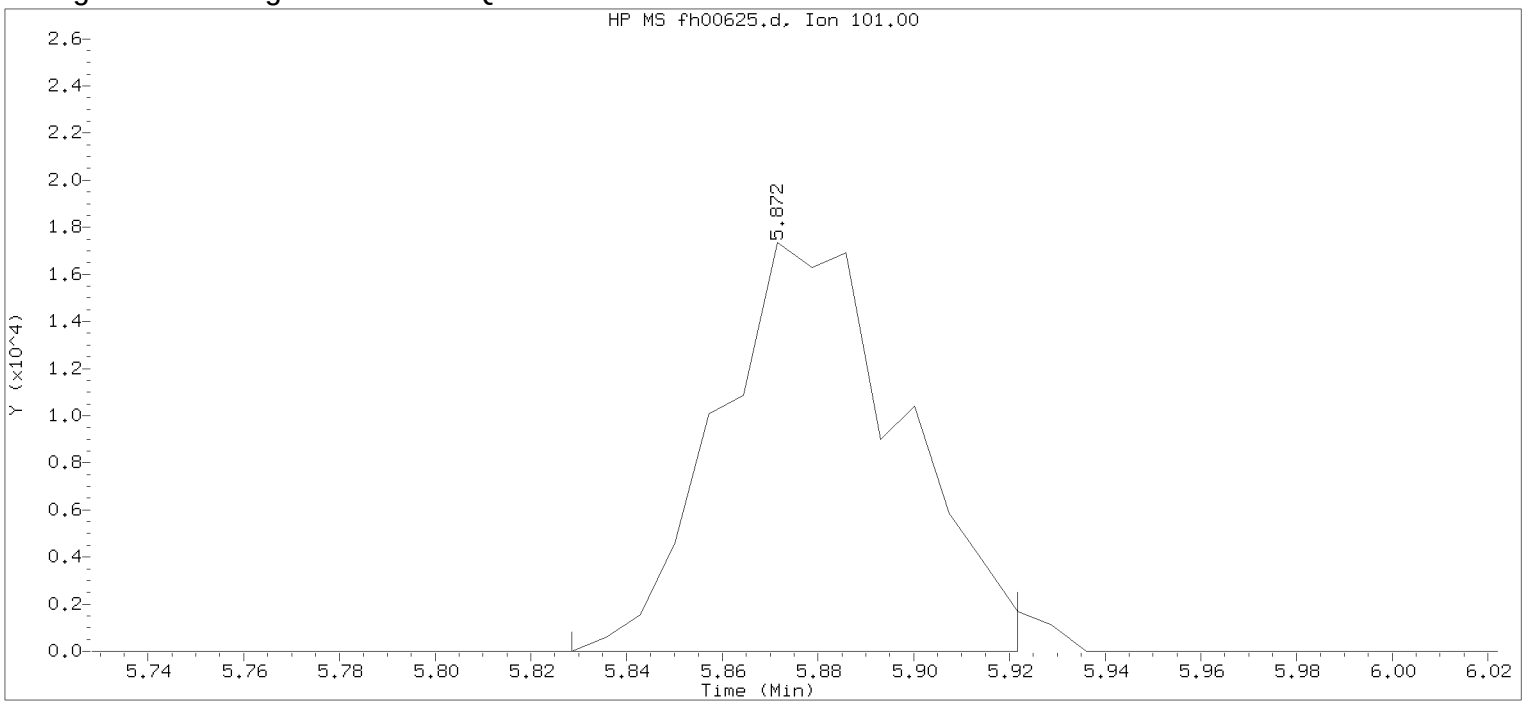
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:57.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:40.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug27.b/fh00625.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:11 Analyst ID: jeb07445

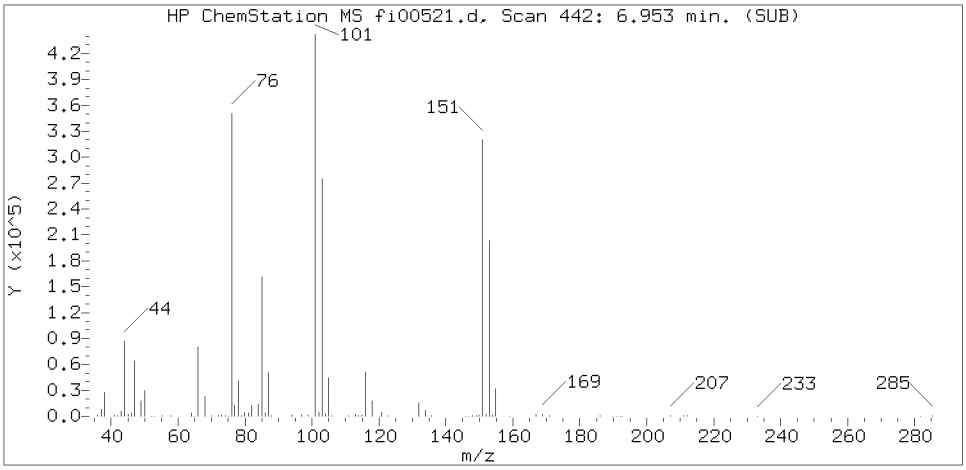
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 16:41 Unknown

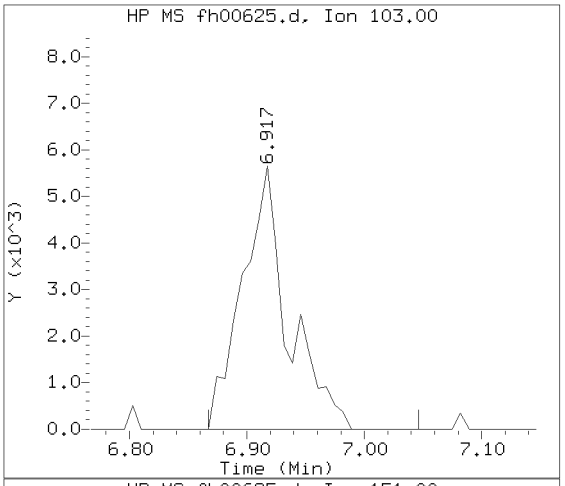
Sample Name: 504-- Lab Sample ID: 9766344

Compound Number : 12
Compound Name : Trichlorofluoromethane
Scan Number : 291
Retention Time (minutes): 5.872
Quant Ion : 101.00
Area : 46484
Concentration (ppb(v)) : 0.3963
Integration start scan : 284 Integration stop scan: 297
Y at integration start : 0 Y at integration end: 0

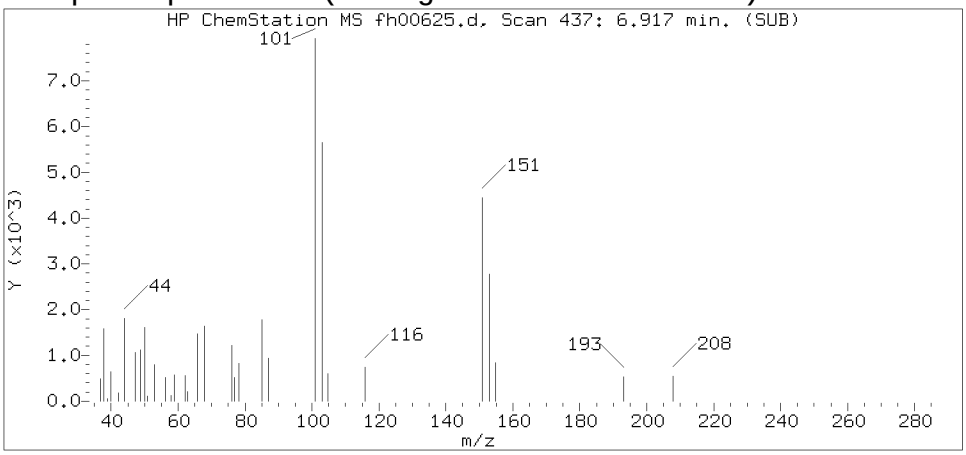
Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:57.
Target 3.5 esignature user ID: jeb07445

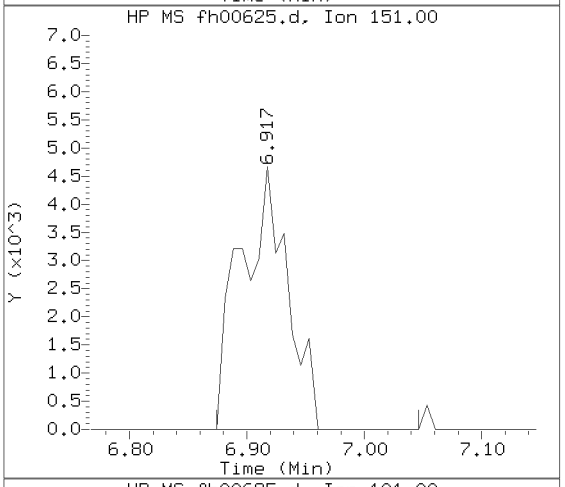
Reference Standard Spectrum for Freon 113



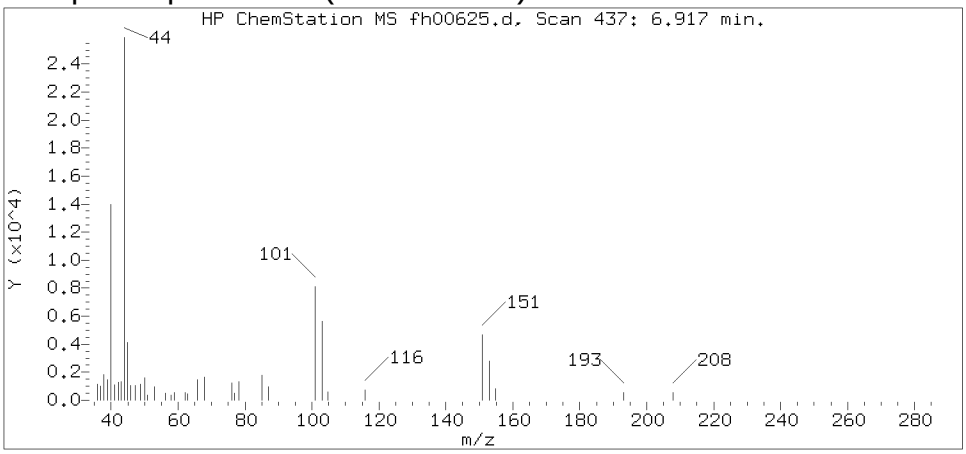


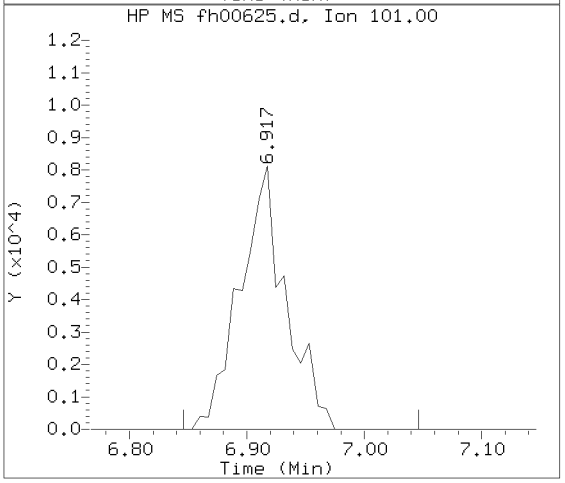
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00625.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:11 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:40 jeb07445

Sample Name: 504-- Lab Sample ID: 9766344

Compound Number : 17
Compound Name : Freon 113
Scan Number : 437
Retention Time (minutes): 6.917
Relative Retention Time :-0.00025
Quant Ion : 103.00
Area (flag) : 15346
Concentration (ppb(v)) : 0.2205

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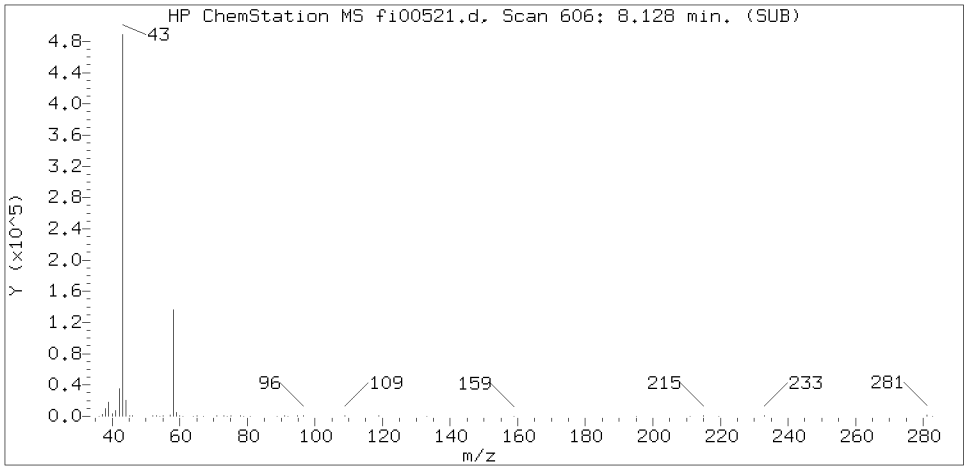
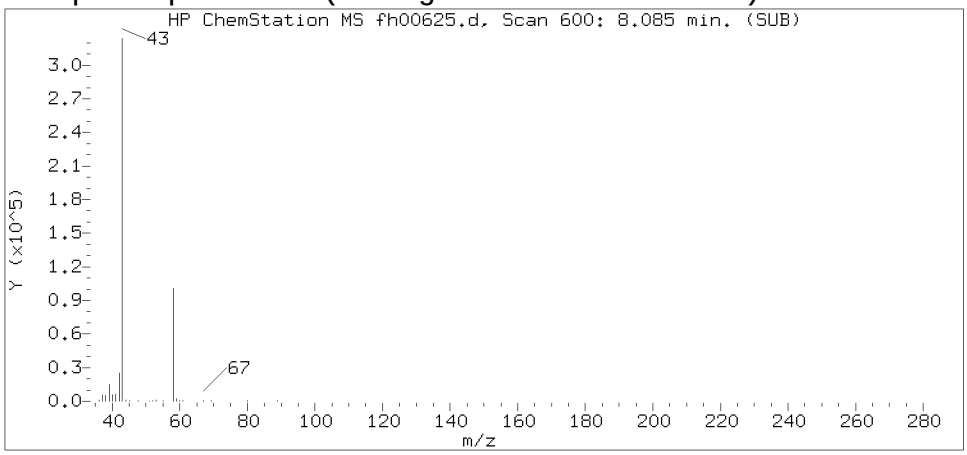
Target 3.5 esignature user ID: jeb07445

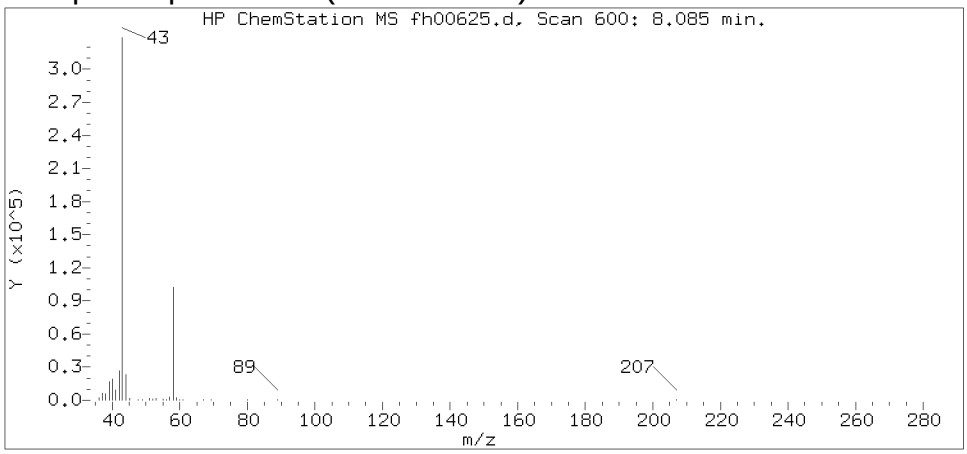
Reference Standard Spectrum for Acetone

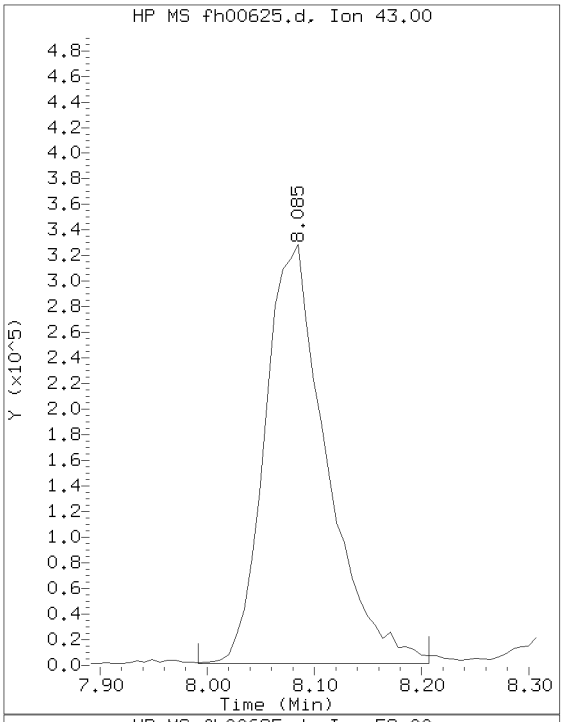


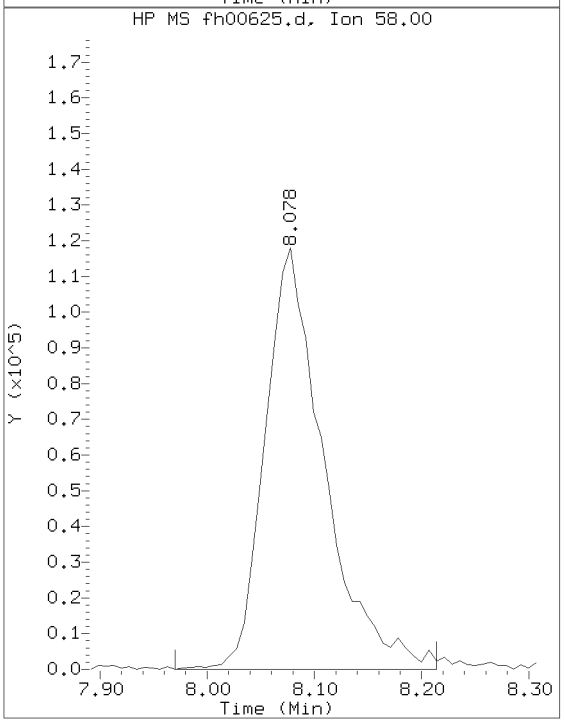
Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)







Data File: /chem/HP26379.i/18aug27.b/fh00625.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:11 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:40 jeb07445

Sample Name: 504-- Lab Sample ID: 9766344

Compound Number : 24
Compound Name : Acetone
Scan Number : 600
Retention Time (minutes): 8.085
Relative Retention Time :-0.00147
Quant Ion : 43.00
Area (flag) : 1305787
Concentration (ppb(v)) : 11.4078

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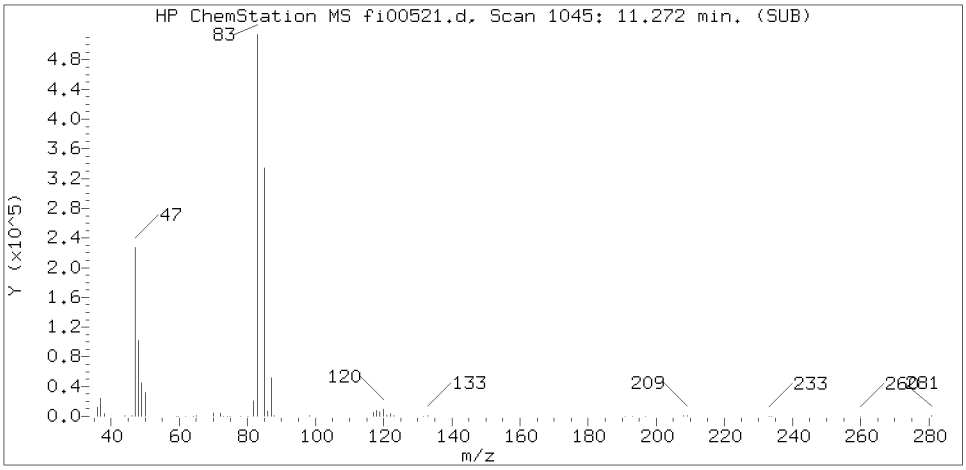
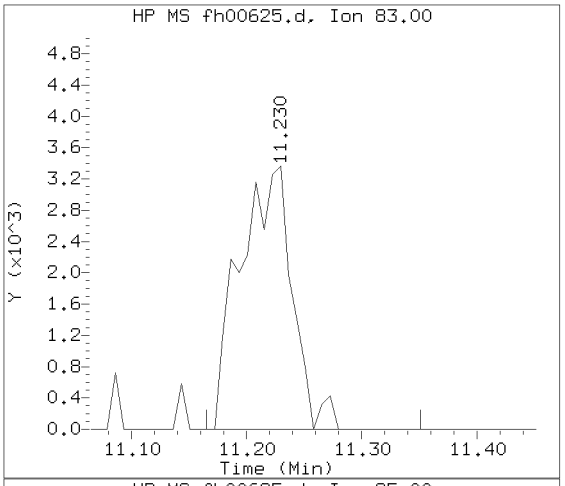
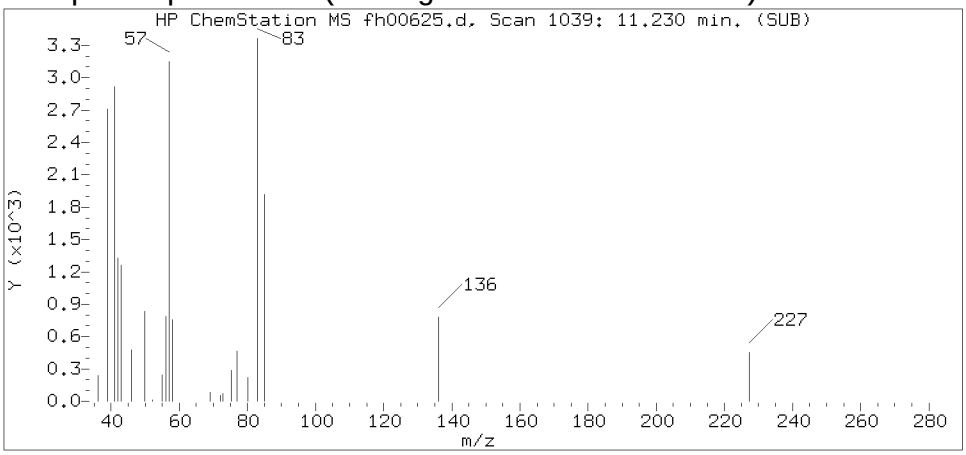
Target 3.5 esignature user ID: jeb07445

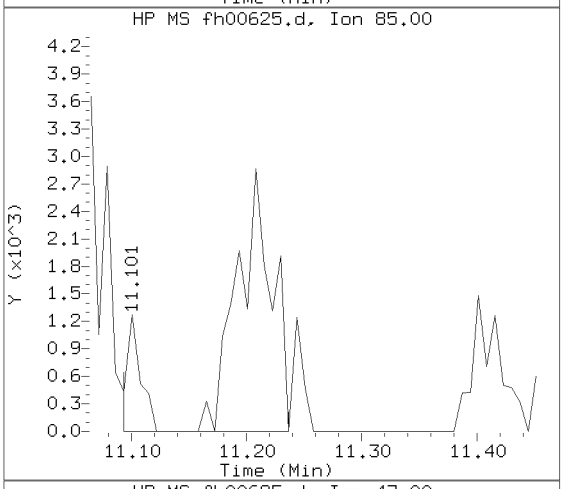
Reference Standard Spectrum for Chloroform



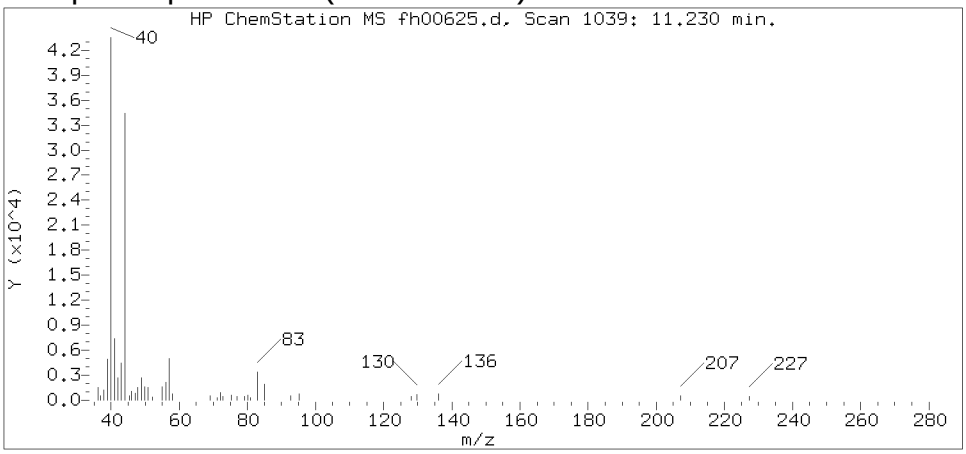


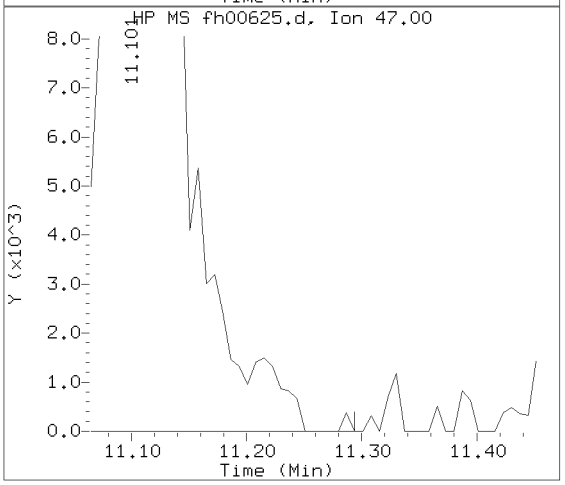
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00625.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:11 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:40 jeb07445

Sample Name: 504-- Lab Sample ID: 9766344

Compound Number : 39
Compound Name : Chloroform
Scan Number : 1039
Retention Time (minutes): 11.230
Relative Retention Time :-0.00064
Quant Ion : 83.00
Area (flag) : 10672
Concentration (ppb(v)) : 0.1021

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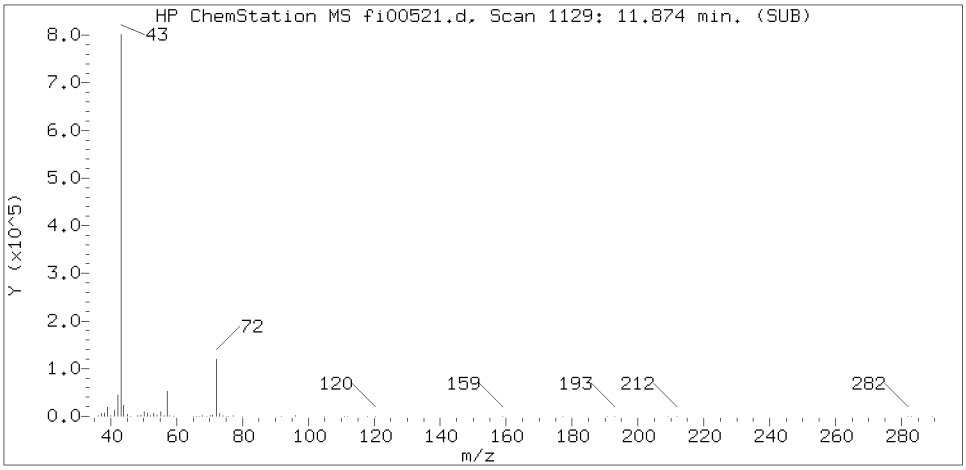
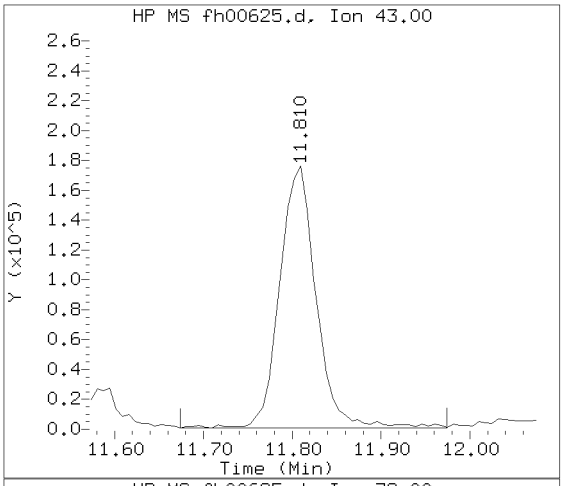
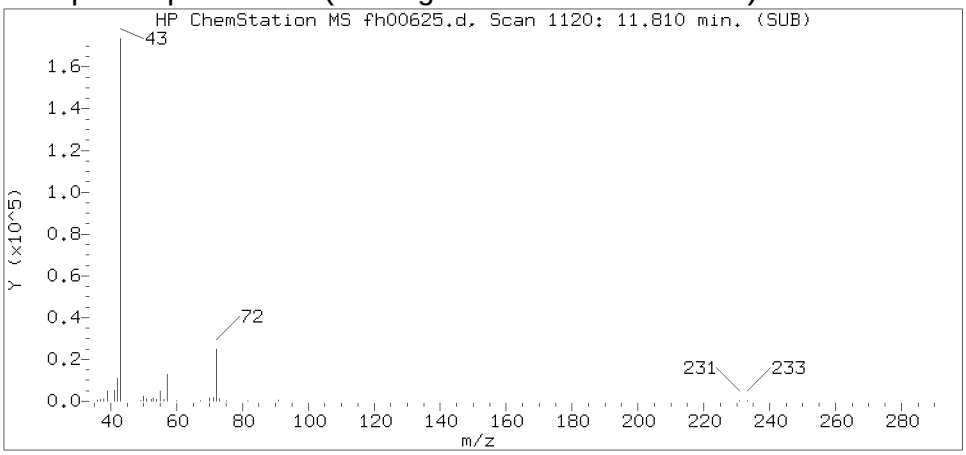
Target 3.5 esignature user ID: jeb07445

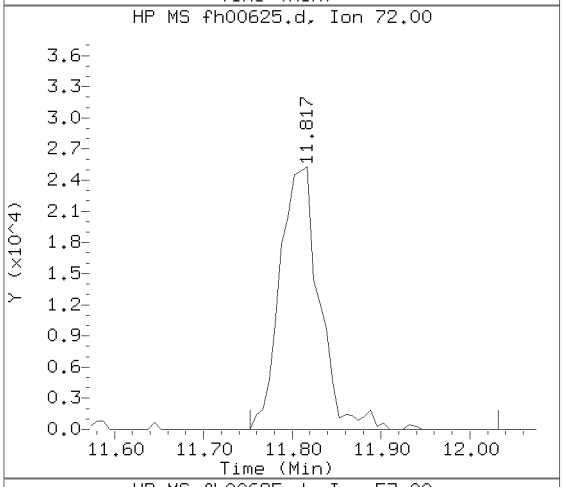
Reference Standard Spectrum for 2-Butanone



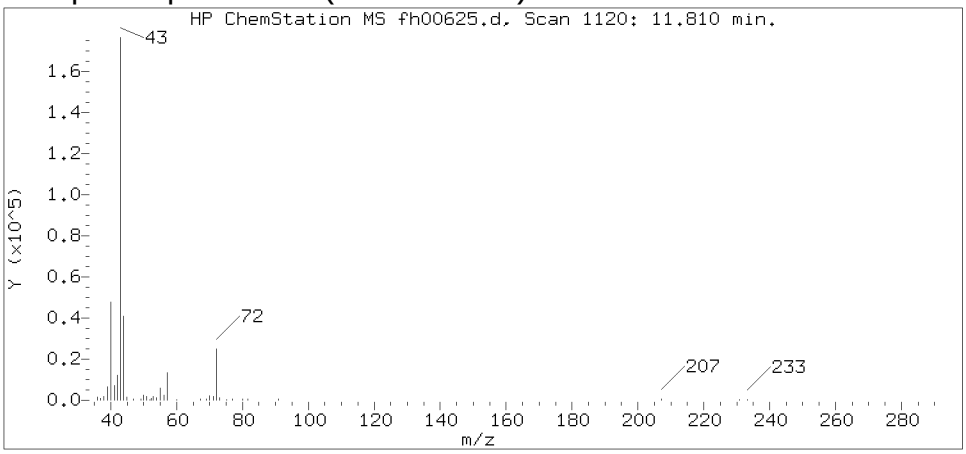


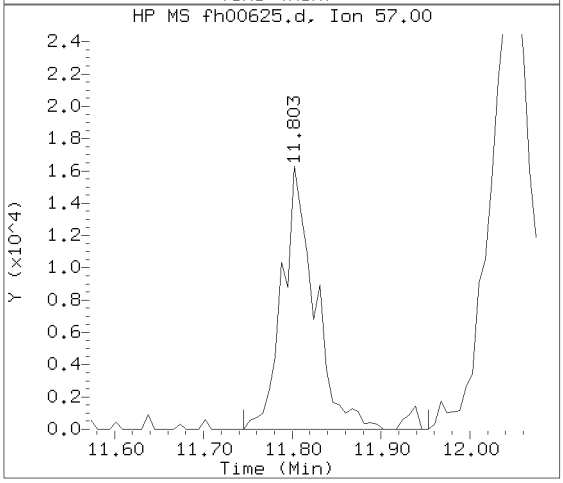
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00625.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:11 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:40 jeb07445

Sample Name: 504-- Lab Sample ID: 9766344

Compound Number : 45
Compound Name : 2-Butanone
Scan Number : 1120
Retention Time (minutes): 11.810
Relative Retention Time : 0.00069
Quant Ion : 43.00
Area (flag) : 499949
Concentration (ppb(v)) : 3.0771

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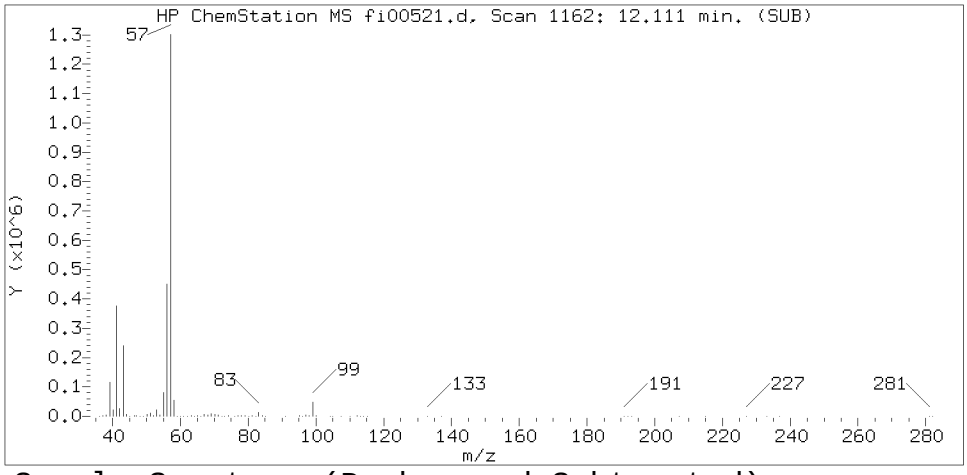
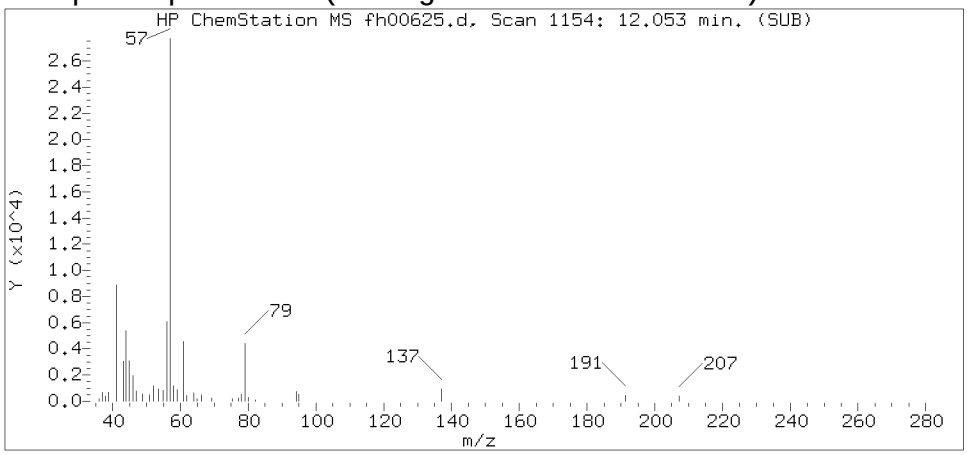
Target 3.5 esignature user ID: jeb07445

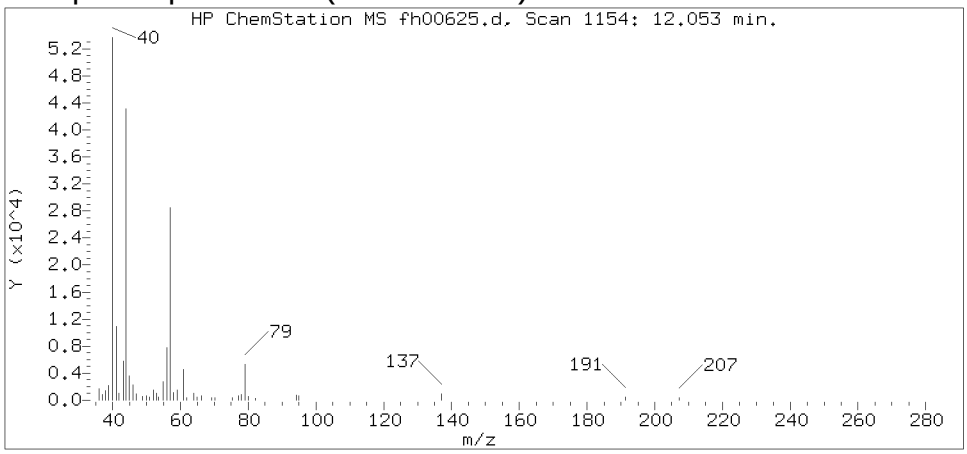
Reference Standard Spectrum for Isooctane

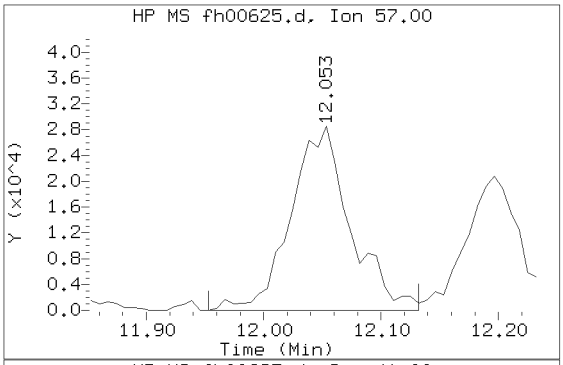


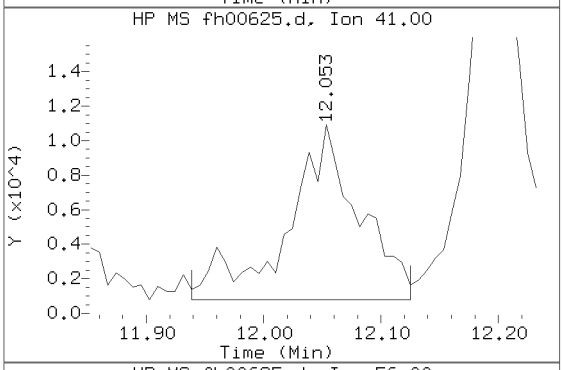
Sample Spectrum (Background Subtracted)

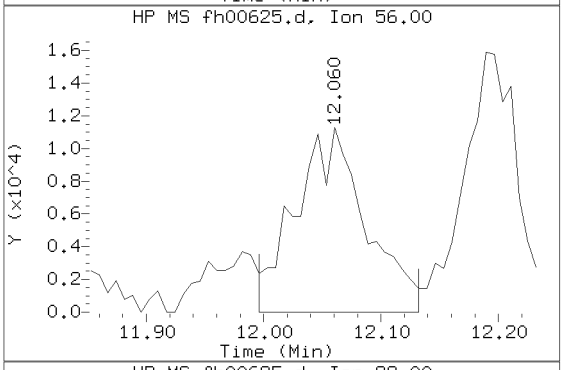


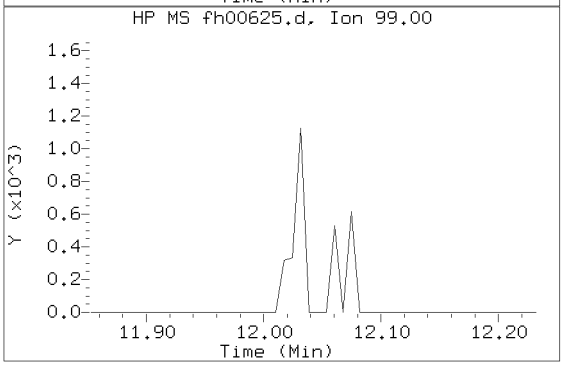
Sample Spectrum (Unaltered)











Data File: /chem/HP26379.i/18aug27.b/fh00625.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:11 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:40 jeb07445

Sample Name: 504-- Lab Sample ID: 9766344

Compound Number	: 46
Compound Name	: Isooctane
Scan Number	: 1154
Retention Time (minutes)	: 12.053
Relative Retention Time	:-0.00054
Quant Ion	: 57.00
Area (flag)	: 100362
Concentration (ppb(v))	: 0.2411

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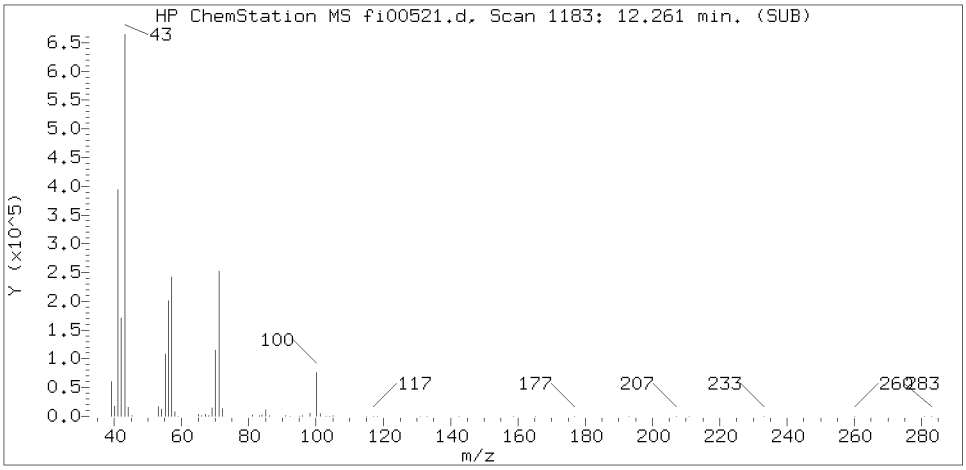
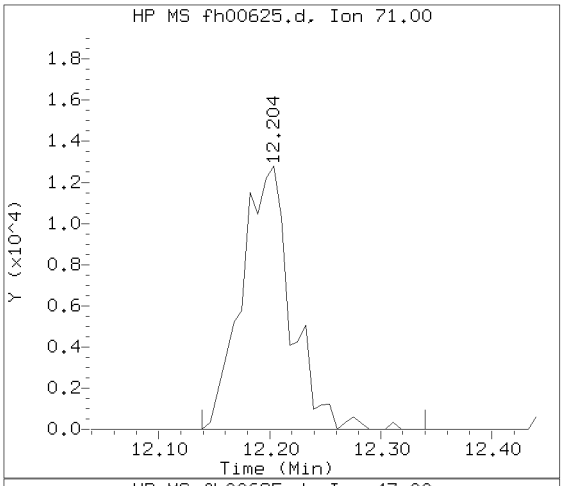
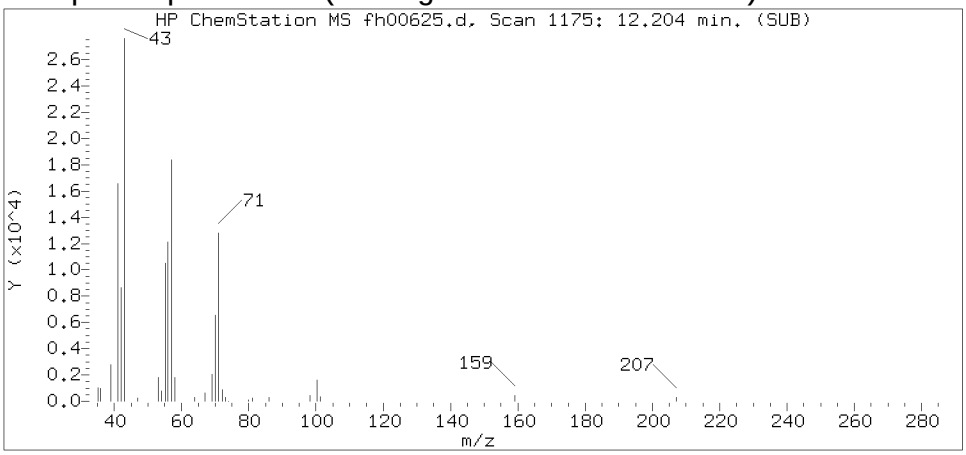
Target 3.5 esignature user ID: jeb07445

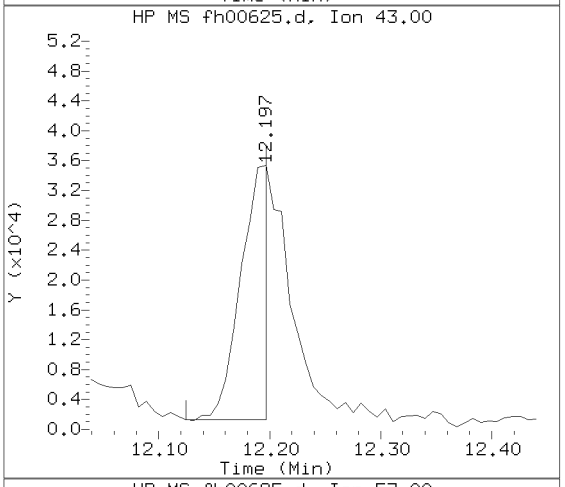
Reference Standard Spectrum for Heptane



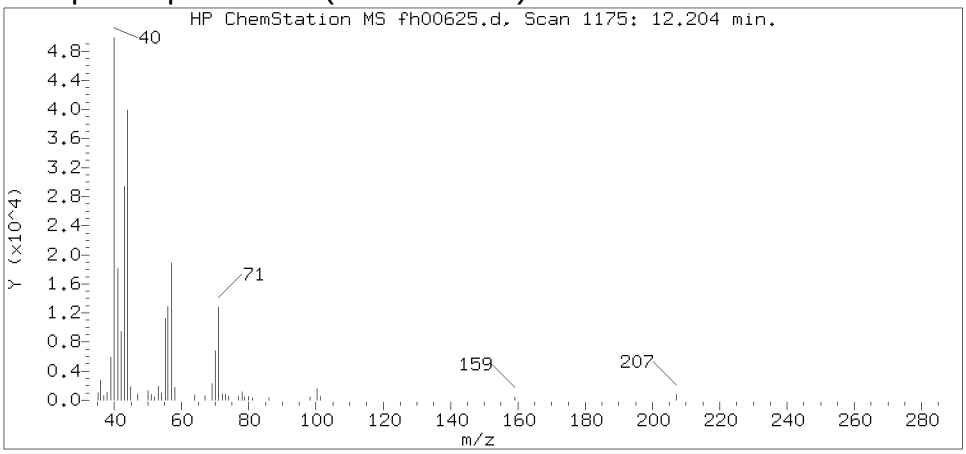


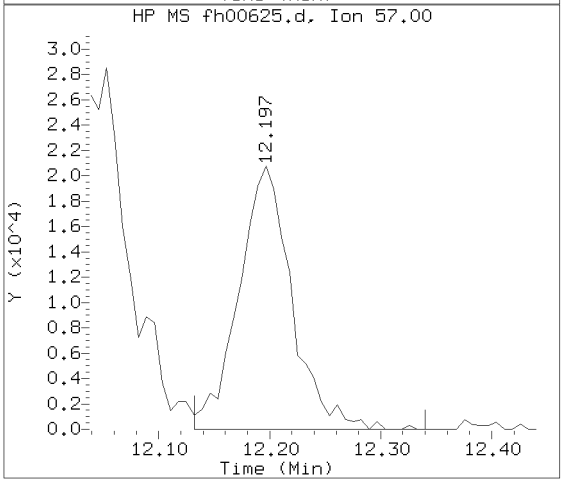
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00625.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:11 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:40 jeb07445

Sample Name: 504-- Lab Sample ID: 9766344

Compound Number : 47
Compound Name : Heptane
Scan Number : 1175
Retention Time (minutes): 12.204
Relative Retention Time :-0.00000
Quant Ion : 71.00
Area (flag) : 39682
Concentration (ppb(v)) : 0.6622

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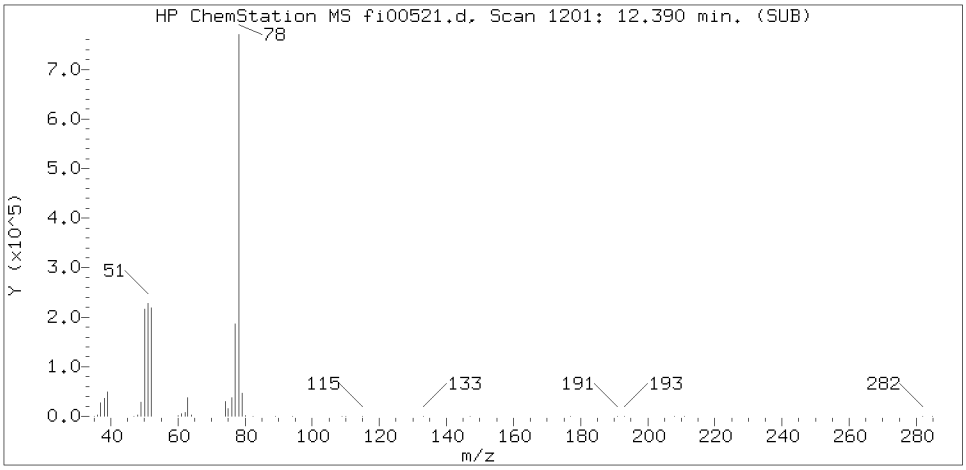
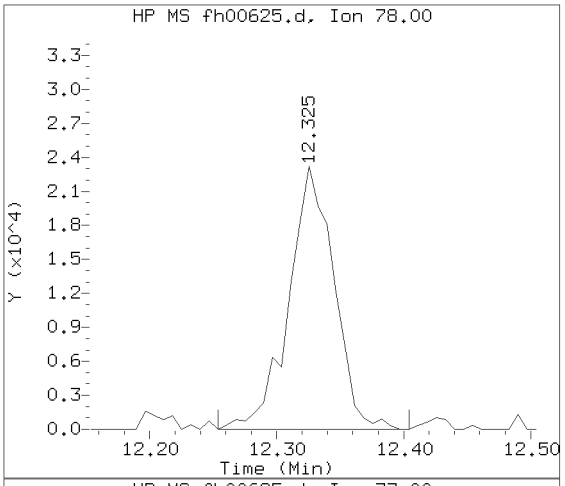
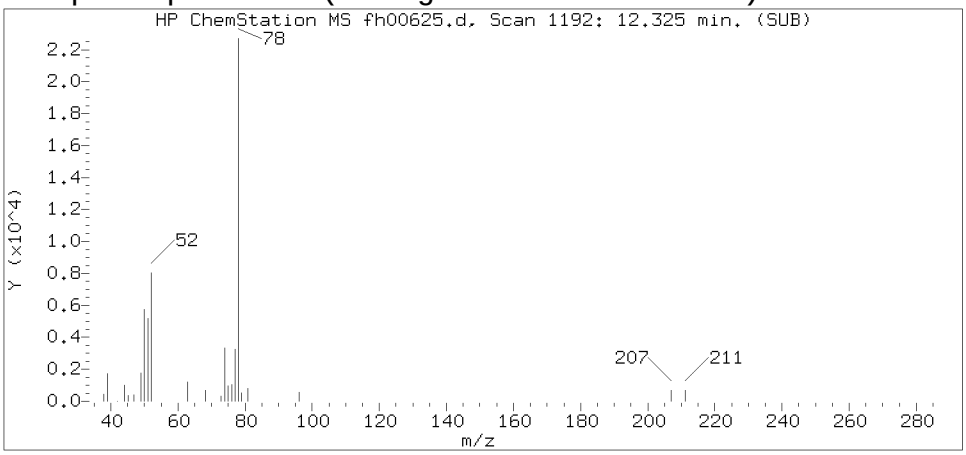
Target 3.5 esignature user ID: jeb07445

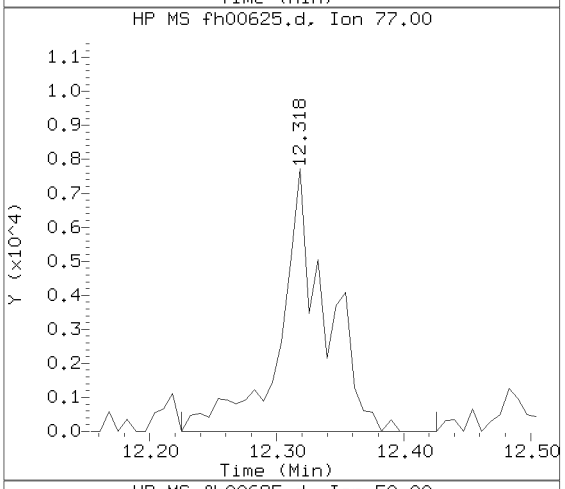
Reference Standard Spectrum for Benzene



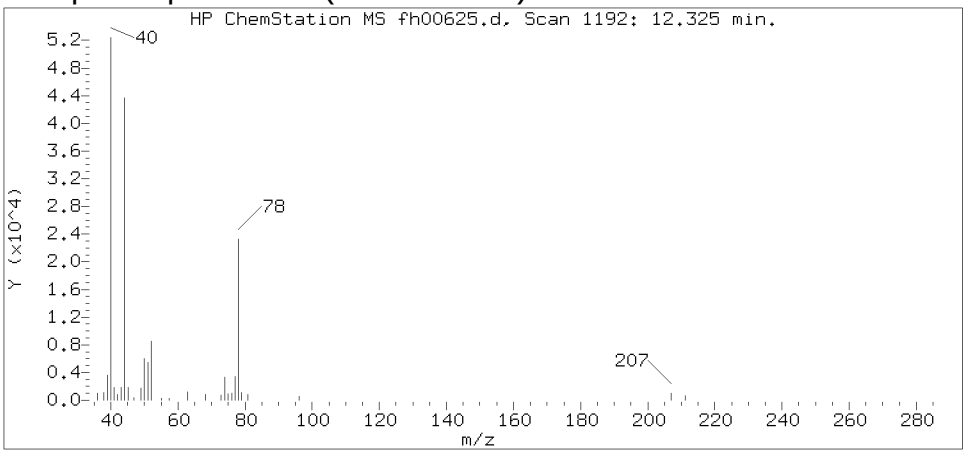


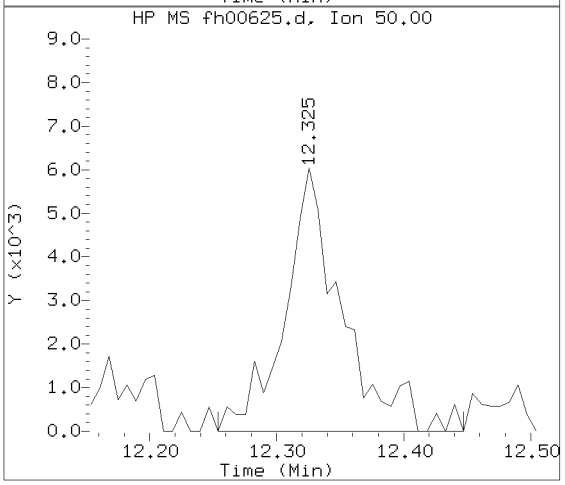
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00625.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:11 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:40 jeb07445

Sample Name: 504-- Lab Sample ID: 9766344

Compound Number : 48
Compound Name : Benzene
Scan Number : 1192
Retention Time (minutes): 12.325
Relative Retention Time :-0.00000
Quant Ion : 78.00
Area (flag) : 57634
Concentration (ppb(v)) : 0.3110

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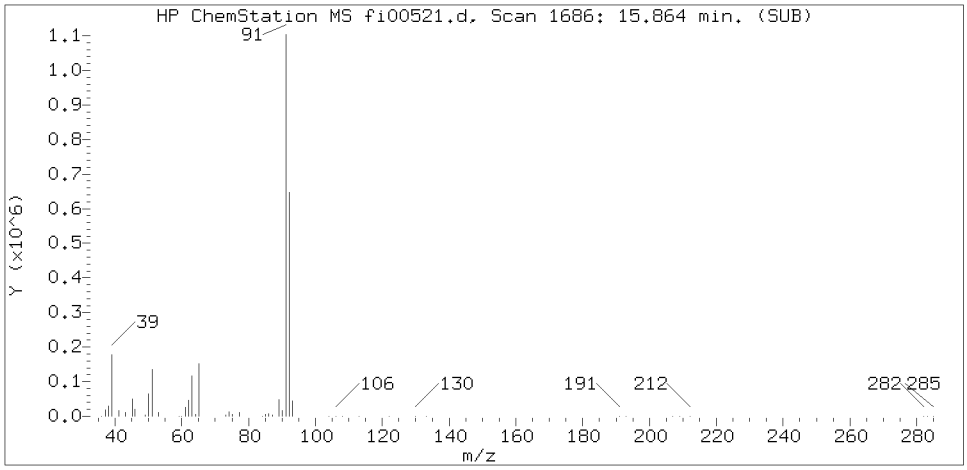
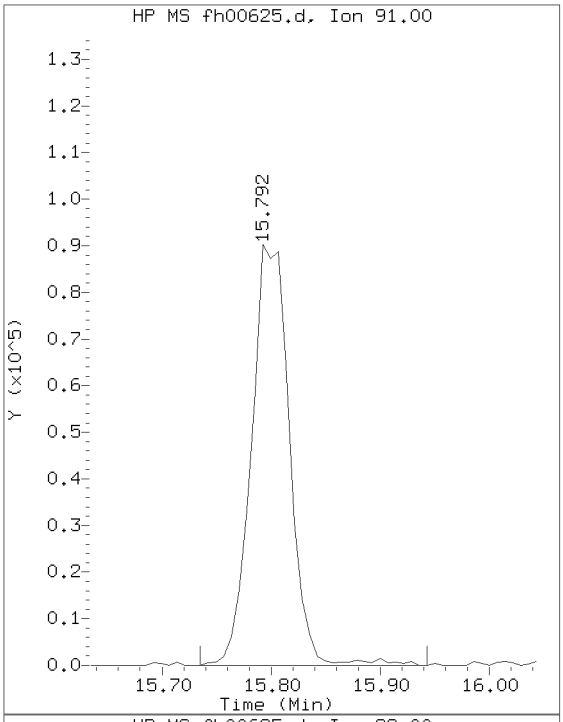
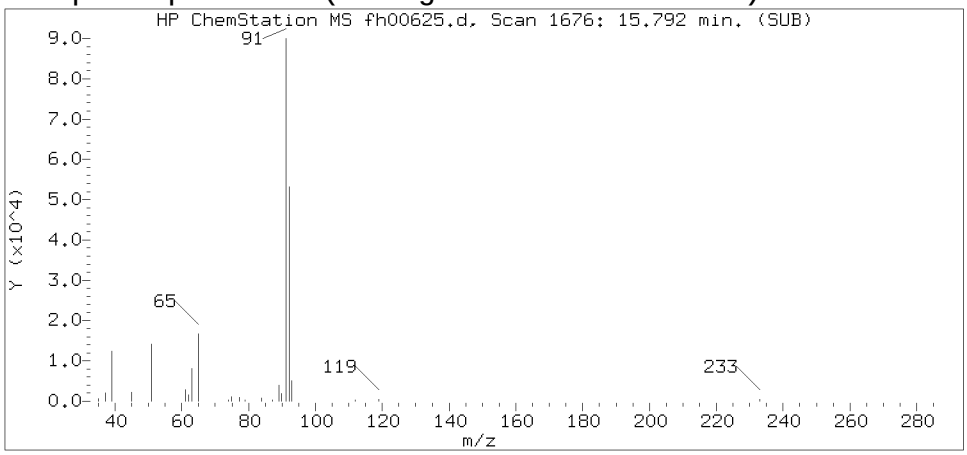
Target 3.5 esignature user ID: jeb07445

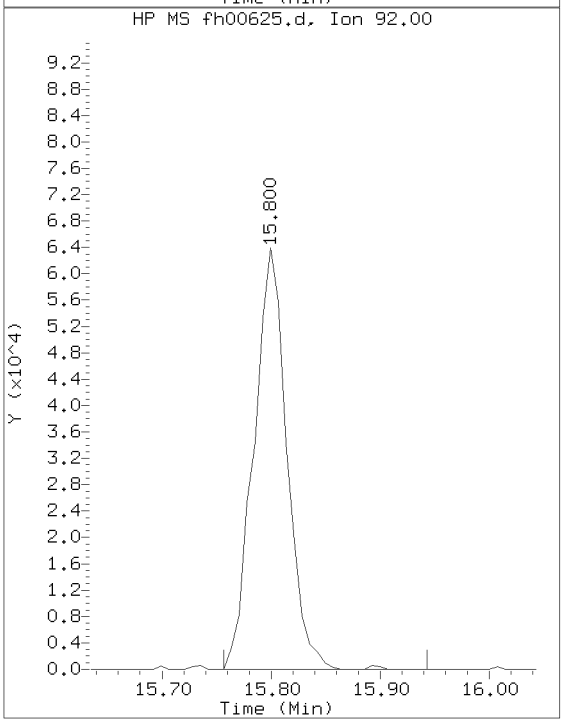
Reference Standard Spectrum for Toluene



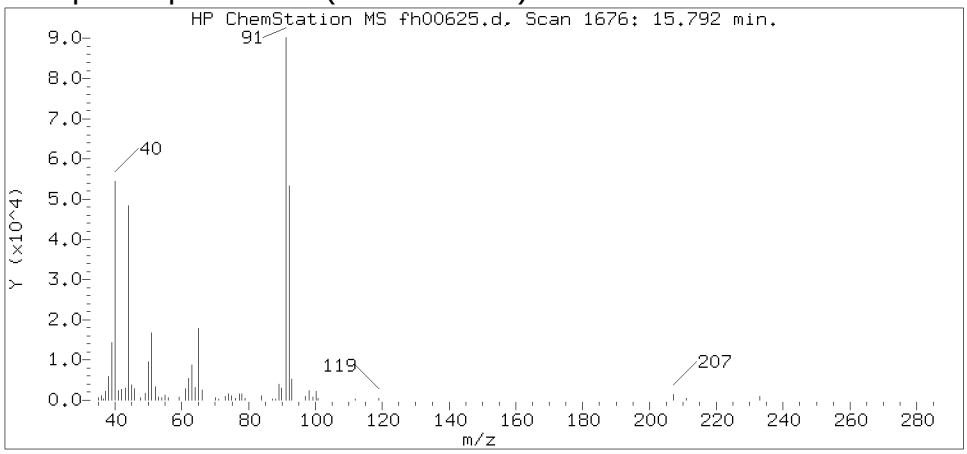


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00625.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:11 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:40 jeb07445

Sample Name: 504-- Lab Sample ID: 9766344

Compound Number	: 61
Compound Name	: Toluene
Scan Number	: 1676
Retention Time (minutes)	: 15.792
Relative Retention Time	: 0.00005
Quant Ion	: 91.00
Area (flag)	: 219364
Concentration (ppb(v))	: 1.0318

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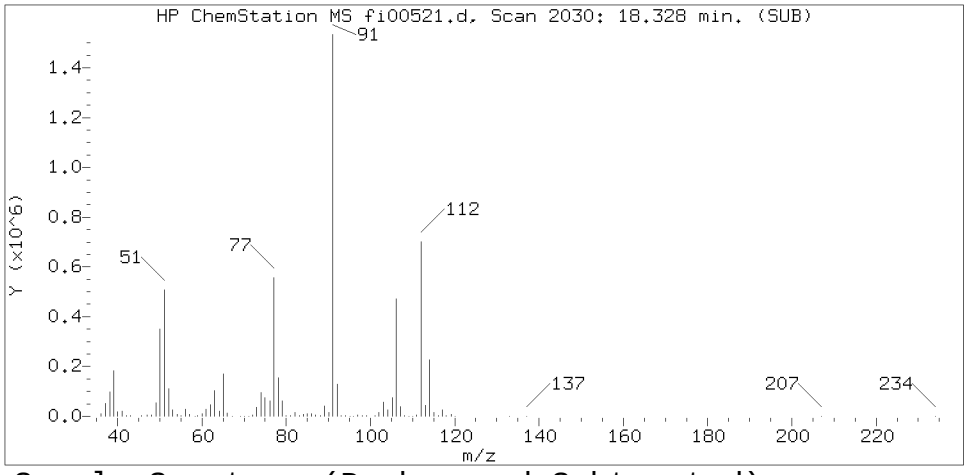
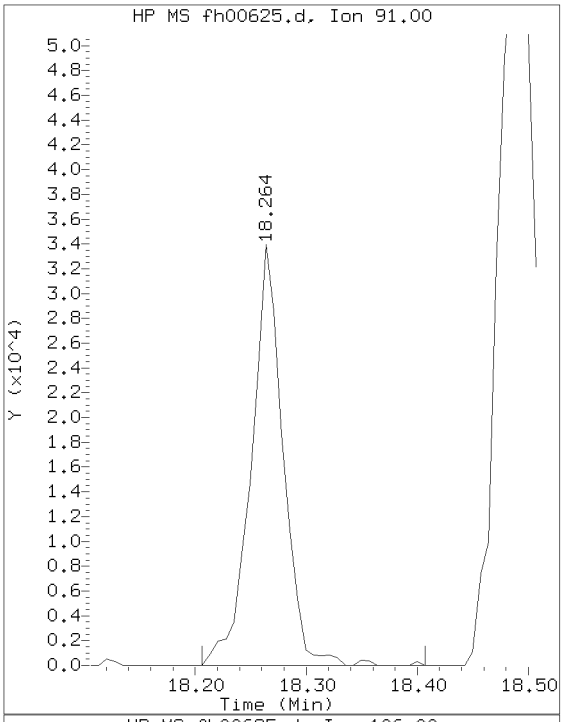
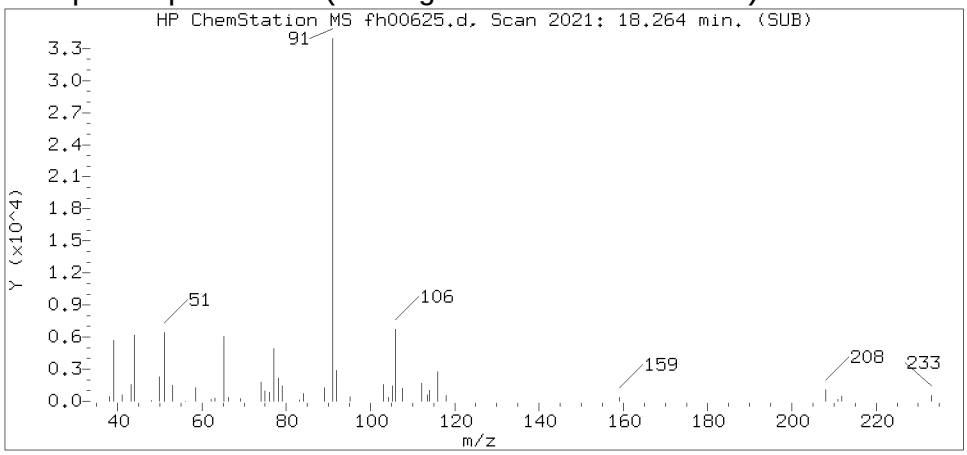
Target 3.5 esignature user ID: jeb07445

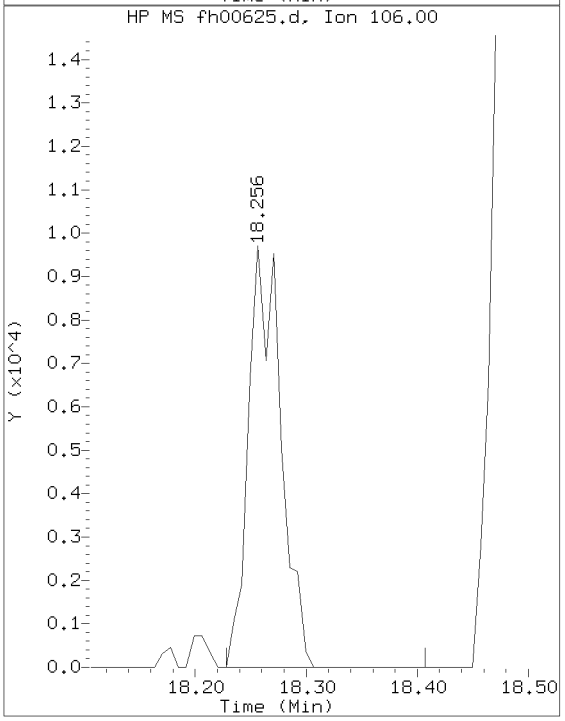
Reference Standard Spectrum for Ethylbenzene



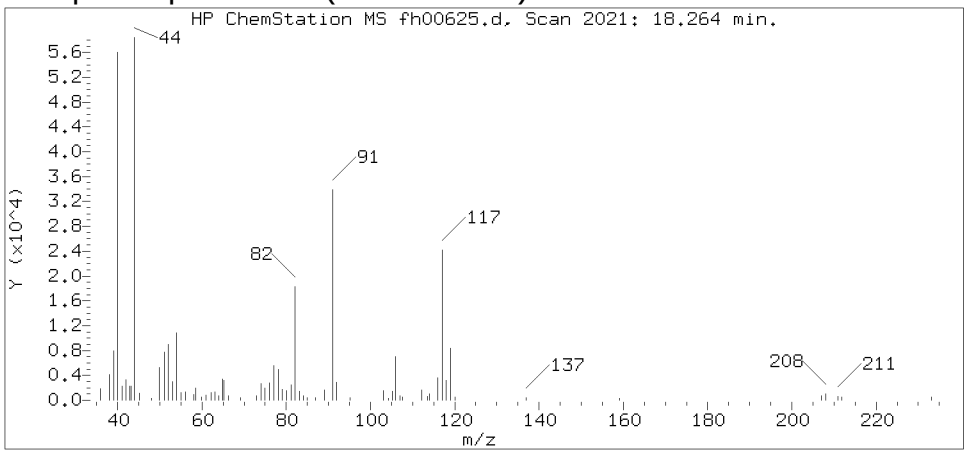


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00625.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:11 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:40 jeb07445

Sample Name: 504-- Lab Sample ID: 9766344

Compound Number	: 73
Compound Name	: Ethylbenzene
Scan Number	: 2021
Retention Time (minutes)	: 18.264
Relative Retention Time	: 0.00000
Quant Ion	: 91.00
Area (flag)	: 68086
Concentration (ppb(v))	: 0.2347

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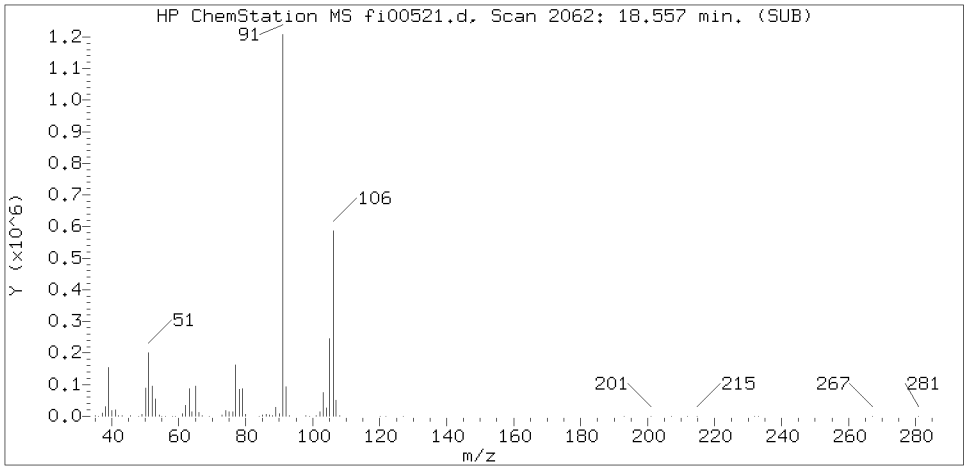
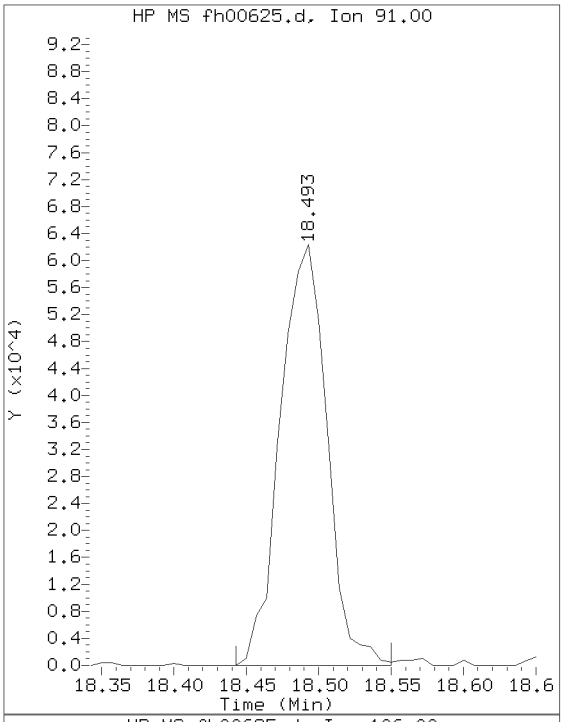
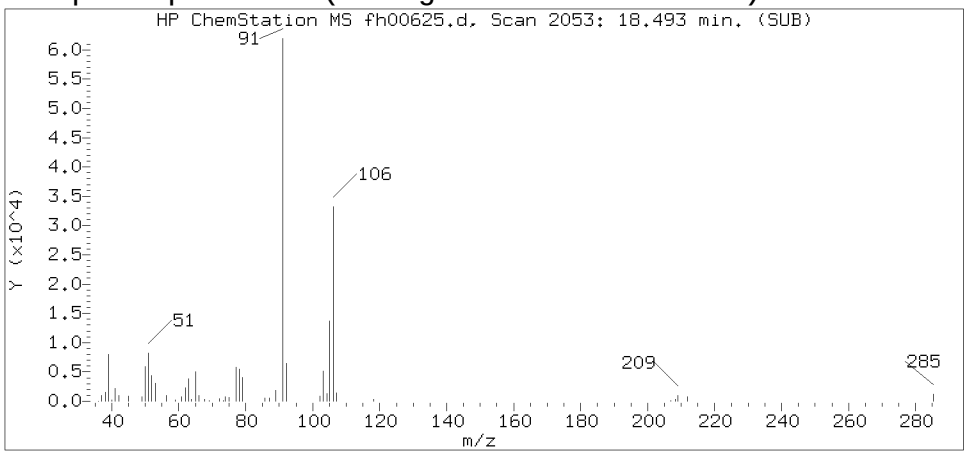
Target 3.5 esignature user ID: jeb07445

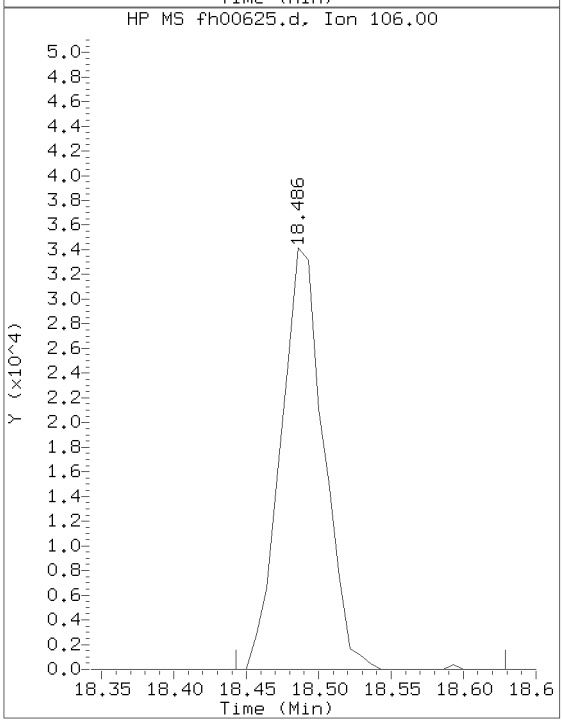
Reference Standard Spectrum for m/p-Xylene



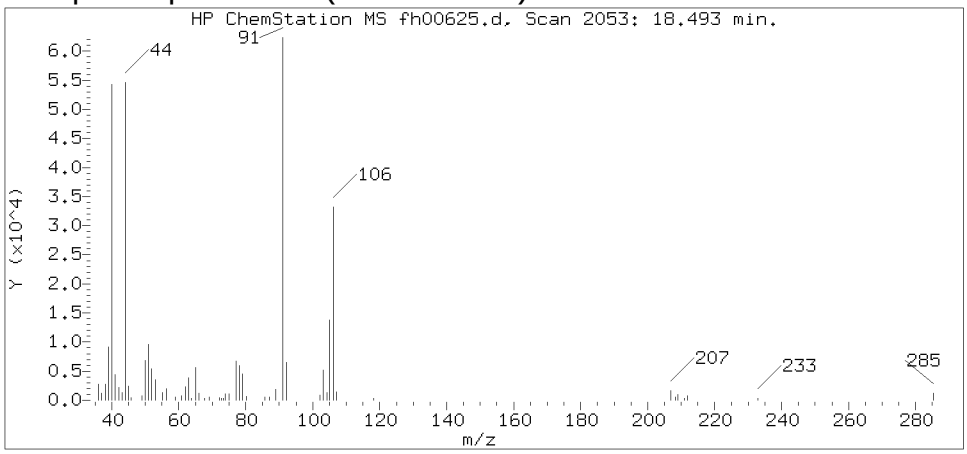


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00625.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:11 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:40 jeb07445

Sample Name: 504-- Lab Sample ID: 9766344

Compound Number : 75
Compound Name : m/p-Xylene
Scan Number : 2053
Retention Time (minutes): 18.493
Relative Retention Time :-0.00040
Quant Ion : 91.00
Area (flag) : 140054
Concentration (ppb(v)) : 0.6715

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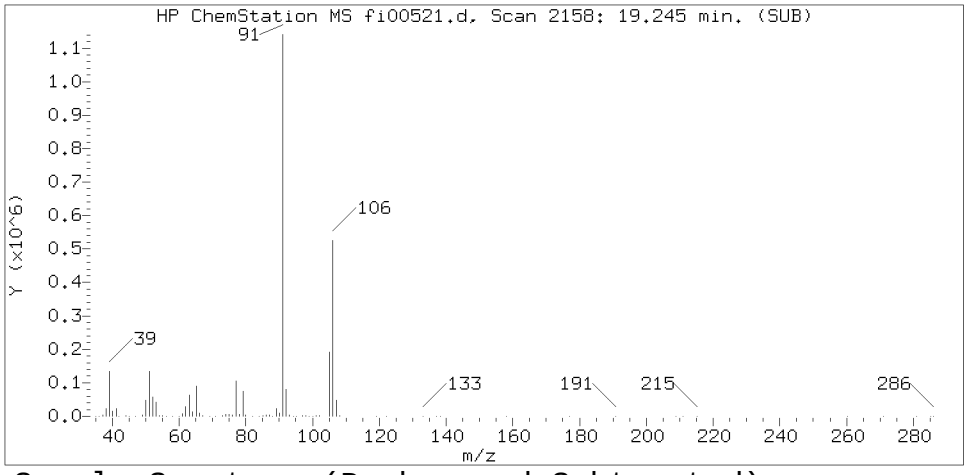
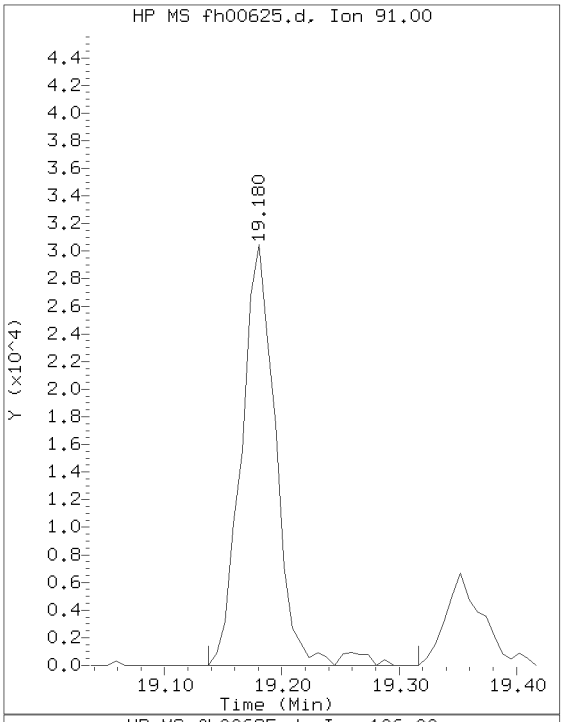
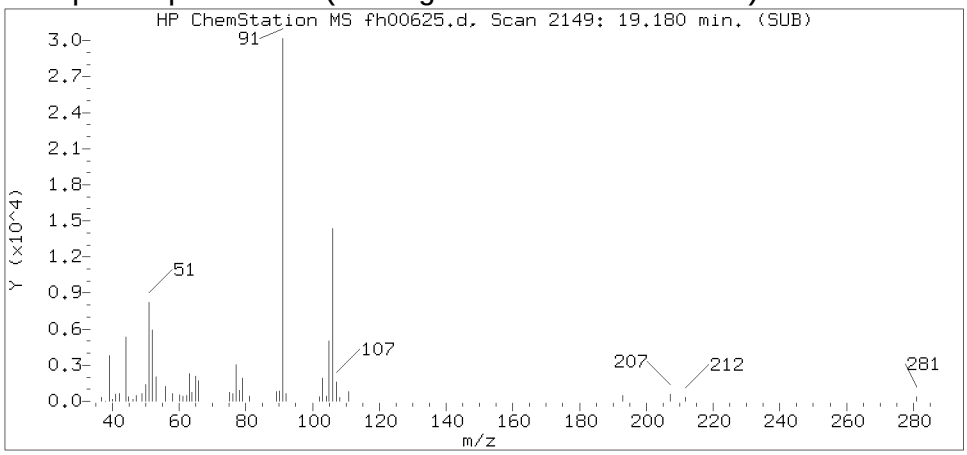
Target 3.5 esignature user ID: jeb07445

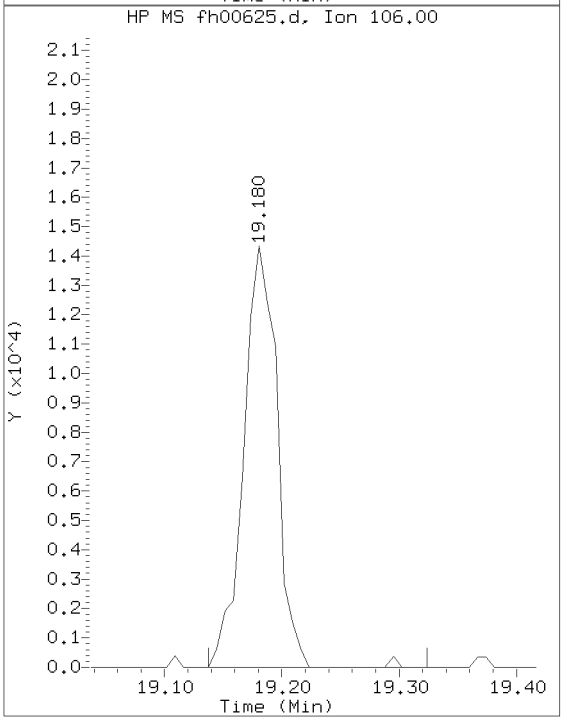
Reference Standard Spectrum for o-Xylene



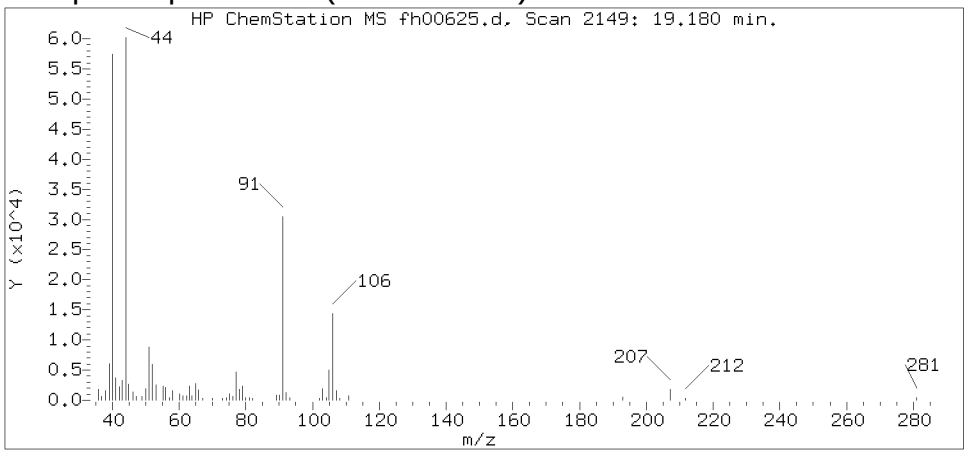


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00625.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:11 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:40 jeb07445

Sample Name: 504-- Lab Sample ID: 9766344

Compound Number : 76
Compound Name : o-Xylene
Scan Number : 2149
Retention Time (minutes): 19.180
Relative Retention Time :-0.00002
Quant Ion : 91.00
Area (flag) : 62474
Concentration (ppb(v)) : 0.3073

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:57.
Target 3.5 esignature user ID: jeb07445

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766345
Canister ID:	509	Lab File ID:	fh00626.d
Pressure Received:	13.2 psia	Date Collected:	08/18/2018
Final Pressure:	26.5 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	16:42
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	2.7	J
75-45-6	Chlorodifluoromethane	0.53	U
76-14-2	Freon 114	0.84	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.31	U
106-99-0	1,3-Butadiene	0.38	U
74-83-9	Bromomethane	0.70	U
75-00-3	Chloroethane	0.50	U
75-43-4	Dichlorofluoromethane	0.46	U
75-69-4	Trichlorofluoromethane	1.8	J
109-66-0	Pentane	3.4	
75-35-4	1,1-Dichloroethene	0.56	U
76-13-1	Freon 113	1.6	J
67-64-1	Acetone	23	
75-15-0	Carbon Disulfide	0.40	U
107-05-1	3-Chloropropene	0.47	U
75-09-2	Methylene Chloride	2.5	J
156-60-5	trans-1,2-Dichloroethene	0.34	U
1634-04-4	Methyl t-Butyl Ether	0.54	U
110-54-3	Hexane	1.8	J
75-34-3	1,1-Dichloroethane	0.36	U
156-59-2	cis-1,2-Dichloroethene	0.48	U
78-93-3	2-Butanone	7.7	
67-66-3	Chloroform	0.45	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766345
Canister ID:	509	Lab File ID:	fh00626.d
Pressure Received:	13.2 psia	Date Collected:	08/18/2018
Final Pressure:	26.5 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	16:42
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
71-55-6	1,1,1-Trichloroethane	0.65	U
56-23-5	Carbon Tetrachloride	0.88	U
71-43-2	Benzene	0.95	J
107-06-2	1,2-Dichloroethane	0.32	U
540-84-1	Isooctane	1.3	J
142-82-5	Heptane	1.6	J
79-01-6	Trichloroethene	0.97	U
78-87-5	1,2-Dichloropropane	0.60	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	0.80	U
10061-01-5	cis-1,3-Dichloropropene	0.45	U
108-10-1	4-Methyl-2-Pentanone	0.61	U
108-88-3	Toluene	4.3	
111-65-9	Octane	1.9	U
10061-02-6	trans-1,3-Dichloropropene	0.54	U
79-00-5	1,1,2-Trichloroethane	0.65	U
127-18-4	Tetrachloroethene	1.7	U
591-78-6	2-Hexanone	0.74	U
124-48-1	Dibromochloromethane	1.1	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	0.60	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	0.83	U
179601-23-1	m/p-Xylene	2.2	J

Abbreviations:
U = The compound is less than the limit being reported.
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E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766345
Canister ID:	509	Lab File ID:	fh00626.d
Pressure Received:	13.2 psia	Date Collected:	08/18/2018
Final Pressure:	26.5 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	16:42
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
95-47-6	o-Xylene	0.89	J
100-42-5	Styrene	0.85	U
75-25-2	Bromoform	1.8	U
98-82-8	Cumene	1.2	U
108-86-1	Bromobenzene	0.64	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	0.84	U
622-96-8	4-Ethyltoluene	0.88	U
108-67-8	1,3,5-Trimethylbenzene	1.6	U
95-63-6	1,2,4-Trimethylbenzene	1.4	U
541-73-1	1,3-Dichlorobenzene	1.1	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.2	U
67-72-1	Hexachloroethane	2.6	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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

Data file: /chem/HP26379.i/18aug27.b/fh00626.d Injection date and time: **27-AUG-2018 16:42**
Data file Sample Info. Line: 9766345;400;F1823930AA;509--;0;0;SAMPLE; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 28-Aug-2018 12:41 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.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): 200 cc Actual injection Volume (IVa): 400 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.108(-0.014)	1022	130	381856 (-10)	10.00		255500 - 596166
52) 1,4-Difluorobenzene	13.393(0.000)	1341	114	1395611 (-8)	10.00		906195 - 2114453
71) Chlorobenzene-d5	18.235(0.000)	2017	117	1410255 (-4)	10.00		883644 - 2061835

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)	4.009(-0.000)	85	68342	0.536	0.54		J	0.13	1
3) Chlorodifluoromethane	(1)			Not Detected					0.15	1
4) Freon 114	(1)			Not Detected					0.12	1
5) Chloromethane	(1)			Not Detected					0.24	1
6) Vinyl Chloride	(1)			Not Detected					0.12	1
7) 1,3-Butadiene	(1)			Not Detected					0.17	1
8) Bromomethane	(1)			Not Detected					0.18	1
9) Chloroethane	(1)			Not Detected					0.19	1
13) Dichlorofluoromethane	(1)			Not Detected					0.11	1
12) Trichlorofluoromethane	(1)	5.871(0.000)	101	41192M	0.329	0.33		J	0.15	1
11) Pentane	(1)	5.857(0.001)	43	161301	1.165	1.17			0.13	1
16) 1,1-Dichloroethene	(1)			Not Detected					0.14	1
17) Freon 113	(1)	6.910(0.000)	103	15321	0.206	0.21		J	0.11	1
24) Acetone	(1)	8.092(-0.001)	43	1190662	9.745	9.74			0.53	5
18) Carbon Disulfide	(1)			Not Detected					0.13	1
22) 3-Chloropropene	(1)			Not Detected					0.15	1
23) Methylene Chloride	(1)	7.970(0.002)	84	30591	0.717	0.72		J	0.25	2
25) trans-1,2-Dichloroethene	(1)			Not Detected					0.086	1
27) Methyl t-Butyl Ether	(1)			Not Detected					0.15	1
26) Hexane	(1)	8.450(0.000)	56	43769	0.497	0.50		J	0.13	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.089	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.12	1
45) 2-Butanone	(1)	11.810(0.001)	43	455195	2.625	2.62			0.21	1
39) Chloroform	(1)			Not Detected					0.092	1
44) 1,1,1-Trichloroethane	(1)			Not Detected					0.12	1
42) Carbon Tetrachloride	(1)			Not Detected					0.14	1
48) Benzene	(2)	12.318(0.000)	78	53359	0.296	0.30		J	0.11	1
50) 1,2-Dichloroethane	(2)			Not Detected					0.08	1
46) Isooctane	(2)	12.060(-0.001)	57	109046	0.269	0.27		J	0.13	1
47) Heptane	(2)	12.196(0.000)	71	22349	0.383	0.38		J	0.23	1
51) Trichloroethene	(2)			Not Detected					0.18	1
55) 1,2-Dichloropropane	(2)			Not Detected					0.13	1
53) Dibromomethane	(2)			Not Detected					0.14	1
56) Bromodichloromethane	(2)			Not Detected					0.12	1
59) cis-1,3-Dichloropropene	(2)			Not Detected					0.1	1
62) 4-Methyl-2-Pentanone	(2)			Not Detected					0.15	1
61) Toluene	(3)	15.799(0.000)	91	239054	1.147	1.15			0.12	1
60) Octane	(3)			Not Detected					0.4	2
64) trans-1,3-Dichloropropene	(3)			Not Detected					0.12	1
67) 1,1,2-Trichloroethane	(3)			Not Detected					0.12	1
63) Tetrachloroethene	(3)			Not Detected					0.25	2
70) 2-Hexanone	(3)			Not Detected					0.18	1
68) Dibromochloromethane	(3)			Not Detected					0.13	1

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:58. Target 3.5 esignature user ID: jeb07445

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

Data file: /chem/HP26379.i/18aug27.b/fh00626.d Injection date and time: **27-AUG-2018 16:42**
Data file Sample Info. Line: 9766345;400;F1823930AA;509--;0;0;SAMPLE; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 28-Aug-2018 12:41 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.d**

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

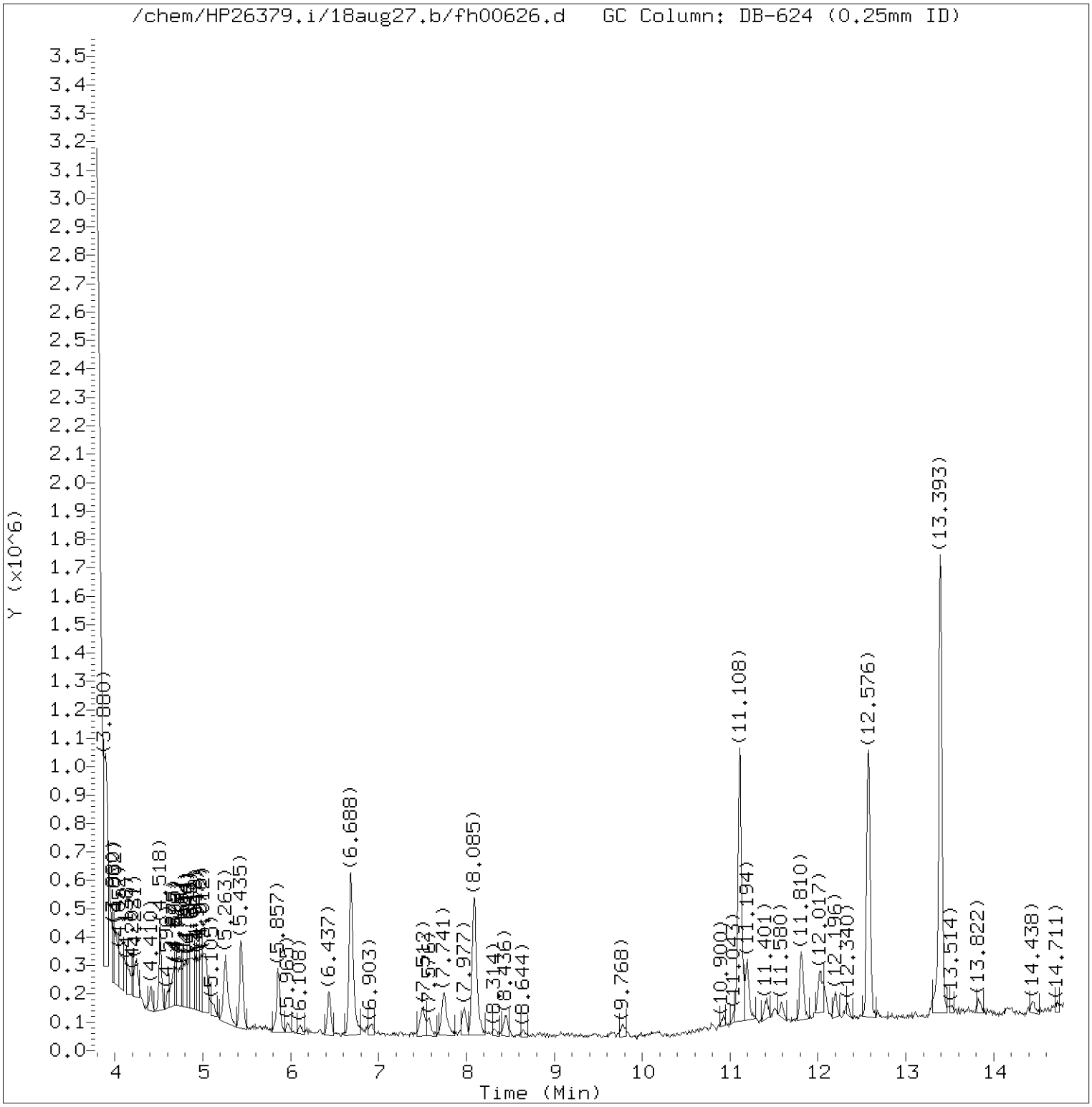
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 26.5 psia Canister Pressure before dilution (Ya): 13.2 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 400 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
69) 1,2-Dibromoethane	(3)			Not Detected					0.13	1
72) Chlorobenzene	(3)			Not Detected					0.13	1
74) 1,1,1,2-Tetrachloroethane	(3)			Not Detected					0.15	1
73) Ethylbenzene	(3)			Not Detected					0.19	1
75) m/p-Xylene	(3)	18.493(-0.000)	91	104192	0.510	0.51		J	0.26	2
76) o-Xylene	(3)	19.188(-0.000)	91	40858	0.205	0.21		J	0.19	1
78) Styrene	(3)			Not Detected					0.2	1
79) Bromoform	(3)			Not Detected					0.17	1
80) Cumene	(3)			Not Detected					0.24	1
82) Bromobenzene	(3)			Not Detected					0.1	1
83) 1,1,2,2-Tetrachloroethane	(3)			Not Detected					0.15	1
87) 1,2,3-Trichloropropane	(3)			Not Detected					0.14	1
84) 4-Ethyltoluene	(3)			Not Detected					0.18	1
86) 1,3,5-Trimethylbenzene	(3)			Not Detected					0.32	2
90) 1,2,4-Trimethylbenzene	(3)			Not Detected					0.28	2
93) 1,3-Dichlorobenzene	(3)			Not Detected					0.19	1
94) 1,4-Dichlorobenzene	(3)			Not Detected					0.17	1
98) 1,2-Dichlorobenzene	(3)			Not Detected					0.2	1
97) Hexachloroethane	(3)			Not Detected					0.27	2

Total number of targets = 62

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:58. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:40. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00626.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:42 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:41 jeb07445

Sample Name: 509-- Lab Sample ID: 9766345

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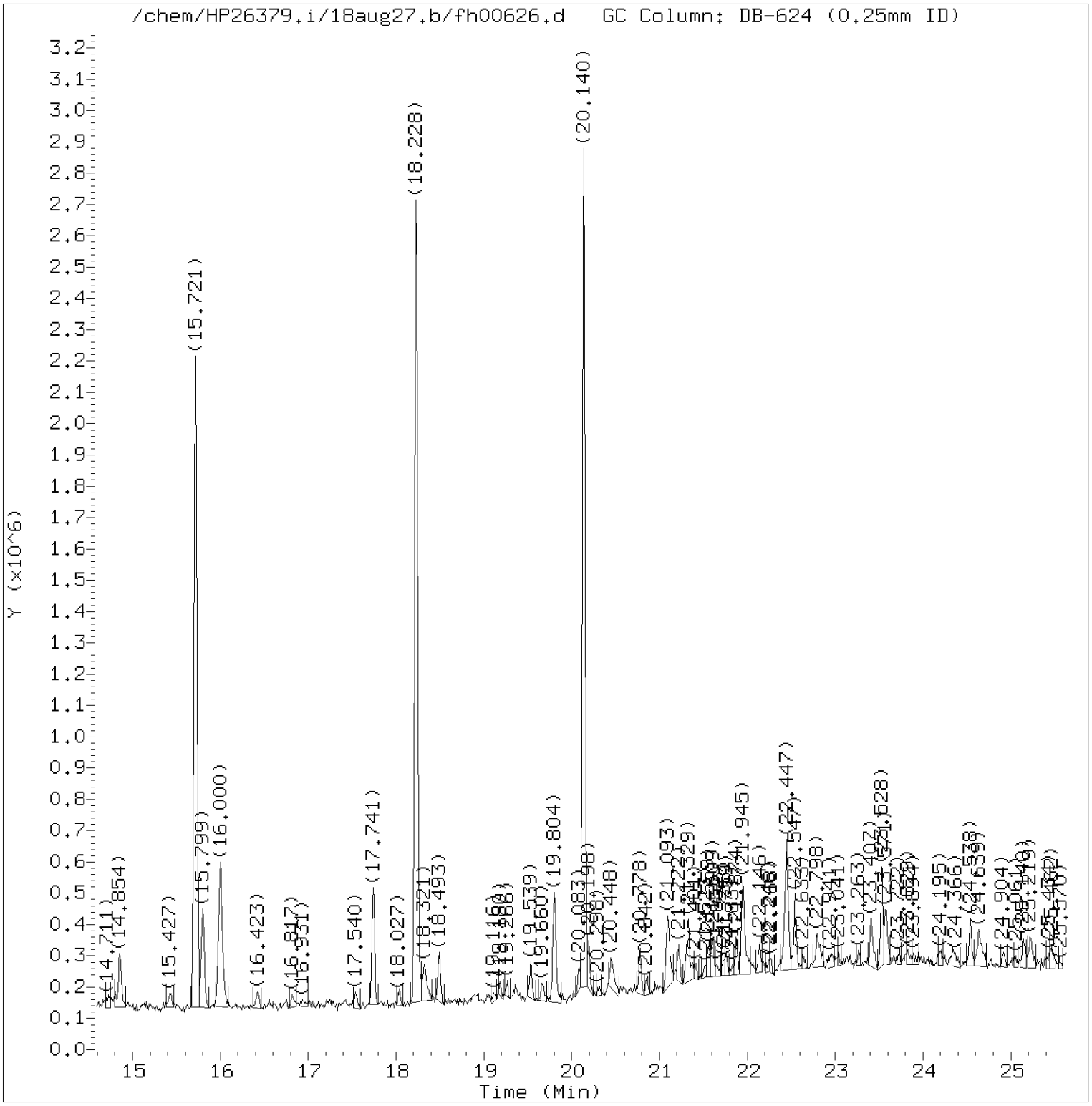
on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00626.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:42 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:41 jeb07445

Sample Name: 509-- Lab Sample ID: 9766345

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on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00626.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:42 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:41 jeb07445

Sample Name: 509-- Lab Sample ID: 9766345

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
2) Dichlorodifluoromethane	(1)	4.009	85	68342	0.536
11) Pentane	(1)	5.857	43	161301	1.165
12) Trichlorofluoromethane	(1)	5.871	101	41192M	0.329
17) Freon 113	(1)	6.910	103	15321	0.206
23) Methylene Chloride	(1)	7.970	84	30591	0.717
24) Acetone	(1)	8.092	43	1190662	9.745
26) Hexane	(1)	8.450	56	43769	0.497
37)*Bromochloromethane	(1)	11.108	130	381856	10.000
45) 2-Butanone	(1)	11.810	43	455195	2.625
46) Isooctane	(2)	12.060	57	109046	0.269
47) Heptane	(2)	12.196	71	22349	0.383
48) Benzene	(2)	12.318	78	53359	0.296
52)*1,4-Difluorobenzene	(2)	13.393	114	1395611	10.000
61) Toluene	(3)	15.799	91	239054	1.147
71)*Chlorobenzene-d5	(3)	18.235	117	1410255	10.000
75) m/p-Xylene	(3)	18.493	91	104192	0.510
76) o-Xylene	(3)	19.188	91	40858	0.205

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

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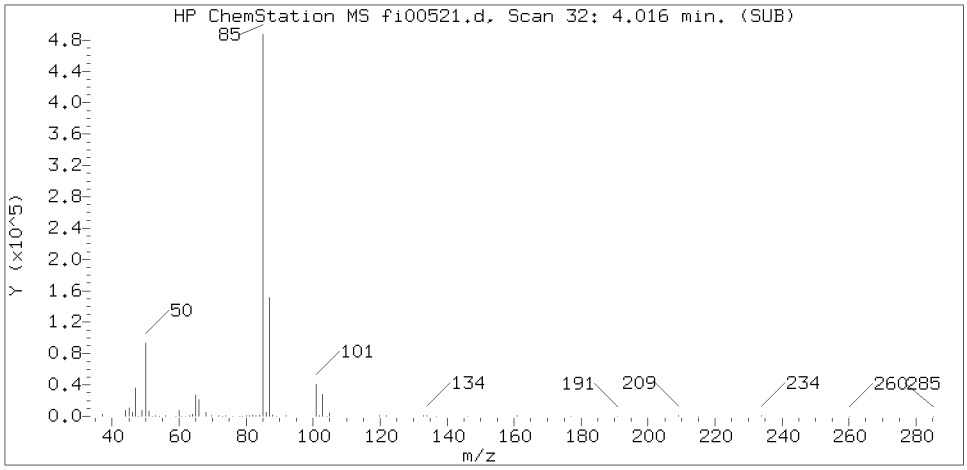
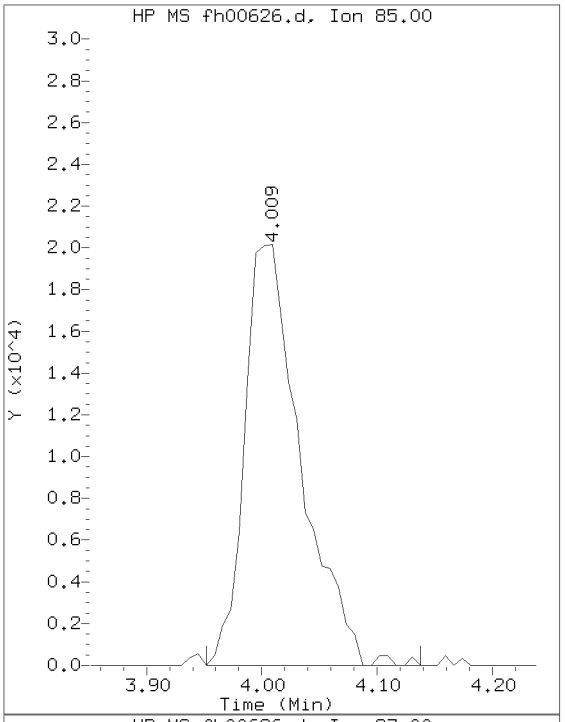
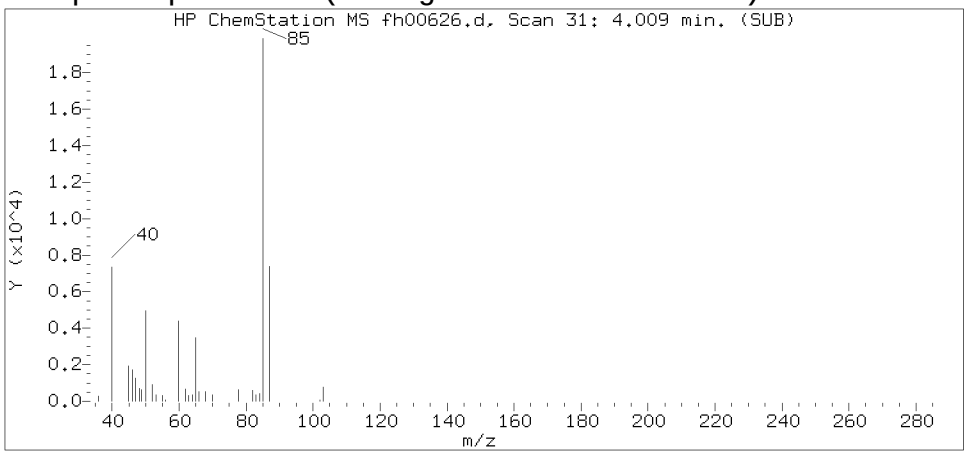
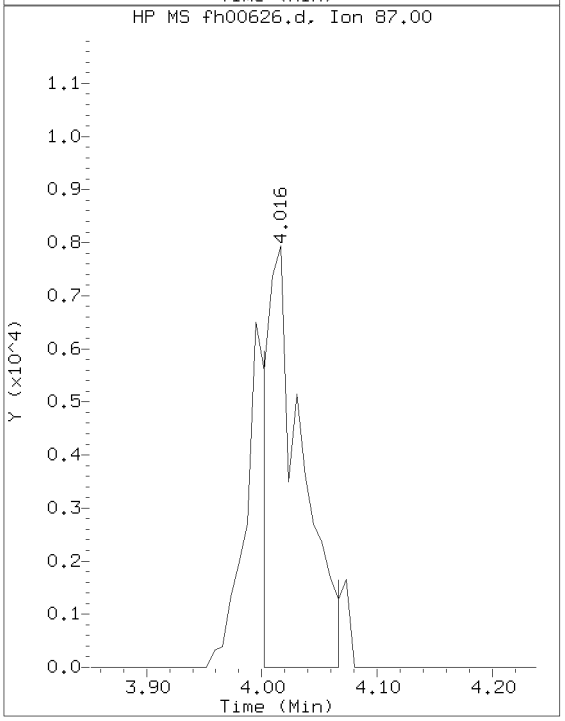
Reference Standard Spectrum for Dichlorodifluoromethane



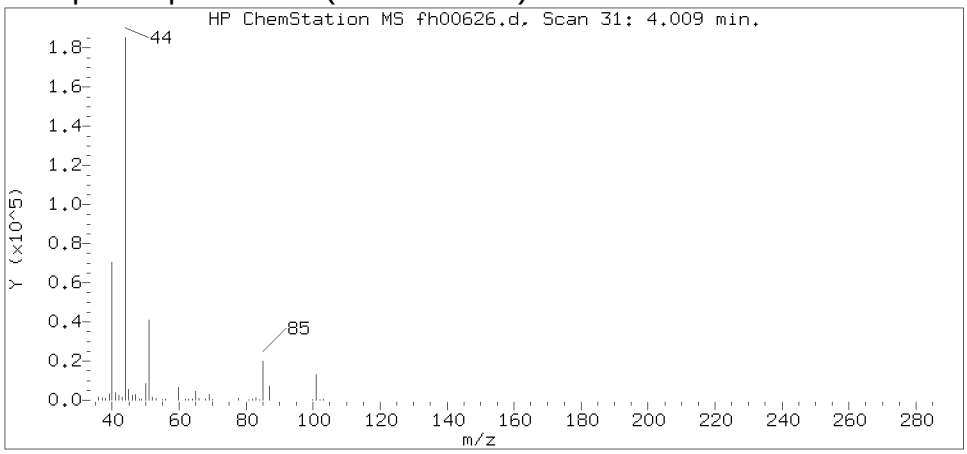


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00626.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:42 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:41 jeb07445

Sample Name: 509-- Lab Sample ID: 9766345

Compound Number	: 2
Compound Name	: Dichlorodifluoromethane
Scan Number	: 31
Retention Time (minutes)	: 4.009
Relative Retention Time	:-0.00018
Quant Ion	: 85.00
Area (flag)	: 68342
Concentration (ppb(v))	: 0.5359

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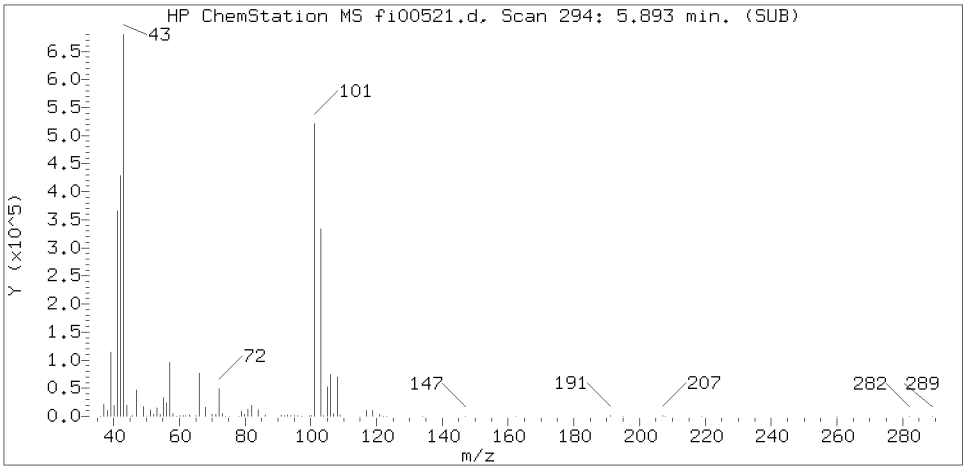
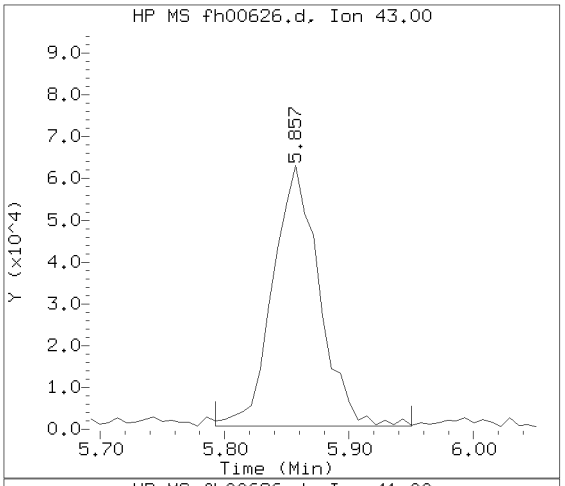
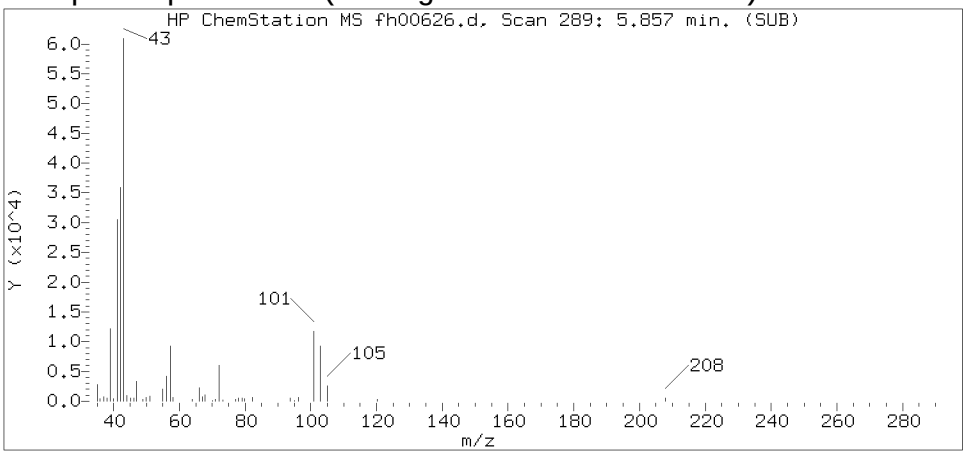
Target 3.5 esignature user ID: jeb07445

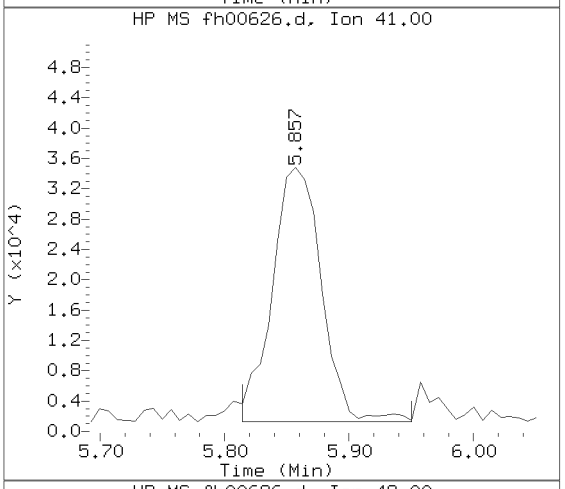
Reference Standard Spectrum for Pentane



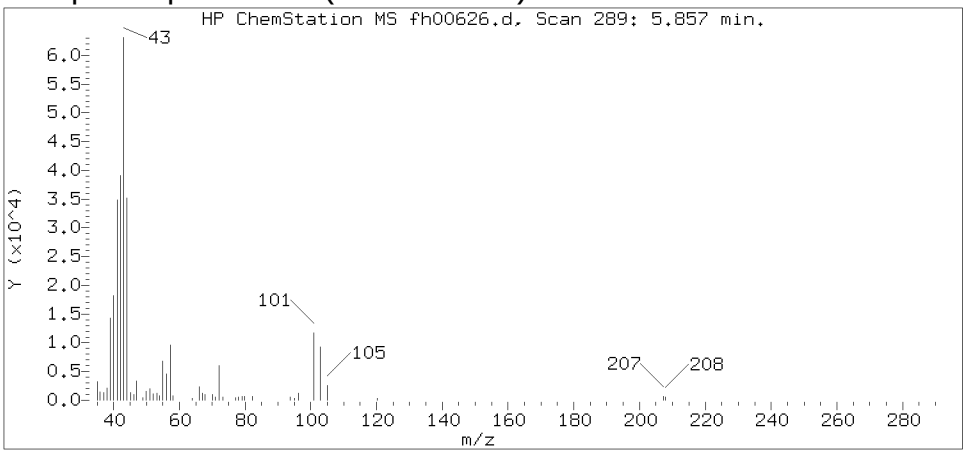


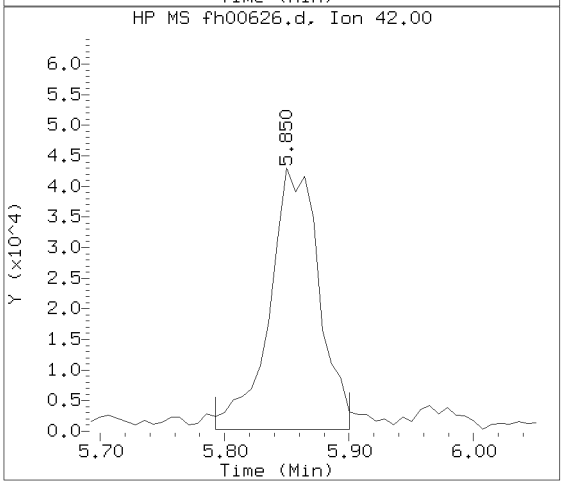
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00626.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:42 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:41 jeb07445

Sample Name: 509-- Lab Sample ID: 9766345

Compound Number : 11
Compound Name : Pentane
Scan Number : 289
Retention Time (minutes): 5.857
Relative Retention Time : 0.00133
Quant Ion : 43.00
Area (flag) : 161301
Concentration (ppb(v)) : 1.1654

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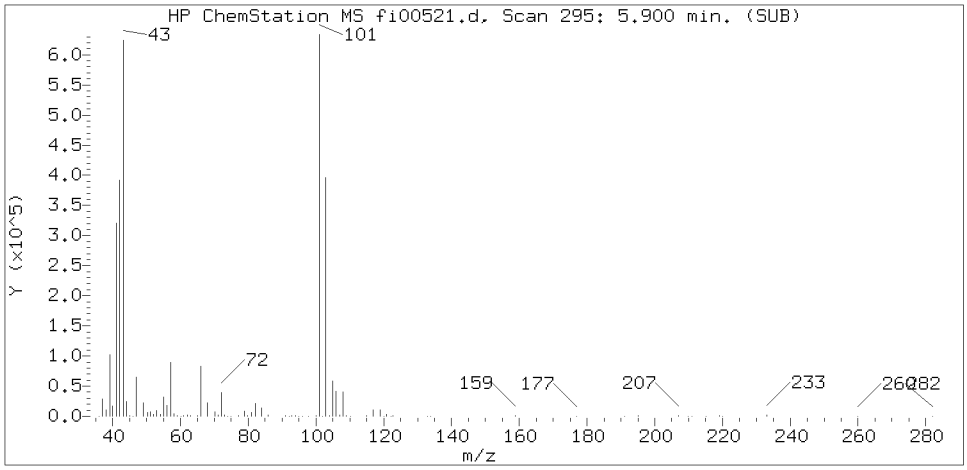
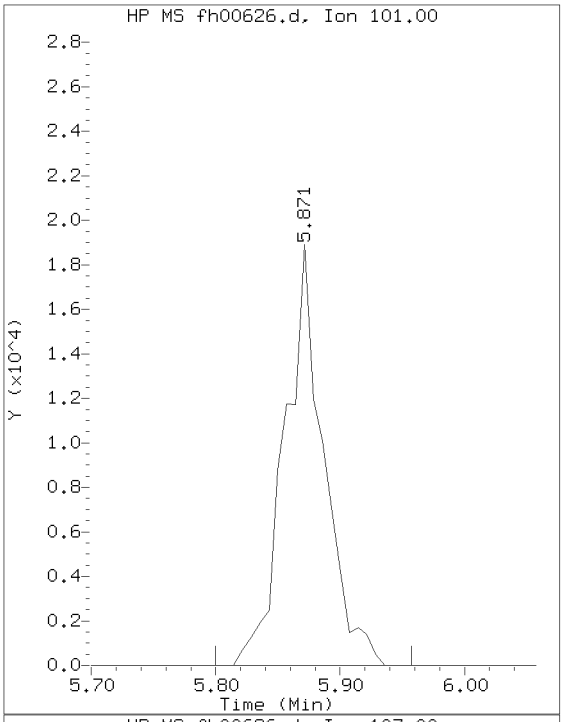
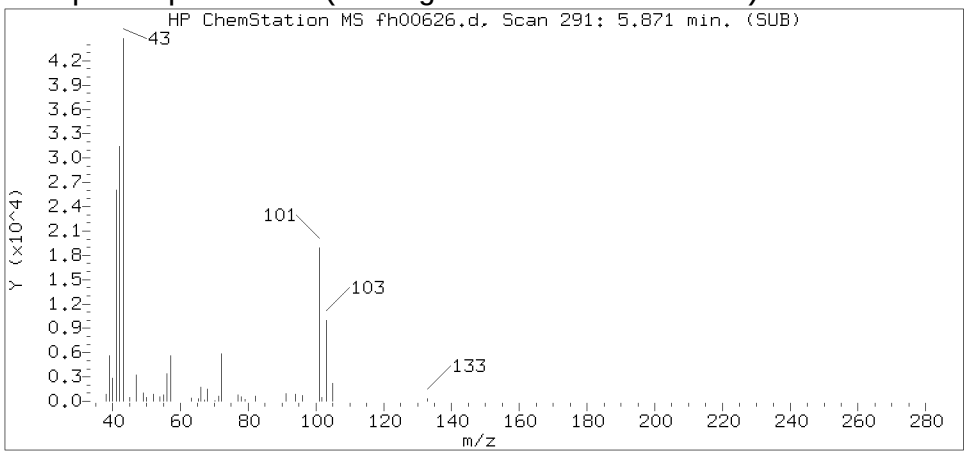
Target 3.5 esignature user ID: jeb07445

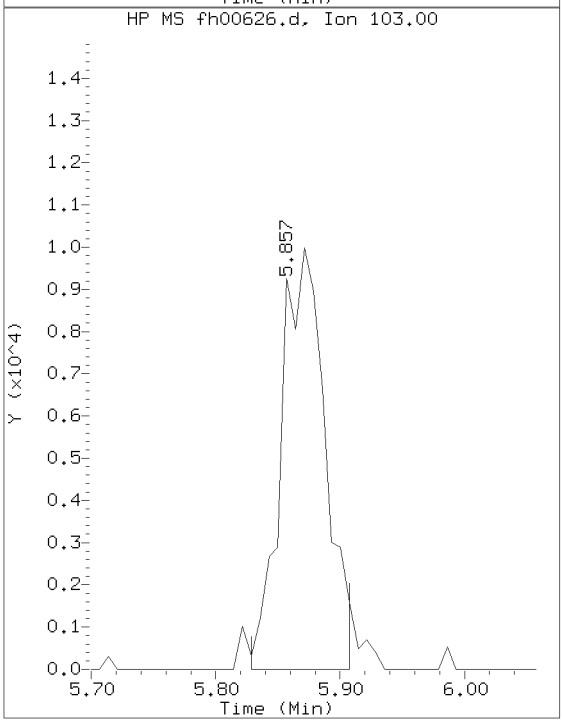
Reference Standard Spectrum for Trichlorofluoromethane



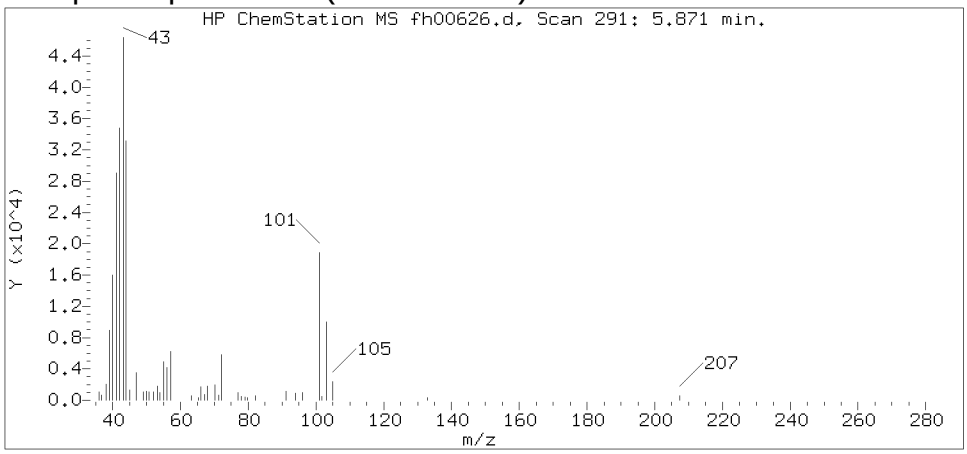


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00626.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:42 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:41 jeb07445

Sample Name: 509-- Lab Sample ID: 9766345

Compound Number	: 12
Compound Name	: Trichlorofluoromethane
Scan Number	: 291
Retention Time (minutes)	: 5.871
Relative Retention Time	: 0.00068
Quant Ion	: 101.00
Area (flag)	: 41192M
Concentration (ppb(v))	: 0.3290

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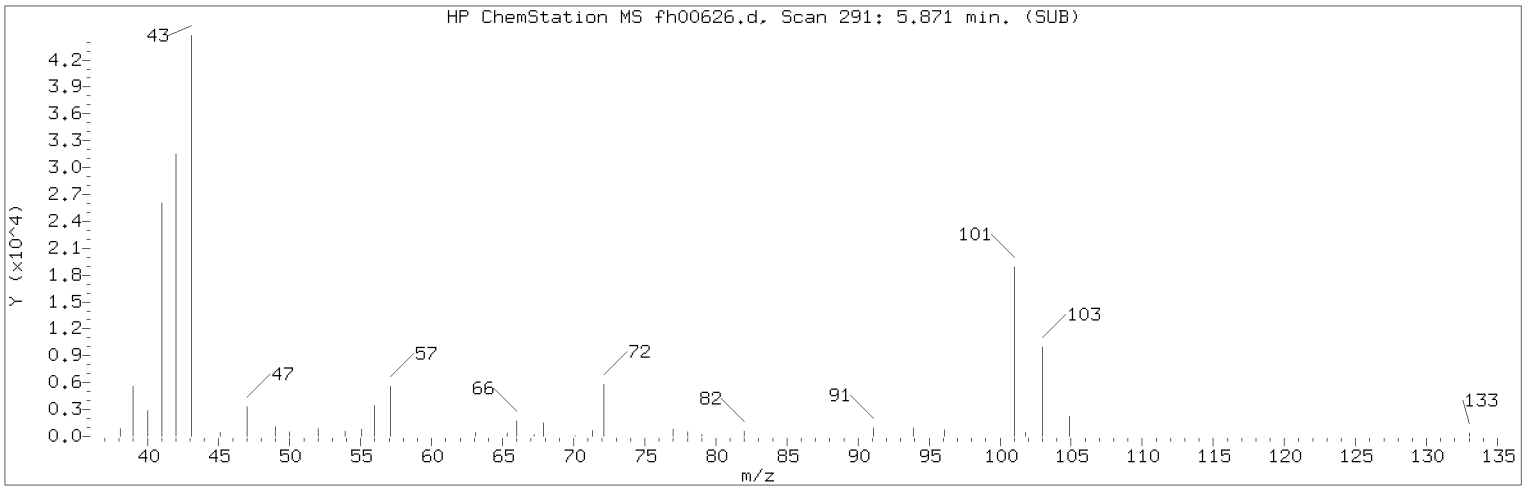
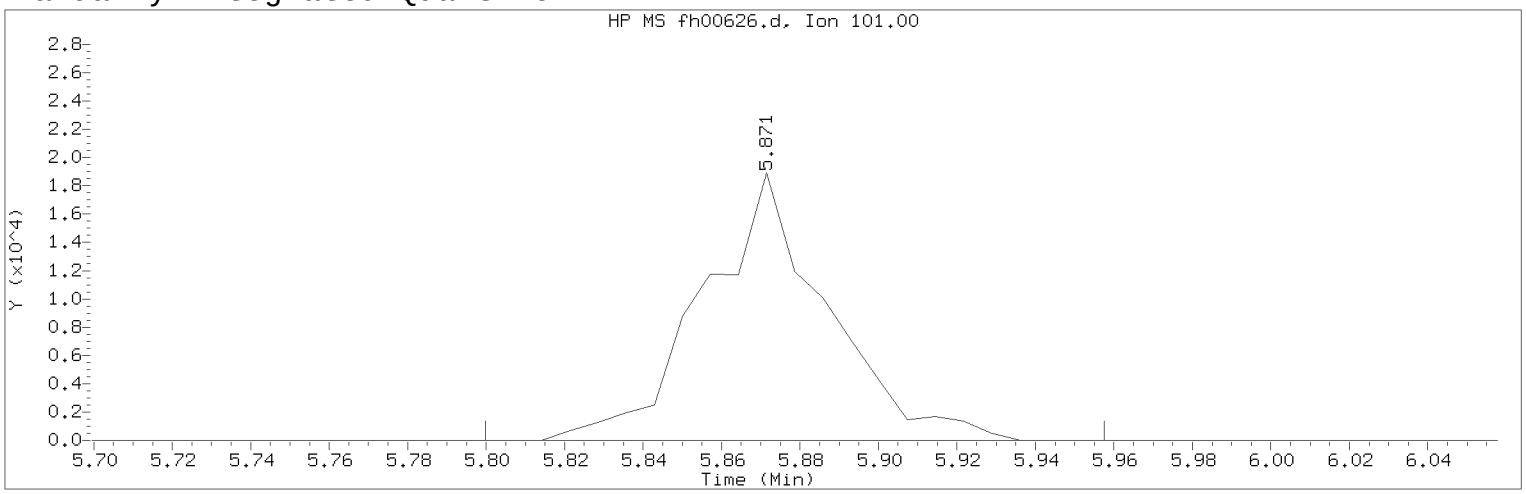
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug27.b/fh00626.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:42 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:41 jeb07445

Sample Name: 509-- Lab Sample ID: 9766345

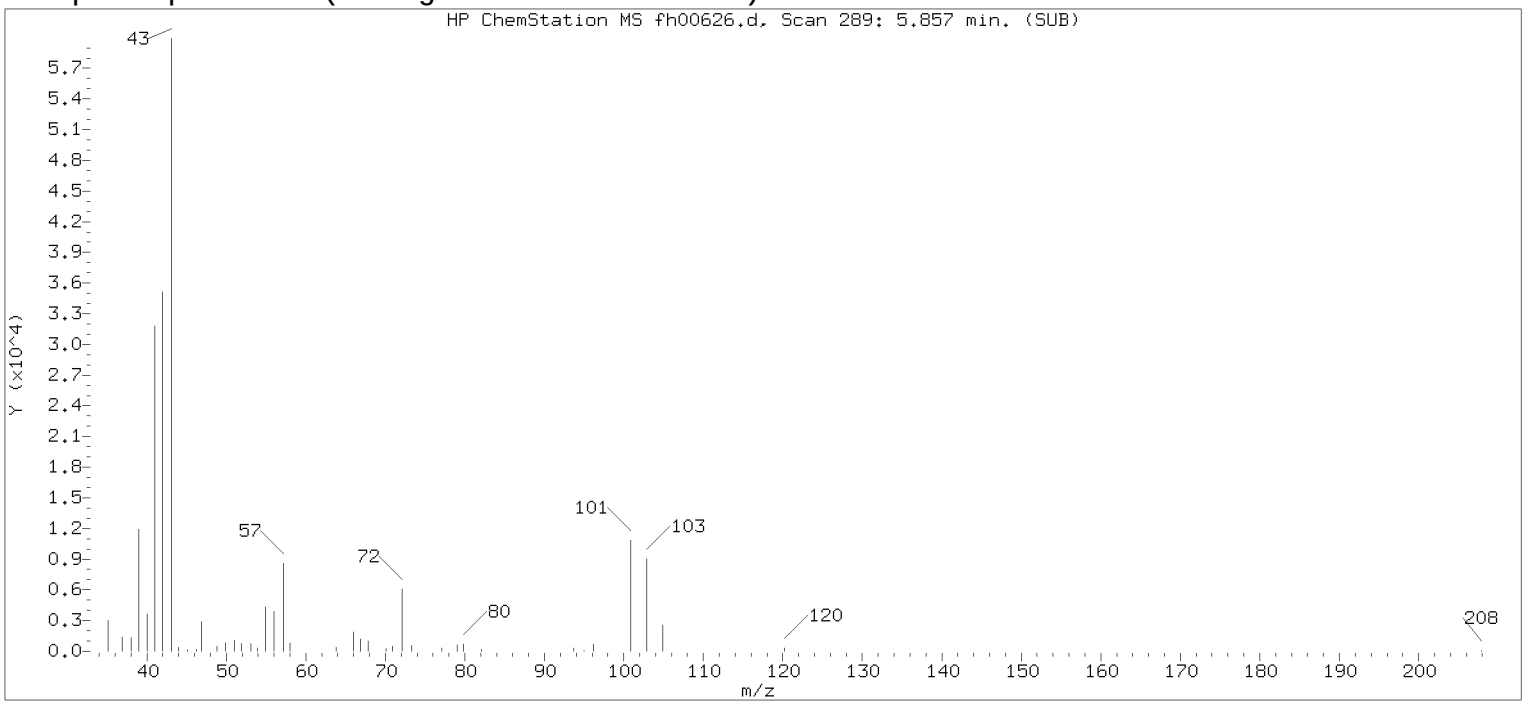
Compound Number : 12
Compound Name : Trichlorofluoromethane
Scan Number : 291
Retention Time (minutes): 5.871
Quant Ion : 101.00
Area (flag) : 41192M
Concentration (ppb(v)) : 0.3290
Integration start scan : 280 Integration stop scan: 302
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

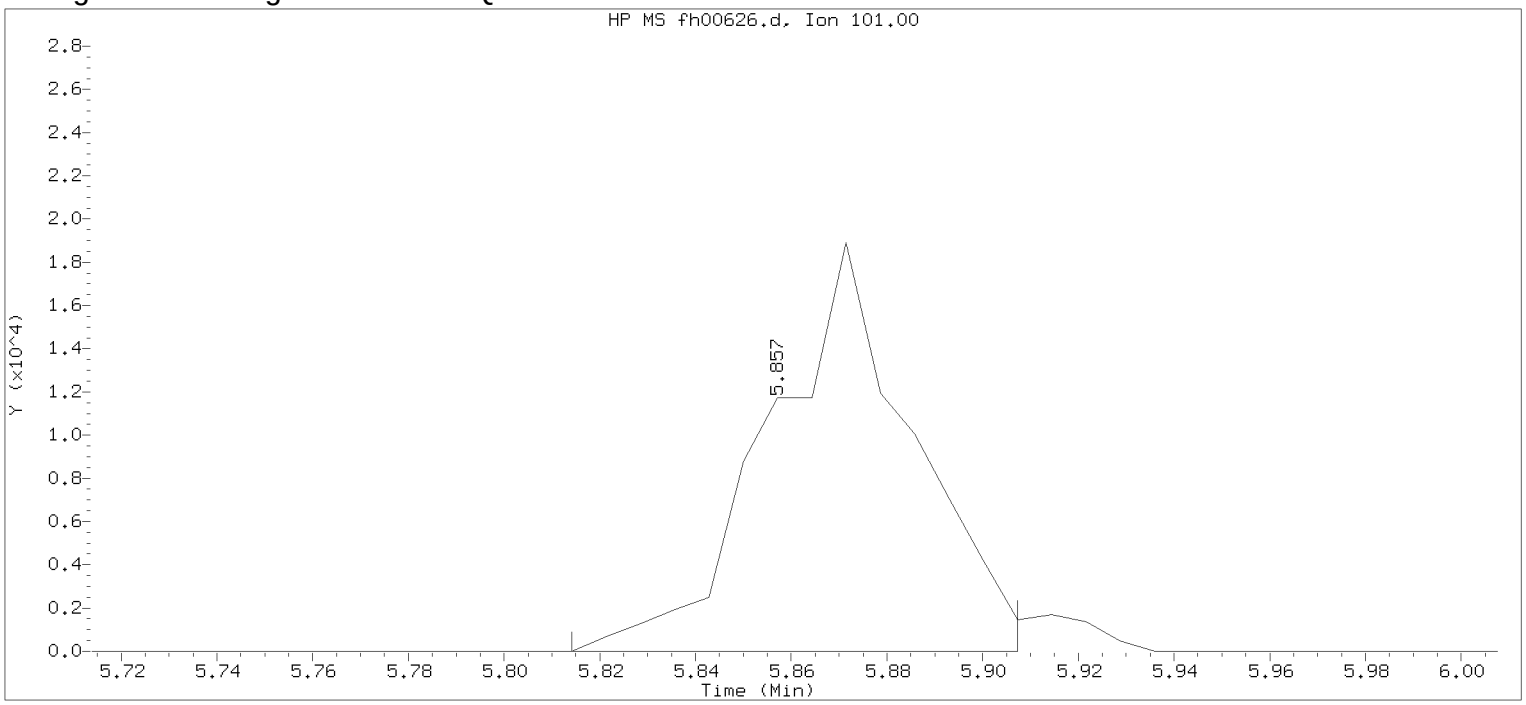
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:40.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug27.b/fh00626.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:42 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 17:12 Unknown

Sample Name: 509-- Lab Sample ID: 9766345

Compound Number : 12
Compound Name : Trichlorofluoromethane
Scan Number : 289
Retention Time (minutes): 5.857
Quant Ion : 101.00
Area : 39348
Concentration (ppb(v)) : 0.3143
Integration start scan : 282 Integration stop scan: 295
Y at integration start : 0 Y at integration end: 0

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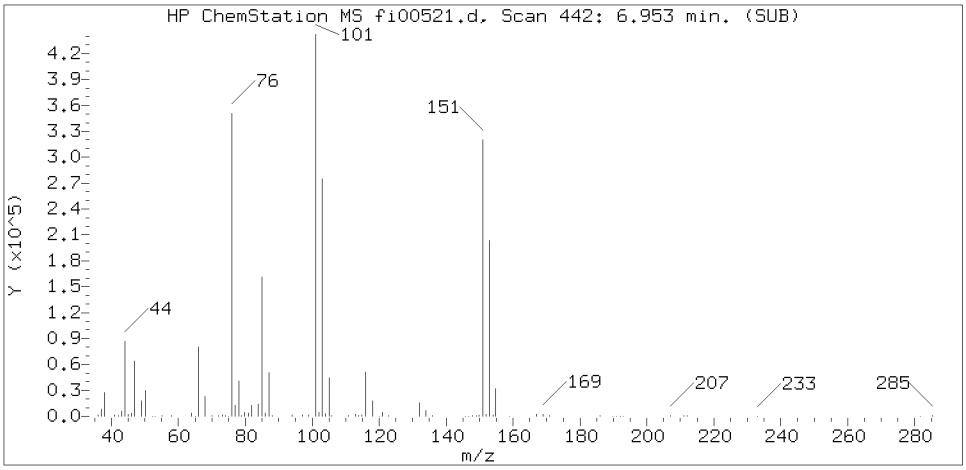
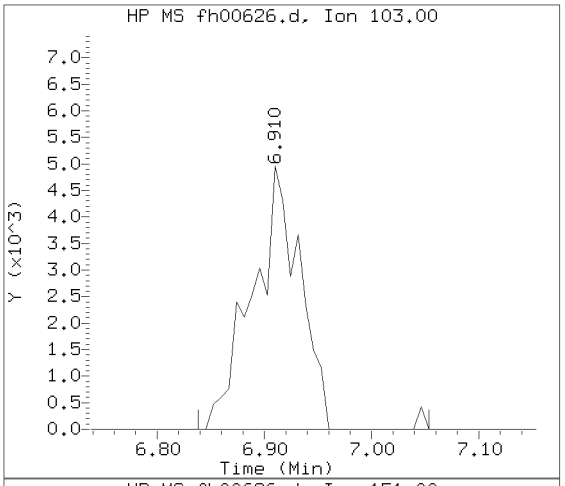
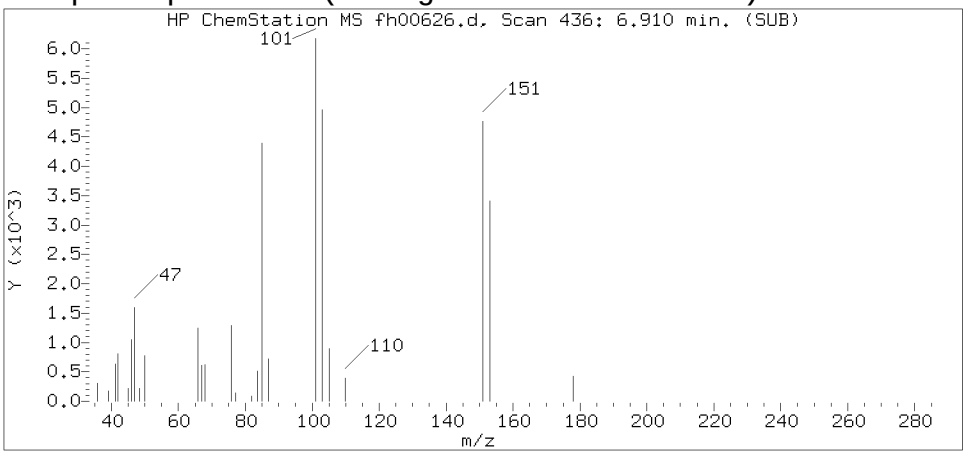
Target 3.5 esignature user ID: jeb07445

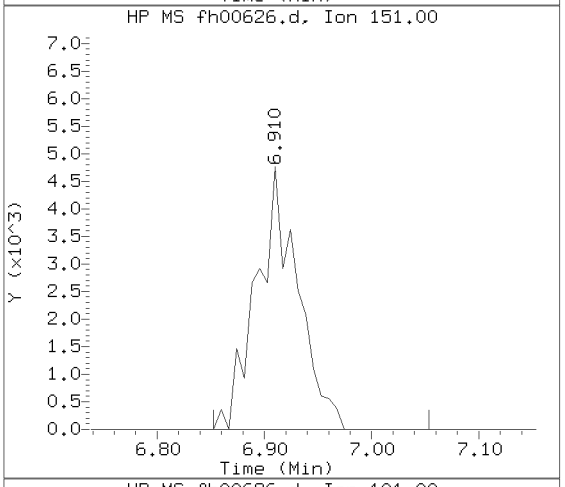
Reference Standard Spectrum for Freon 113



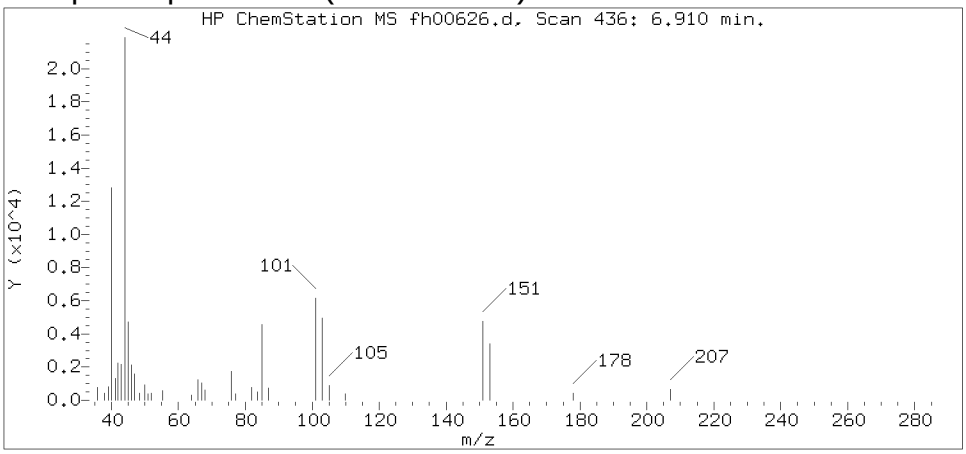


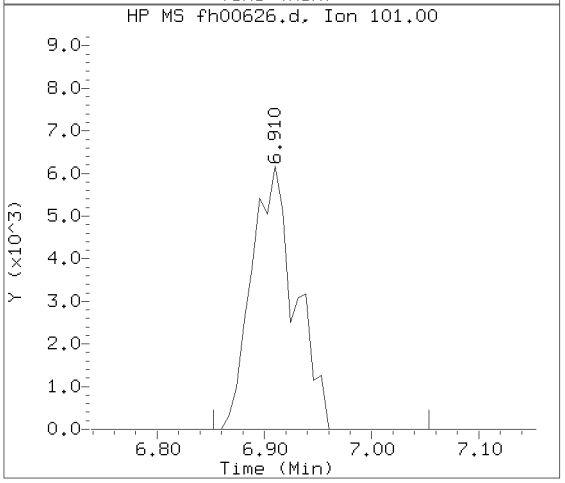
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00626.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:42 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:41 jeb07445

Sample Name: 509-- Lab Sample ID: 9766345

Compound Number : 17
Compound Name : Freon 113
Scan Number : 436
Retention Time (minutes): 6.910
Relative Retention Time : 0.00080
Quant Ion : 103.00
Area (flag) : 15321
Concentration (ppb(v)) : 0.2062

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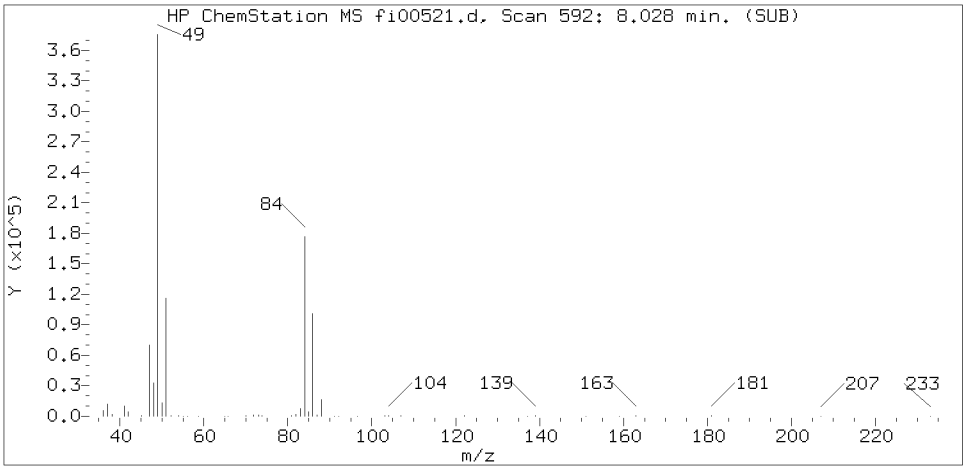
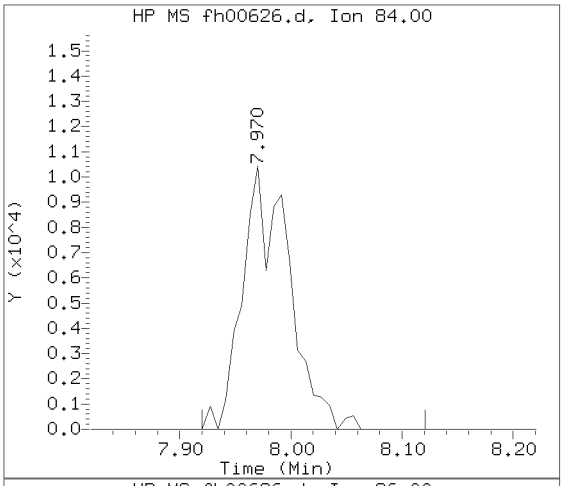
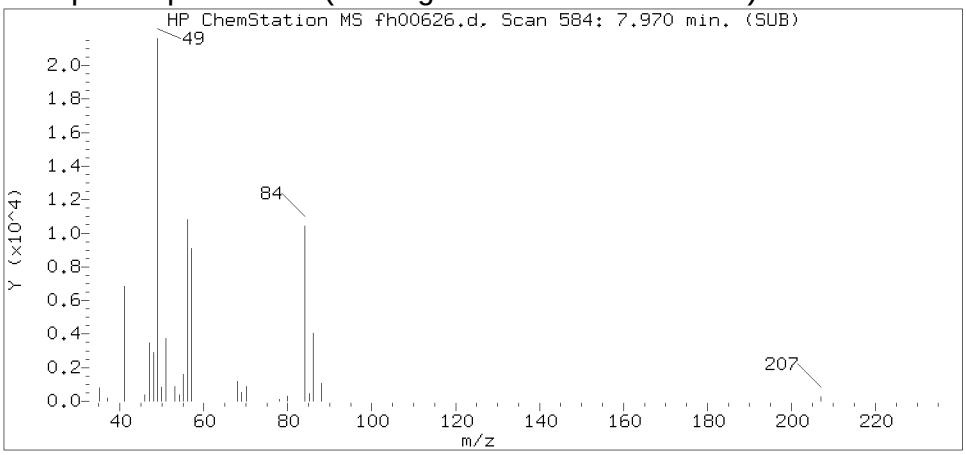
Target 3.5 esignature user ID: jeb07445

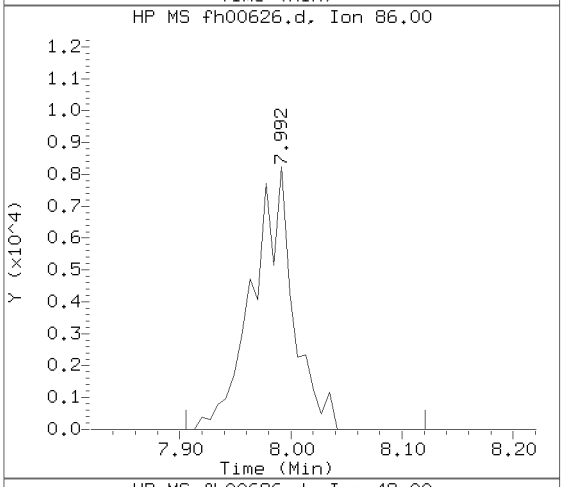
Reference Standard Spectrum for Methylene Chloride



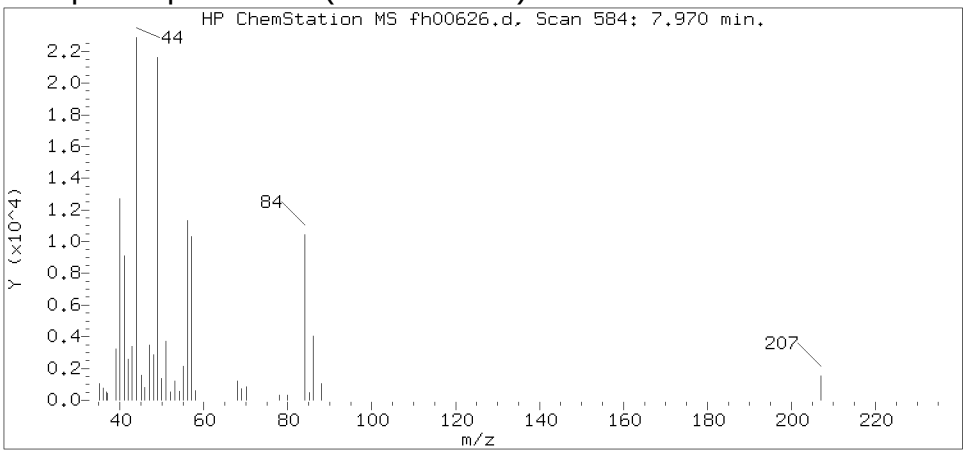


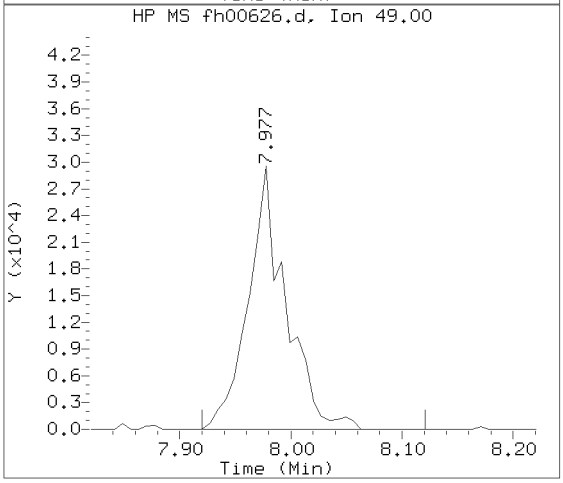
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00626.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:42 Analyst ID: jeb07445

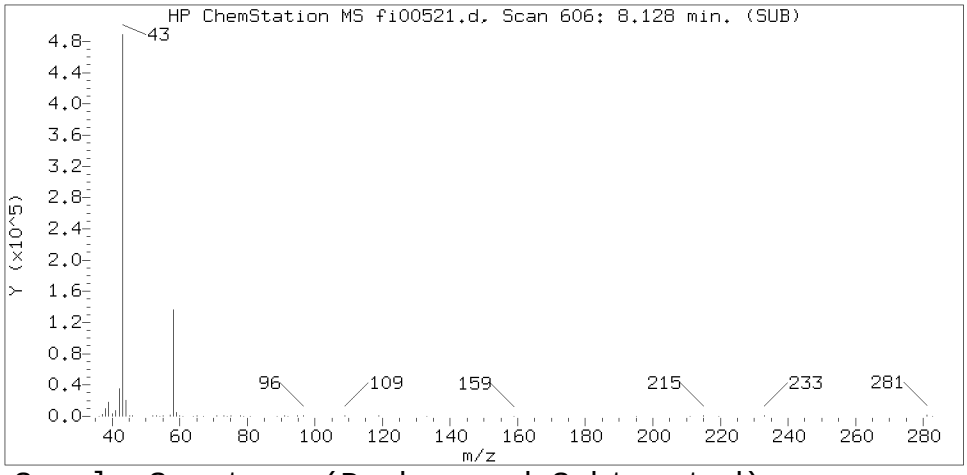
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:41 jeb07445

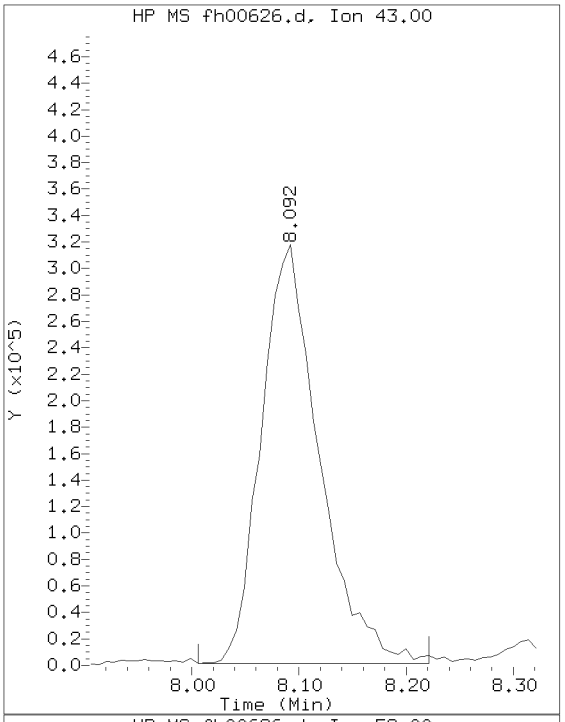
Sample Name: 509-- Lab Sample ID: 9766345

Compound Number : 23
Compound Name : Methylene Chloride
Scan Number : 584
Retention Time (minutes): 7.970
Relative Retention Time : 0.00222
Quant Ion : 84.00
Area (flag) : 30591
Concentration (ppb(v)) : 0.7171

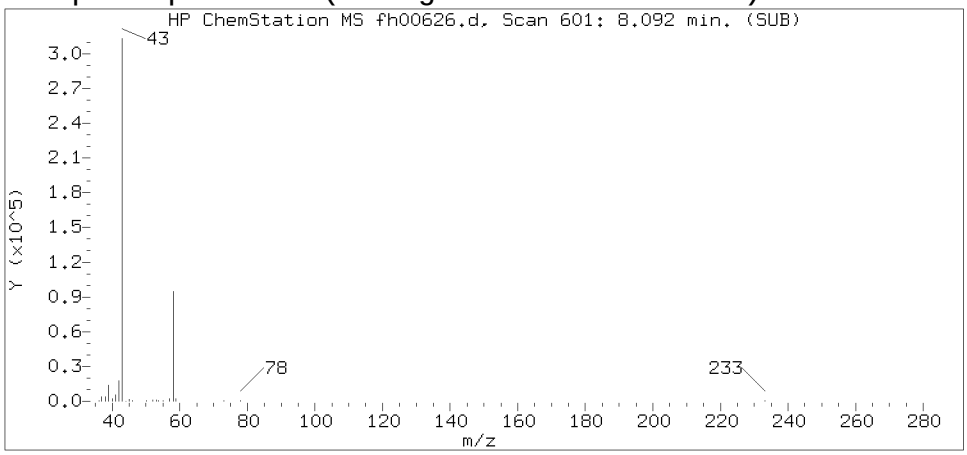
Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

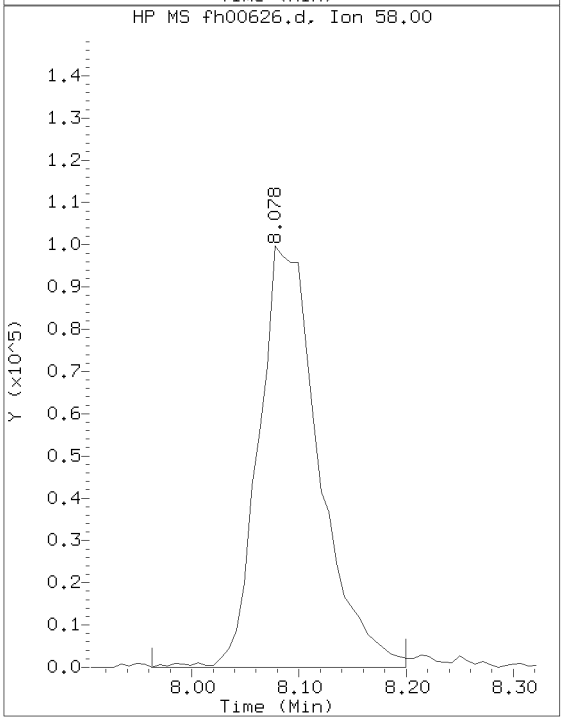
Reference Standard Spectrum for Acetone



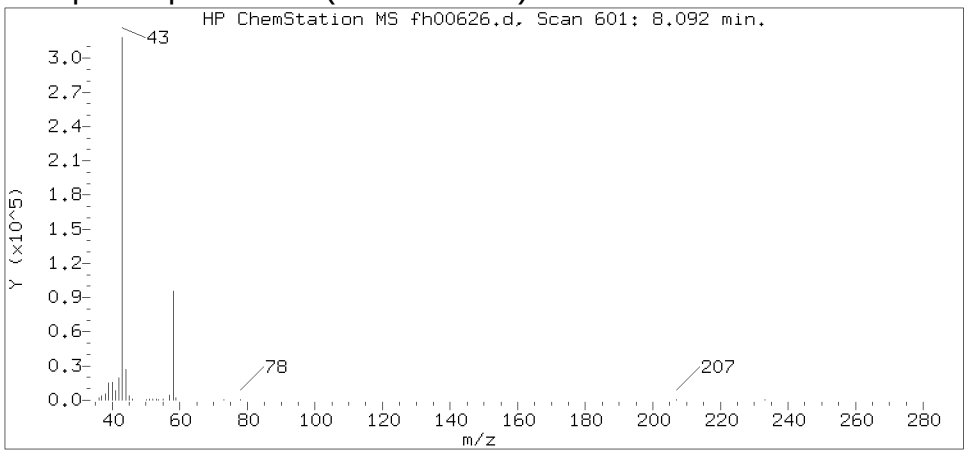


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00626.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:42 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:41 jeb07445

Sample Name: 509-- Lab Sample ID: 9766345

Compound Number : 24
Compound Name : Acetone
Scan Number : 601
Retention Time (minutes): 8.092
Relative Retention Time :-0.00164
Quant Ion : 43.00
Area (flag) : 1190662
Concentration (ppb(v)) : 9.7448

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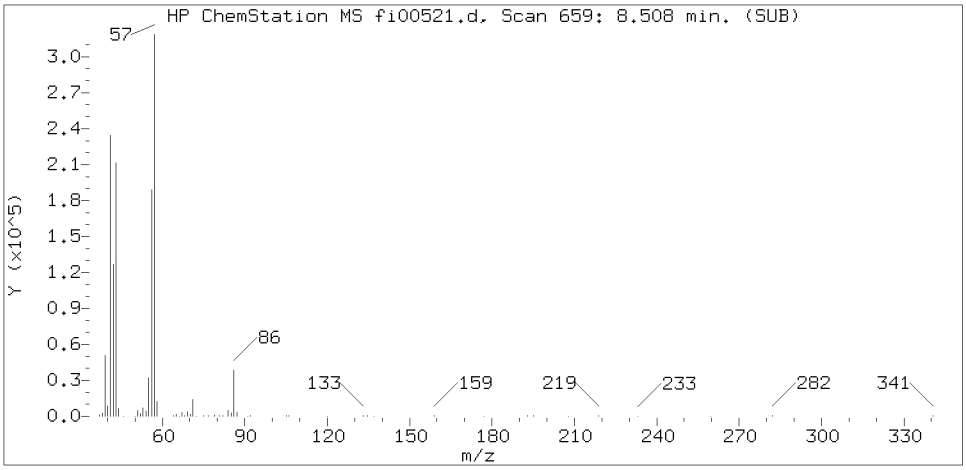
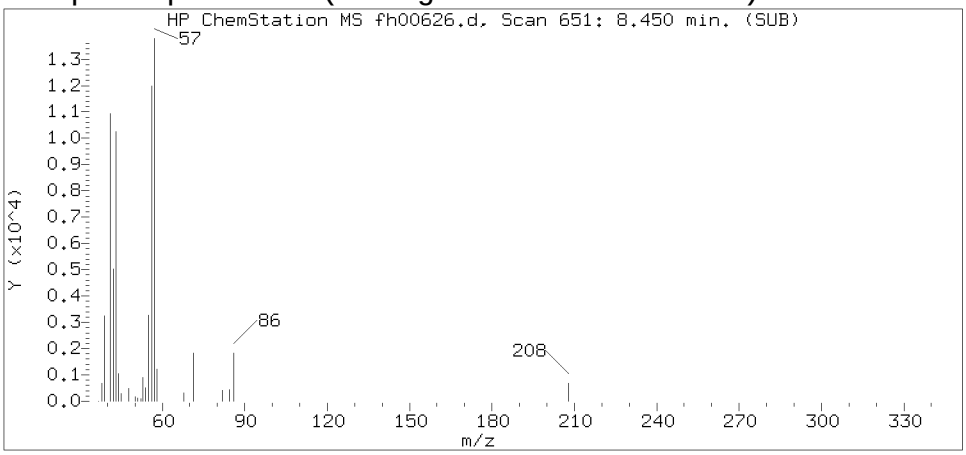
Target 3.5 esignature user ID: jeb07445

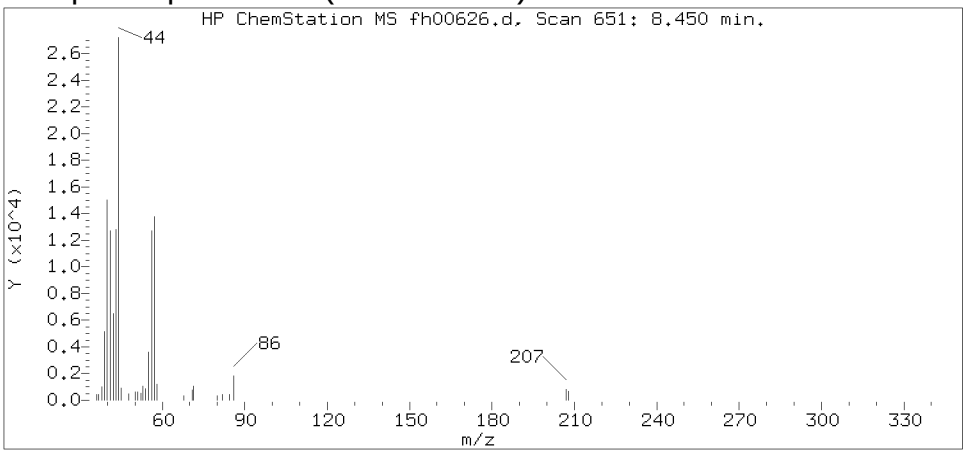
Reference Standard Spectrum for Hexane

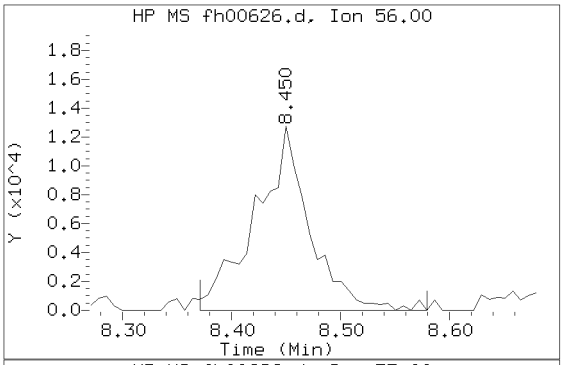


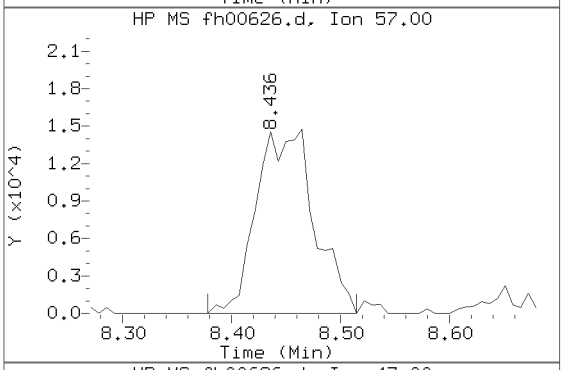
Sample Spectrum (Background Subtracted)

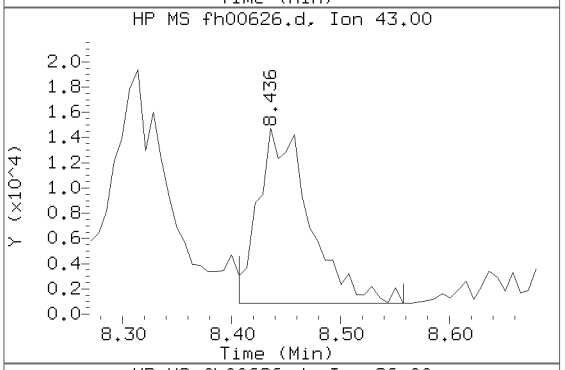


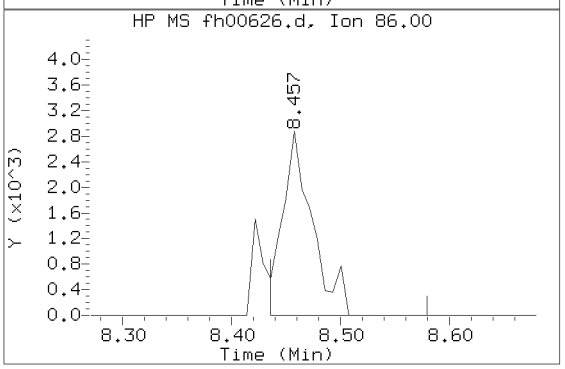
Sample Spectrum (Unaltered)











Data File: /chem/HP26379.i/18aug27.b/fh00626.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:42 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:41 jeb07445

Sample Name: 509-- Lab Sample ID: 9766345

Compound Number : 26
Compound Name : Hexane
Scan Number : 651
Retention Time (minutes): 8.450
Relative Retention Time : 0.00098
Quant Ion : 56.00
Area (flag) : 43769
Concentration (ppb(v)) : 0.4970

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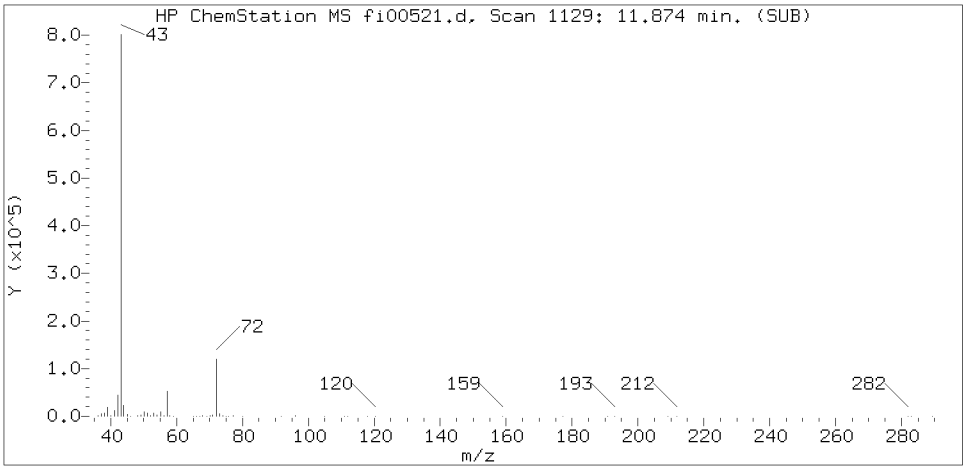
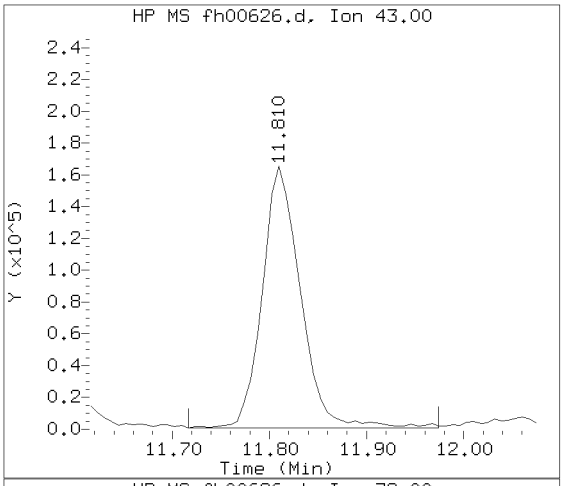
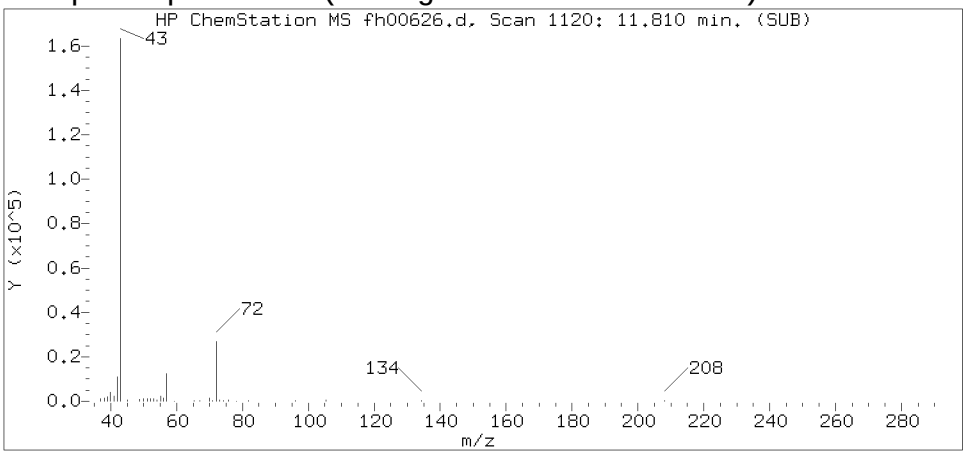
Target 3.5 esignature user ID: jeb07445

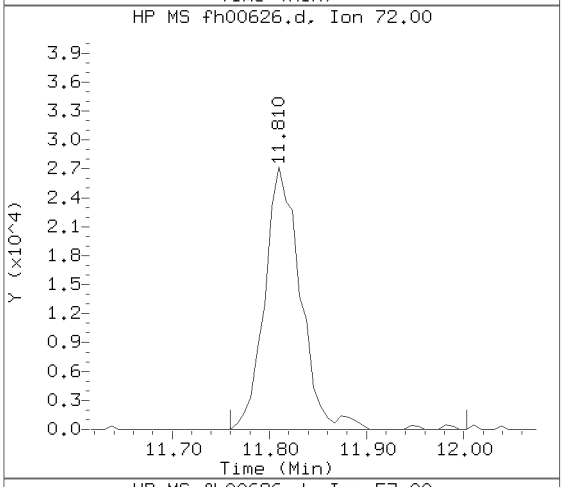
Reference Standard Spectrum for 2-Butanone



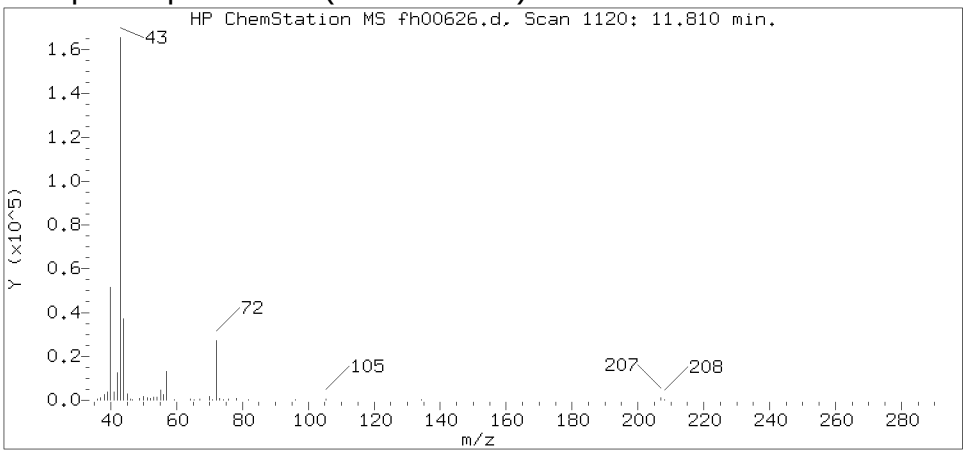


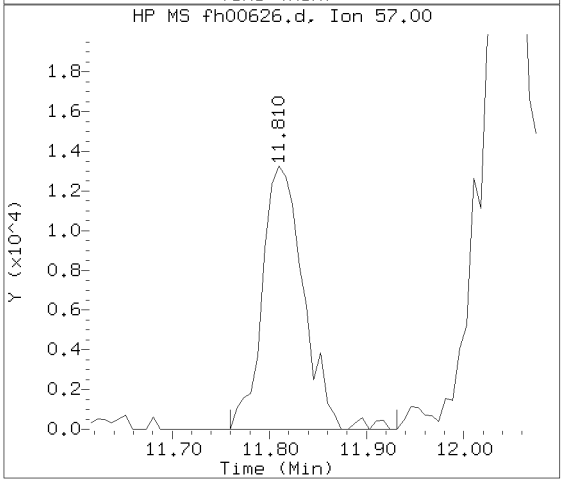
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00626.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:42 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:41 jeb07445

Sample Name: 509-- Lab Sample ID: 9766345

Compound Number : 45
Compound Name : 2-Butanone
Scan Number : 1120
Retention Time (minutes): 11.810
Relative Retention Time : 0.00137
Quant Ion : 43.00
Area (flag) : 455195
Concentration (ppb(v)) : 2.6246

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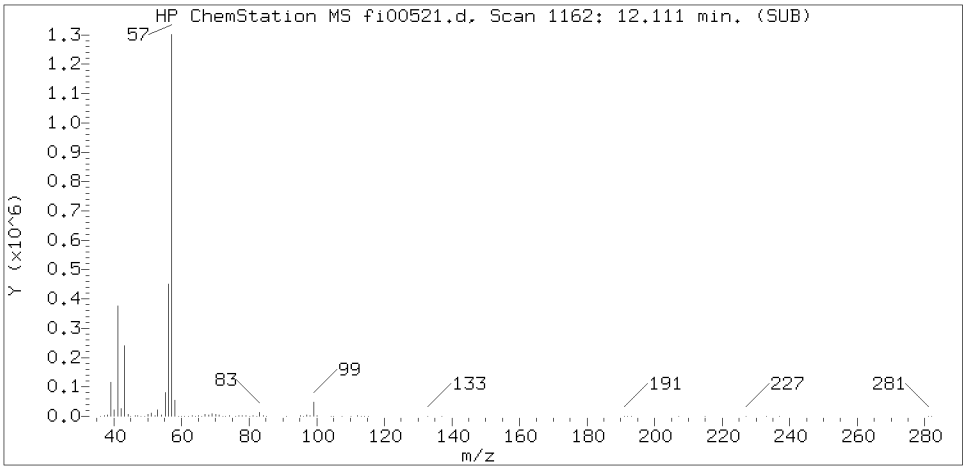
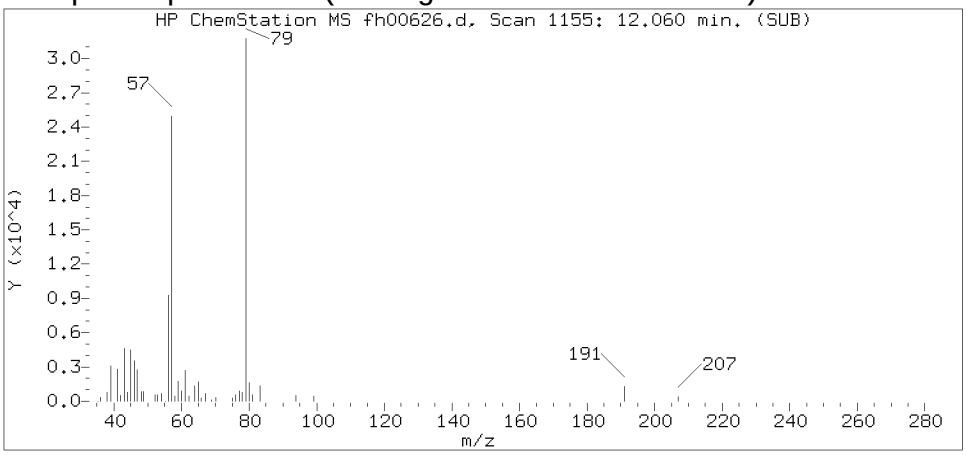
Target 3.5 esignature user ID: jeb07445

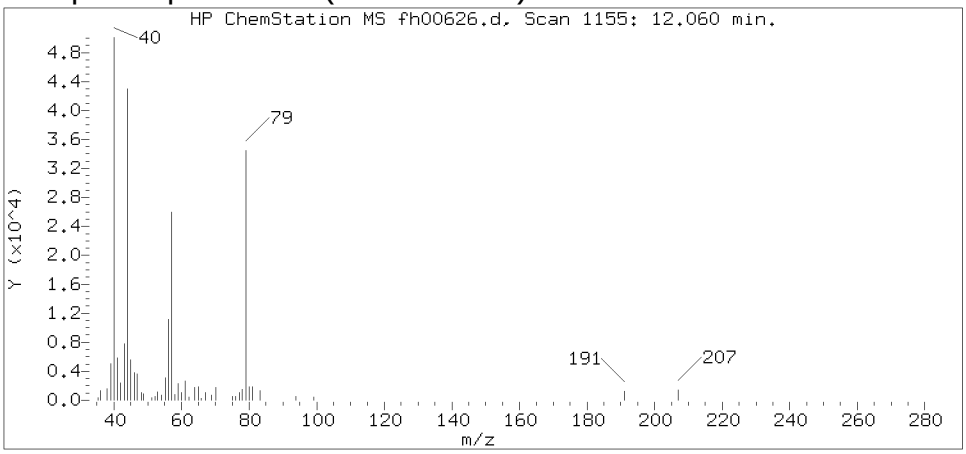
Reference Standard Spectrum for Isooctane

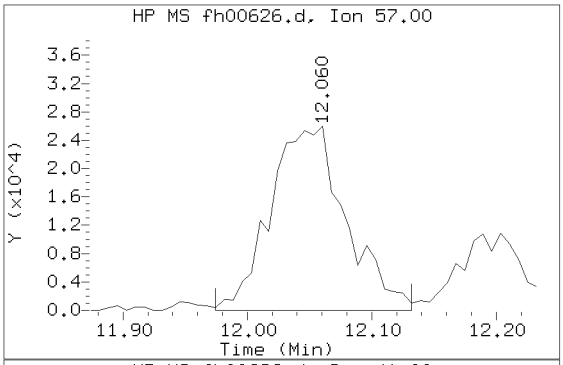


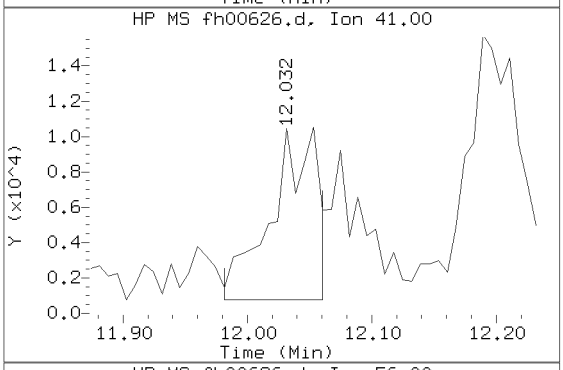
Sample Spectrum (Background Subtracted)

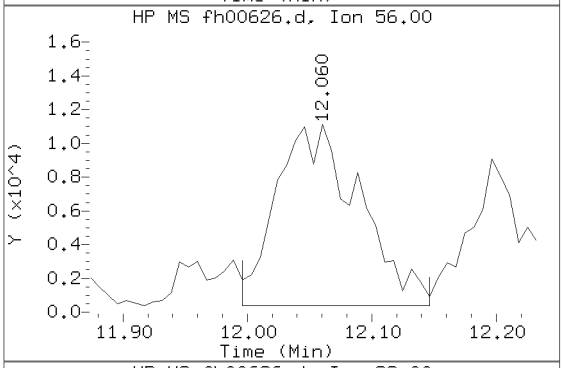


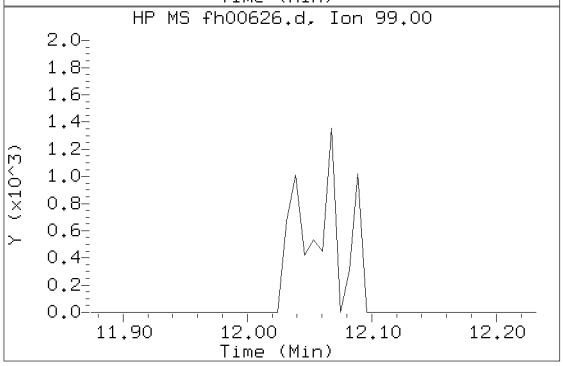
Sample Spectrum (Unaltered)











Data File: /chem/HP26379.i/18aug27.b/fh00626.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:42 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:41 jeb07445

Sample Name: 509-- Lab Sample ID: 9766345

Compound Number : 46
Compound Name : Isooctane
Scan Number : 1155
Retention Time (minutes): 12.060
Relative Retention Time :-0.00107
Quant Ion : 57.00
Area (flag) : 109046
Concentration (ppb(v)) : 0.2692

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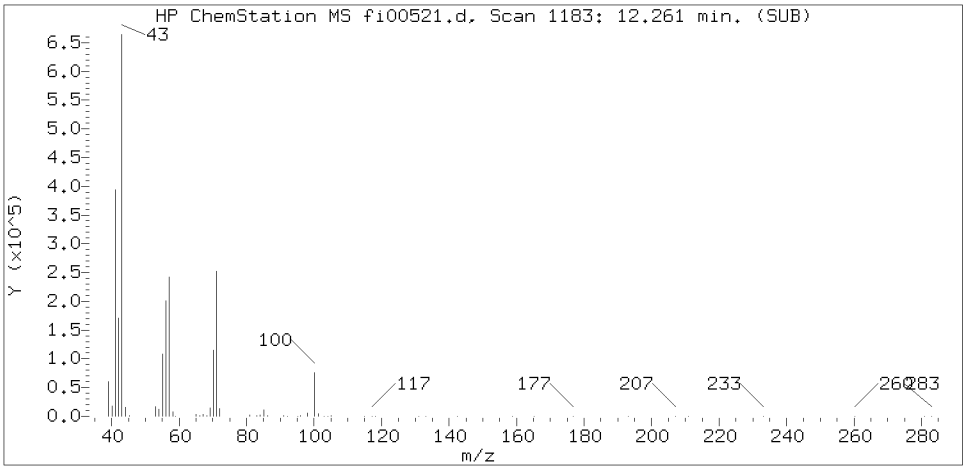
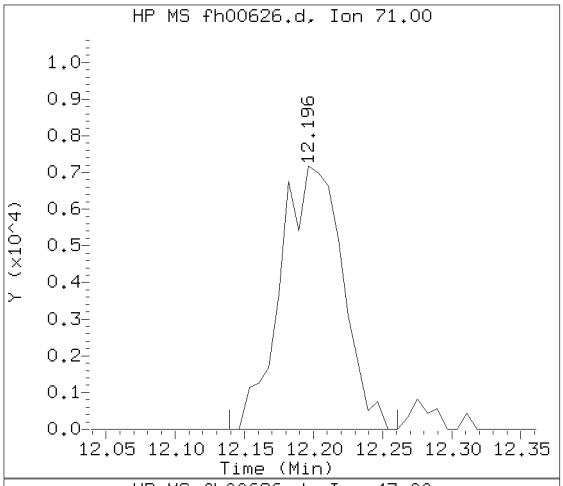
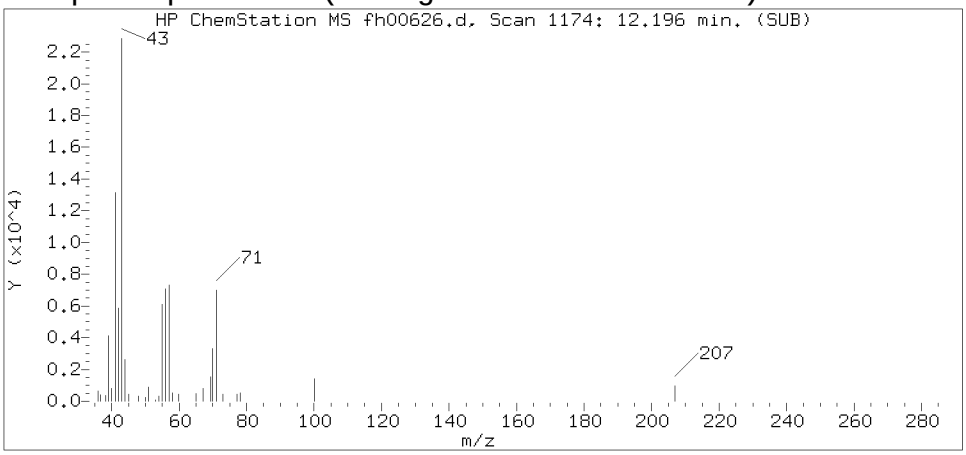
Target 3.5 esignature user ID: jeb07445

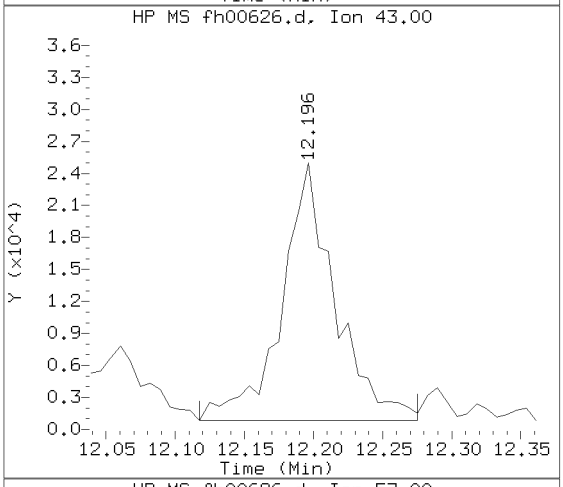
Reference Standard Spectrum for Heptane



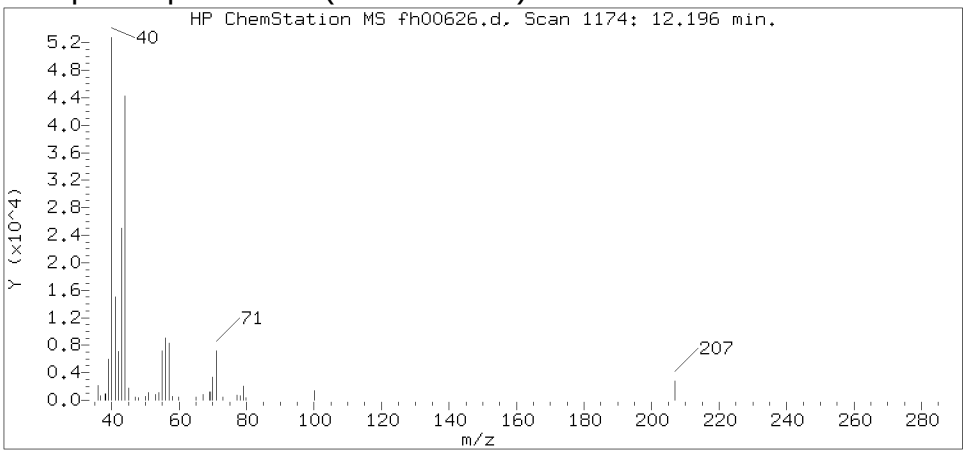


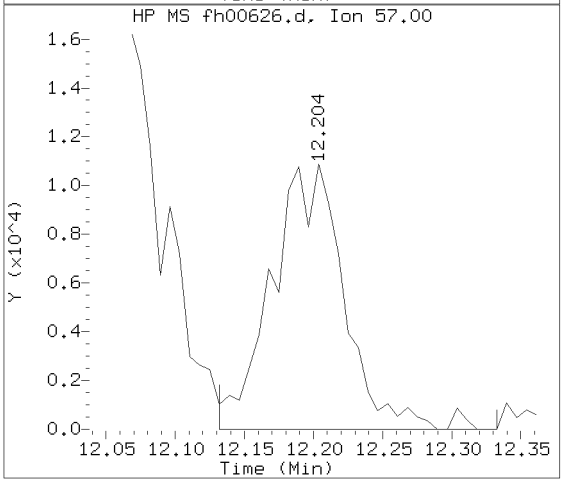
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00626.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:42 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:41 jeb07445

Sample Name: 509-- Lab Sample ID: 9766345

Compound Number : 47
Compound Name : Heptane
Scan Number : 1174
Retention Time (minutes): 12.196
Relative Retention Time : 0.00053
Quant Ion : 71.00
Area (flag) : 22349
Concentration (ppb(v)) : 0.3833

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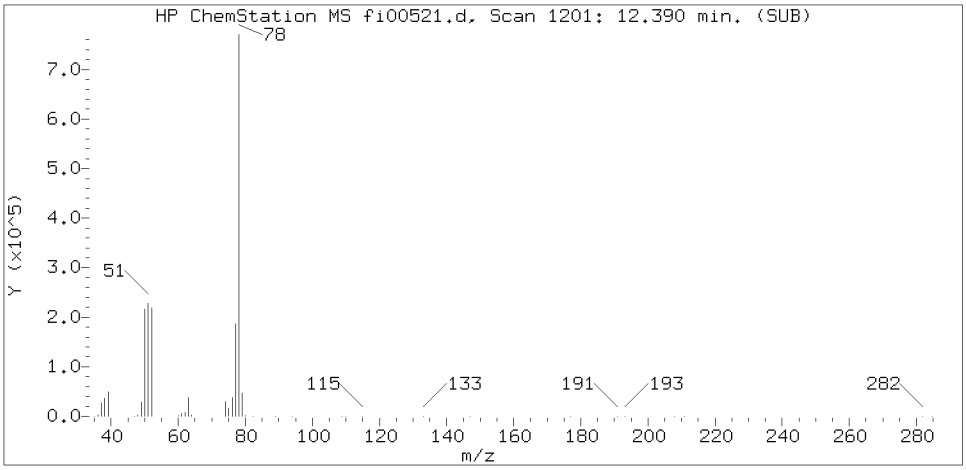
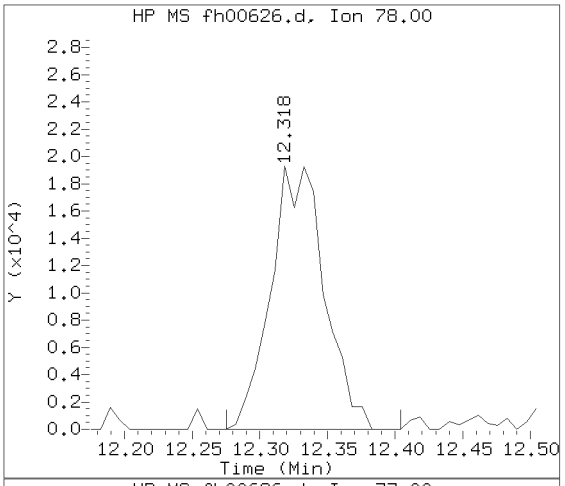
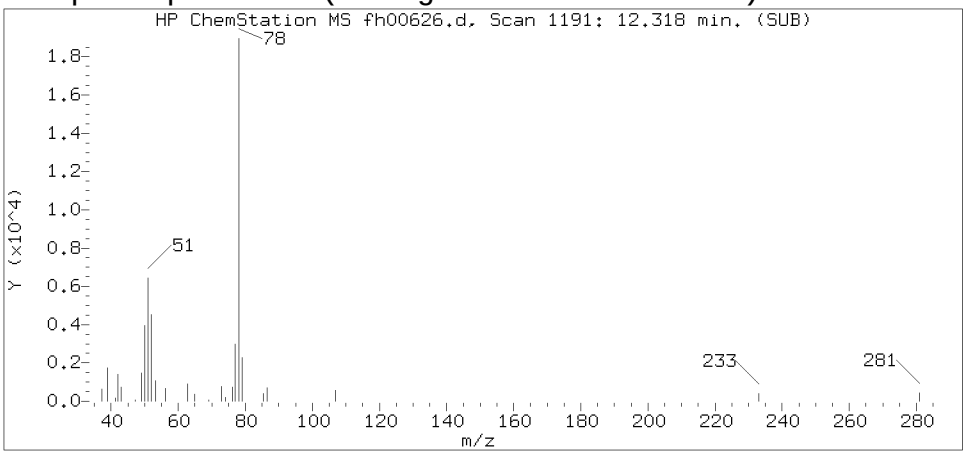
Target 3.5 esignature user ID: jeb07445

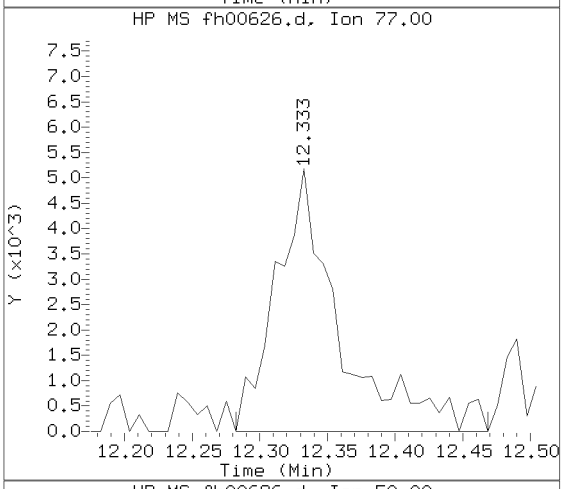
Reference Standard Spectrum for Benzene



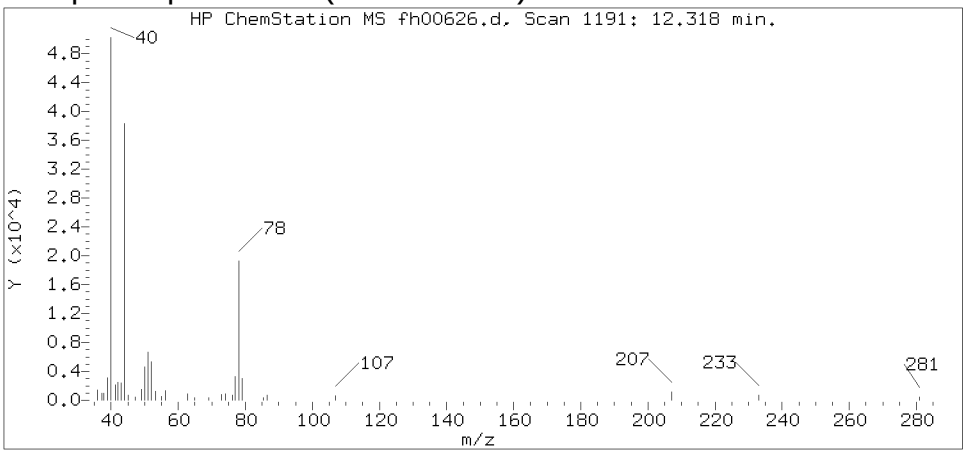


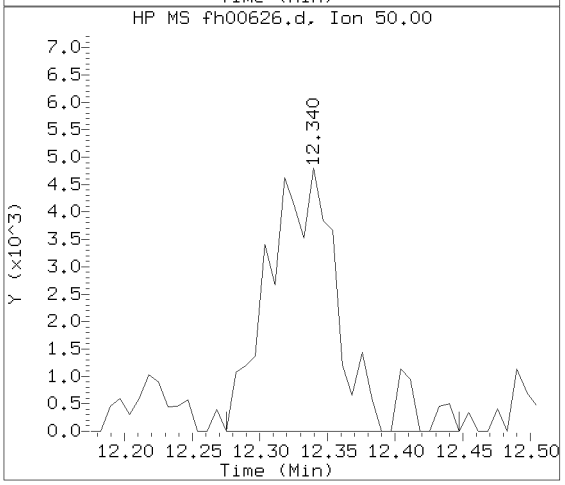
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00626.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:42 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:41 jeb07445

Sample Name: 509-- Lab Sample ID: 9766345

Compound Number : 48
Compound Name : Benzene
Scan Number : 1191
Retention Time (minutes): 12.318
Relative Retention Time : 0.00053
Quant Ion : 78.00
Area (flag) : 53359
Concentration (ppb(v)) : 0.2959

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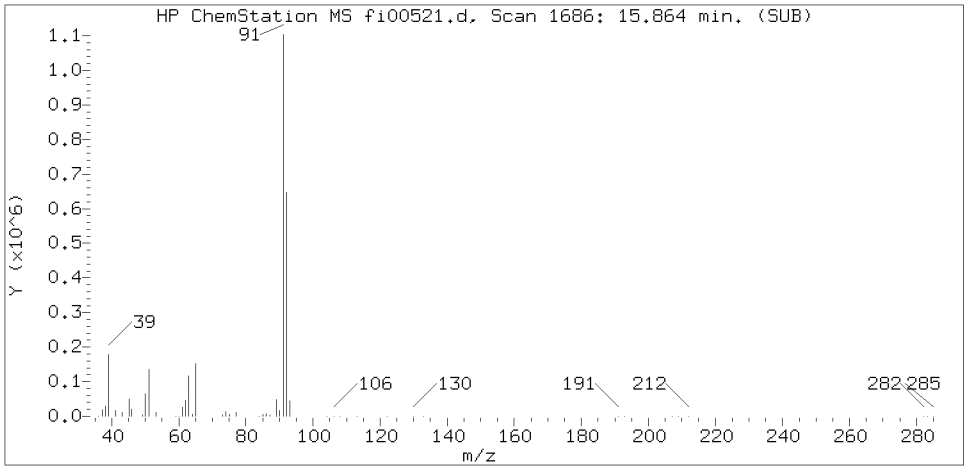
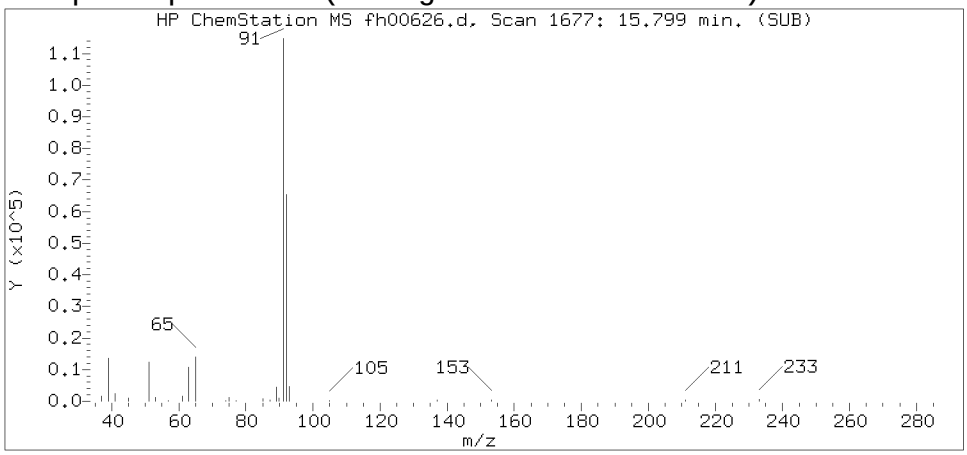
Target 3.5 esignature user ID: jeb07445

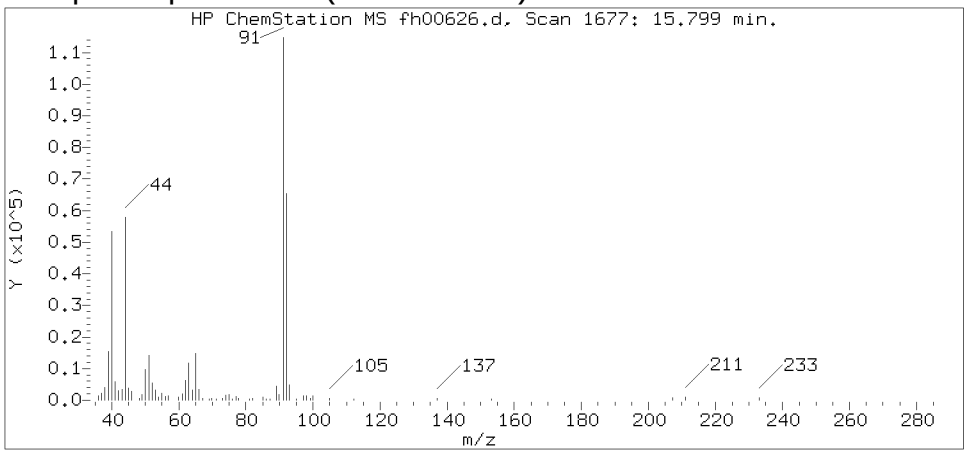
Reference Standard Spectrum for Toluene

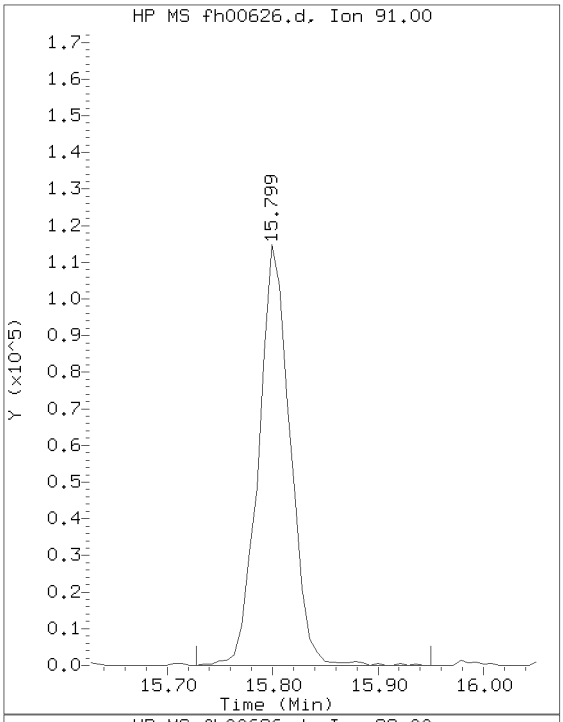


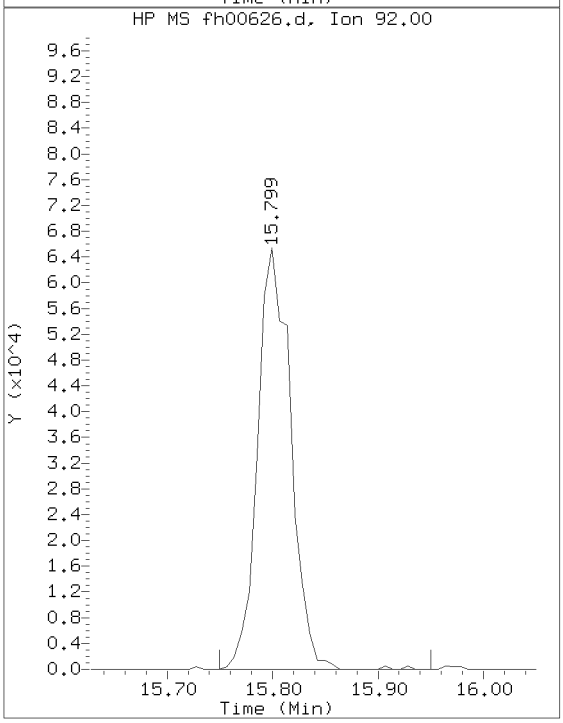
Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)







Data File: /chem/HP26379.i/18aug27.b/fh00626.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:42 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:41 jeb07445

Sample Name: 509-- Lab Sample ID: 9766345

Compound Number	: 61
Compound Name	: Toluene
Scan Number	: 1677
Retention Time (minutes)	: 15.799
Relative Retention Time	: 0.00000
Quant Ion	: 91.00
Area (flag)	: 239054
Concentration (ppb(v))	: 1.1475

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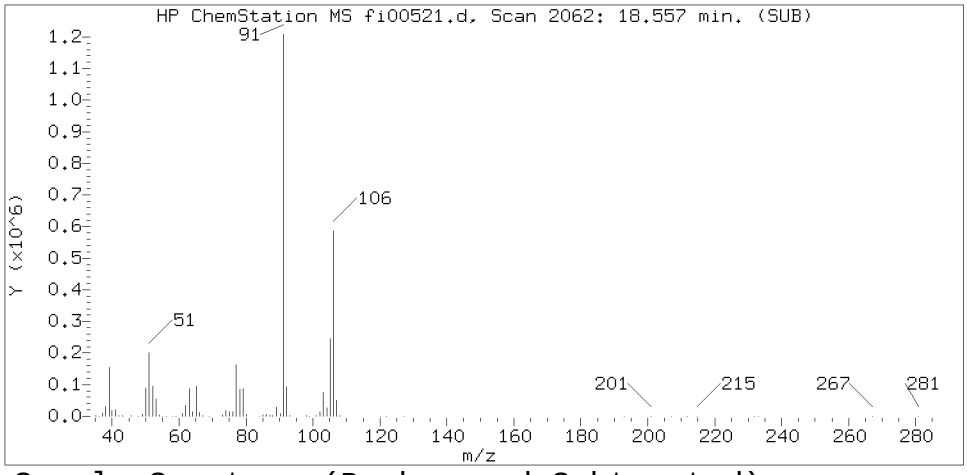
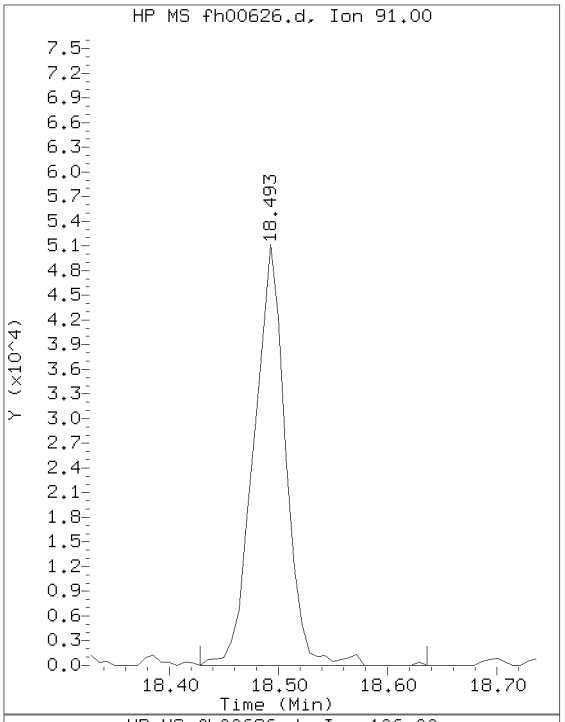
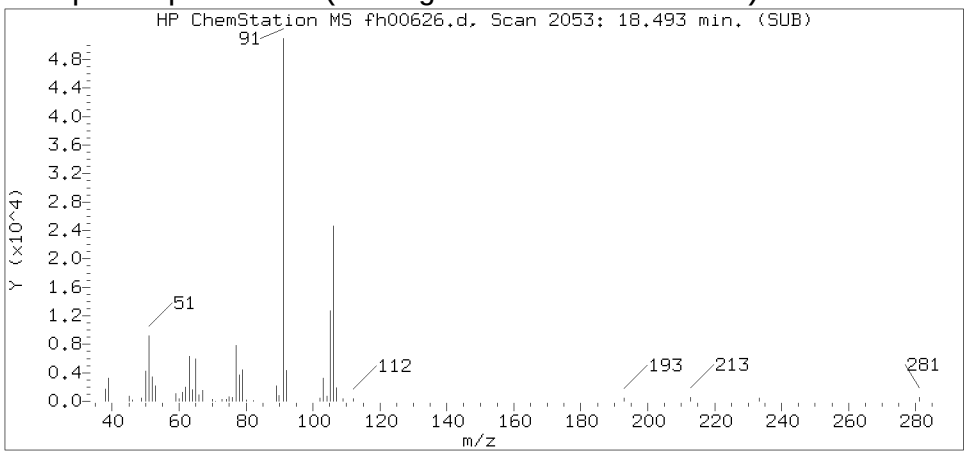
Target 3.5 esignature user ID: jeb07445

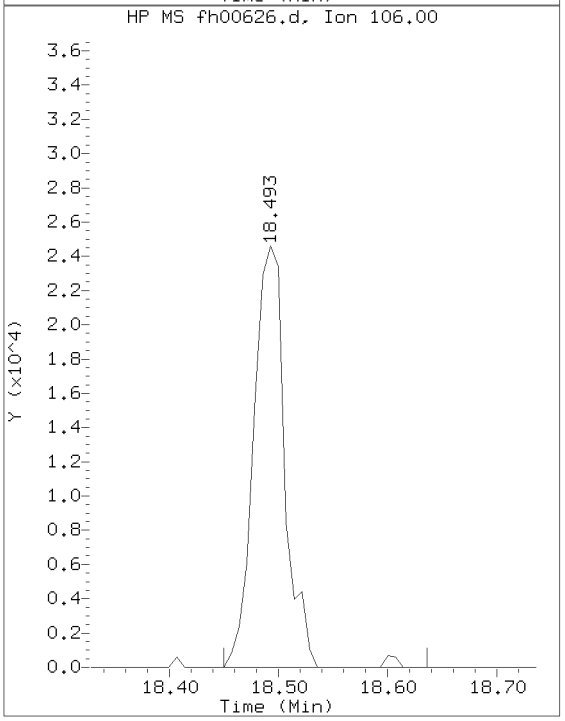
Reference Standard Spectrum for m/p-Xylene



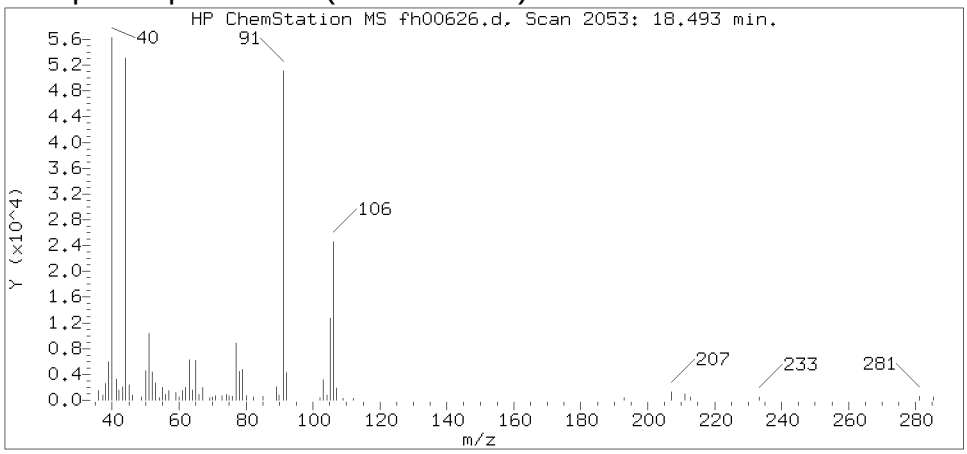


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00626.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:42 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:41 jeb07445

Sample Name: 509-- Lab Sample ID: 9766345

Compound Number	: 75
Compound Name	: m/p-Xylene
Scan Number	: 2053
Retention Time (minutes)	: 18.493
Relative Retention Time	:-0.00000
Quant Ion	: 91.00
Area (flag)	: 104192
Concentration (ppb(v))	: 0.5099

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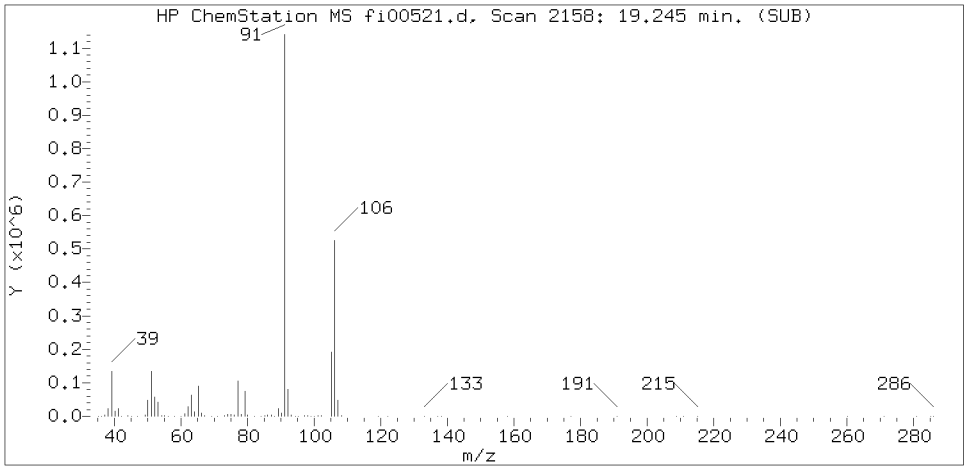
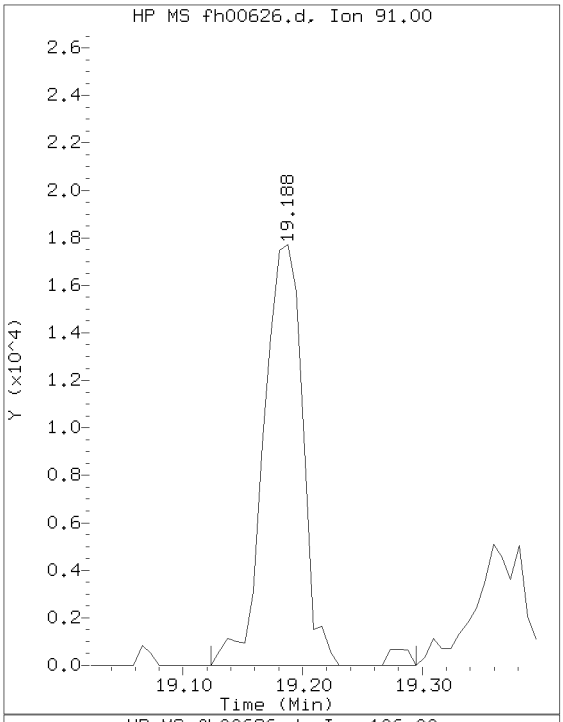
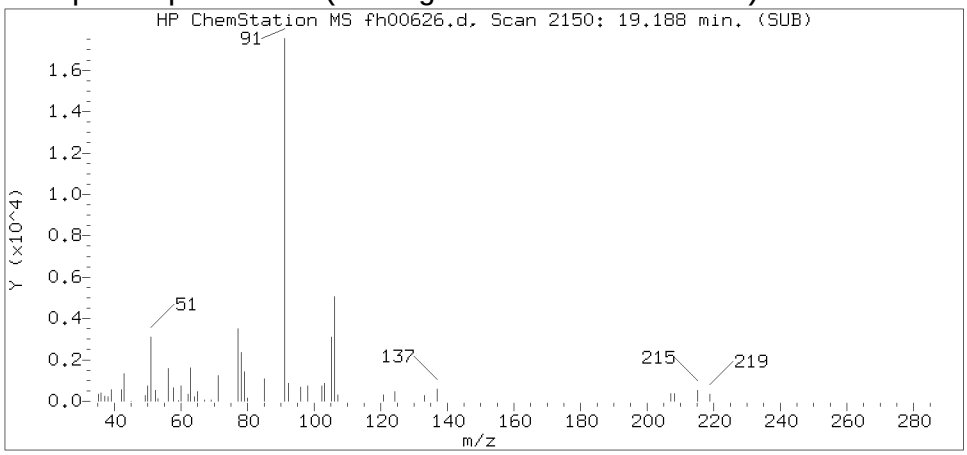
Target 3.5 esignature user ID: jeb07445

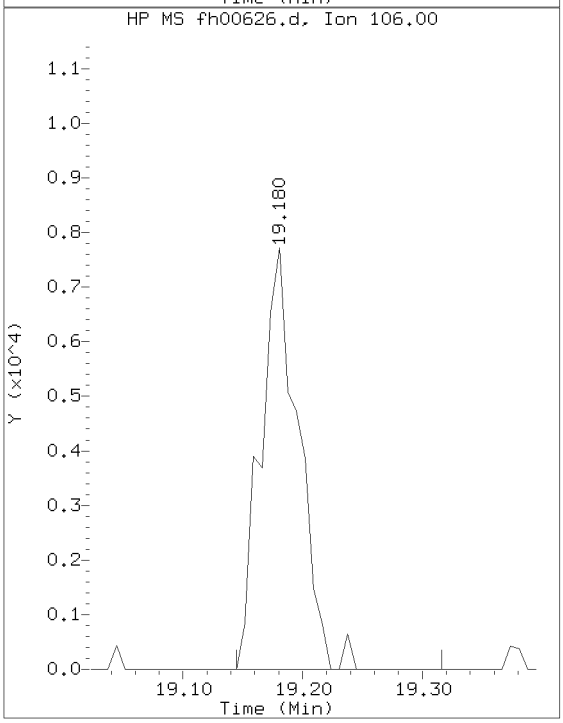
Reference Standard Spectrum for o-Xylene



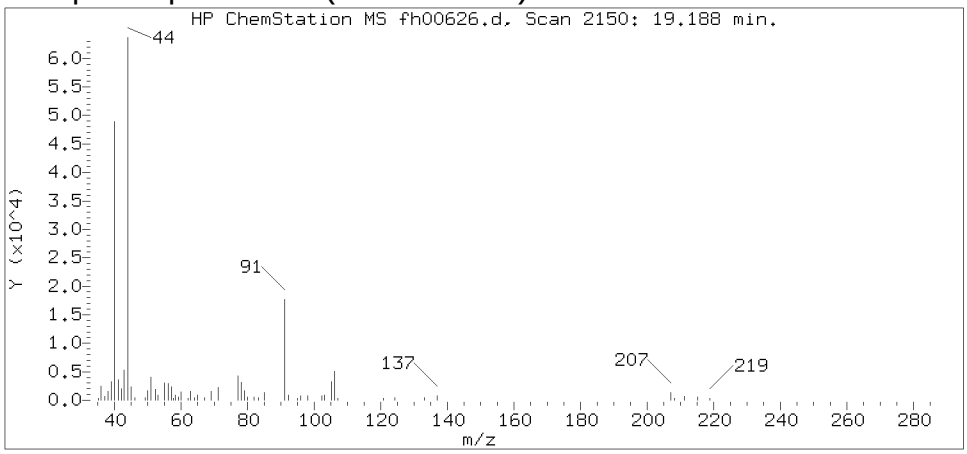


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00626.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 16:42 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:41 jeb07445

Sample Name: 509-- Lab Sample ID: 9766345

Compound Number : 76
Compound Name : o-Xylene
Scan Number : 2150
Retention Time (minutes): 19.188
Relative Retention Time :-0.00000
Quant Ion : 91.00
Area (flag) : 40858
Concentration (ppb(v)) : 0.2051

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766346
Canister ID:	518	Lab File ID:	fh00627.d
Pressure Received:	12.2 psia	Date Collected:	08/18/2018
Final Pressure:	24.5 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	17:12
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	2.9	J
75-45-6	Chlorodifluoromethane	0.53	U
76-14-2	Freon 114	0.84	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.31	U
106-99-0	1,3-Butadiene	0.38	U
74-83-9	Bromomethane	0.70	U
75-00-3	Chloroethane	0.50	U
75-43-4	Dichlorofluoromethane	0.46	U
75-69-4	Trichlorofluoromethane	1.7	J
109-66-0	Pentane	4.4	
75-35-4	1,1-Dichloroethene	0.56	U
76-13-1	Freon 113	1.1	J
67-64-1	Acetone	33	
75-15-0	Carbon Disulfide	0.40	U
107-05-1	3-Chloropropene	0.47	U
75-09-2	Methylene Chloride	0.87	U
156-60-5	trans-1,2-Dichloroethene	0.34	U
1634-04-4	Methyl t-Butyl Ether	0.54	U
110-54-3	Hexane	2.1	J
75-34-3	1,1-Dichloroethane	0.36	U
156-59-2	cis-1,2-Dichloroethene	0.48	U
78-93-3	2-Butanone	9.8	
67-66-3	Chloroform	1.1	J

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766346
Canister ID:	518	Lab File ID:	fh00627.d
Pressure Received:	12.2 psia	Date Collected:	08/18/2018
Final Pressure:	24.5 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	17:12
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
71-55-6	1,1,1-Trichloroethane	0.65	U
56-23-5	Carbon Tetrachloride	0.88	U
71-43-2	Benzene	3.1	J
107-06-2	1,2-Dichloroethane	0.32	U
540-84-1	Isooctane	2.1	J
142-82-5	Heptane	3.8	J
79-01-6	Trichloroethene	0.97	U
78-87-5	1,2-Dichloropropane	0.60	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	0.80	U
10061-01-5	cis-1,3-Dichloropropene	0.45	U
108-10-1	4-Methyl-2-Pentanone	1.0	J
108-88-3	Toluene	5.8	
111-65-9	Octane	1.9	U
10061-02-6	trans-1,3-Dichloropropene	0.54	U
79-00-5	1,1,2-Trichloroethane	0.65	U
127-18-4	Tetrachloroethene	1.7	U
591-78-6	2-Hexanone	0.74	U
124-48-1	Dibromochloromethane	1.1	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	0.60	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	0.95	J
179601-23-1	m/p-Xylene	3.2	J

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766346
Canister ID:	518	Lab File ID:	fh00627.d
Pressure Received:	12.2 psia	Date Collected:	08/18/2018
Final Pressure:	24.5 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	17:12
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
95-47-6	o-Xylene	1.3	J
100-42-5	Styrene	0.85	U
75-25-2	Bromoform	1.8	U
98-82-8	Cumene	1.2	U
108-86-1	Bromobenzene	0.64	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	0.84	U
622-96-8	4-Ethyltoluene	0.88	U
108-67-8	1,3,5-Trimethylbenzene	1.6	U
95-63-6	1,2,4-Trimethylbenzene	1.4	U
541-73-1	1,3-Dichlorobenzene	1.1	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.2	U
67-72-1	Hexachloroethane	2.6	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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

Data file: /chem/HP26379.i/18aug27.b/fh00627.d Injection date and time: **27-AUG-2018 17:12**
Data file Sample Info. Line: 9766346;400;F1823930AA;518--;0;0;SAMPLE; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.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): 24.5 psia Canister Pressure before dilution (Ya): 12.2 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 400 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.115(-0.022)	1023	130	374629 (-12)	10.00		255500 - 596166
52) 1,4-Difluorobenzene	13.393(0.000)	1341	114	1349302 (-11)	10.00		906195 - 2114453
71) Chlorobenzene-d5	18.228(0.007)	2016	117	1302975 (-12)	10.00		883644 - 2061835

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)	4.009(0.000)	85	73406M	0.587	0.59		J	0.13	1
3) Chlorodifluoromethane	(1)			Not Detected					0.15	1
4) Freon 114	(1)			Not Detected					0.12	1
5) Chloromethane	(1)			Not Detected					0.24	1
6) Vinyl Chloride	(1)			Not Detected					0.12	1
7) 1,3-Butadiene	(1)			Not Detected					0.17	1
8) Bromomethane	(1)			Not Detected					0.18	1
9) Chloroethane	(1)			Not Detected					0.19	1
13) Dichlorofluoromethane	(1)			Not Detected					0.11	1
12) Trichlorofluoromethane	(1)	5.879(0.000)	101	38019	0.310	0.31		J	0.15	1
11) Pentane	(1)	5.872(0.000)	43	204645	1.507	1.51			0.13	1
16) 1,1-Dichloroethene	(1)			Not Detected					0.14	1
17) Freon 113	(1)	6.932(-0.000)	103	10675	0.146	0.15		J	0.11	1
24) Acetone	(1)	8.078(0.000)	43	1663230	13.875	13.88			0.53	5
18) Carbon Disulfide	(1)			Not Detected					0.13	1
22) 3-Chloropropene	(1)			Not Detected					0.15	1
23) Methylene Chloride	(1)			Not Detected					0.25	2
25) trans-1,2-Dichloroethene	(1)			Not Detected					0.086	1
27) Methyl t-Butyl Ether	(1)			Not Detected					0.15	1
26) Hexane	(1)	8.450(0.001)	56	52073	0.603	0.60		J	0.13	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.089	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.12	1
45) 2-Butanone	(1)	11.810(0.002)	43	563682	3.313	3.31			0.21	1
39) Chloroform	(1)	11.215(0.001)	83	23649	0.216	0.22		J	0.092	1
44) 1,1,1-Trichloroethane	(1)			Not Detected					0.12	1
42) Carbon Tetrachloride	(1)			Not Detected					0.14	1
48) Benzene	(2)	12.326(-0.000)	78	167219	0.959	0.96		J	0.11	1
50) 1,2-Dichloroethane	(2)			Not Detected					0.08	1
46) Isooctane	(2)	12.060(-0.001)	57	175830	0.449	0.45		J	0.13	1
47) Heptane	(2)	12.211(-0.000)	71	51644	0.916	0.92		J	0.23	1
51) Trichloroethene	(2)			Not Detected					0.18	1
55) 1,2-Dichloropropane	(2)			Not Detected					0.13	1
53) Dibromomethane	(2)			Not Detected					0.14	1
56) Bromodichloromethane	(2)			Not Detected					0.12	1
59) cis-1,3-Dichloropropene	(2)			Not Detected					0.1	1
62) 4-Methyl-2-Pentanone	(2)	16.401(0.000)	43	56614	0.250	0.25		J	0.15	1
61) Toluene	(3)	15.807(-0.000)	91	298691	1.552	1.55			0.12	1
60) Octane	(3)			Not Detected					0.4	2
64) trans-1,3-Dichloropropene	(3)			Not Detected					0.12	1
67) 1,1,2-Trichloroethane	(3)			Not Detected					0.12	1
63) Tetrachloroethene	(3)			Not Detected					0.25	2
70) 2-Hexanone	(3)			Not Detected					0.18	1
68) Dibromochloromethane	(3)			Not Detected					0.13	1

M = Compound was manually integrated.

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

Data file: /chem/HP26379.i/18aug27.b/fh00627.d Injection date and time: **27-AUG-2018 17:12**
Data file Sample Info. Line: 9766346;400;F1823930AA;518--;0;0;SAMPLE; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.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): 24.5 psia Canister Pressure before dilution (Ya): 12.2 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 400 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
69) 1,2-Dibromoethane	(3)			Not Detected					0.13	1
72) Chlorobenzene	(3)			Not Detected					0.13	1
74) 1,1,1,2-Tetrachloroethane	(3)			Not Detected					0.15	1
73) Ethylbenzene	(3)	18.278(-0.000)	91	57243	0.218	0.22		J	0.19	1
75) m/p-Xylene	(3)	18.493(-0.000)	91	138384	0.733	0.73		J	0.26	2
76) o-Xylene	(3)	19.181(-0.000)	91	55957	0.304	0.30		J	0.19	1
78) Styrene	(3)			Not Detected					0.2	1
79) Bromoform	(3)			Not Detected					0.17	1
80) Cumene	(3)			Not Detected					0.24	1
82) Bromobenzene	(3)			Not Detected					0.1	1
83) 1,1,2,2-Tetrachloroethane	(3)			Not Detected					0.15	1
87) 1,2,3-Trichloropropane	(3)			Not Detected					0.14	1
84) 4-Ethyltoluene	(3)			Not Detected					0.18	1
86) 1,3,5-Trimethylbenzene	(3)			Not Detected					0.32	2
90) 1,2,4-Trimethylbenzene	(3)			Not Detected					0.28	2
93) 1,3-Dichlorobenzene	(3)			Not Detected					0.19	1
94) 1,4-Dichlorobenzene	(3)			Not Detected					0.17	1
98) 1,2-Dichlorobenzene	(3)			Not Detected					0.2	1
97) Hexachloroethane	(3)			Not Detected					0.27	2

Total number of targets = 62

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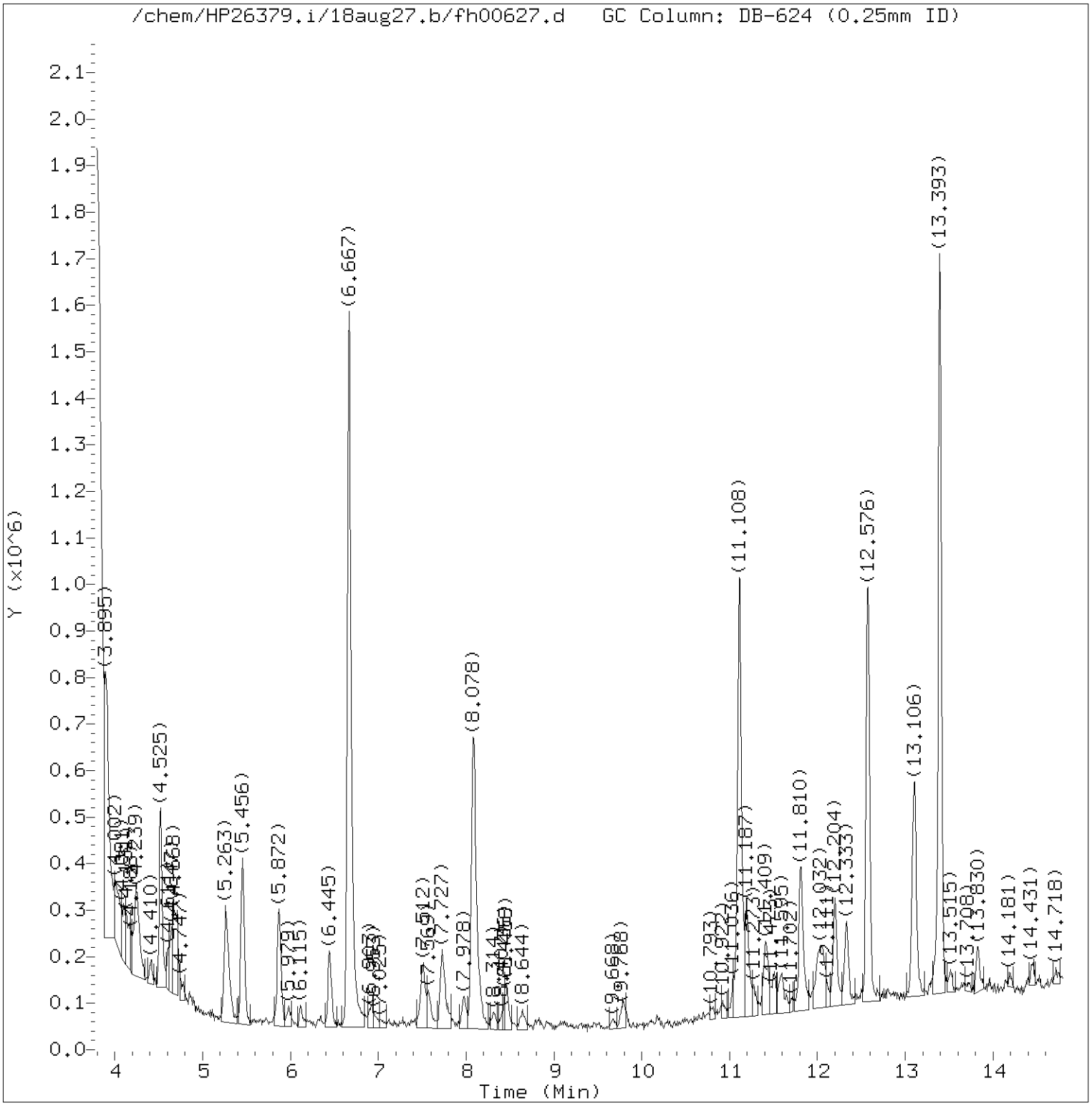
Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:40. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

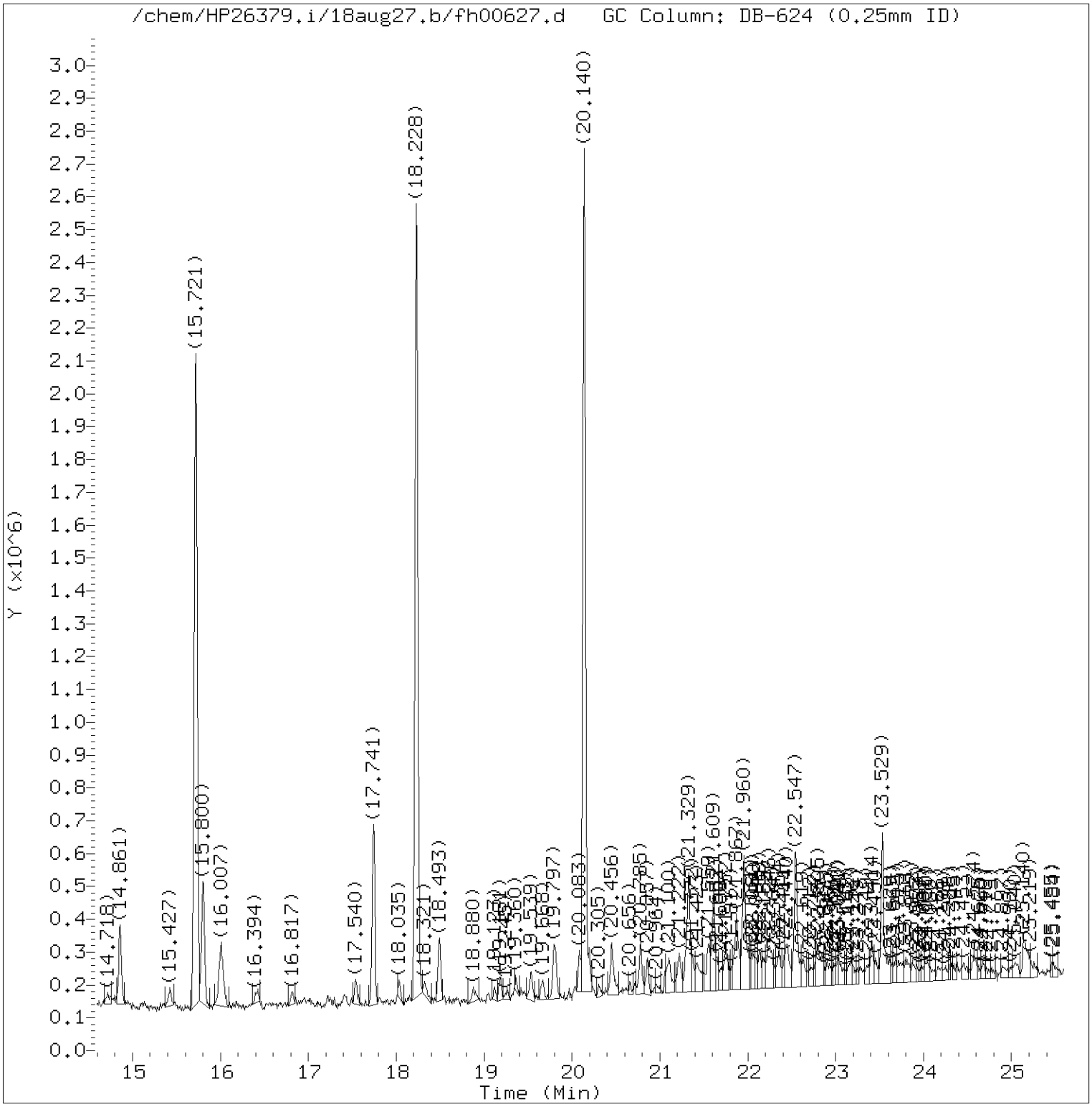
Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00627.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:12 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 518-- Lab Sample ID: 9766346

Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00627.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:12 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 518-- Lab Sample ID: 9766346

Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00627.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:12 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 518-- Lab Sample ID: 9766346

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
2) Dichlorodifluoromethane	(1)	4.009	85	73406M	0.587
11) Pentane	(1)	5.872	43	204645	1.507
12) Trichlorofluoromethane	(1)	5.879	101	38019	0.310
17) Freon 113	(1)	6.932	103	10675	0.146
24) Acetone	(1)	8.078	43	1663230	13.875
26) Hexane	(1)	8.450	56	52073	0.603
37)*Bromochloromethane	(1)	11.115	130	374629	10.000
39) Chloroform	(1)	11.215	83	23649	0.216
45) 2-Butanone	(1)	11.810	43	563682	3.313
46) Isooctane	(2)	12.061	57	175830	0.449
47) Heptane	(2)	12.211	71	51644	0.916
48) Benzene	(2)	12.326	78	167219	0.959
52)*1,4-Difluorobenzene	(2)	13.393	114	1349302	10.000
61) Toluene	(3)	15.807	91	298691	1.552
62) 4-Methyl-2-Pentanone	(2)	16.401	43	56614	0.250
71)*Chlorobenzene-d5	(3)	18.228	117	1302975	10.000
73) Ethylbenzene	(3)	18.278	91	57243	0.218
75) m/p-Xylene	(3)	18.493	91	138384	0.733
76) o-Xylene	(3)	19.181	91	55957	0.304

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

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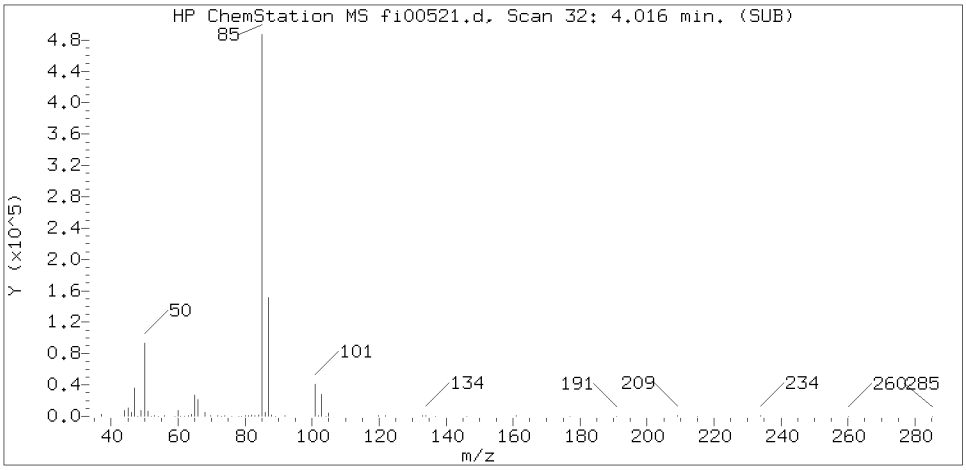
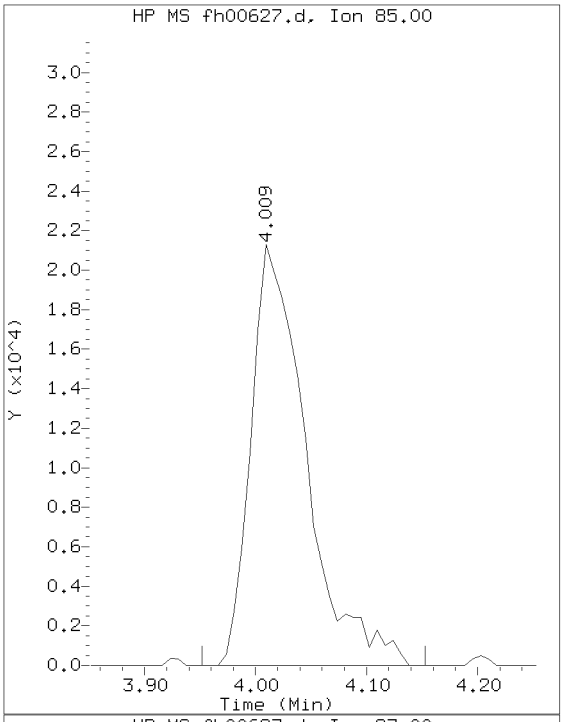
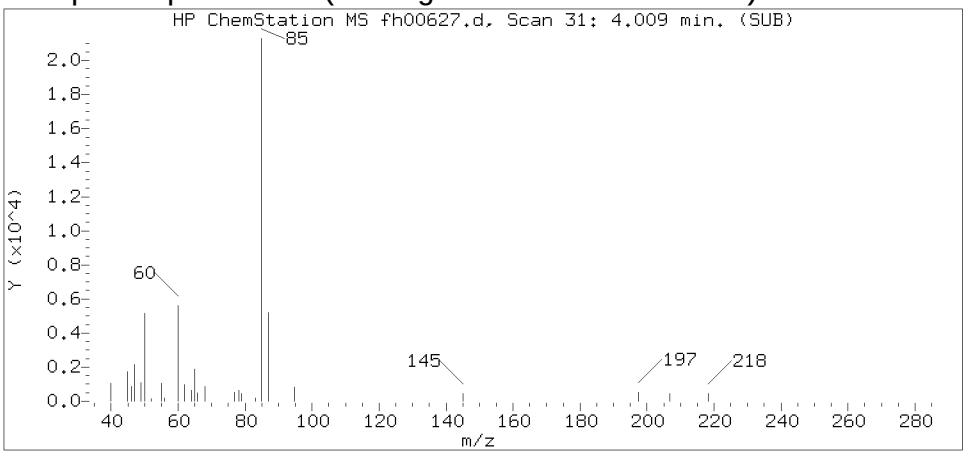
on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

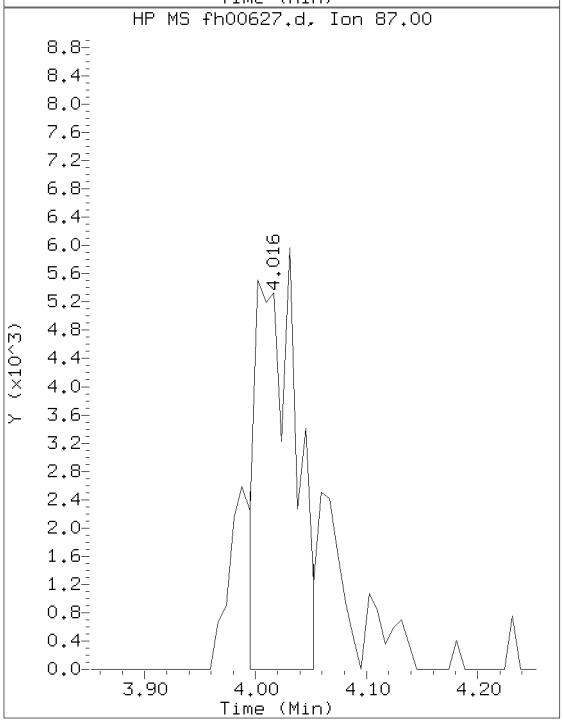
Reference Standard Spectrum for Dichlorodifluoromethane



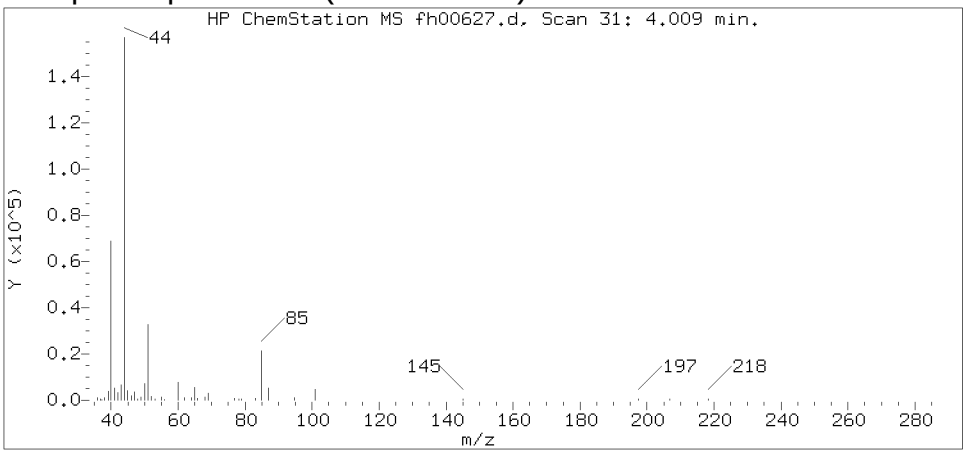


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00627.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:12 Analyst ID: jeb07445

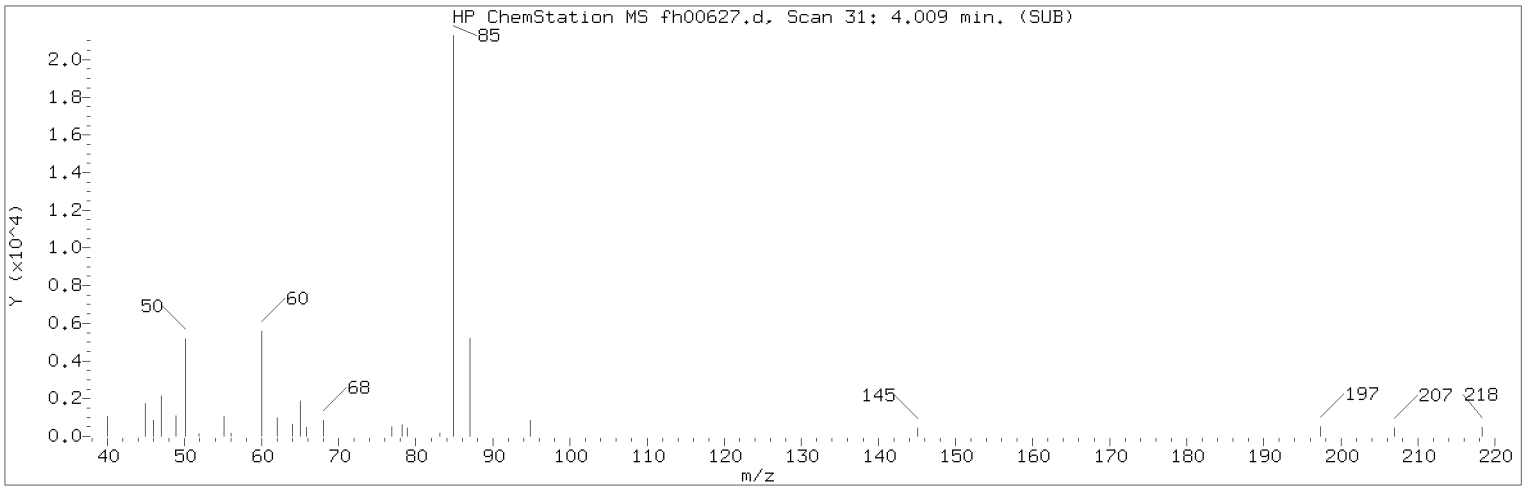
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 518-- Lab Sample ID: 9766346

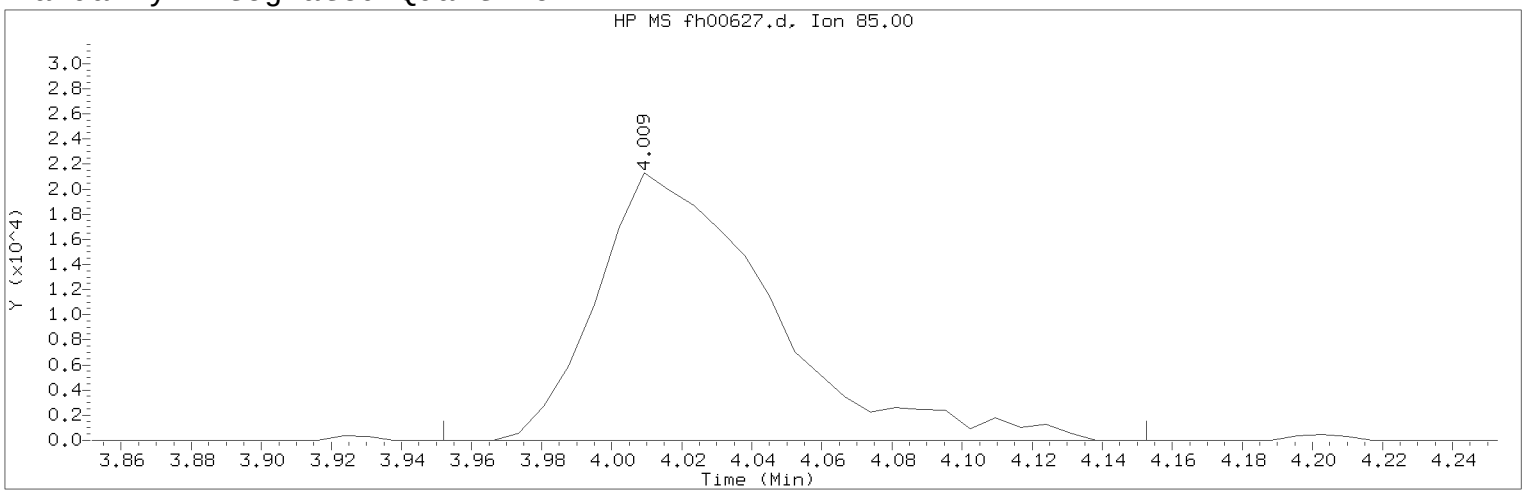
Compound Number	: 2
Compound Name	: Dichlorodifluoromethane
Scan Number	: 31
Retention Time (minutes)	: 4.009
Relative Retention Time	: 0.00004
Quant Ion	: 85.00
Area (flag)	: 73406M
Concentration (ppb(v))	: 0.5867

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug27.b/fh00627.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:12 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 518-- Lab Sample ID: 9766346

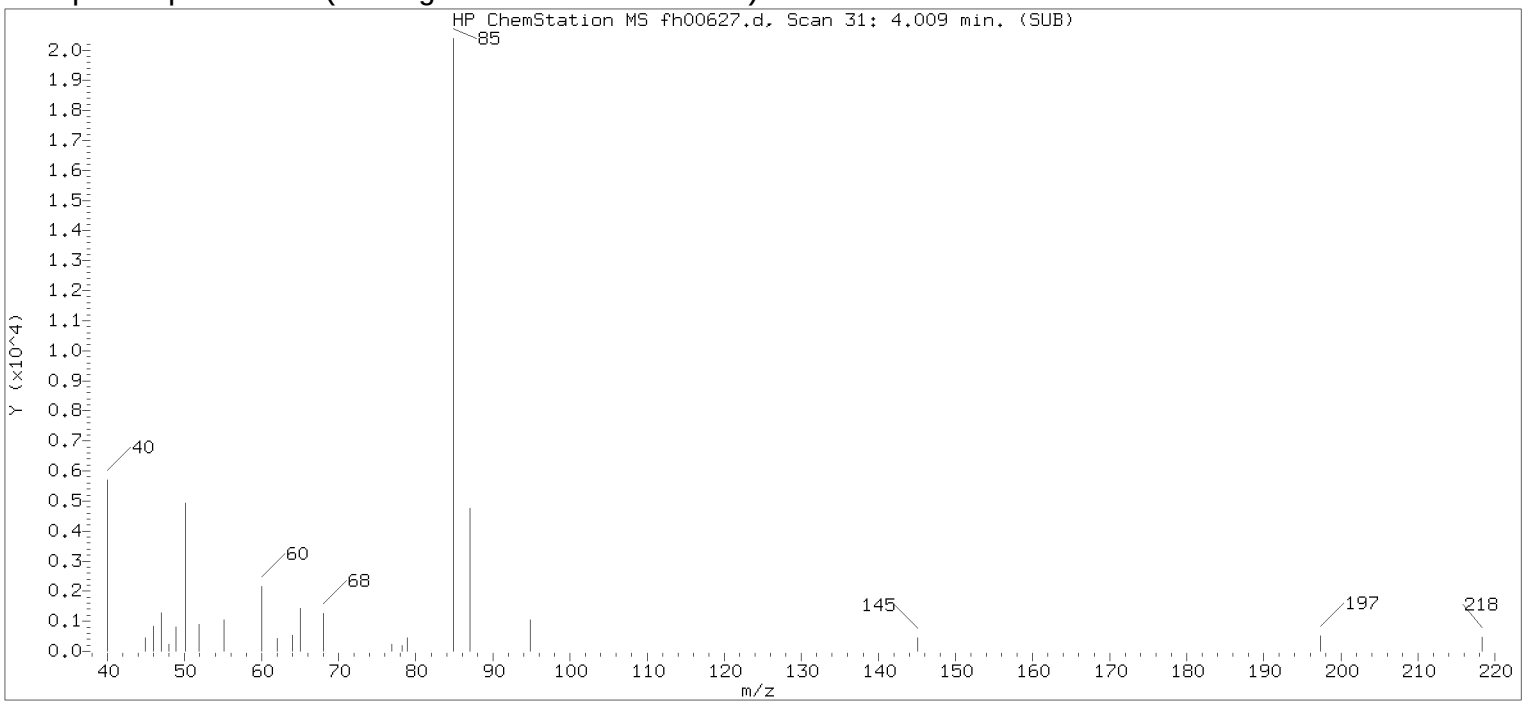
Compound Number : 2
Compound Name : Dichlorodifluoromethane
Scan Number : 31
Retention Time (minutes): 4.009
Quant Ion : 85.00
Area (flag) : 73406M
Concentration (ppb(v)) : 0.5867
Integration start scan : 22 Integration stop scan: 50
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

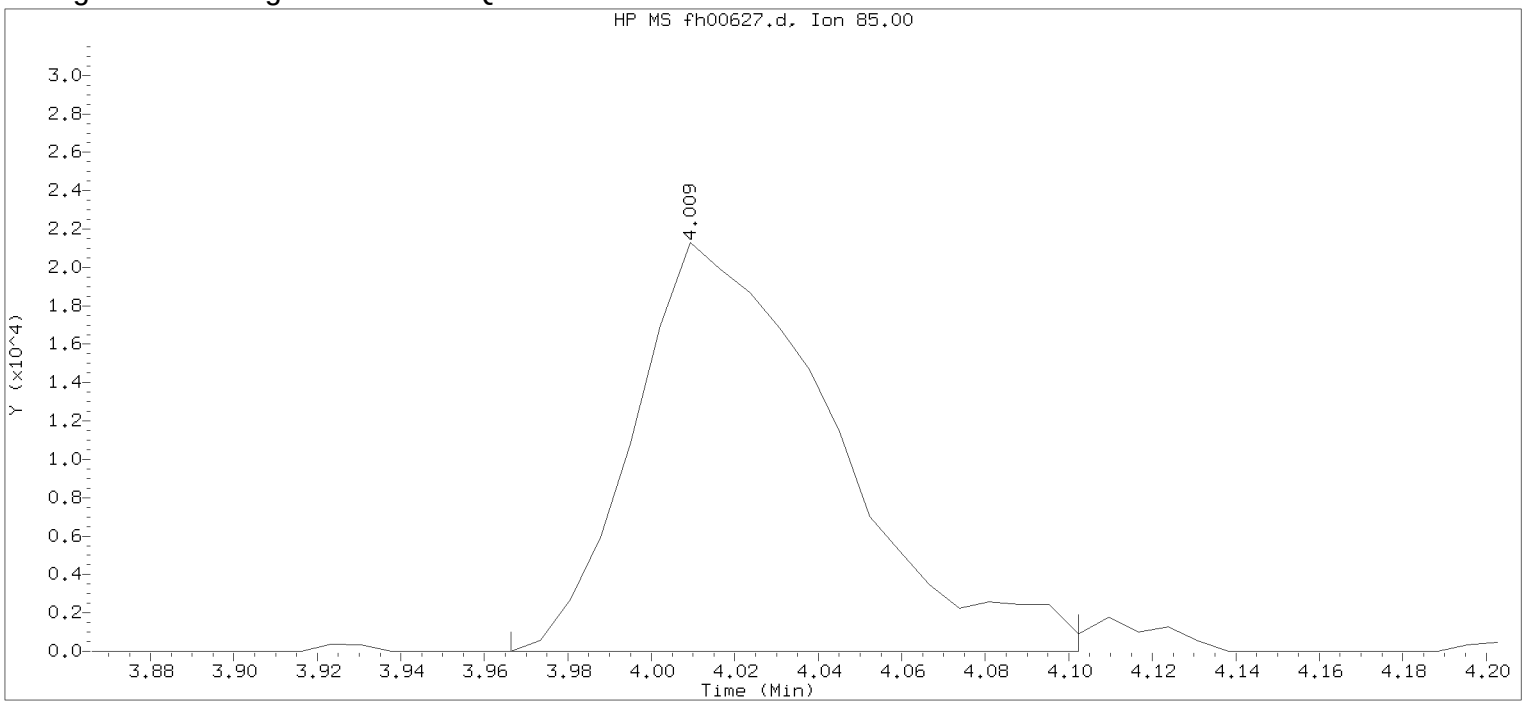
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:40.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug27.b/fh00627.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:12 Analyst ID: jeb07445

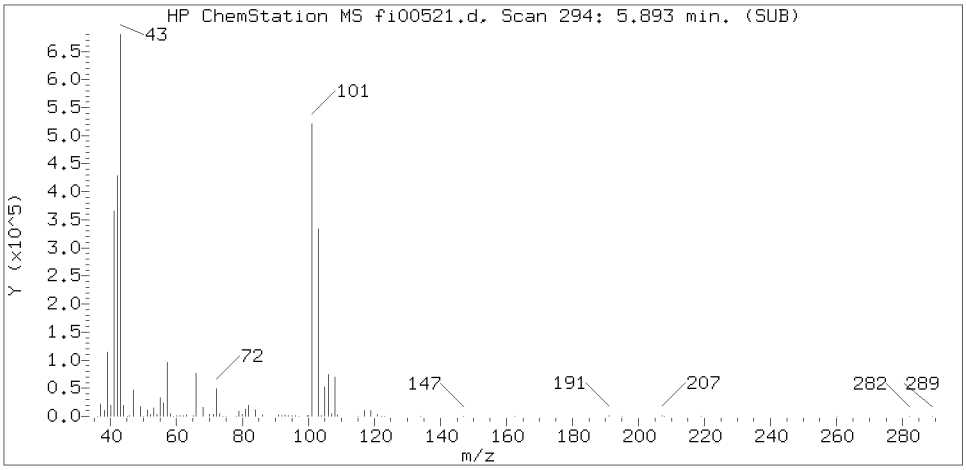
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 17:42 Unknown

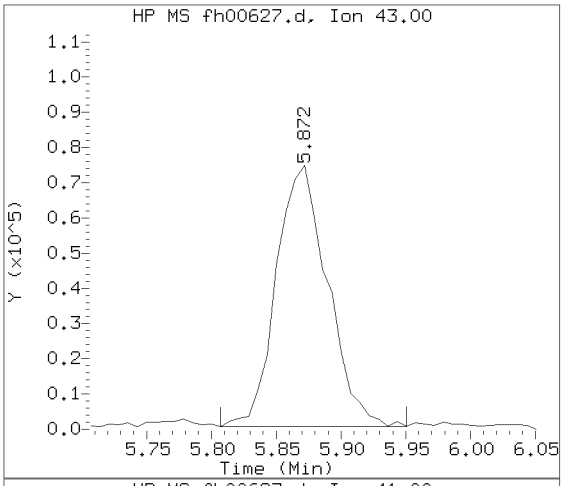
Sample Name: 518-- Lab Sample ID: 9766346

Compound Number : 2
Compound Name : Dichlorodifluoromethane
Scan Number : 31
Retention Time (minutes): 4.009
Quant Ion : 85.00
Area : 71224
Concentration (ppb(v)) : 0.5693
Integration start scan : 24 Integration stop scan: 43
Y at integration start : 0 Y at integration end: 0

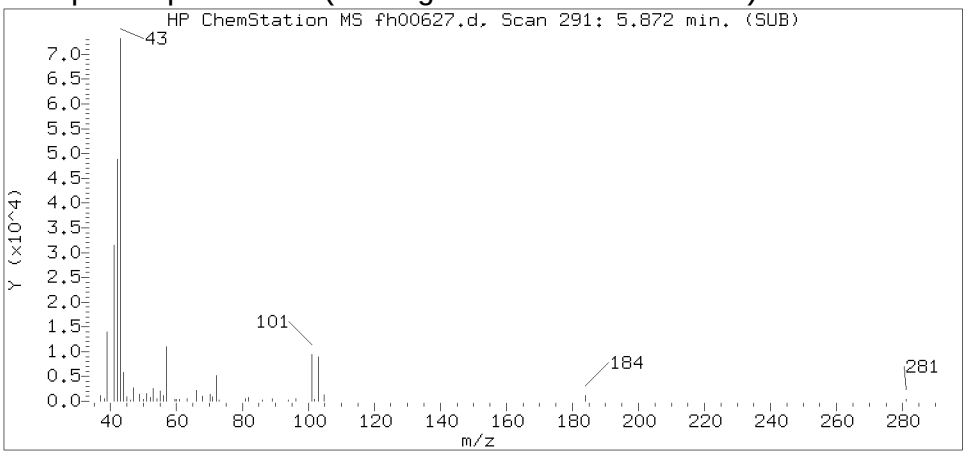
Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

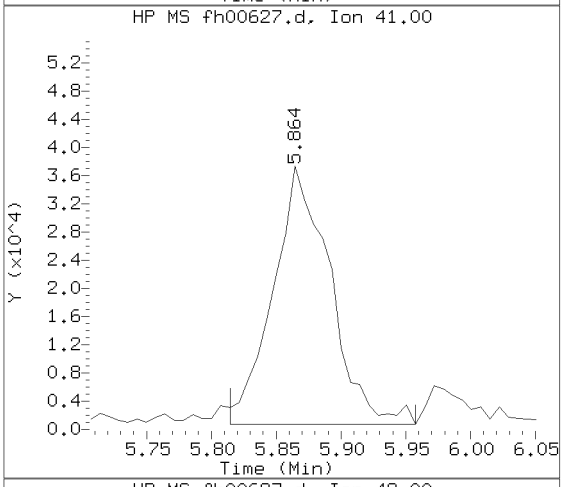
Reference Standard Spectrum for Pentane



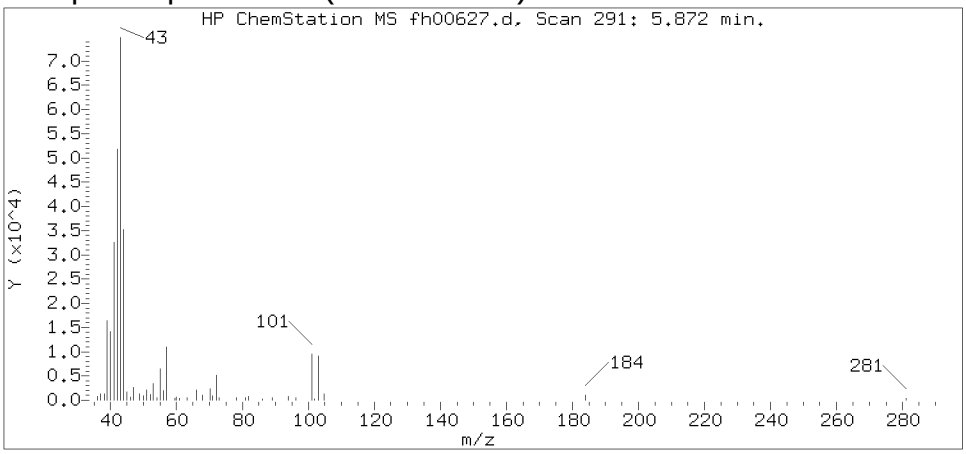


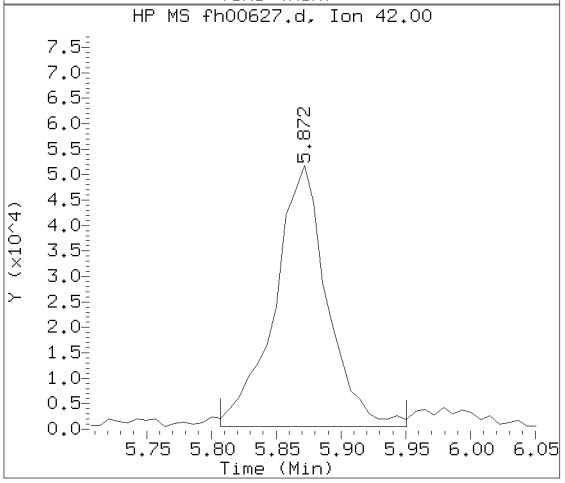
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00627.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:12 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 518-- Lab Sample ID: 9766346

Compound Number : 11
Compound Name : Pentane
Scan Number : 291
Retention Time (minutes): 5.872
Relative Retention Time : 0.00037
Quant Ion : 43.00
Area (flag) : 204645
Concentration (ppb(v)) : 1.5071

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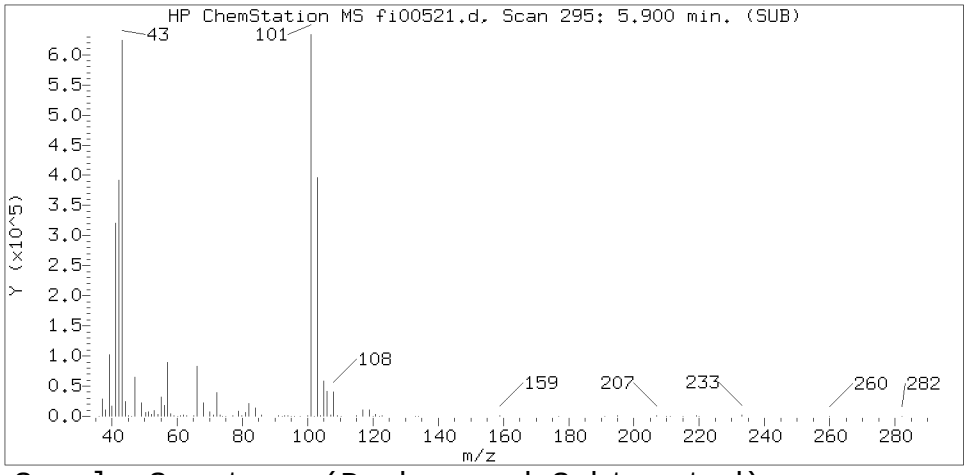
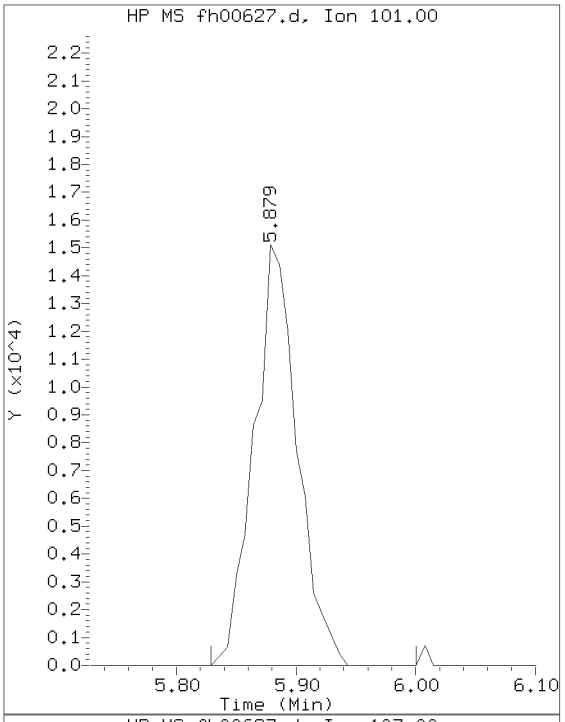
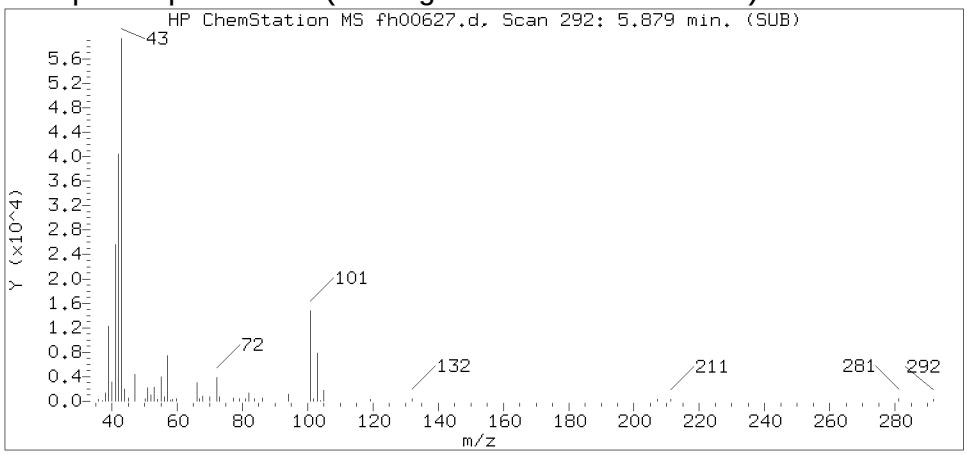
Target 3.5 esignature user ID: jeb07445

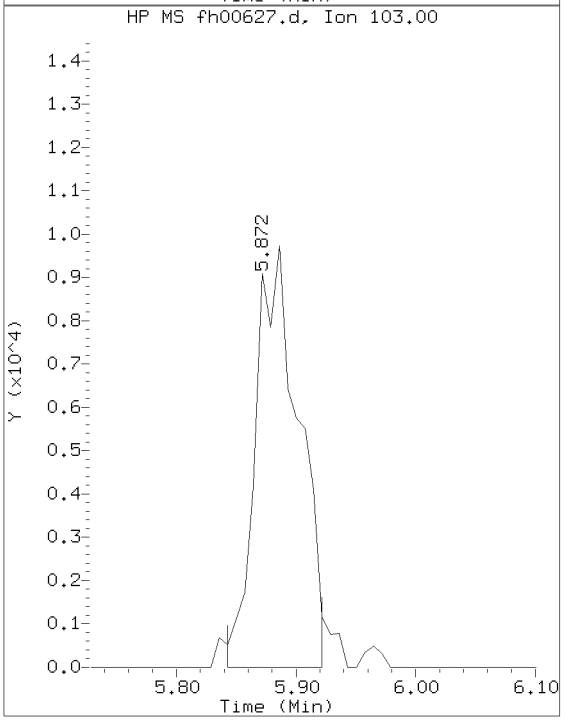
Reference Standard Spectrum for Trichlorofluoromethane



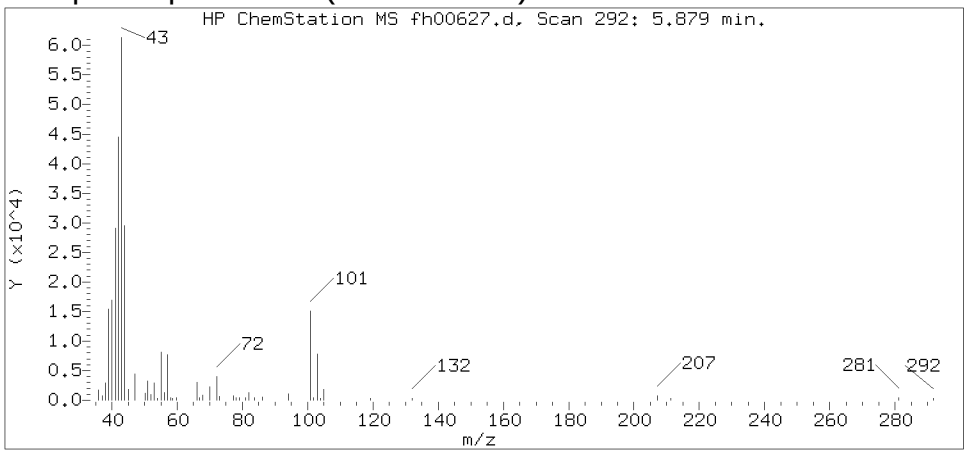


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00627.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:12 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 518-- Lab Sample ID: 9766346

Compound Number	: 12
Compound Name	: Trichlorofluoromethane
Scan Number	: 292
Retention Time (minutes)	: 5.879
Relative Retention Time	: 0.00037
Quant Ion	: 101.00
Area (flag)	: 38019
Concentration (ppb(v))	: 0.3095

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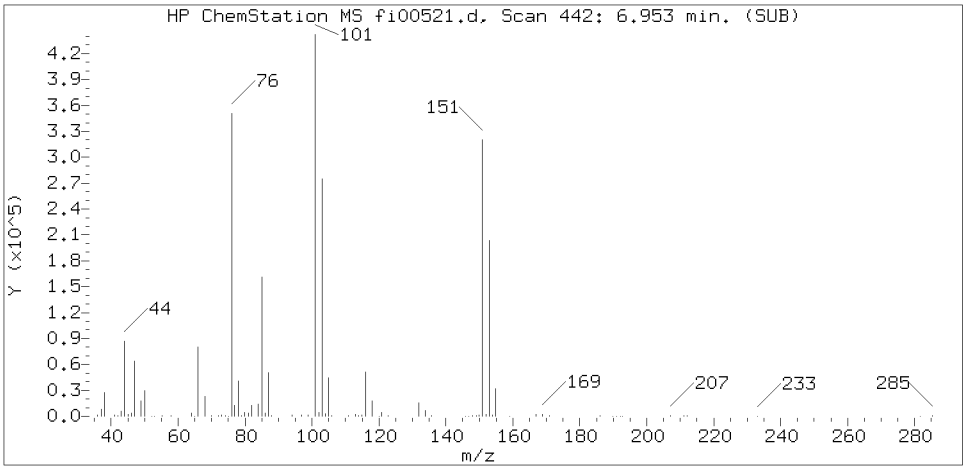
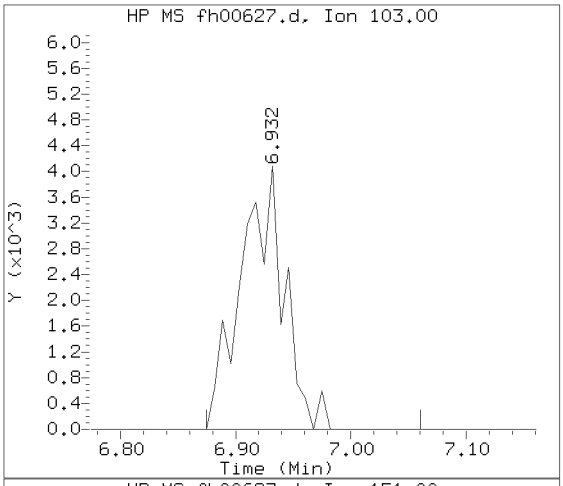
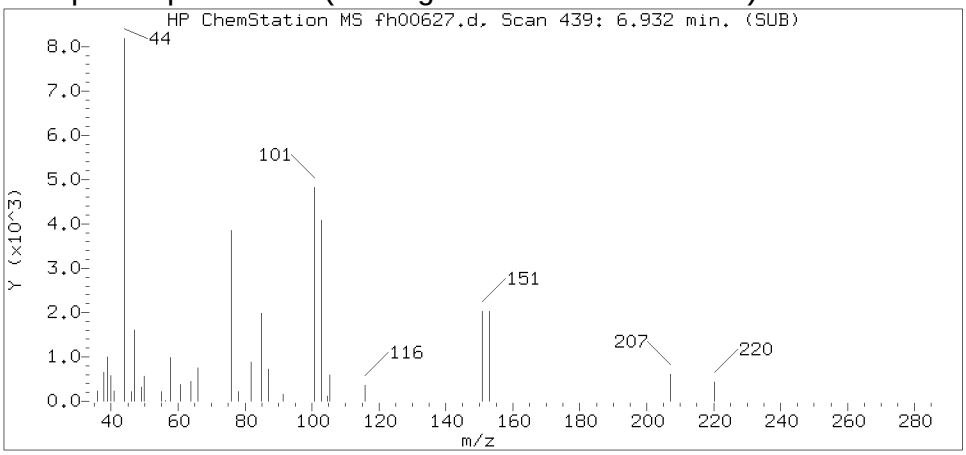
Target 3.5 esignature user ID: jeb07445

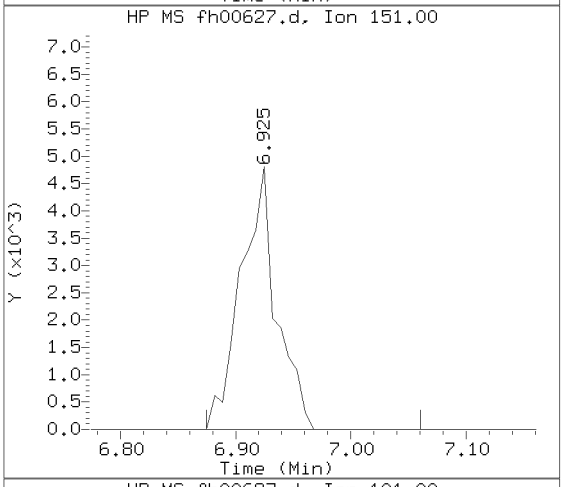
Reference Standard Spectrum for Freon 113



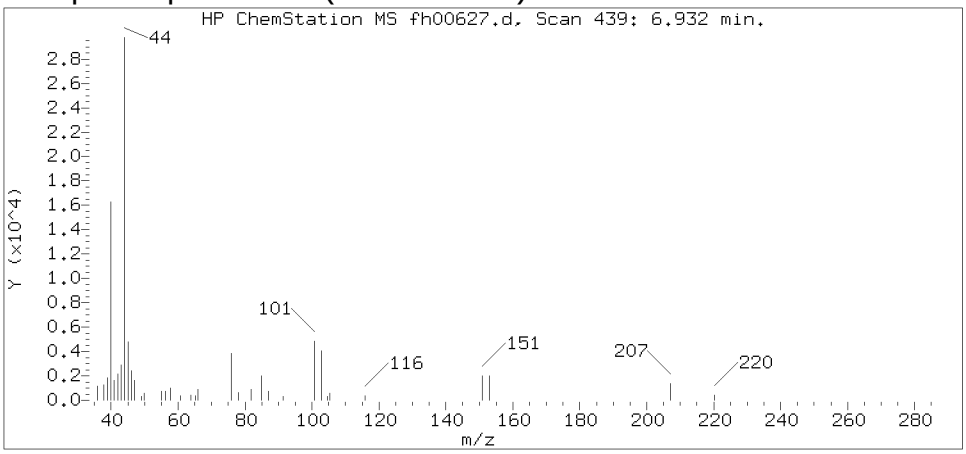


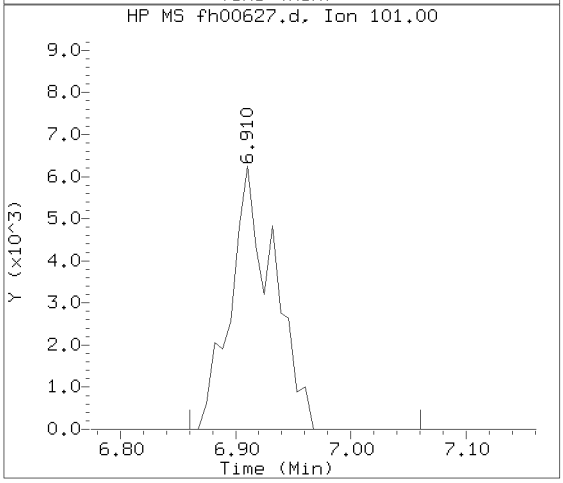
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00627.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:12 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 518-- Lab Sample ID: 9766346

Compound Number : 17
Compound Name : Freon 113
Scan Number : 439
Retention Time (minutes): 6.932
Relative Retention Time :-0.00073
Quant Ion : 103.00
Area (flag) : 10675
Concentration (ppb(v)) : 0.1465

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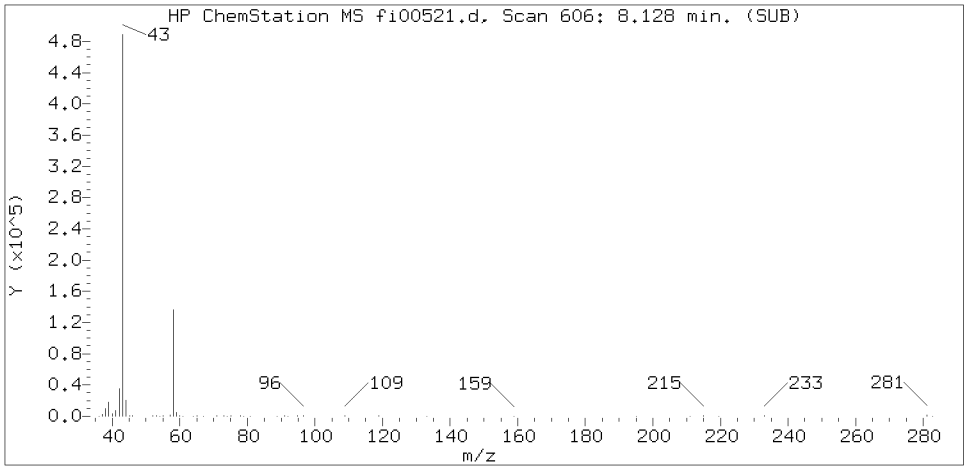
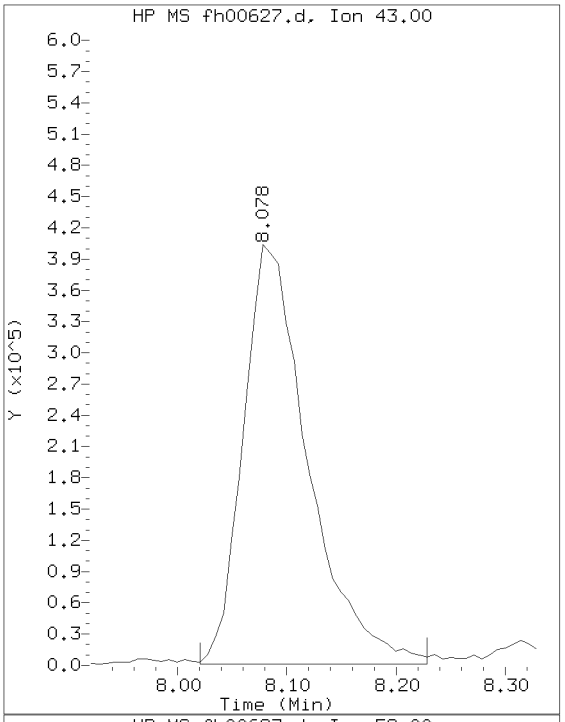
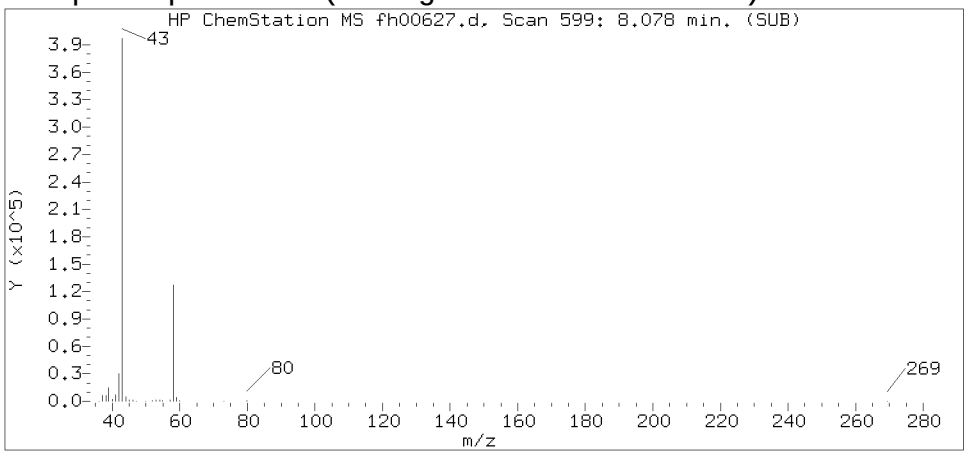
Target 3.5 esignature user ID: jeb07445

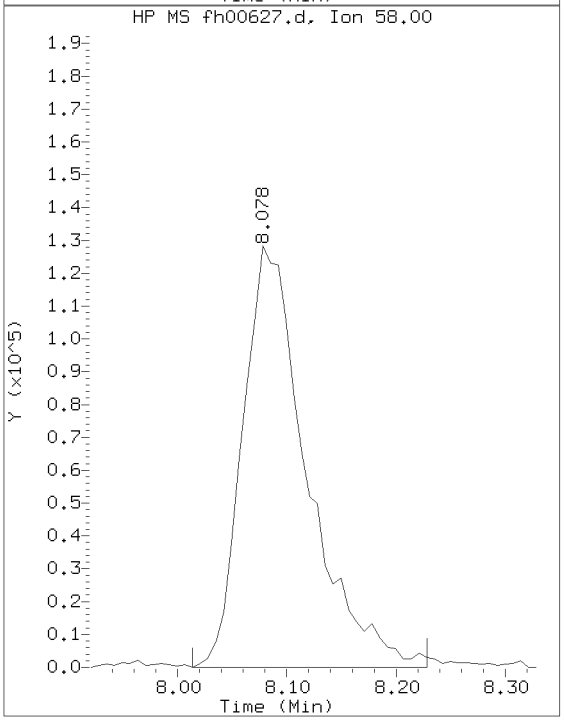
Reference Standard Spectrum for Acetone



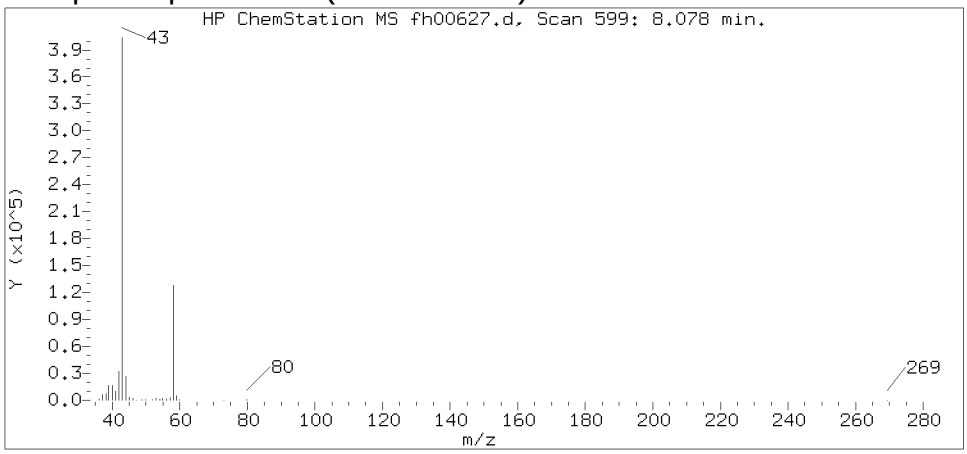


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00627.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:12 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 518-- Lab Sample ID: 9766346

Compound Number	: 24
Compound Name	: Acetone
Scan Number	: 599
Retention Time (minutes)	: 8.078
Relative Retention Time	: 0.00011
Quant Ion	: 43.00
Area (flag)	: 1663230
Concentration (ppb(v))	: 13.8750

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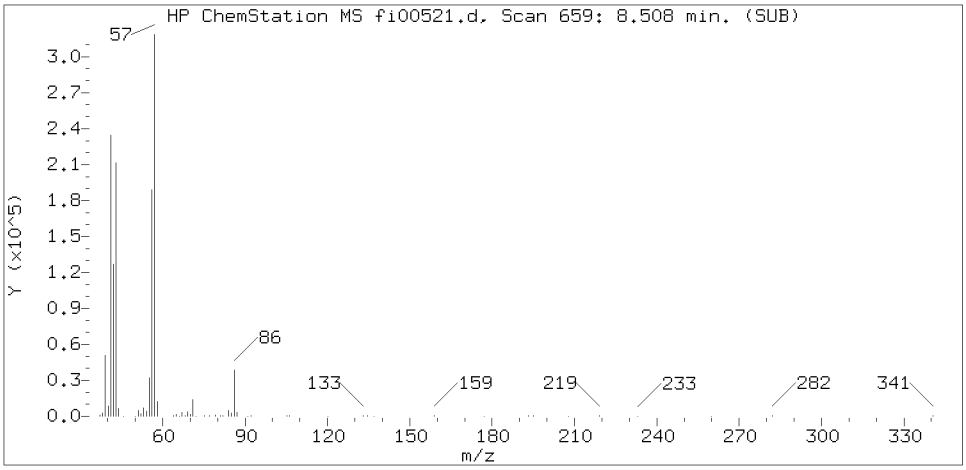
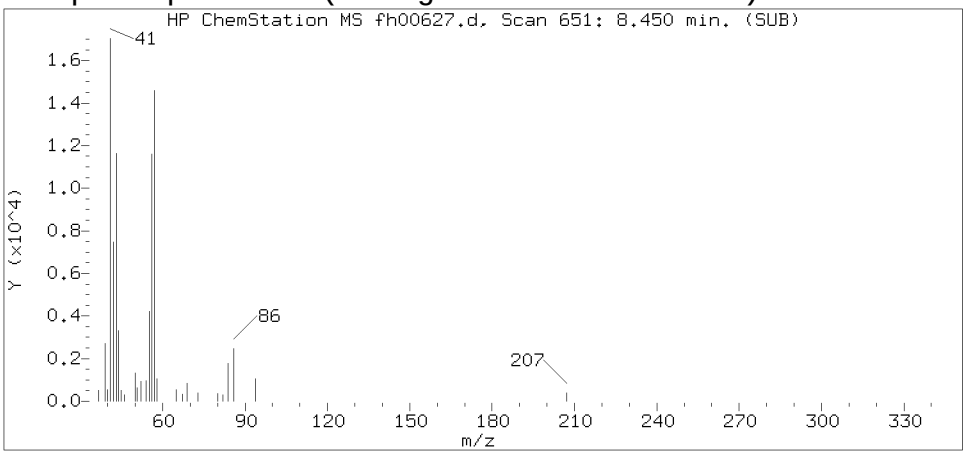
Target 3.5 esignature user ID: jeb07445

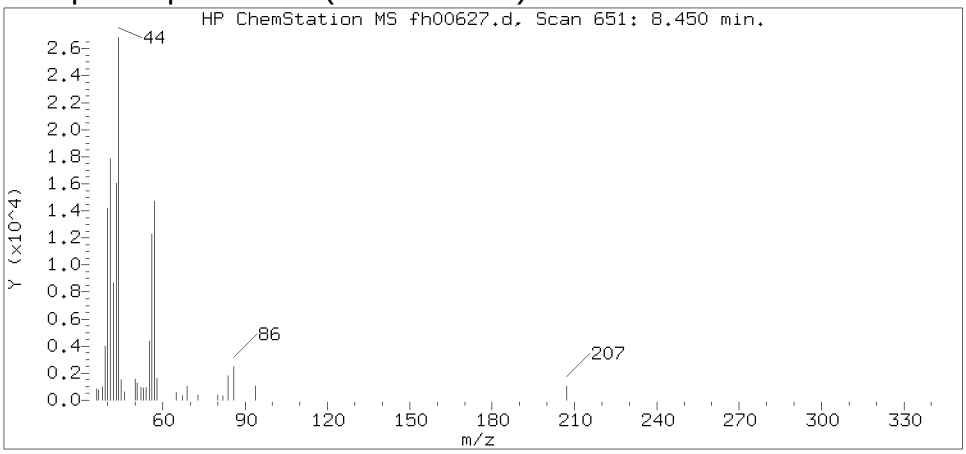
Reference Standard Spectrum for Hexane

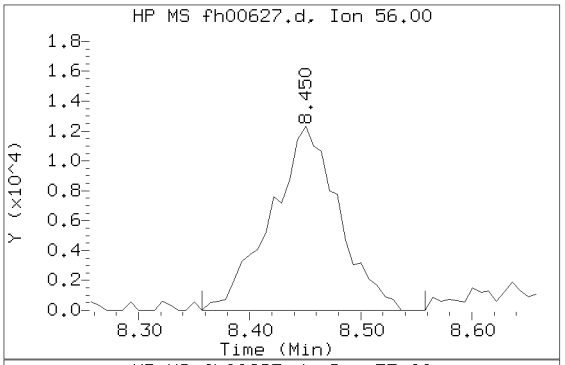


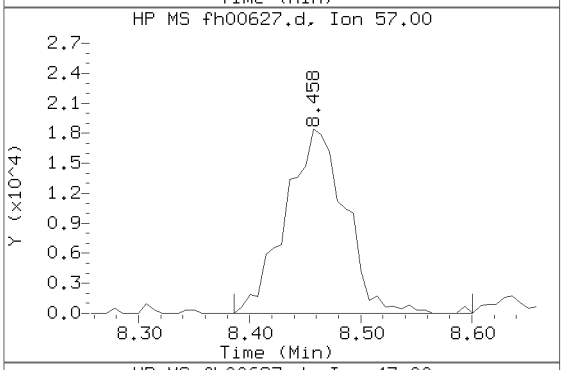
Sample Spectrum (Background Subtracted)

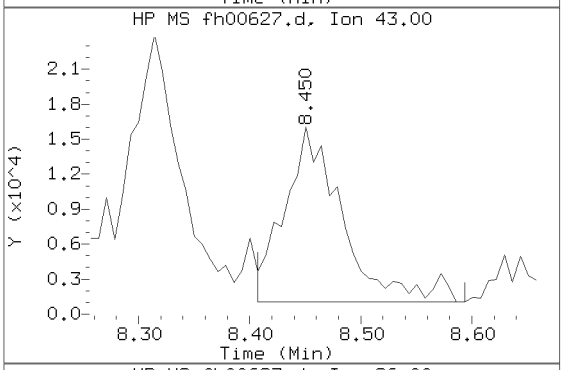


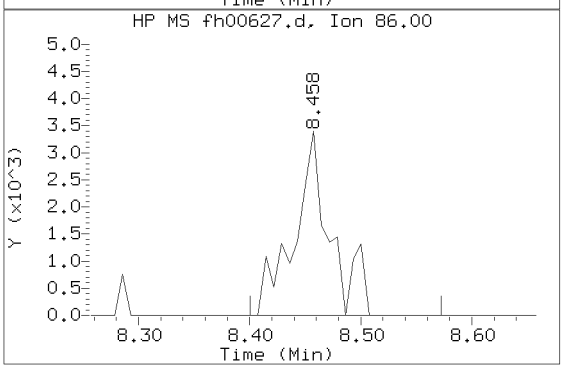
Sample Spectrum (Unaltered)











Data File: /chem/HP26379.i/18aug27.b/fh00627.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:12 Analyst ID: jeb07445

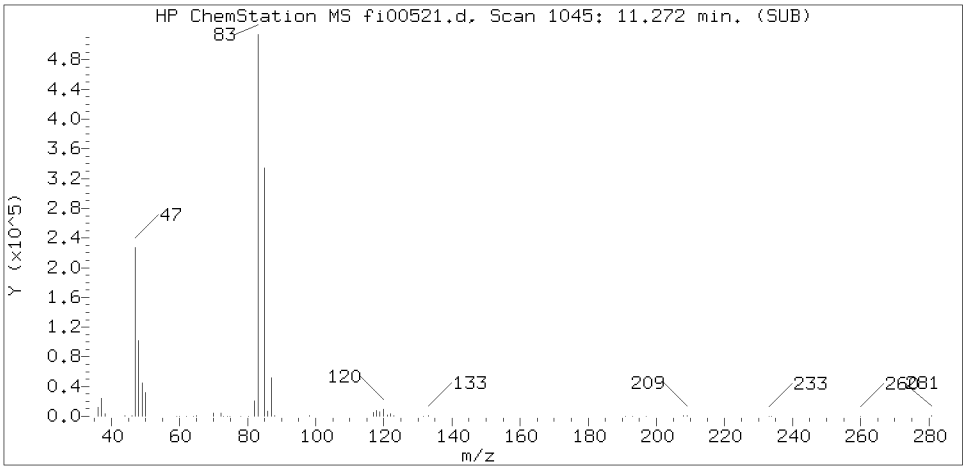
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

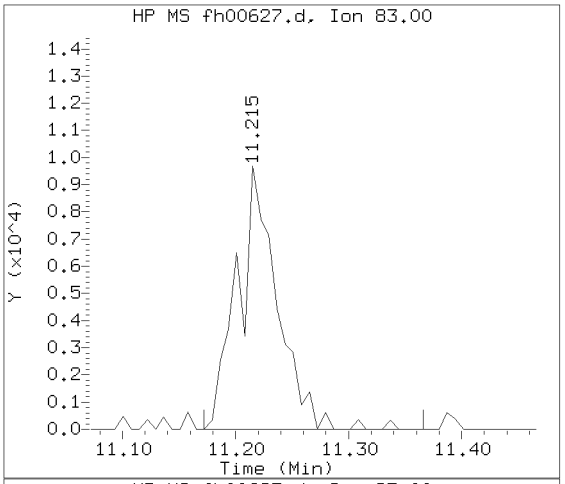
Sample Name: 518-- Lab Sample ID: 9766346

Compound Number : 26
Compound Name : Hexane
Scan Number : 651
Retention Time (minutes): 8.450
Relative Retention Time : 0.00147
Quant Ion : 56.00
Area (flag) : 52073
Concentration (ppb(v)) : 0.6027

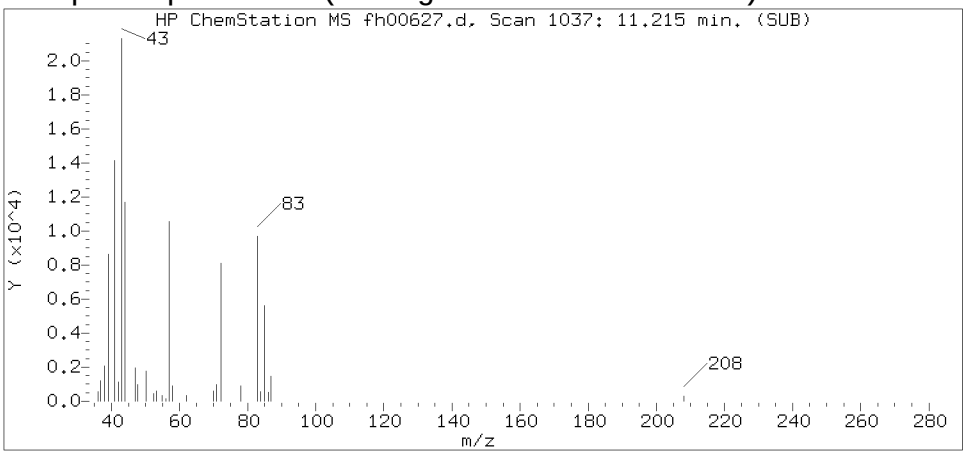
Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

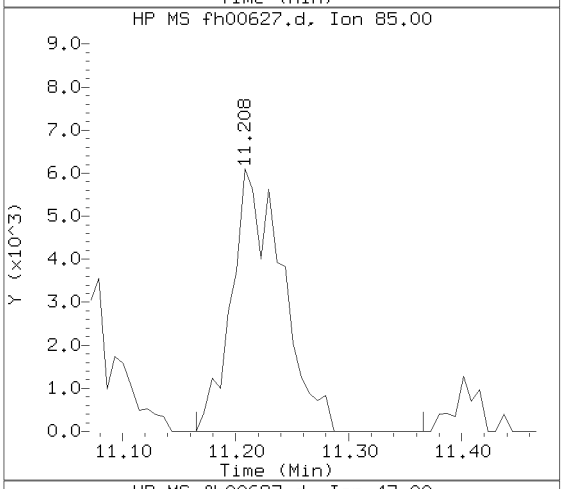
Reference Standard Spectrum for Chloroform



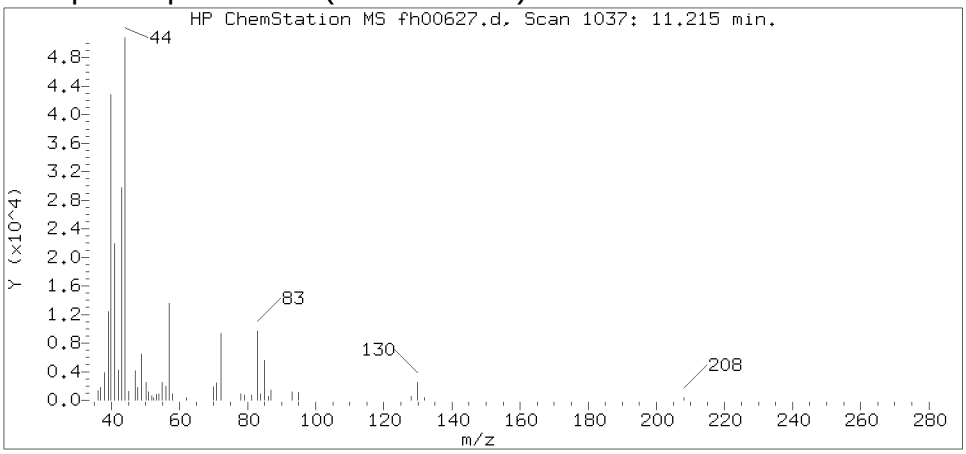


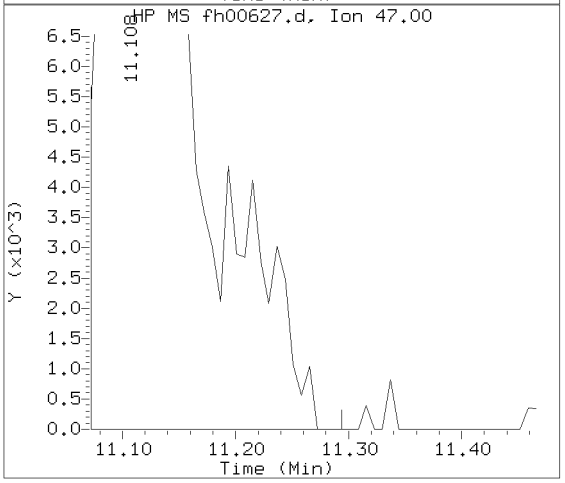
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00627.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:12 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 518-- Lab Sample ID: 9766346

Compound Number	: 39
Compound Name	: Chloroform
Scan Number	: 1037
Retention Time (minutes)	: 11.215
Relative Retention Time	: 0.00195
Quant Ion	: 83.00
Area (flag)	: 23649
Concentration (ppb(v))	: 0.2161

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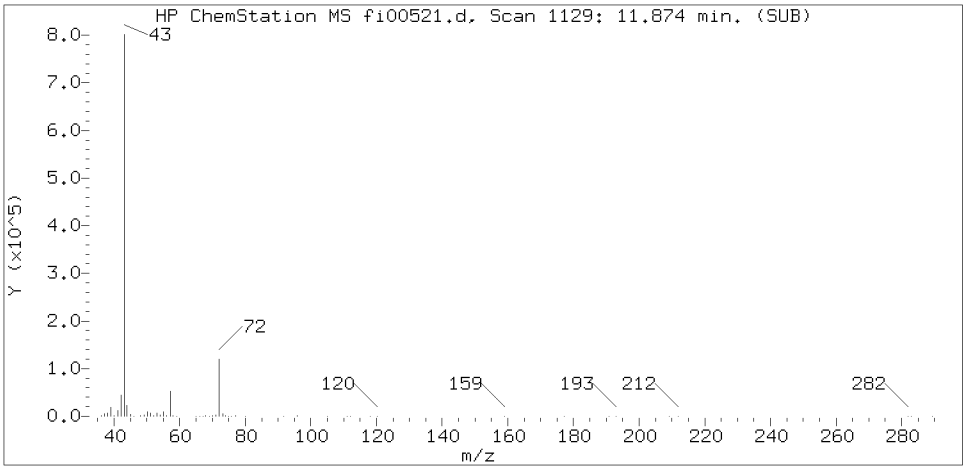
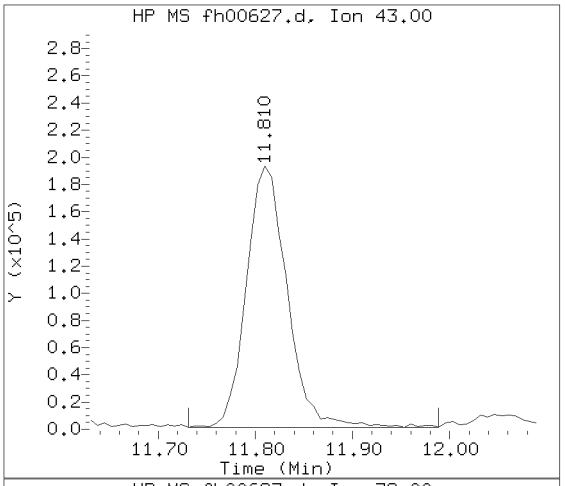
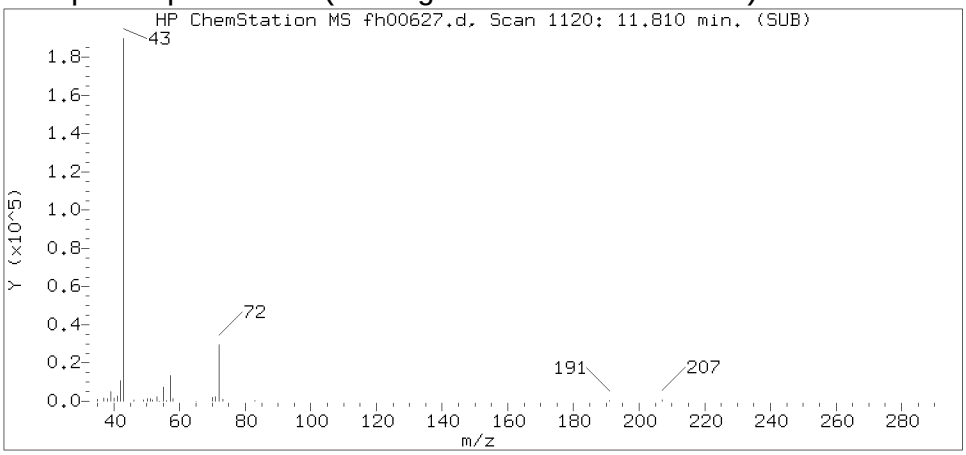
Target 3.5 esignature user ID: jeb07445

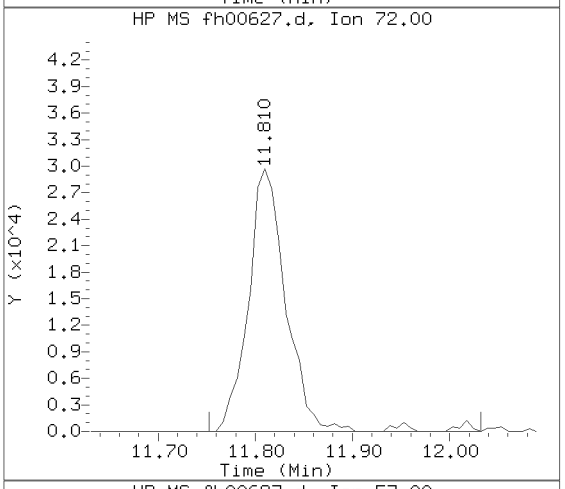
Reference Standard Spectrum for 2-Butanone



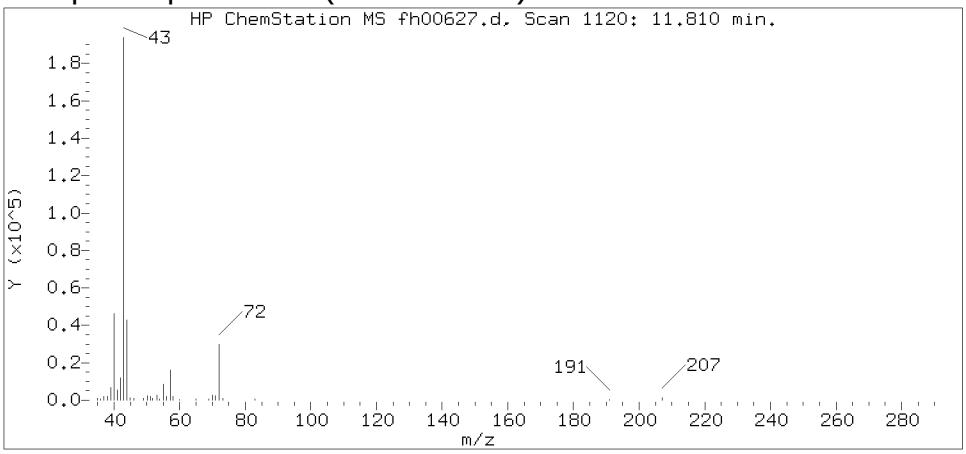


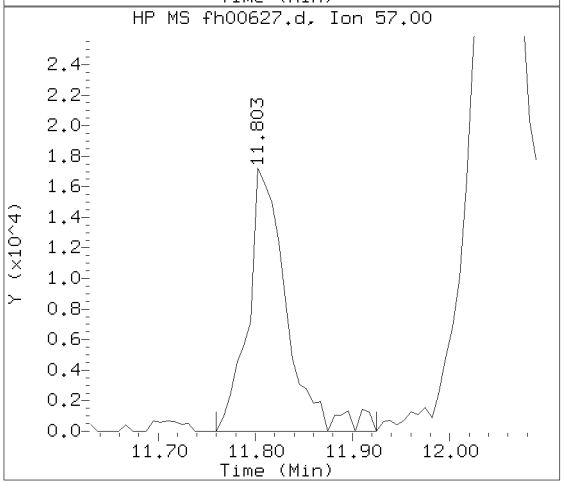
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00627.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:12 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 518-- Lab Sample ID: 9766346

Compound Number : 45
Compound Name : 2-Butanone
Scan Number : 1120
Retention Time (minutes): 11.810
Relative Retention Time : 0.00206
Quant Ion : 43.00
Area (flag) : 563682
Concentration (ppb(v)) : 3.3129

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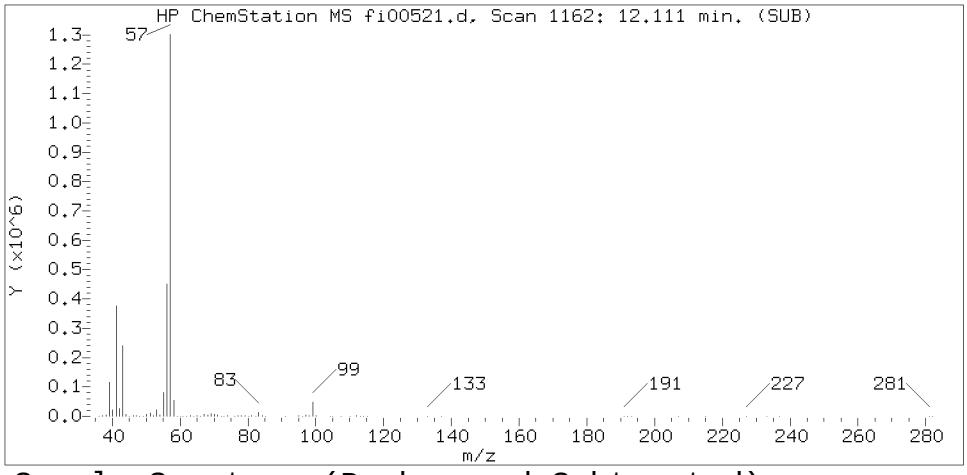
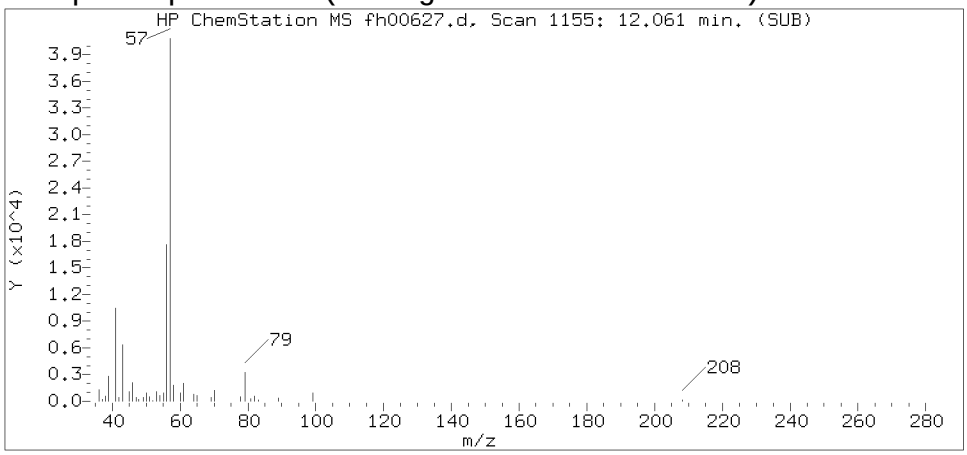
Target 3.5 esignature user ID: jeb07445

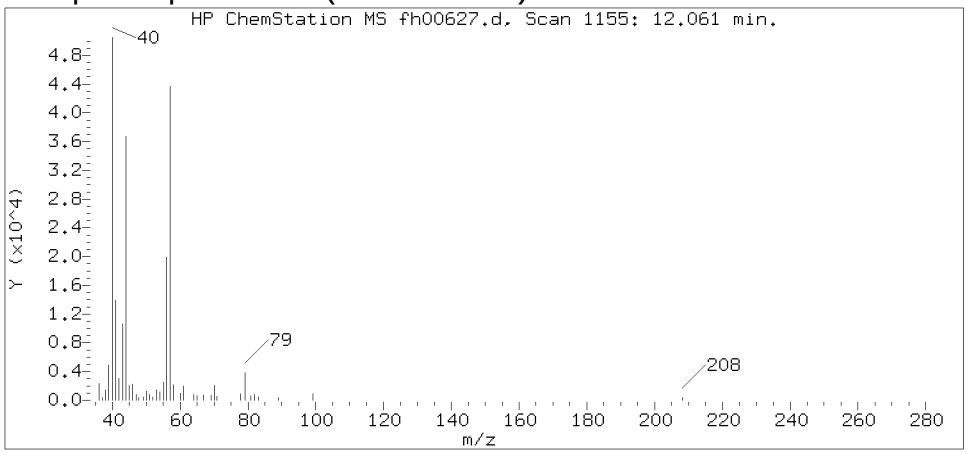
Reference Standard Spectrum for Isooctane

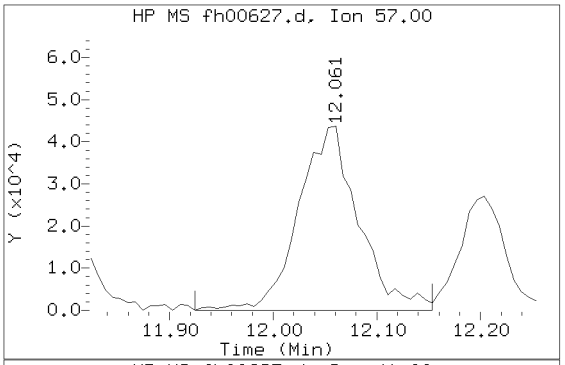


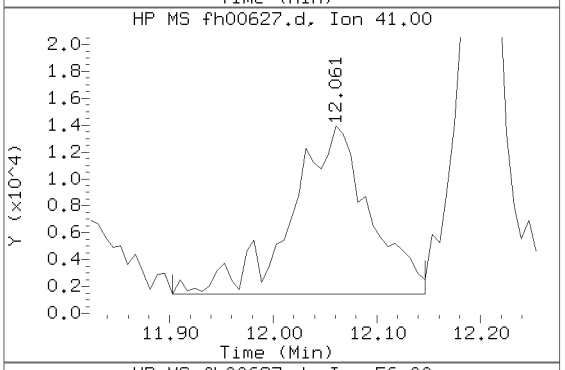
Sample Spectrum (Background Subtracted)

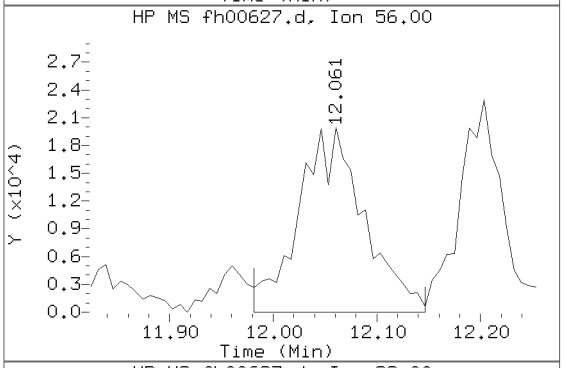


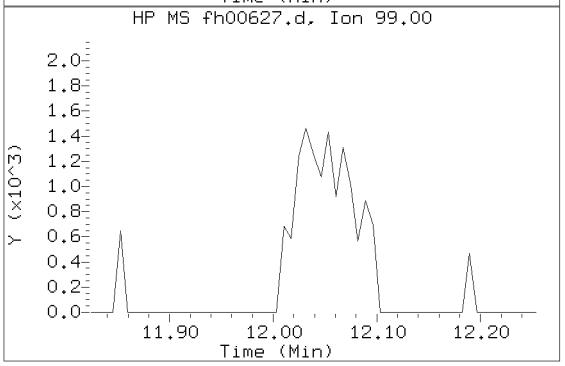
Sample Spectrum (Unaltered)











Data File: /chem/HP26379.i/18aug27.b/fh00627.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:12 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 518-- Lab Sample ID: 9766346

Compound Number : 46
Compound Name : Isooctane
Scan Number : 1155
Retention Time (minutes): 12.061
Relative Retention Time :-0.00107
Quant Ion : 57.00
Area (flag) : 175830
Concentration (ppb(v)) : 0.4490

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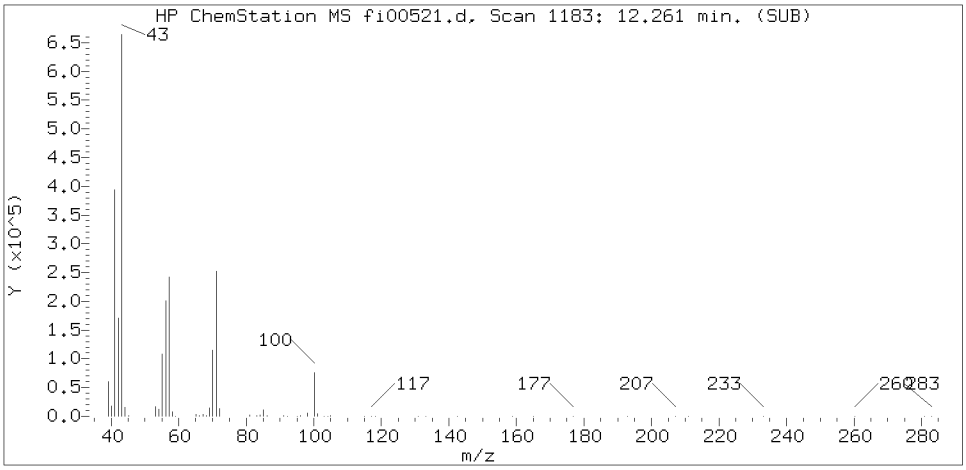
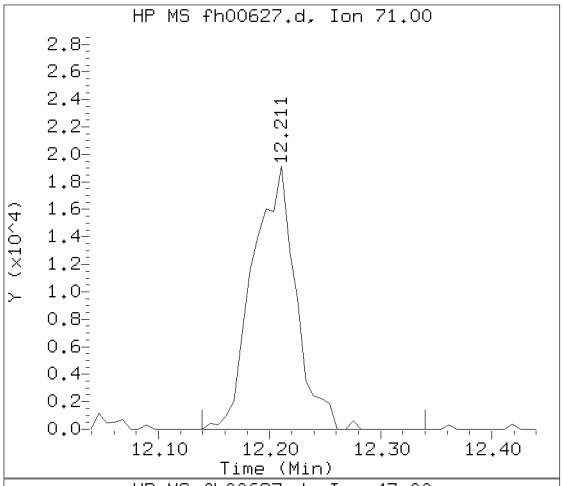
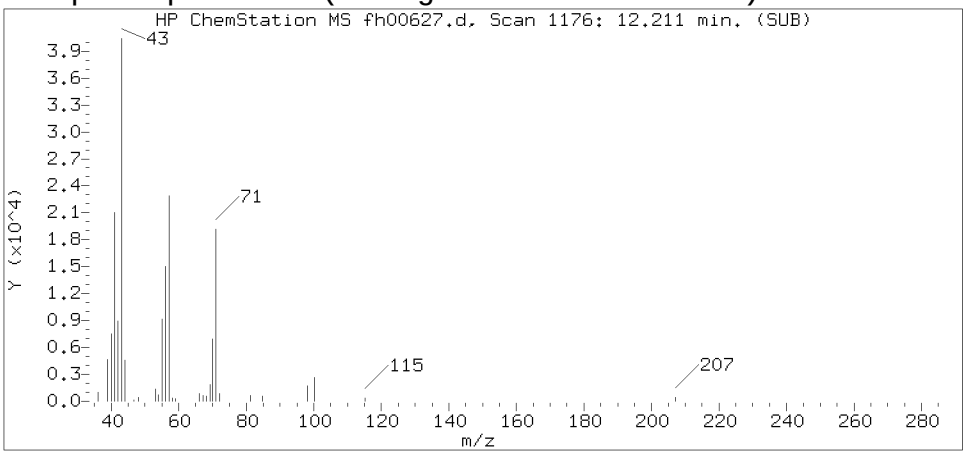
Target 3.5 esignature user ID: jeb07445

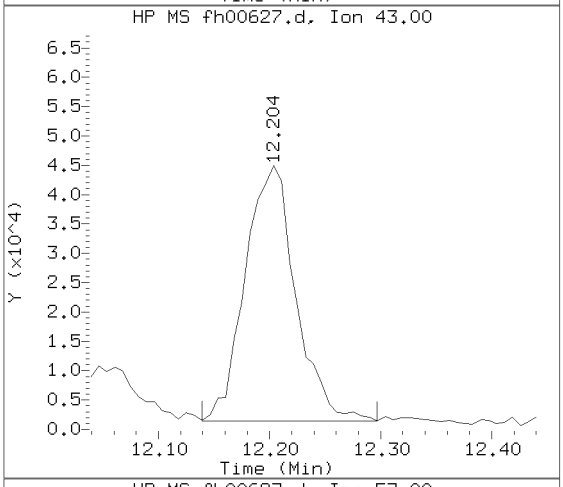
Reference Standard Spectrum for Heptane



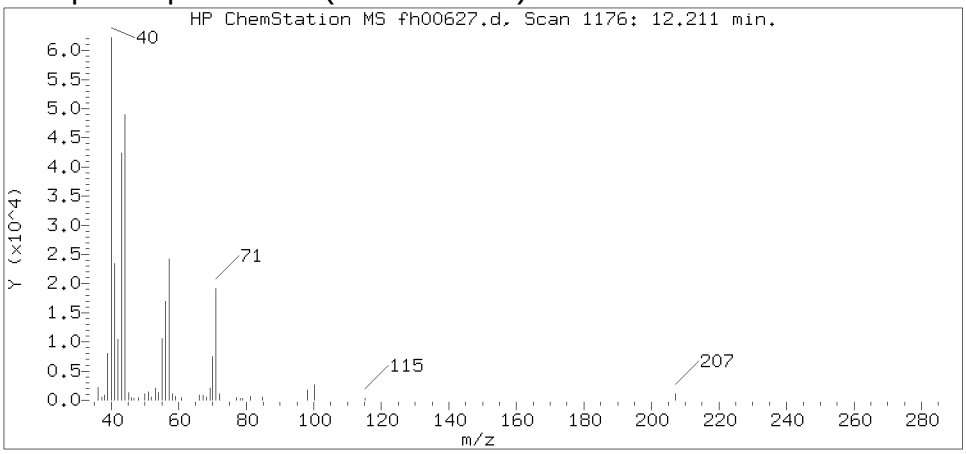


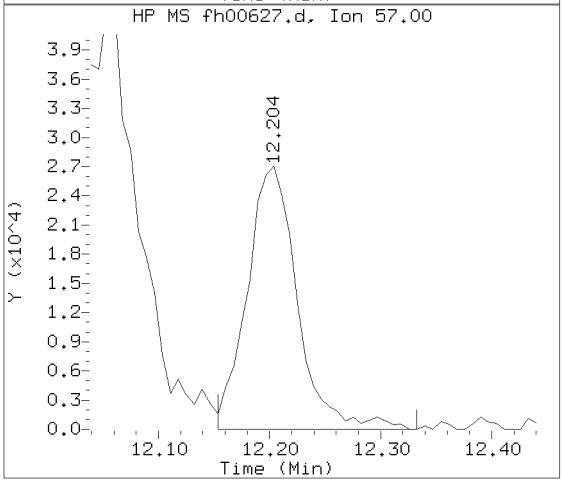
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00627.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:12 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 518-- Lab Sample ID: 9766346

Compound Number : 47
Compound Name : Heptane
Scan Number : 1176
Retention Time (minutes): 12.211
Relative Retention Time :-0.00053
Quant Ion : 71.00
Area (flag) : 51644
Concentration (ppb(v)) : 0.9161

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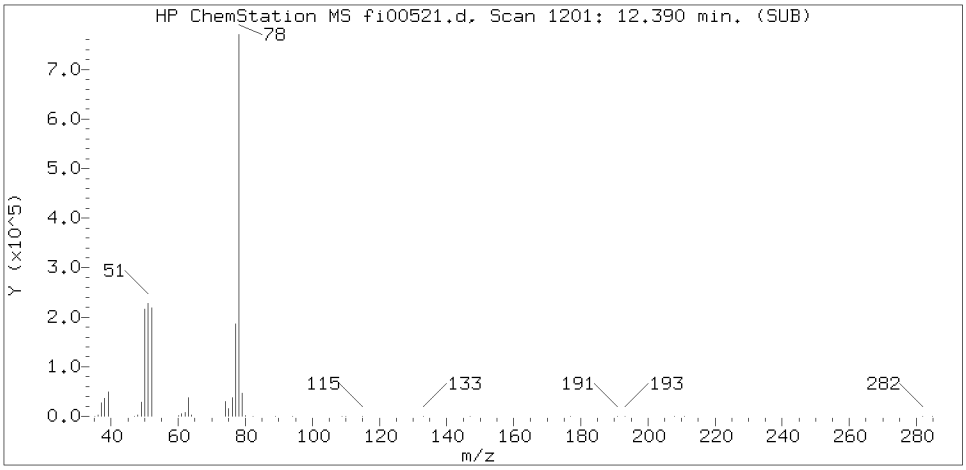
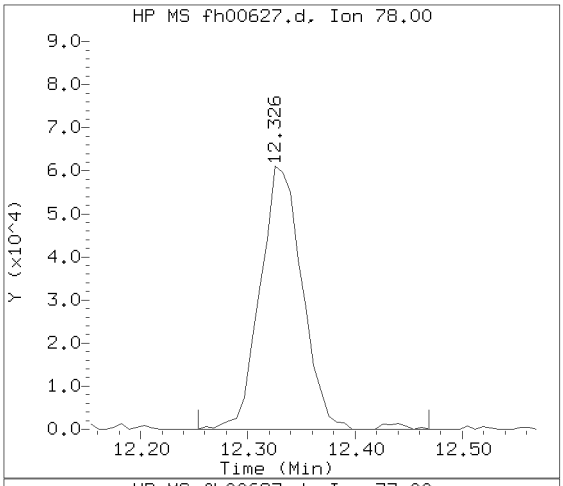
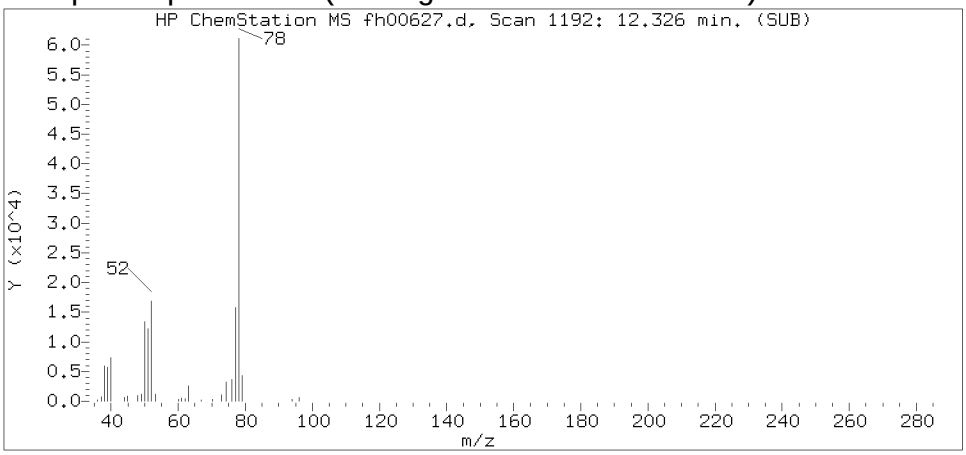
Target 3.5 esignature user ID: jeb07445

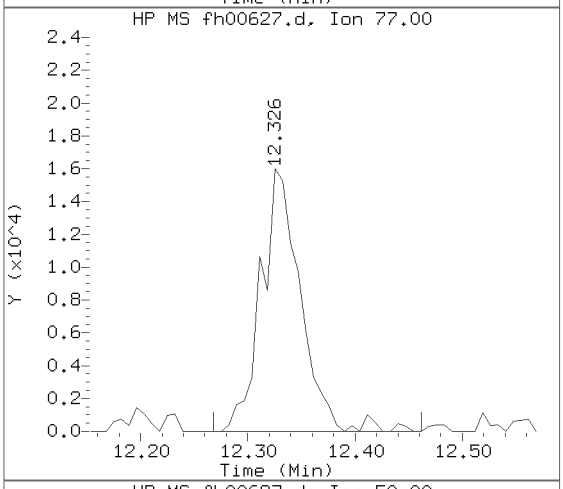
Reference Standard Spectrum for Benzene



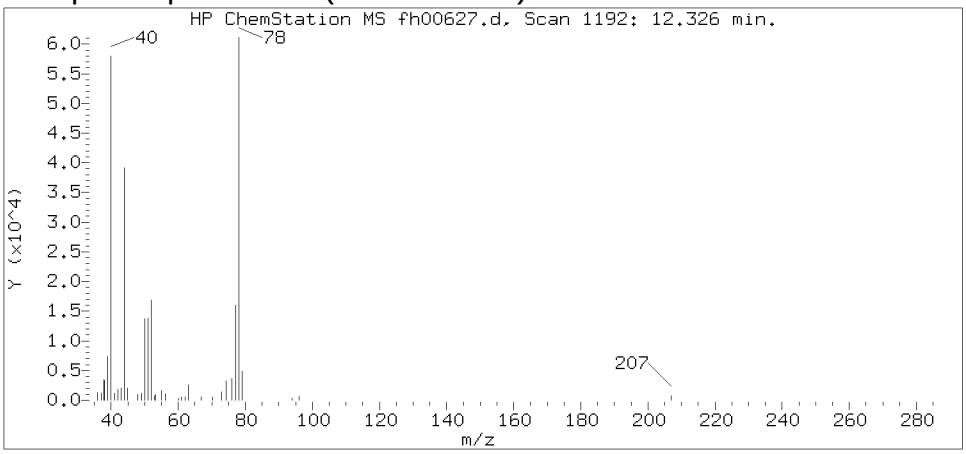


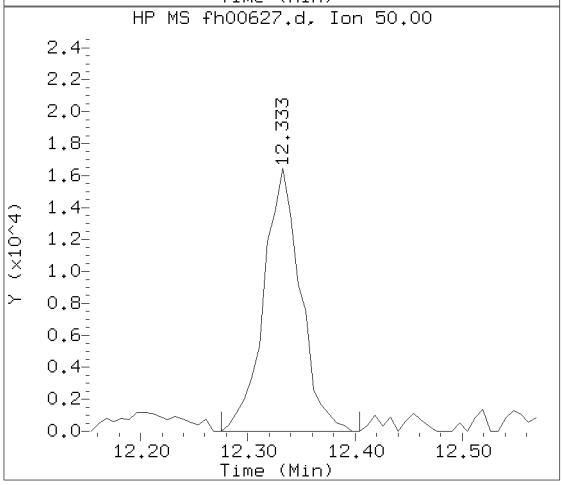
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00627.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:12 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 518-- Lab Sample ID: 9766346

Compound Number : 48
Compound Name : Benzene
Scan Number : 1192
Retention Time (minutes): 12.326
Relative Retention Time :-0.00000
Quant Ion : 78.00
Area (flag) : 167219
Concentration (ppb(v)) : 0.9592

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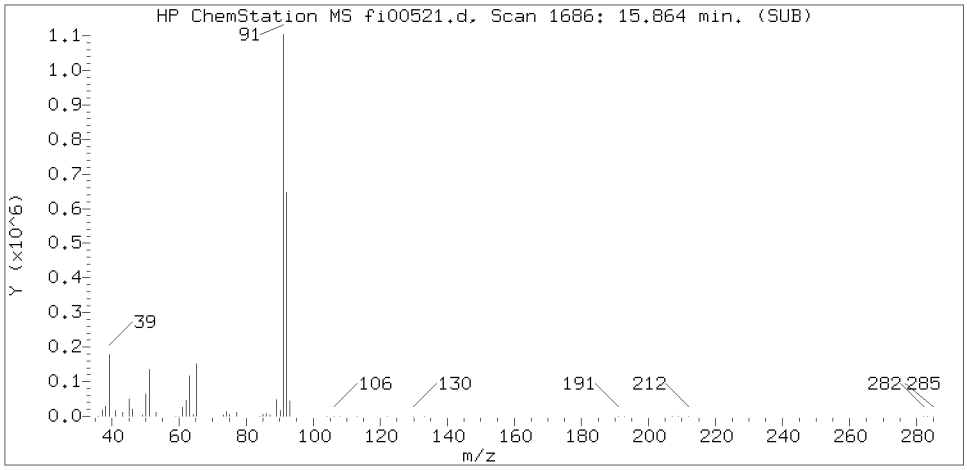
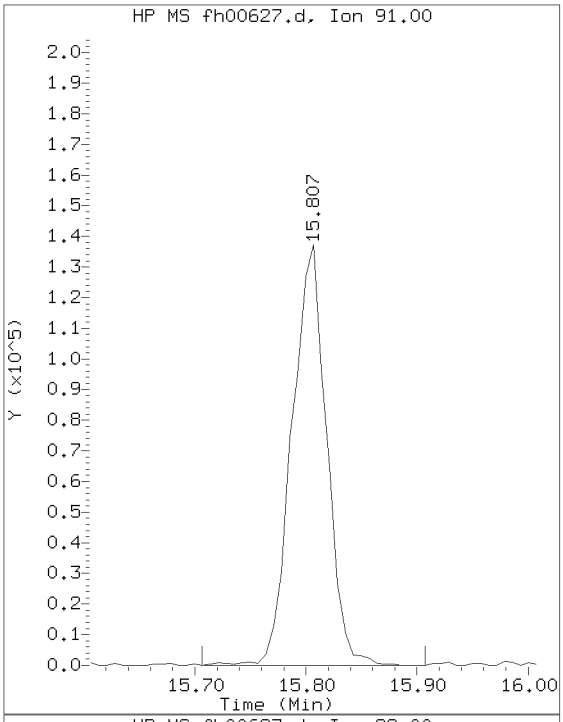
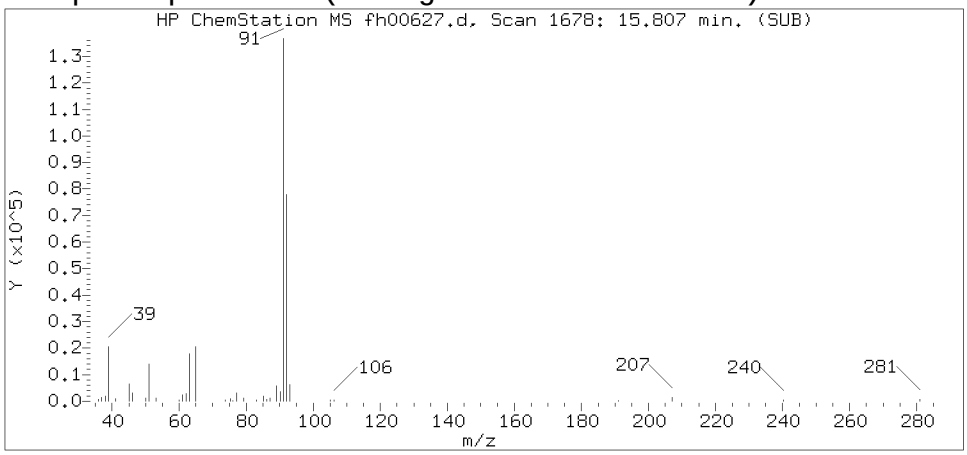
Target 3.5 esignature user ID: jeb07445

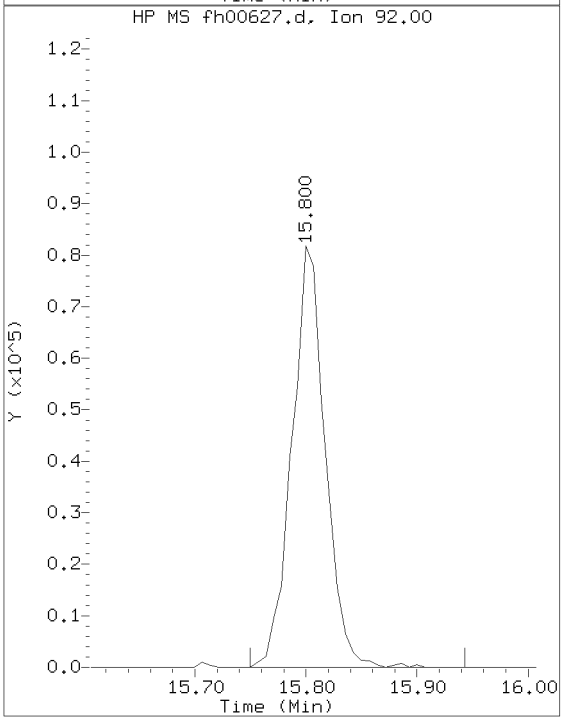
Reference Standard Spectrum for Toluene



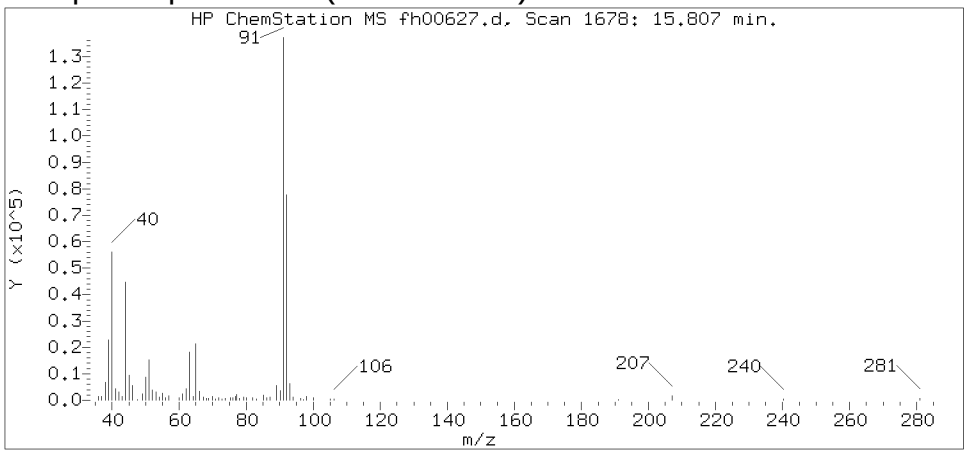


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00627.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:12 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 518-- Lab Sample ID: 9766346

Compound Number : 61
Compound Name : Toluene
Scan Number : 1678
Retention Time (minutes): 15.807
Relative Retention Time :-0.00073
Quant Ion : 91.00
Area (flag) : 298691
Concentration (ppb(v)) : 1.5518

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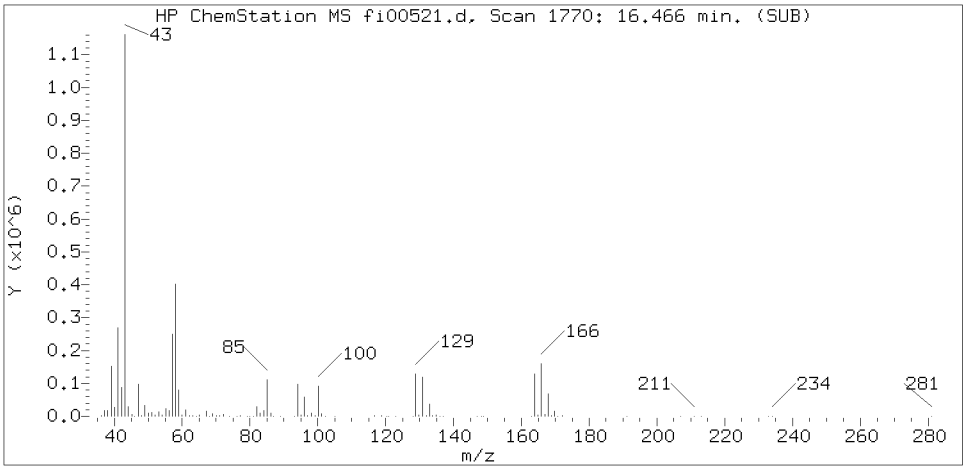
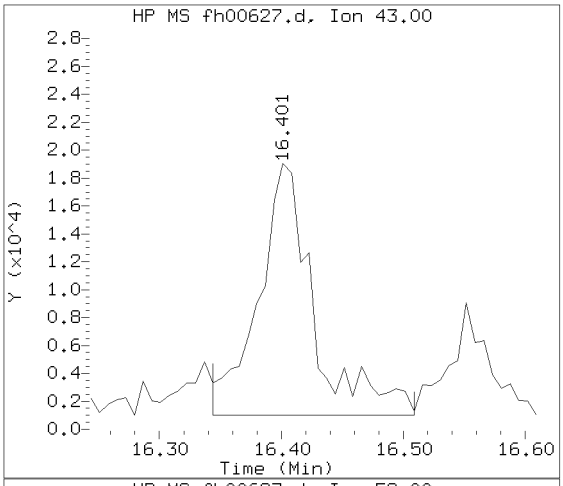
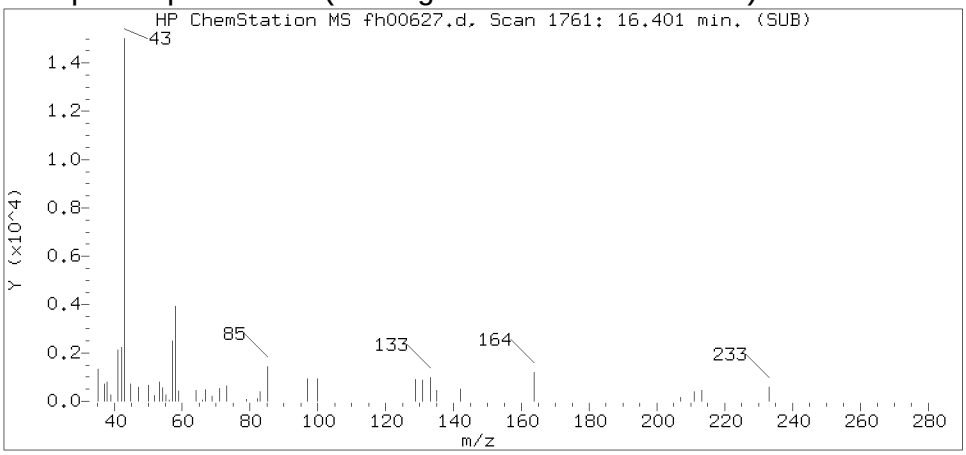
Target 3.5 esignature user ID: jeb07445

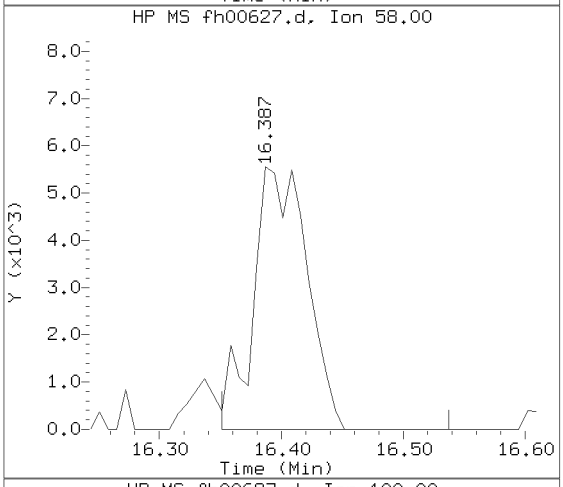
Reference Standard Spectrum for 4-Methyl-2-Pentanone



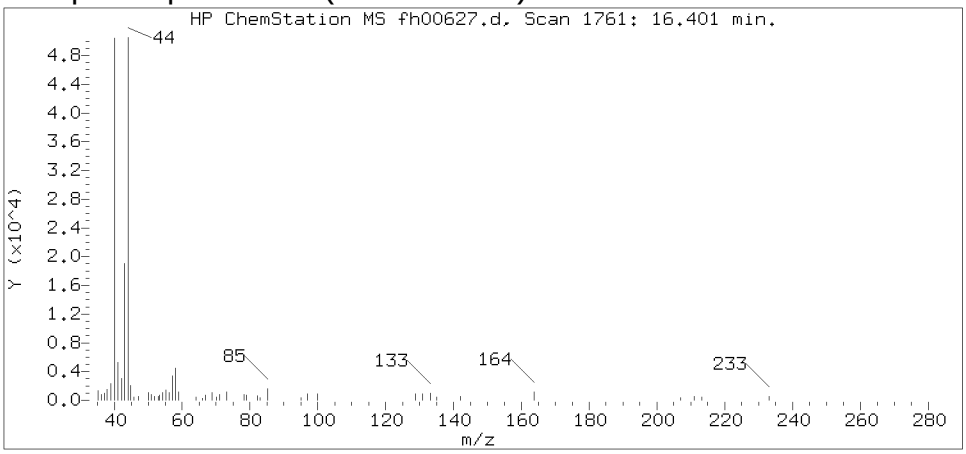


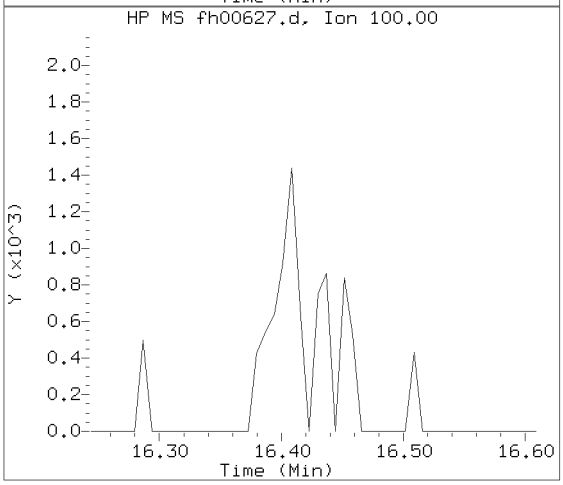
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00627.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:12 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 518-- Lab Sample ID: 9766346

Compound Number : 62
Compound Name : 4-Methyl-2-Pentanone
Scan Number : 1761
Retention Time (minutes): 16.401
Relative Retention Time : 0.00000
Quant Ion : 43.00
Area (flag) : 56614
Concentration (ppb(v)) : 0.2500

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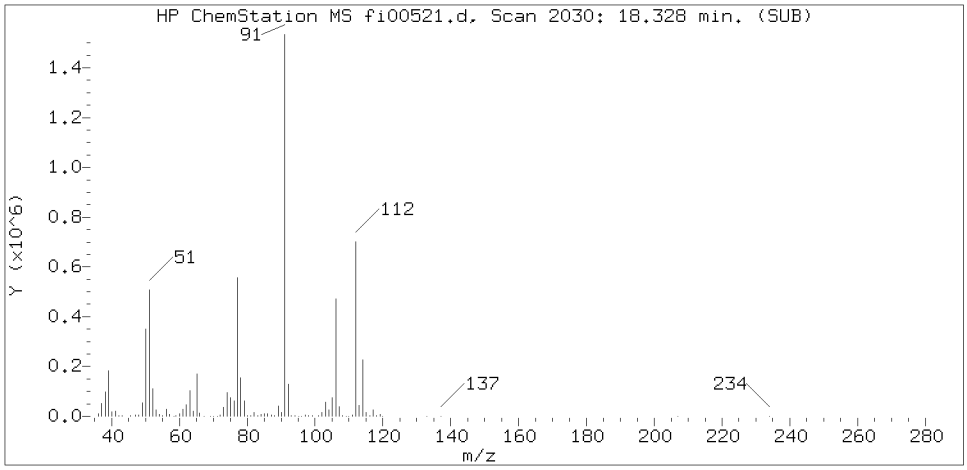
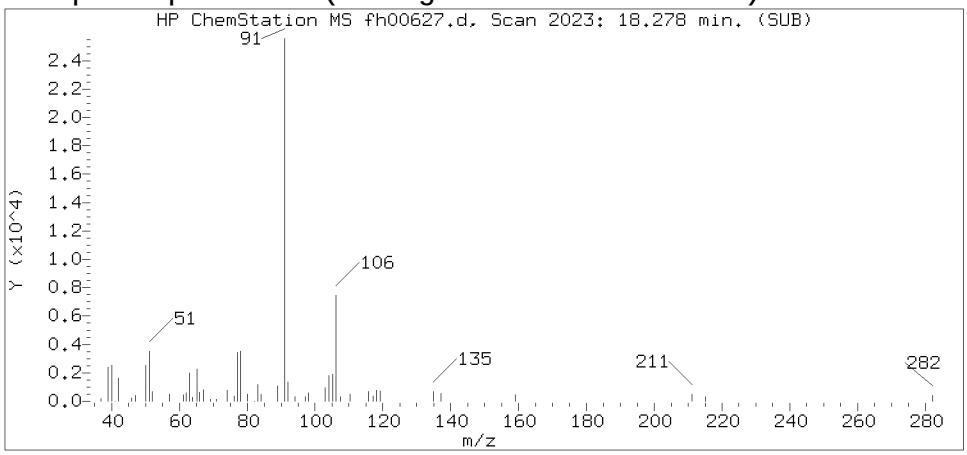
Target 3.5 esignature user ID: jeb07445

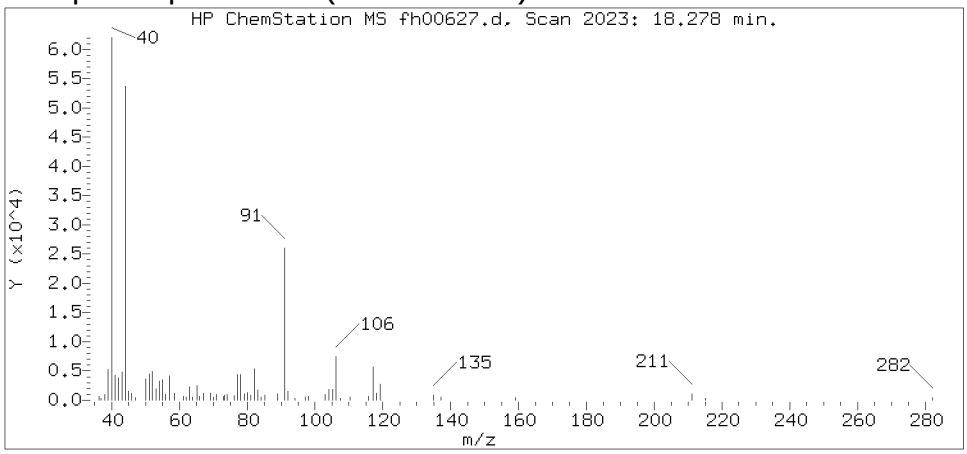
Reference Standard Spectrum for Ethylbenzene

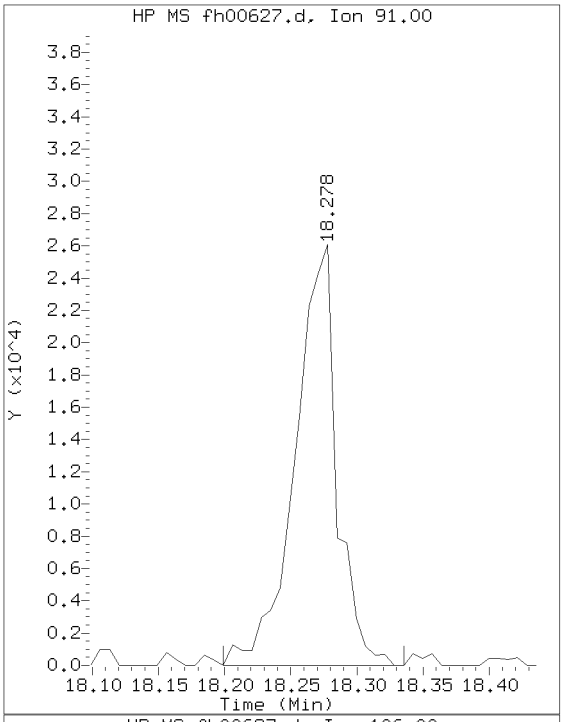


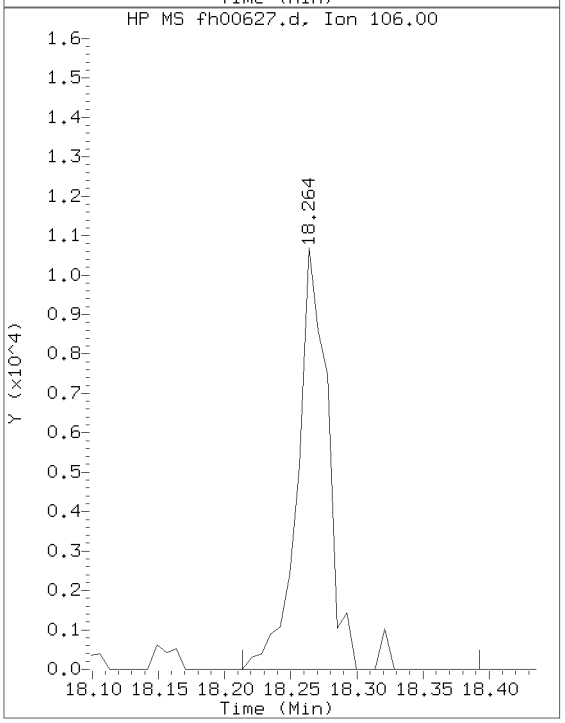
Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)







Data File: /chem/HP26379.i/18aug27.b/fh00627.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:12 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 518-- Lab Sample ID: 9766346

Compound Number : 73
Compound Name : Ethylbenzene
Scan Number : 2023
Retention Time (minutes): 18.278
Relative Retention Time :-0.00079
Quant Ion : 91.00
Area (flag) : 57243
Concentration (ppb(v)) : 0.2179

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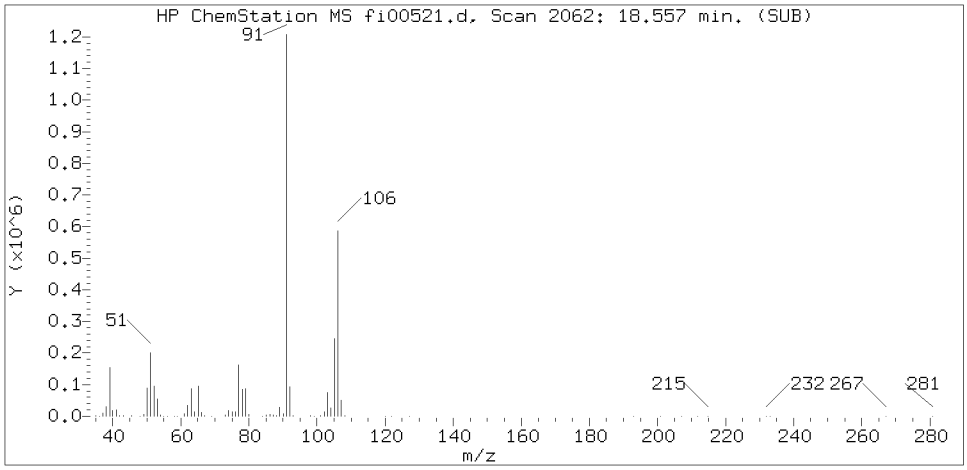
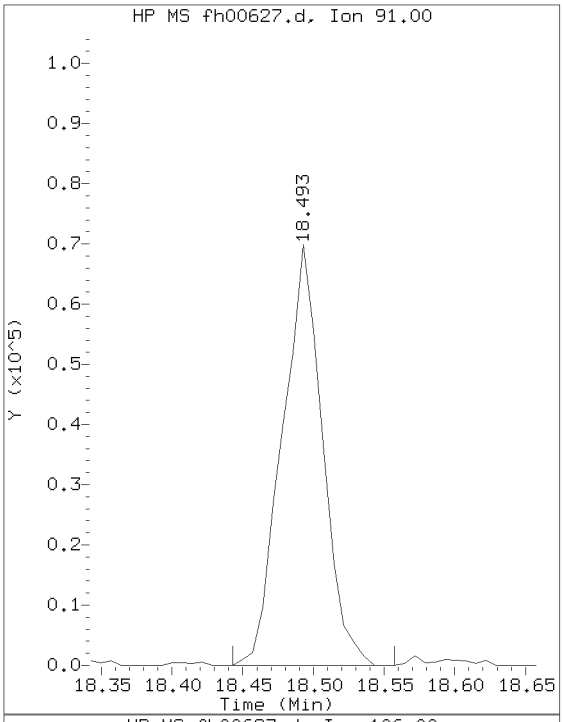
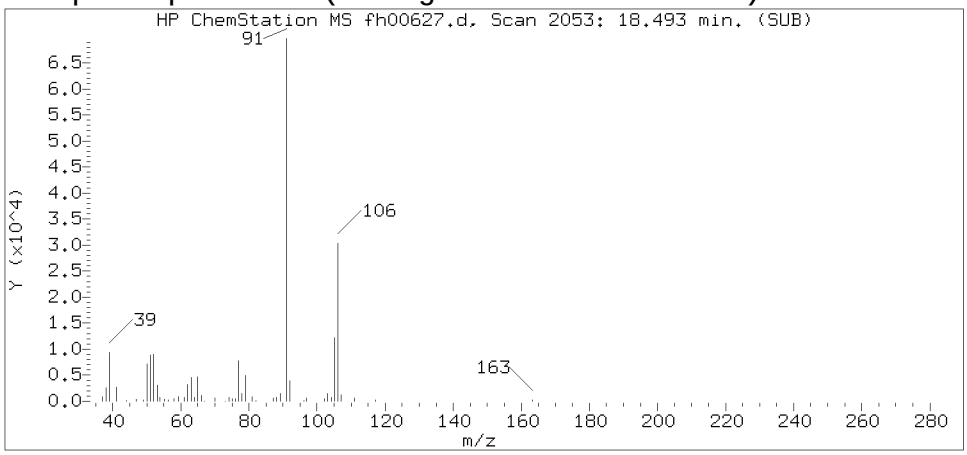
Target 3.5 esignature user ID: jeb07445

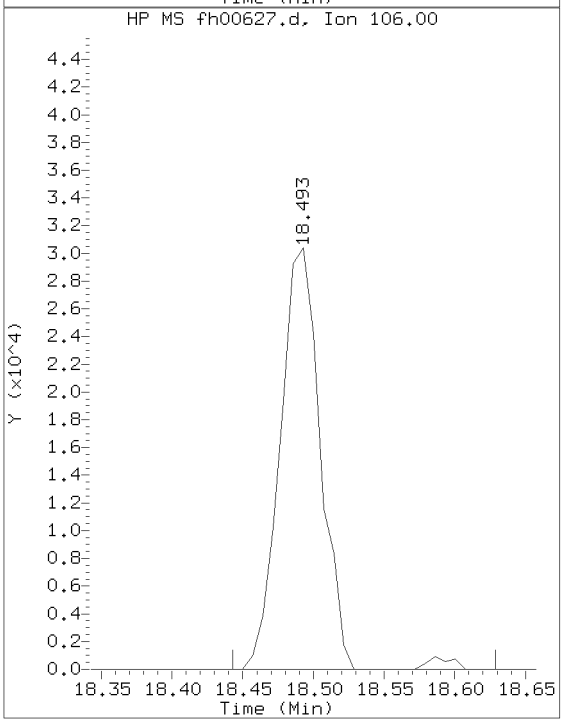
Reference Standard Spectrum for m/p-Xylene



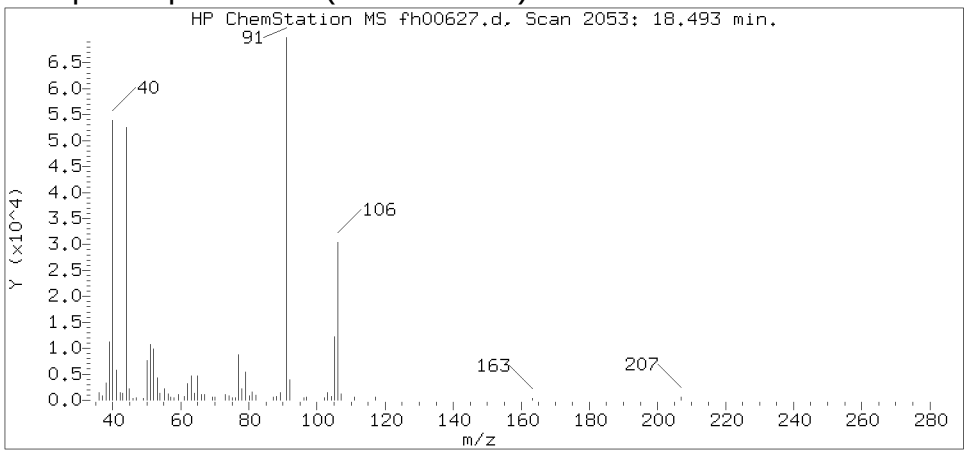


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00627.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:12 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 518-- Lab Sample ID: 9766346

Compound Number : 75
Compound Name : m/p-Xylene
Scan Number : 2053
Retention Time (minutes): 18.493
Relative Retention Time :-0.00040
Quant Ion : 91.00
Area (flag) : 138384
Concentration (ppb(v)) : 0.7329

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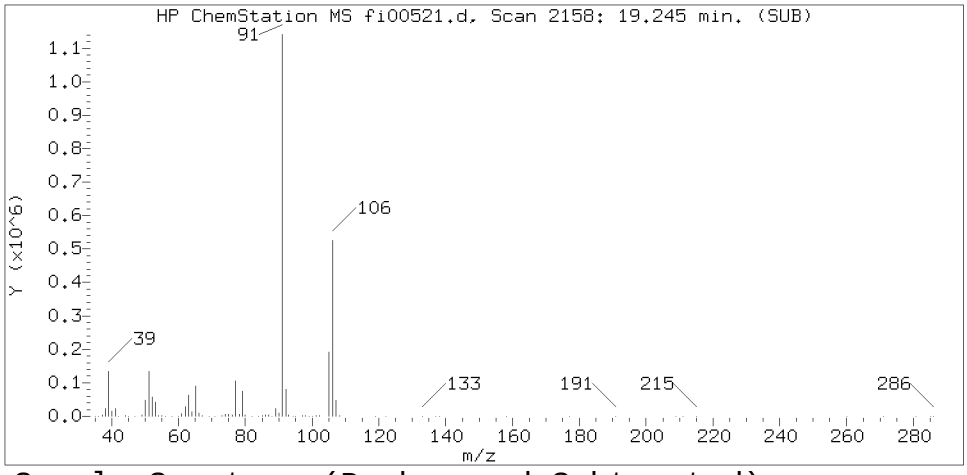
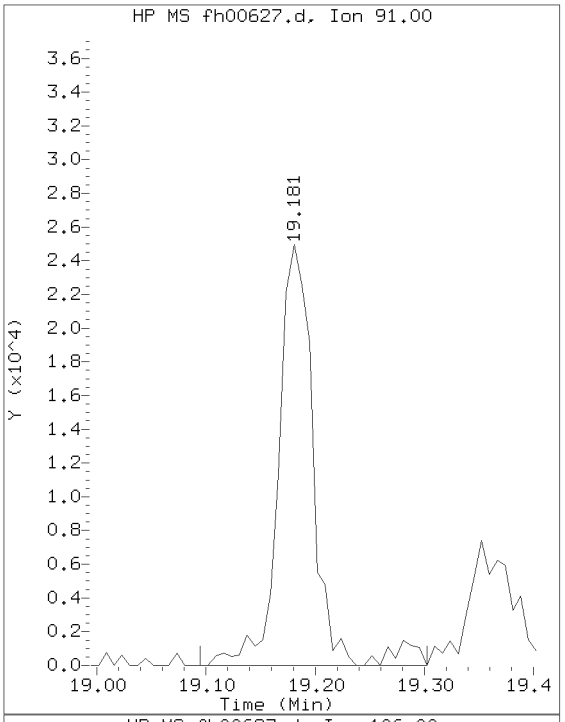
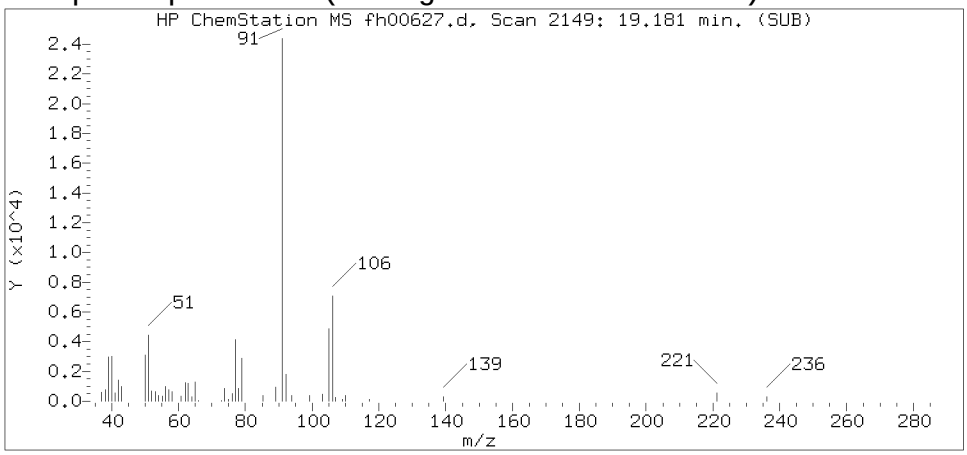
Target 3.5 esignature user ID: jeb07445

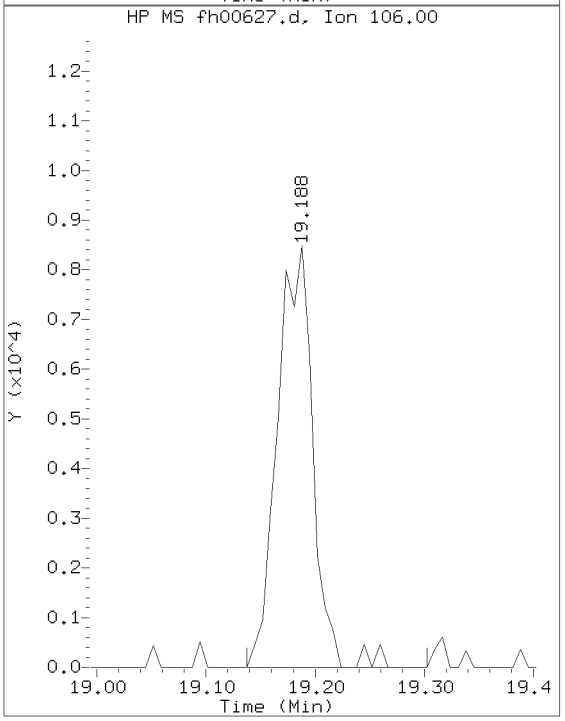
Reference Standard Spectrum for o-Xylene



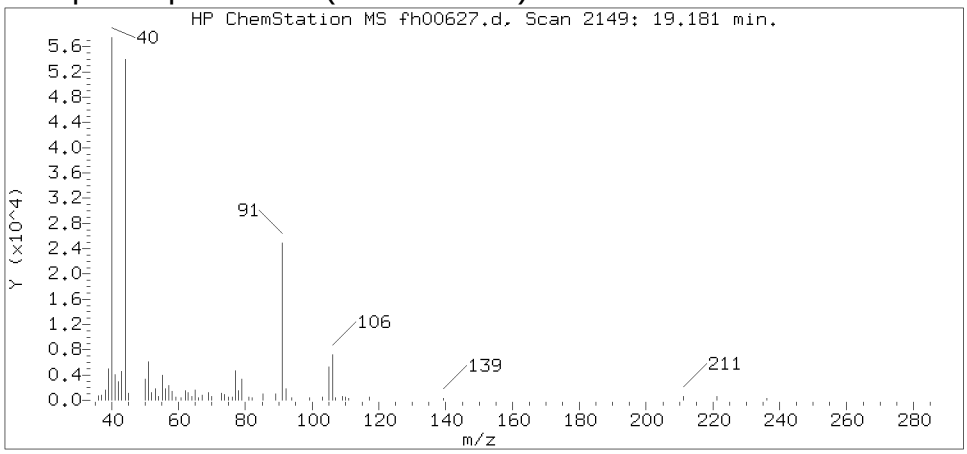


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00627.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:12 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 518-- Lab Sample ID: 9766346

Compound Number : 76
Compound Name : o-Xylene
Scan Number : 2149
Retention Time (minutes): 19.181
Relative Retention Time :-0.00002
Quant Ion : 91.00
Area (flag) : 55957
Concentration (ppb(v)) : 0.3041

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Target 3.5 esignature user ID: jeb07445

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766347
Canister ID:	525	Lab File ID:	fh00628.d
Pressure Received:	13.7 psia	Date Collected:	08/18/2018
Final Pressure:	27.4 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	17:43
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	3.0	J
75-45-6	Chlorodifluoromethane	0.53	U
76-14-2	Freon 114	0.84	U
74-87-3	Chloromethane	0.79	J
75-01-4	Vinyl Chloride	0.31	U
106-99-0	1,3-Butadiene	0.38	U
74-83-9	Bromomethane	0.70	U
75-00-3	Chloroethane	0.50	U
75-43-4	Dichlorofluoromethane	0.46	U
75-69-4	Trichlorofluoromethane	2.1	J
109-66-0	Pentane	5.3	
75-35-4	1,1-Dichloroethene	0.56	U
76-13-1	Freon 113	1.2	J
67-64-1	Acetone	30	
75-15-0	Carbon Disulfide	0.40	U
107-05-1	3-Chloropropene	0.47	U
75-09-2	Methylene Chloride	0.87	U
156-60-5	trans-1,2-Dichloroethene	0.34	U
1634-04-4	Methyl t-Butyl Ether	0.54	U
110-54-3	Hexane	2.6	J
75-34-3	1,1-Dichloroethane	0.36	U
156-59-2	cis-1,2-Dichloroethene	0.48	U
78-93-3	2-Butanone	9.0	
67-66-3	Chloroform	0.45	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766347
Canister ID:	525	Lab File ID:	fh00628.d
Pressure Received:	13.7 psia	Date Collected:	08/18/2018
Final Pressure:	27.4 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	17:43
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
71-55-6	1,1,1-Trichloroethane	0.65	U
56-23-5	Carbon Tetrachloride	0.88	U
71-43-2	Benzene	1.2	J
107-06-2	1,2-Dichloroethane	0.32	U
540-84-1	Isooctane	2.1	J
142-82-5	Heptane	2.1	J
79-01-6	Trichloroethene	0.97	U
78-87-5	1,2-Dichloropropane	0.60	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	0.80	U
10061-01-5	cis-1,3-Dichloropropene	0.45	U
108-10-1	4-Methyl-2-Pentanone	0.61	U
108-88-3	Toluene	6.5	
111-65-9	Octane	1.9	U
10061-02-6	trans-1,3-Dichloropropene	0.54	U
79-00-5	1,1,2-Trichloroethane	0.65	U
127-18-4	Tetrachloroethene	1.7	U
591-78-6	2-Hexanone	0.74	U
124-48-1	Dibromochloromethane	1.1	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	0.60	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.1	J
179601-23-1	m/p-Xylene	3.6	J

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766347
Canister ID:	525	Lab File ID:	fh00628.d
Pressure Received:	13.7 psia	Date Collected:	08/18/2018
Final Pressure:	27.4 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	17:43
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
95-47-6	o-Xylene	1.2	J
100-42-5	Styrene	0.85	U
75-25-2	Bromoform	1.8	U
98-82-8	Cumene	1.2	U
108-86-1	Bromobenzene	0.64	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	0.84	U
622-96-8	4-Ethyltoluene	0.88	U
108-67-8	1,3,5-Trimethylbenzene	1.6	U
95-63-6	1,2,4-Trimethylbenzene	1.4	U
541-73-1	1,3-Dichlorobenzene	1.1	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.2	U
67-72-1	Hexachloroethane	2.6	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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

Data file: /chem/HP26379.i/18aug27.b/fh00628.d Injection date and time: **27-AUG-2018 17:43**
Data file Sample Info. Line: 9766347;400;F1823930AA;525--;0;0;SAMPLE; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.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): 27.4 psia Canister Pressure before dilution (Ya): 13.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 400 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.100(-0.007)	1021	130	325966 (-23)	10.00		255500 - 596166
52) 1,4-Difluorobenzene	13.400(-0.007)	1342	114	1286231 (-15)	10.00		906195 - 2114453
71) Chlorobenzene-d5	18.228(0.007)	2016	117	1300061 (-12)	10.00		883644 - 2061835

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)	4.023(-0.001)	85	66180M	0.608	0.61		J	0.13	1
3) Chlorodifluoromethane	(1)			Not Detected					0.15	1
4) Freon 114	(1)			Not Detected					0.12	1
5) Chloromethane	(1)	4.468(-0.000)	50	26944	0.382	0.38		J	0.24	1
6) Vinyl Chloride	(1)			Not Detected					0.12	1
7) 1,3-Butadiene	(1)			Not Detected					0.17	1
8) Bromomethane	(1)			Not Detected					0.18	1
9) Chloroethane	(1)			Not Detected					0.19	1
13) Dichlorofluoromethane	(1)			Not Detected					0.11	1
12) Trichlorofluoromethane	(1)	5.886(-0.000)	101	39031	0.365	0.37		J	0.15	1
11) Pentane	(1)	5.879(-0.000)	43	212038	1.795	1.79			0.13	1
16) 1,1-Dichloroethene	(1)			Not Detected					0.14	1
17) Freon 113	(1)	6.932(-0.001)	103	9842	0.155	0.16		J	0.11	1
24) Acetone	(1)	8.085(-0.001)	43	1323215	12.686	12.69			0.53	5
18) Carbon Disulfide	(1)			Not Detected					0.13	1
22) 3-Chloropropene	(1)			Not Detected					0.15	1
23) Methylene Chloride	(1)			Not Detected					0.25	2
25) trans-1,2-Dichloroethene	(1)			Not Detected					0.086	1
27) Methyl t-Butyl Ether	(1)			Not Detected					0.15	1
26) Hexane	(1)	8.464(-0.000)	56	56413	0.750	0.75		J	0.13	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.089	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.12	1
45) 2-Butanone	(1)	11.810(0.000)	43	451637	3.051	3.05			0.21	1
39) Chloroform	(1)			Not Detected					0.092	1
44) 1,1,1-Trichloroethane	(1)			Not Detected					0.12	1
42) Carbon Tetrachloride	(1)			Not Detected					0.14	1
48) Benzene	(2)	12.332(-0.000)	78	64753	0.390	0.39		J	0.11	1
50) 1,2-Dichloroethane	(2)			Not Detected					0.08	1
46) Isooctane	(2)	12.053(-0.000)	57	166806	0.447	0.45		J	0.13	1
47) Heptane	(2)	12.204(0.000)	71	28081	0.523	0.52		J	0.23	1
51) Trichloroethene	(2)			Not Detected					0.18	1
55) 1,2-Dichloropropane	(2)			Not Detected					0.13	1
53) Dibromomethane	(2)			Not Detected					0.14	1
56) Bromodichloromethane	(2)			Not Detected					0.12	1
59) cis-1,3-Dichloropropene	(2)			Not Detected					0.1	1
62) 4-Methyl-2-Pentanone	(2)			Not Detected					0.15	1
61) Toluene	(3)	15.806(-0.000)	91	333175	1.735	1.73			0.12	1
60) Octane	(3)			Not Detected					0.4	2
64) trans-1,3-Dichloropropene	(3)			Not Detected					0.12	1
67) 1,1,2-Trichloroethane	(3)			Not Detected					0.12	1
63) Tetrachloroethene	(3)			Not Detected					0.25	2
70) 2-Hexanone	(3)			Not Detected					0.18	1
68) Dibromochloromethane	(3)			Not Detected					0.13	1

M = Compound was manually integrated.

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Lancaster Laboratories, Inc.

Analysis Summary for GC/MS Volatiles in Air 9766347

Data file: /chem/HP26379.i/18aug27.b/fh00628.d Injection date and time: **27-AUG-2018 17:43**
Data file Sample Info. Line: 9766347;400;F1823930AA;525--;0;0;SAMPLE; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.d**

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

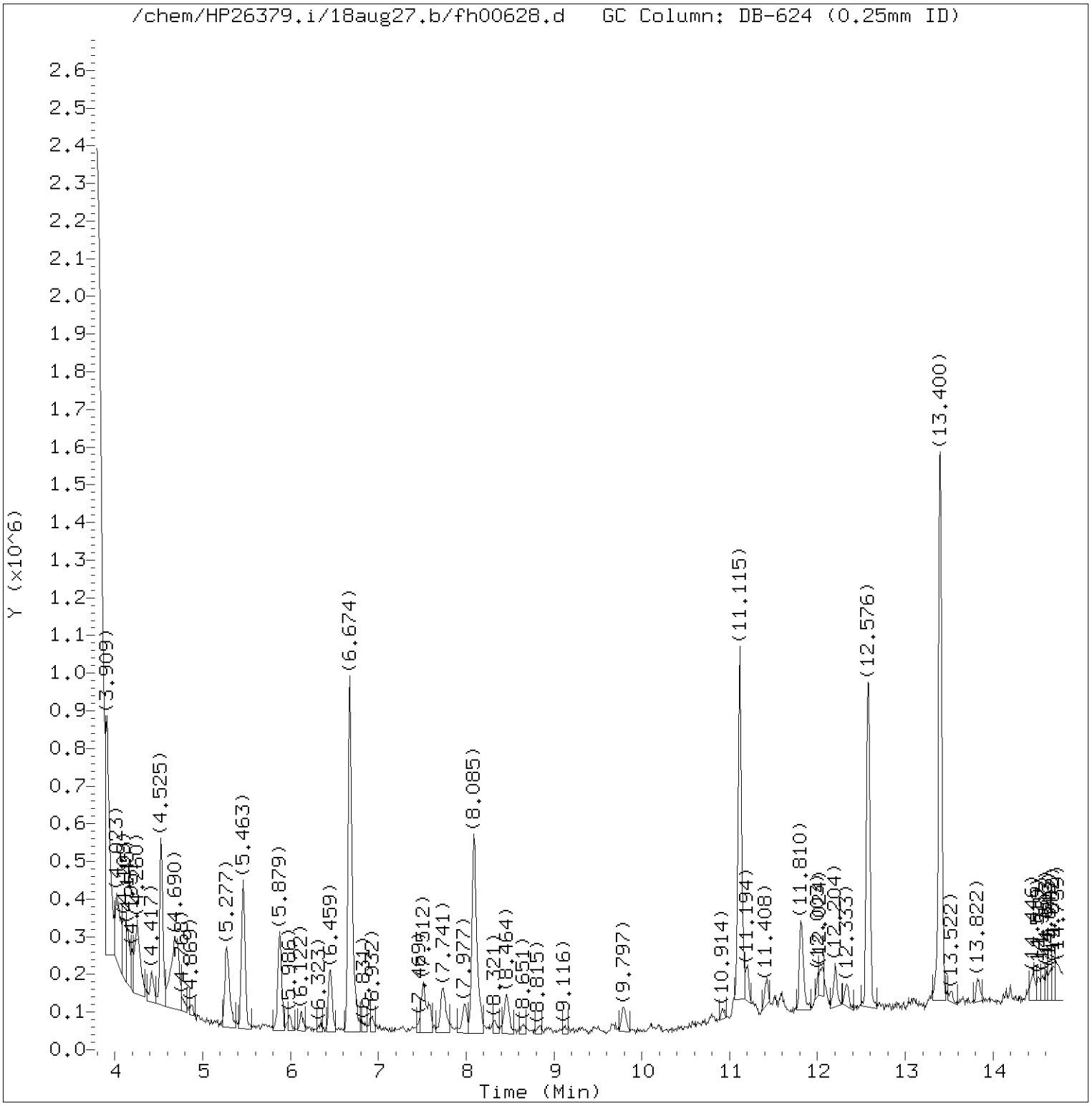
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 27.4 psia Canister Pressure before dilution (Ya): 13.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 400 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
69) 1,2-Dibromoethane	(3)			Not Detected					0.13	1
72) Chlorobenzene	(3)			Not Detected					0.13	1
74) 1,1,1,2-Tetrachloroethane	(3)			Not Detected					0.15	1
73) Ethylbenzene	(3)	18.271(-0.000)	91	65886	0.251	0.25		J	0.19	1
75) m/p-Xylene	(3)	18.493(-0.000)	91	156679	0.832	0.83		J	0.26	2
76) o-Xylene	(3)	19.180(-0.000)	91	49826	0.271	0.27		J	0.19	1
78) Styrene	(3)			Not Detected					0.2	1
79) Bromoform	(3)			Not Detected					0.17	1
80) Cumene	(3)			Not Detected					0.24	1
82) Bromobenzene	(3)			Not Detected					0.1	1
83) 1,1,2,2-Tetrachloroethane	(3)			Not Detected					0.15	1
87) 1,2,3-Trichloropropane	(3)			Not Detected					0.14	1
84) 4-Ethyltoluene	(3)			Not Detected					0.18	1
86) 1,3,5-Trimethylbenzene	(3)			Not Detected					0.32	2
90) 1,2,4-Trimethylbenzene	(3)			Not Detected					0.28	2
93) 1,3-Dichlorobenzene	(3)			Not Detected					0.19	1
94) 1,4-Dichlorobenzene	(3)			Not Detected					0.17	1
98) 1,2-Dichlorobenzene	(3)			Not Detected					0.2	1
97) Hexachloroethane	(3)			Not Detected					0.27	2

Total number of targets = 62

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:58. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:40. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

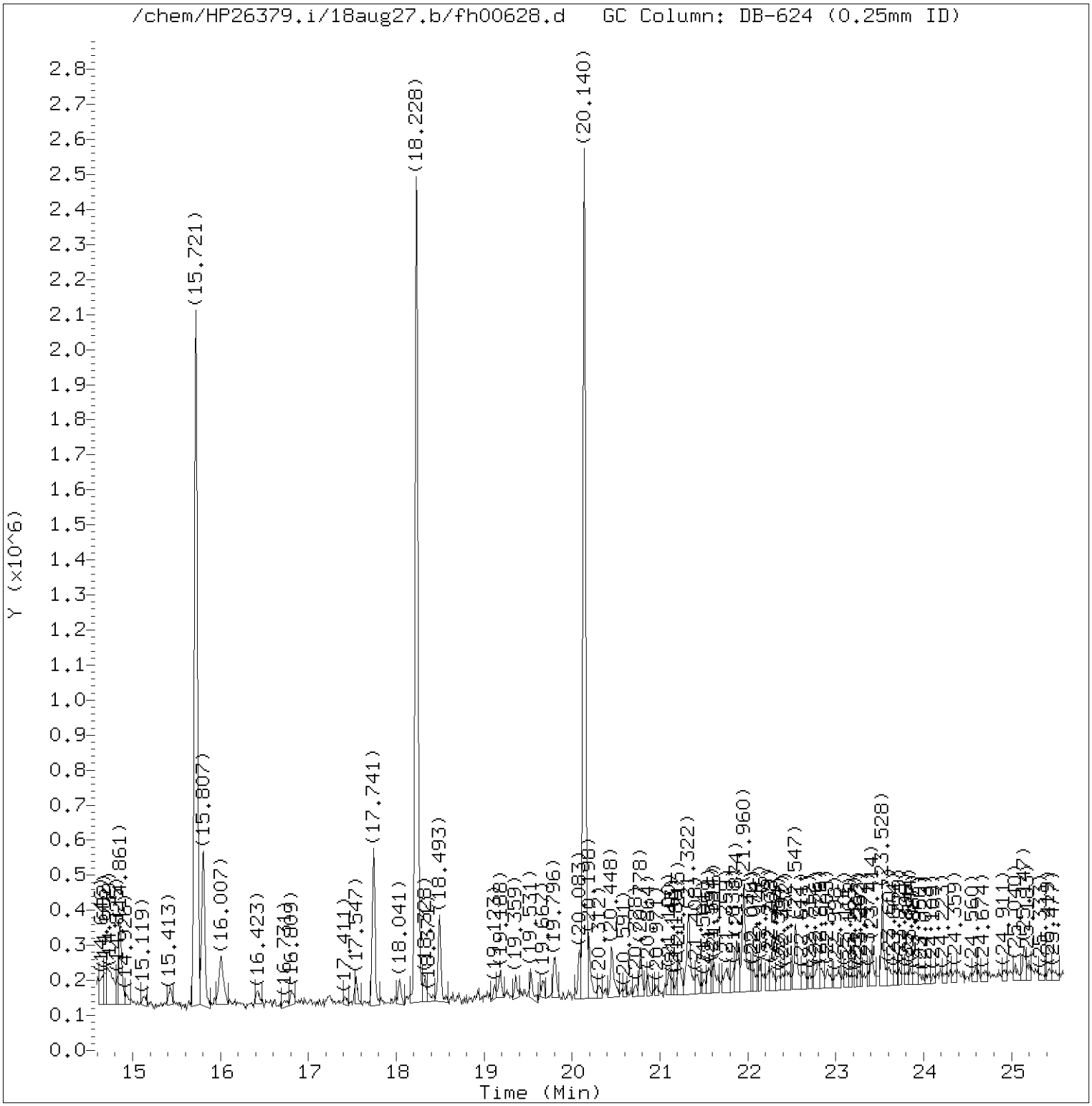
Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00628.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:43 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 525-- Lab Sample ID: 9766347

Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00628.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:43 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 525-- Lab Sample ID: 9766347

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on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00628.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:43 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 525-- Lab Sample ID: 9766347

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
2) Dichlorodifluoromethane	(1)	4.023	85	66180M	0.608
5) Chloromethane	(1)	4.468	50	26944	0.382
11) Pentane	(1)	5.879	43	212038	1.795
12) Trichlorofluoromethane	(1)	5.886	101	39031	0.365
17) Freon 113	(1)	6.932	103	9842	0.155
24) Acetone	(1)	8.085	43	1323215	12.686
26) Hexane	(1)	8.464	56	56413	0.750
37)*Bromochloromethane	(1)	11.100	130	325966	10.000
45) 2-Butanone	(1)	11.810	43	451637	3.051
46) Isooctane	(2)	12.053	57	166806	0.447
47) Heptane	(2)	12.204	71	28081	0.523
48) Benzene	(2)	12.333	78	64753	0.390
52)*1,4-Difluorobenzene	(2)	13.400	114	1286231	10.000
61) Toluene	(3)	15.807	91	333175	1.735
71)*Chlorobenzene-d5	(3)	18.228	117	1300061	10.000
73) Ethylbenzene	(3)	18.271	91	65886	0.251
75) m/p-Xylene	(3)	18.493	91	156679	0.832
76) o-Xylene	(3)	19.180	91	49826	0.271

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

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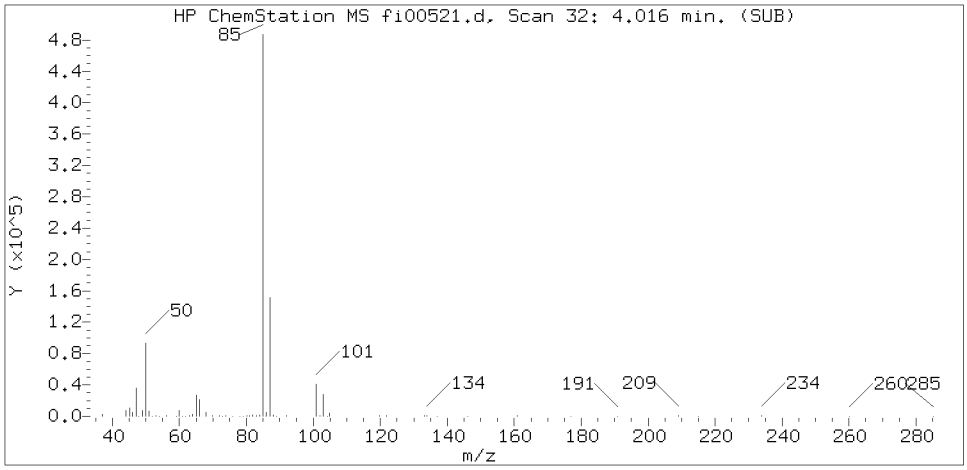
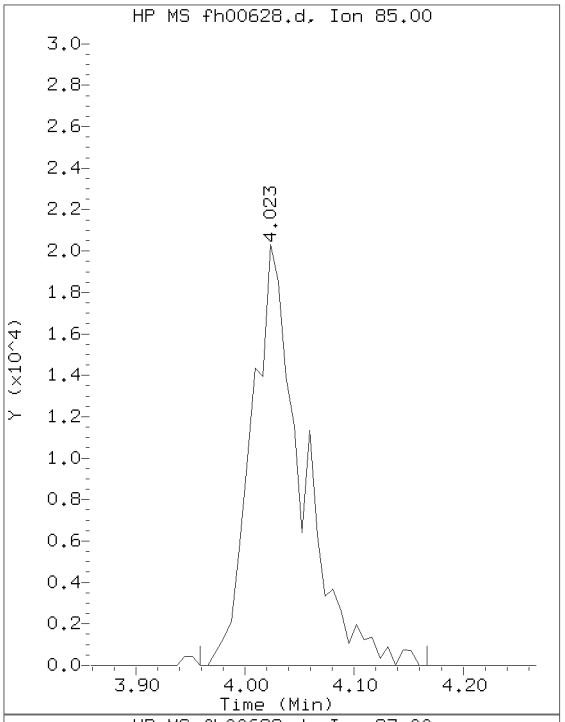
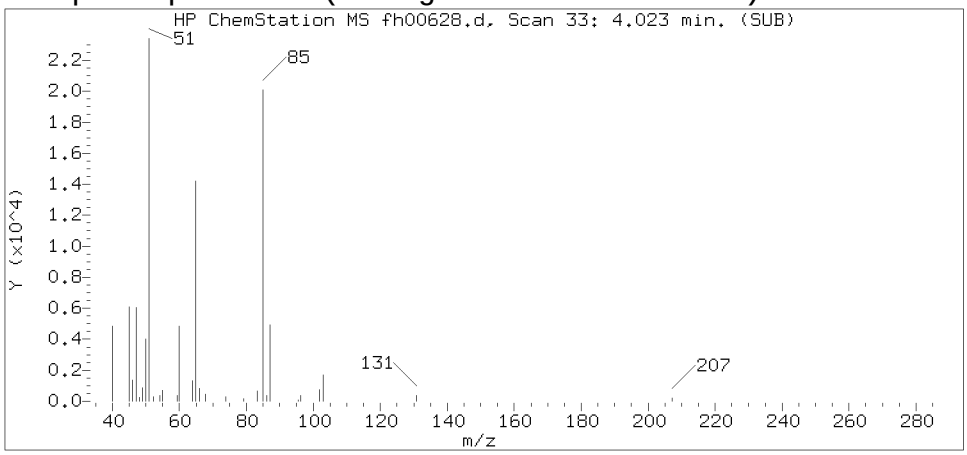
Target 3.5 esignature user ID: jeb07445

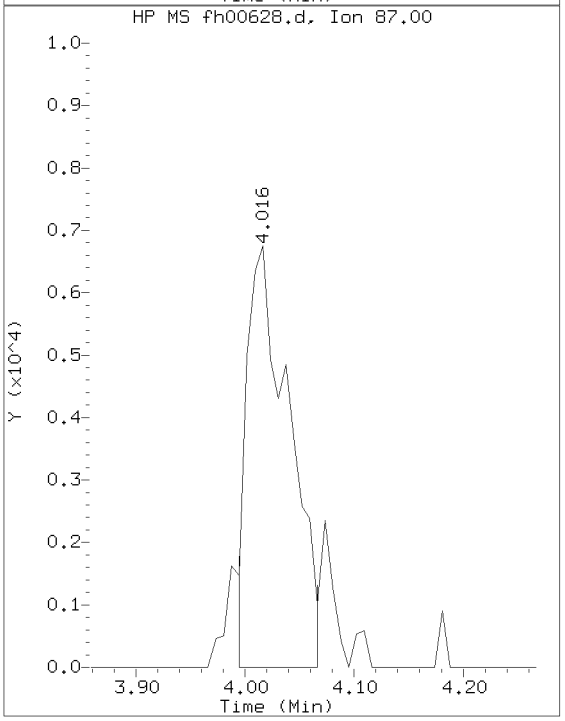
Reference Standard Spectrum for Dichlorodifluoromethane



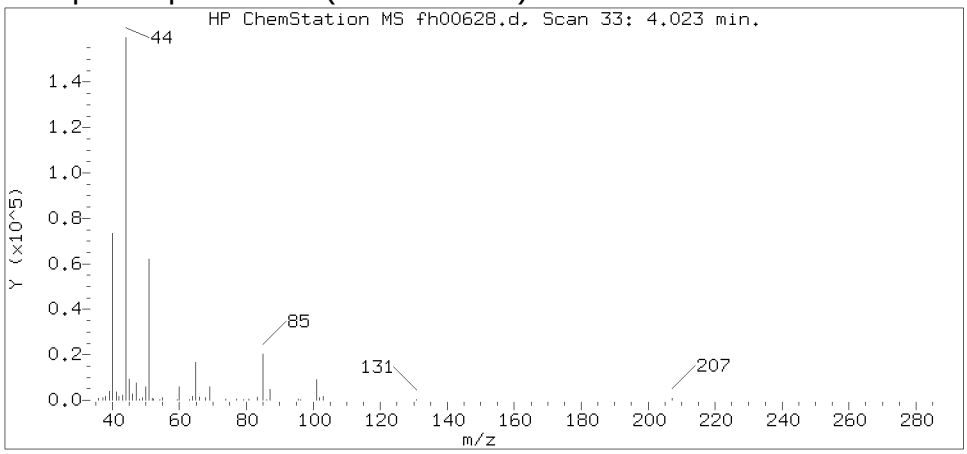


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00628.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:43 Analyst ID: jeb07445

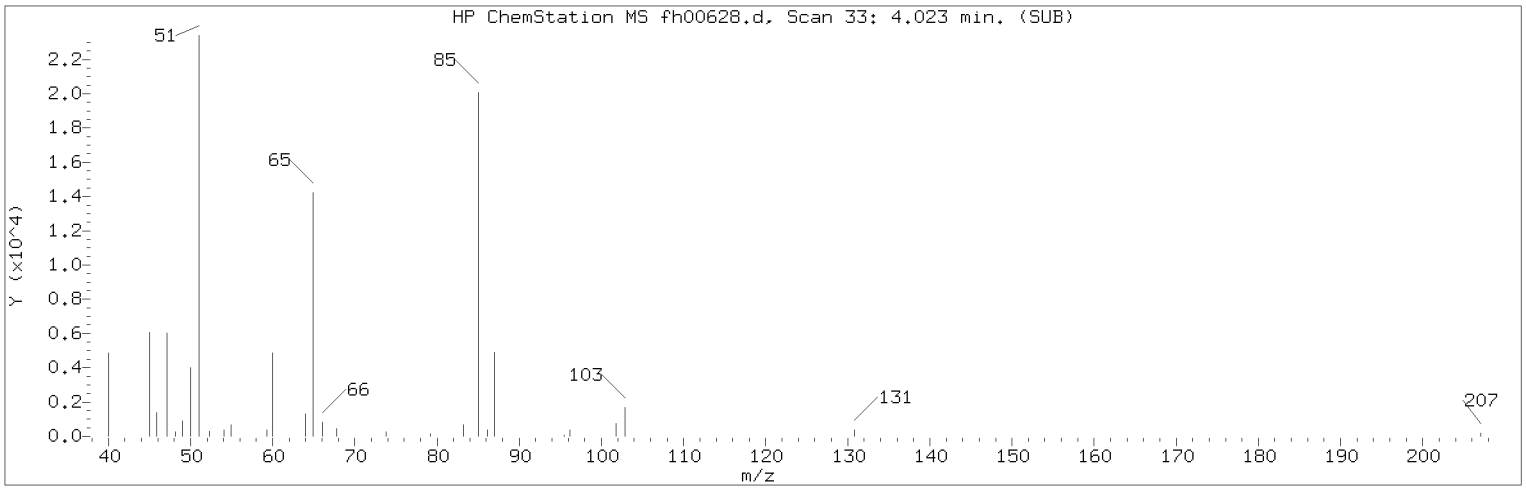
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 525-- Lab Sample ID: 9766347

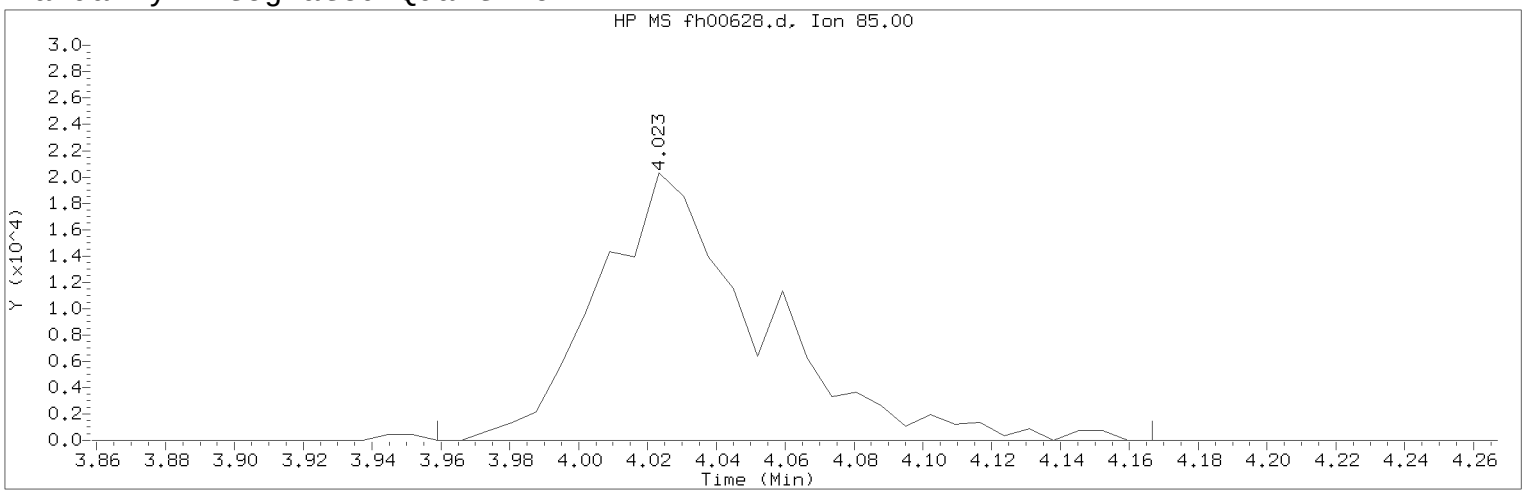
Compound Number : 2
Compound Name : Dichlorodifluoromethane
Scan Number : 33
Retention Time (minutes): 4.023
Relative Retention Time :-0.00170
Quant Ion : 85.00
Area (flag) : 66180M
Concentration (ppb(v)) : 0.6079

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug27.b/fh00628.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:43 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 525-- Lab Sample ID: 9766347

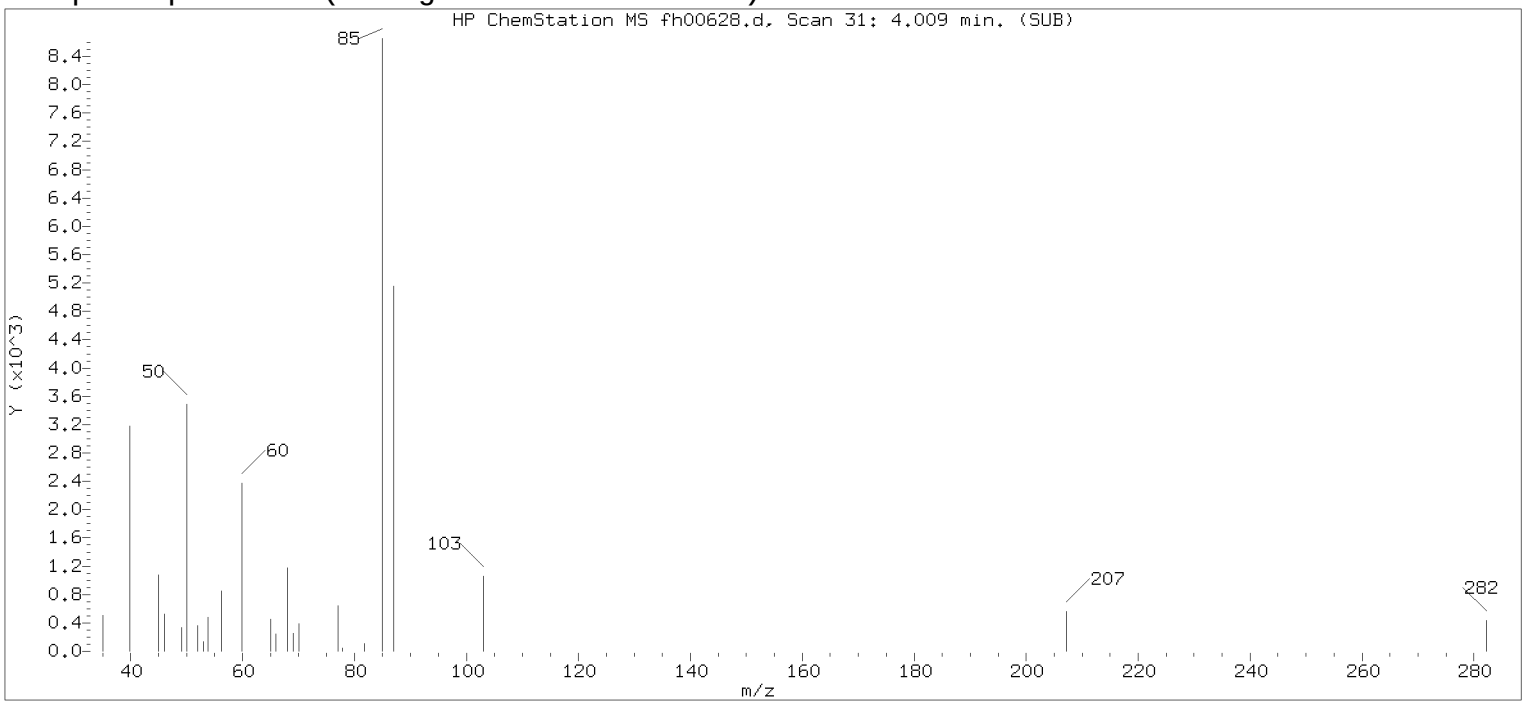
Compound Number : 2
Compound Name : Dichlorodifluoromethane
Scan Number : 33
Retention Time (minutes): 4.023
Quant Ion : 85.00
Area (flag) : 66180M
Concentration (ppb(v)) : 0.6079
Integration start scan : 23 Integration stop scan: 52
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

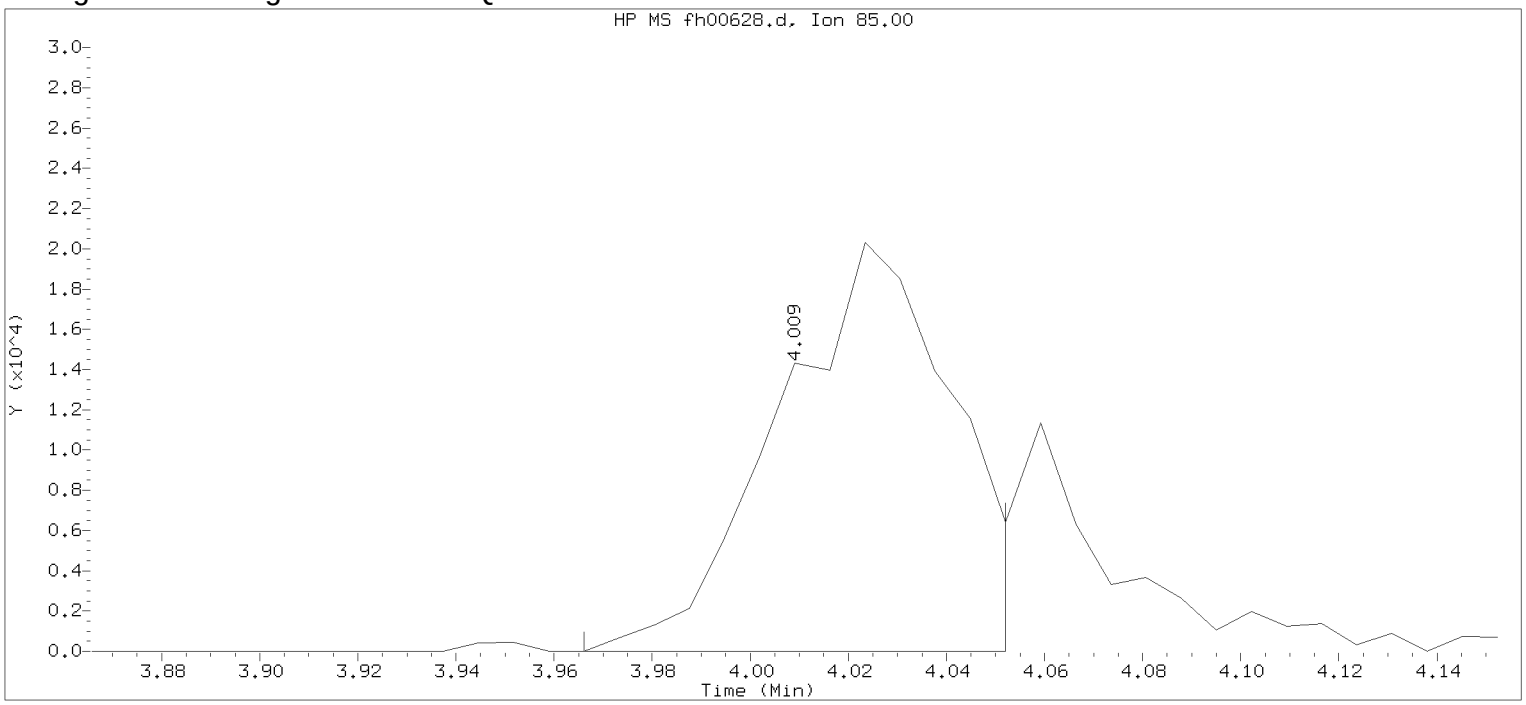
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:40.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug27.b/fh00628.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:43 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 18:13 Unknown

Sample Name: 525-- Lab Sample ID: 9766347

Compound Number : 2
Compound Name : Dichlorodifluoromethane
Scan Number : 31
Retention Time (minutes): 4.009
Quant Ion : 85.00
Area : 49506
Concentration (ppb(v)) : 0.4548
Integration start scan : 24 Integration stop scan: 36
Y at integration start : 0 Y at integration end: 0

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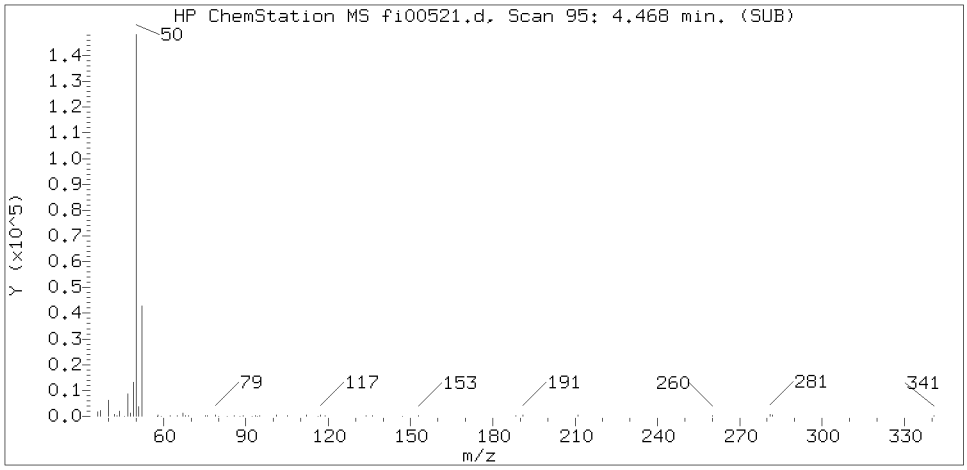
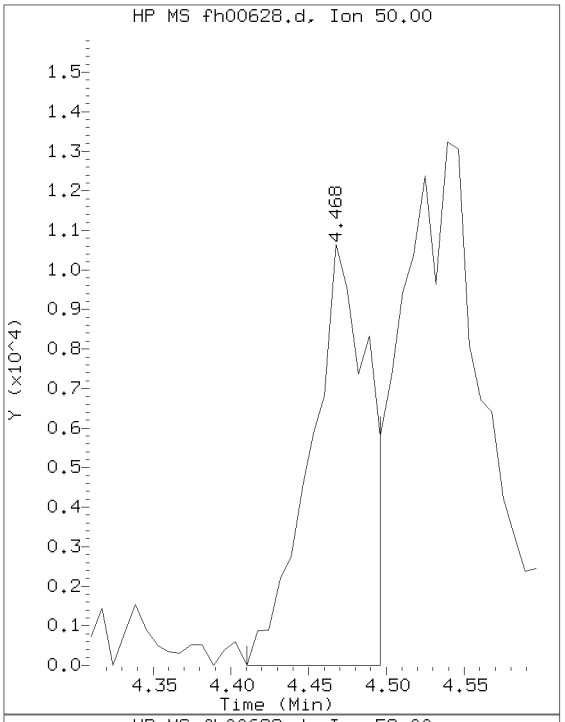
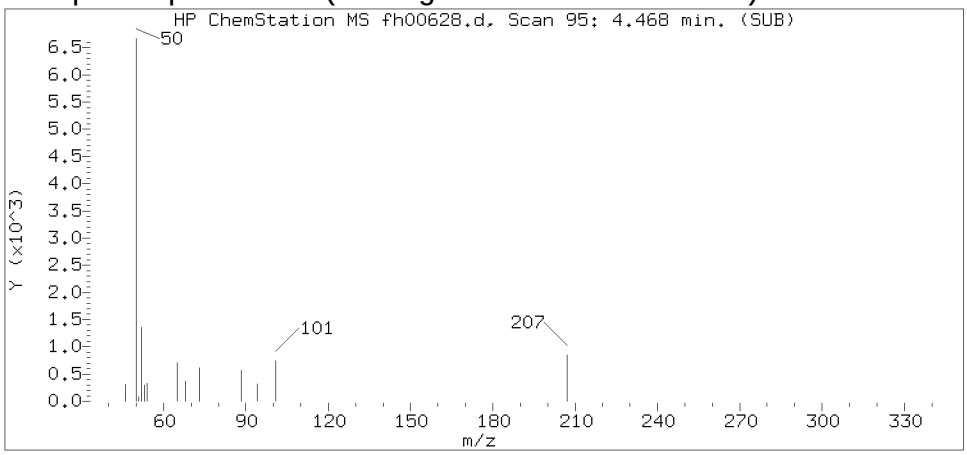
Target 3.5 esignature user ID: jeb07445

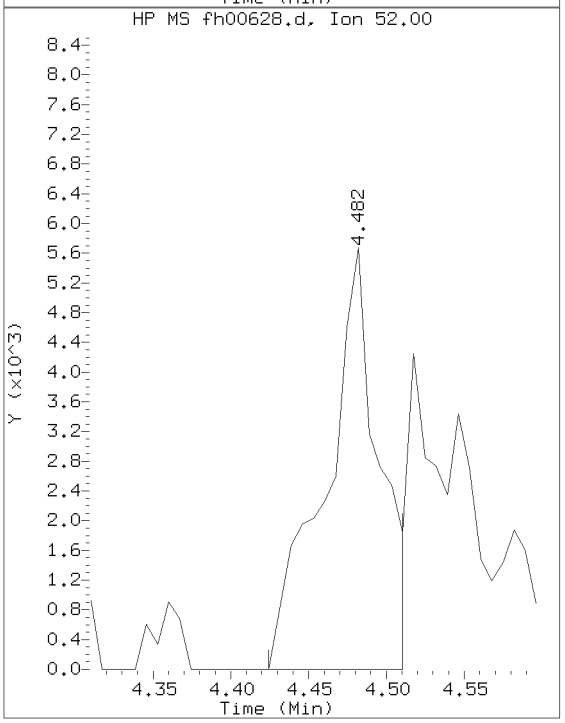
Reference Standard Spectrum for Chloromethane



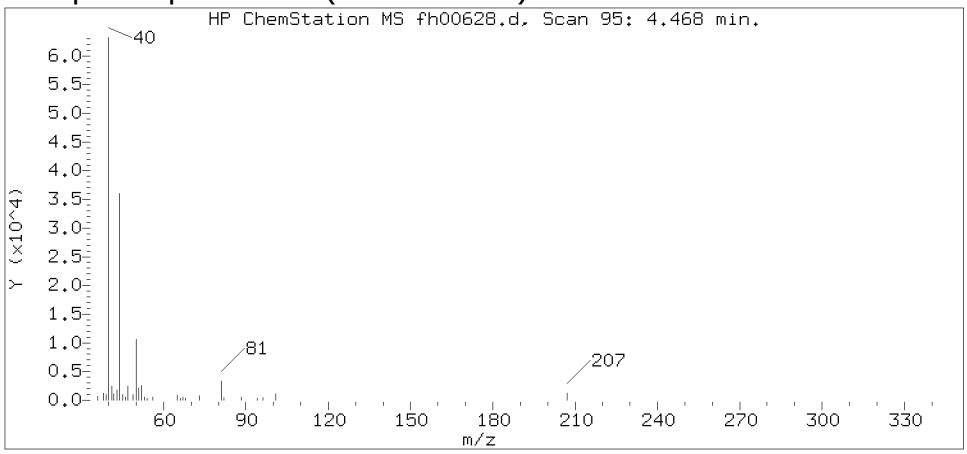


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00628.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:43 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 525-- Lab Sample ID: 9766347

Compound Number : 5
Compound Name : Chloromethane
Scan Number : 95
Retention Time (minutes): 4.468
Relative Retention Time :-0.00038
Quant Ion : 50.00
Area (flag) : 26944
Concentration (ppb(v)) : 0.3817

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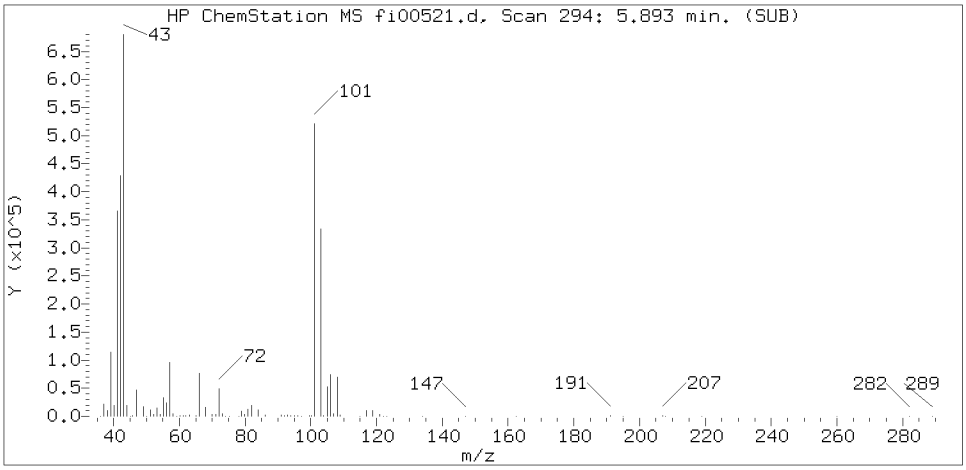
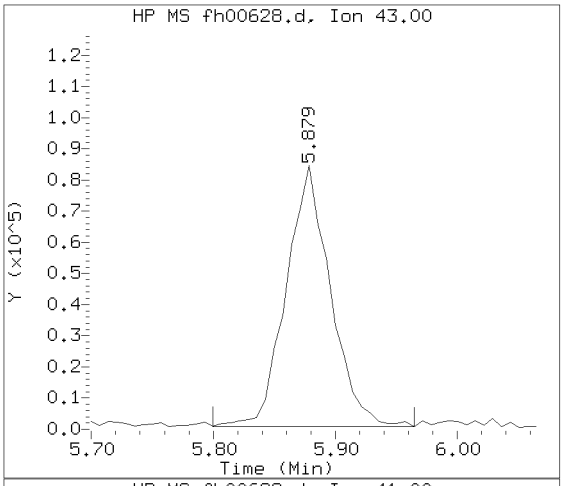
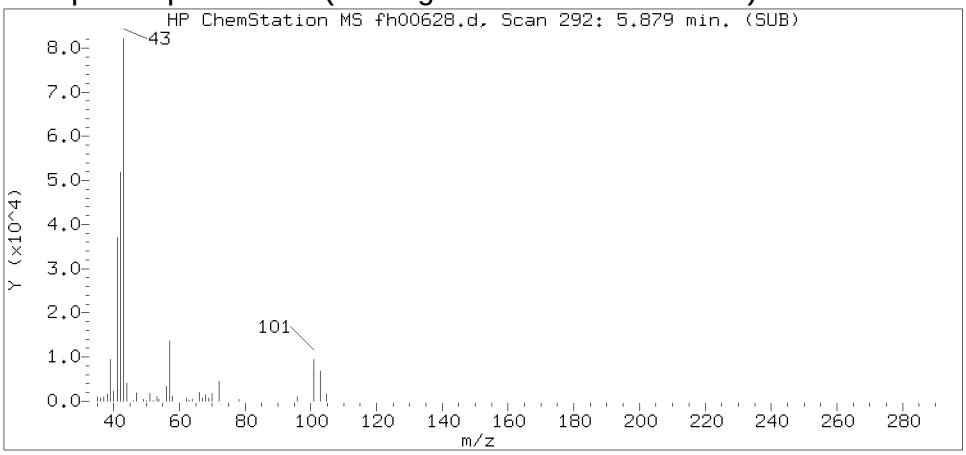
Target 3.5 esignature user ID: jeb07445

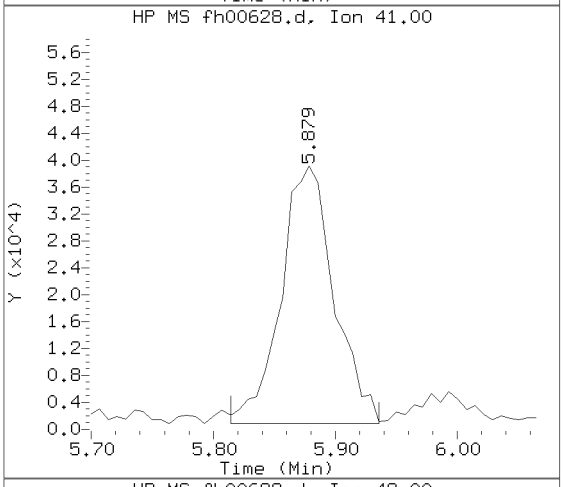
Reference Standard Spectrum for Pentane



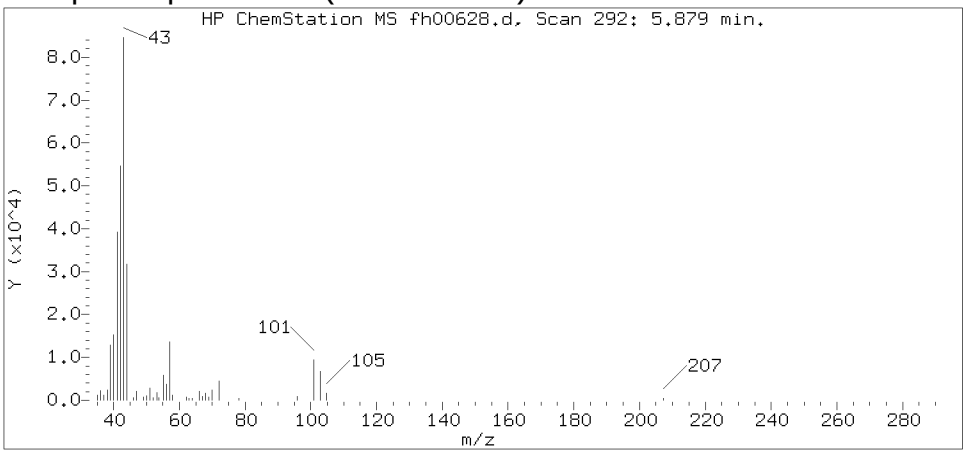


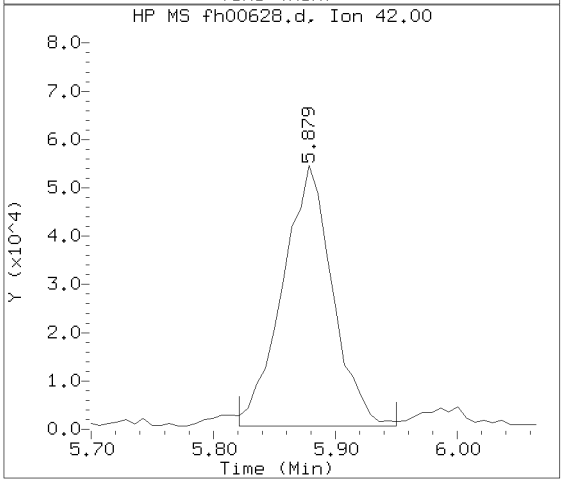
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00628.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:43 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 525-- Lab Sample ID: 9766347

Compound Number : 11
Compound Name : Pentane
Scan Number : 292
Retention Time (minutes): 5.879
Relative Retention Time :-0.00095
Quant Ion : 43.00
Area (flag) : 212038
Concentration (ppb(v)) : 1.7947

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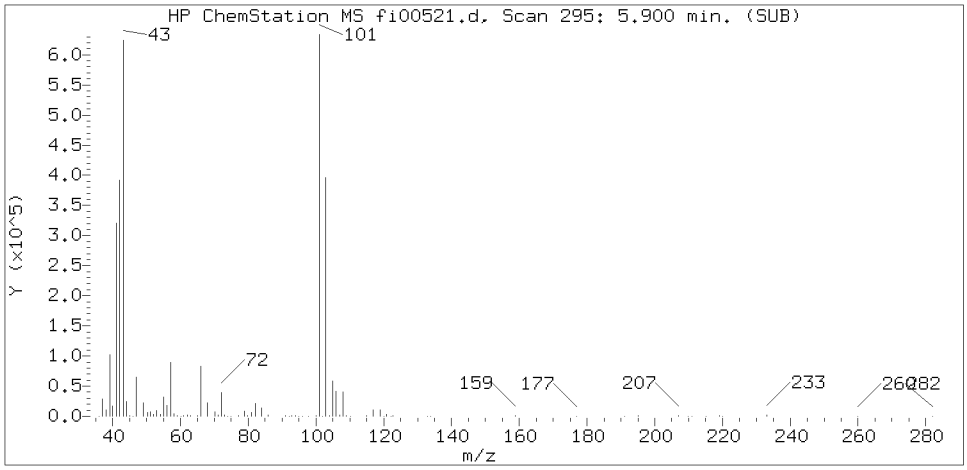
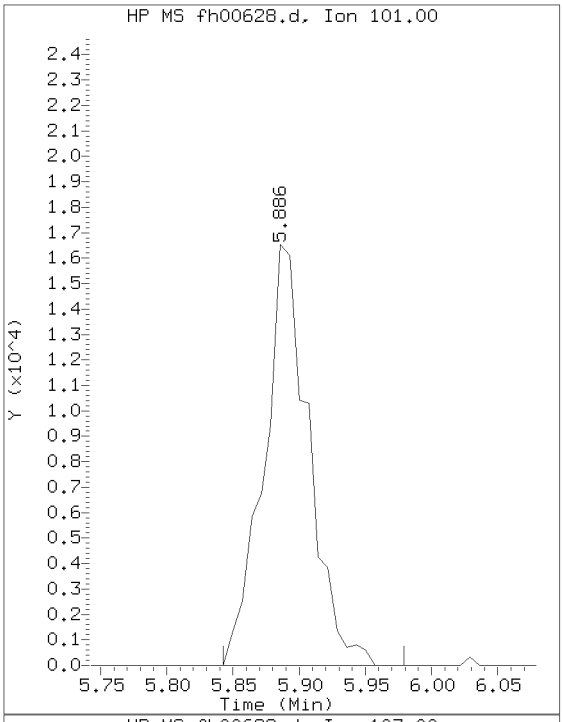
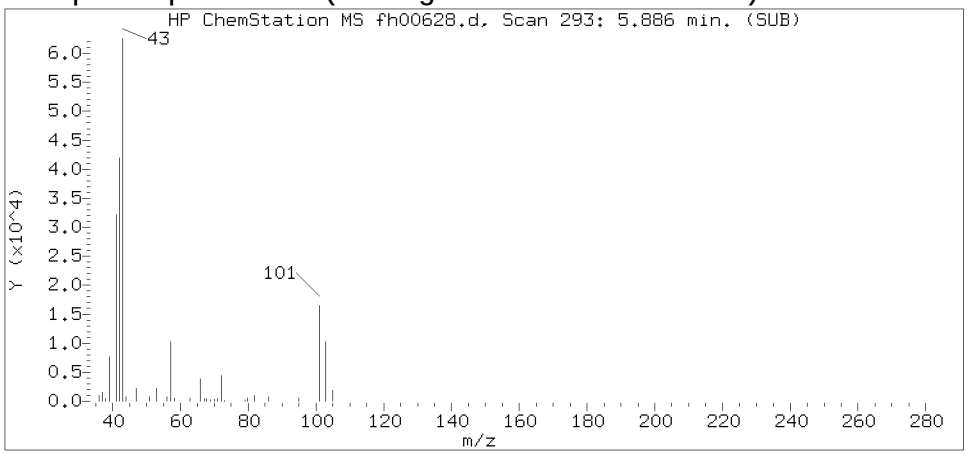
Target 3.5 esignature user ID: jeb07445

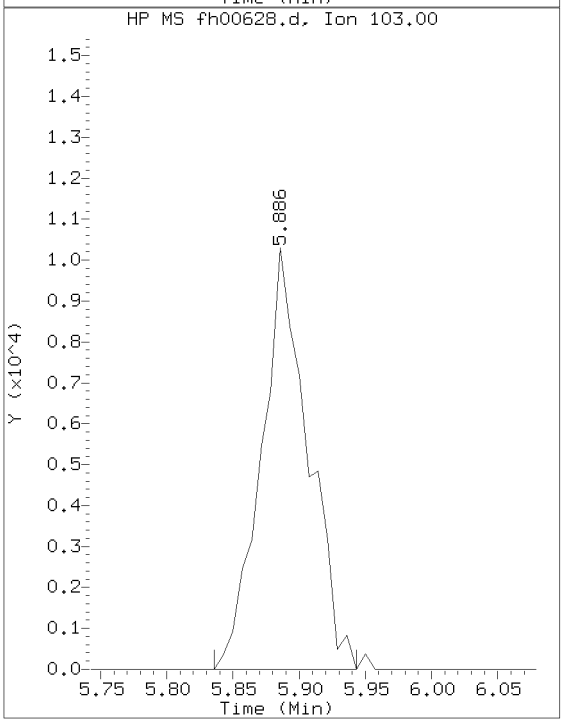
Reference Standard Spectrum for Trichlorofluoromethane



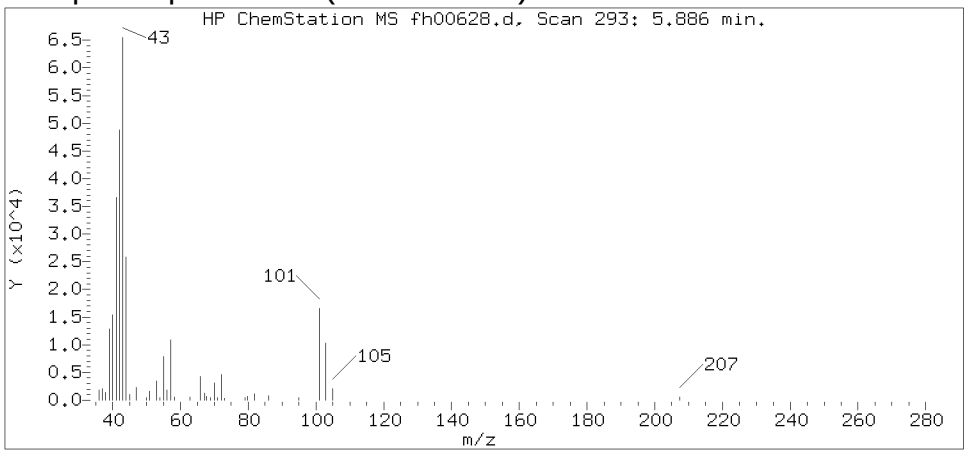


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00628.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:43 Analyst ID: jeb07445

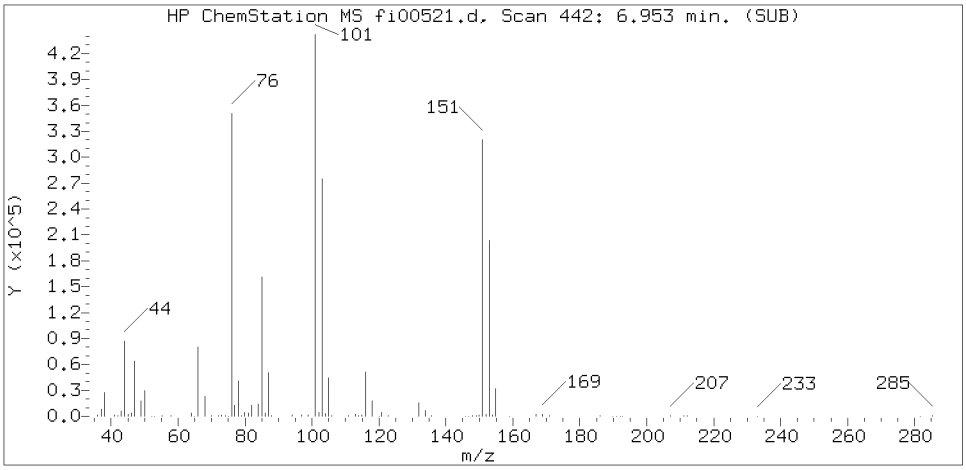
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

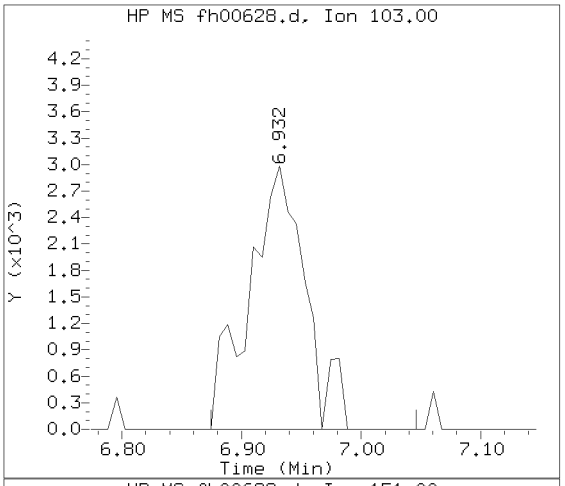
Sample Name: 525-- Lab Sample ID: 9766347

Compound Number : 12
Compound Name : Trichlorofluoromethane
Scan Number : 293
Retention Time (minutes): 5.886
Relative Retention Time :-0.00095
Quant Ion : 101.00
Area (flag) : 39031
Concentration (ppb(v)) : 0.3652

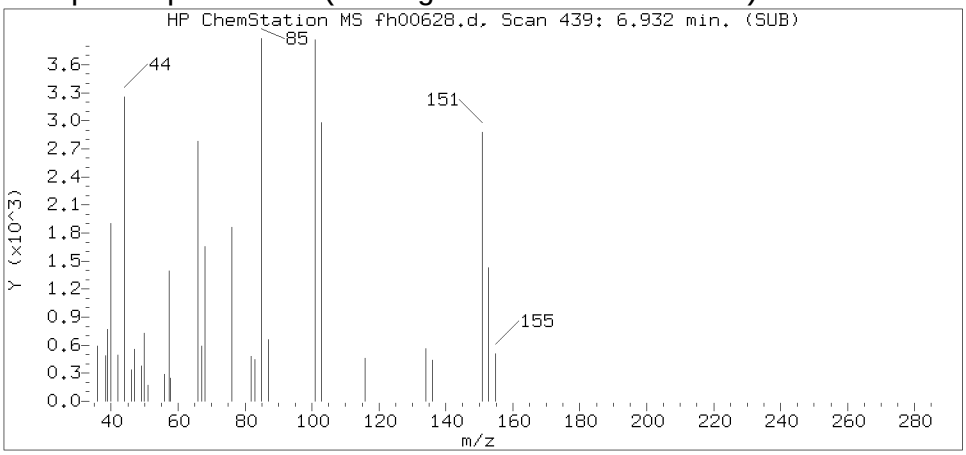
Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

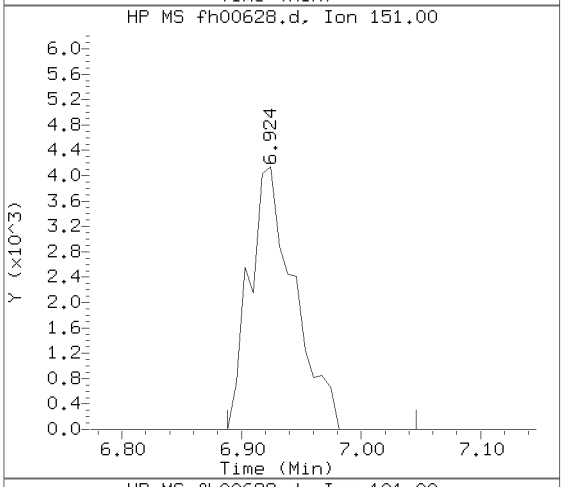
Reference Standard Spectrum for Freon 113



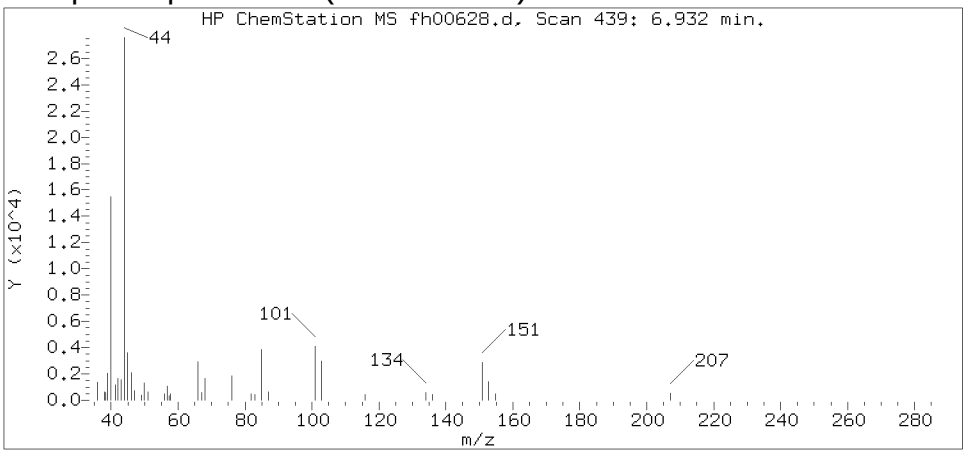


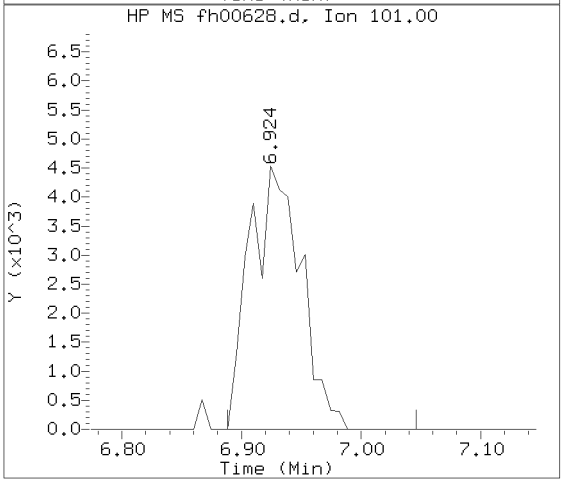
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00628.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:43 Analyst ID: jeb07445

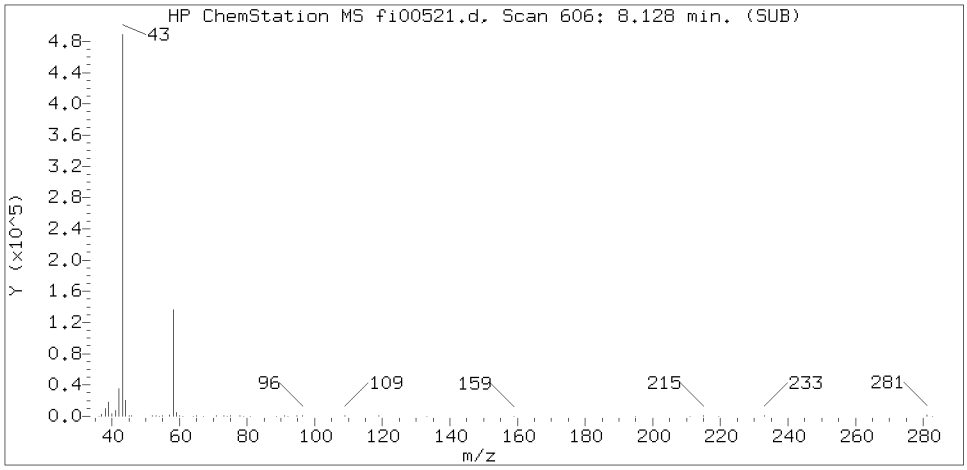
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 525-- Lab Sample ID: 9766347

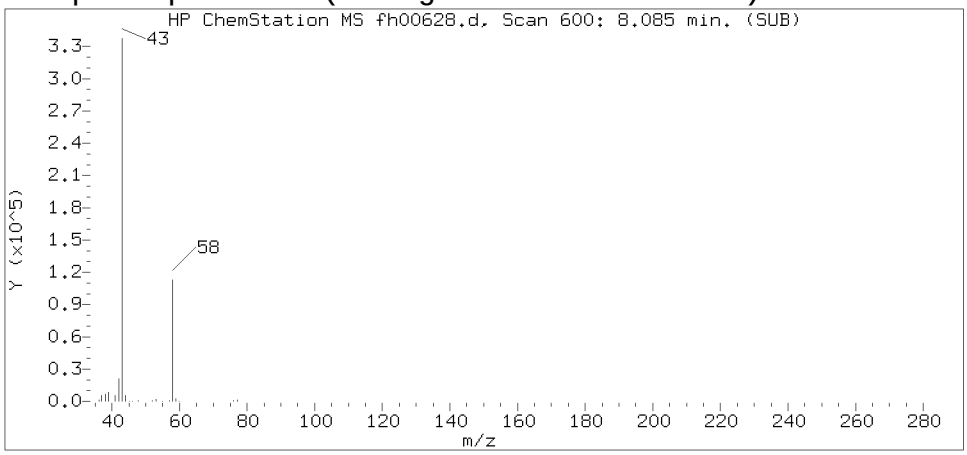
Compound Number : 17
Compound Name : Freon 113
Scan Number : 439
Retention Time (minutes): 6.932
Relative Retention Time :-0.00153
Quant Ion : 103.00
Area (flag) : 9842
Concentration (ppb(v)) : 0.1552

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

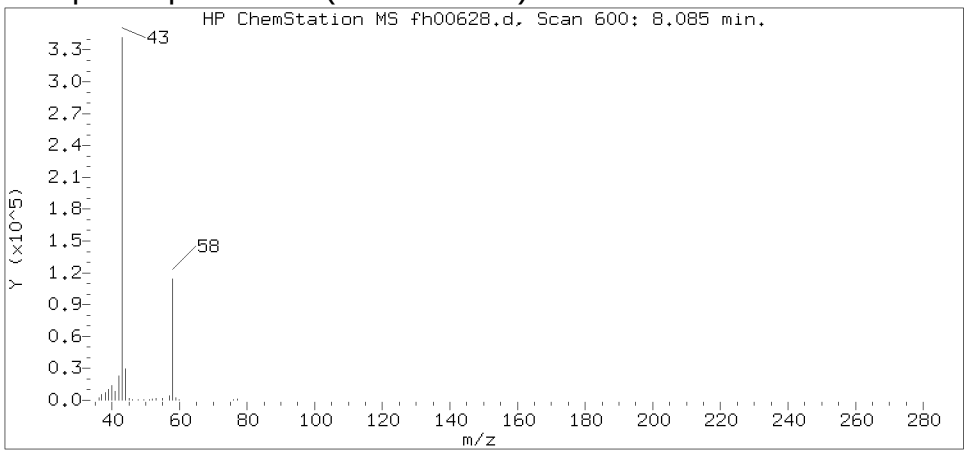
Reference Standard Spectrum for Acetone

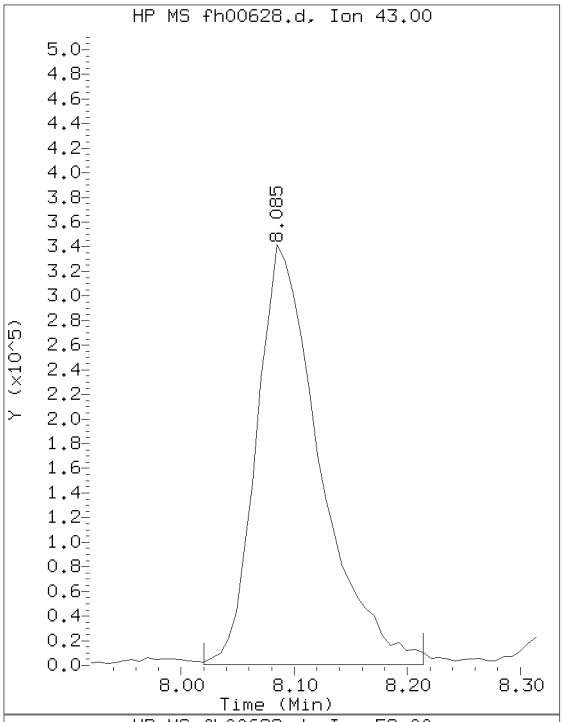


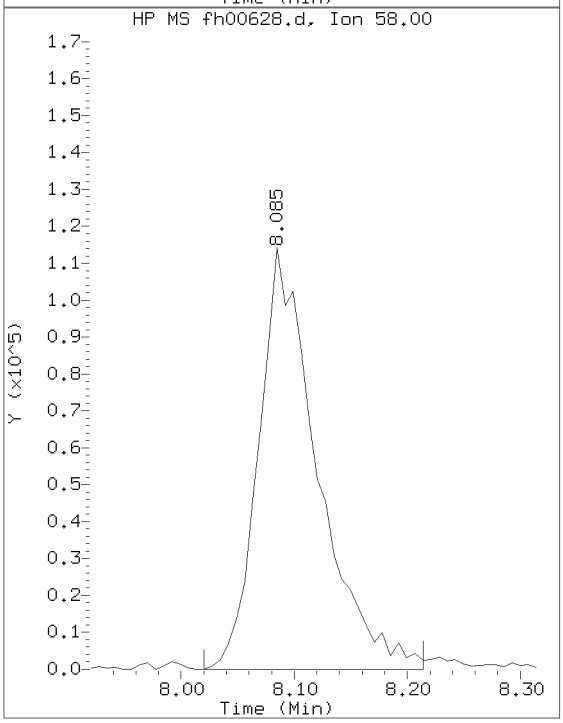
Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)







Data File: /chem/HP26379.i/18aug27.b/fh00628.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:43 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 525-- Lab Sample ID: 9766347

Compound Number	: 24
Compound Name	: Acetone
Scan Number	: 600
Retention Time (minutes)	: 8.085
Relative Retention Time	:-0.00147
Quant Ion	: 43.00
Area (flag)	: 1323215
Concentration (ppb(v))	: 12.6865

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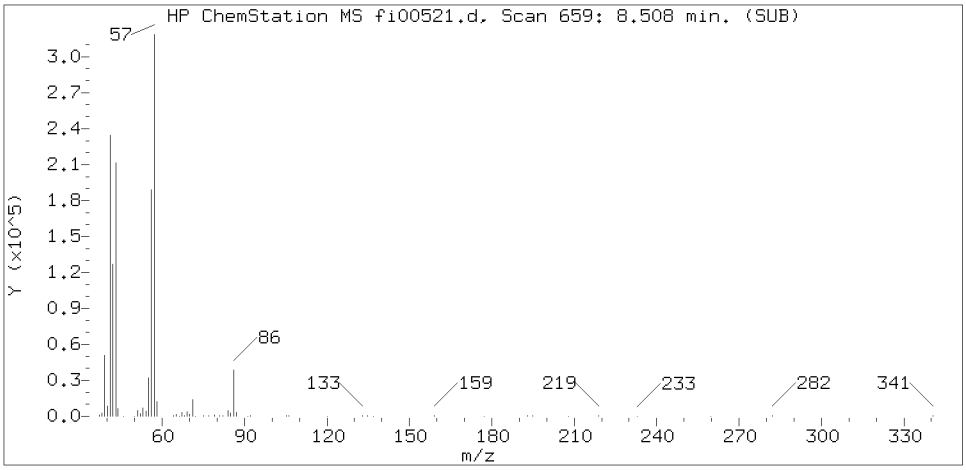
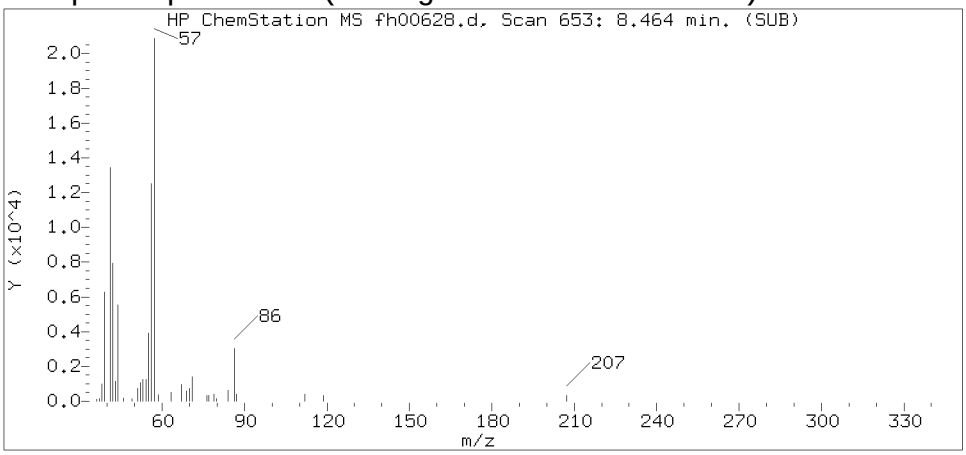
Target 3.5 esignature user ID: jeb07445

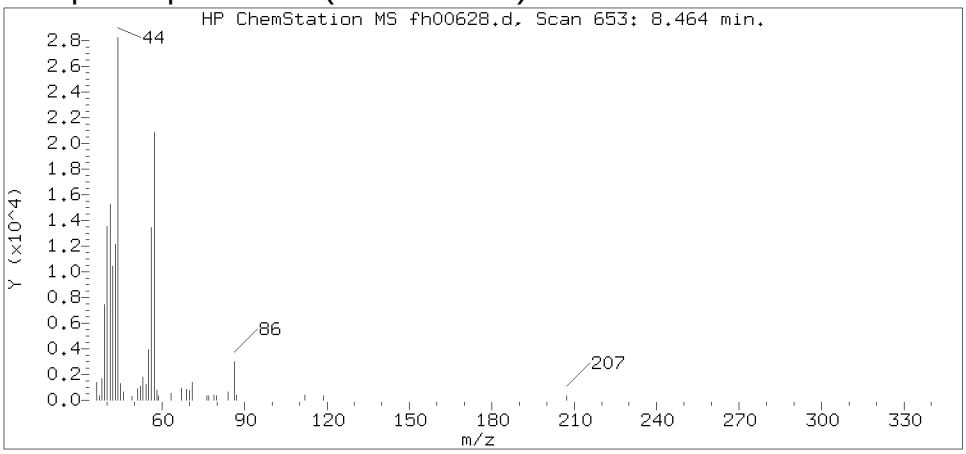
Reference Standard Spectrum for Hexane

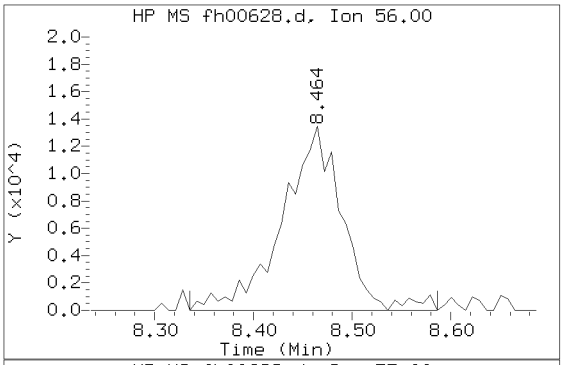


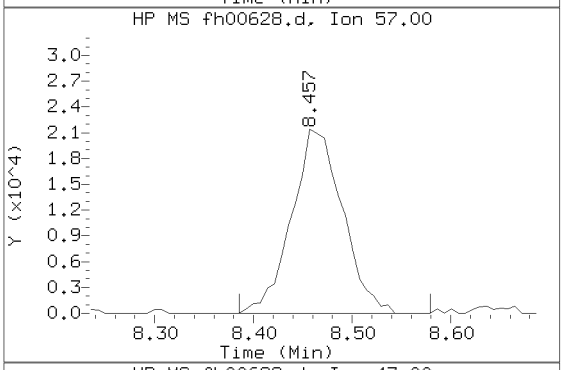
Sample Spectrum (Background Subtracted)

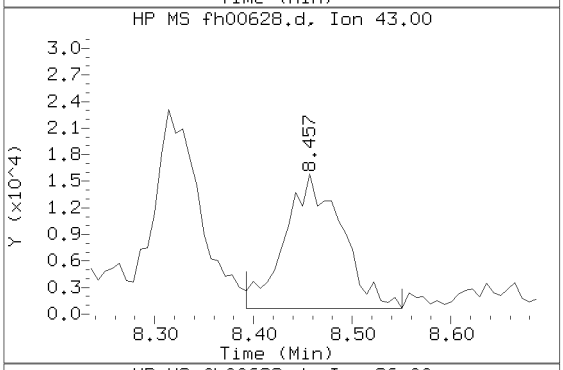


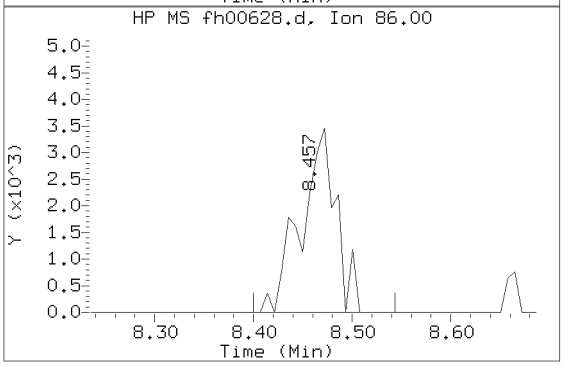
Sample Spectrum (Unaltered)











Data File: /chem/HP26379.i/18aug27.b/fh00628.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:43 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 525-- Lab Sample ID: 9766347

Compound Number : 26
Compound Name : Hexane
Scan Number : 653
Retention Time (minutes): 8.464
Relative Retention Time :-0.00080
Quant Ion : 56.00
Area (flag) : 56413
Concentration (ppb(v)) : 0.7504

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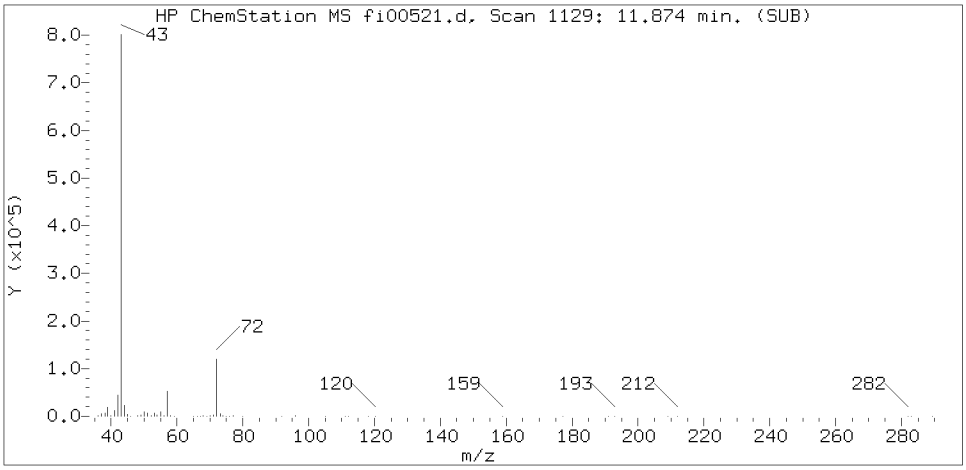
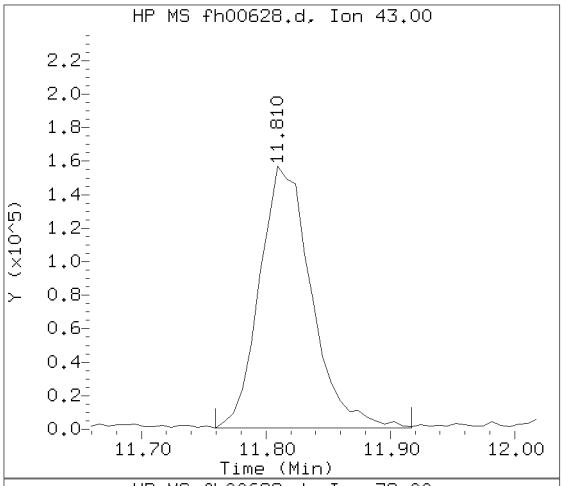
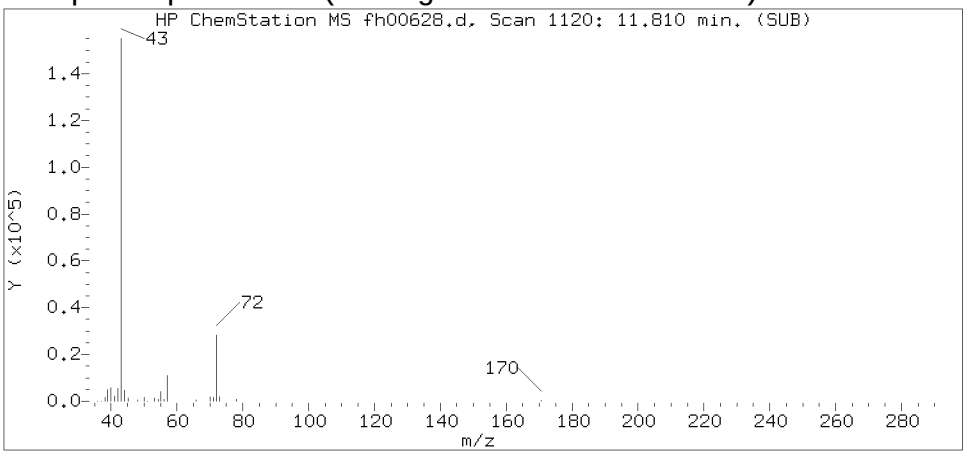
Target 3.5 esignature user ID: jeb07445

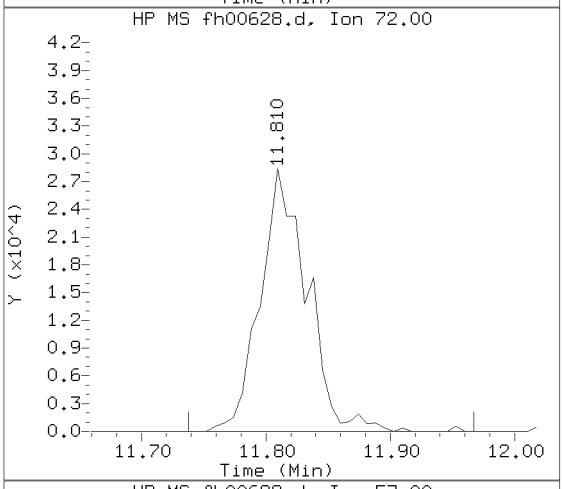
Reference Standard Spectrum for 2-Butanone



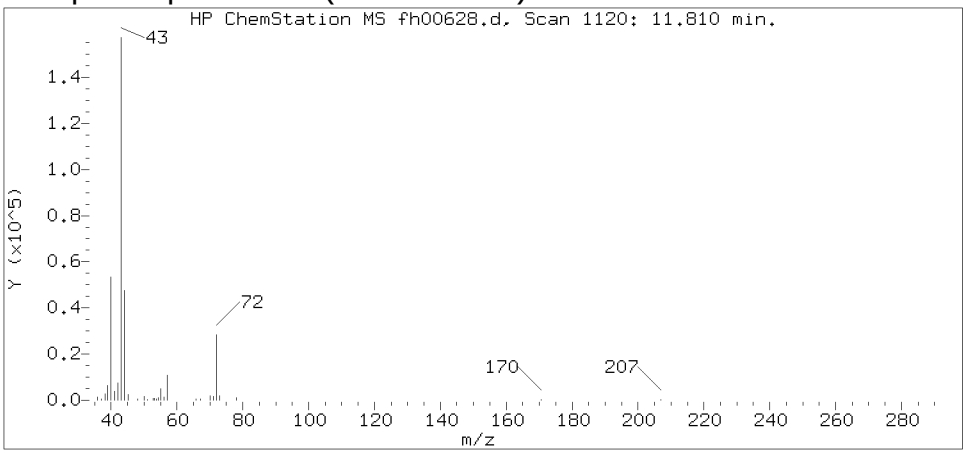


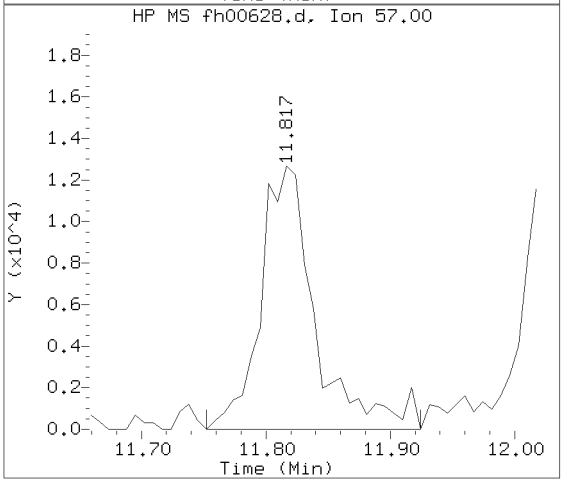
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00628.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:43 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 525-- Lab Sample ID: 9766347

Compound Number : 45
Compound Name : 2-Butanone
Scan Number : 1120
Retention Time (minutes): 11.810
Relative Retention Time : 0.00069
Quant Ion : 43.00
Area (flag) : 451637
Concentration (ppb(v)) : 3.0506

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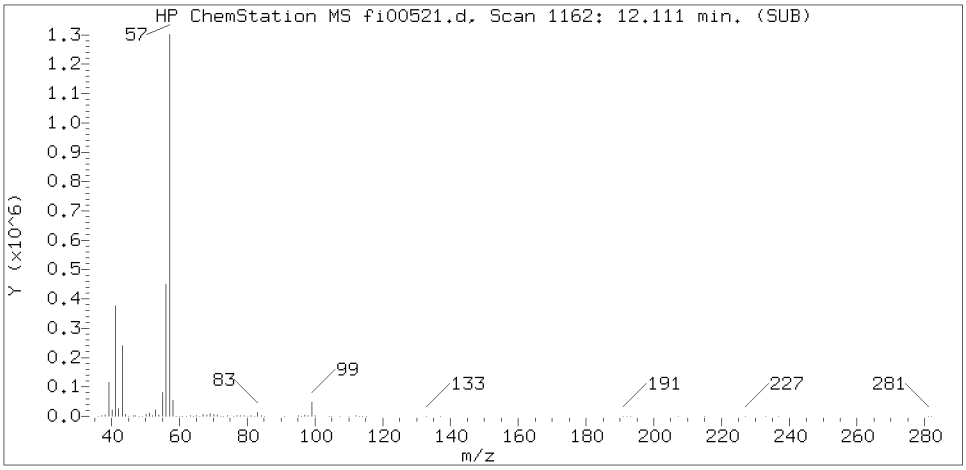
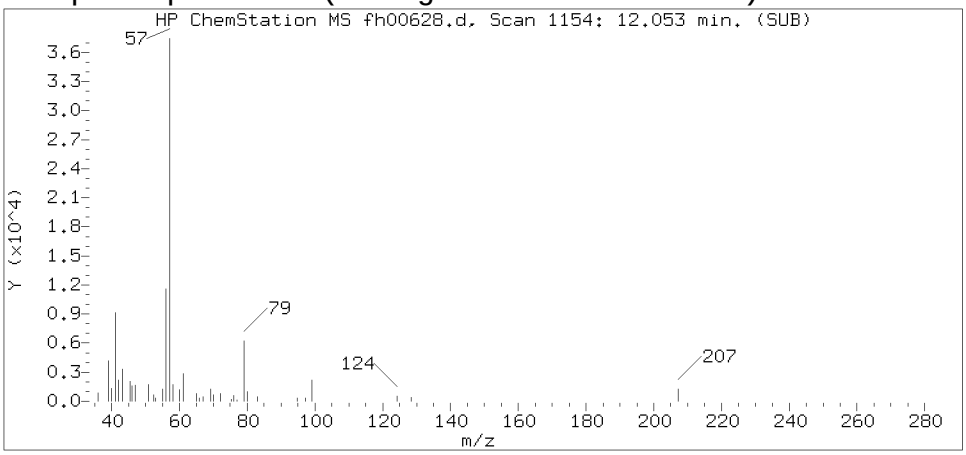
Target 3.5 esignature user ID: jeb07445

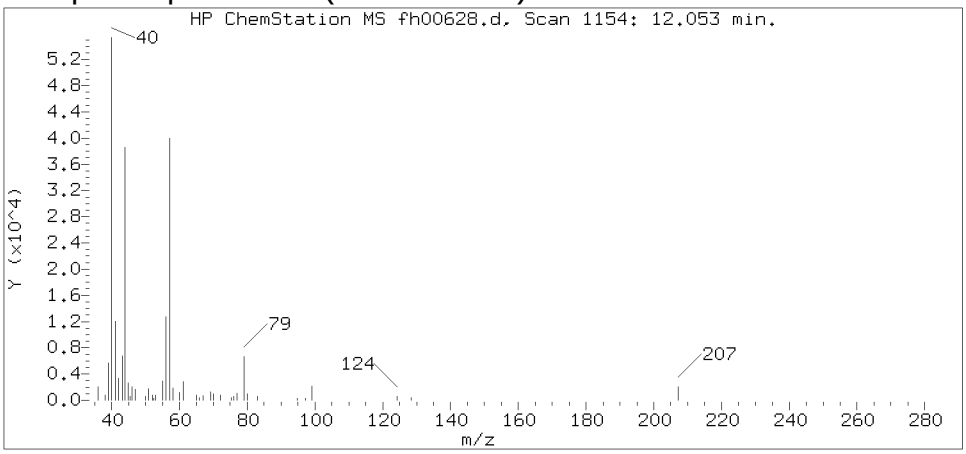
Reference Standard Spectrum for Isooctane

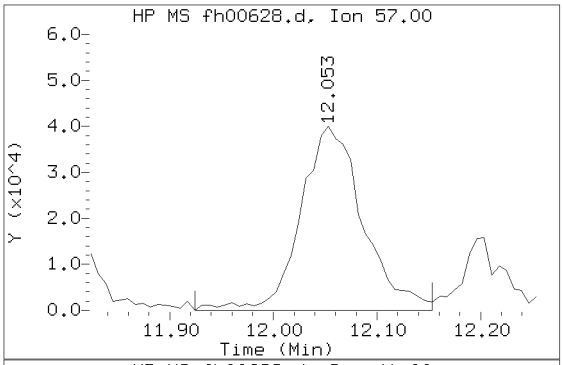


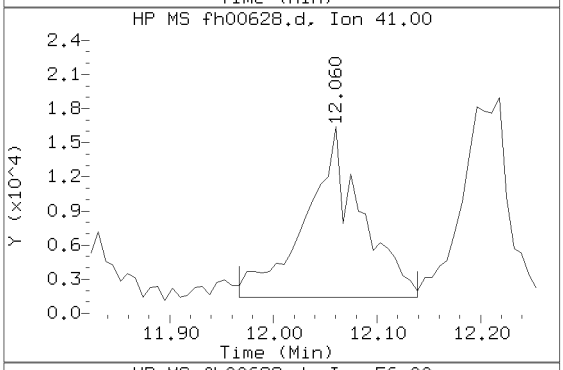
Sample Spectrum (Background Subtracted)

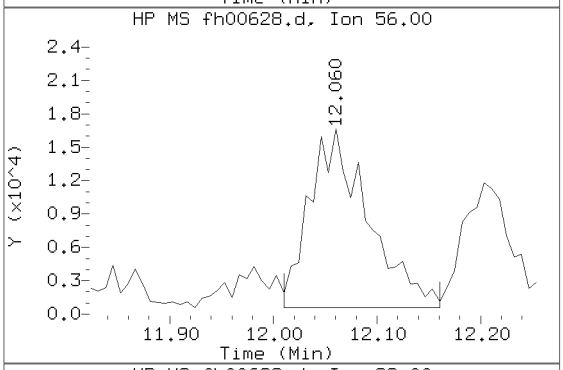


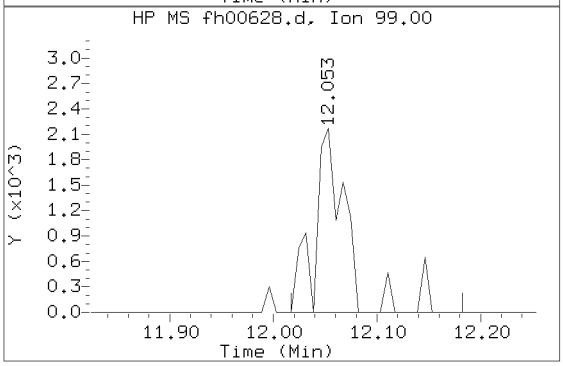
Sample Spectrum (Unaltered)











Data File: /chem/HP26379.i/18aug27.b/fh00628.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:43 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 525-- Lab Sample ID: 9766347

Compound Number : 46
Compound Name : Isooctane
Scan Number : 1154
Retention Time (minutes): 12.053
Relative Retention Time :-0.00005
Quant Ion : 57.00
Area (flag) : 166806
Concentration (ppb(v)) : 0.4469

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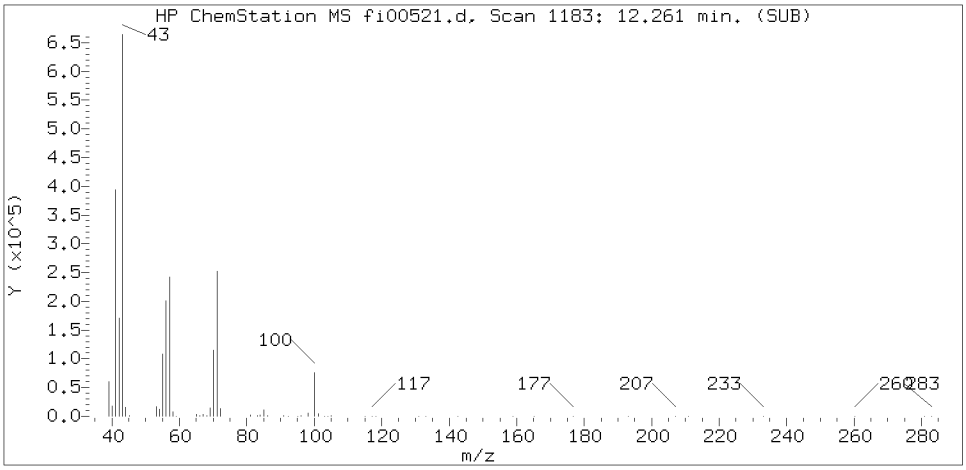
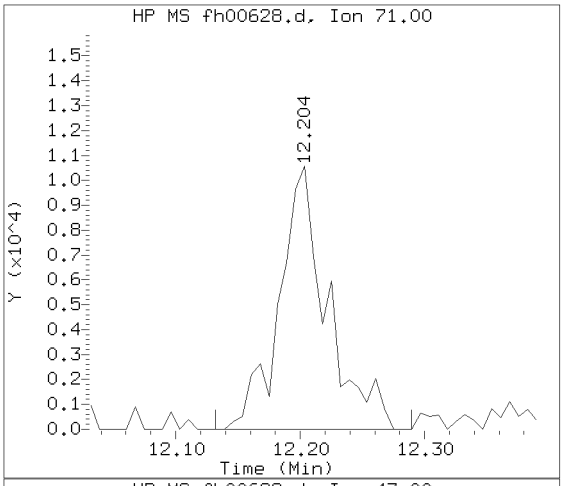
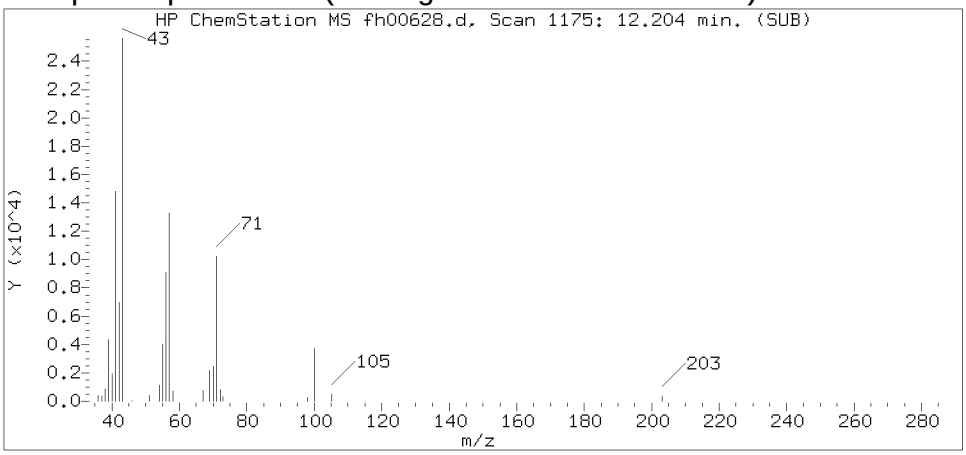
Target 3.5 esignature user ID: jeb07445

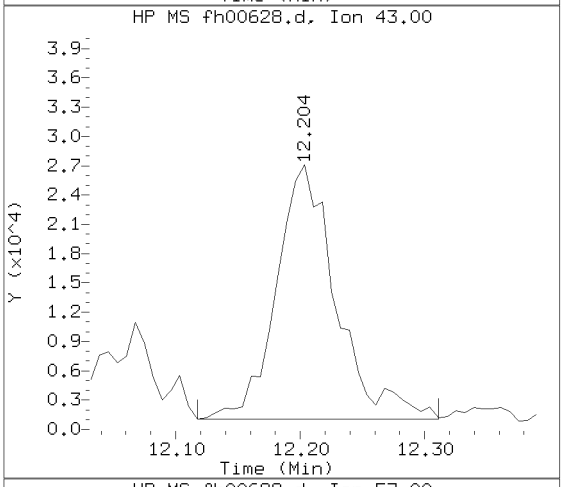
Reference Standard Spectrum for Heptane



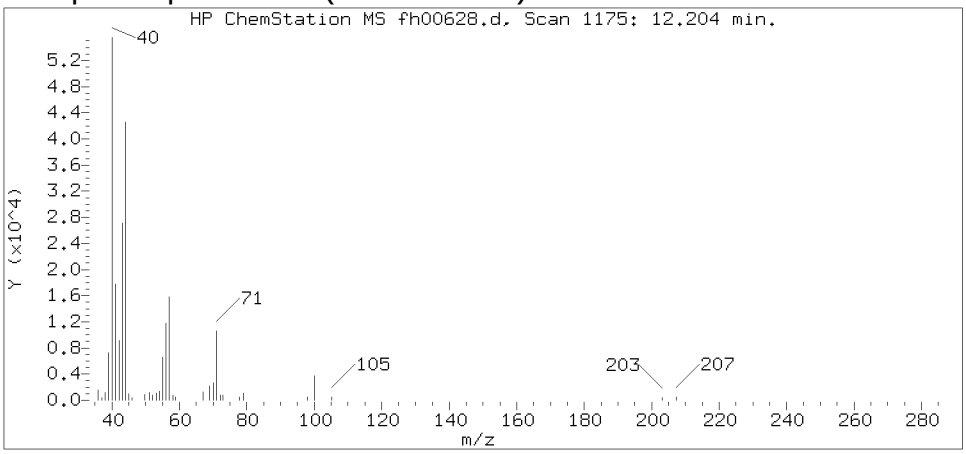


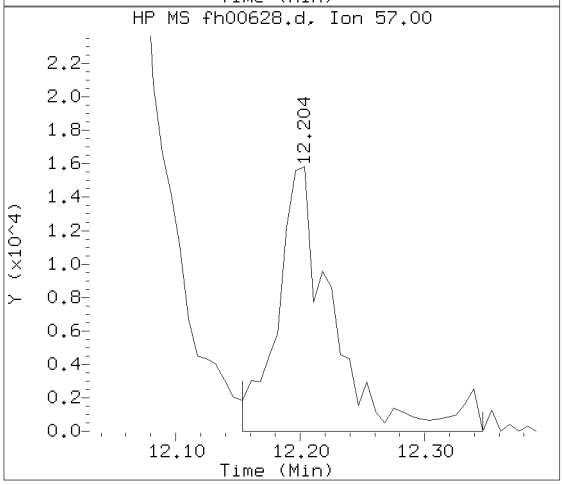
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00628.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:43 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 525-- Lab Sample ID: 9766347

Compound Number	: 47
Compound Name	: Heptane
Scan Number	: 1175
Retention Time (minutes)	: 12.204
Relative Retention Time	: 0.00049
Quant Ion	: 71.00
Area (flag)	: 28081
Concentration (ppb(v))	: 0.5226

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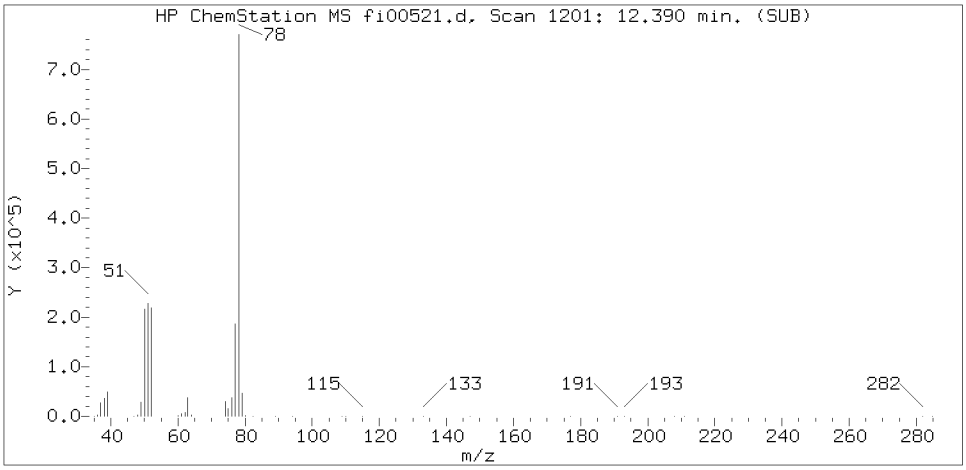
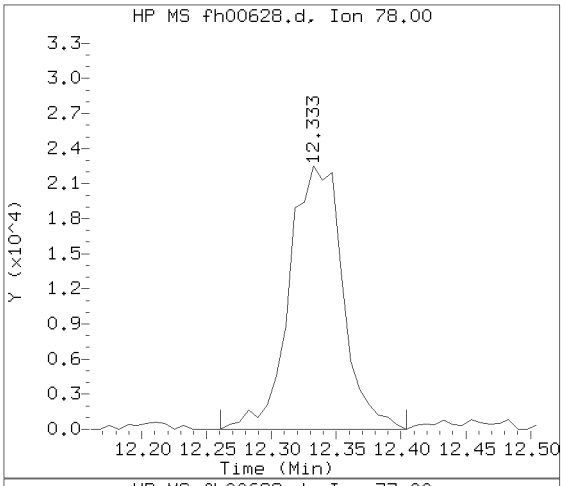
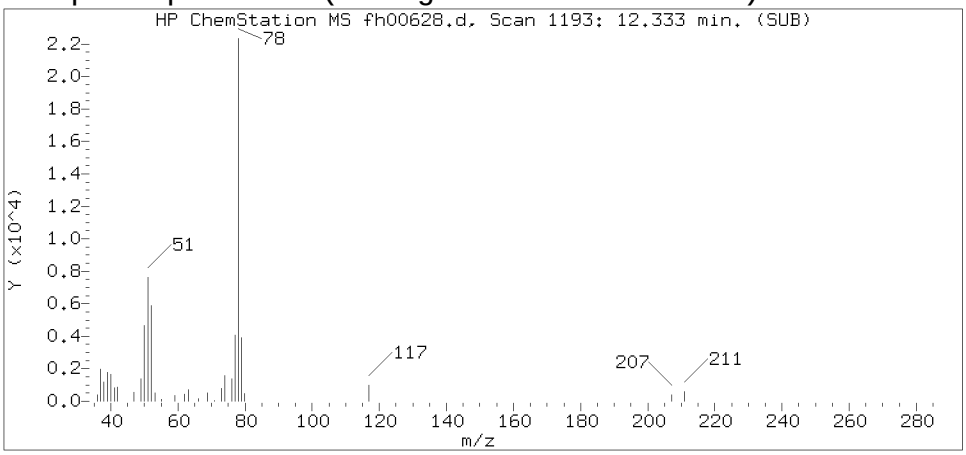
Target 3.5 esignature user ID: jeb07445

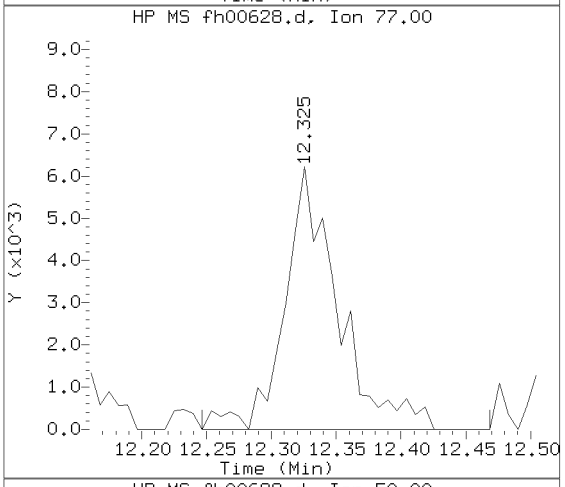
Reference Standard Spectrum for Benzene



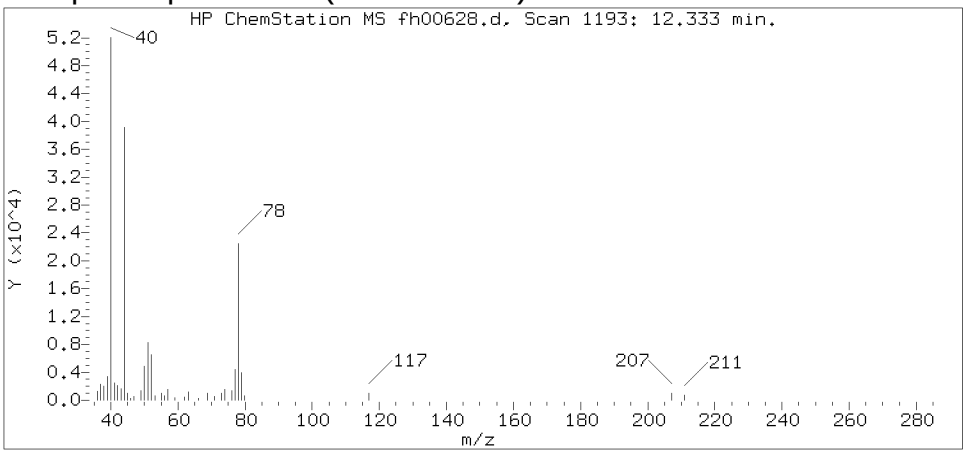


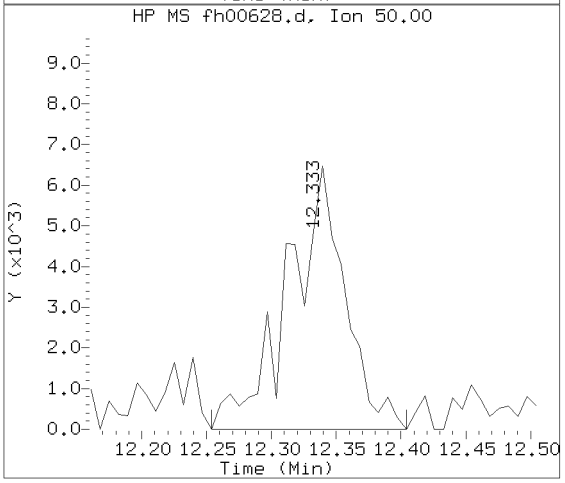
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00628.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:43 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 525-- Lab Sample ID: 9766347

Compound Number : 48
Compound Name : Benzene
Scan Number : 1193
Retention Time (minutes): 12.333
Relative Retention Time :-0.00004
Quant Ion : 78.00
Area (flag) : 64753
Concentration (ppb(v)) : 0.3897

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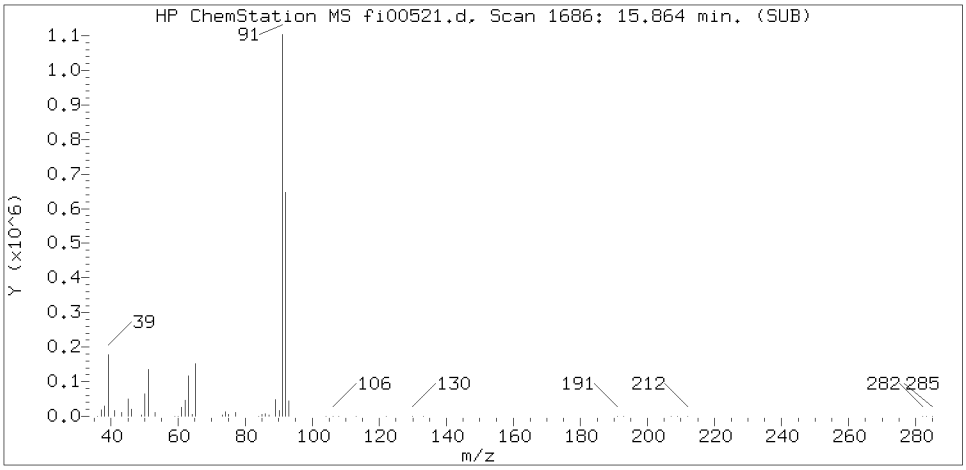
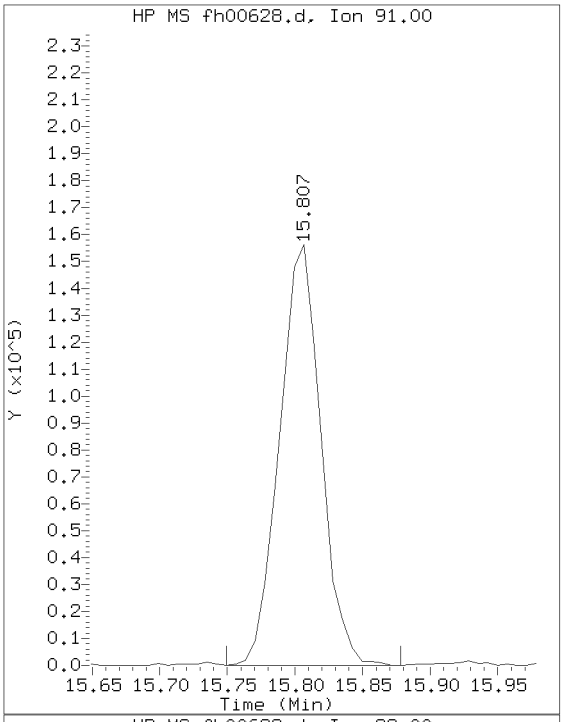
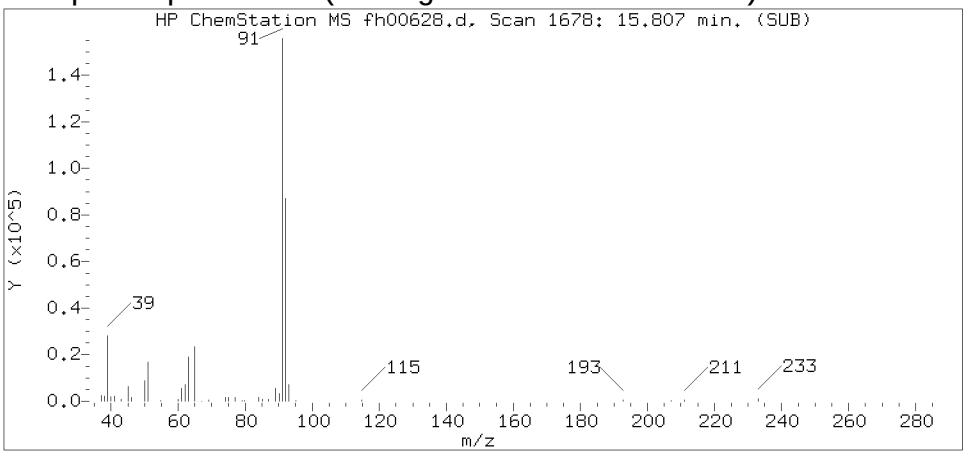
Target 3.5 esignature user ID: jeb07445

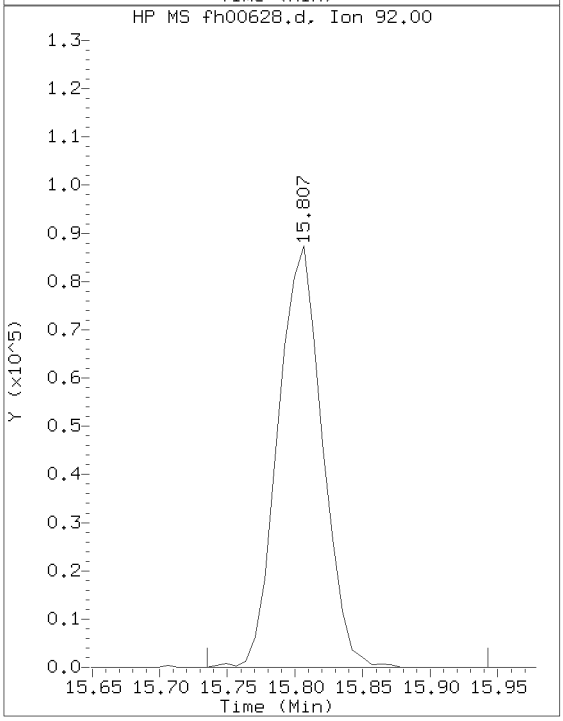
Reference Standard Spectrum for Toluene



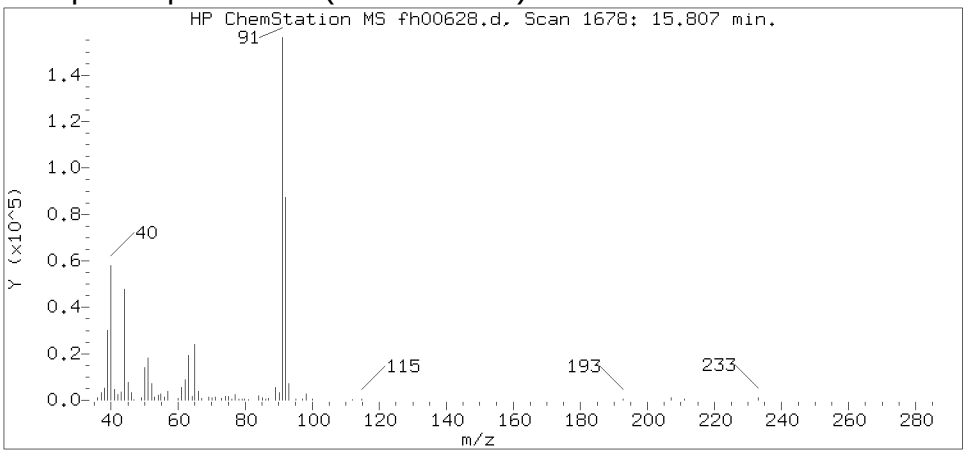


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00628.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:43 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 525-- Lab Sample ID: 9766347

Compound Number : 61
Compound Name : Toluene
Scan Number : 1678
Retention Time (minutes): 15.807
Relative Retention Time :-0.00073
Quant Ion : 91.00
Area (flag) : 333175
Concentration (ppb(v)) : 1.7349

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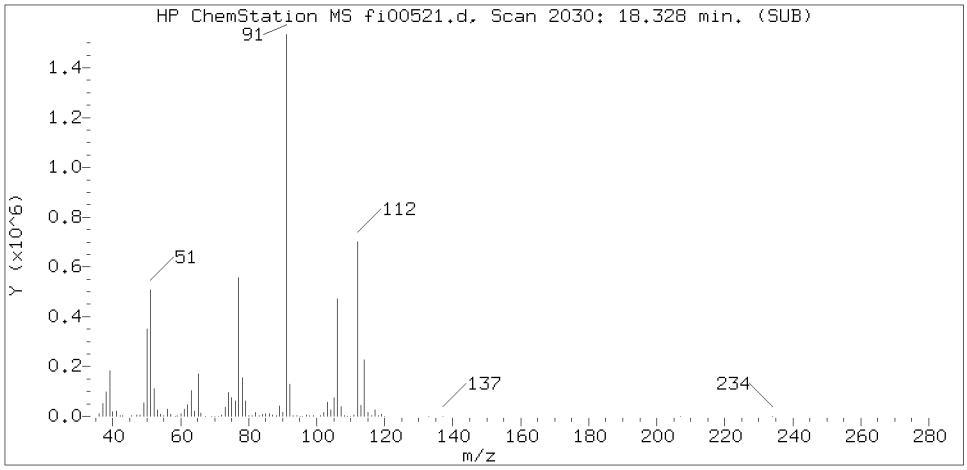
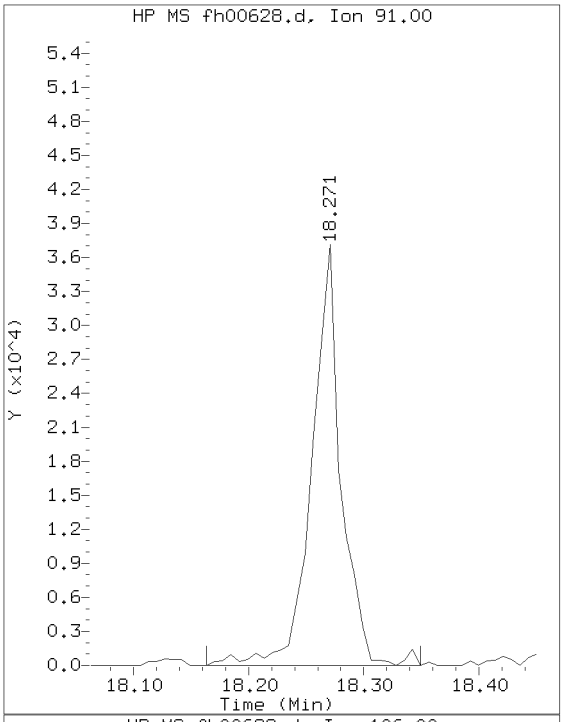
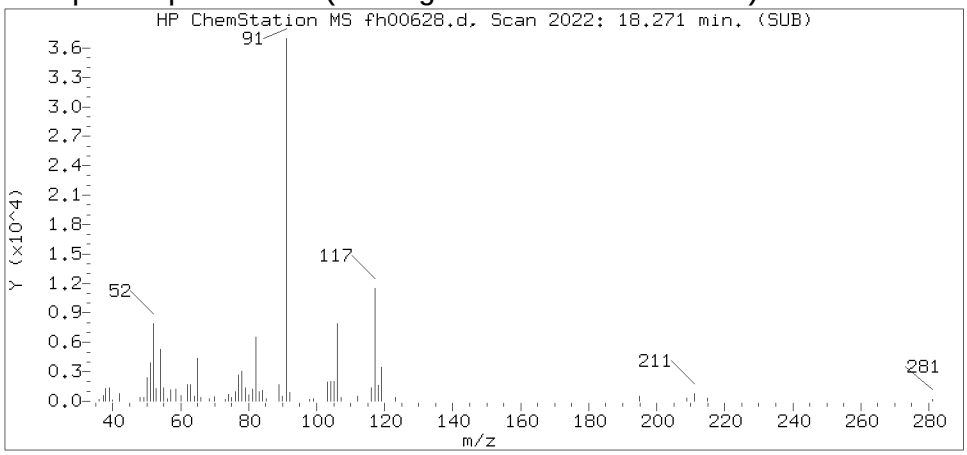
Target 3.5 esignature user ID: jeb07445

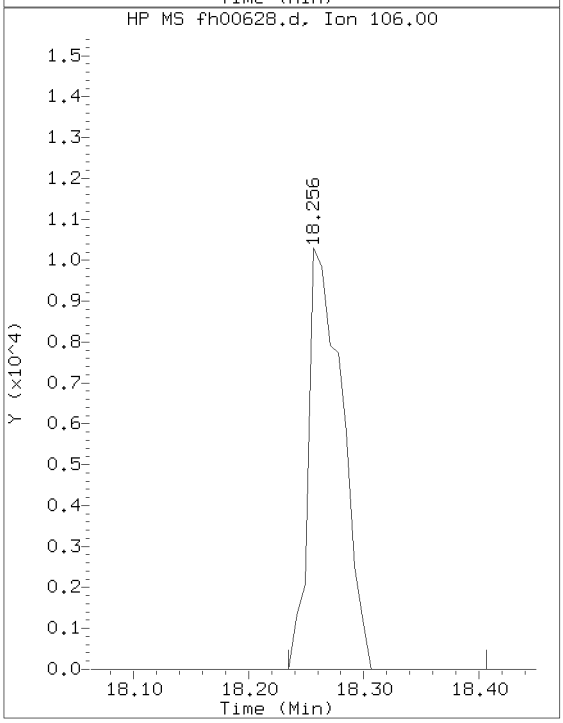
Reference Standard Spectrum for Ethylbenzene



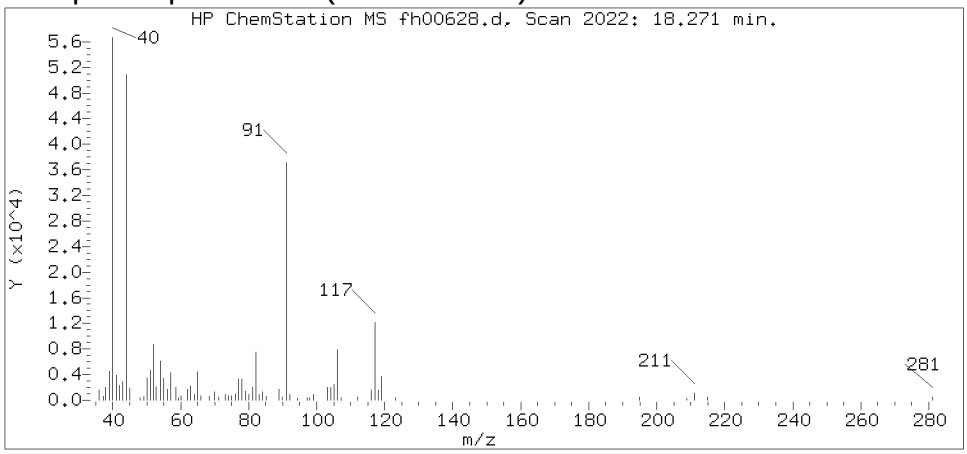


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00628.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:43 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 525-- Lab Sample ID: 9766347

Compound Number : 73
Compound Name : Ethylbenzene
Scan Number : 2022
Retention Time (minutes): 18.271
Relative Retention Time :-0.00039
Quant Ion : 91.00
Area (flag) : 65886
Concentration (ppb(v)) : 0.2514

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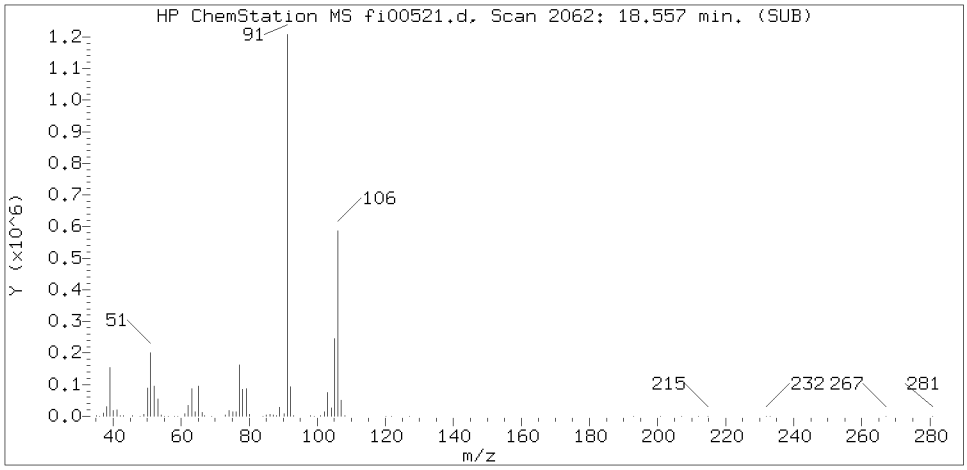
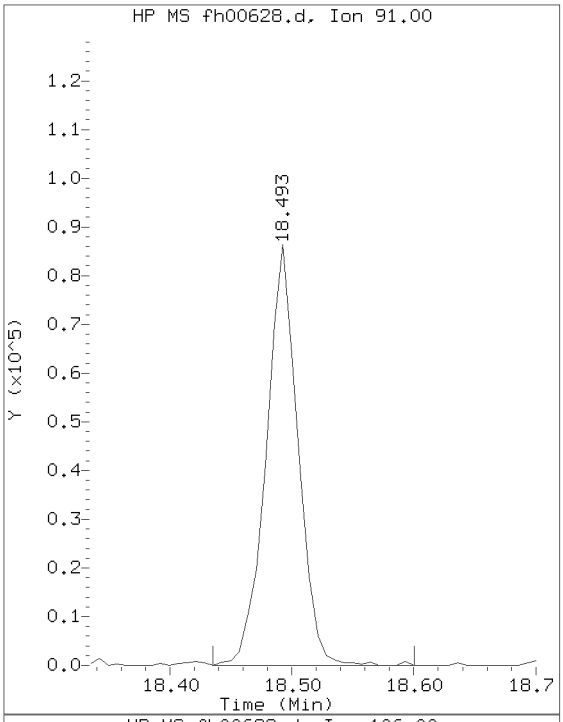
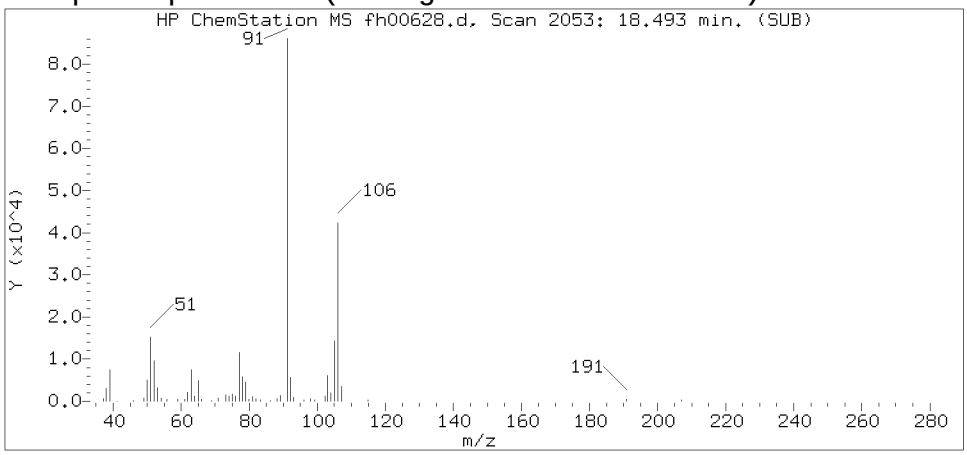
Target 3.5 esignature user ID: jeb07445

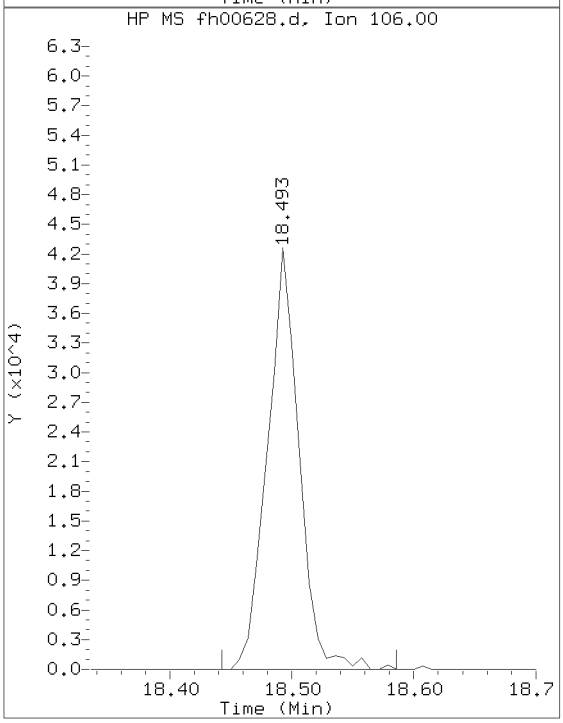
Reference Standard Spectrum for m/p-Xylene



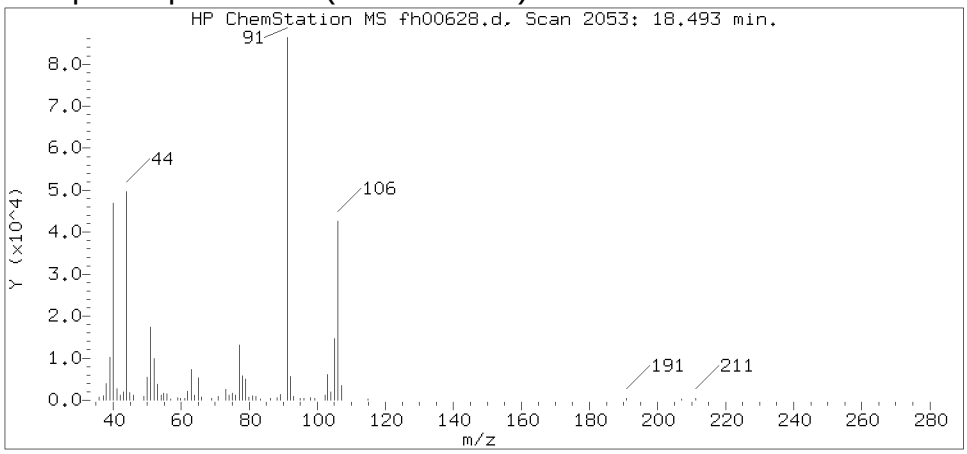


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00628.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:43 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 525-- Lab Sample ID: 9766347

Compound Number : 75
Compound Name : m/p-Xylene
Scan Number : 2053
Retention Time (minutes): 18.493
Relative Retention Time :-0.00040
Quant Ion : 91.00
Area (flag) : 156679
Concentration (ppb(v)) : 0.8317

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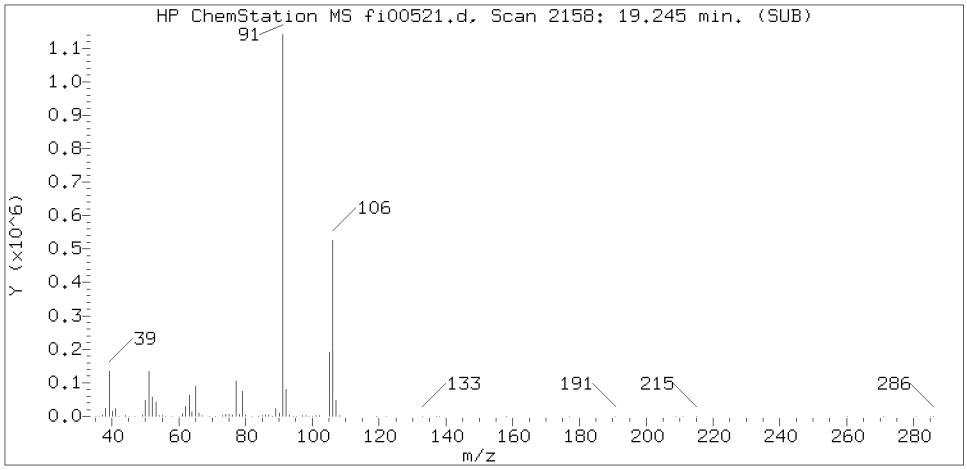
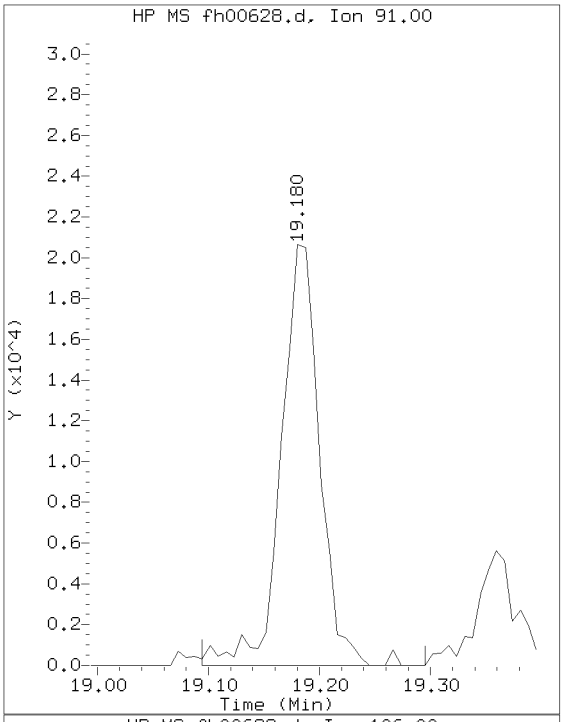
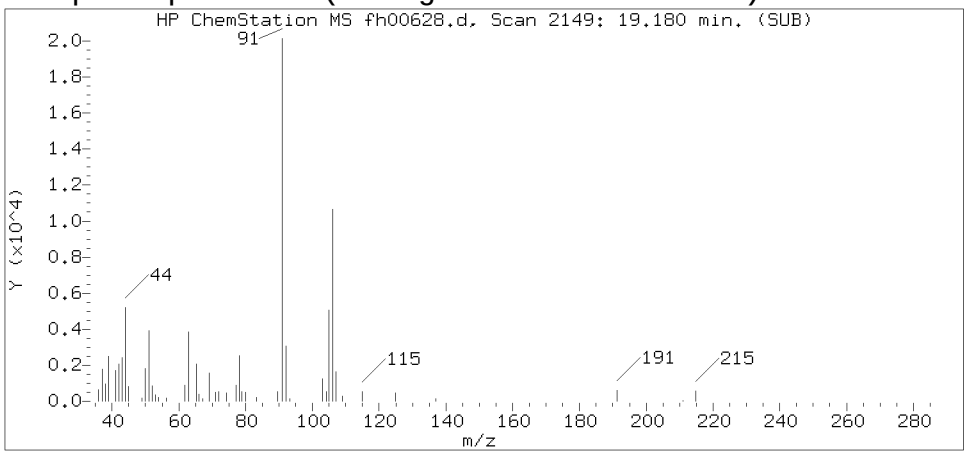
Target 3.5 esignature user ID: jeb07445

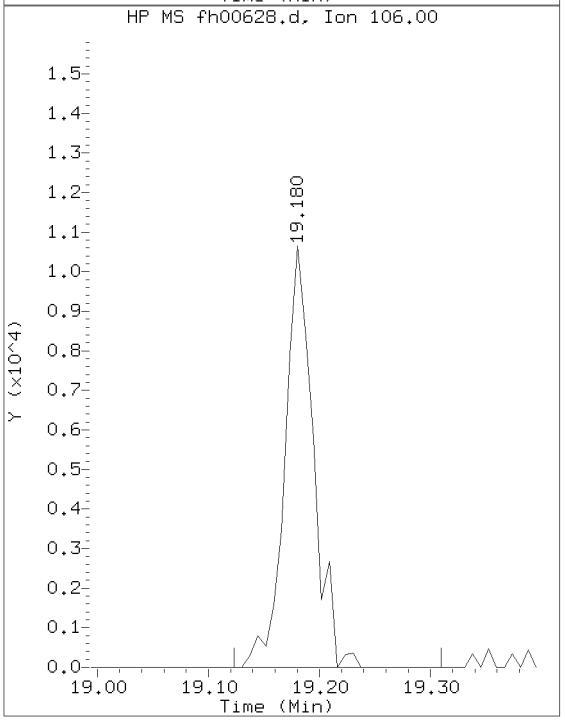
Reference Standard Spectrum for o-Xylene



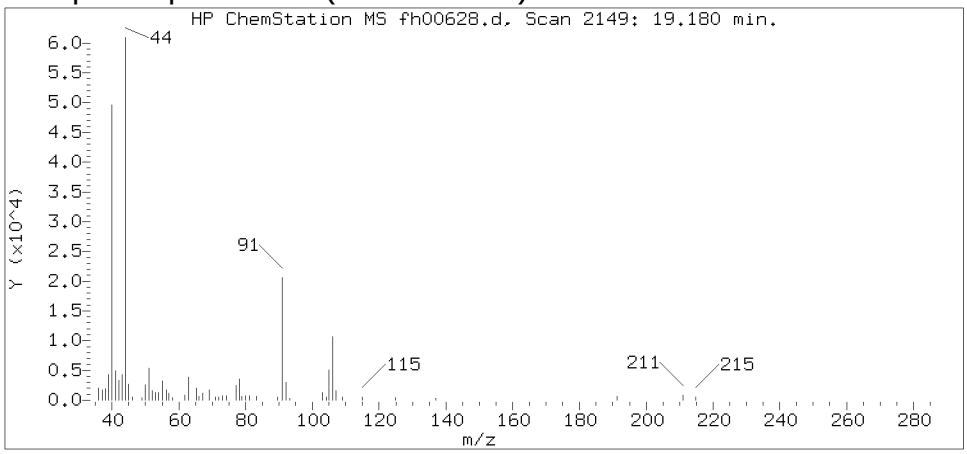


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00628.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 17:43 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:42 jeb07445

Sample Name: 525-- Lab Sample ID: 9766347

Compound Number	: 76
Compound Name	: o-Xylene
Scan Number	: 2149
Retention Time (minutes)	: 19.180
Relative Retention Time	:-0.00002
Quant Ion	: 91.00
Area (flag)	: 49826
Concentration (ppb(v))	: 0.2714

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Target 3.5 esignature user ID: jeb07445

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766348
Canister ID:	820	Lab File ID:	fh00629.d
Pressure Received:	14.6 psia	Date Collected:	08/18/2018
Final Pressure:	29.2 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	18:14
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	2.8	J
75-45-6	Chlorodifluoromethane	0.53	U
76-14-2	Freon 114	0.84	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.31	U
106-99-0	1,3-Butadiene	0.38	U
74-83-9	Bromomethane	0.70	U
75-00-3	Chloroethane	0.50	U
75-43-4	Dichlorofluoromethane	0.46	U
75-69-4	Trichlorofluoromethane	1.8	J
109-66-0	Pentane	5.0	
75-35-4	1,1-Dichloroethene	0.56	U
76-13-1	Freon 113	0.95	J
67-64-1	Acetone	29	
75-15-0	Carbon Disulfide	0.40	U
107-05-1	3-Chloropropene	0.47	U
75-09-2	Methylene Chloride	0.87	U
156-60-5	trans-1,2-Dichloroethene	0.34	U
1634-04-4	Methyl t-Butyl Ether	0.54	U
110-54-3	Hexane	2.6	J
75-34-3	1,1-Dichloroethane	0.36	U
156-59-2	cis-1,2-Dichloroethene	0.48	U
78-93-3	2-Butanone	9.5	
67-66-3	Chloroform	0.45	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766348
Canister ID:	820	Lab File ID:	fh00629.d
Pressure Received:	14.6 psia	Date Collected:	08/18/2018
Final Pressure:	29.2 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	18:14
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
71-55-6	1,1,1-Trichloroethane	0.65	U
56-23-5	Carbon Tetrachloride	0.88	U
71-43-2	Benzene	1.3	J
107-06-2	1,2-Dichloroethane	0.32	U
540-84-1	Isooctane	2.0	J
142-82-5	Heptane	2.6	J
79-01-6	Trichloroethene	0.97	U
78-87-5	1,2-Dichloropropane	0.60	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	0.80	U
10061-01-5	cis-1,3-Dichloropropene	0.45	U
108-10-1	4-Methyl-2-Pentanone	0.68	J
108-88-3	Toluene	6.7	
111-65-9	Octane	1.9	U
10061-02-6	trans-1,3-Dichloropropene	0.54	U
79-00-5	1,1,2-Trichloroethane	0.65	U
127-18-4	Tetrachloroethene	1.7	U
591-78-6	2-Hexanone	0.74	U
124-48-1	Dibromochloromethane	1.1	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	0.60	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.1	J
179601-23-1	m/p-Xylene	3.5	J

Abbreviations:
U = The compound is less than the limit being reported.
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E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766348
Canister ID:	820	Lab File ID:	fh00629.d
Pressure Received:	14.6 psia	Date Collected:	08/18/2018
Final Pressure:	29.2 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	18:14
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
95-47-6	o-Xylene	1.3	J
100-42-5	Styrene	0.85	U
75-25-2	Bromoform	1.8	U
98-82-8	Cumene	1.2	U
108-86-1	Bromobenzene	0.64	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	0.84	U
622-96-8	4-Ethyltoluene	0.88	U
108-67-8	1,3,5-Trimethylbenzene	1.6	U
95-63-6	1,2,4-Trimethylbenzene	1.4	U
541-73-1	1,3-Dichlorobenzene	1.1	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.2	U
67-72-1	Hexachloroethane	2.6	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Volatiles in Air 9766348

Data file: /chem/HP26379.i/18aug27.b/fh00629.d Injection date and time: **27-AUG-2018 18:14**
Data file Sample Info. Line: 9766348;400;F1823930AA;--820;0;0;SAMPLE; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 28-Aug-2018 12:43 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.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): 29.2 psia Canister Pressure before dilution (Ya): 14.6 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 400 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.108(-0.014)	1022	130	374830 (-12)	10.00		255500 - 596166
52) 1,4-Difluorobenzene	13.400(-0.007)	1342	114	1272181 (-16)	10.00		906195 - 2114453
71) Chlorobenzene-d5	18.228(0.007)	2016	117	1317269 (-11)	10.00		883644 - 2061835

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)	4.016(-0.000)	85	70864	0.566	0.57		J	0.13	1
3) Chlorodifluoromethane	(1)			Not Detected					0.15	1
4) Freon 114	(1)			Not Detected					0.12	1
5) Chloromethane	(1)			Not Detected					0.24	1
6) Vinyl Chloride	(1)			Not Detected					0.12	1
7) 1,3-Butadiene	(1)			Not Detected					0.17	1
8) Bromomethane	(1)			Not Detected					0.18	1
9) Chloroethane	(1)			Not Detected					0.19	1
13) Dichlorofluoromethane	(1)			Not Detected					0.11	1
12) Trichlorofluoromethane	(1)	5.879(0.000)	101	39316	0.320	0.32		J	0.15	1
11) Pentane	(1)	5.872(0.000)	43	228811	1.684	1.68			0.13	1
16) 1,1-Dichloroethene	(1)			Not Detected					0.14	1
17) Freon 113	(1)	6.917(0.000)	103	9027	0.124	0.12		J	0.11	1
24) Acetone	(1)	8.085(-0.001)	43	1440130	12.007	12.01			0.53	5
18) Carbon Disulfide	(1)			Not Detected					0.13	1
22) 3-Chloropropene	(1)			Not Detected					0.15	1
23) Methylene Chloride	(1)			Not Detected					0.25	2
25) trans-1,2-Dichloroethene	(1)			Not Detected					0.086	1
27) Methyl t-Butyl Ether	(1)			Not Detected					0.15	1
26) Hexane	(1)	8.457(0.000)	56	63086	0.730	0.73		J	0.13	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.089	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.12	1
45) 2-Butanone	(1)	11.810(0.001)	43	548563	3.222	3.22			0.21	1
39) Chloroform	(1)			Not Detected					0.092	1
44) 1,1,1-Trichloroethane	(1)			Not Detected					0.12	1
42) Carbon Tetrachloride	(1)			Not Detected					0.14	1
48) Benzene	(2)	12.340(-0.000)	78	65099	0.396	0.40		J	0.11	1
50) 1,2-Dichloroethane	(2)			Not Detected					0.08	1
46) Isooctane	(2)	12.053(-0.000)	57	157146	0.426	0.43		J	0.13	1
47) Heptane	(2)	12.196(0.001)	71	34347	0.646	0.65		J	0.23	1
51) Trichloroethene	(2)			Not Detected					0.18	1
55) 1,2-Dichloropropane	(2)			Not Detected					0.13	1
53) Dibromomethane	(2)			Not Detected					0.14	1
56) Bromodichloromethane	(2)			Not Detected					0.12	1
59) cis-1,3-Dichloropropene	(2)			Not Detected					0.1	1
62) 4-Methyl-2-Pentanone	(2)	16.401(0.000)	43	35267	0.165	0.17		J	0.15	1
61) Toluene	(3)	15.807(-0.000)	91	345897	1.778	1.78			0.12	1
60) Octane	(3)			Not Detected					0.4	2
64) trans-1,3-Dichloropropene	(3)			Not Detected					0.12	1
67) 1,1,2-Trichloroethane	(3)			Not Detected					0.12	1
63) Tetrachloroethene	(3)			Not Detected					0.25	2
70) 2-Hexanone	(3)			Not Detected					0.18	1
68) Dibromochloromethane	(3)			Not Detected					0.13	1

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18aug27.b/fh00629.d Injection date and time: **27-AUG-2018 18:14**
Data file Sample Info. Line: 9766348;400;F1823930AA;--820;0;0;SAMPLE; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 28-Aug-2018 12:43 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.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): 29.2 psia Canister Pressure before dilution (Ya): 14.6 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 400 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
69) 1,2-Dibromoethane	(3)			Not Detected					0.13	1
72) Chlorobenzene	(3)			Not Detected					0.13	1
74) 1,1,1,2-Tetrachloroethane	(3)			Not Detected					0.15	1
73) Ethylbenzene	(3)	18.271(-0.000)	91	69666	0.262	0.26		J	0.19	1
75) m/p-Xylene	(3)	18.493(-0.000)	91	154572	0.810	0.81		J	0.26	2
76) o-Xylene	(3)	19.180(-0.000)	91	55882	0.300	0.30		J	0.19	1
78) Styrene	(3)			Not Detected					0.2	1
79) Bromoform	(3)			Not Detected					0.17	1
80) Cumene	(3)			Not Detected					0.24	1
82) Bromobenzene	(3)			Not Detected					0.1	1
83) 1,1,2,2-Tetrachloroethane	(3)			Not Detected					0.15	1
87) 1,2,3-Trichloropropane	(3)			Not Detected					0.14	1
84) 4-Ethyltoluene	(3)			Not Detected					0.18	1
86) 1,3,5-Trimethylbenzene	(3)			Not Detected					0.32	2
90) 1,2,4-Trimethylbenzene	(3)			Not Detected					0.28	2
93) 1,3-Dichlorobenzene	(3)			Not Detected					0.19	1
94) 1,4-Dichlorobenzene	(3)			Not Detected					0.17	1
98) 1,2-Dichlorobenzene	(3)			Not Detected					0.2	1
97) Hexachloroethane	(3)			Not Detected					0.27	2

Total number of targets = 62

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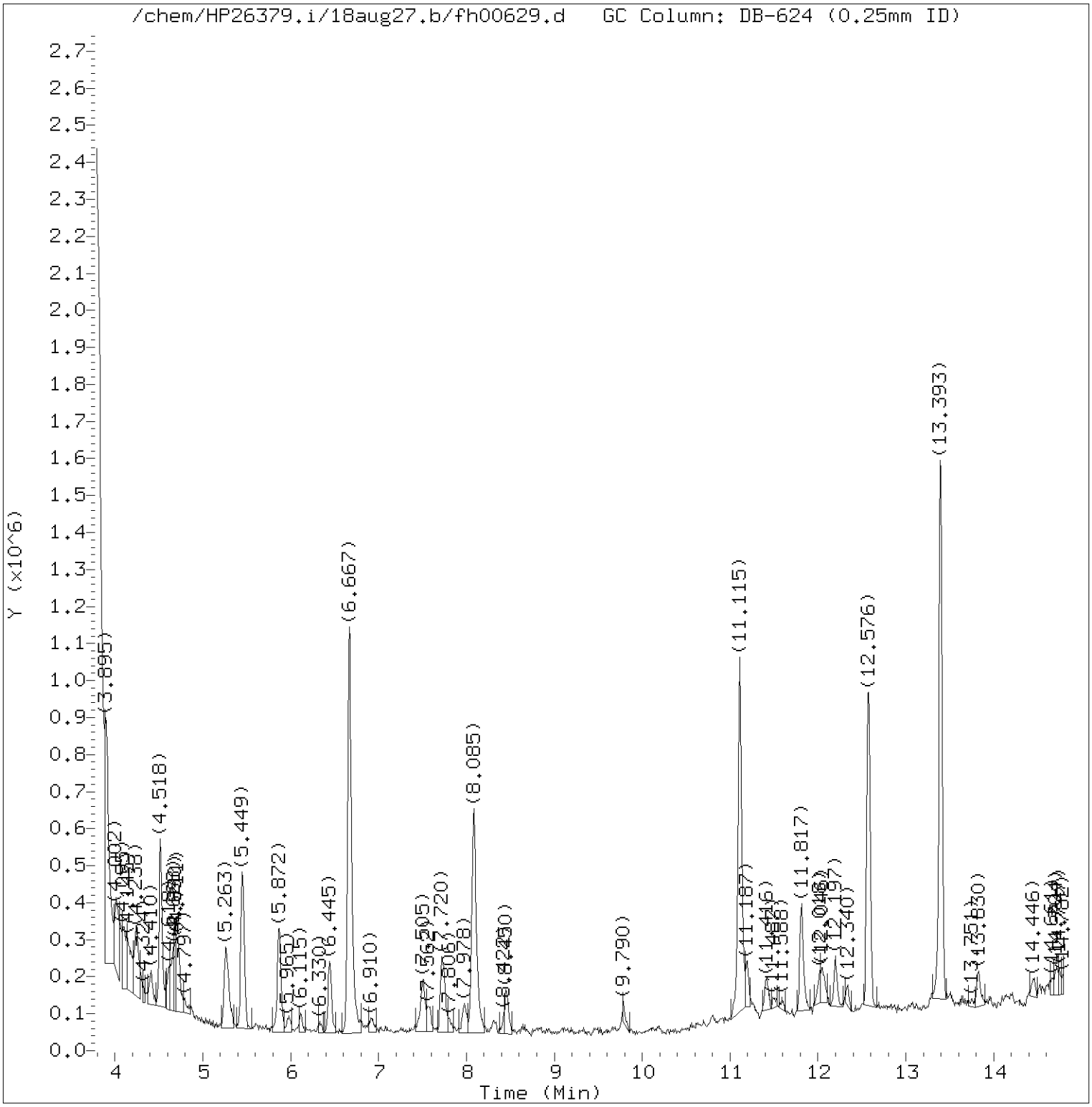
Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:40. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

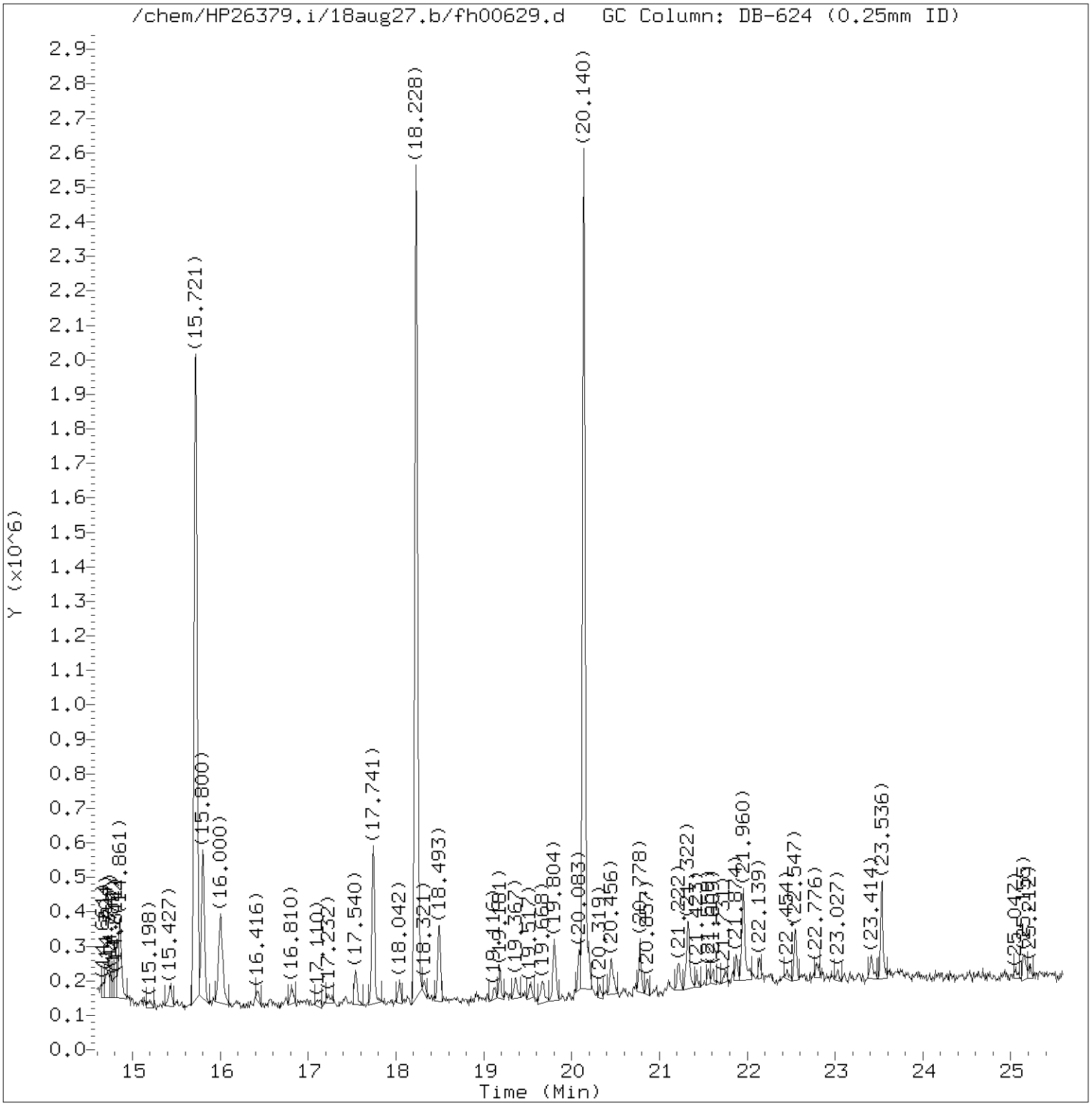
Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00629.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:14 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:43 jeb07445

Sample Name: --820 Lab Sample ID: 9766348

Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00629.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:14 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:43 jeb07445

Sample Name: --820 Lab Sample ID: 9766348

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on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00629.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:14 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:43 jeb07445

Sample Name: --820 Lab Sample ID: 9766348

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
2) Dichlorodifluoromethane	(1)	4.016	85	70864	0.566
11) Pentane	(1)	5.872	43	228811	1.684
12) Trichlorofluoromethane	(1)	5.879	101	39316	0.320
17) Freon 113	(1)	6.917	103	9027	0.124
24) Acetone	(1)	8.085	43	1440130	12.007
26) Hexane	(1)	8.457	56	63086	0.730
37)*Bromochloromethane	(1)	11.108	130	374830	10.000
45) 2-Butanone	(1)	11.810	43	548563	3.222
46) Isooctane	(2)	12.053	57	157146	0.426
47) Heptane	(2)	12.197	71	34347	0.646
48) Benzene	(2)	12.340	78	65099	0.396
52)*1,4-Difluorobenzene	(2)	13.400	114	1272181	10.000
61) Toluene	(3)	15.807	91	345897	1.778
62) 4-Methyl-2-Pentanone	(2)	16.401	43	35267	0.165
71)*Chlorobenzene-d5	(3)	18.228	117	1317269	10.000
73) Ethylbenzene	(3)	18.271	91	69666	0.262
75) m/p-Xylene	(3)	18.493	91	154572	0.810
76) o-Xylene	(3)	19.181	91	55882	0.300

* = Compound is an internal standard.

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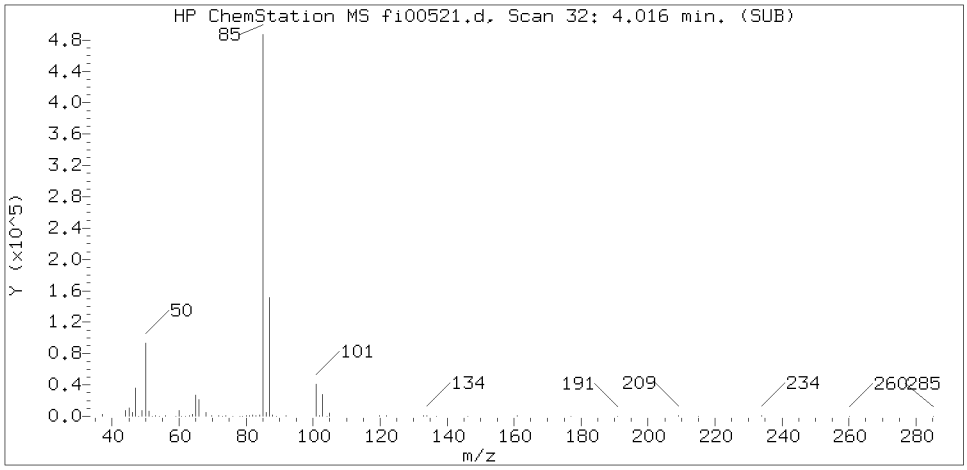
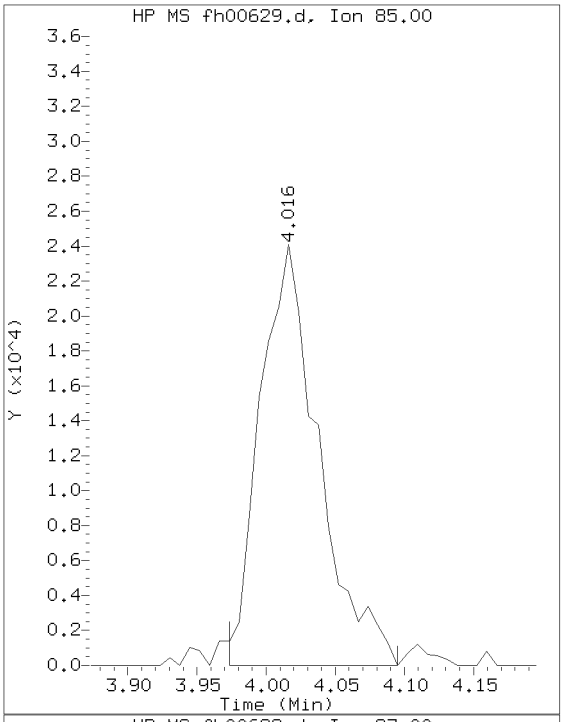
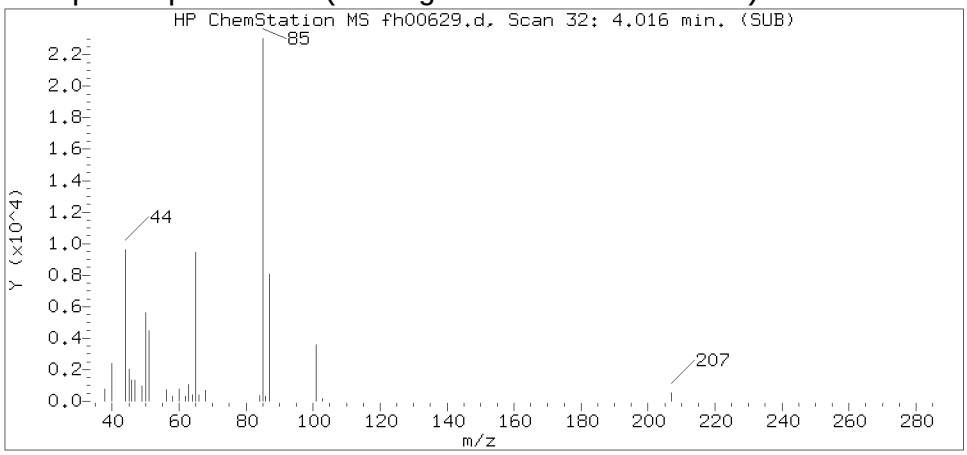
on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

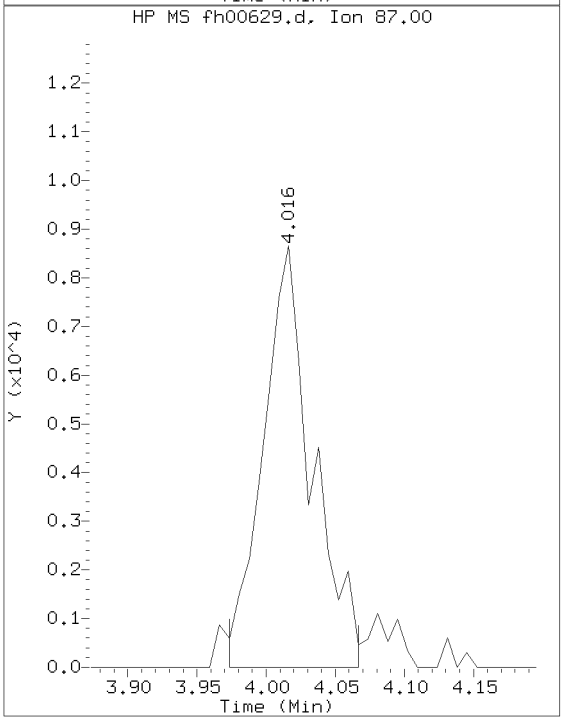
Reference Standard Spectrum for Dichlorodifluoromethane



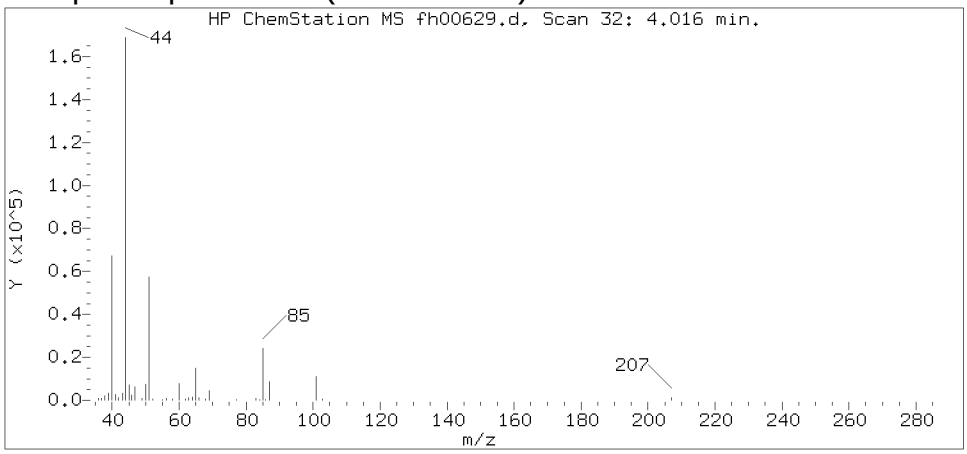


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00629.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:14 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:43 jeb07445

Sample Name: --820 Lab Sample ID: 9766348

Compound Number : 2
Compound Name : Dichlorodifluoromethane
Scan Number : 32
Retention Time (minutes): 4.016
Relative Retention Time :-0.00083
Quant Ion : 85.00
Area (flag) : 70864
Concentration (ppb(v)) : 0.5661

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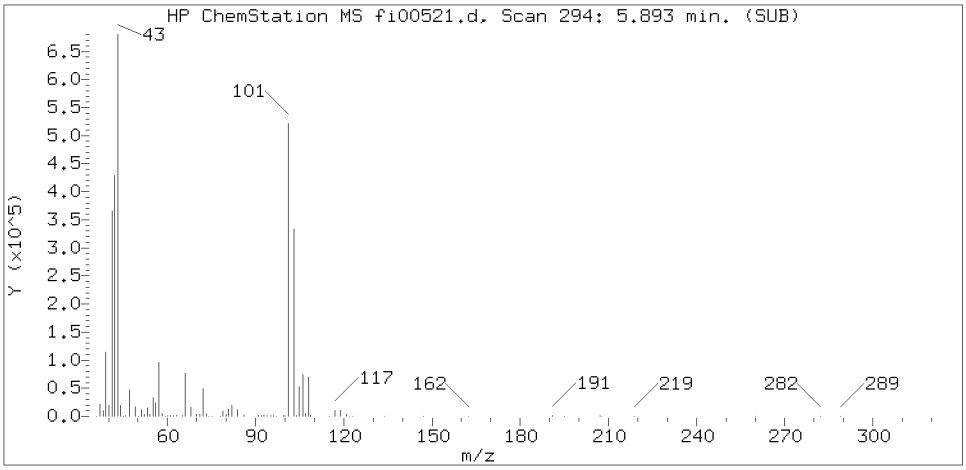
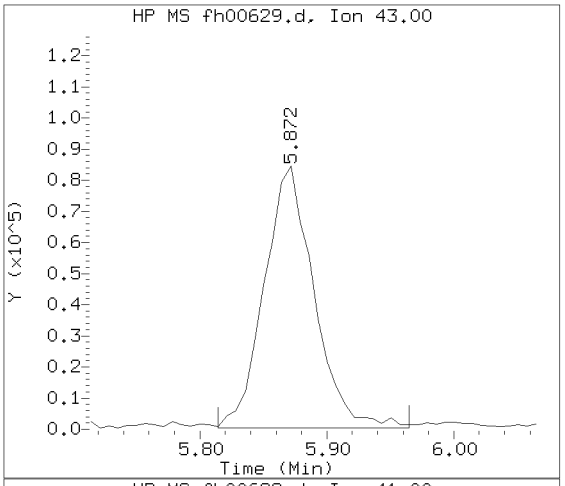
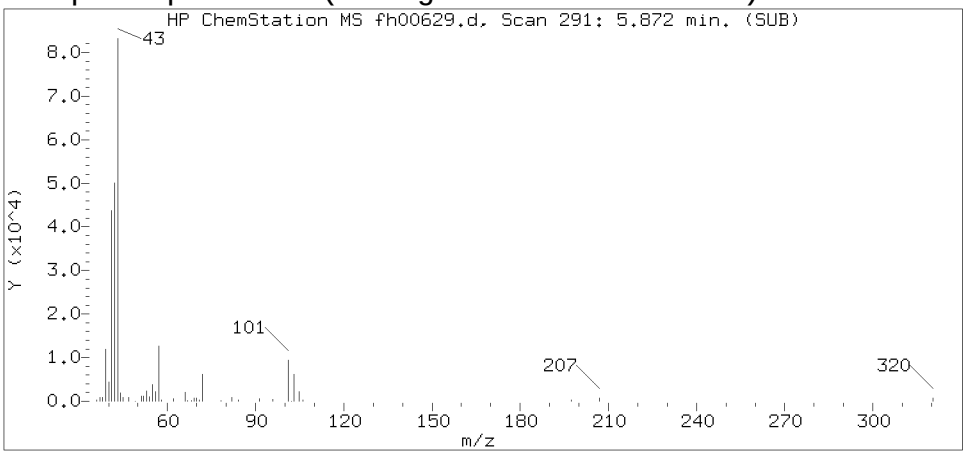
Target 3.5 esignature user ID: jeb07445

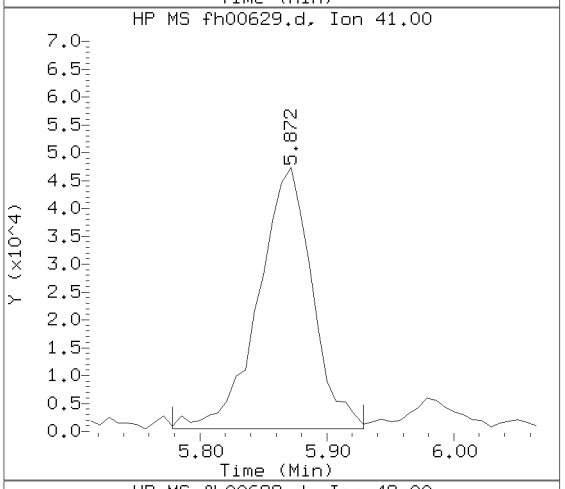
Reference Standard Spectrum for Pentane



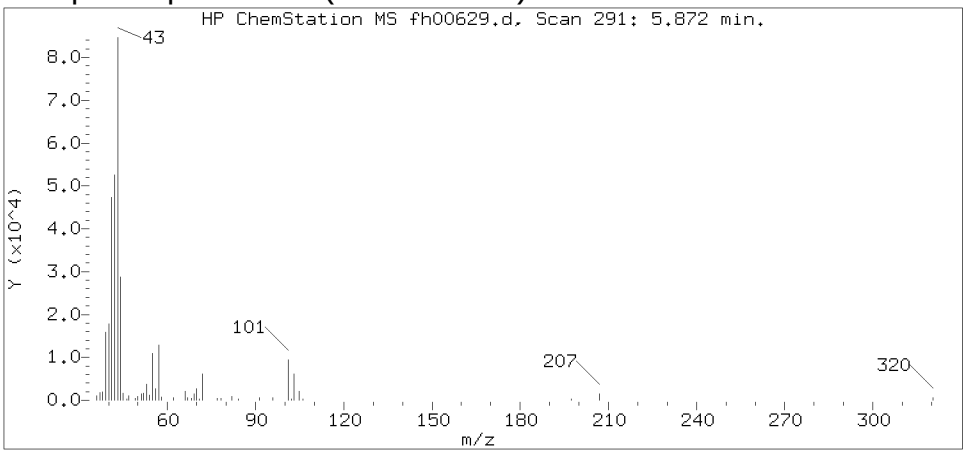


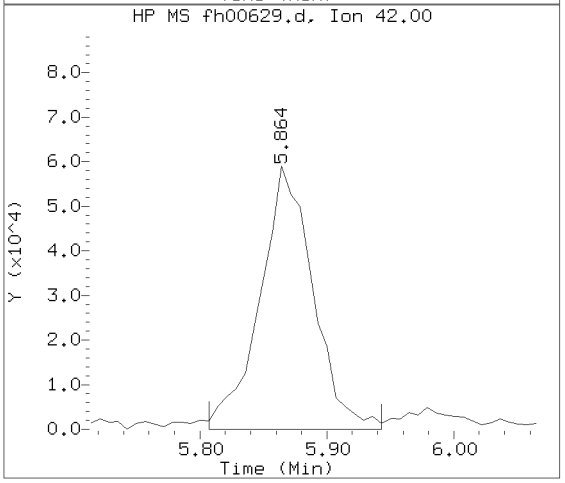
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00629.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:14 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:43 jeb07445

Sample Name: --820 Lab Sample ID: 9766348

Compound Number : 11
Compound Name : Pentane
Scan Number : 291
Retention Time (minutes): 5.872
Relative Retention Time : 0.00003
Quant Ion : 43.00
Area (flag) : 228811
Concentration (ppb(v)) : 1.6842

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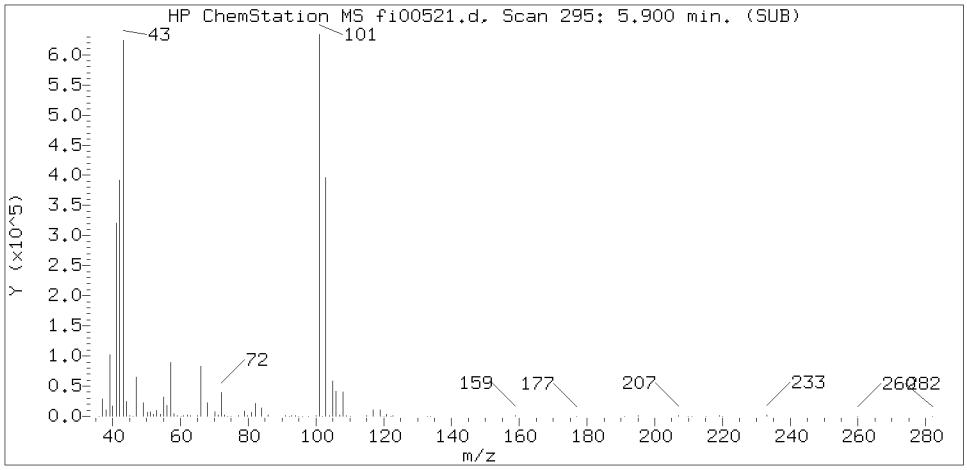
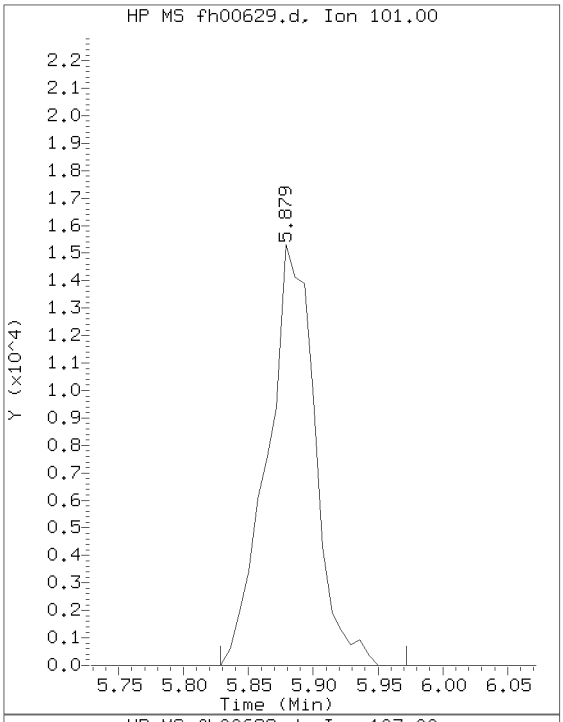
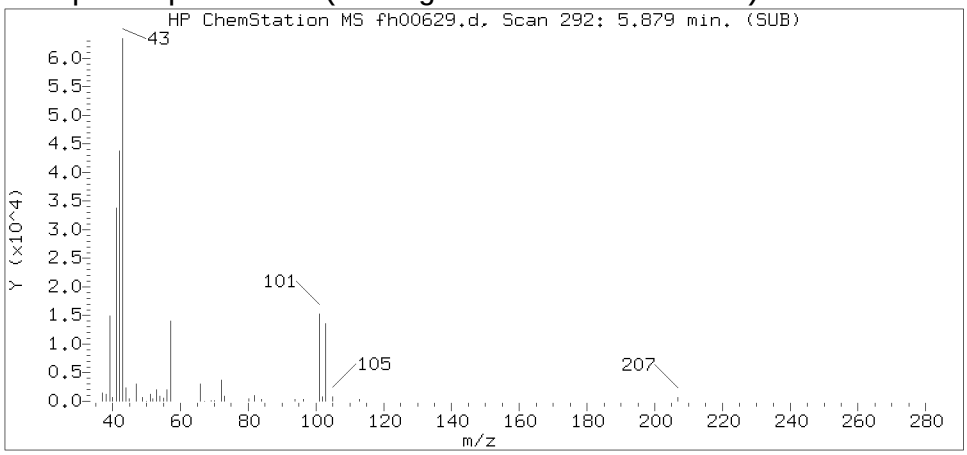
Target 3.5 esignature user ID: jeb07445

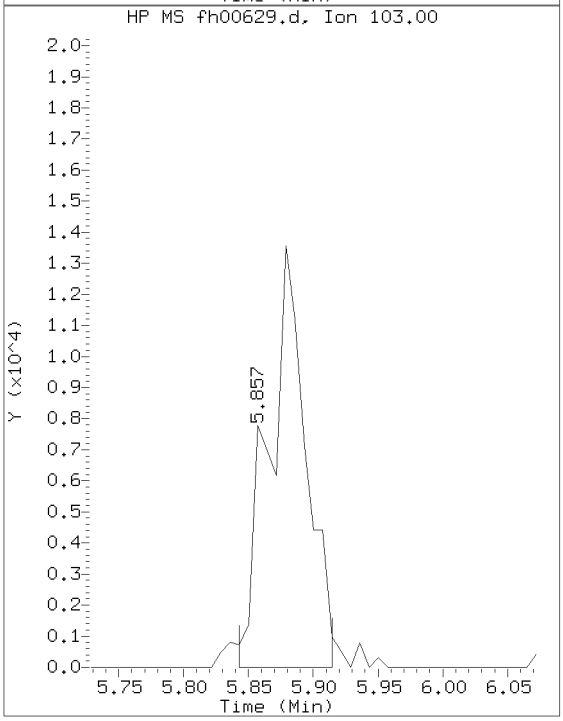
Reference Standard Spectrum for Trichlorofluoromethane



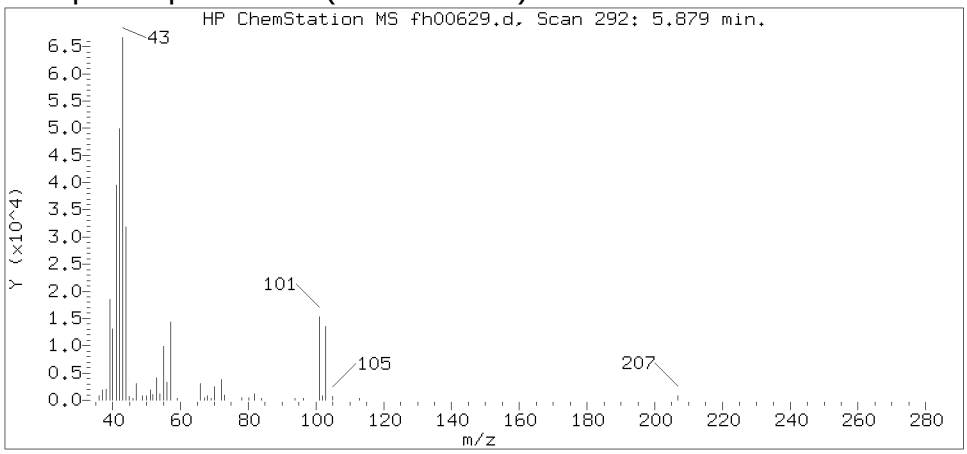


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00629.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:14 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:43 jeb07445

Sample Name: --820 Lab Sample ID: 9766348

Compound Number	: 12
Compound Name	: Trichlorofluoromethane
Scan Number	: 292
Retention Time (minutes)	: 5.879
Relative Retention Time	: 0.00003
Quant Ion	: 101.00
Area (flag)	: 39316
Concentration (ppb(v))	: 0.3199

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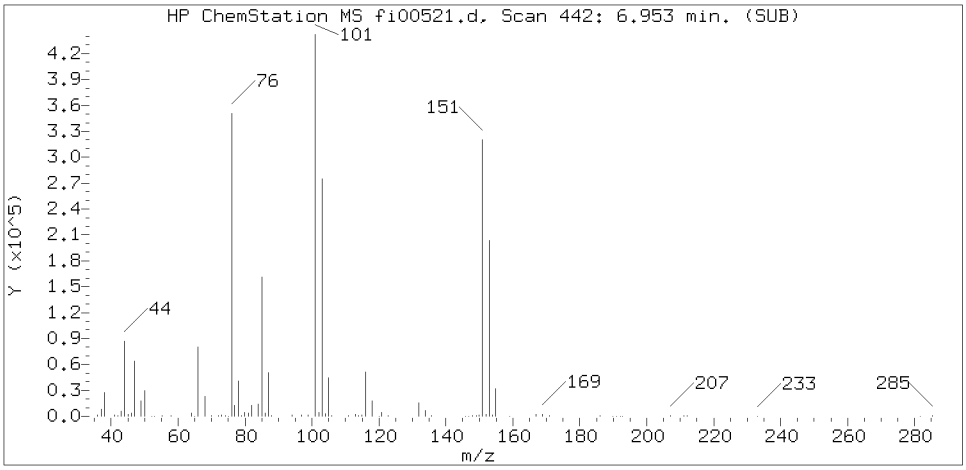
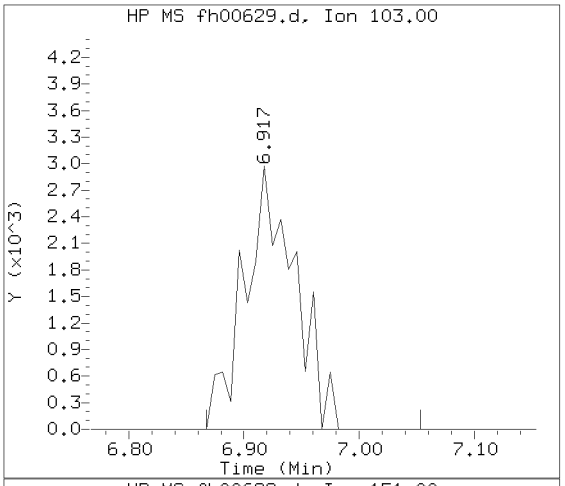
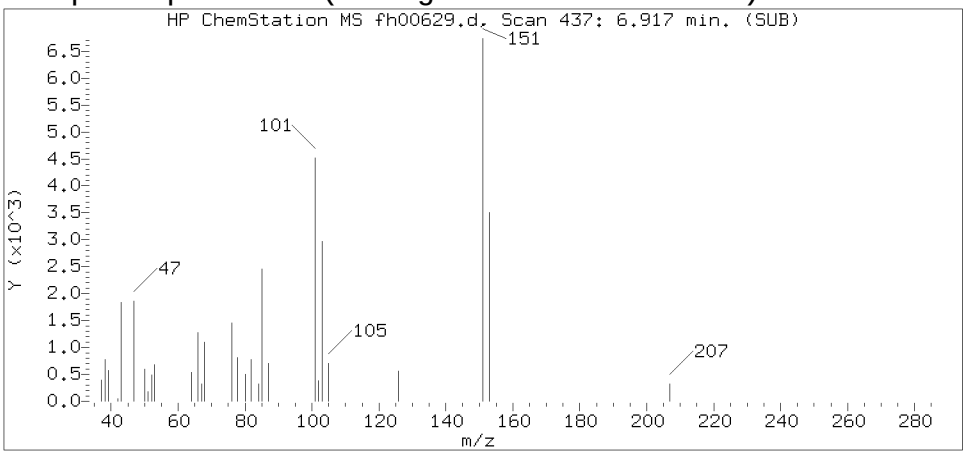
Target 3.5 esignature user ID: jeb07445

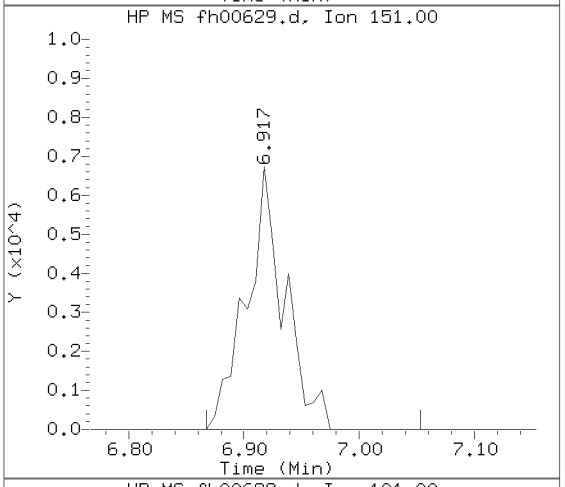
Reference Standard Spectrum for Freon 113



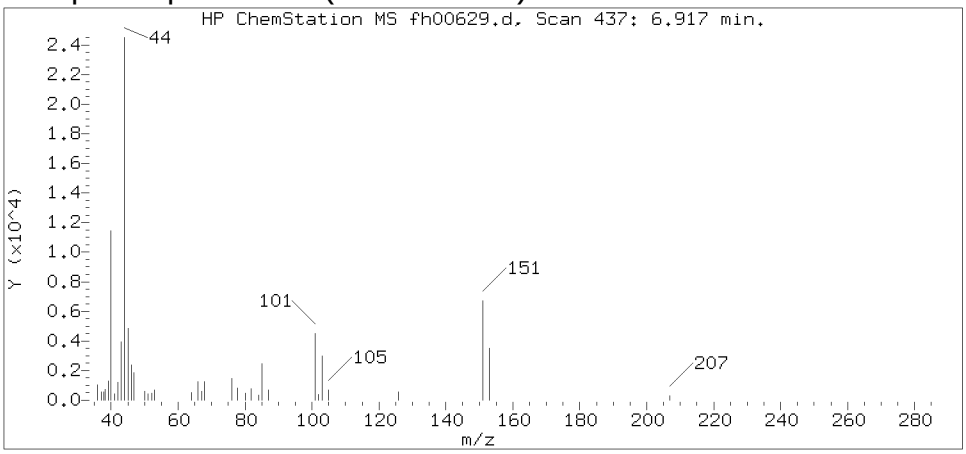


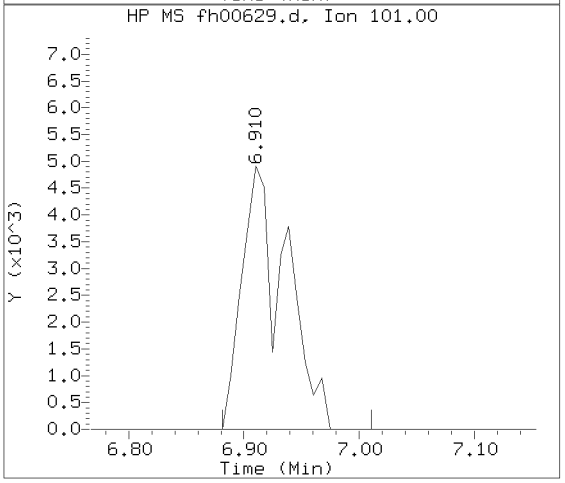
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00629.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:14 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:43 jeb07445

Sample Name: --820 Lab Sample ID: 9766348

Compound Number : 17
Compound Name : Freon 113
Scan Number : 437
Retention Time (minutes): 6.917
Relative Retention Time : 0.00015
Quant Ion : 103.00
Area (flag) : 9027
Concentration (ppb(v)) : 0.1238

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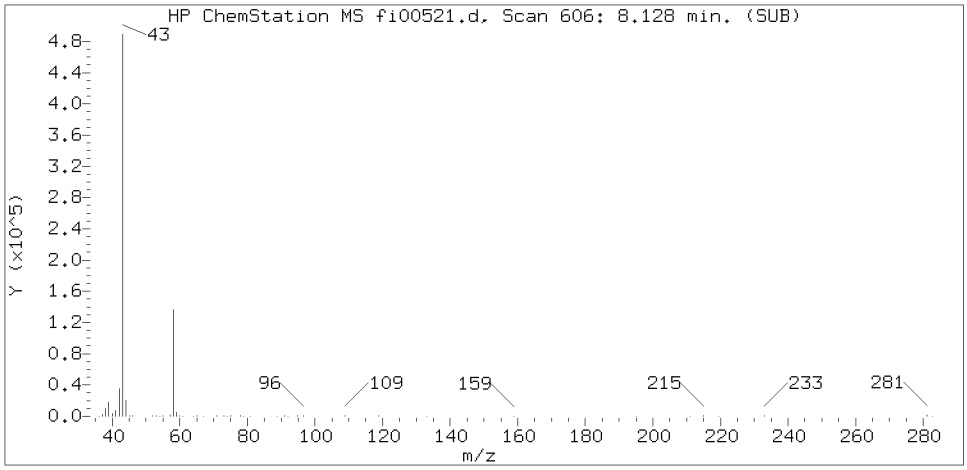
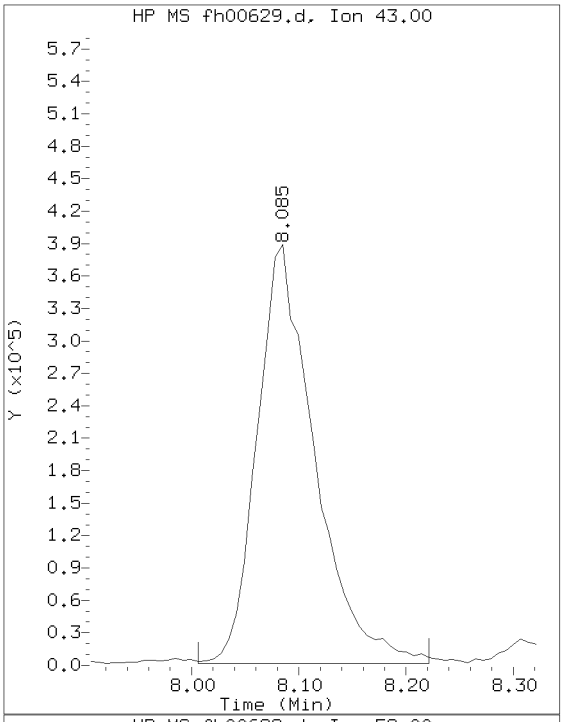
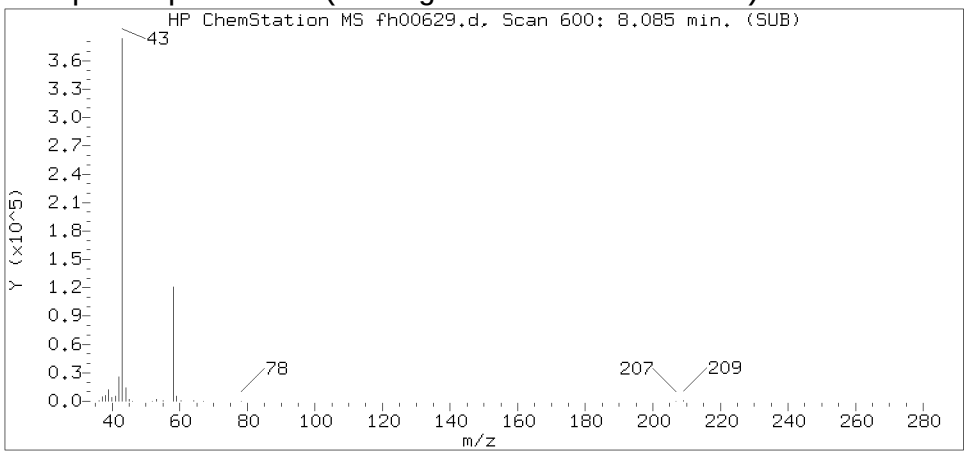
Target 3.5 esignature user ID: jeb07445

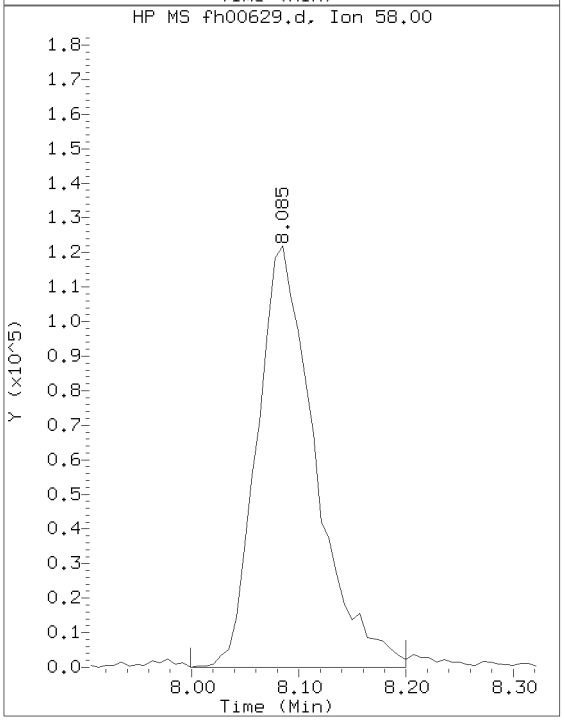
Reference Standard Spectrum for Acetone



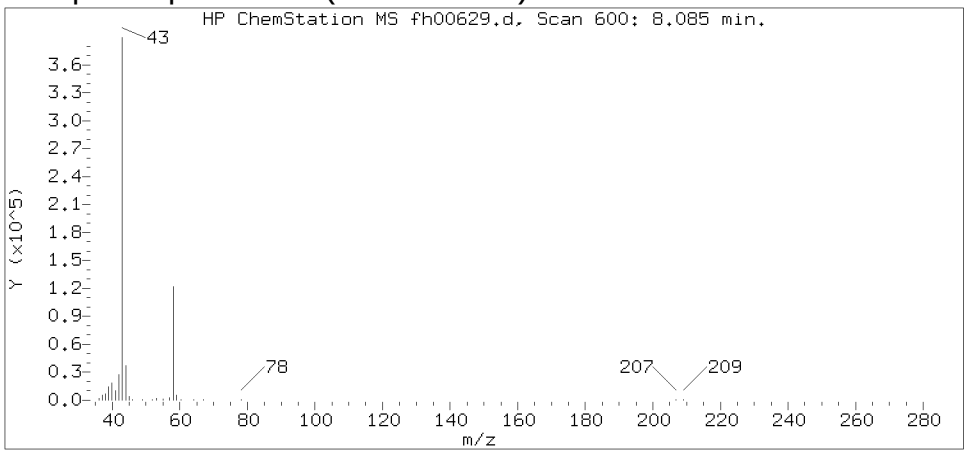


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00629.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:14 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:43 jeb07445

Sample Name: --820 Lab Sample ID: 9766348

Compound Number : 24
Compound Name : Acetone
Scan Number : 600
Retention Time (minutes): 8.085
Relative Retention Time :-0.00100
Quant Ion : 43.00
Area (flag) : 1440130
Concentration (ppb(v)) : 12.0074

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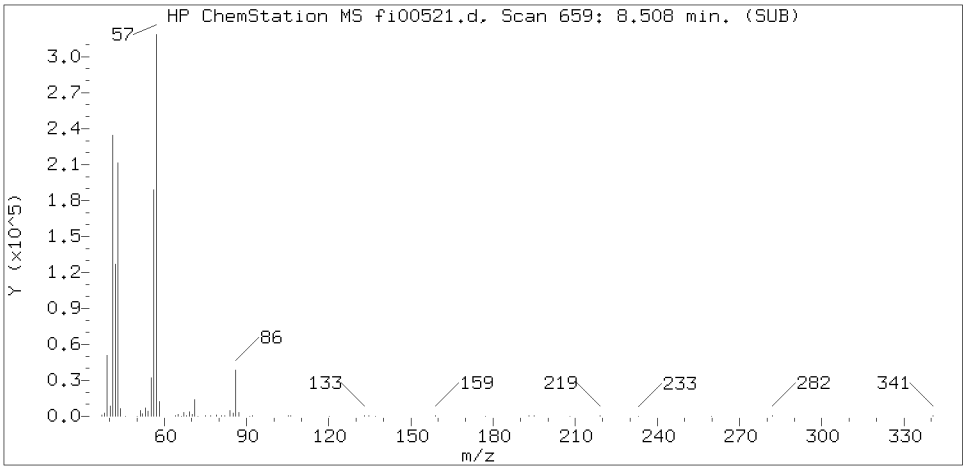
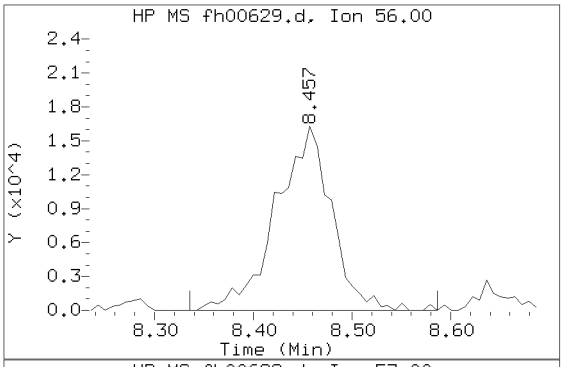
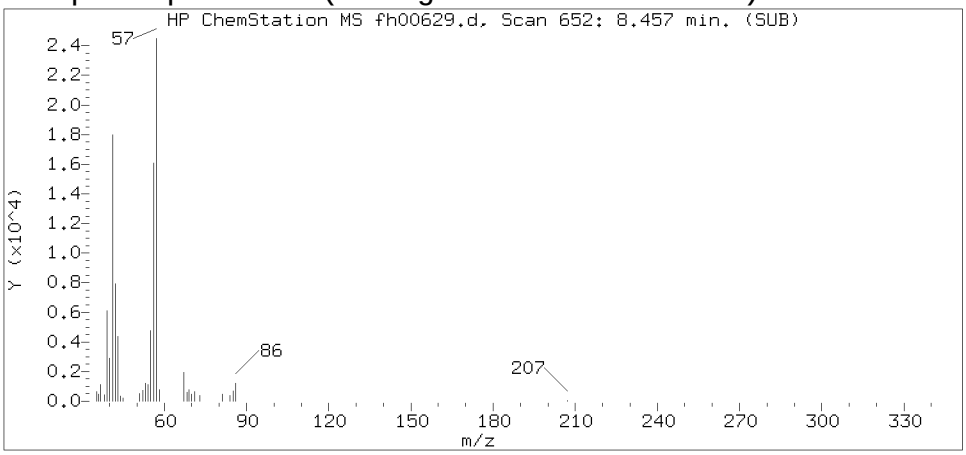
Target 3.5 esignature user ID: jeb07445

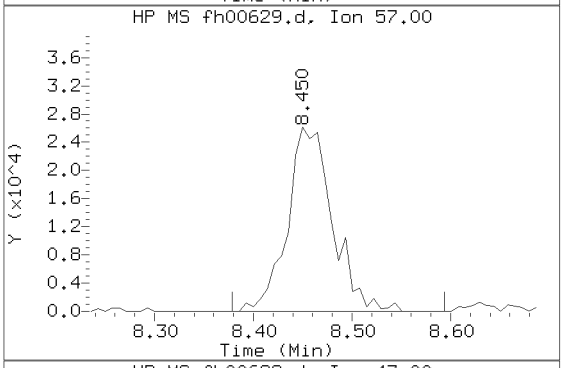
Reference Standard Spectrum for Hexane

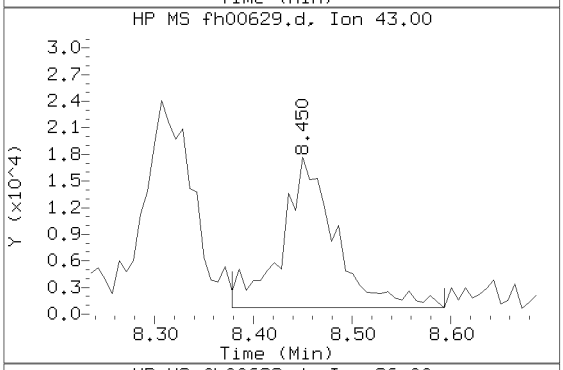




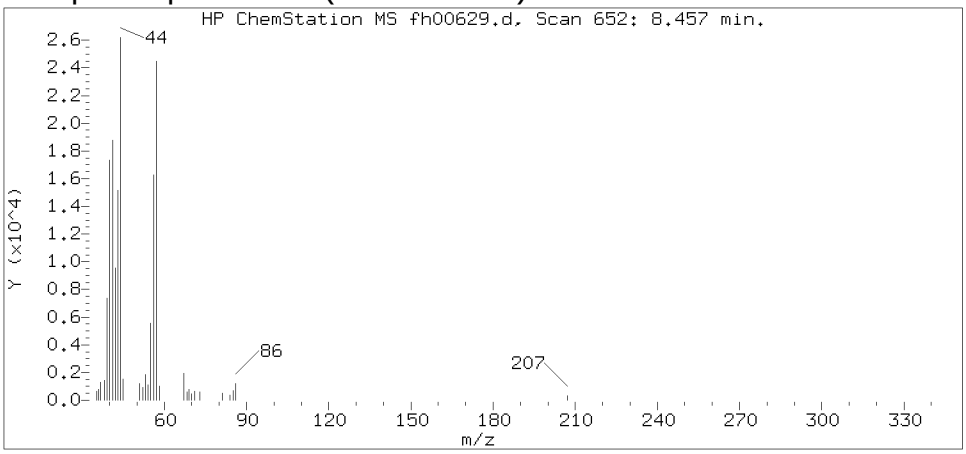
Sample Spectrum (Background Subtracted)

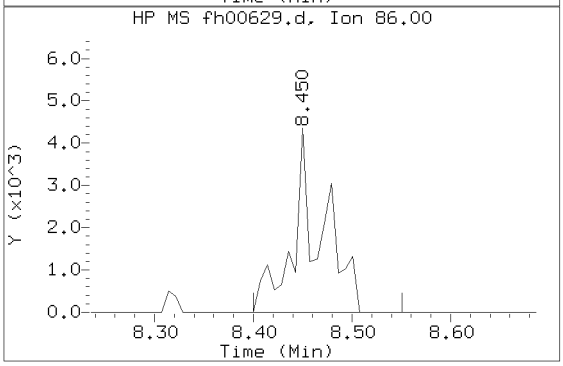






Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00629.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:14 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:43 jeb07445

Sample Name: --820 Lab Sample ID: 9766348

Compound Number : 26
Compound Name : Hexane
Scan Number : 652
Retention Time (minutes): 8.457
Relative Retention Time : 0.00033
Quant Ion : 56.00
Area (flag) : 63086
Concentration (ppb(v)) : 0.7298

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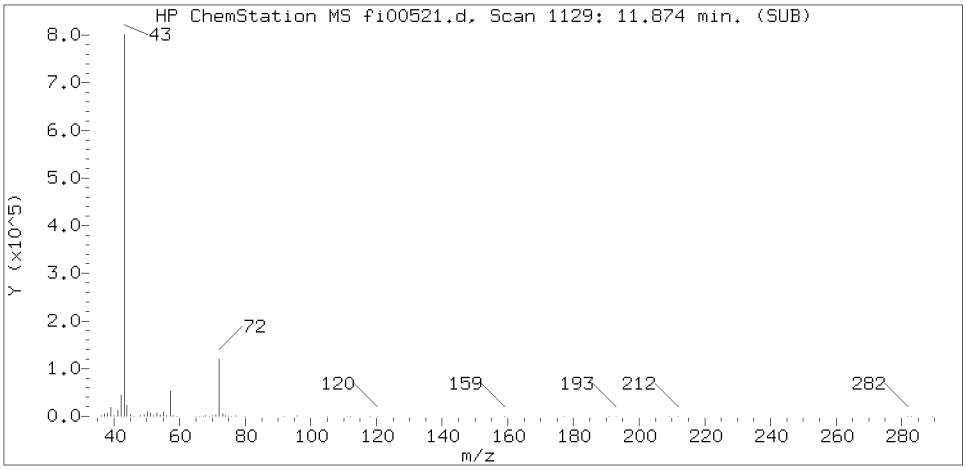
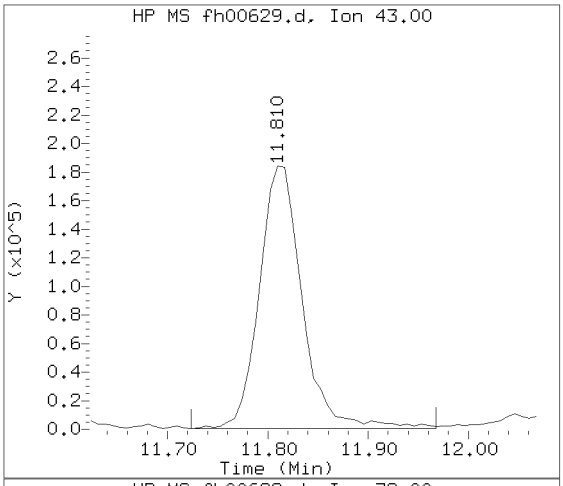
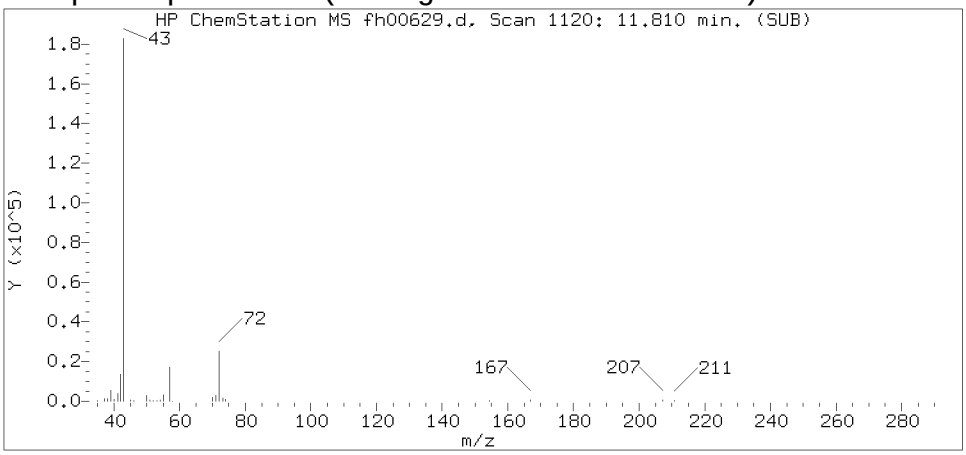
Target 3.5 esignature user ID: jeb07445

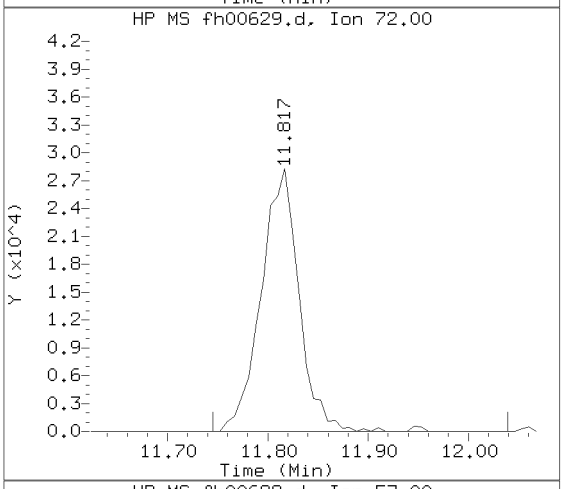
Reference Standard Spectrum for 2-Butanone



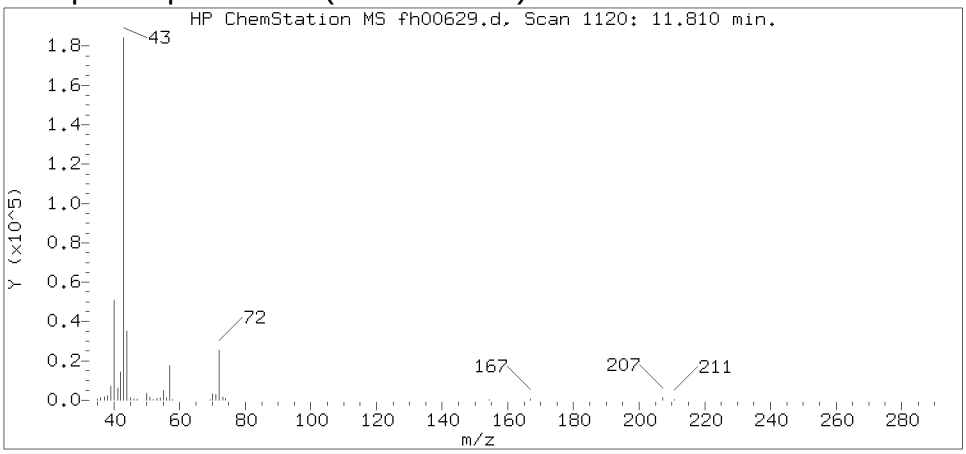


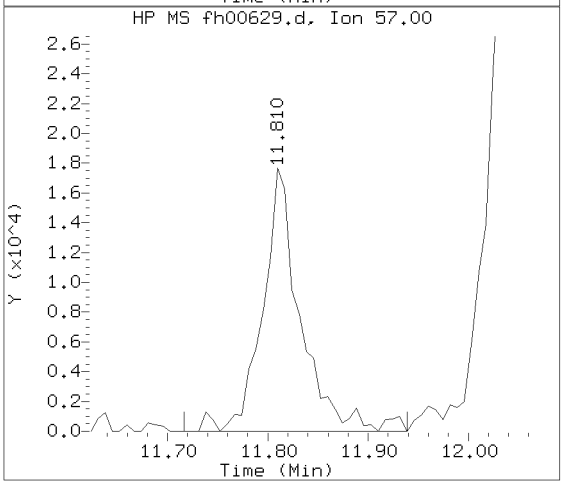
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00629.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:14 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:43 jeb07445

Sample Name: --820 Lab Sample ID: 9766348

Compound Number : 45
Compound Name : 2-Butanone
Scan Number : 1120
Retention Time (minutes): 11.810
Relative Retention Time : 0.00137
Quant Ion : 43.00
Area (flag) : 548563
Concentration (ppb(v)) : 3.2223

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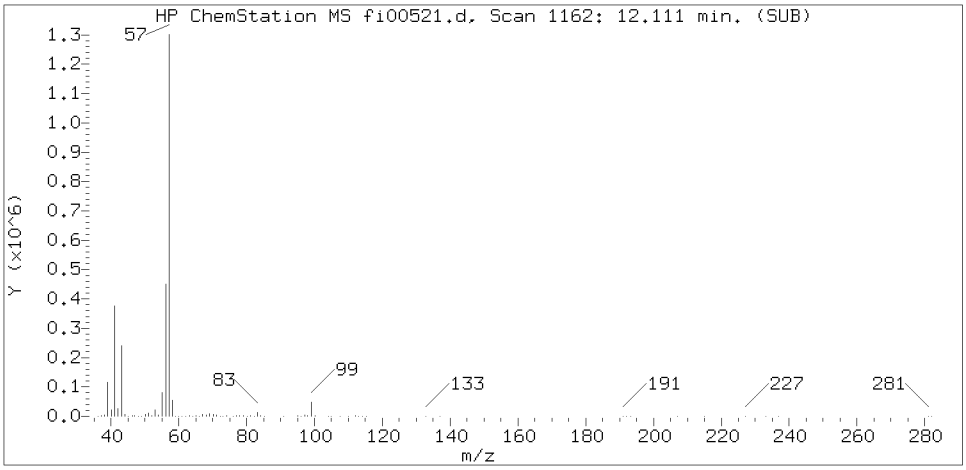
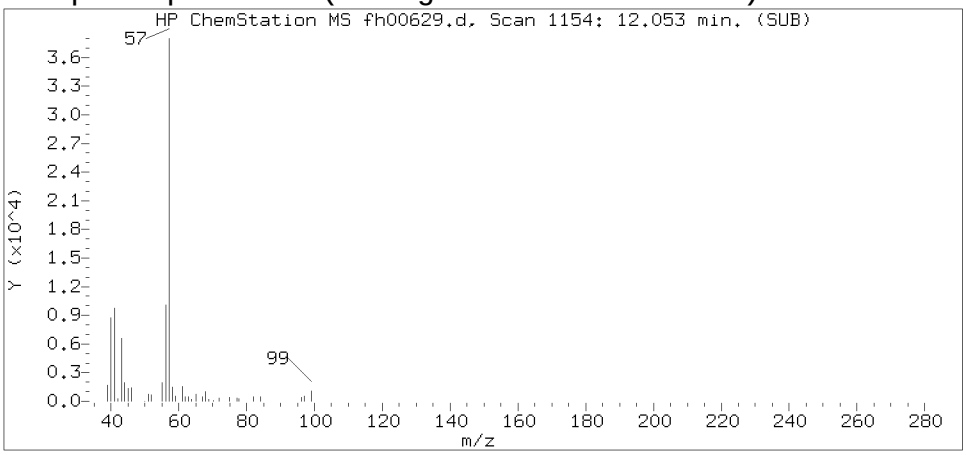
Target 3.5 esignature user ID: jeb07445

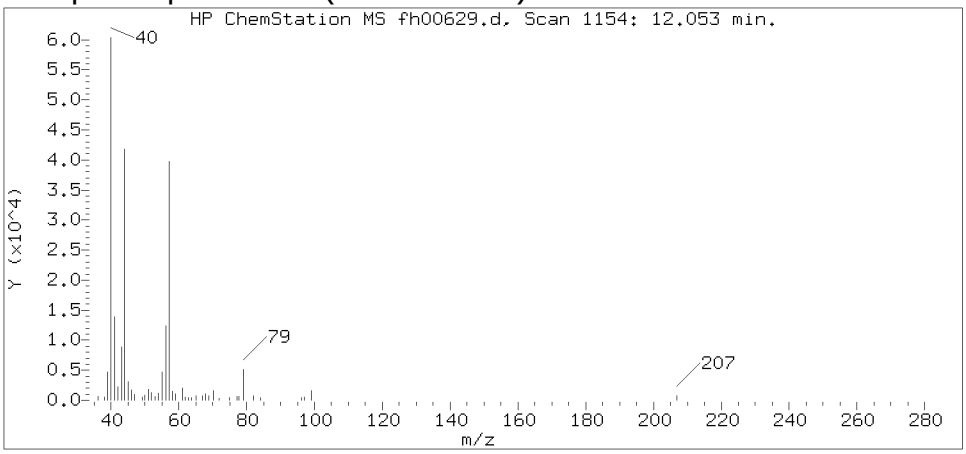
Reference Standard Spectrum for Isooctane

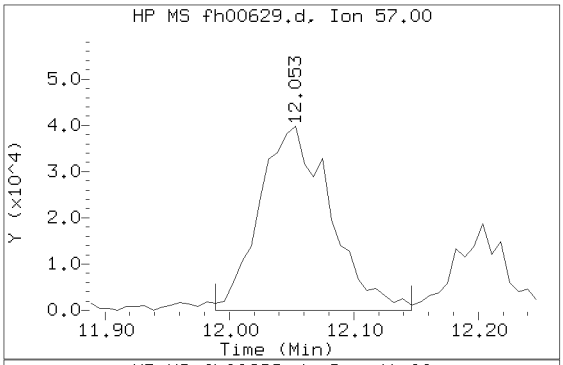


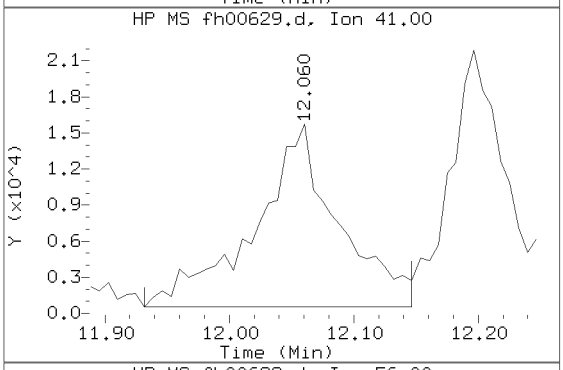
Sample Spectrum (Background Subtracted)

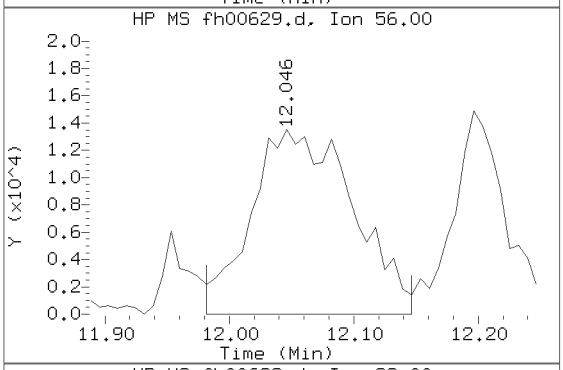


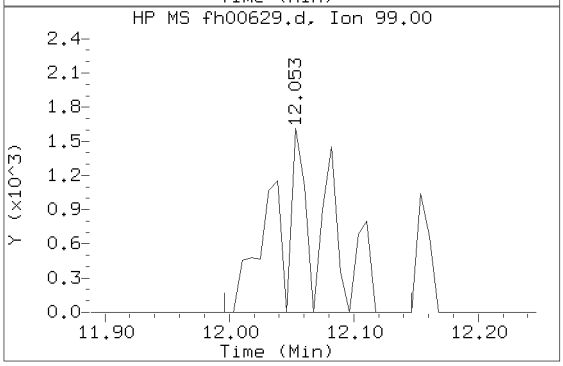
Sample Spectrum (Unaltered)











Data File: /chem/HP26379.i/18aug27.b/fh00629.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:14 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:43 jeb07445

Sample Name: --820 Lab Sample ID: 9766348

Compound Number : 46
Compound Name : Isooctane
Scan Number : 1154
Retention Time (minutes): 12.053
Relative Retention Time :-0.00005
Quant Ion : 57.00
Area (flag) : 157146
Concentration (ppb(v)) : 0.4256

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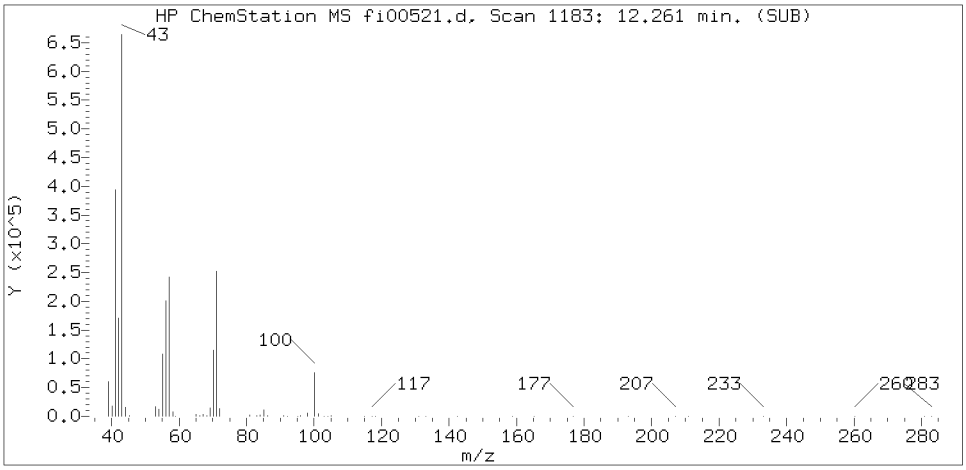
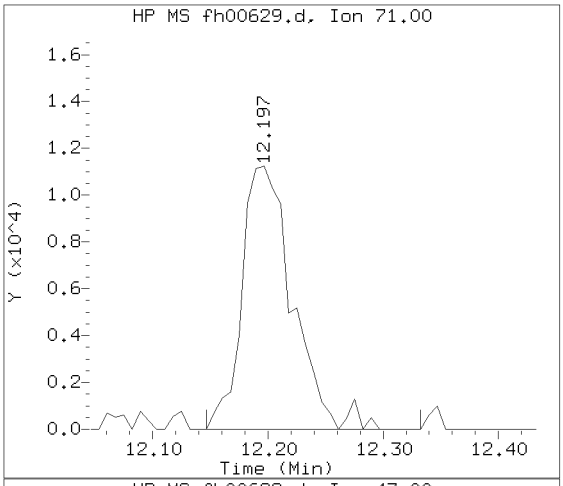
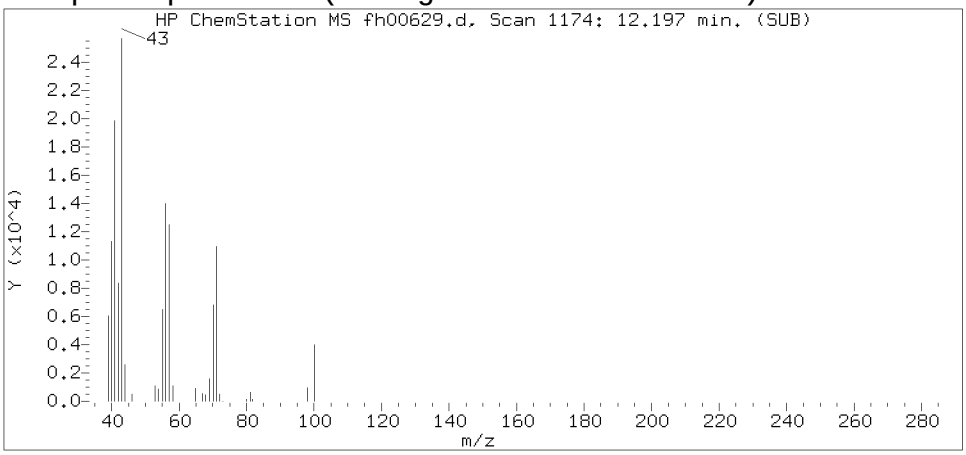
Target 3.5 esignature user ID: jeb07445

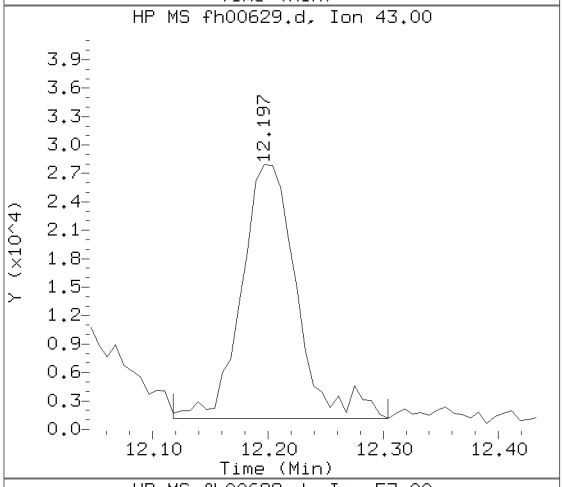
Reference Standard Spectrum for Heptane



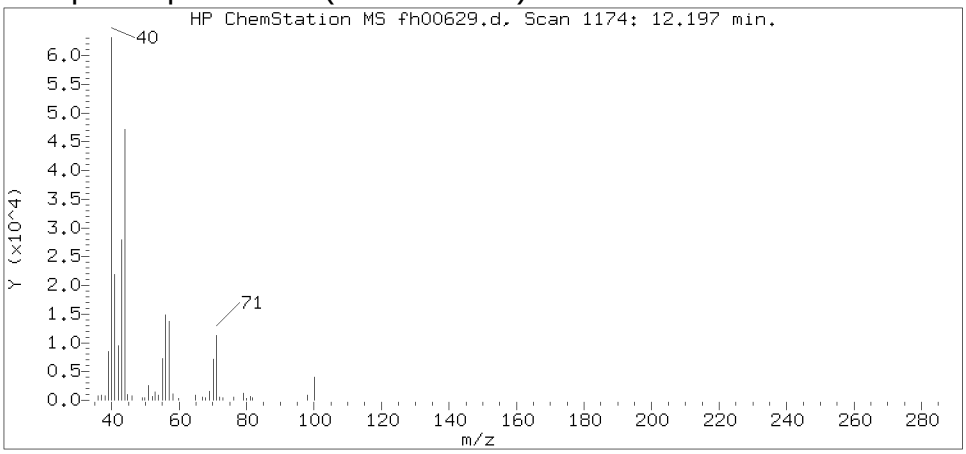


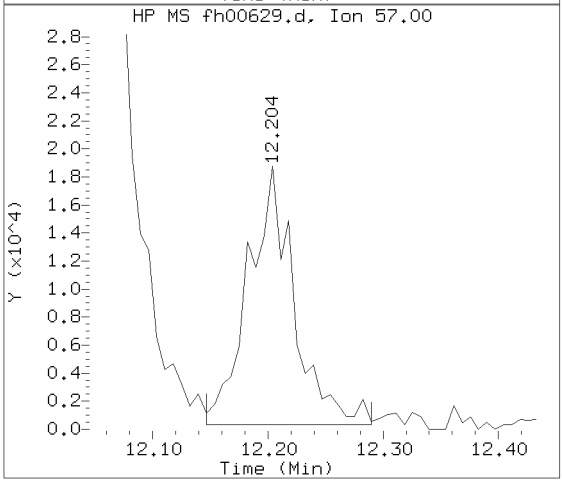
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00629.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:14 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:43 jeb07445

Sample Name: --820 Lab Sample ID: 9766348

Compound Number	: 47
Compound Name	: Heptane
Scan Number	: 1174
Retention Time (minutes)	: 12.197
Relative Retention Time	: 0.00102
Quant Ion	: 71.00
Area (flag)	: 34347
Concentration (ppb(v))	: 0.6462

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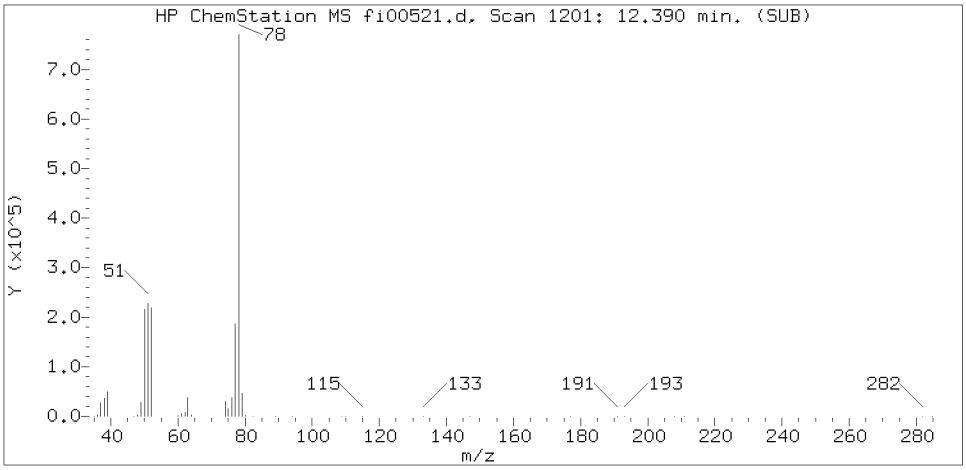
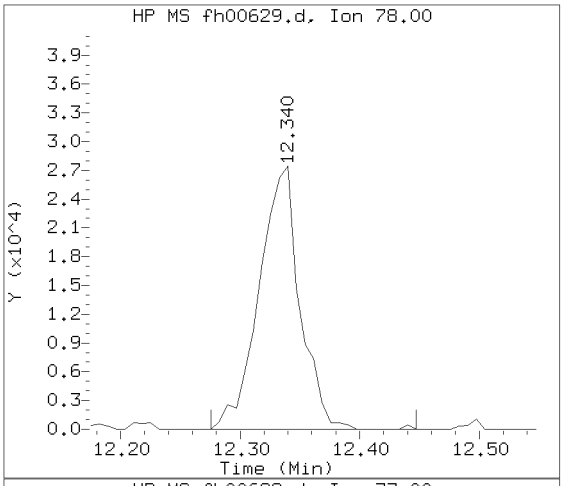
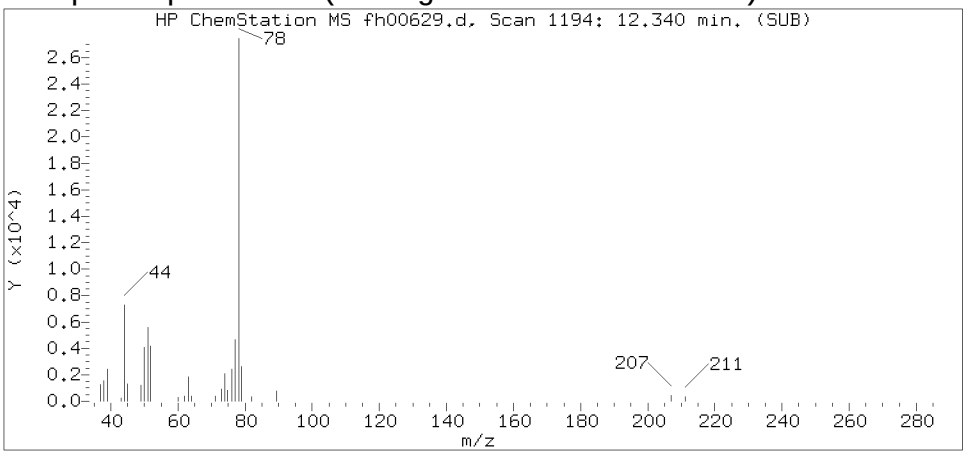
Target 3.5 esignature user ID: jeb07445

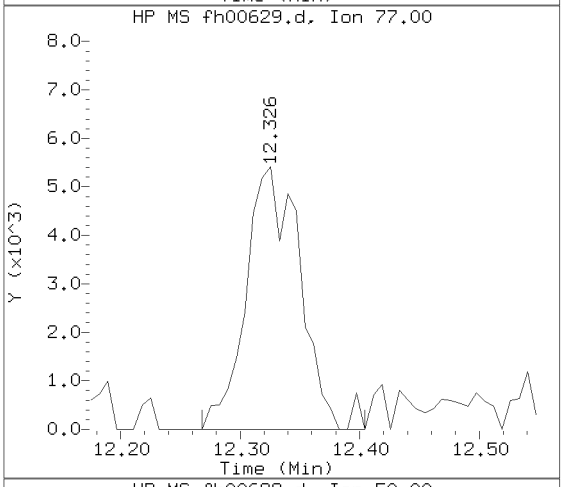
Reference Standard Spectrum for Benzene



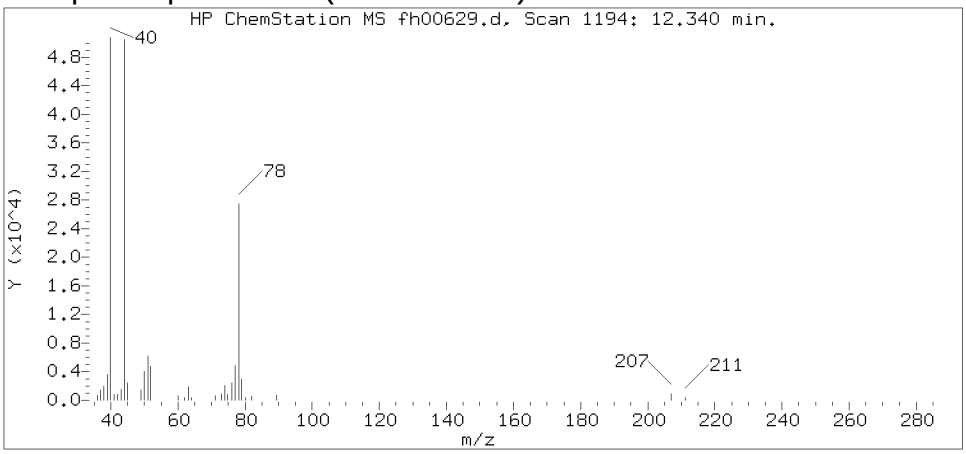


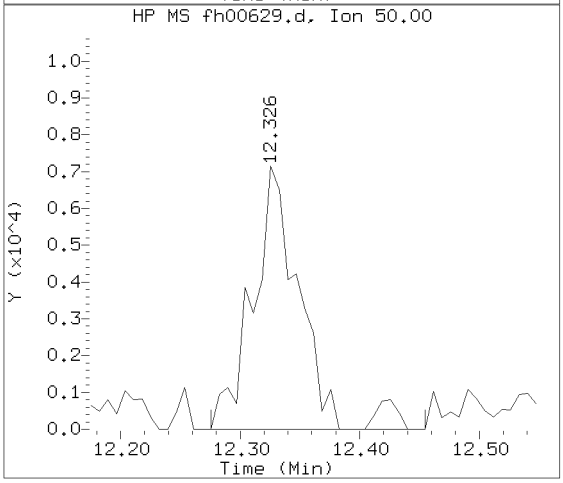
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00629.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:14 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:43 jeb07445

Sample Name: --820 Lab Sample ID: 9766348

Compound Number : 48
Compound Name : Benzene
Scan Number : 1194
Retention Time (minutes): 12.340
Relative Retention Time :-0.00058
Quant Ion : 78.00
Area (flag) : 65099
Concentration (ppb(v)) : 0.3961

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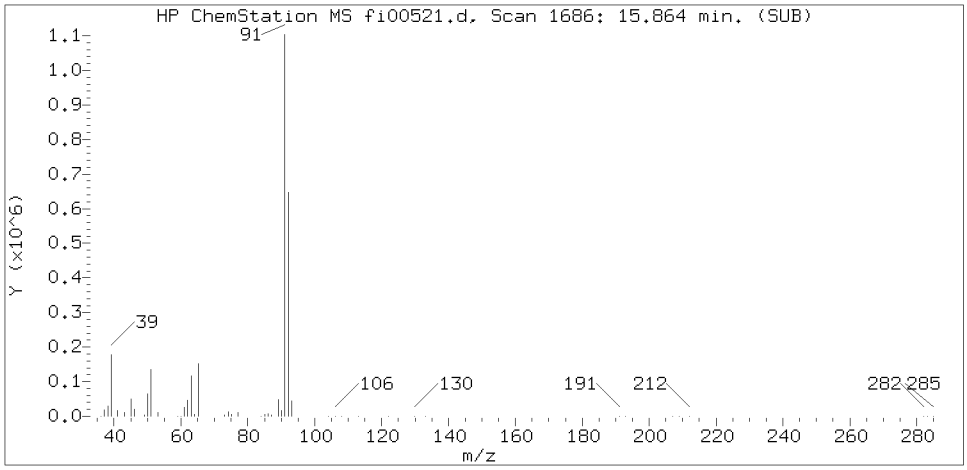
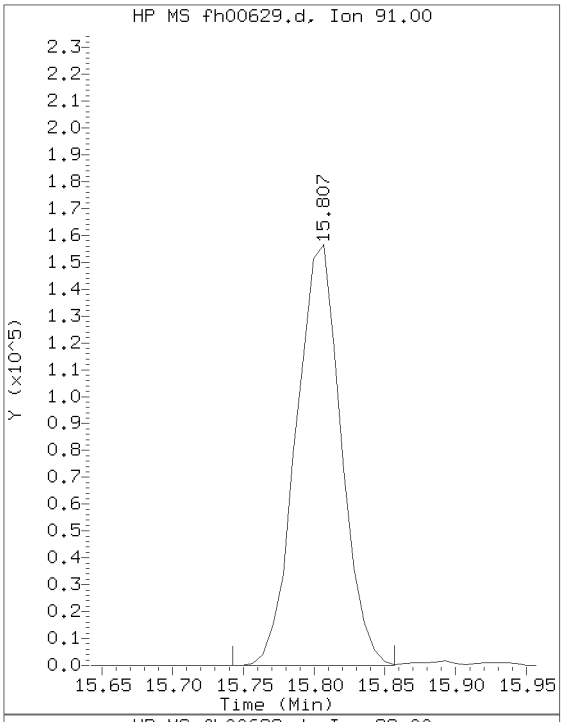
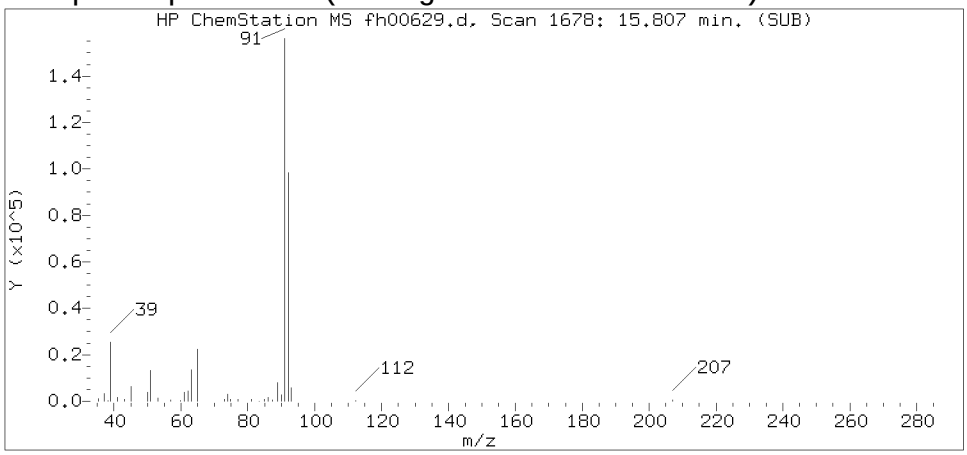
Target 3.5 esignature user ID: jeb07445

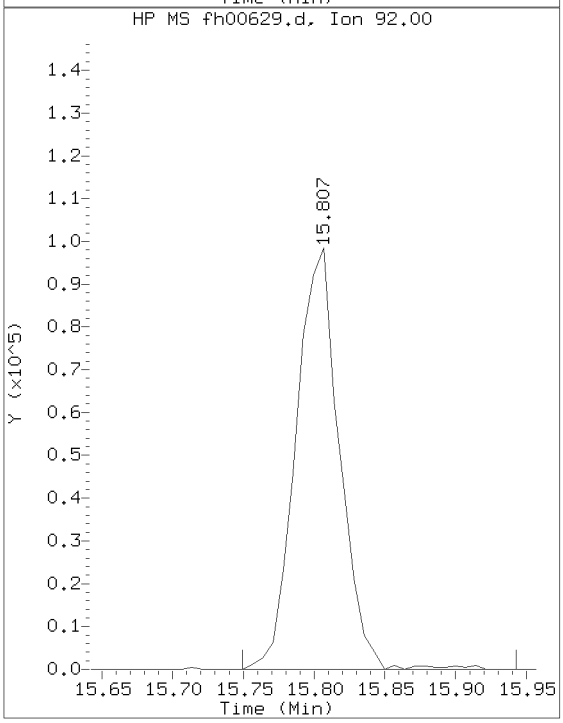
Reference Standard Spectrum for Toluene



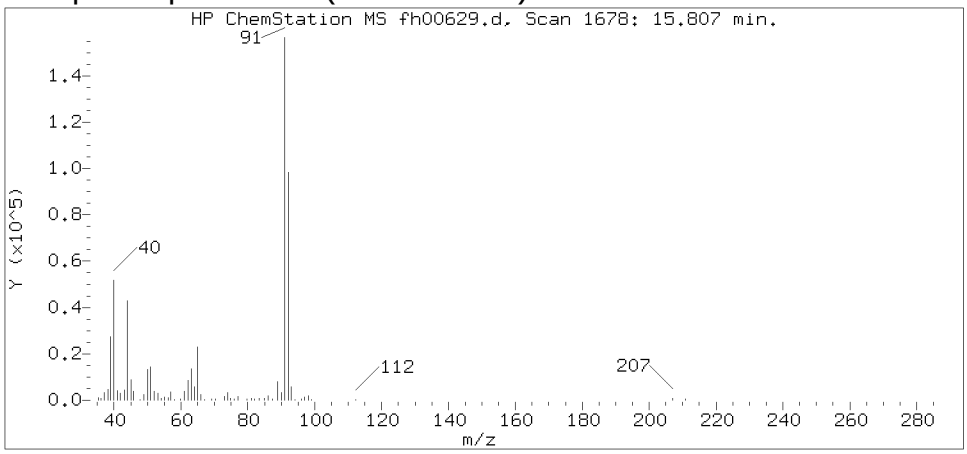


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00629.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:14 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:43 jeb07445

Sample Name: --820 Lab Sample ID: 9766348

Compound Number : 61
Compound Name : Toluene
Scan Number : 1678
Retention Time (minutes): 15.807
Relative Retention Time :-0.00073
Quant Ion : 91.00
Area (flag) : 345897
Concentration (ppb(v)) : 1.7776

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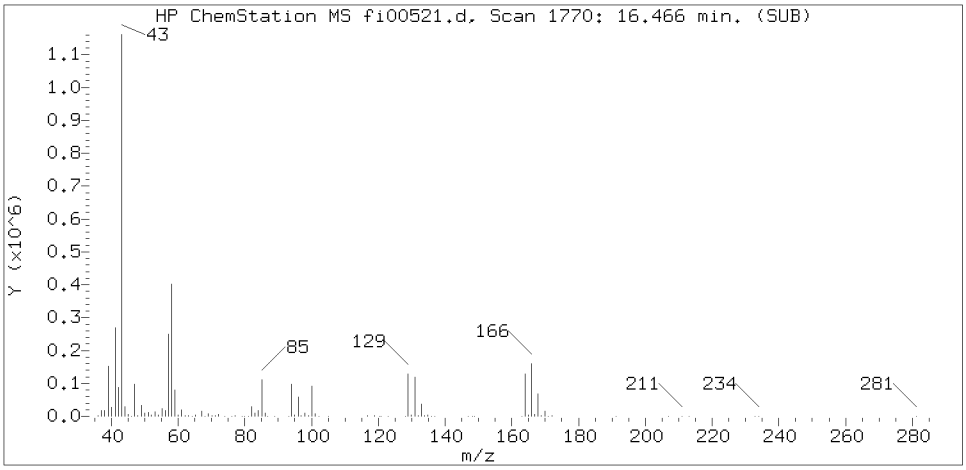
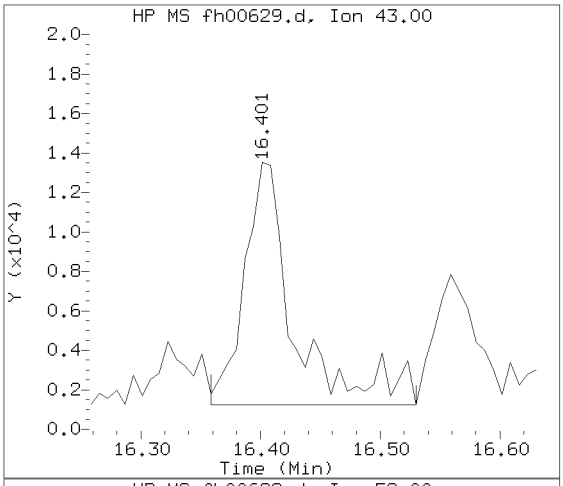
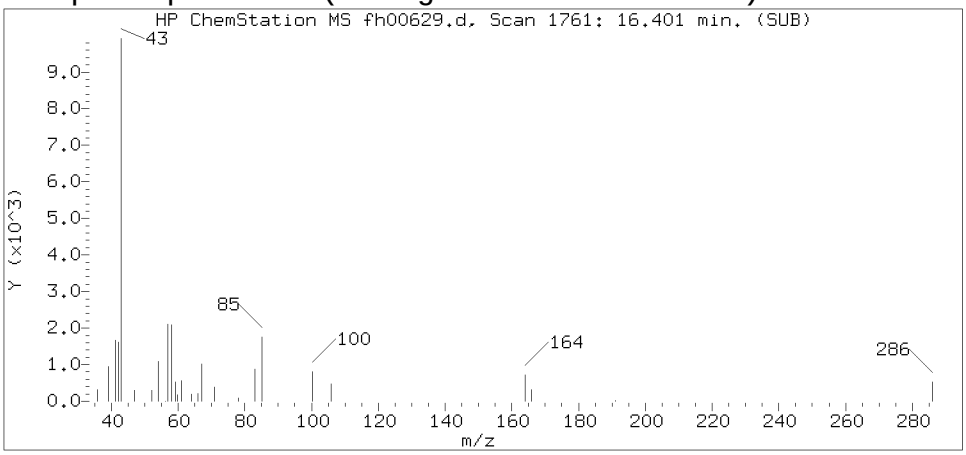
Target 3.5 esignature user ID: jeb07445

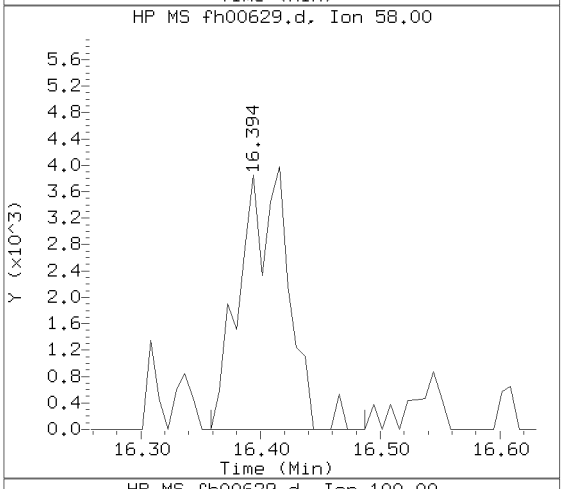
Reference Standard Spectrum for 4-Methyl-2-Pentanone



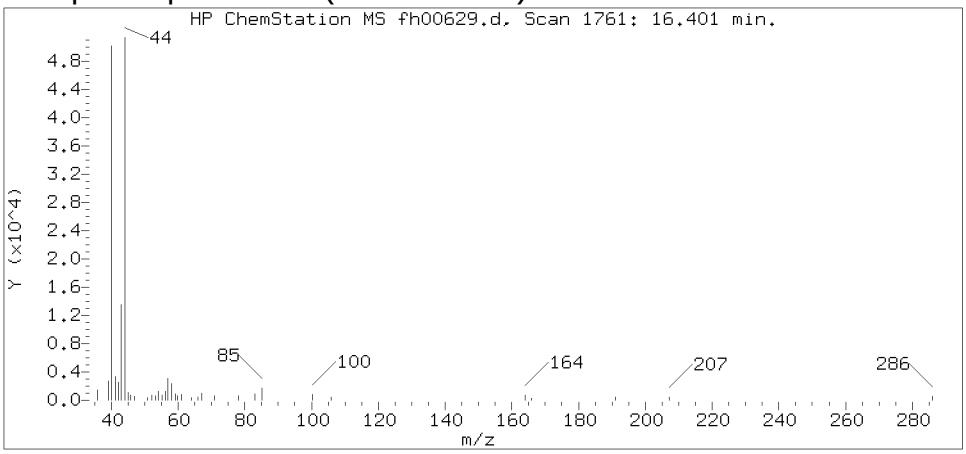


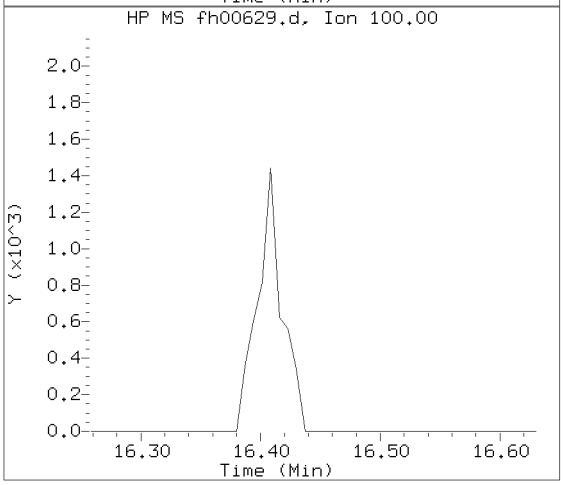
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00629.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:14 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:43 jeb07445

Sample Name: --820 Lab Sample ID: 9766348

Compound Number : 62
Compound Name : 4-Methyl-2-Pentanone
Scan Number : 1761
Retention Time (minutes): 16.401
Relative Retention Time : 0.00066
Quant Ion : 43.00
Area (flag) : 35267
Concentration (ppb(v)) : 0.1652

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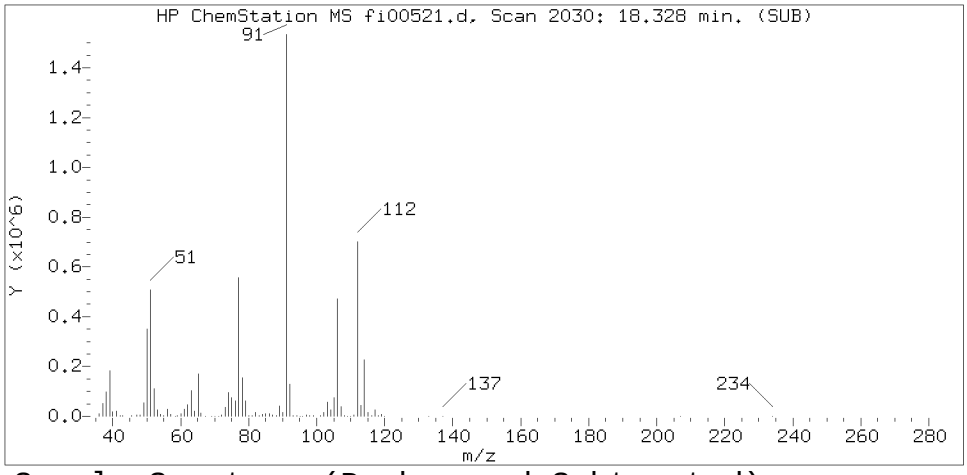
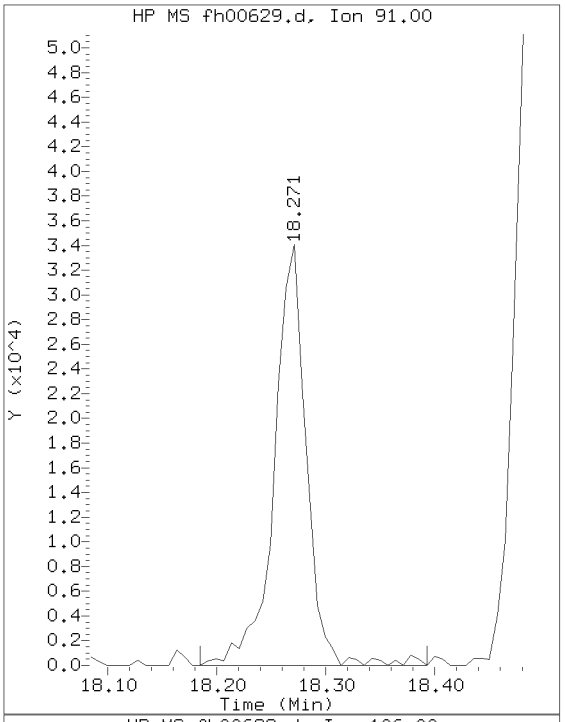
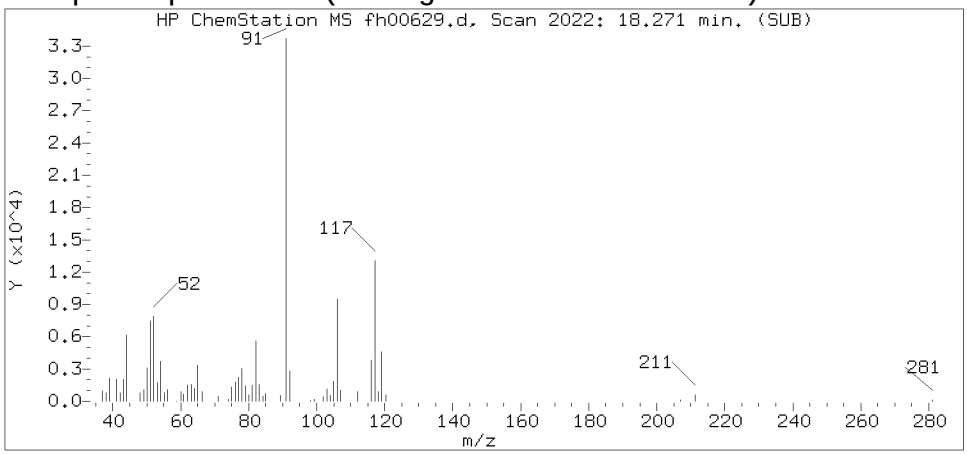
Target 3.5 esignature user ID: jeb07445

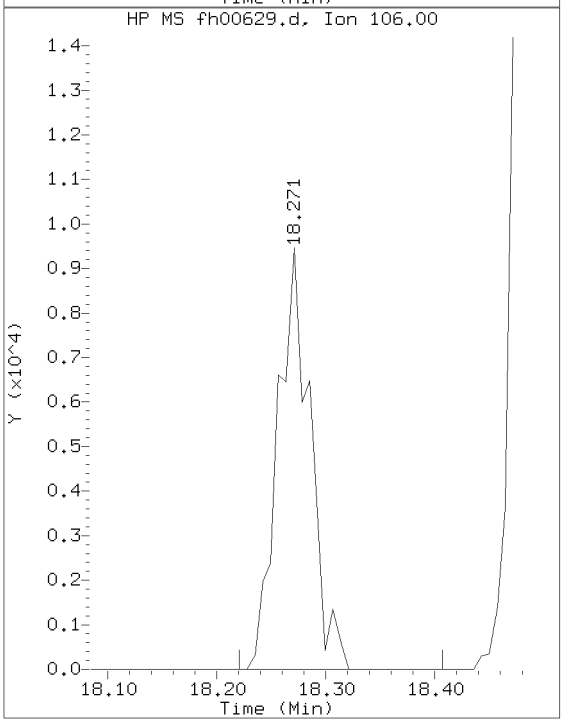
Reference Standard Spectrum for Ethylbenzene



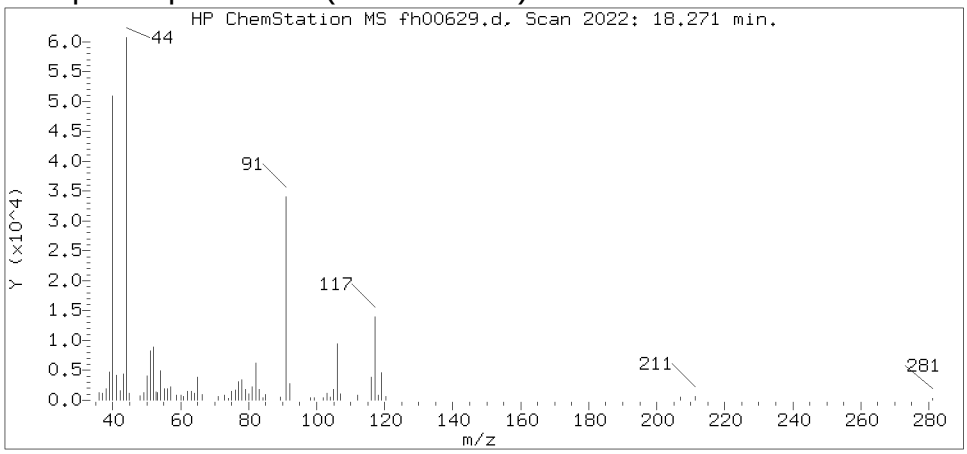


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00629.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:14 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:43 jeb07445

Sample Name: --820 Lab Sample ID: 9766348

Compound Number : 73
Compound Name : Ethylbenzene
Scan Number : 2022
Retention Time (minutes): 18.271
Relative Retention Time :-0.00039
Quant Ion : 91.00
Area (flag) : 69666
Concentration (ppb(v)) : 0.2623

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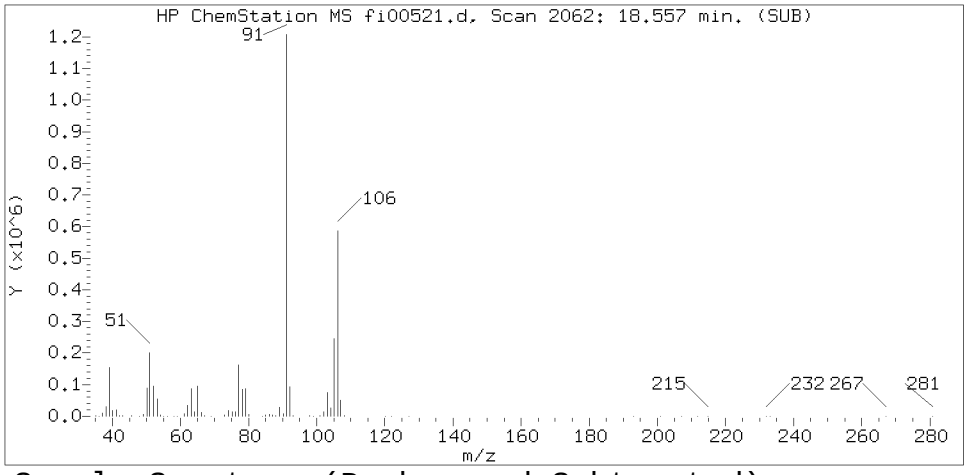
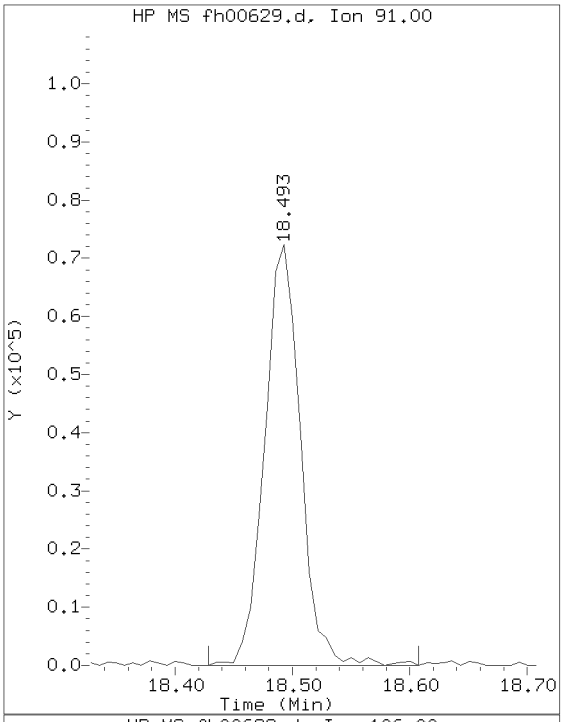
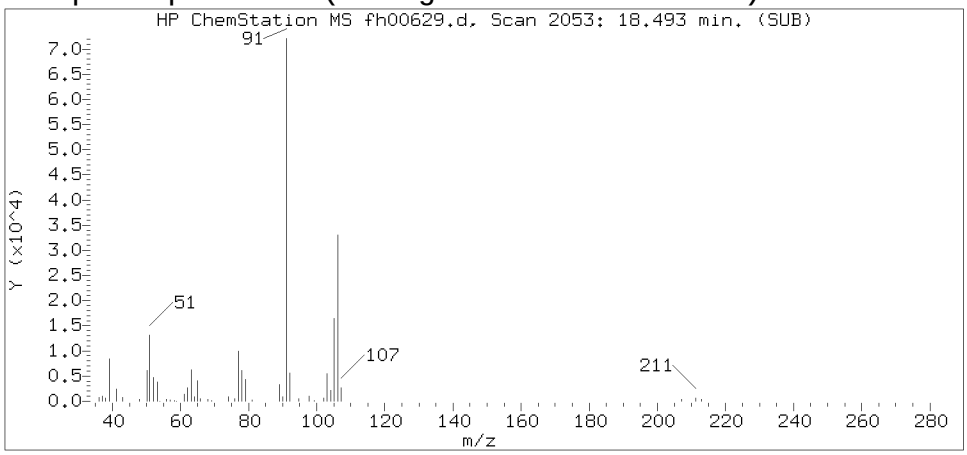
Target 3.5 esignature user ID: jeb07445

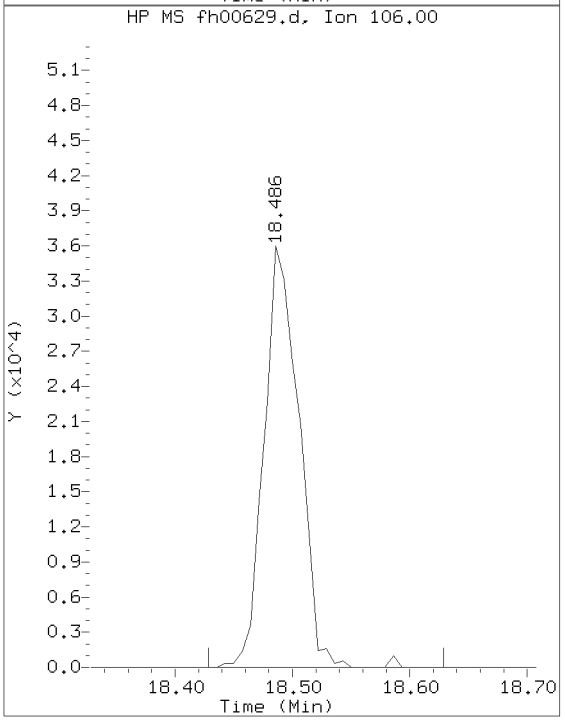
Reference Standard Spectrum for m/p-Xylene



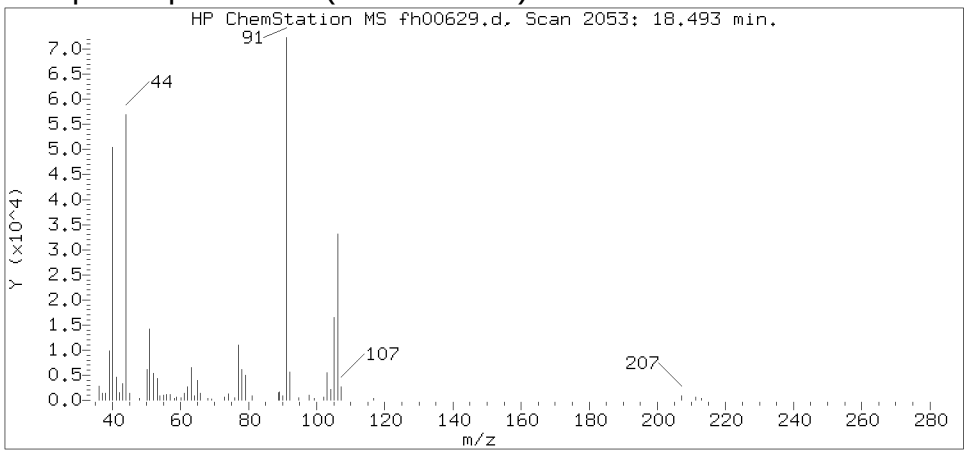


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00629.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:14 Analyst ID: jeb07445

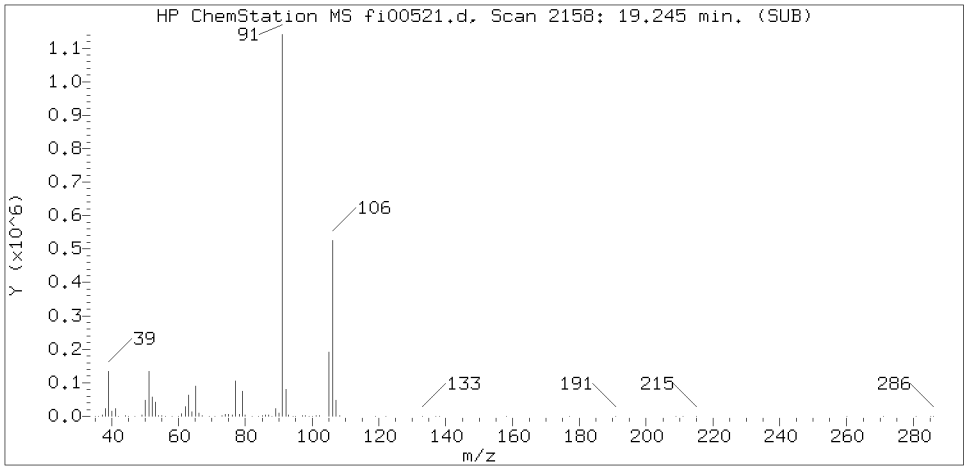
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:43 jeb07445

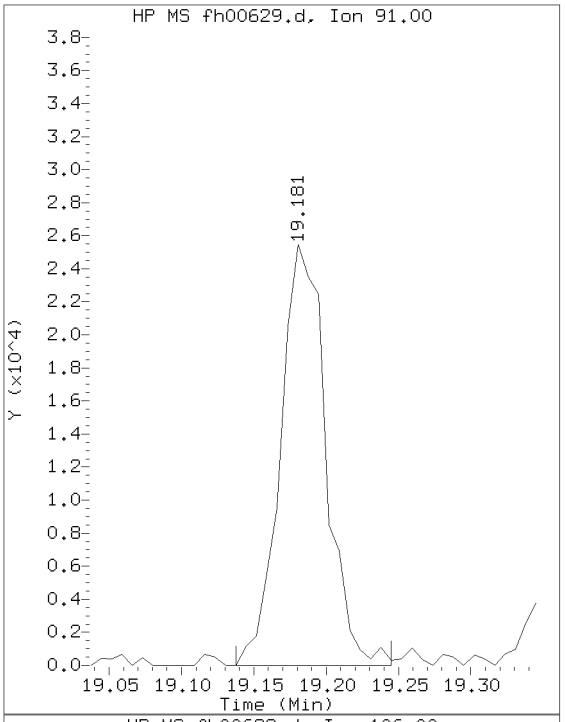
Sample Name: --820 Lab Sample ID: 9766348

Compound Number : 75
Compound Name : m/p-Xylene
Scan Number : 2053
Retention Time (minutes): 18.493
Relative Retention Time :-0.00040
Quant Ion : 91.00
Area (flag) : 154572
Concentration (ppb(v)) : 0.8098

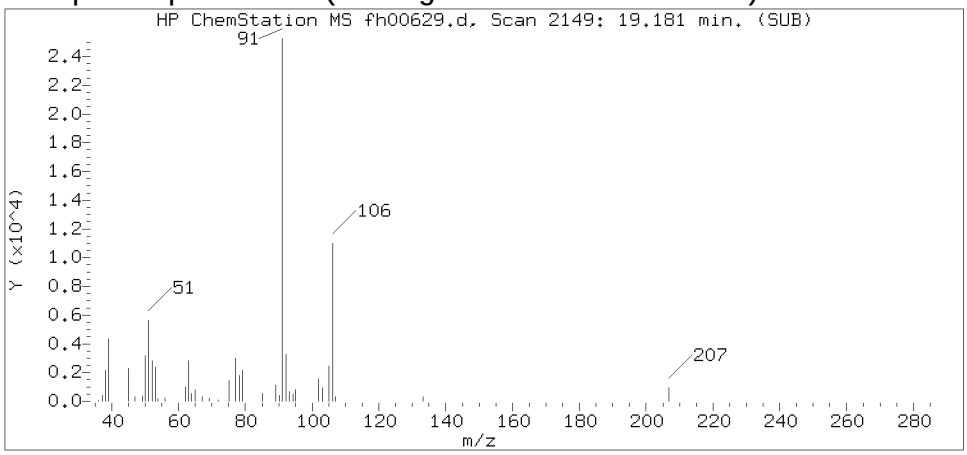
Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

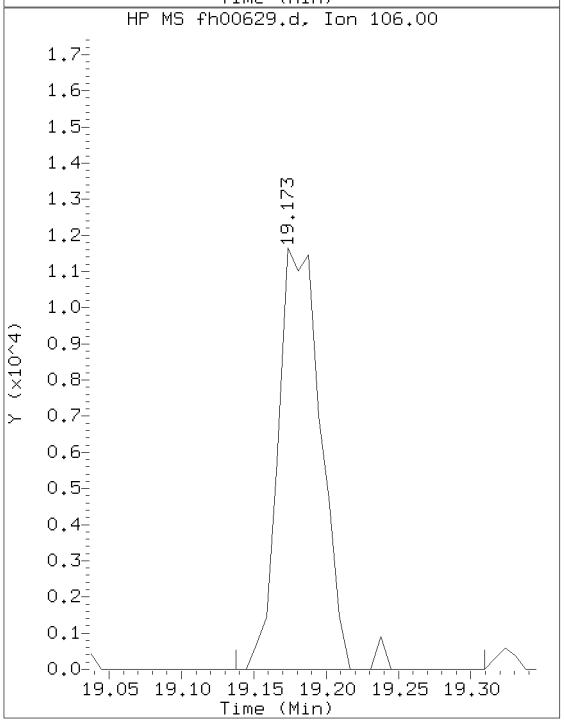
Reference Standard Spectrum for o-Xylene



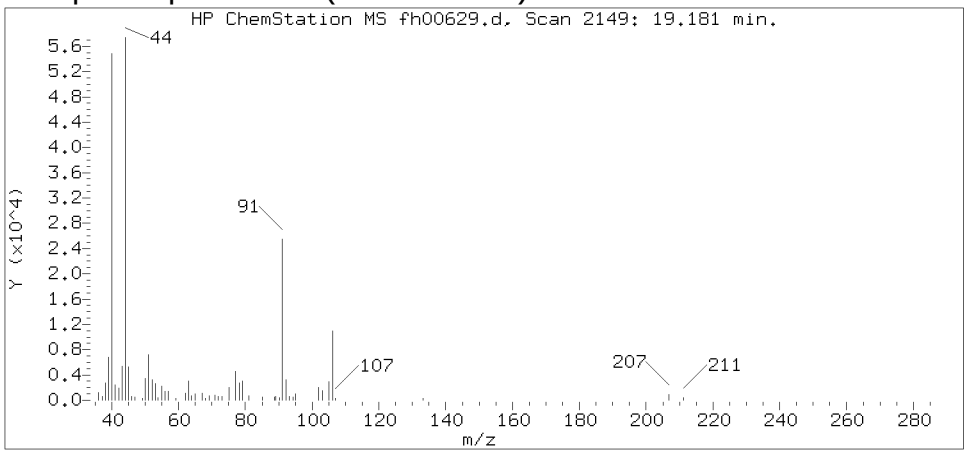


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00629.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:14 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:43 jeb07445

Sample Name: --820 Lab Sample ID: 9766348

Compound Number : 76
Compound Name : o-Xylene
Scan Number : 2149
Retention Time (minutes): 19.181
Relative Retention Time :-0.00002
Quant Ion : 91.00
Area (flag) : 55882
Concentration (ppb(v)) : 0.3004

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766349
Canister ID:	1352	Lab File ID:	fh00630.d
Pressure Received:	12.2 psia	Date Collected:	08/18/2018
Final Pressure:	24.5 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	18:44
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	2.8	J
75-45-6	Chlorodifluoromethane	0.53	U
76-14-2	Freon 114	0.84	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.31	U
106-99-0	1,3-Butadiene	0.38	U
74-83-9	Bromomethane	0.70	U
75-00-3	Chloroethane	0.50	U
75-43-4	Dichlorofluoromethane	0.46	U
75-69-4	Trichlorofluoromethane	1.4	J
109-66-0	Pentane	4.1	
75-35-4	1,1-Dichloroethene	0.56	U
76-13-1	Freon 113	0.85	J
67-64-1	Acetone	24	
75-15-0	Carbon Disulfide	0.40	U
107-05-1	3-Chloropropene	0.47	U
75-09-2	Methylene Chloride	0.87	U
156-60-5	trans-1,2-Dichloroethene	0.34	U
1634-04-4	Methyl t-Butyl Ether	0.54	U
110-54-3	Hexane	2.1	J
75-34-3	1,1-Dichloroethane	0.36	U
156-59-2	cis-1,2-Dichloroethene	0.48	U
78-93-3	2-Butanone	3.0	
67-66-3	Chloroform	0.45	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766349
Canister ID:	1352	Lab File ID:	fh00630.d
Pressure Received:	12.2 psia	Date Collected:	08/18/2018
Final Pressure:	24.5 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	18:44
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
71-55-6	1,1,1-Trichloroethane	0.65	U
56-23-5	Carbon Tetrachloride	0.88	U
71-43-2	Benzene	1.0	J
107-06-2	1,2-Dichloroethane	0.32	U
540-84-1	Isooctane	1.7	J
142-82-5	Heptane	2.2	J
79-01-6	Trichloroethene	0.97	U
78-87-5	1,2-Dichloropropane	0.60	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	0.80	U
10061-01-5	cis-1,3-Dichloropropene	0.45	U
108-10-1	4-Methyl-2-Pentanone	0.61	U
108-88-3	Toluene	5.3	
111-65-9	Octane	1.9	U
10061-02-6	trans-1,3-Dichloropropene	0.54	U
79-00-5	1,1,2-Trichloroethane	0.65	U
127-18-4	Tetrachloroethene	1.7	U
591-78-6	2-Hexanone	0.74	U
124-48-1	Dibromochloromethane	1.1	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	0.60	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	J
179601-23-1	m/p-Xylene	3.1	J

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766349
Canister ID:	1352	Lab File ID:	fh00630.d
Pressure Received:	12.2 psia	Date Collected:	08/18/2018
Final Pressure:	24.5 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	18:44
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
95-47-6	o-Xylene	1.2	J
100-42-5	Styrene	0.85	U
75-25-2	Bromoform	1.8	U
98-82-8	Cumene	1.2	U
108-86-1	Bromobenzene	0.64	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	0.84	U
622-96-8	4-Ethyltoluene	0.88	U
108-67-8	1,3,5-Trimethylbenzene	1.6	U
95-63-6	1,2,4-Trimethylbenzene	1.4	U
541-73-1	1,3-Dichlorobenzene	1.1	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.2	U
67-72-1	Hexachloroethane	2.6	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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

Data file: /chem/HP26379.i/18aug27.b/fh00630.d Injection date and time: **27-AUG-2018 18:44**
Data file Sample Info. Line: 9766349;400;F1823930AA;1352-;0;0;SAMPLE; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 28-Aug-2018 12:44 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.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): 24.5 psia Canister Pressure before dilution (Ya): 12.2 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 400 cc

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.115	(-0.022)	1023	130	360742	(-15)	10.00		255500 - 596166
52) 1,4-Difluorobenzene	13.400	(-0.007)	1342	114	1232097	(-18)	10.00		906195 - 2114453
71) Chlorobenzene-d5	18.228	(0.007)	2016	117	1276285	(-13)	10.00		883644 - 2061835

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)	4.016	(-0.000)	85	67590M	0.561	0.56		J	0.13	1
3) Chlorodifluoromethane	(1)				Not Detected					0.15	1
4) Freon 114	(1)				Not Detected					0.12	1
5) Chloromethane	(1)				Not Detected					0.24	1
6) Vinyl Chloride	(1)				Not Detected					0.12	1
7) 1,3-Butadiene	(1)				Not Detected					0.17	1
8) Bromomethane	(1)				Not Detected					0.18	1
9) Chloroethane	(1)				Not Detected					0.19	1
13) Dichlorofluoromethane	(1)				Not Detected					0.11	1
12) Trichlorofluoromethane	(1)	5.879	(0.000)	101	30260	0.256	0.26		J	0.15	1
11) Pentane	(1)	5.872	(0.000)	43	180954	1.384	1.38			0.13	1
16) 1,1-Dichloroethene	(1)				Not Detected					0.14	1
17) Freon 113	(1)	6.918	(0.000)	103	7794	0.111	0.11		J	0.11	1
24) Acetone	(1)	8.085	(-0.000)	43	1156058	10.015	10.02			0.53	5
18) Carbon Disulfide	(1)				Not Detected					0.13	1
22) 3-Chloropropene	(1)				Not Detected					0.15	1
23) Methylene Chloride	(1)				Not Detected					0.25	2
25) trans-1,2-Dichloroethene	(1)				Not Detected					0.086	1
27) Methyl t-Butyl Ether	(1)				Not Detected					0.15	1
26) Hexane	(1)	8.458	(0.000)	56	50052	0.602	0.60		J	0.13	1
31) 1,1-Dichloroethane	(1)				Not Detected					0.089	1
35) cis-1,2-Dichloroethene	(1)				Not Detected					0.12	1
45) 2-Butanone	(1)	11.824	(0.000)	43	168691	1.030	1.03			0.21	1
39) Chloroform	(1)				Not Detected					0.092	1
44) 1,1,1-Trichloroethane	(1)				Not Detected					0.12	1
42) Carbon Tetrachloride	(1)				Not Detected					0.14	1
48) Benzene	(2)	12.340	(-0.000)	78	52093	0.327	0.33		J	0.11	1
50) 1,2-Dichloroethane	(2)				Not Detected					0.08	1
46) Isooctane	(2)	12.046	(0.000)	57	133254	0.373	0.37		J	0.13	1
47) Heptane	(2)	12.218	(-0.000)	71	27668	0.538	0.54		J	0.23	1
51) Trichloroethene	(2)				Not Detected					0.18	1
55) 1,2-Dichloropropane	(2)				Not Detected					0.13	1
53) Dibromomethane	(2)				Not Detected					0.14	1
56) Bromodichloromethane	(2)				Not Detected					0.12	1
59) cis-1,3-Dichloropropene	(2)				Not Detected					0.1	1
62) 4-Methyl-2-Pentanone	(2)				Not Detected					0.15	1
61) Toluene	(3)	15.807	(-0.000)	91	266749	1.415	1.41			0.12	1
60) Octane	(3)				Not Detected					0.4	2
64) trans-1,3-Dichloropropene	(3)				Not Detected					0.12	1
67) 1,1,2-Trichloroethane	(3)				Not Detected					0.12	1
63) Tetrachloroethene	(3)				Not Detected					0.25	2
70) 2-Hexanone	(3)				Not Detected					0.18	1
68) Dibromochloromethane	(3)				Not Detected					0.13	1

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:58. Target 3.5 esignature user ID: jeb07445

Lancaster Laboratories, Inc.

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18aug27.b/fh00630.d Injection date and time: **27-AUG-2018 18:44**
Data file Sample Info. Line: 9766349;400;F1823930AA;1352-;0;0;SAMPLE; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 28-Aug-2018 12:44 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.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): 24.5 psia Canister Pressure before dilution (Ya): 12.2 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 400 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
69) 1,2-Dibromoethane	(3)			Not Detected					0.13	1
72) Chlorobenzene	(3)			Not Detected					0.13	1
74) 1,1,1,2-Tetrachloroethane	(3)			Not Detected					0.15	1
73) Ethylbenzene	(3)	18.271(-0.000)	91	60324	0.234	0.23		J	0.19	1
75) m/p-Xylene	(3)	18.493(-0.000)	91	133436	0.722	0.72		J	0.26	2
76) o-Xylene	(3)	19.181(-0.000)	91	49220	0.273	0.27		J	0.19	1
78) Styrene	(3)			Not Detected					0.2	1
79) Bromoform	(3)			Not Detected					0.17	1
80) Cumene	(3)			Not Detected					0.24	1
82) Bromobenzene	(3)			Not Detected					0.1	1
83) 1,1,2,2-Tetrachloroethane	(3)			Not Detected					0.15	1
87) 1,2,3-Trichloropropane	(3)			Not Detected					0.14	1
84) 4-Ethyltoluene	(3)			Not Detected					0.18	1
86) 1,3,5-Trimethylbenzene	(3)			Not Detected					0.32	2
90) 1,2,4-Trimethylbenzene	(3)			Not Detected					0.28	2
93) 1,3-Dichlorobenzene	(3)			Not Detected					0.19	1
94) 1,4-Dichlorobenzene	(3)			Not Detected					0.17	1
98) 1,2-Dichlorobenzene	(3)			Not Detected					0.2	1
97) Hexachloroethane	(3)			Not Detected					0.27	2

Total number of targets = 62

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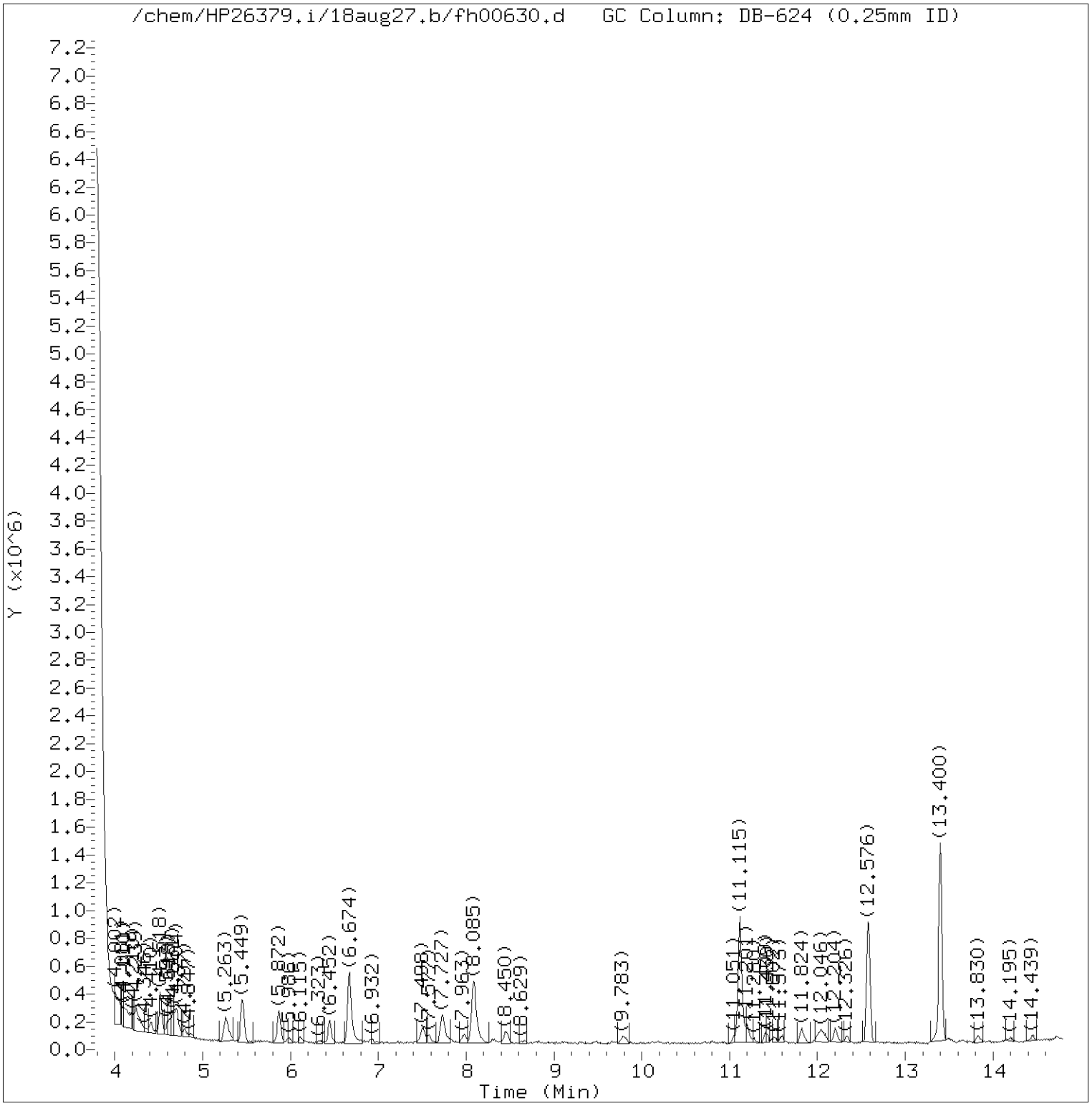
Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:40. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

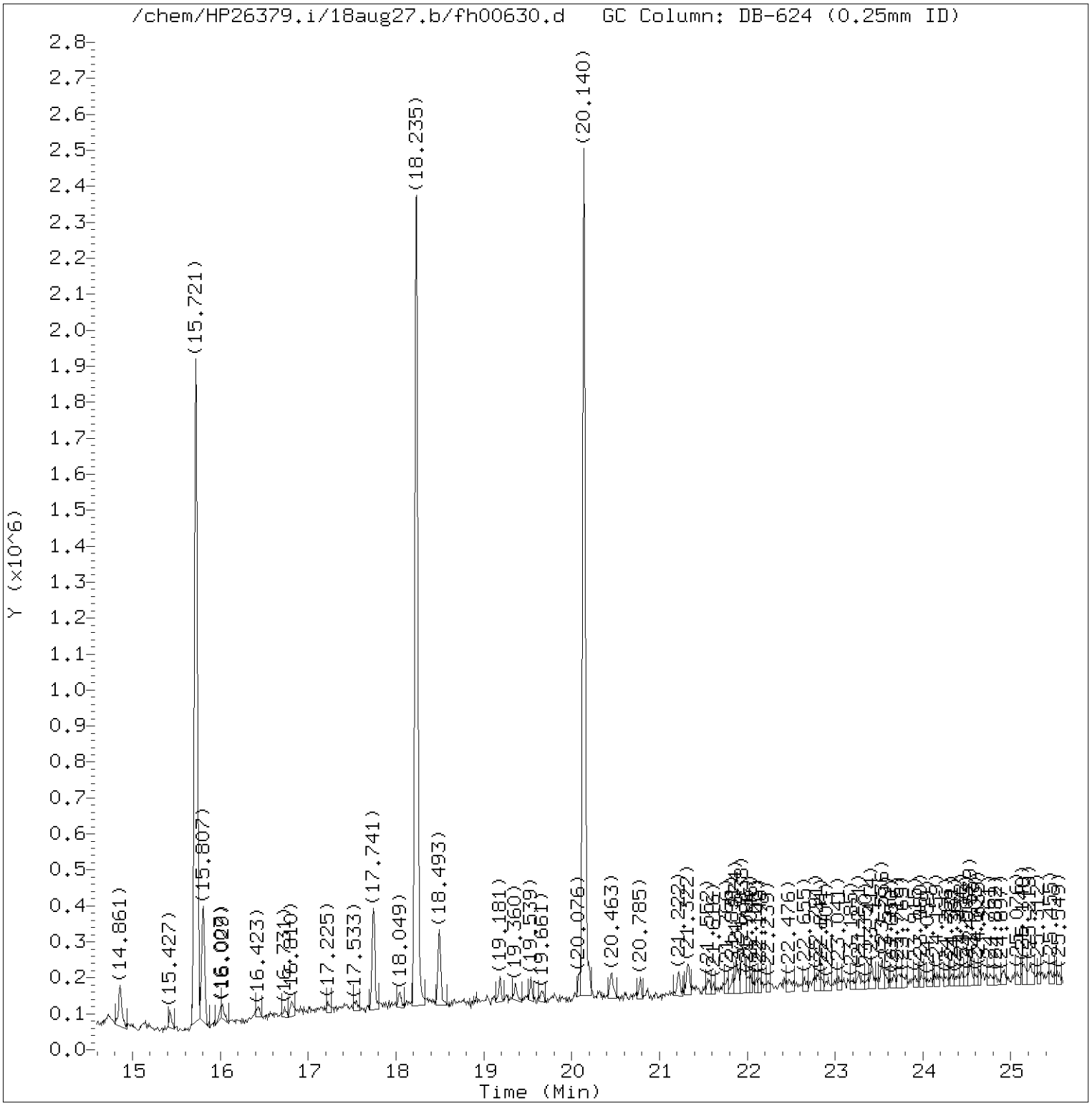
Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00630.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:44 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:44 jeb07445

Sample Name: 1352- Lab Sample ID: 9766349

Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00630.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:44 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:44 jeb07445

Sample Name: 1352- Lab Sample ID: 9766349

Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00630.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:44 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:44 jeb07445

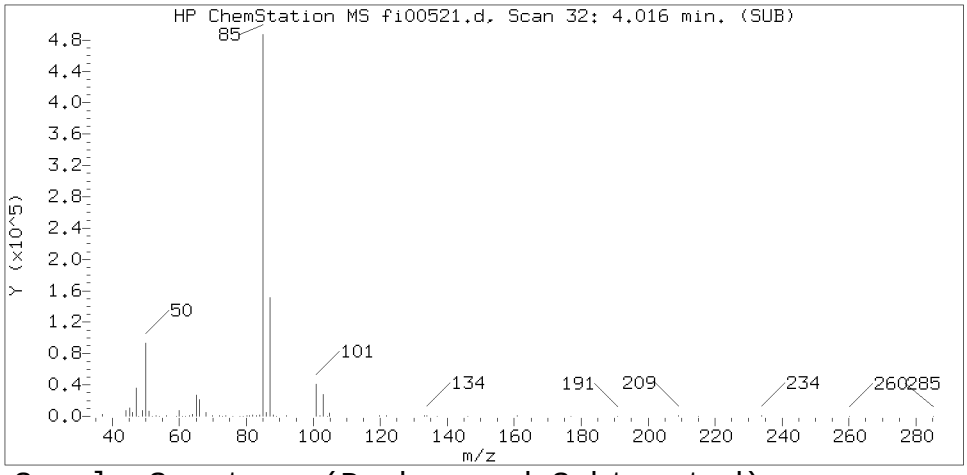
Sample Name: 1352- Lab Sample ID: 9766349

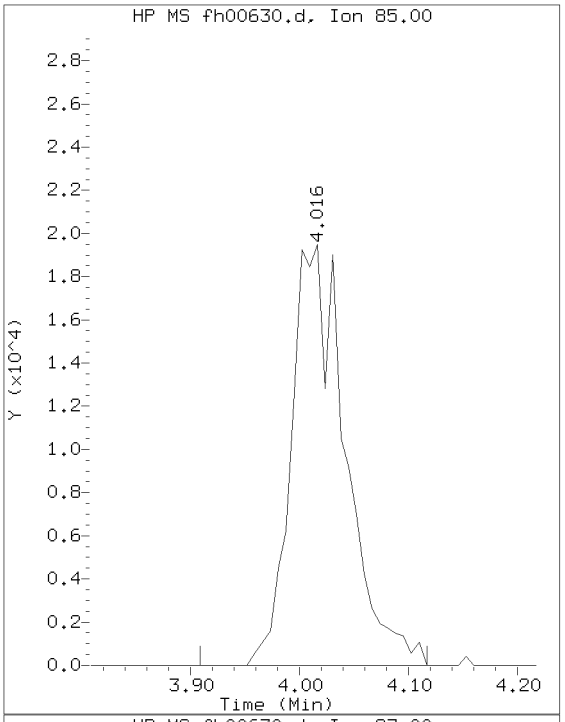
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
2) Dichlorodifluoromethane	(1)	4.016	85	67590M	0.561
11) Pentane	(1)	5.872	43	180954	1.384
12) Trichlorofluoromethane	(1)	5.879	101	30260	0.256
17) Freon 113	(1)	6.918	103	7794	0.111
24) Acetone	(1)	8.085	43	1156058	10.015
26) Hexane	(1)	8.458	56	50052	0.602
37)*Bromochloromethane	(1)	11.115	130	360742	10.000
45) 2-Butanone	(1)	11.824	43	168691	1.030
46) Isooctane	(2)	12.046	57	133254	0.373
47) Heptane	(2)	12.218	71	27668	0.538
48) Benzene	(2)	12.340	78	52093	0.327
52)*1,4-Difluorobenzene	(2)	13.400	114	1232097	10.000
61) Toluene	(3)	15.807	91	266749	1.415
71)*Chlorobenzene-d5	(3)	18.228	117	1276285	10.000
73) Ethylbenzene	(3)	18.271	91	60324	0.234
75) m/p-Xylene	(3)	18.493	91	133436	0.722
76) o-Xylene	(3)	19.181	91	49220	0.273

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

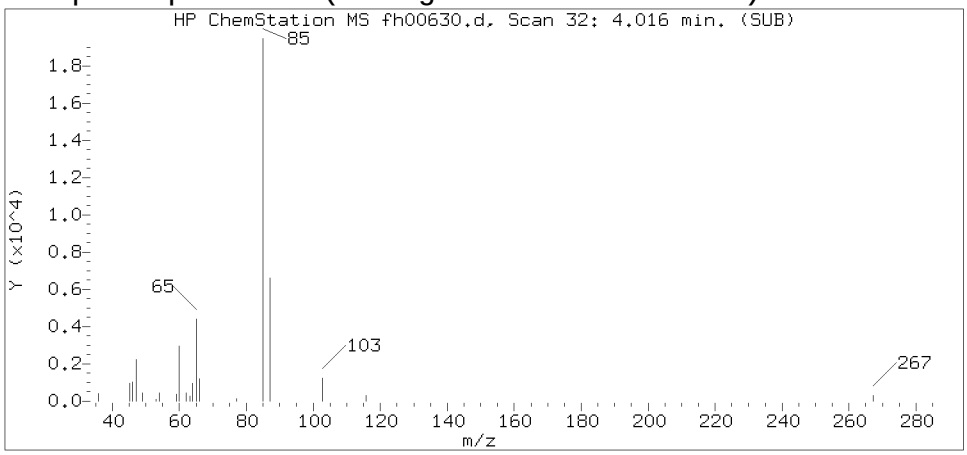
Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

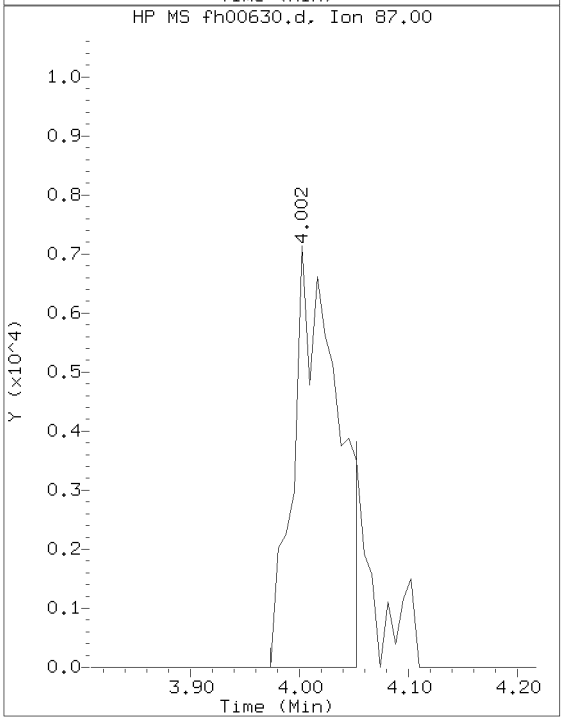
Reference Standard Spectrum for Dichlorodifluoromethane



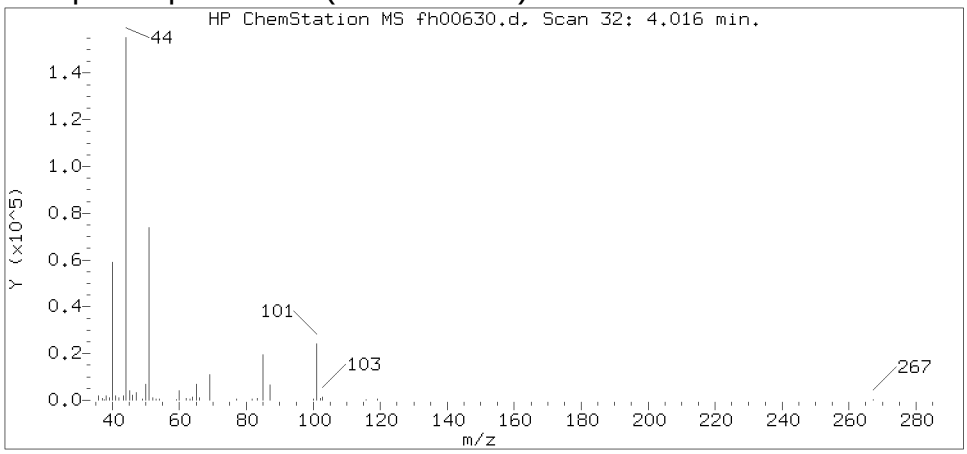


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00630.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:44 Analyst ID: jeb07445

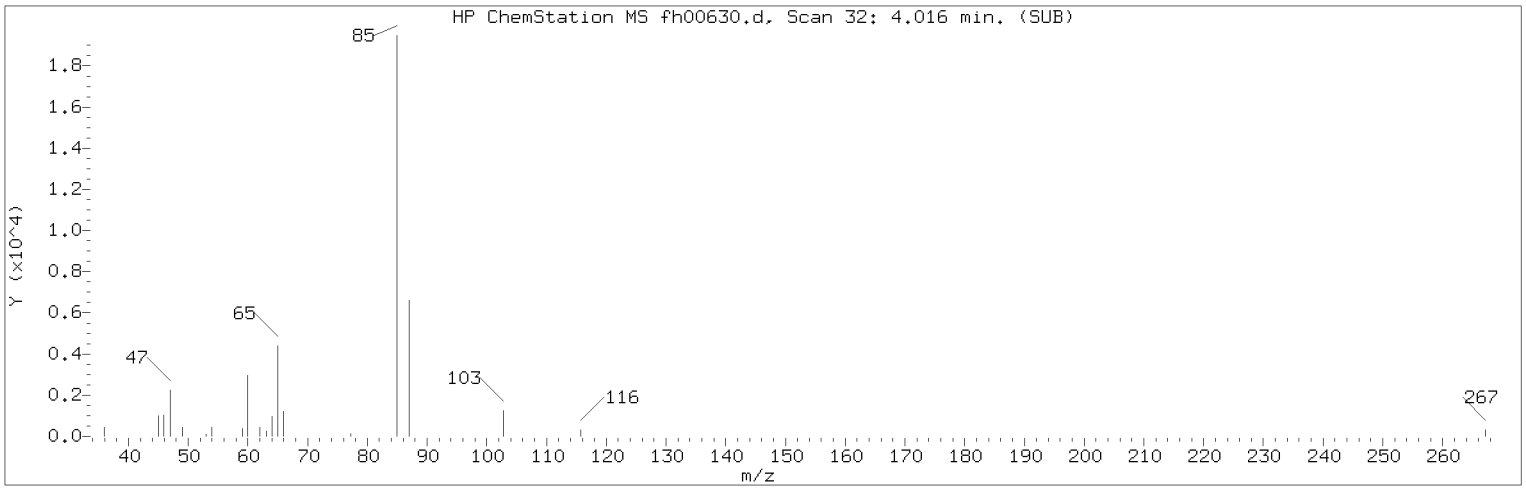
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:44 jeb07445

Sample Name: 1352- Lab Sample ID: 9766349

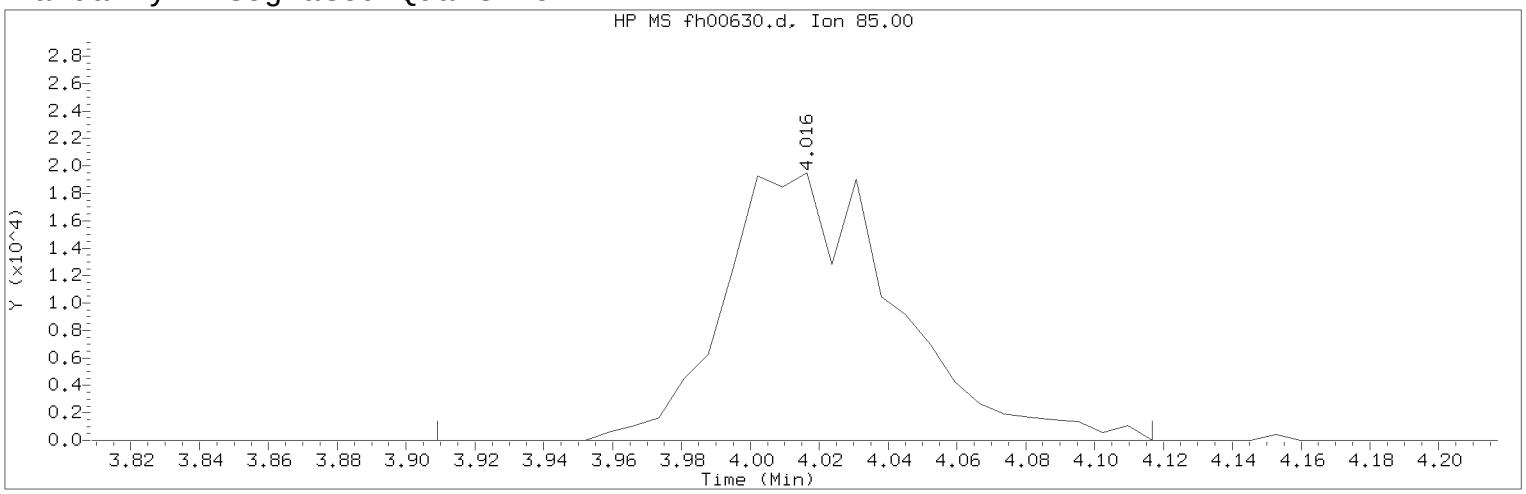
Compound Number : 2
Compound Name : Dichlorodifluoromethane
Scan Number : 32
Retention Time (minutes): 4.016
Relative Retention Time :-0.00060
Quant Ion : 85.00
Area (flag) : 67590M
Concentration (ppb(v)) : 0.5610

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug27.b/fh00630.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:44 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:44 jeb07445

Sample Name: 1352- Lab Sample ID: 9766349

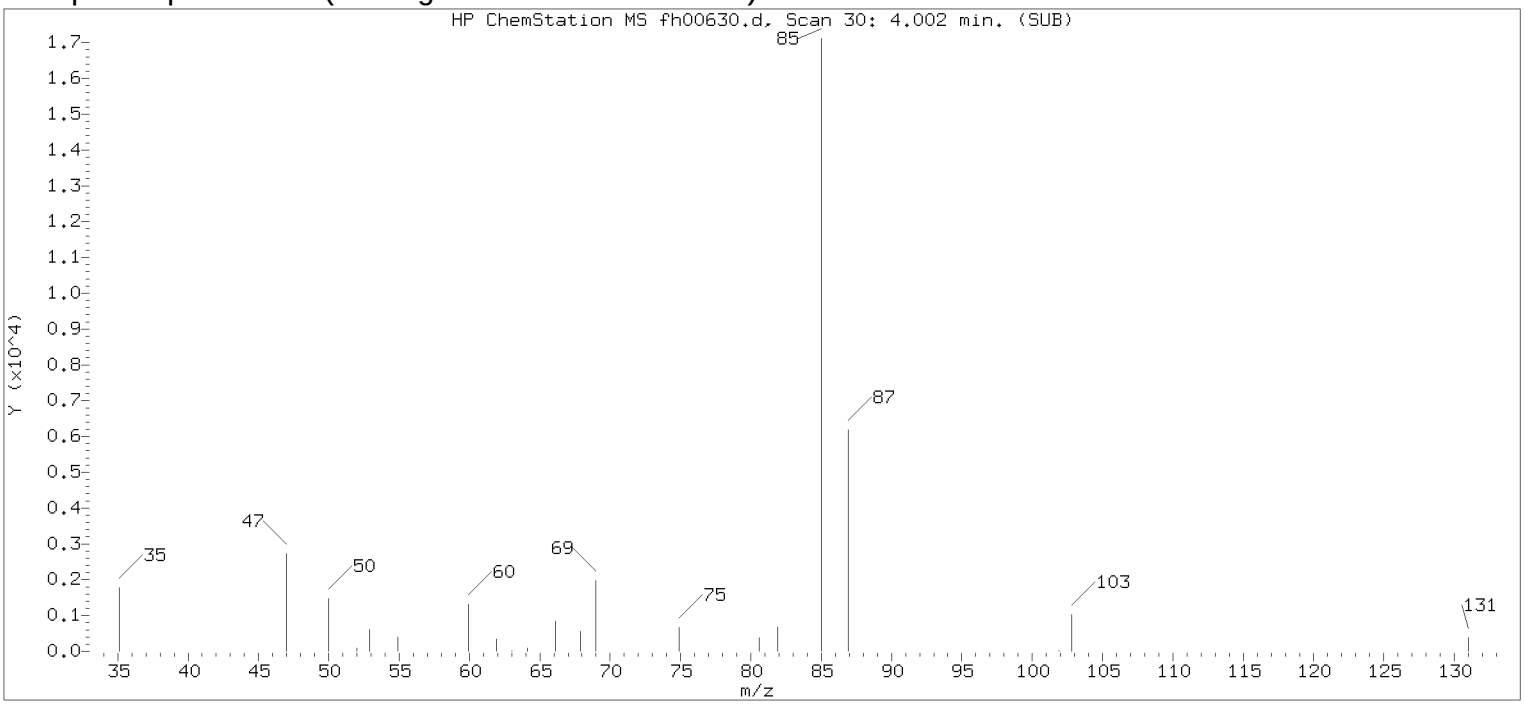
Compound Number : 2
Compound Name : Dichlorodifluoromethane
Scan Number : 32
Retention Time (minutes): 4.016
Quant Ion : 85.00
Area (flag) : 67590M
Concentration (ppb(v)) : 0.5610
Integration start scan : 16 Integration stop scan: 45
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

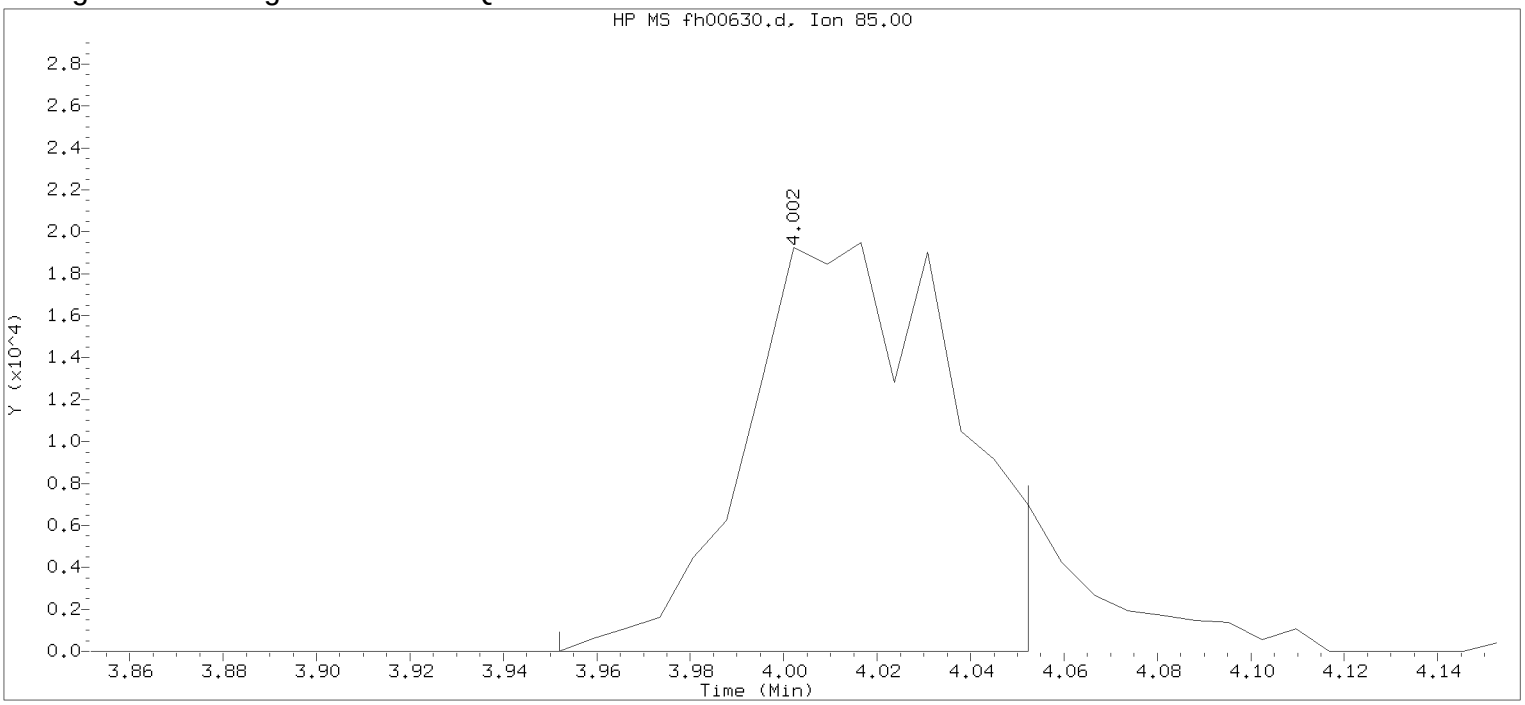
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:40.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug27.b/fh00630.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:44 Analyst ID: jeb07445

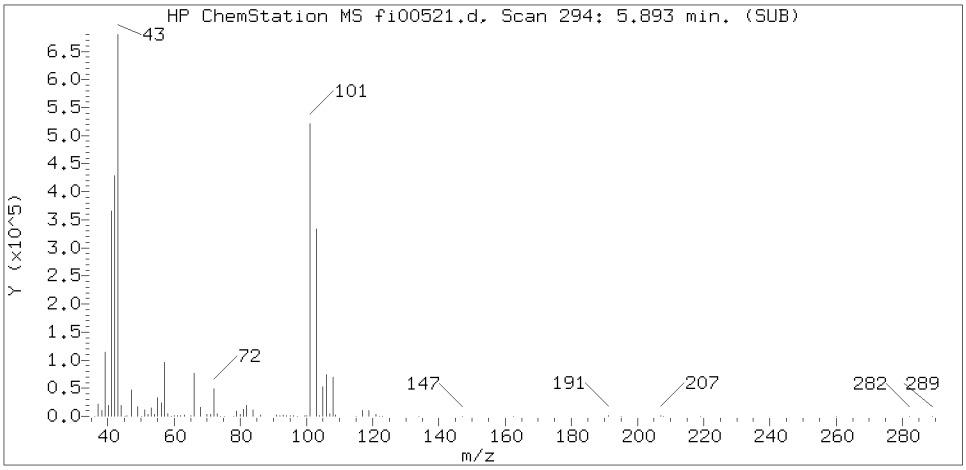
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 19:15 Unknown

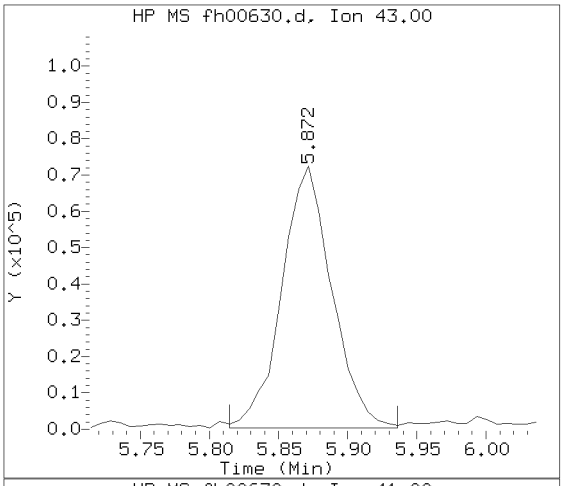
Sample Name: 1352- Lab Sample ID: 9766349

Compound Number : 2
Compound Name : Dichlorodifluoromethane
Scan Number : 30
Retention Time (minutes): 4.002
Quant Ion : 85.00
Area : 59637
Concentration (ppb(v)) : 0.4950
Integration start scan : 22 Integration stop scan: 36
Y at integration start : 0 Y at integration end: 0

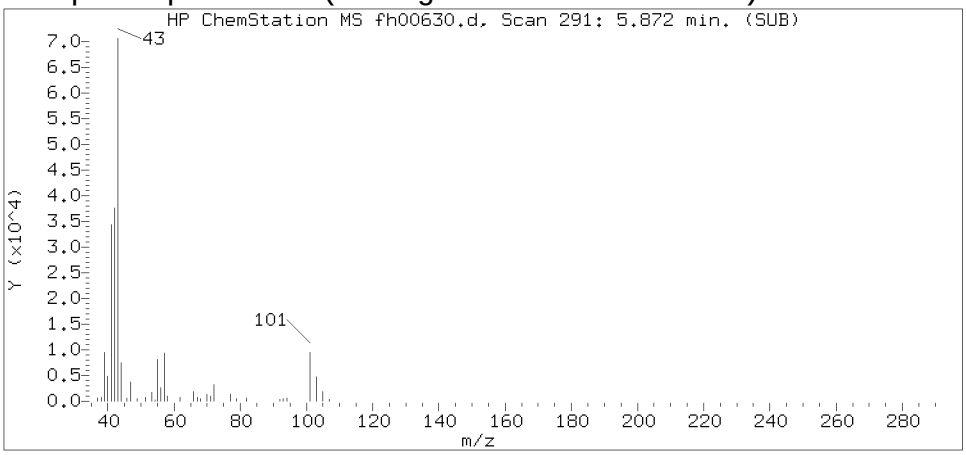
Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

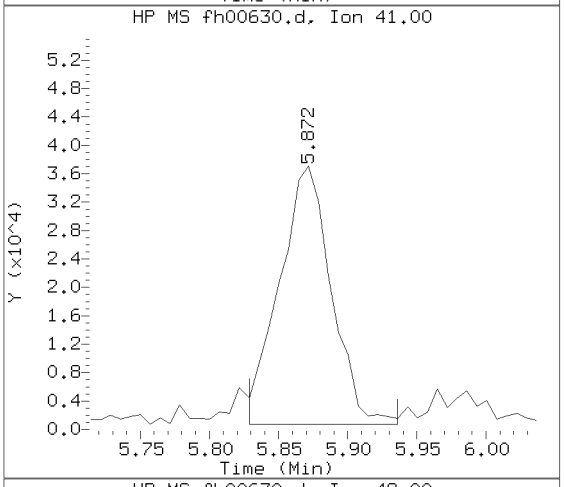
Reference Standard Spectrum for Pentane



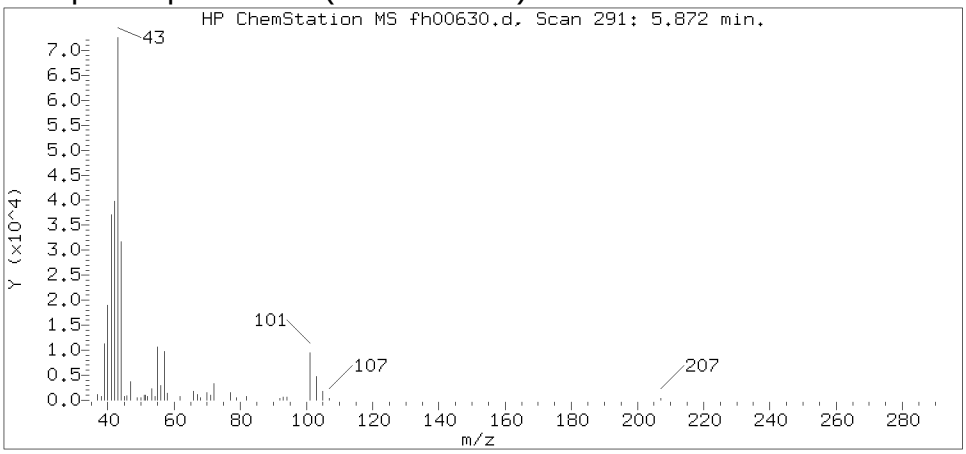


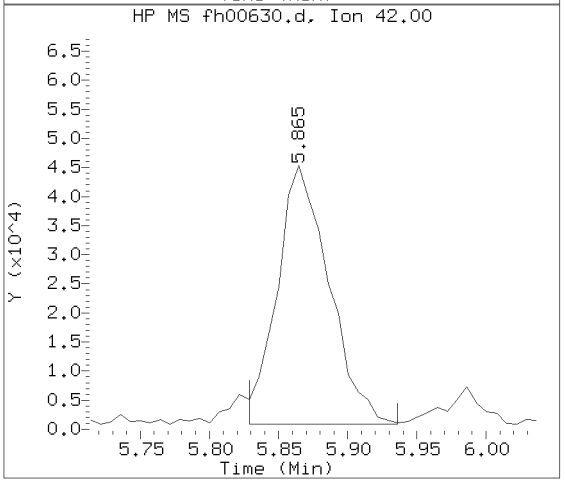
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00630.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:44 Analyst ID: jeb07445

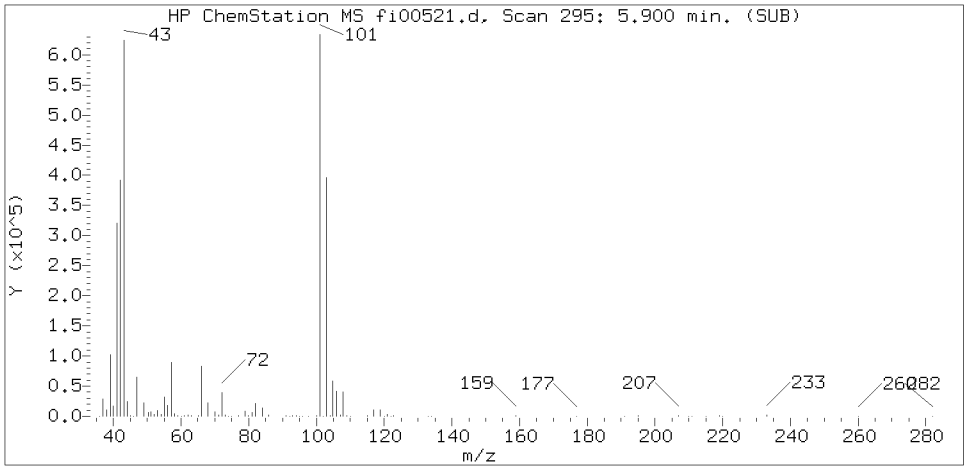
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:44 jeb07445

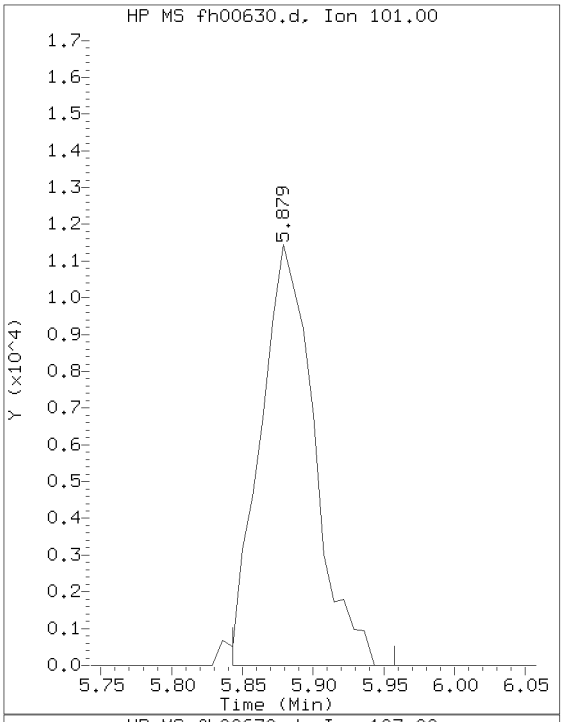
Sample Name: 1352- Lab Sample ID: 9766349

Compound Number : 11
Compound Name : Pentane
Scan Number : 291
Retention Time (minutes): 5.872
Relative Retention Time : 0.00037
Quant Ion : 43.00
Area (flag) : 180954
Concentration (ppb(v)) : 1.3840

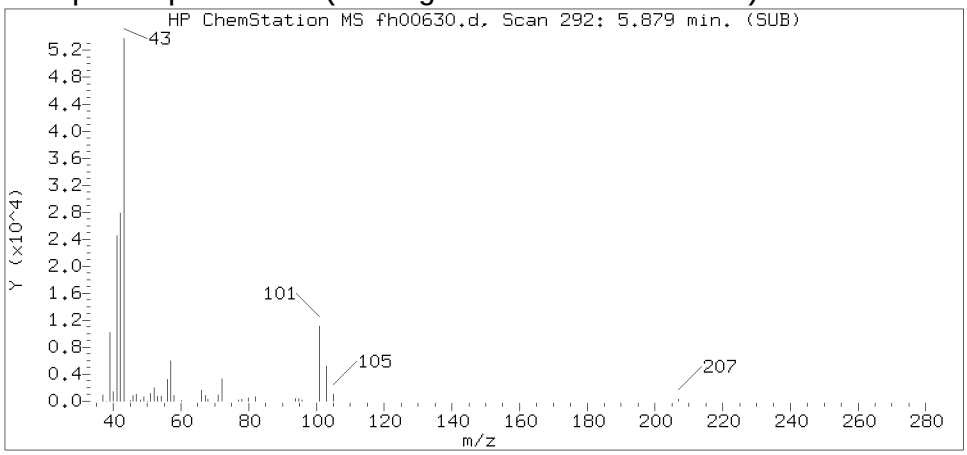
Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

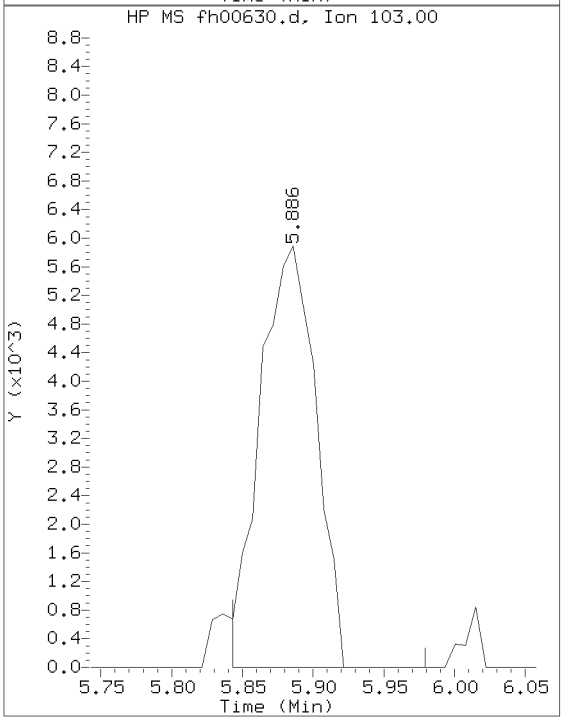
Reference Standard Spectrum for Trichlorofluoromethane



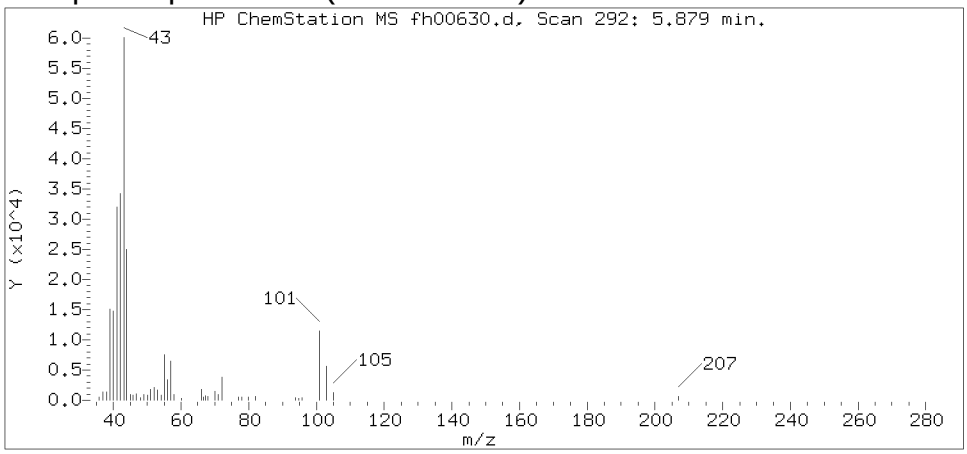


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00630.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:44 Analyst ID: jeb07445

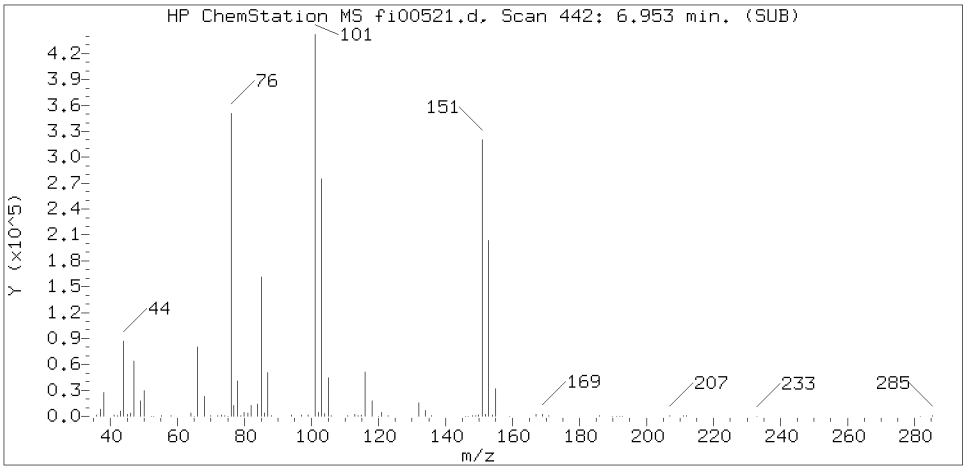
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:44 jeb07445

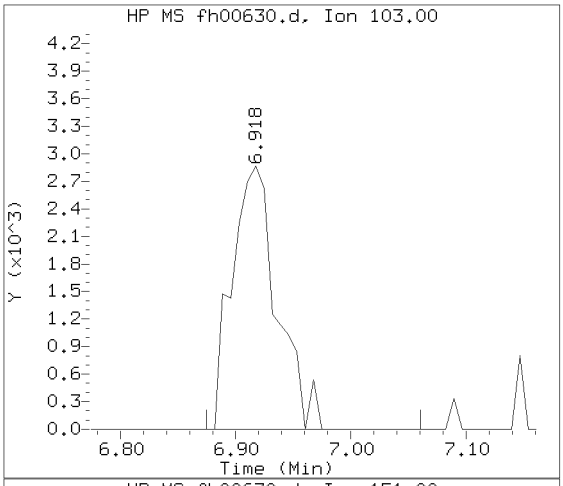
Sample Name: 1352- Lab Sample ID: 9766349

Compound Number	: 12
Compound Name	: Trichlorofluoromethane
Scan Number	: 292
Retention Time (minutes)	: 5.879
Relative Retention Time	: 0.00037
Quant Ion	: 101.00
Area (flag)	: 30260
Concentration (ppb(v))	: 0.2558

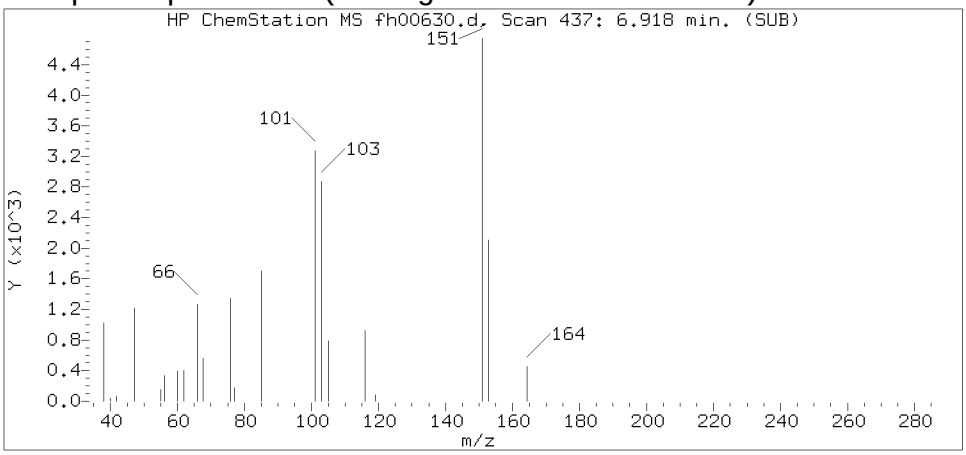
Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

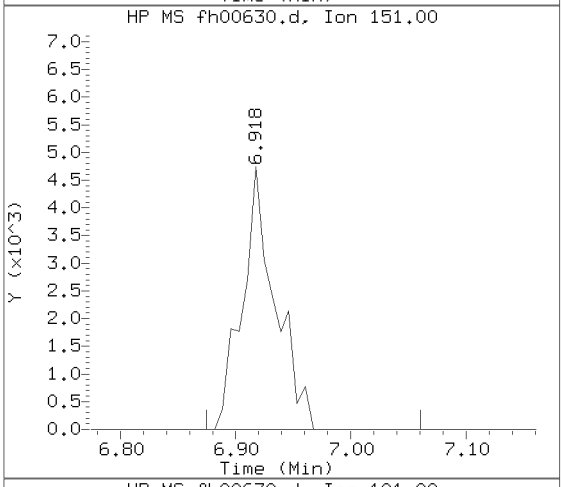
Reference Standard Spectrum for Freon 113



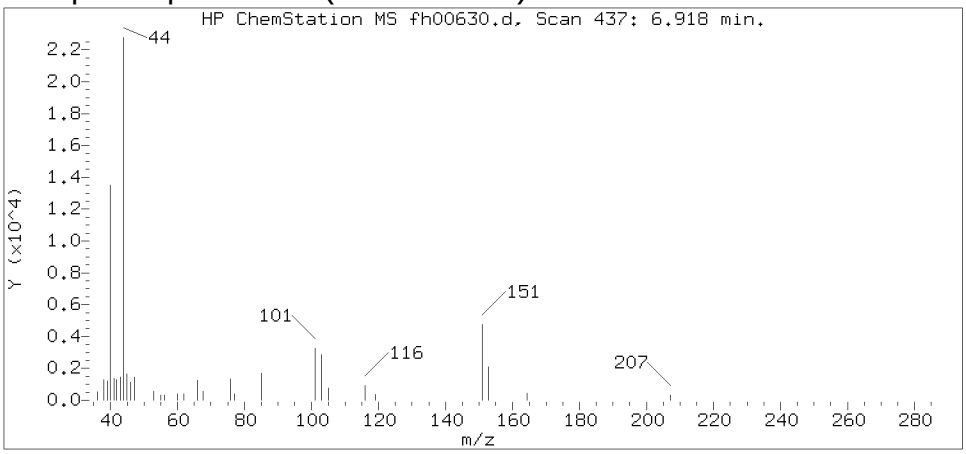


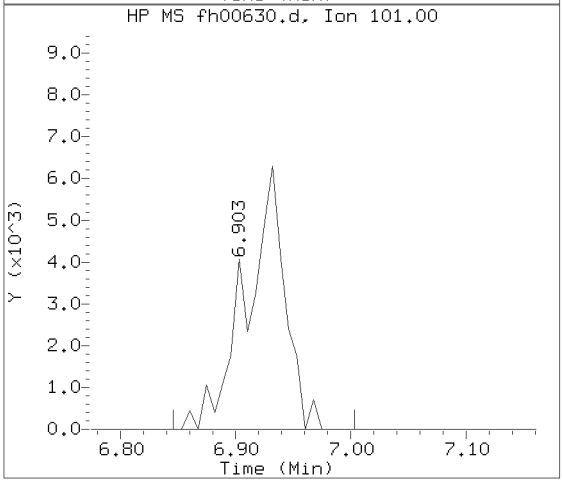
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00630.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:44 Analyst ID: jeb07445

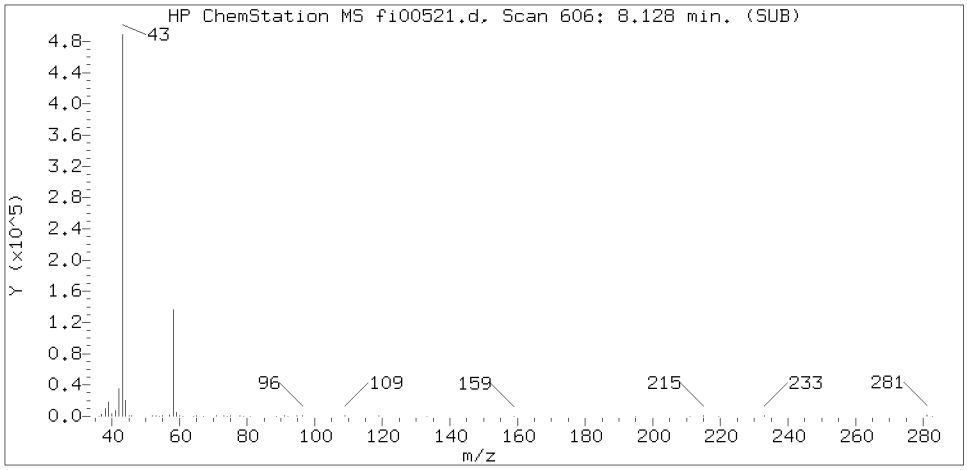
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:44 jeb07445

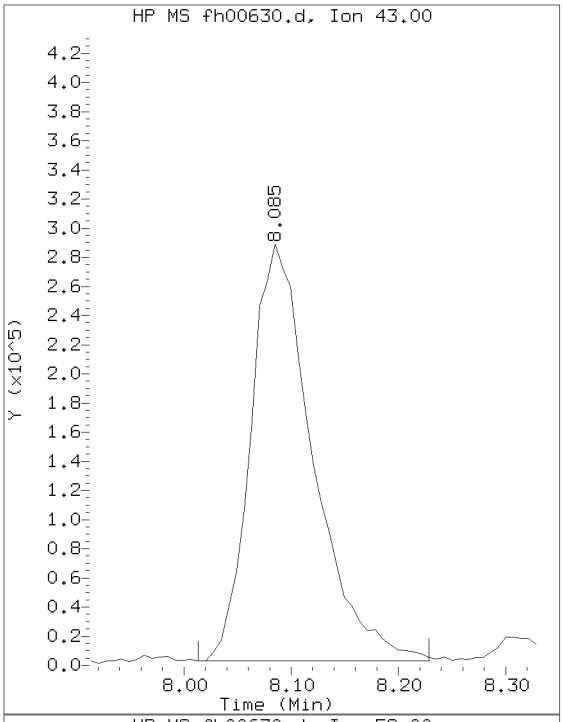
Sample Name: 1352- Lab Sample ID: 9766349

Compound Number : 17
Compound Name : Freon 113
Scan Number : 437
Retention Time (minutes): 6.918
Relative Retention Time : 0.00055
Quant Ion : 103.00
Area (flag) : 7794
Concentration (ppb(v)) : 0.1110

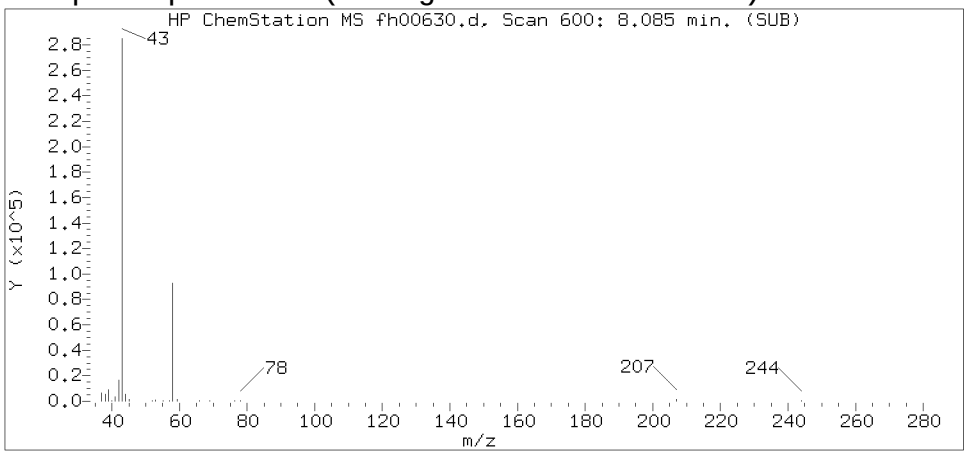
Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

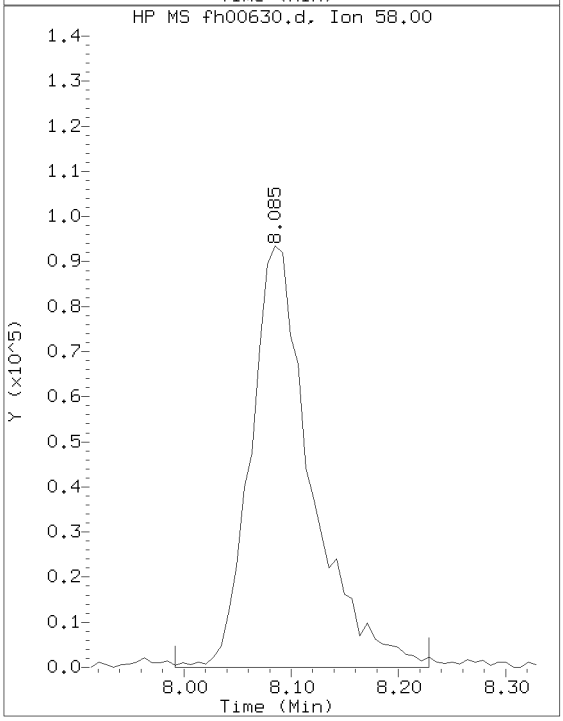
Reference Standard Spectrum for Acetone



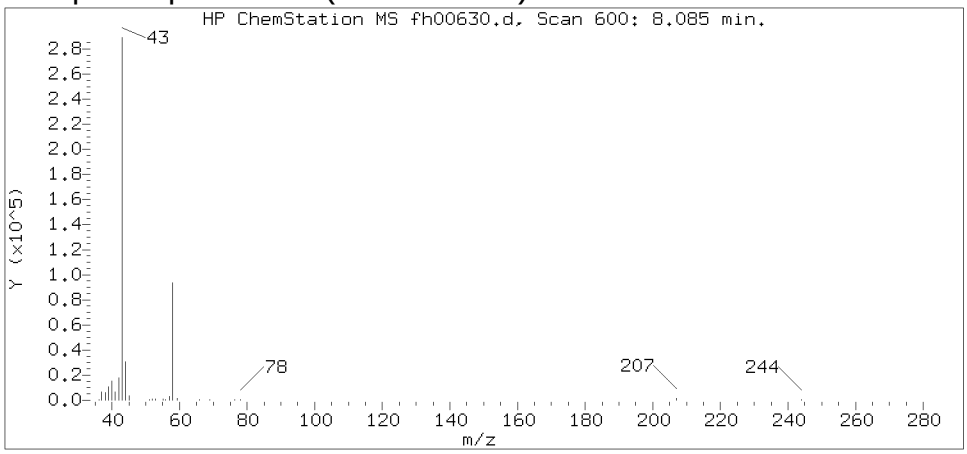


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00630.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:44 Analyst ID: jeb07445

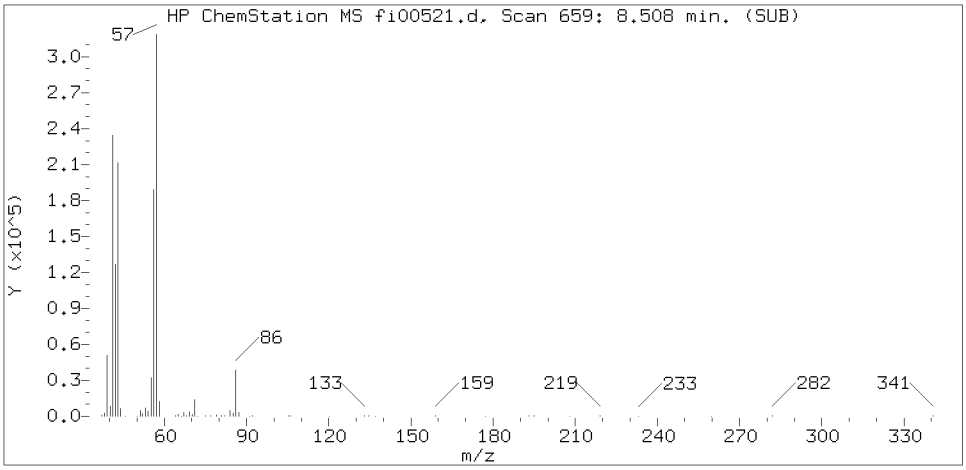
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:44 jeb07445

Sample Name: 1352- Lab Sample ID: 9766349

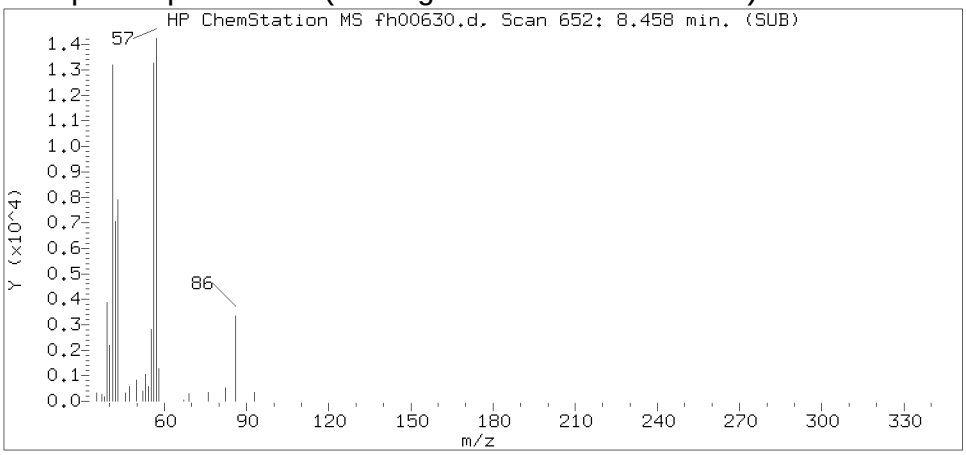
Compound Number : 24
Compound Name : Acetone
Scan Number : 600
Retention Time (minutes): 8.085
Relative Retention Time :-0.00053
Quant Ion : 43.00
Area (flag) : 1156058
Concentration (ppb(v)) : 10.0153

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

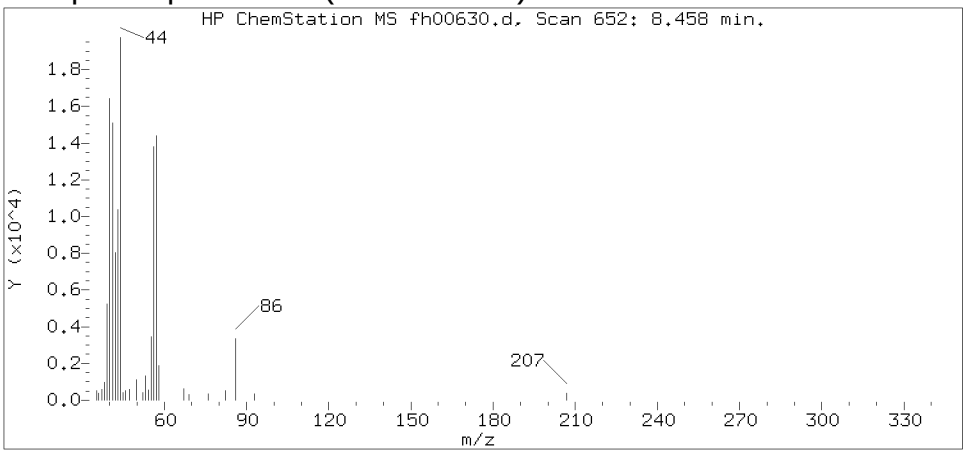
Reference Standard Spectrum for Hexane

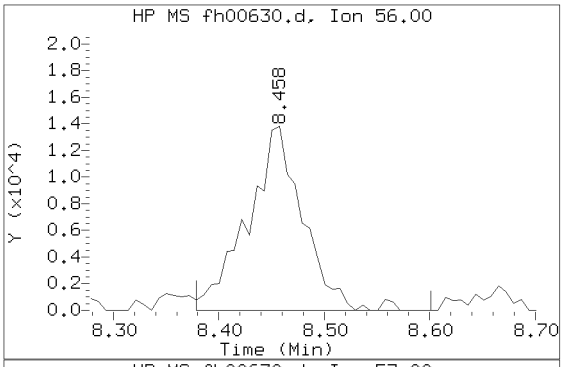


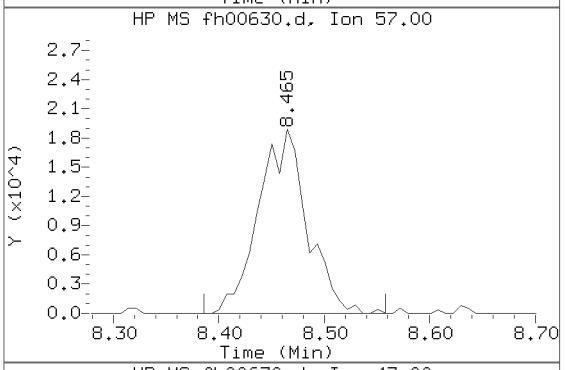
Sample Spectrum (Background Subtracted)

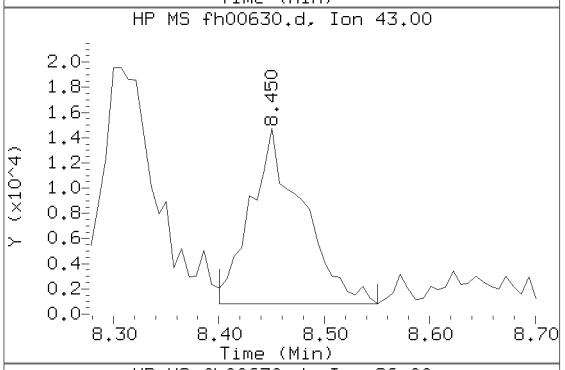


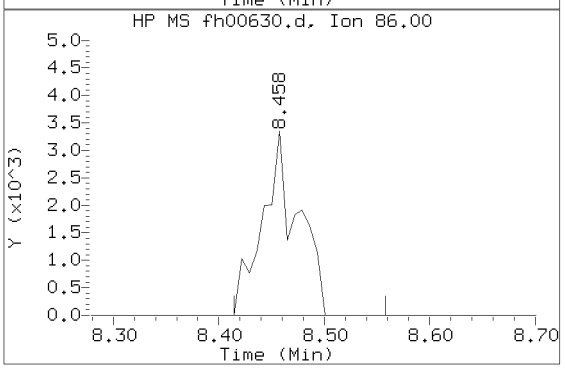
Sample Spectrum (Unaltered)











Data File: /chem/HP26379.i/18aug27.b/fh00630.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:44 Analyst ID: jeb07445

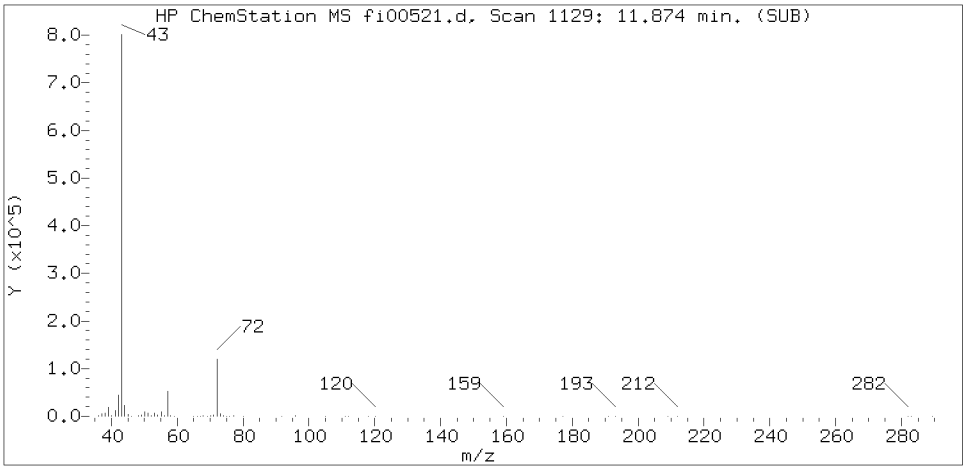
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:44 jeb07445

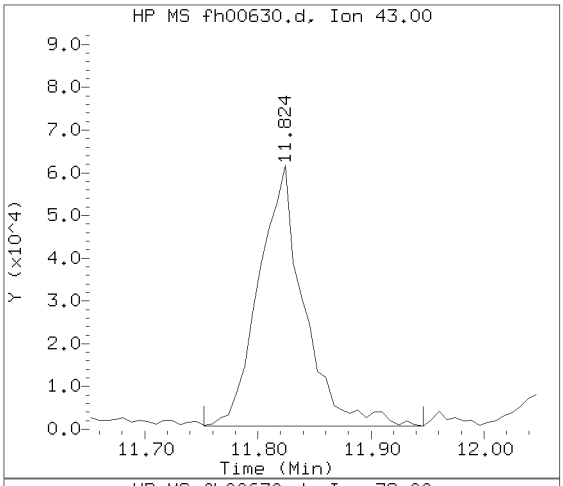
Sample Name: 1352- Lab Sample ID: 9766349

Compound Number : 26
Compound Name : Hexane
Scan Number : 652
Retention Time (minutes): 8.458
Relative Retention Time : 0.00082
Quant Ion : 56.00
Area (flag) : 50052
Concentration (ppb(v)) : 0.6016

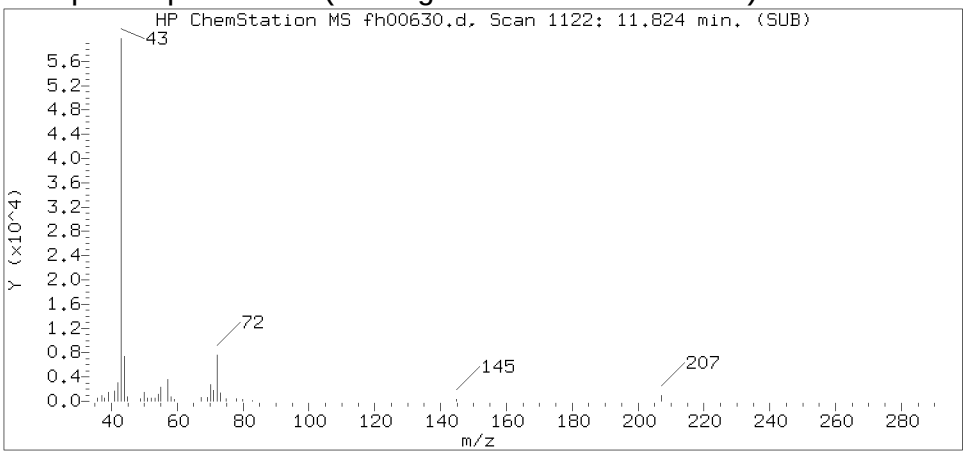
Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

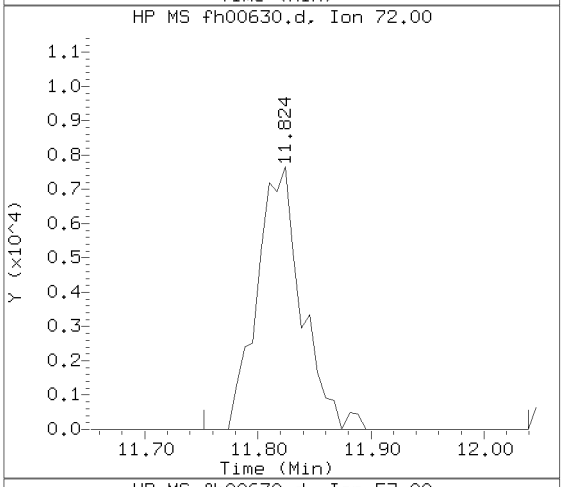
Reference Standard Spectrum for 2-Butanone



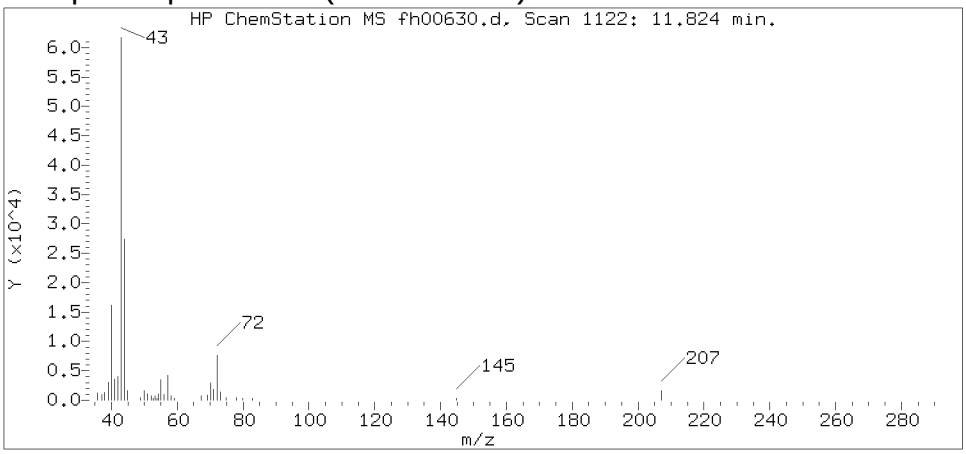


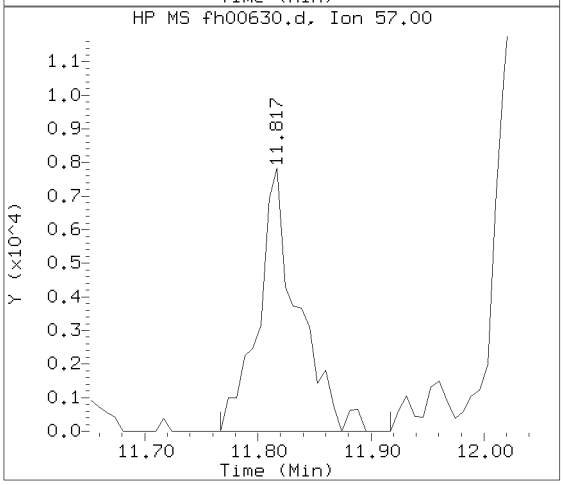
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00630.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:44 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:44 jeb07445

Sample Name: 1352- Lab Sample ID: 9766349

Compound Number : 45
Compound Name : 2-Butanone
Scan Number : 1122
Retention Time (minutes): 11.824
Relative Retention Time : 0.00077
Quant Ion : 43.00
Area (flag) : 168691
Concentration (ppb(v)) : 1.0296

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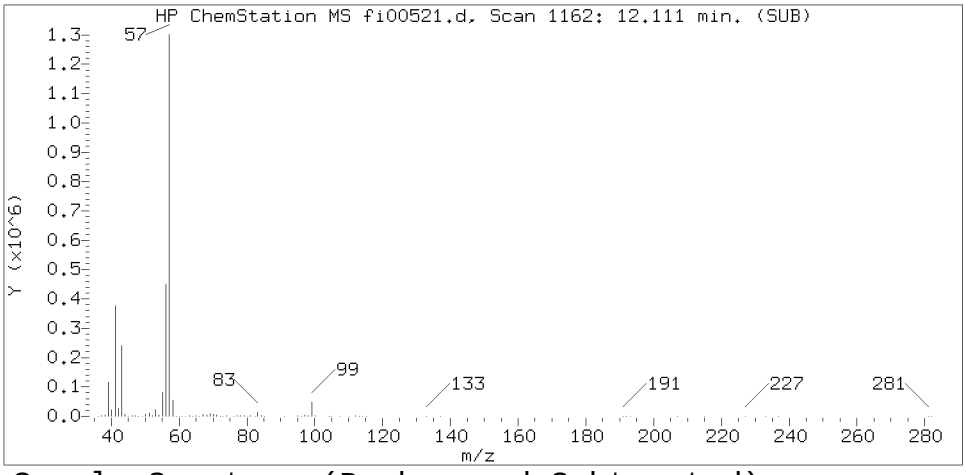
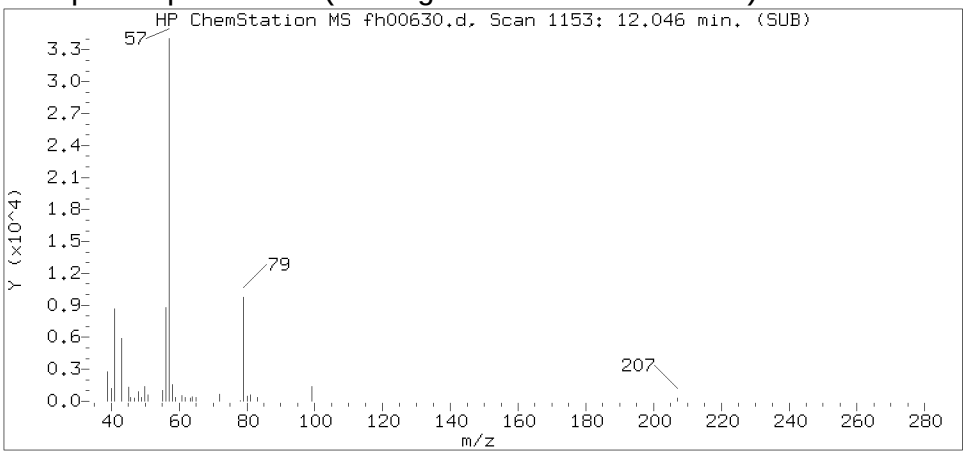
Target 3.5 esignature user ID: jeb07445

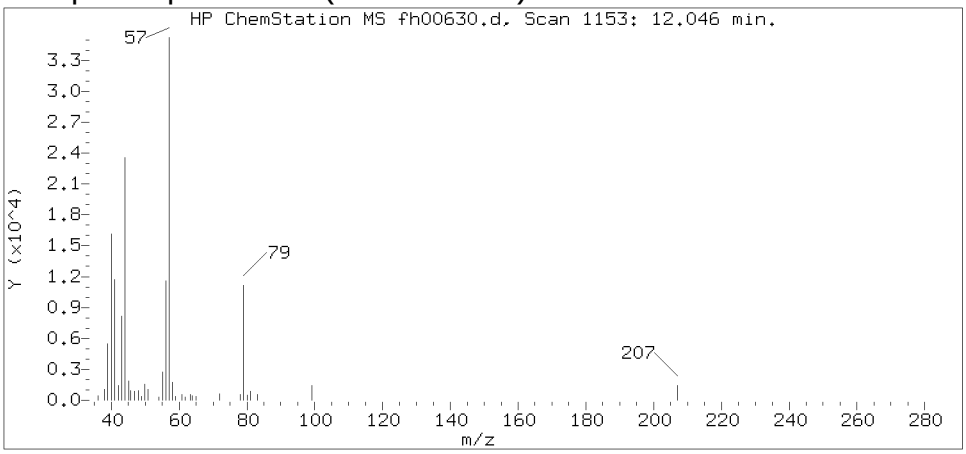
Reference Standard Spectrum for Isooctane

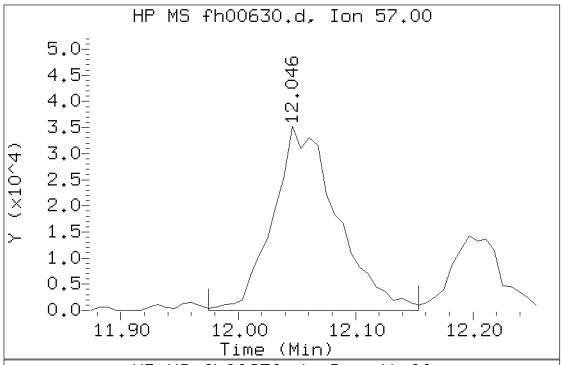


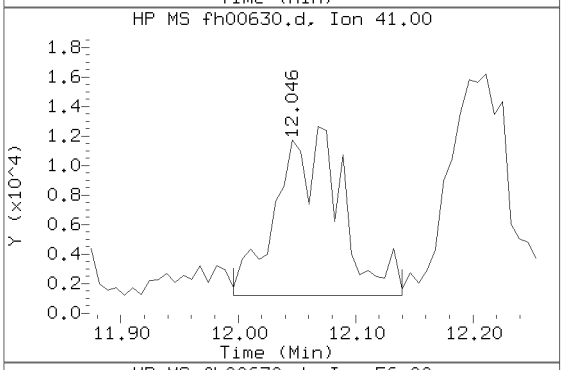
Sample Spectrum (Background Subtracted)

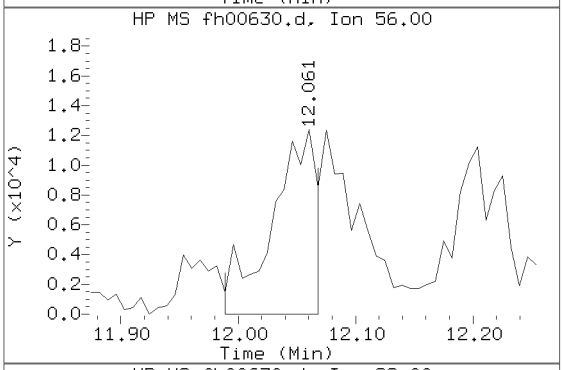


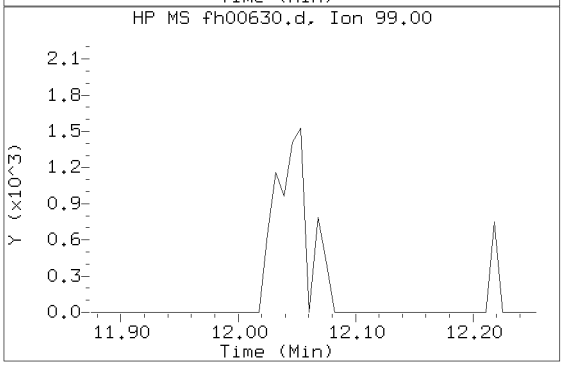
Sample Spectrum (Unaltered)











Data File: /chem/HP26379.i/18aug27.b/fh00630.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:44 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:44 jeb07445

Sample Name: 1352- Lab Sample ID: 9766349

Compound Number	: 46
Compound Name	: Isooctane
Scan Number	: 1153
Retention Time (minutes)	: 12.046
Relative Retention Time	: 0.00048
Quant Ion	: 57.00
Area (flag)	: 133254
Concentration (ppb(v))	: 0.3727

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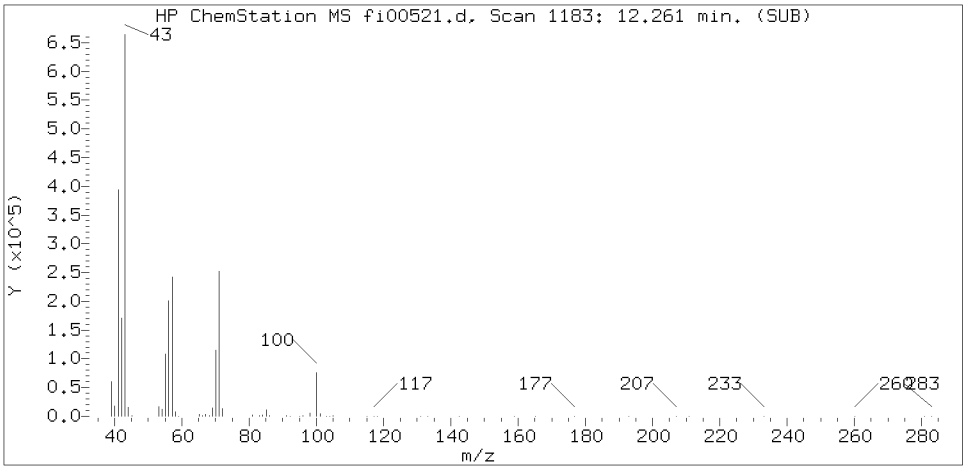
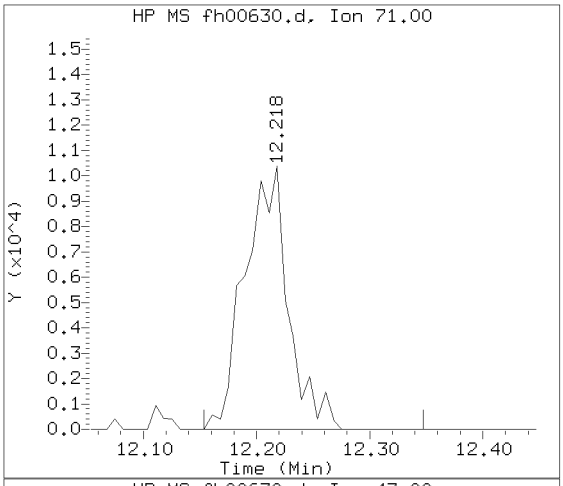
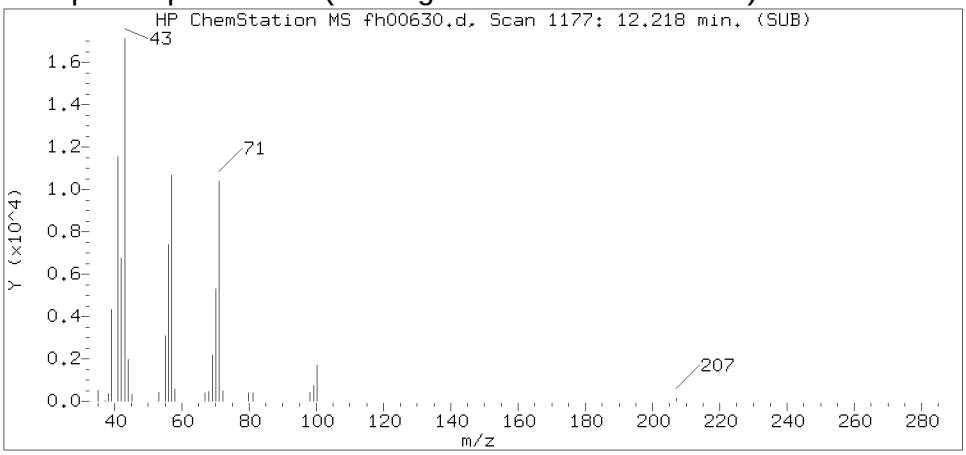
Target 3.5 esignature user ID: jeb07445

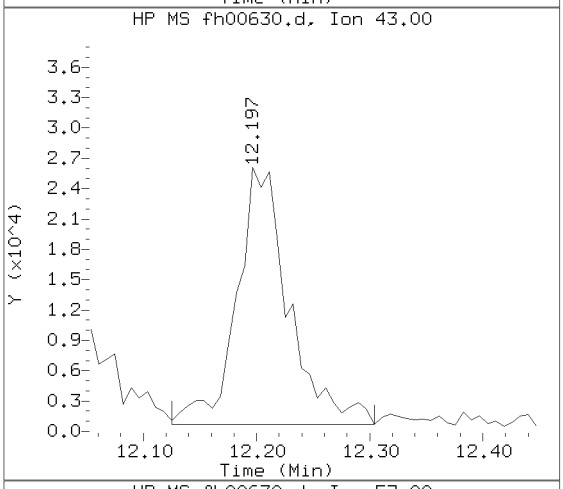
Reference Standard Spectrum for Heptane



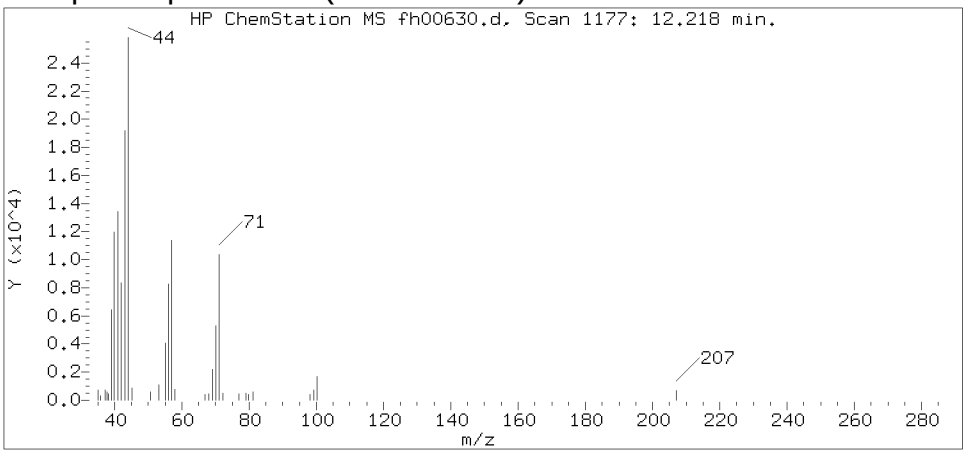


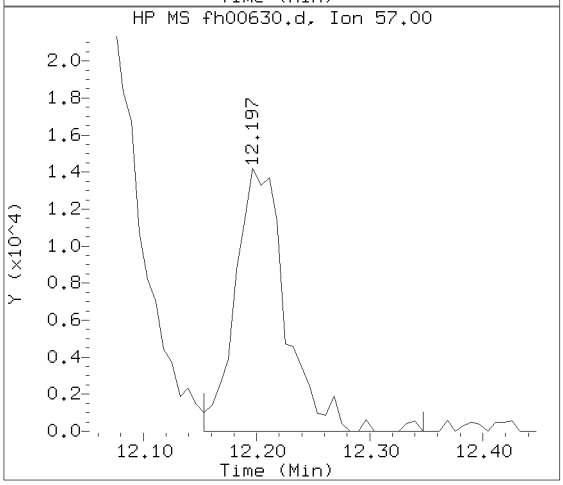
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00630.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:44 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:44 jeb07445

Sample Name: 1352- Lab Sample ID: 9766349

Compound Number : 47
Compound Name : Heptane
Scan Number : 1177
Retention Time (minutes): 12.218
Relative Retention Time :-0.00058
Quant Ion : 71.00
Area (flag) : 27668
Concentration (ppb(v)) : 0.5375

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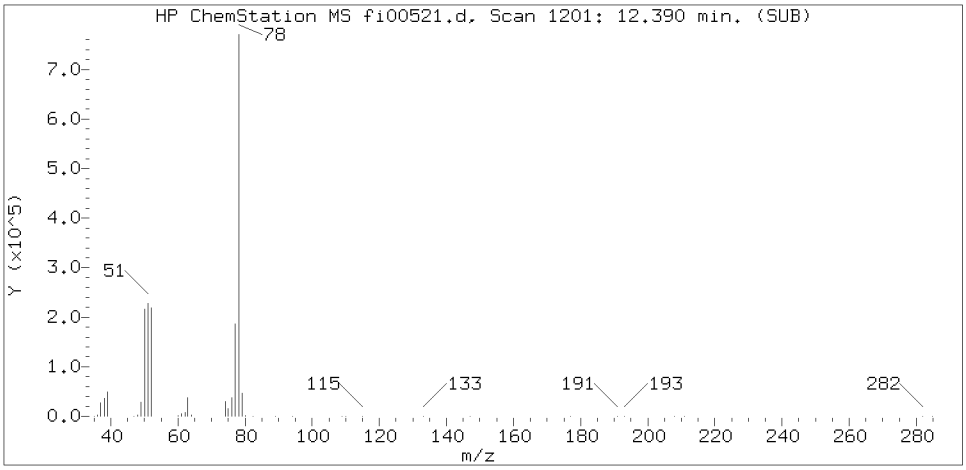
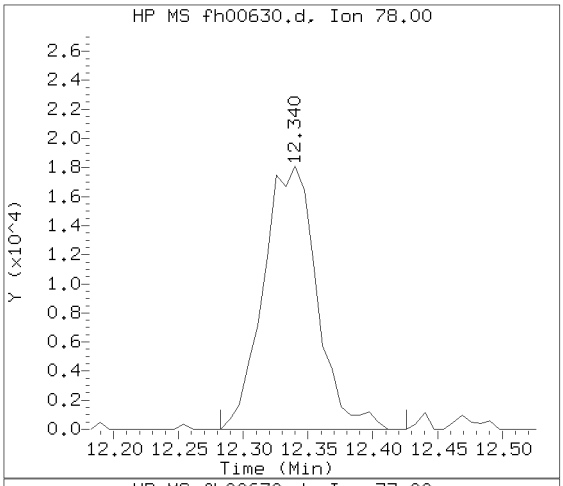
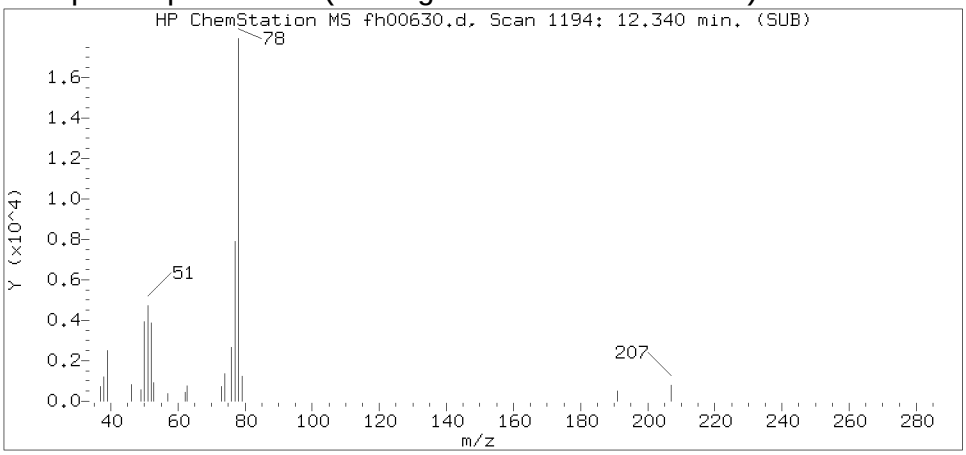
Target 3.5 esignature user ID: jeb07445

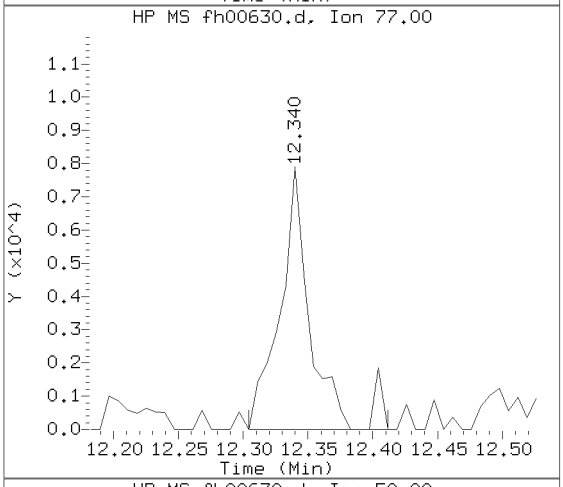
Reference Standard Spectrum for Benzene



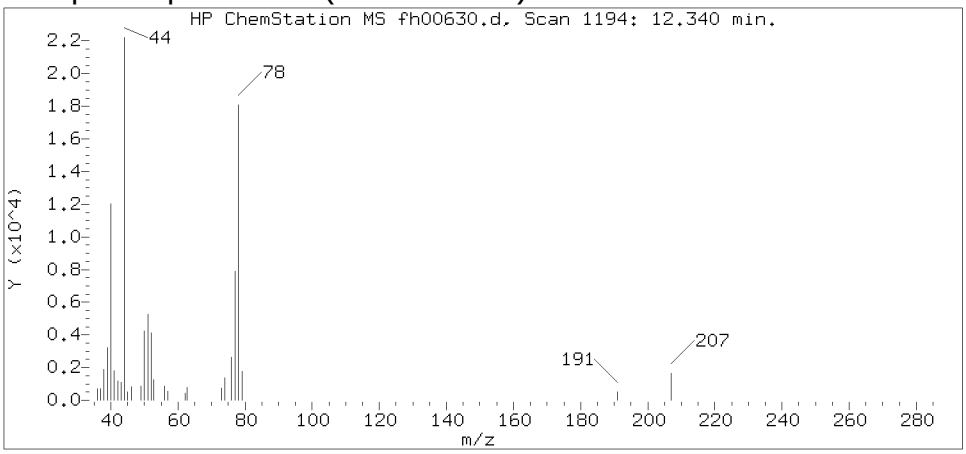


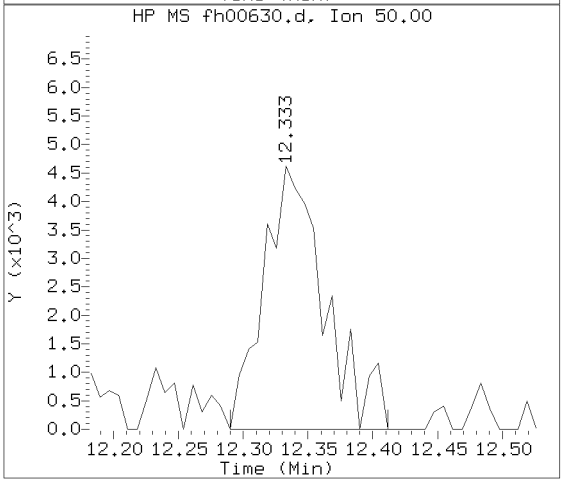
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00630.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:44 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:44 jeb07445

Sample Name: 1352- Lab Sample ID: 9766349

Compound Number : 48
Compound Name : Benzene
Scan Number : 1194
Retention Time (minutes): 12.340
Relative Retention Time :-0.00058
Quant Ion : 78.00
Area (flag) : 52093
Concentration (ppb(v)) : 0.3273

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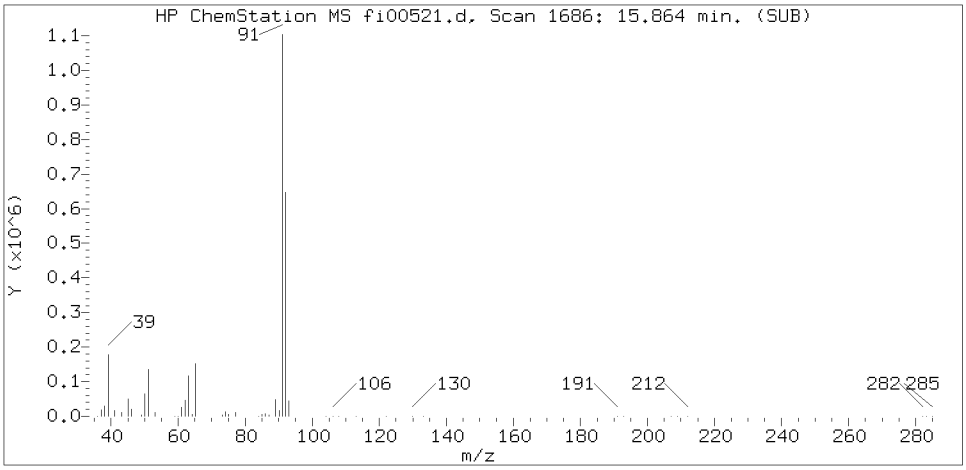
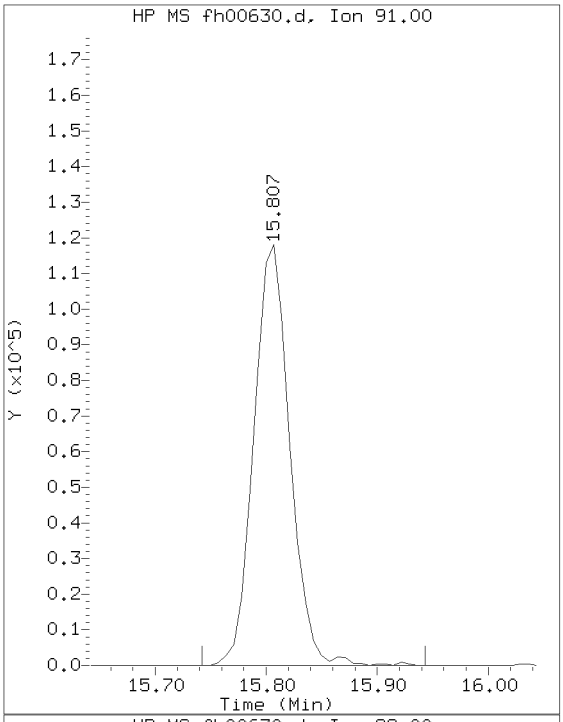
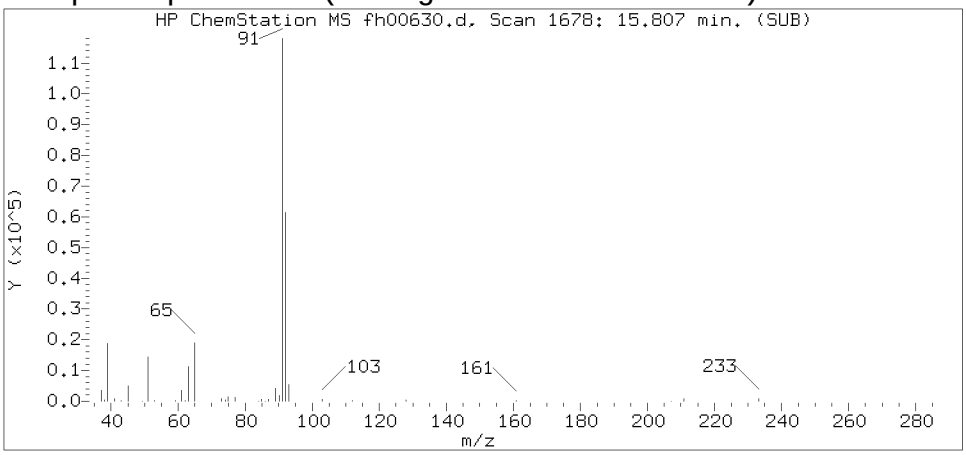
Target 3.5 esignature user ID: jeb07445

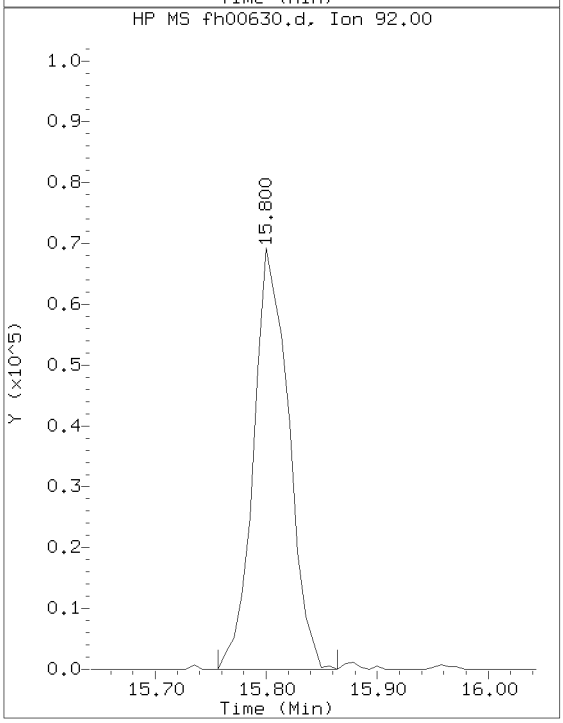
Reference Standard Spectrum for Toluene



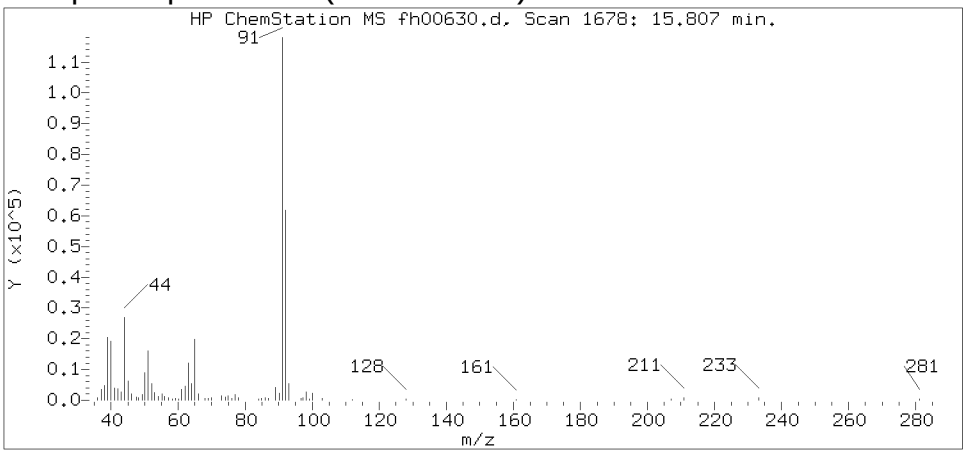


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00630.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:44 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:44 jeb07445

Sample Name: 1352- Lab Sample ID: 9766349

Compound Number : 61
Compound Name : Toluene
Scan Number : 1678
Retention Time (minutes): 15.807
Relative Retention Time :-0.00073
Quant Ion : 91.00
Area (flag) : 266749
Concentration (ppb(v)) : 1.4148

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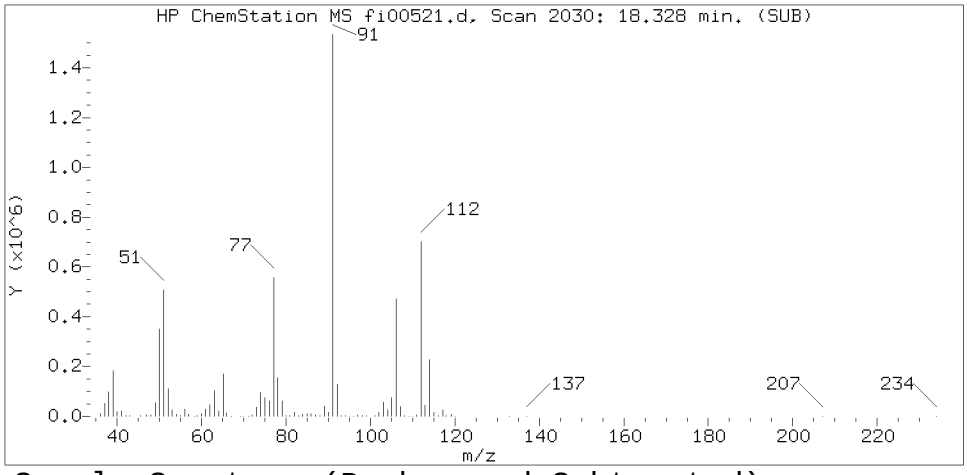
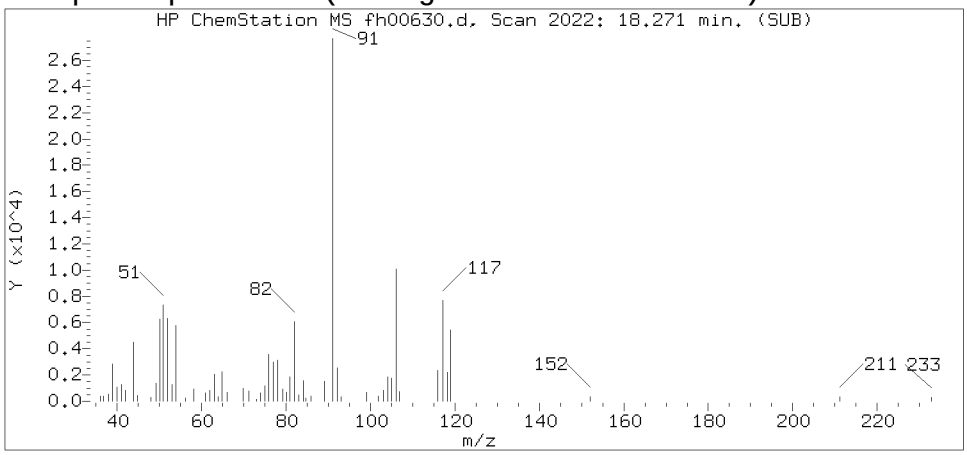
Target 3.5 esignature user ID: jeb07445

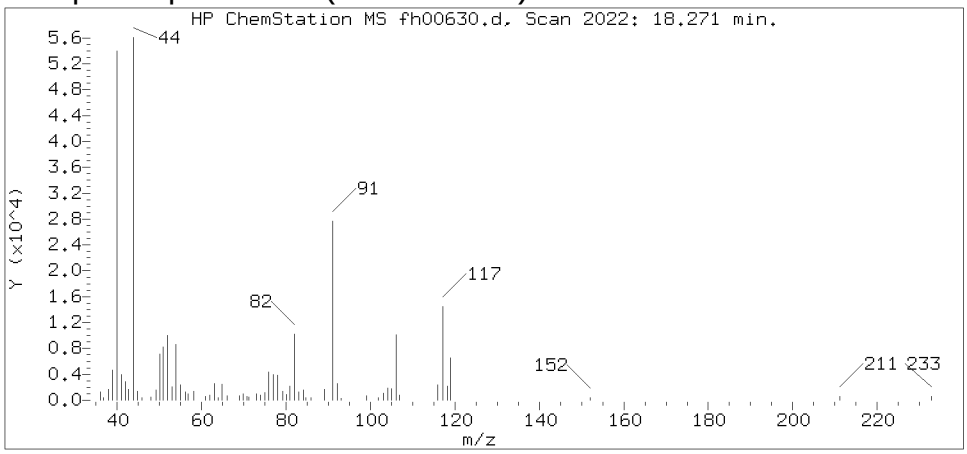
Reference Standard Spectrum for Ethylbenzene

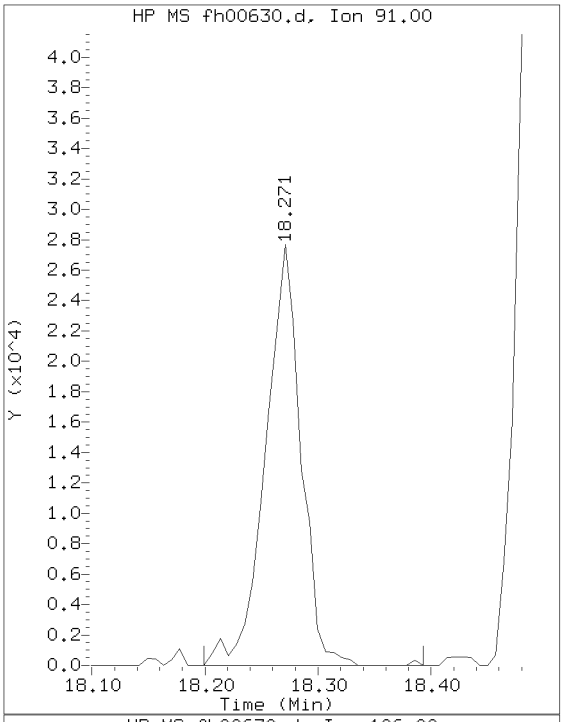


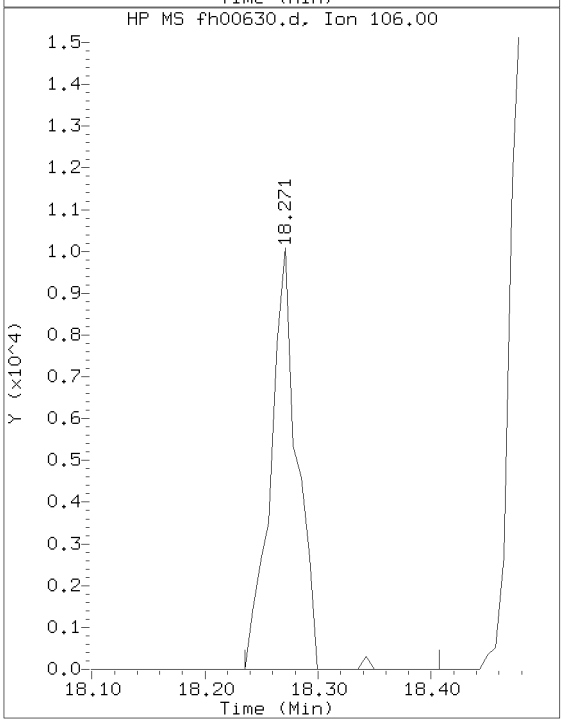
Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)







Data File: /chem/HP26379.i/18aug27.b/fh00630.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:44 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:44 jeb07445

Sample Name: 1352- Lab Sample ID: 9766349

Compound Number : 73
Compound Name : Ethylbenzene
Scan Number : 2022
Retention Time (minutes): 18.271
Relative Retention Time :-0.00039
Quant Ion : 91.00
Area (flag) : 60324
Concentration (ppb(v)) : 0.2345

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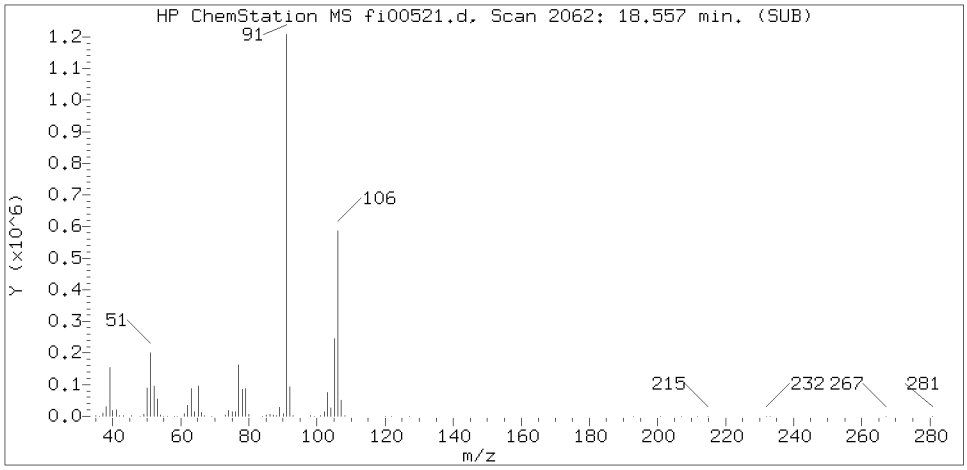
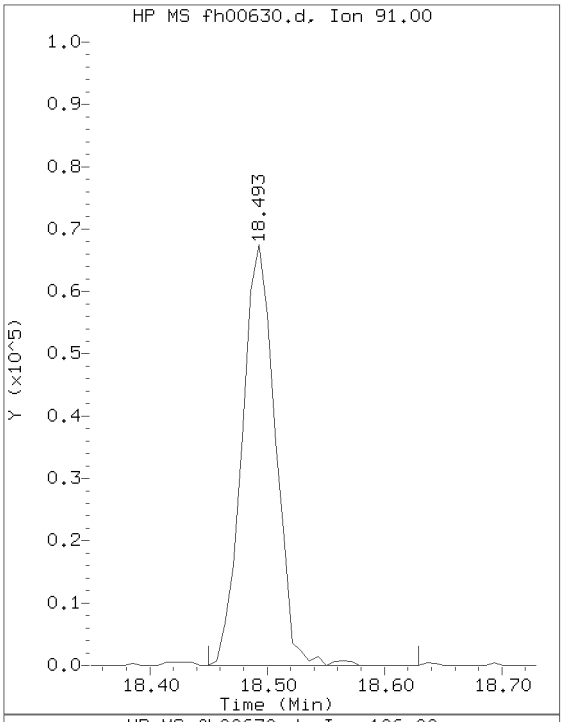
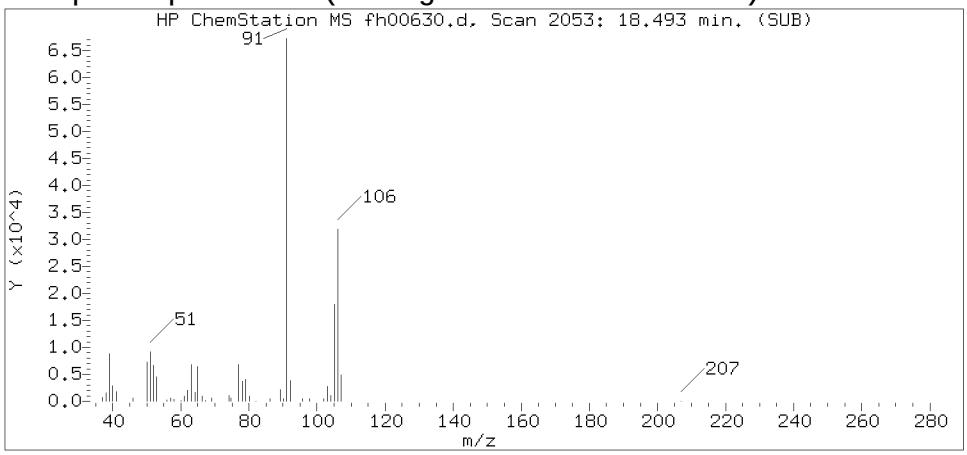
Target 3.5 esignature user ID: jeb07445

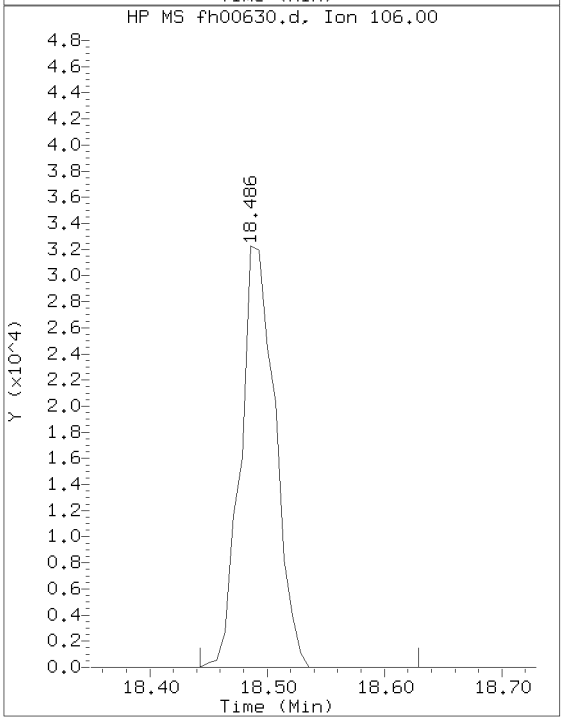
Reference Standard Spectrum for m/p-Xylene



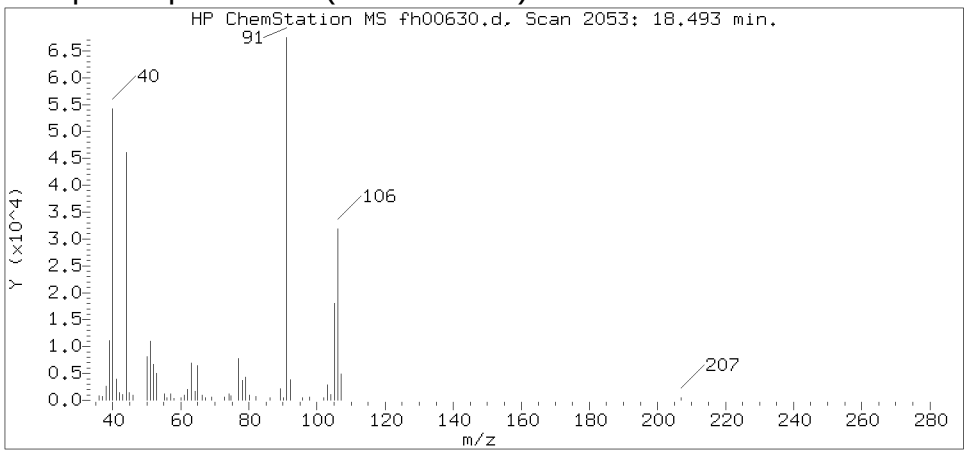


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00630.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:44 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:44 jeb07445

Sample Name: 1352- Lab Sample ID: 9766349

Compound Number : 75
Compound Name : m/p-Xylene
Scan Number : 2053
Retention Time (minutes): 18.493
Relative Retention Time :-0.00040
Quant Ion : 91.00
Area (flag) : 133436
Concentration (ppb(v)) : 0.7215

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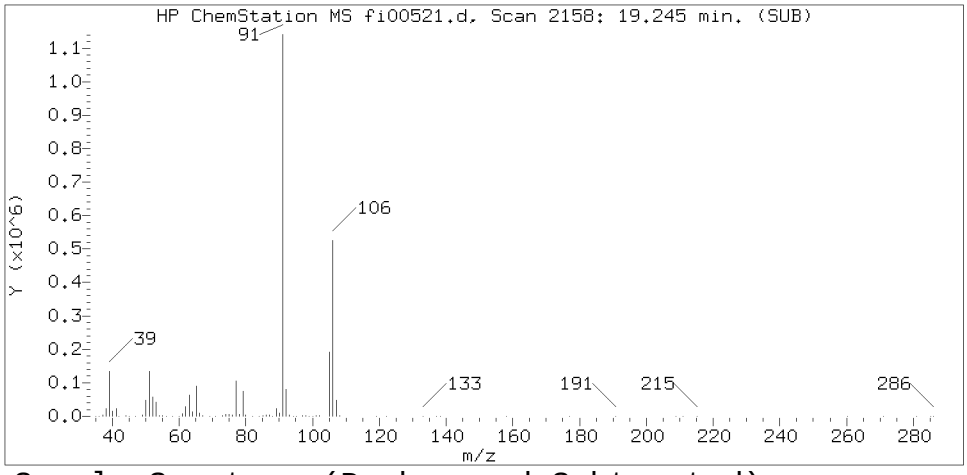
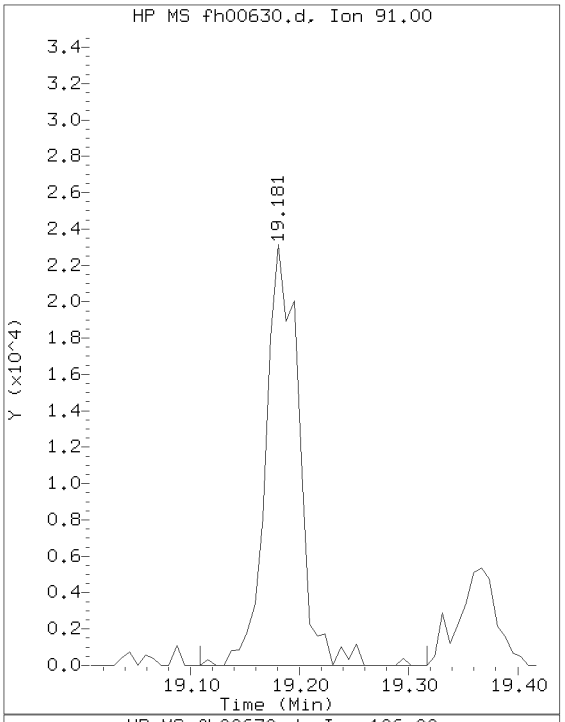
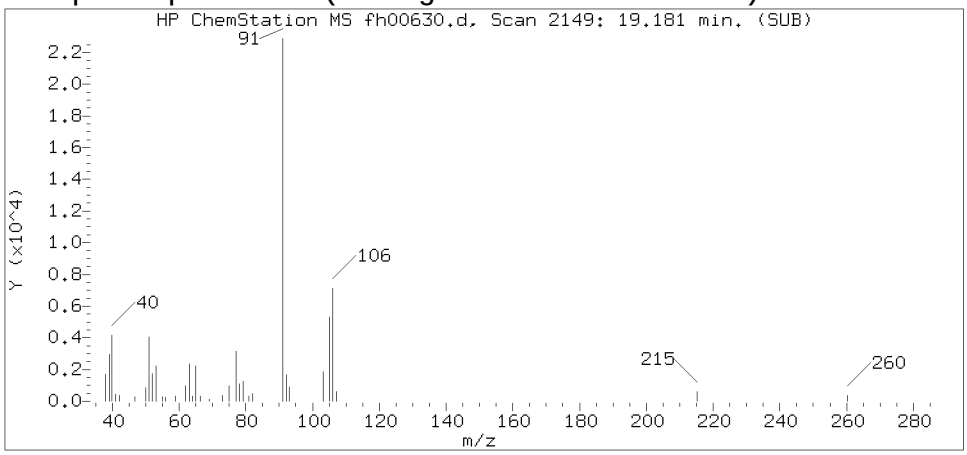
Target 3.5 esignature user ID: jeb07445

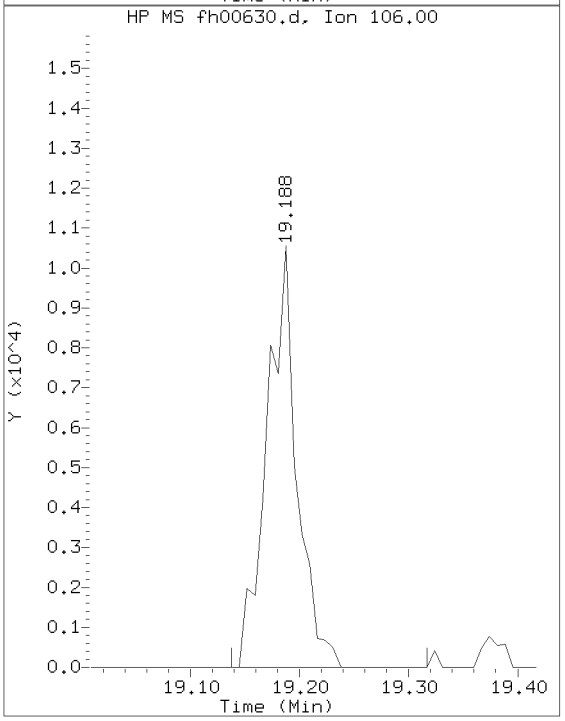
Reference Standard Spectrum for o-Xylene



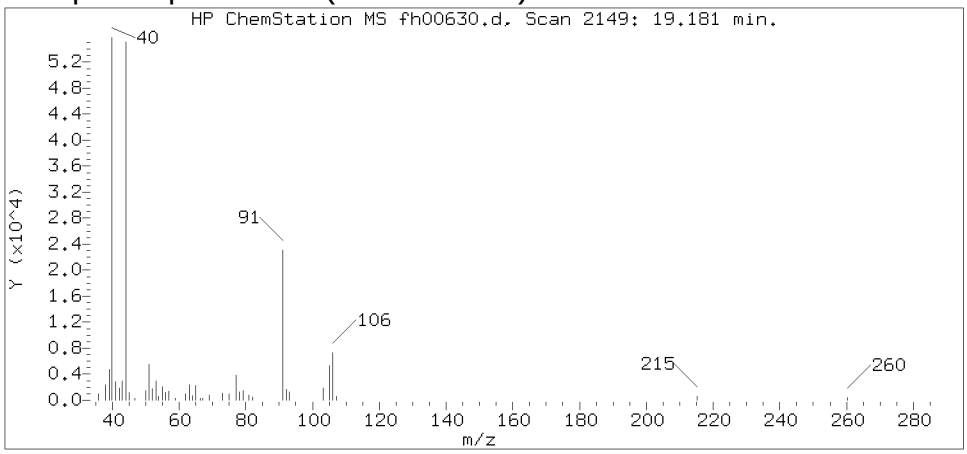


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00630.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 18:44 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:44 jeb07445

Sample Name: 1352- Lab Sample ID: 9766349

Compound Number : 76
Compound Name : o-Xylene
Scan Number : 2149
Retention Time (minutes): 19.181
Relative Retention Time :-0.00002
Quant Ion : 91.00
Area (flag) : 49220
Concentration (ppb(v)) : 0.2731

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:58.
Target 3.5 esignature user ID: jeb07445

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766350
Canister ID:	851	Lab File ID:	fh00632.d
Pressure Received:	14.2 psia	Date Collected:	08/18/2018
Final Pressure:	28.4 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	19:49
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	2.7	J
75-45-6	Chlorodifluoromethane	0.53	U
76-14-2	Freon 114	0.84	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.31	U
106-99-0	1,3-Butadiene	0.38	U
74-83-9	Bromomethane	0.70	U
75-00-3	Chloroethane	0.50	U
75-43-4	Dichlorofluoromethane	0.46	U
75-69-4	Trichlorofluoromethane	1.5	J
109-66-0	Pentane	3.3	
75-35-4	1,1-Dichloroethene	0.56	U
76-13-1	Freon 113	1.2	J
67-64-1	Acetone	21	
75-15-0	Carbon Disulfide	0.40	U
107-05-1	3-Chloropropene	0.47	U
75-09-2	Methylene Chloride	0.87	U
156-60-5	trans-1,2-Dichloroethene	0.34	U
1634-04-4	Methyl t-Butyl Ether	0.54	U
110-54-3	Hexane	2.0	J
75-34-3	1,1-Dichloroethane	0.36	U
156-59-2	cis-1,2-Dichloroethene	0.48	U
78-93-3	2-Butanone	2.9	
67-66-3	Chloroform	0.45	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766350
Canister ID:	851	Lab File ID:	fh00632.d
Pressure Received:	14.2 psia	Date Collected:	08/18/2018
Final Pressure:	28.4 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	19:49
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
71-55-6	1,1,1-Trichloroethane	0.65	U
56-23-5	Carbon Tetrachloride	0.88	U
71-43-2	Benzene	0.94	J
107-06-2	1,2-Dichloroethane	0.32	U
540-84-1	Isooctane	1.5	J
142-82-5	Heptane	1.5	J
79-01-6	Trichloroethene	0.97	U
78-87-5	1,2-Dichloropropane	0.60	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	0.80	U
10061-01-5	cis-1,3-Dichloropropene	0.45	U
108-10-1	4-Methyl-2-Pentanone	0.61	U
108-88-3	Toluene	4.6	
111-65-9	Octane	1.9	U
10061-02-6	trans-1,3-Dichloropropene	0.54	U
79-00-5	1,1,2-Trichloroethane	0.65	U
127-18-4	Tetrachloroethene	1.7	U
591-78-6	2-Hexanone	0.74	U
124-48-1	Dibromochloromethane	1.1	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	0.60	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	0.89	J
179601-23-1	m/p-Xylene	2.7	J

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766350
Canister ID:	851	Lab File ID:	fh00632.d
Pressure Received:	14.2 psia	Date Collected:	08/18/2018
Final Pressure:	28.4 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	19:49
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
95-47-6	o-Xylene	0.94	J
100-42-5	Styrene	0.85	U
75-25-2	Bromoform	1.8	U
98-82-8	Cumene	1.2	U
108-86-1	Bromobenzene	0.64	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	0.84	U
622-96-8	4-Ethyltoluene	0.88	U
108-67-8	1,3,5-Trimethylbenzene	1.6	U
95-63-6	1,2,4-Trimethylbenzene	1.4	U
541-73-1	1,3-Dichlorobenzene	1.1	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.2	U
67-72-1	Hexachloroethane	2.6	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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

Data file: /chem/HP26379.i/18aug27.b/fh00632.d Injection date and time: **27-AUG-2018 19:49**
Data file Sample Info. Line: 9766350;400;F1823930AA;851--;0;0;SAMPLE; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.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): 28.4 psia Canister Pressure before dilution (Ya): 14.2 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 400 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.115(-0.022)	1023	130	370516 (-13)	10.00		255500 - 596166
52) 1,4-Difluorobenzene	13.400(-0.007)	1342	114	1244519 (-18)	10.00		906195 - 2114453
71) Chlorobenzene-d5	18.228(0.007)	2016	117	1293541 (-12)	10.00		883644 - 2061835

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)	4.016(-0.000)	85	66999M	0.541	0.54		J	0.13	1
3) Chlorodifluoromethane	(1)			Not Detected					0.15	1
4) Freon 114	(1)			Not Detected					0.12	1
5) Chloromethane	(1)			Not Detected					0.24	1
6) Vinyl Chloride	(1)			Not Detected					0.12	1
7) 1,3-Butadiene	(1)			Not Detected					0.17	1
8) Bromomethane	(1)			Not Detected					0.18	1
9) Chloroethane	(1)			Not Detected					0.19	1
13) Dichlorofluoromethane	(1)			Not Detected					0.11	1
12) Trichlorofluoromethane	(1)	5.879(0.000)	101	31457	0.259	0.26		J	0.15	1
11) Pentane	(1)	5.879(-0.000)	43	151948	1.131	1.13			0.13	1
16) 1,1-Dichloroethene	(1)			Not Detected					0.14	1
17) Freon 113	(1)	6.917(0.000)	103	11749	0.163	0.16		J	0.11	1
24) Acetone	(1)	8.092(-0.001)	43	1069664	9.022	9.02			0.53	5
18) Carbon Disulfide	(1)			Not Detected					0.13	1
22) 3-Chloropropene	(1)			Not Detected					0.15	1
23) Methylene Chloride	(1)			Not Detected					0.25	2
25) trans-1,2-Dichloroethene	(1)			Not Detected					0.086	1
27) Methyl t-Butyl Ether	(1)			Not Detected					0.15	1
26) Hexane	(1)	8.465(0.000)	56	47554M	0.557	0.56		J	0.13	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.089	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.12	1
45) 2-Butanone	(1)	11.817(0.001)	43	165640	0.984	0.98		J	0.21	1
39) Chloroform	(1)			Not Detected					0.092	1
44) 1,1,1-Trichloroethane	(1)			Not Detected					0.12	1
42) Carbon Tetrachloride	(1)			Not Detected					0.14	1
48) Benzene	(2)	12.340(-0.000)	78	47236	0.294	0.29		J	0.11	1
50) 1,2-Dichloroethane	(2)			Not Detected					0.08	1
46) Isooctane	(2)	12.046(0.000)	57	119288	0.330	0.33		J	0.13	1
47) Heptane	(2)	12.204(0.000)	71	19552	0.376	0.38		J	0.23	1
51) Trichloroethene	(2)			Not Detected					0.18	1
55) 1,2-Dichloropropane	(2)			Not Detected					0.13	1
53) Dibromomethane	(2)			Not Detected					0.14	1
56) Bromodichloromethane	(2)			Not Detected					0.12	1
59) cis-1,3-Dichloropropene	(2)			Not Detected					0.1	1
62) 4-Methyl-2-Pentanone	(2)			Not Detected					0.15	1
61) Toluene	(3)	15.807(-0.000)	91	233524	1.222	1.22			0.12	1
60) Octane	(3)			Not Detected					0.4	2
64) trans-1,3-Dichloropropene	(3)			Not Detected					0.12	1
67) 1,1,2-Trichloroethane	(3)			Not Detected					0.12	1
63) Tetrachloroethene	(3)			Not Detected					0.25	2
70) 2-Hexanone	(3)			Not Detected					0.18	1
68) Dibromochloromethane	(3)			Not Detected					0.13	1

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:59. Target 3.5 esignature user ID: jeb07445

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

Data file: /chem/HP26379.i/18aug27.b/fh00632.d Injection date and time: **27-AUG-2018 19:49**
Data file Sample Info. Line: 9766350;400;F1823930AA;851--;0;0;SAMPLE; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.d**

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

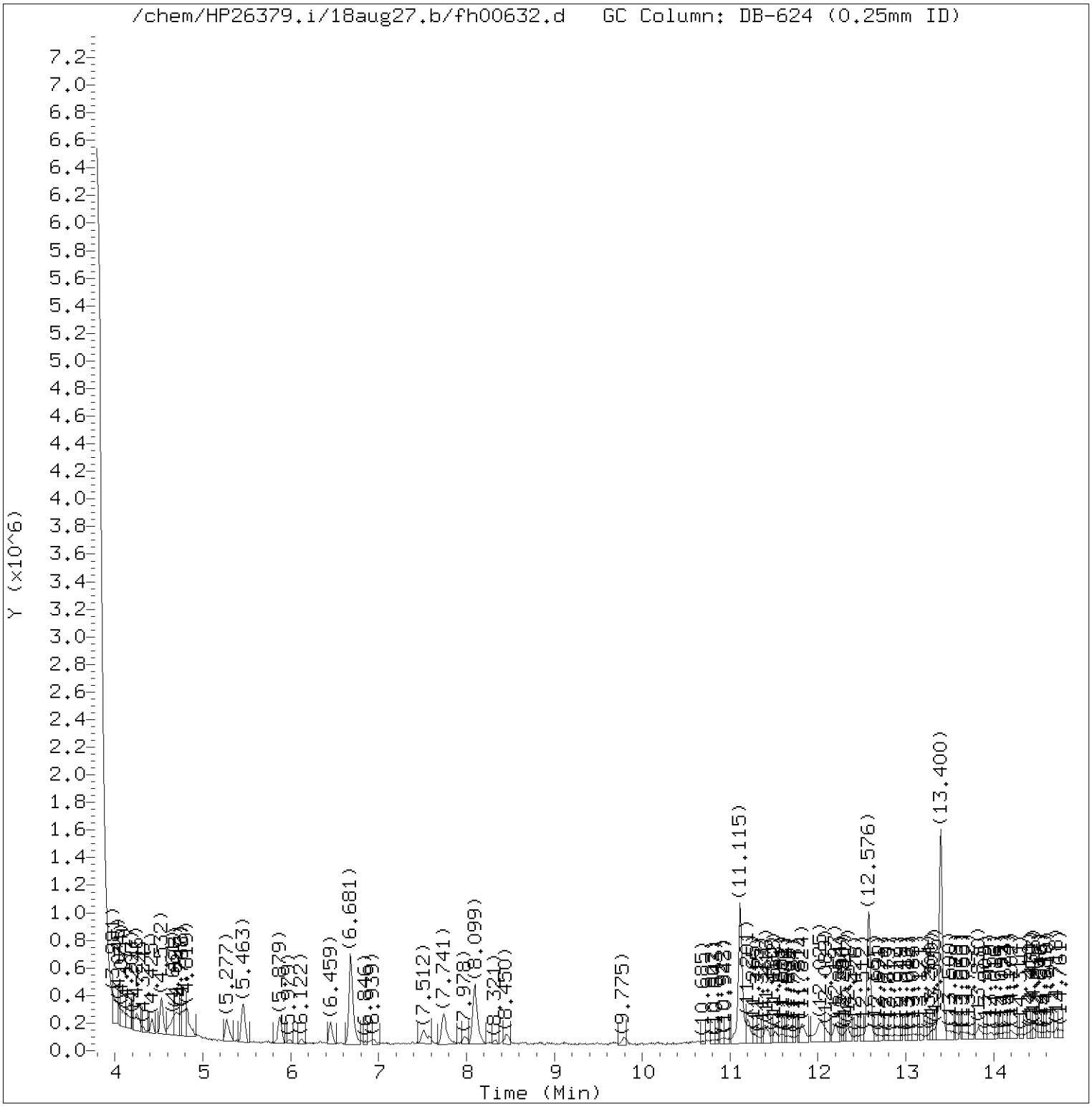
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 28.4 psia Canister Pressure before dilution (Ya): 14.2 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 400 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
69) 1,2-Dibromoethane	(3)			Not Detected					0.13	1
72) Chlorobenzene	(3)			Not Detected					0.13	1
74) 1,1,1,2-Tetrachloroethane	(3)			Not Detected					0.15	1
73) Ethylbenzene	(3)	18.264(-0.000)	91	53244	0.204	0.20		J	0.19	1
75) m/p-Xylene	(3)	18.493(-0.000)	91	115909	0.618	0.62		J	0.26	2
76) o-Xylene	(3)	19.180(-0.000)	91	39744	0.218	0.22		J	0.19	1
78) Styrene	(3)			Not Detected					0.2	1
79) Bromoform	(3)			Not Detected					0.17	1
80) Cumene	(3)			Not Detected					0.24	1
82) Bromobenzene	(3)			Not Detected					0.1	1
83) 1,1,2,2-Tetrachloroethane	(3)			Not Detected					0.15	1
87) 1,2,3-Trichloropropane	(3)			Not Detected					0.14	1
84) 4-Ethyltoluene	(3)			Not Detected					0.18	1
86) 1,3,5-Trimethylbenzene	(3)			Not Detected					0.32	2
90) 1,2,4-Trimethylbenzene	(3)			Not Detected					0.28	2
93) 1,3-Dichlorobenzene	(3)			Not Detected					0.19	1
94) 1,4-Dichlorobenzene	(3)			Not Detected					0.17	1
98) 1,2-Dichlorobenzene	(3)			Not Detected					0.2	1
97) Hexachloroethane	(3)			Not Detected					0.27	2

Total number of targets = 62

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:59. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:40. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

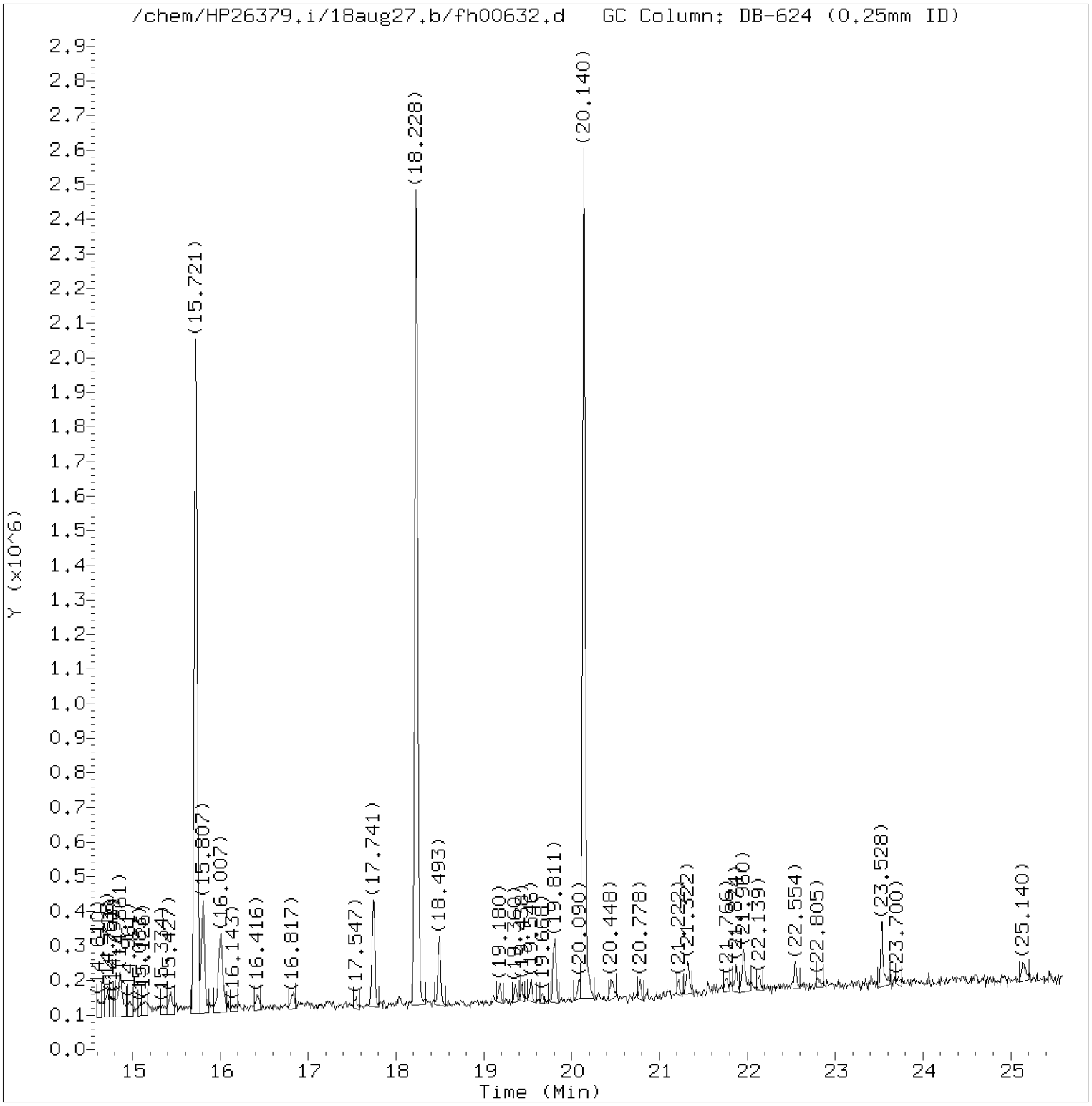
Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00632.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 19:49 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Sample Name: 851-- Lab Sample ID: 9766350

Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00632.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 19:49 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Sample Name: 851-- Lab Sample ID: 9766350

Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00632.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 19:49 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

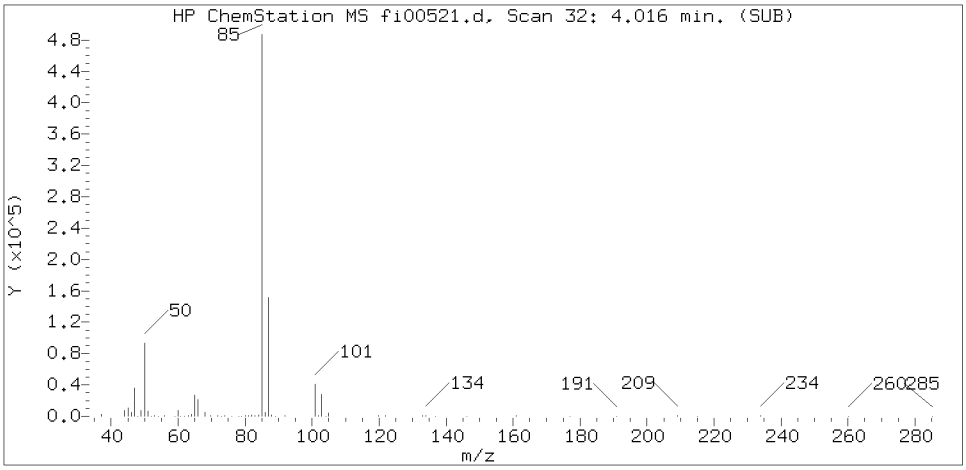
Sample Name: 851-- Lab Sample ID: 9766350

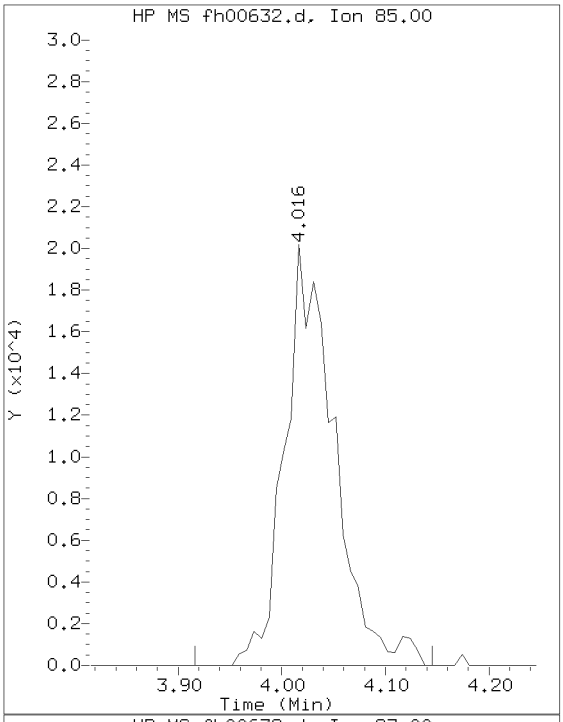
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
2) Dichlorodifluoromethane	(1)	4.016	85	66999M	0.541
11) Pentane	(1)	5.879	43	151948	1.131
12) Trichlorofluoromethane	(1)	5.879	101	31457	0.259
17) Freon 113	(1)	6.917	103	11749	0.163
24) Acetone	(1)	8.092	43	1069664	9.022
26) Hexane	(1)	8.465	56	47554M	0.557
37)*Bromochloromethane	(1)	11.115	130	370516	10.000
45) 2-Butanone	(1)	11.817	43	165640	0.984
46) Isooctane	(2)	12.046	57	119288	0.330
47) Heptane	(2)	12.204	71	19552	0.376
48) Benzene	(2)	12.340	78	47236	0.294
52)*1,4-Difluorobenzene	(2)	13.400	114	1244519	10.000
61) Toluene	(3)	15.807	91	233524	1.222
71)*Chlorobenzene-d5	(3)	18.228	117	1293541	10.000
73) Ethylbenzene	(3)	18.264	91	53244	0.204
75) m/p-Xylene	(3)	18.493	91	115909	0.618
76) o-Xylene	(3)	19.180	91	39744	0.218

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

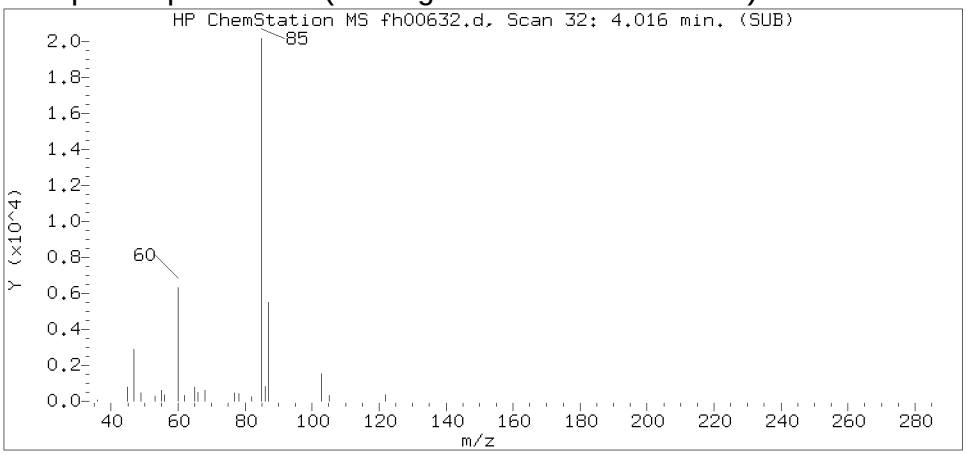
Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07445

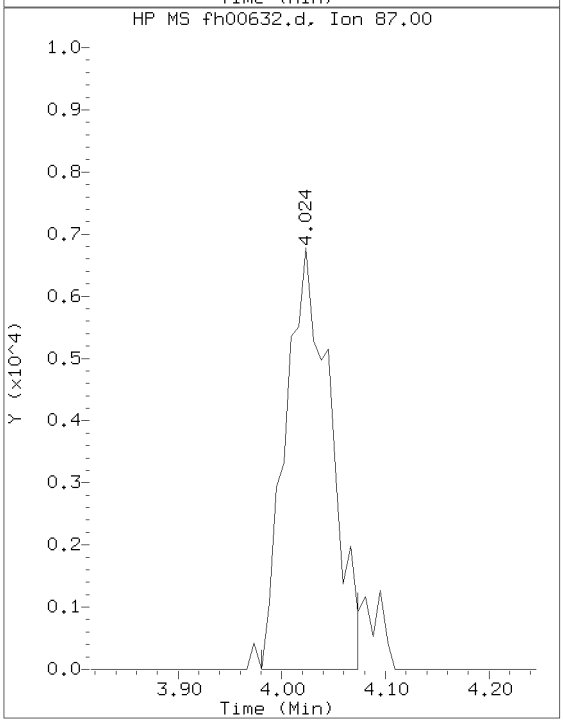
Reference Standard Spectrum for Dichlorodifluoromethane



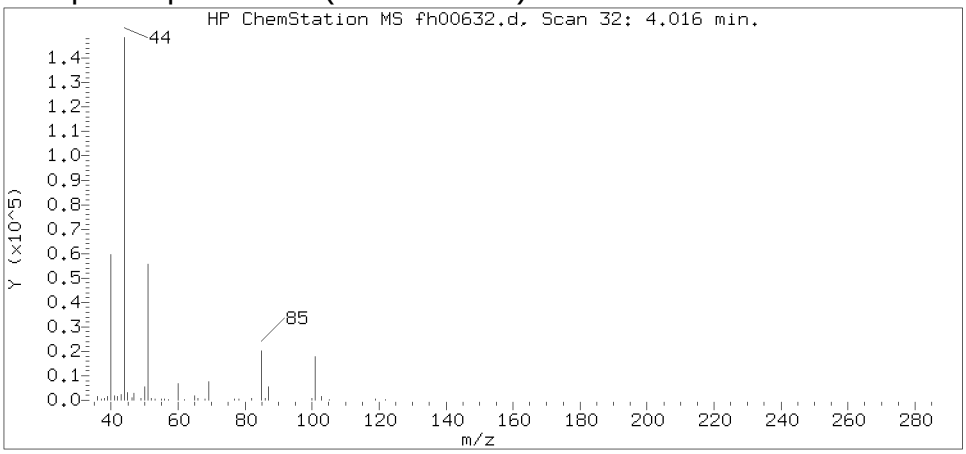


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00632.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 19:49 Analyst ID: jeb07445

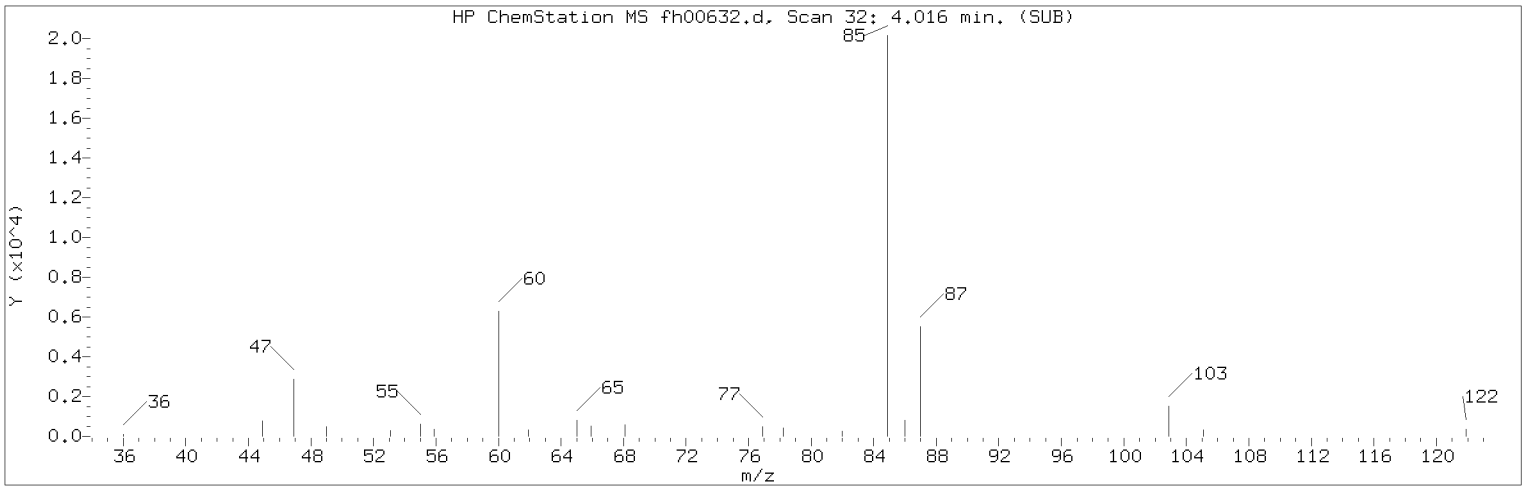
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Sample Name: 851-- Lab Sample ID: 9766350

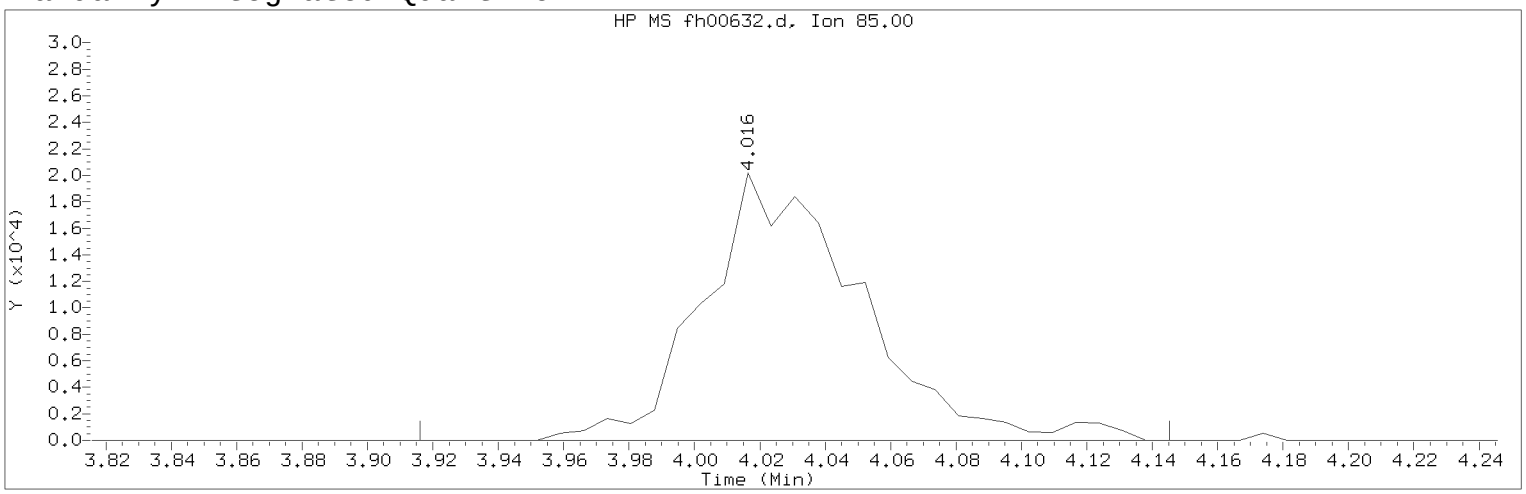
Compound Number : 2
Compound Name : Dichlorodifluoromethane
Scan Number : 32
Retention Time (minutes): 4.016
Relative Retention Time :-0.00060
Quant Ion : 85.00
Area (flag) : 66999M
Concentration (ppb(v)) : 0.5415

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug27.b/fh00632.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 19:49 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Sample Name: 851-- Lab Sample ID: 9766350

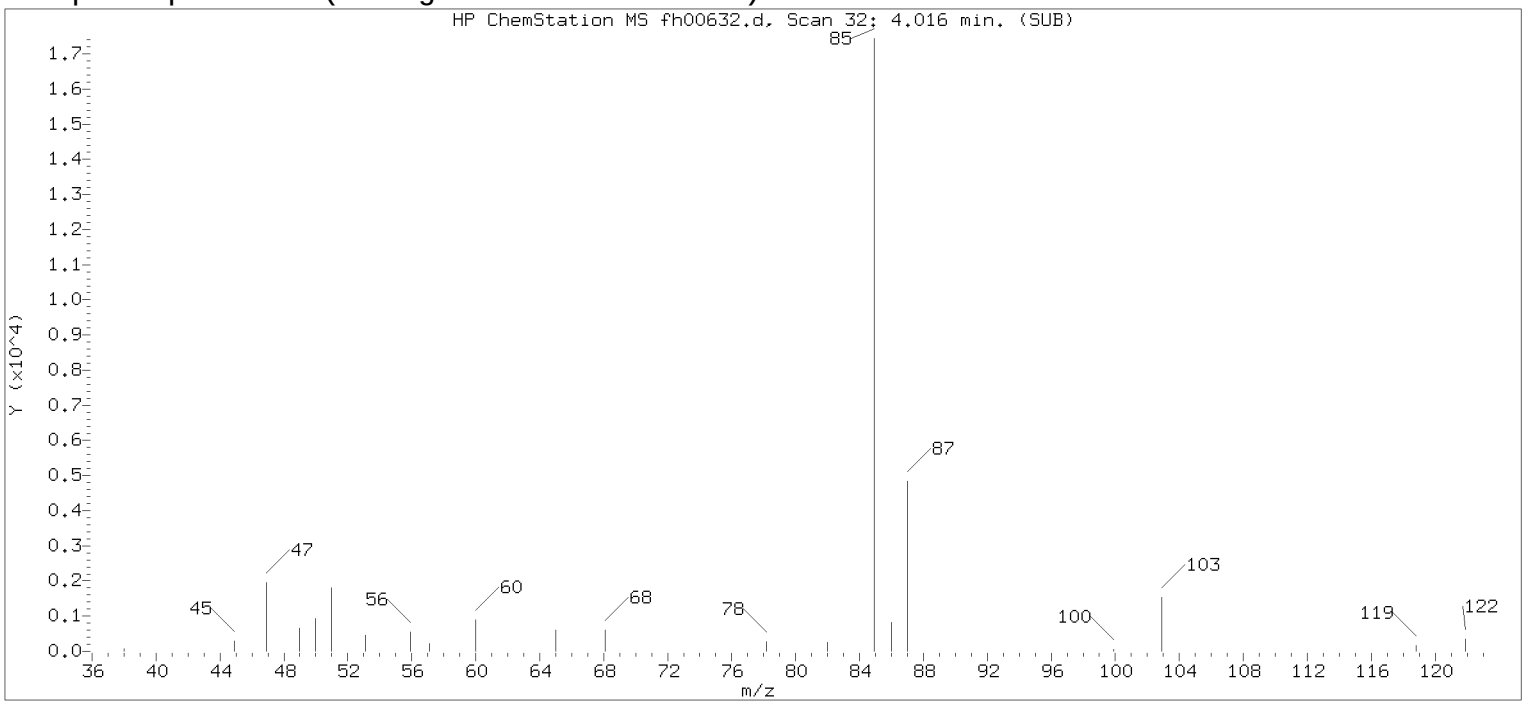
Compound Number : 2
Compound Name : Dichlorodifluoromethane
Scan Number : 32
Retention Time (minutes): 4.016
Quant Ion : 85.00
Area (flag) : 66999M
Concentration (ppb(v)) : 0.5415
Integration start scan : 17 Integration stop scan: 49
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

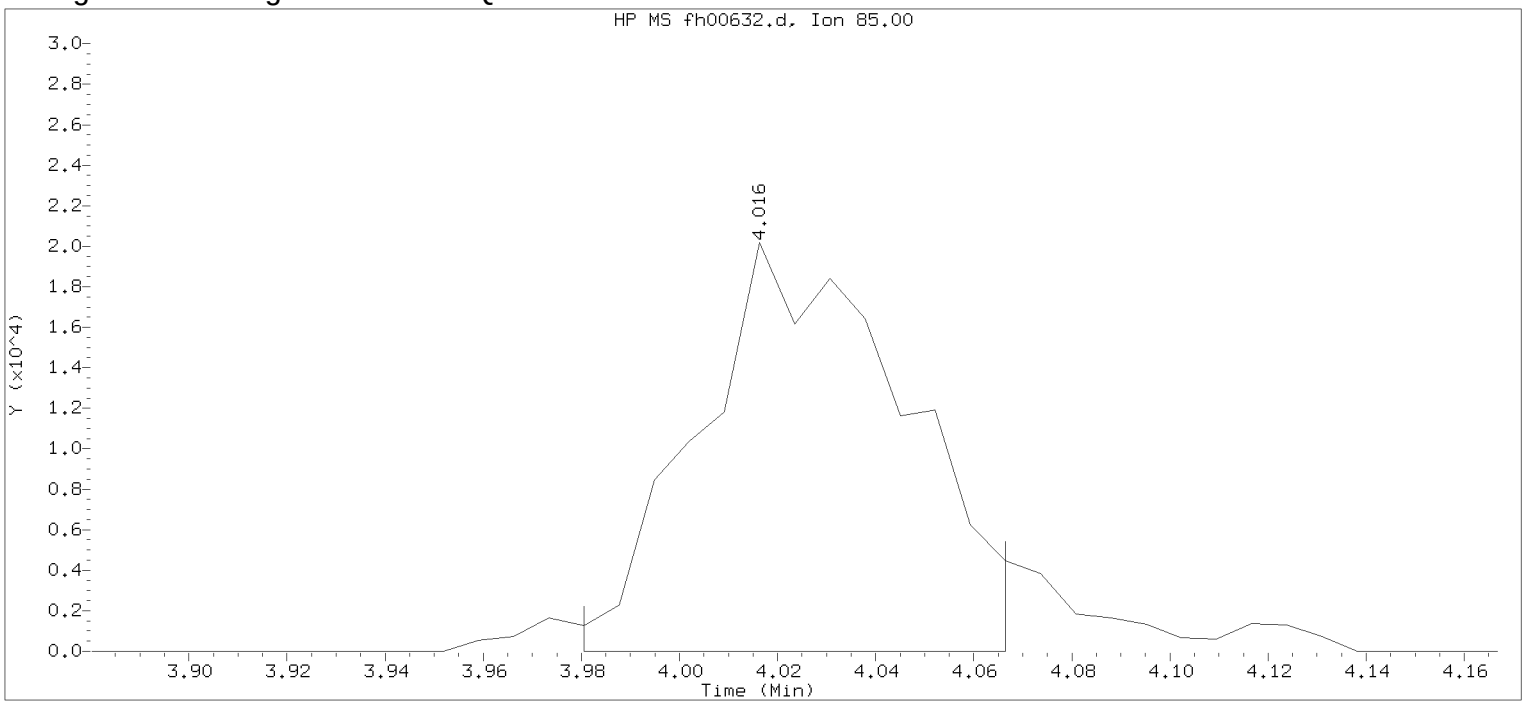
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:40.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug27.b/fh00632.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 19:49 Analyst ID: jeb07445

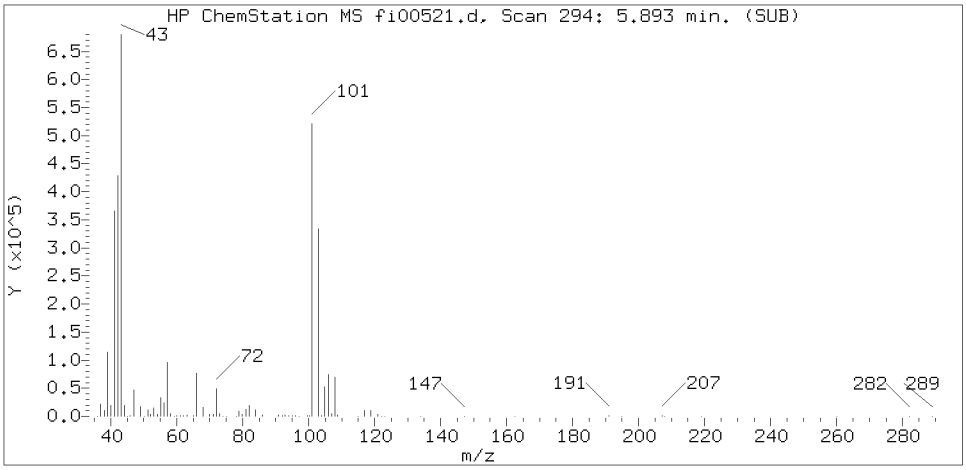
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 20:19 Unknown

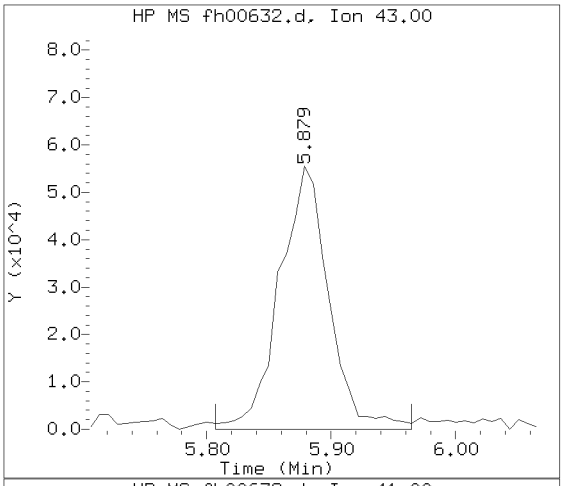
Sample Name: 851-- Lab Sample ID: 9766350

Compound Number : 2
Compound Name : Dichlorodifluoromethane
Scan Number : 32
Retention Time (minutes): 4.016
Quant Ion : 85.00
Area : 58794
Concentration (ppb(v)) : 0.4751
Integration start scan : 26 Integration stop scan: 38
Y at integration start : 0 Y at integration end: 0

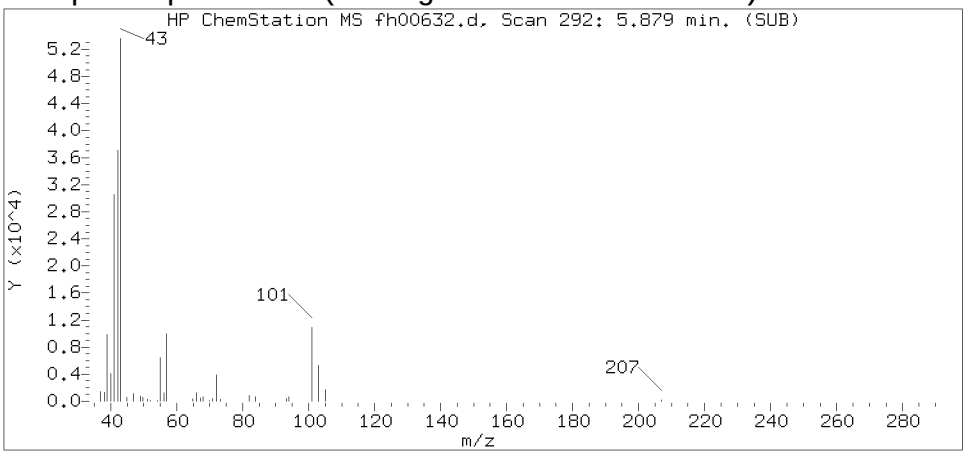
Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07445

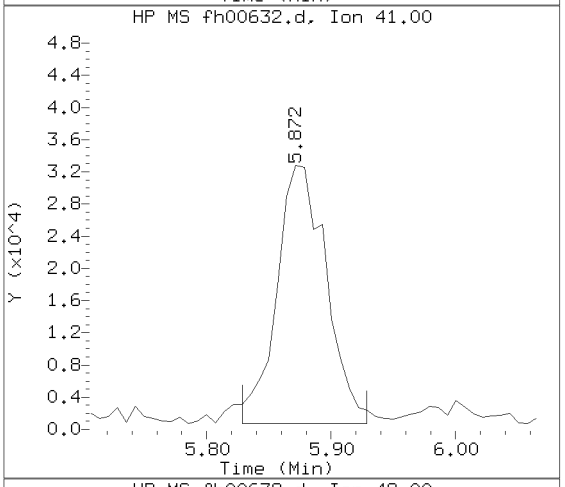
Reference Standard Spectrum for Pentane



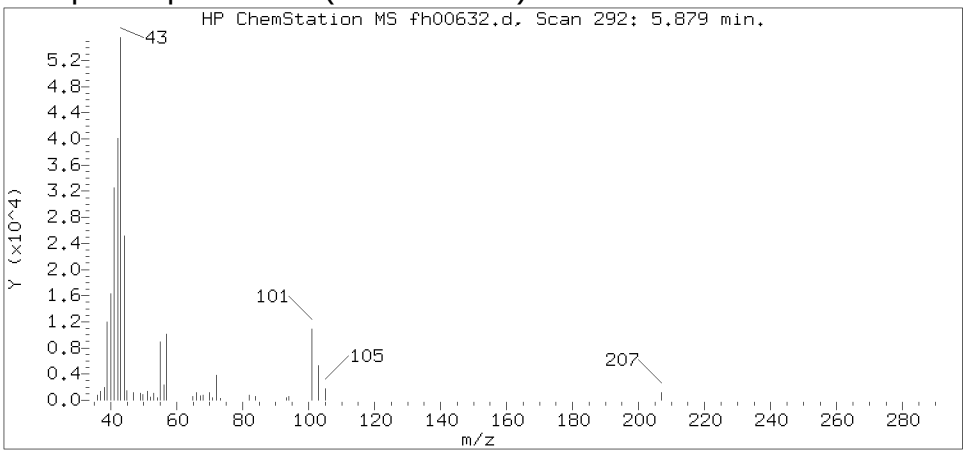


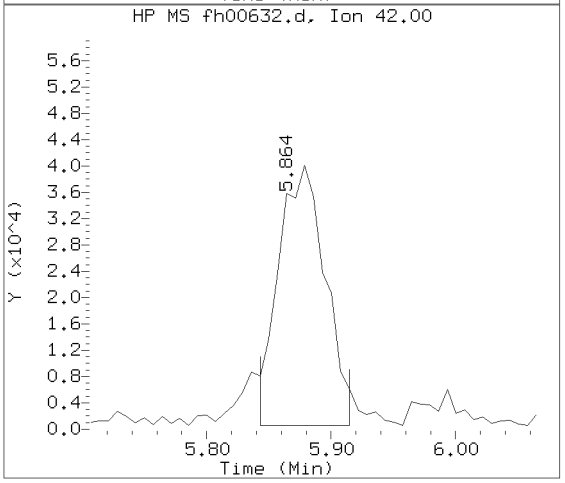
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00632.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 19:49 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Sample Name: 851-- Lab Sample ID: 9766350

Compound Number : 11
Compound Name : Pentane
Scan Number : 292
Retention Time (minutes): 5.879
Relative Retention Time :-0.00027
Quant Ion : 43.00
Area (flag) : 151948
Concentration (ppb(v)) : 1.1315

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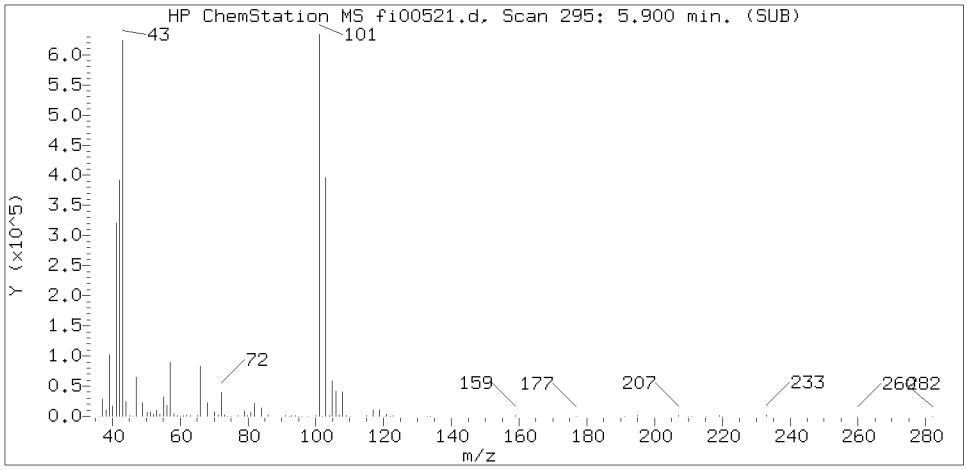
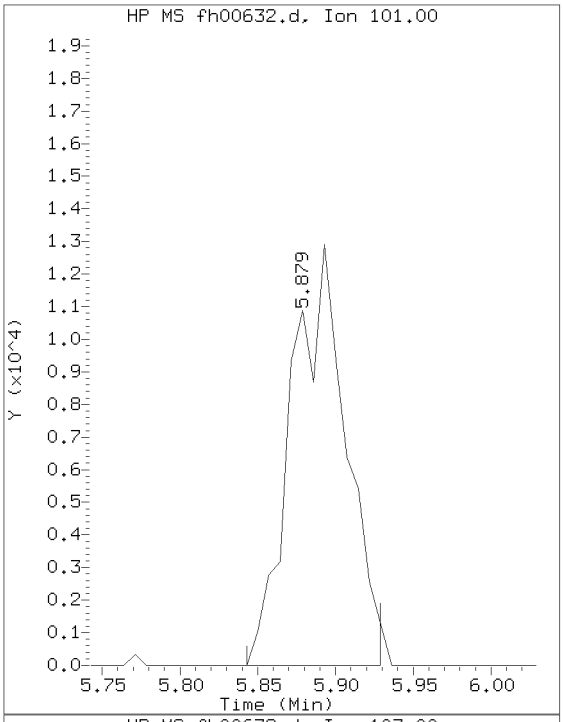
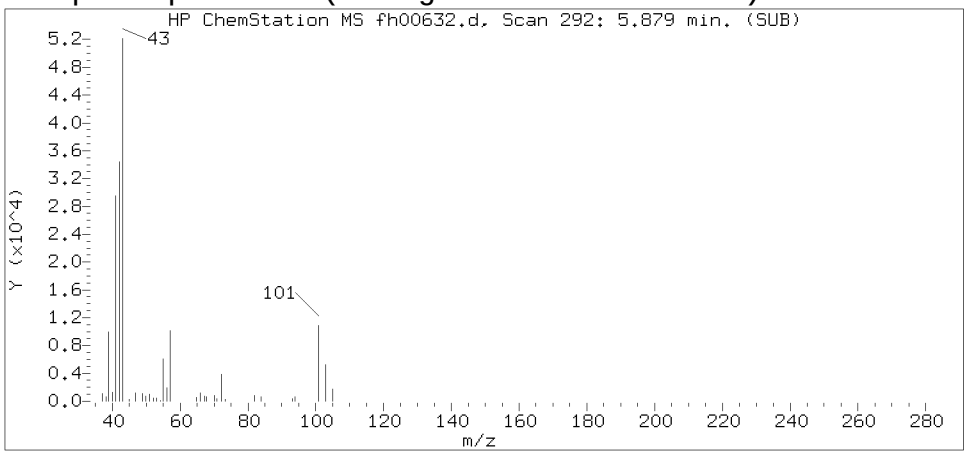
Target 3.5 esignature user ID: jeb07445

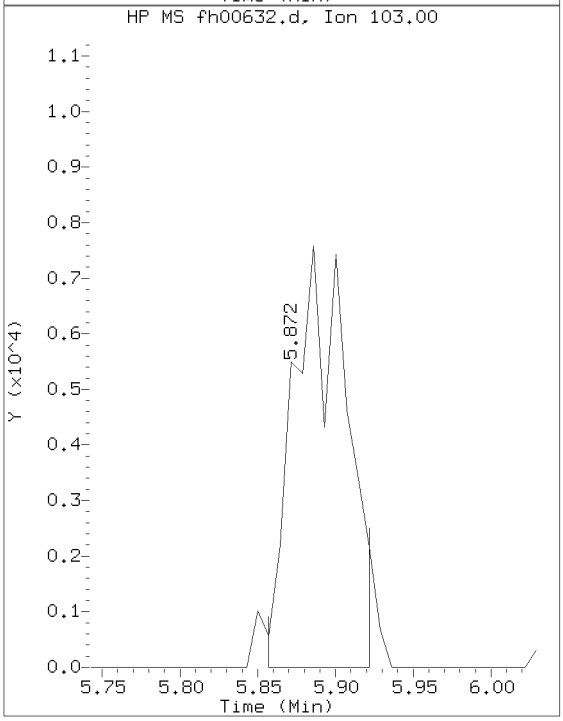
Reference Standard Spectrum for Trichlorofluoromethane



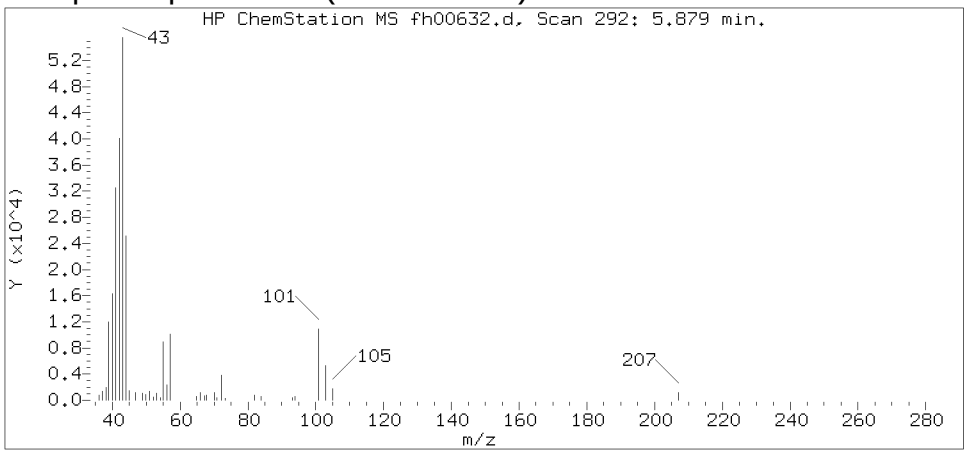


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00632.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 19:49 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Sample Name: 851-- Lab Sample ID: 9766350

Compound Number	: 12
Compound Name	: Trichlorofluoromethane
Scan Number	: 292
Retention Time (minutes)	: 5.879
Relative Retention Time	: 0.00038
Quant Ion	: 101.00
Area (flag)	: 31457
Concentration (ppb(v))	: 0.2589

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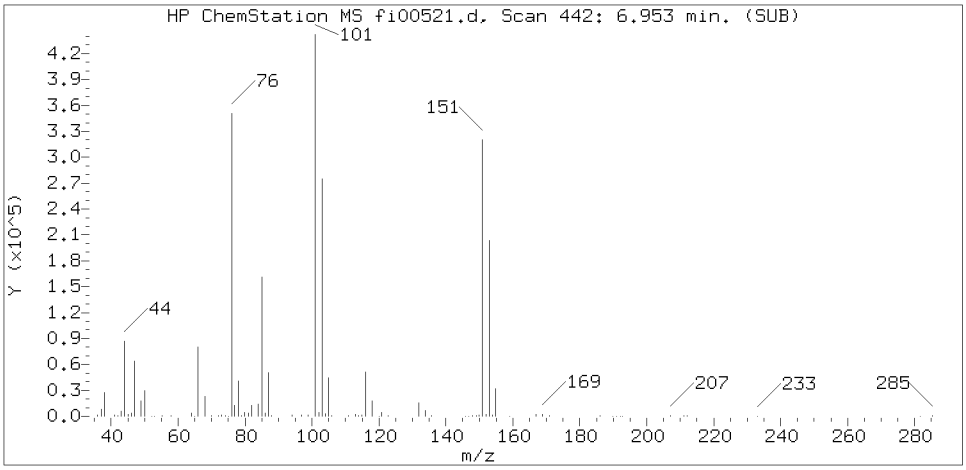
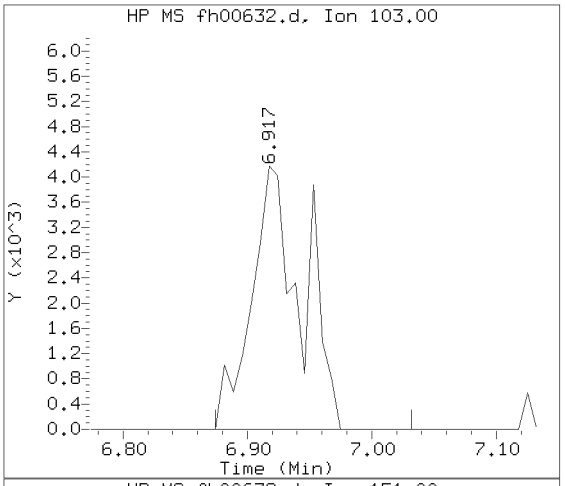
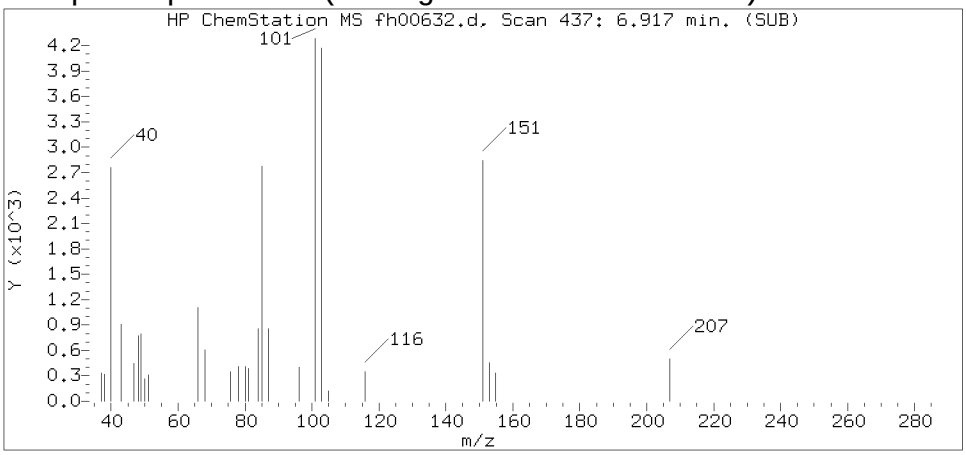
Target 3.5 esignature user ID: jeb07445

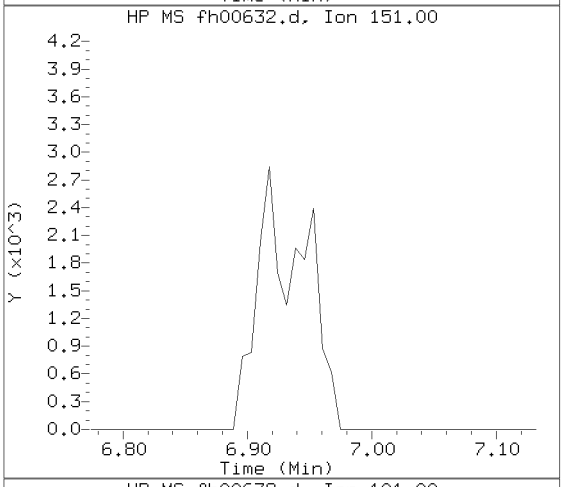
Reference Standard Spectrum for Freon 113



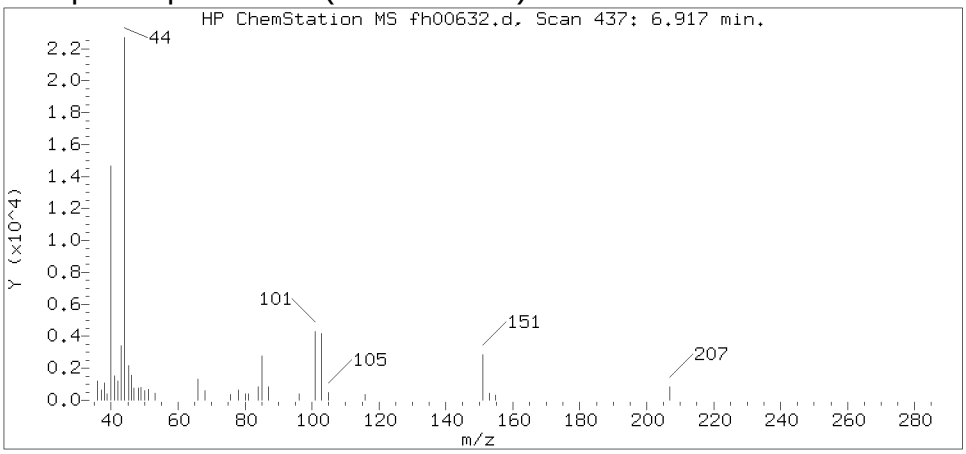


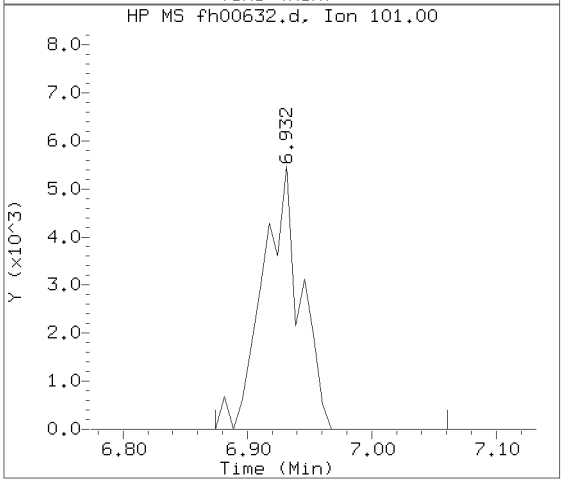
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00632.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 19:49 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Sample Name: 851-- Lab Sample ID: 9766350

Compound Number : 17
Compound Name : Freon 113
Scan Number : 437
Retention Time (minutes): 6.917
Relative Retention Time : 0.00056
Quant Ion : 103.00
Area (flag) : 11749
Concentration (ppb(v)) : 0.1630

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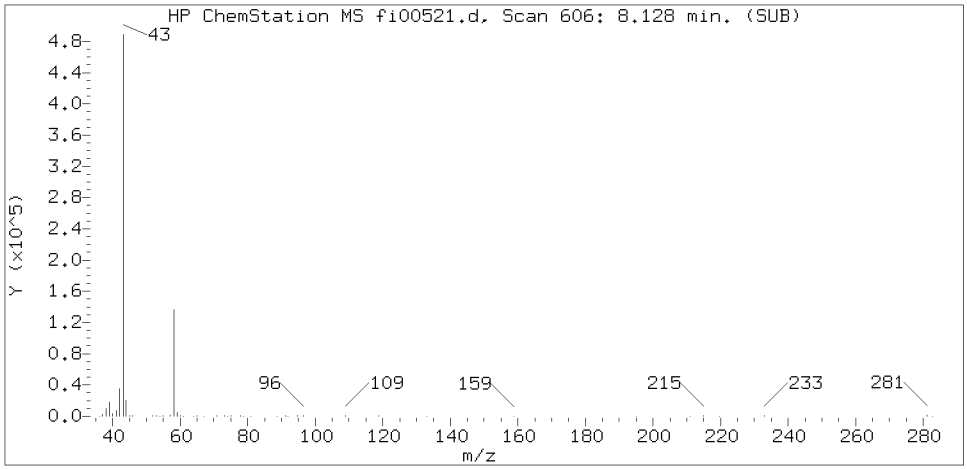
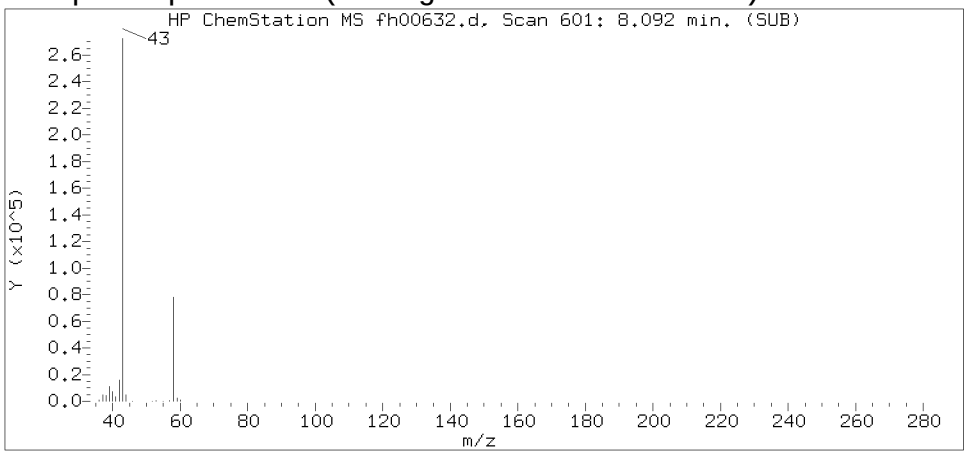
Target 3.5 esignature user ID: jeb07445

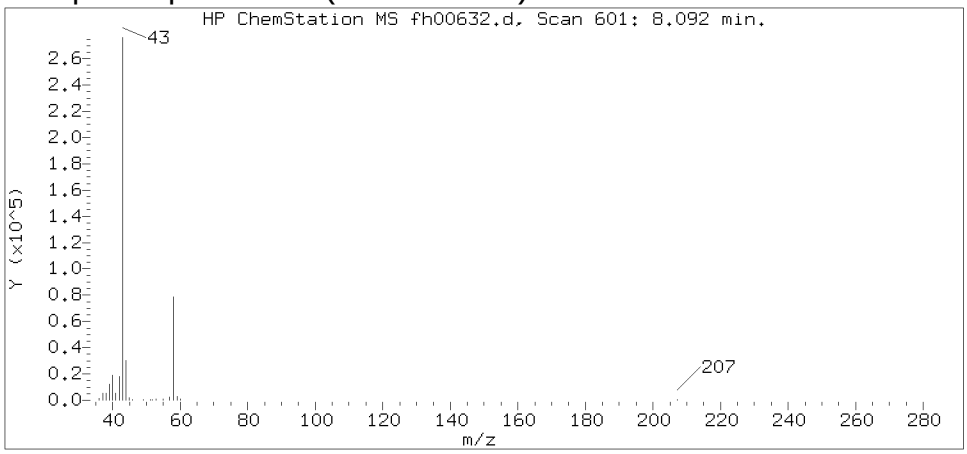
Reference Standard Spectrum for Acetone

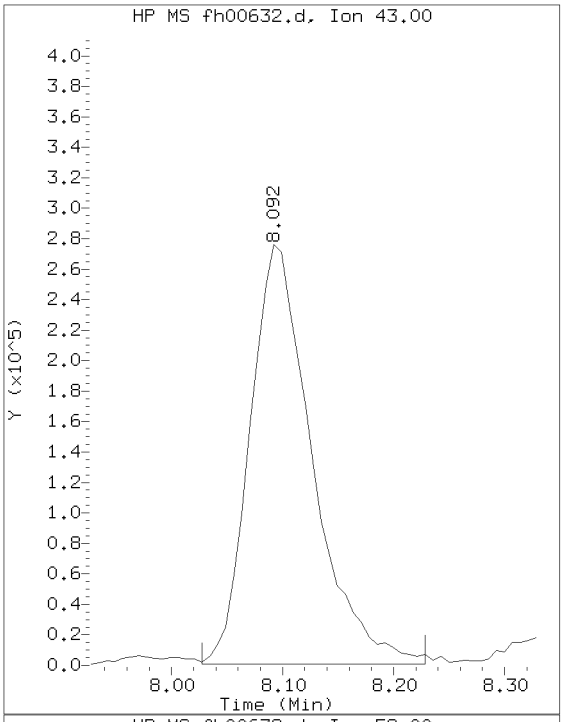


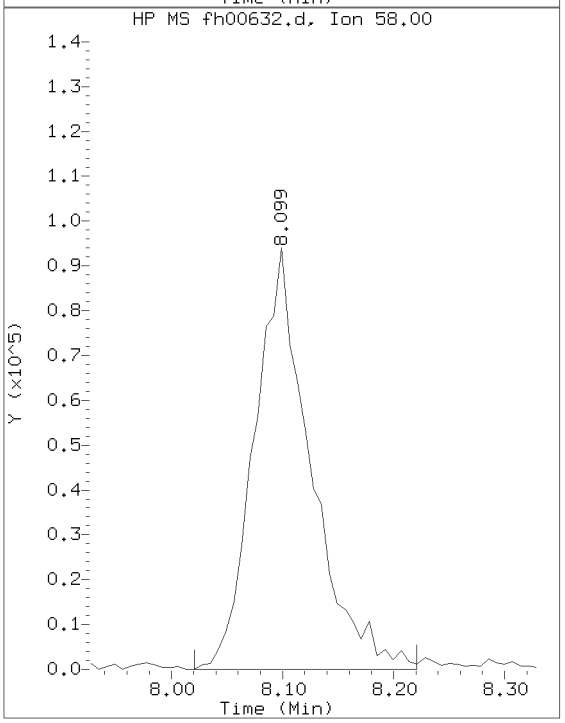
Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)







Data File: /chem/HP26379.i/18aug27.b/fh00632.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 19:49 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Sample Name: 851-- Lab Sample ID: 9766350

Compound Number : 24
Compound Name : Acetone
Scan Number : 601
Retention Time (minutes): 8.092
Relative Retention Time :-0.00117
Quant Ion : 43.00
Area (flag) : 1069664
Concentration (ppb(v)) : 9.0224

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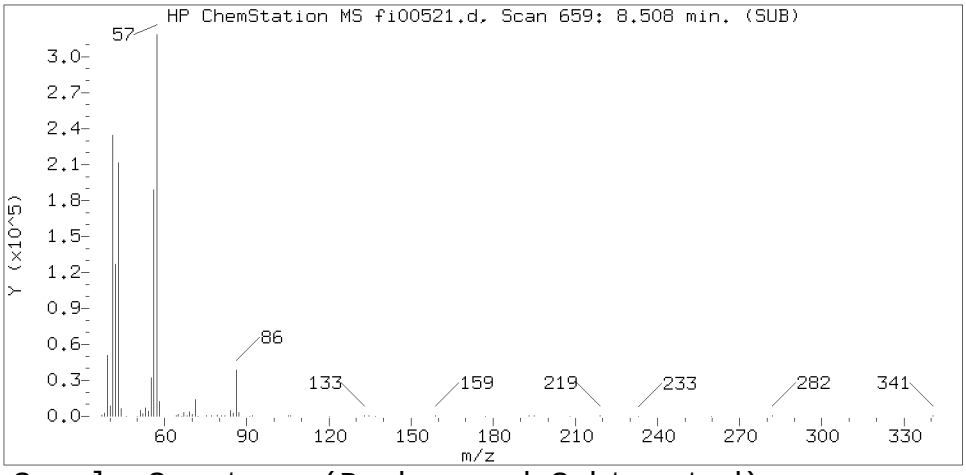
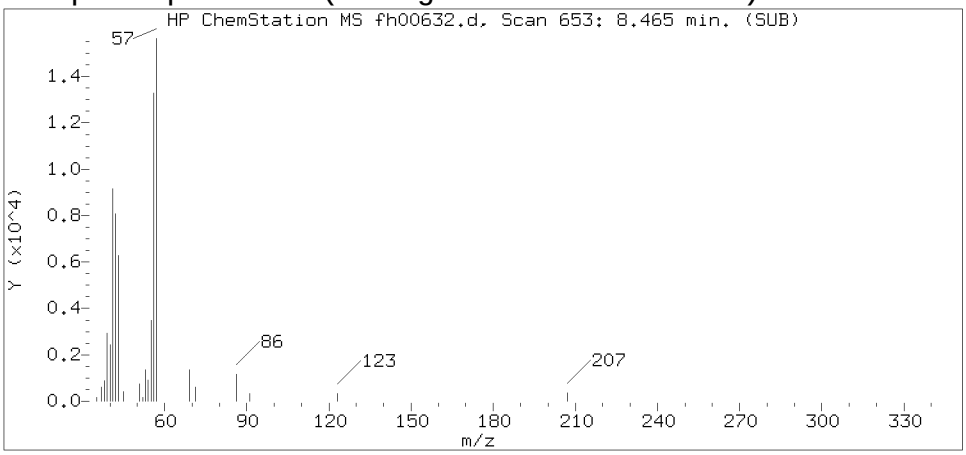
Target 3.5 esignature user ID: jeb07445

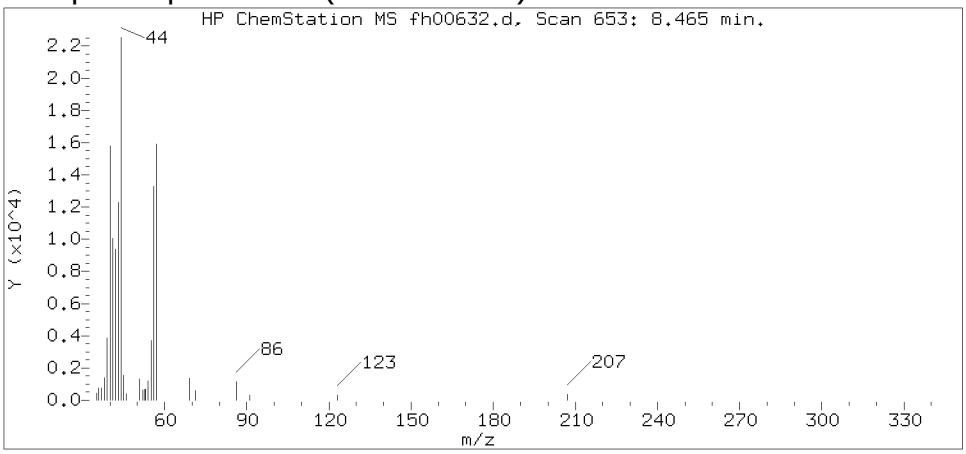
Reference Standard Spectrum for Hexane

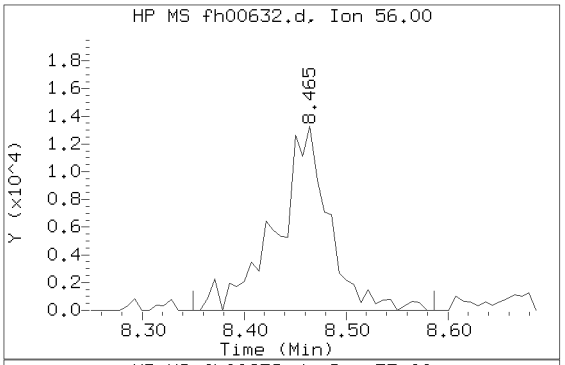


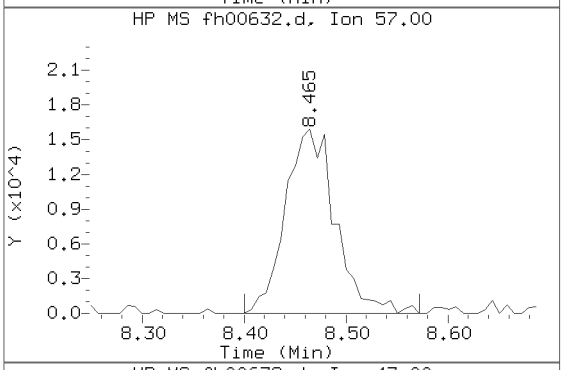
Sample Spectrum (Background Subtracted)

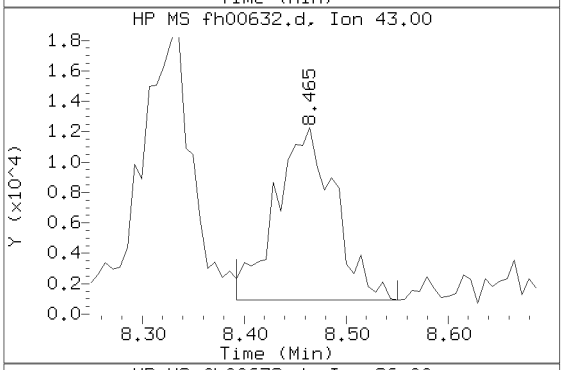


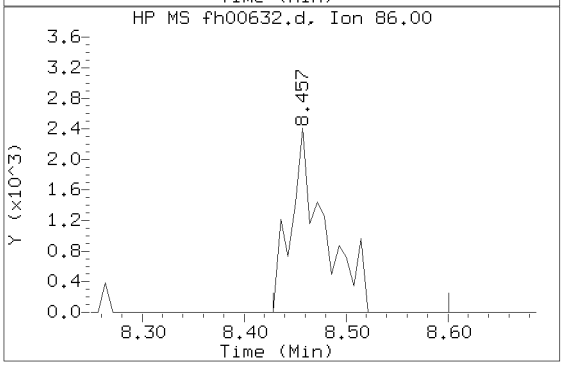
Sample Spectrum (Unaltered)











Data File: /chem/HP26379.i/18aug27.b/fh00632.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 19:49 Analyst ID: jeb07445

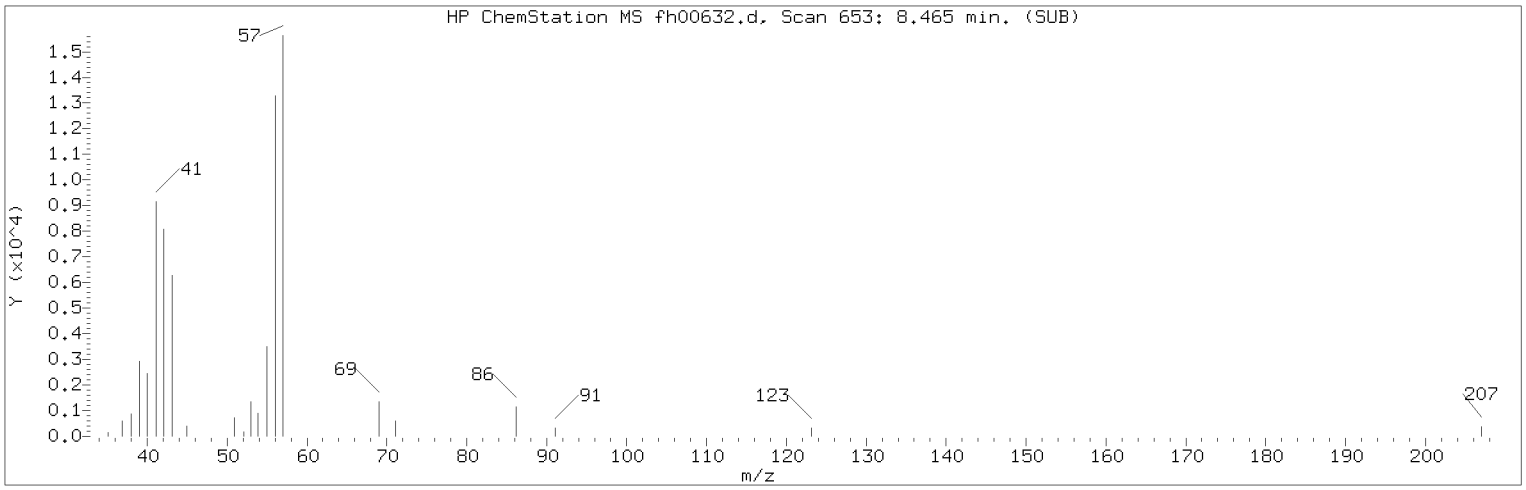
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Sample Name: 851-- Lab Sample ID: 9766350

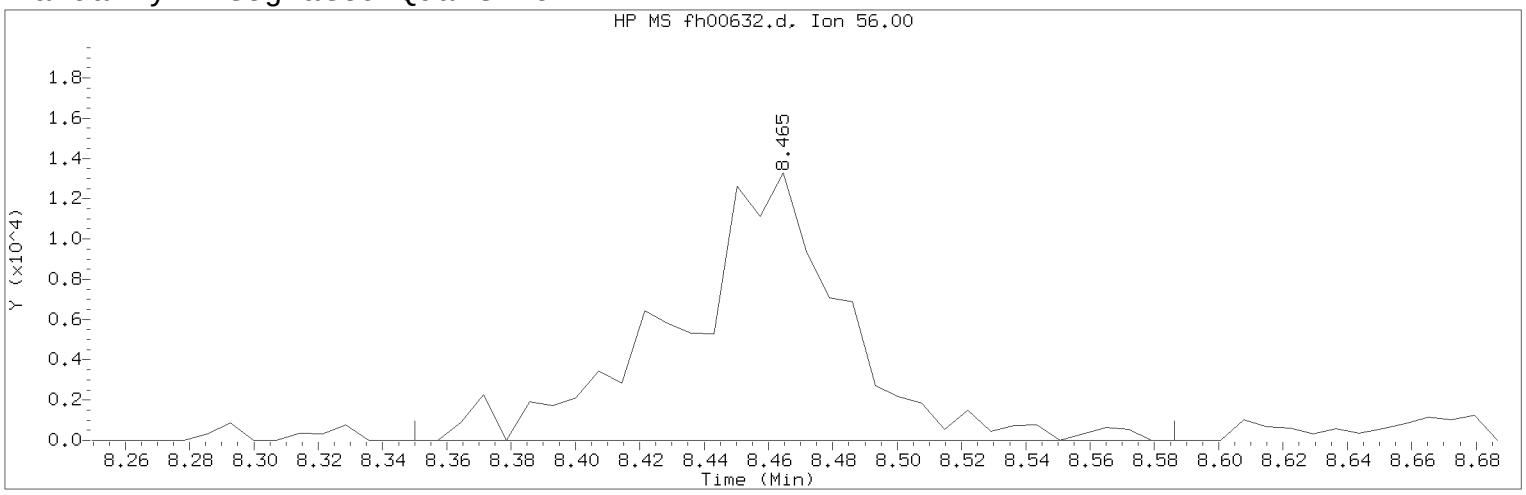
Compound Number	: 26
Compound Name	: Hexane
Scan Number	: 653
Retention Time (minutes)	: 8.465
Relative Retention Time	: 0.00018
Quant Ion	: 56.00
Area (flag)	: 47554M
Concentration (ppb(v))	: 0.5565

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug27.b/fh00632.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 19:49 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Sample Name: 851-- Lab Sample ID: 9766350

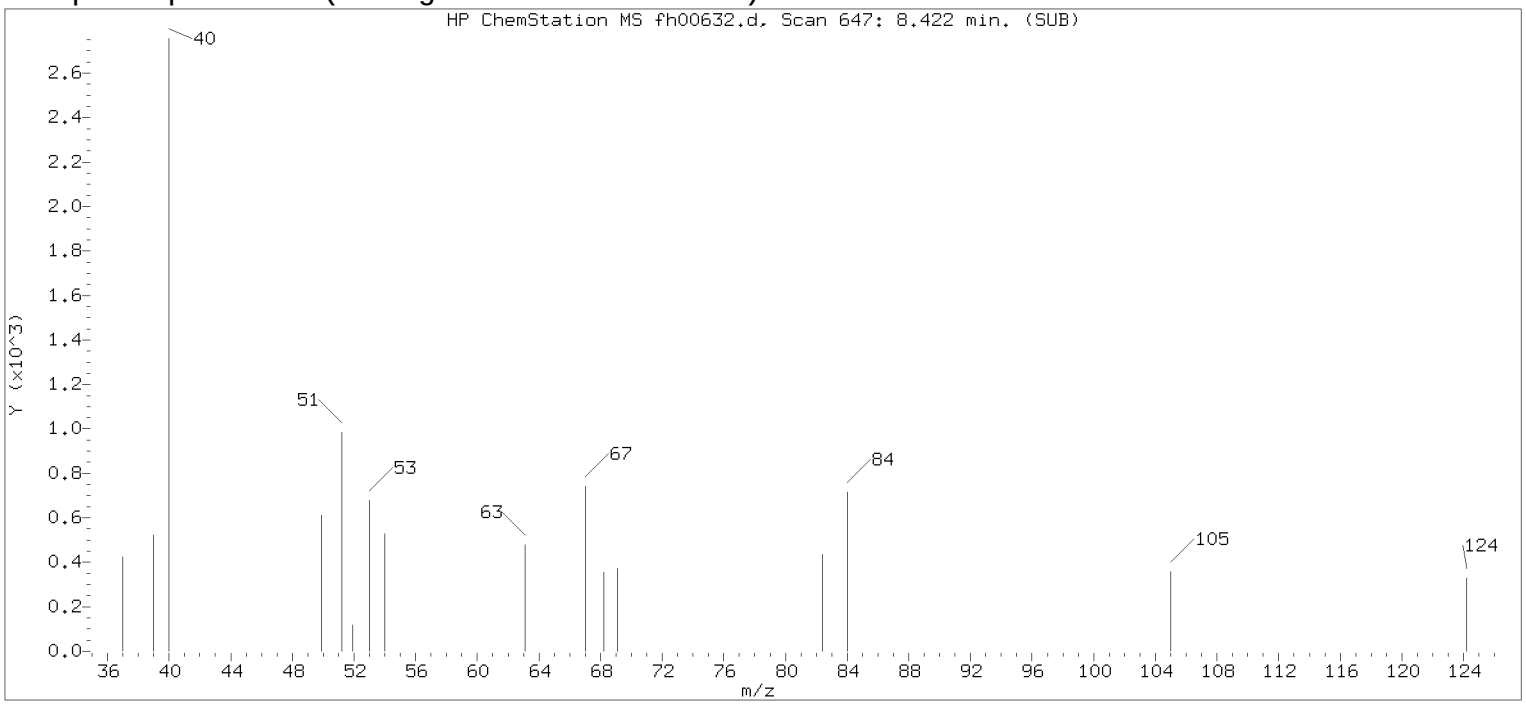
Compound Number : 26
Compound Name : Hexane
Scan Number : 653
Retention Time (minutes): 8.465
Quant Ion : 56.00
Area (flag) : 47554M
Concentration (ppb(v)) : 0.5565
Integration start scan : 636 Integration stop scan: 669
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

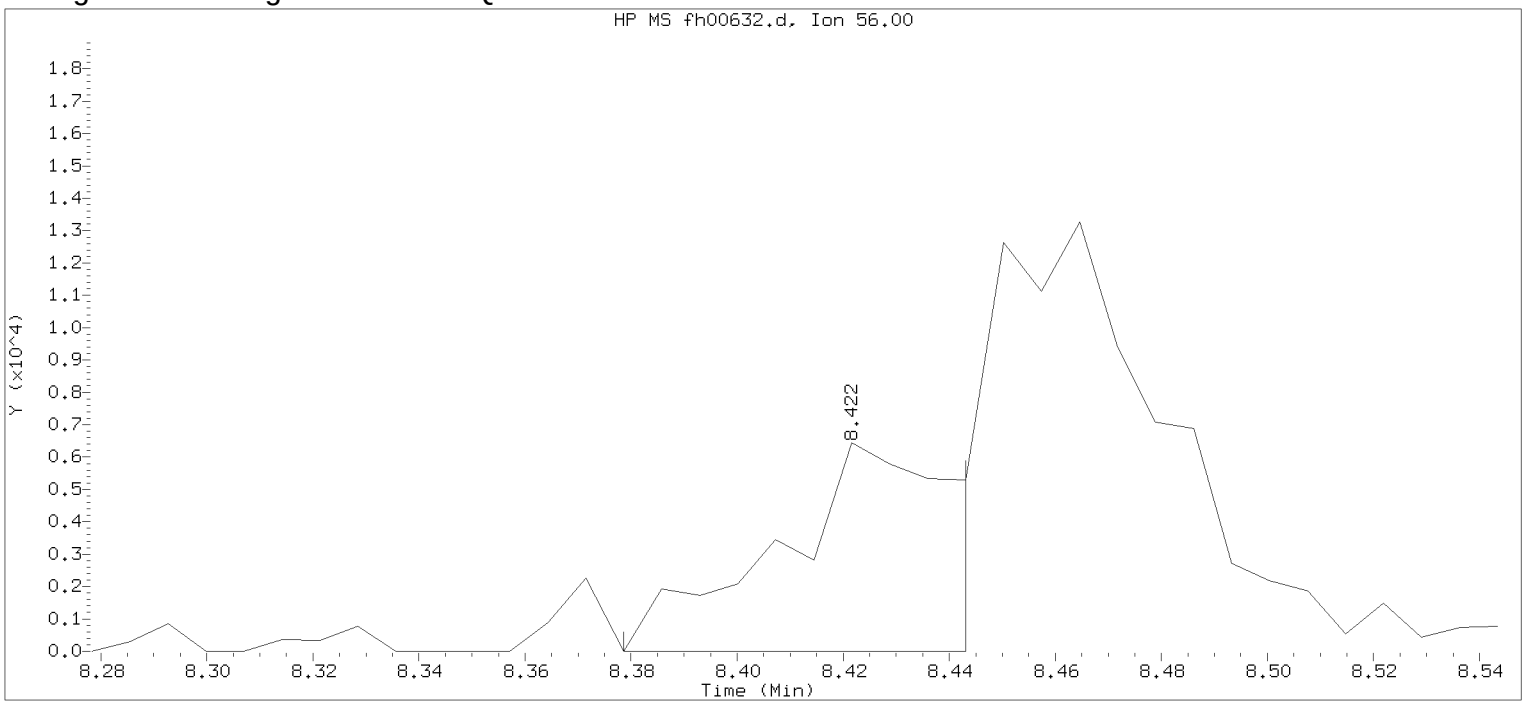
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:40.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug27.b/fh00632.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 19:49 Analyst ID: jeb07445

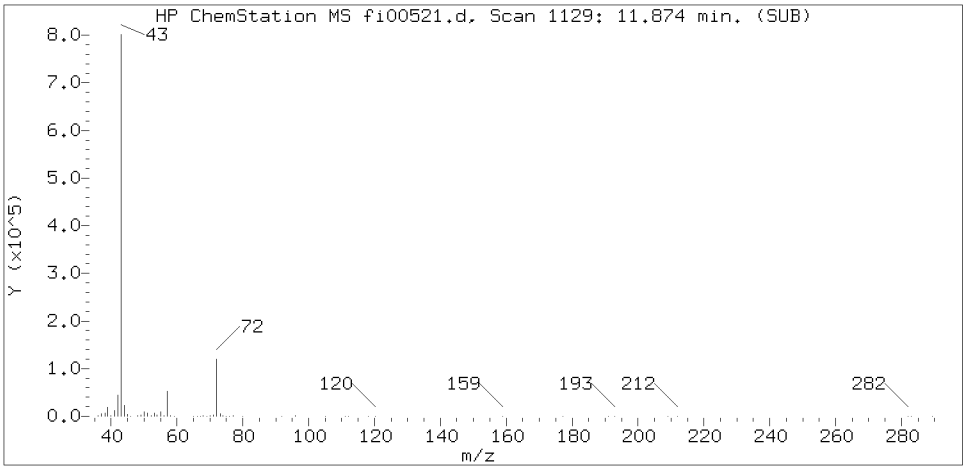
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 20:19 Unknown

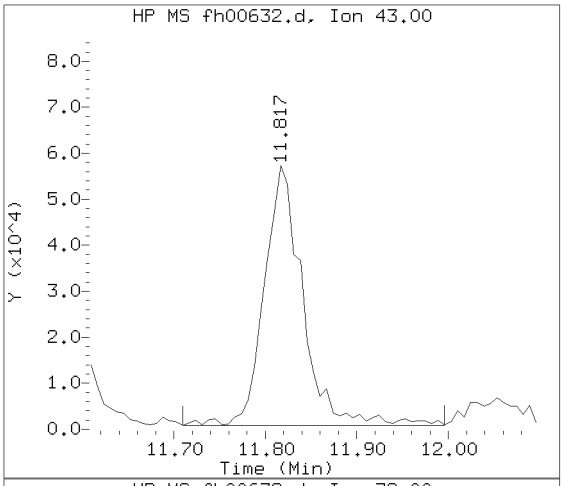
Sample Name: 851-- Lab Sample ID: 9766350

Compound Number : 26
Compound Name : Hexane
Scan Number : 647
Retention Time (minutes): 8.422
Quant Ion : 56.00
Area : 13857
Concentration (ppb(v)) : 0.1622
Integration start scan : 640 Integration stop scan: 649
Y at integration start : 0 Y at integration end: 0

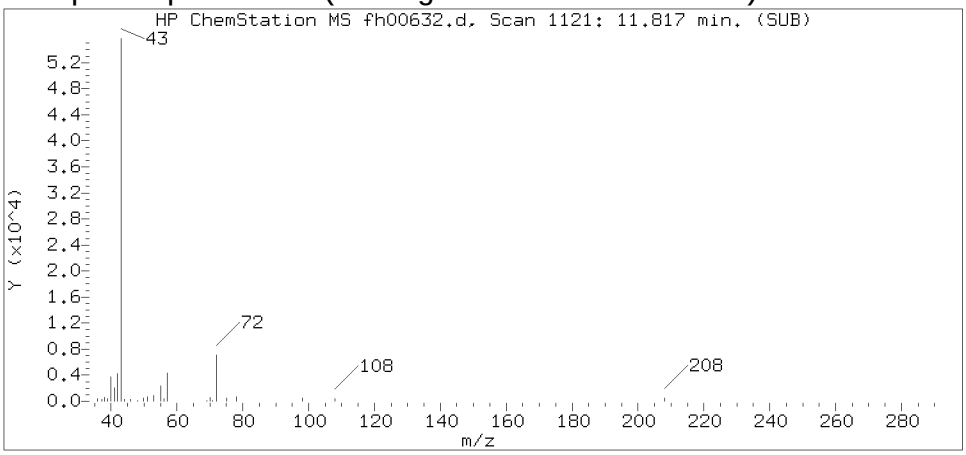
Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07445

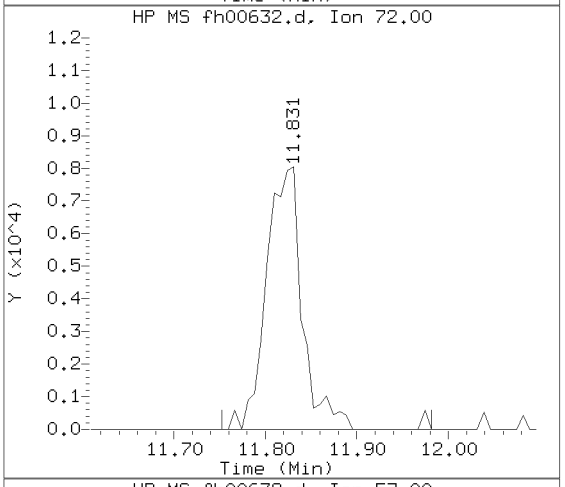
Reference Standard Spectrum for 2-Butanone



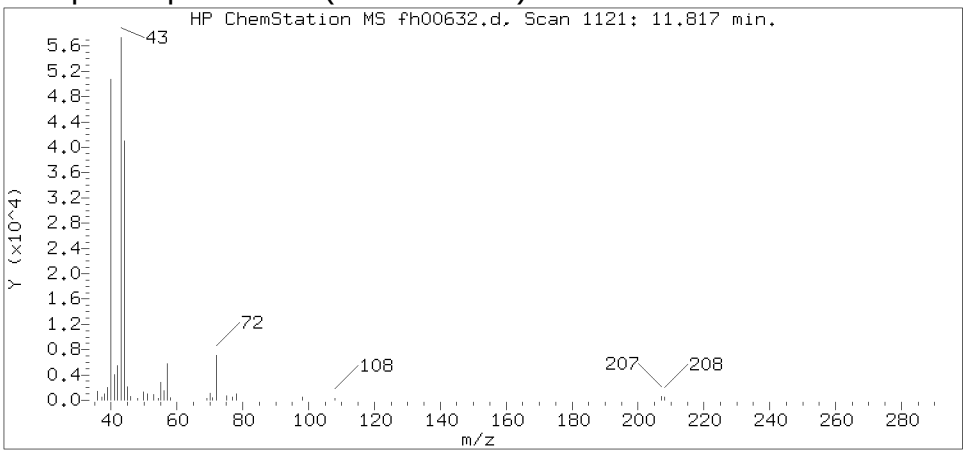


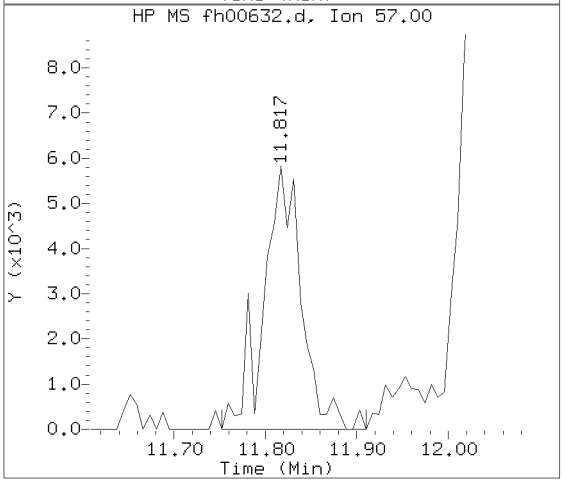
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00632.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 19:49 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Sample Name: 851-- Lab Sample ID: 9766350

Compound Number	: 45
Compound Name	: 2-Butanone
Scan Number	: 1121
Retention Time (minutes)	: 11.817
Relative Retention Time	: 0.00141
Quant Ion	: 43.00
Area (flag)	: 165640
Concentration (ppb(v))	: 0.9843

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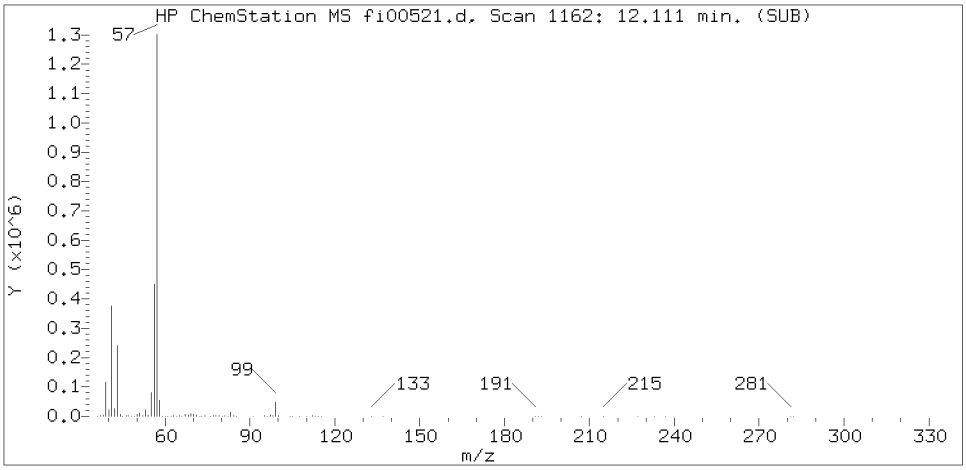
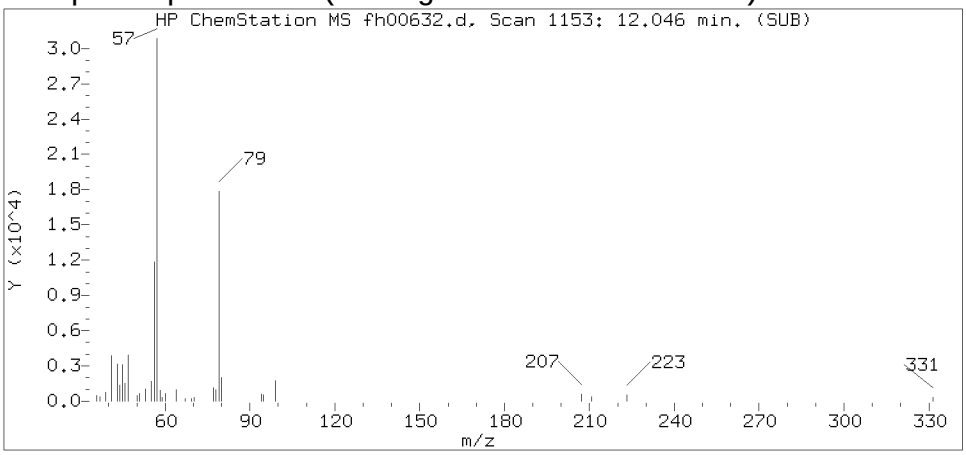
Target 3.5 esignature user ID: jeb07445

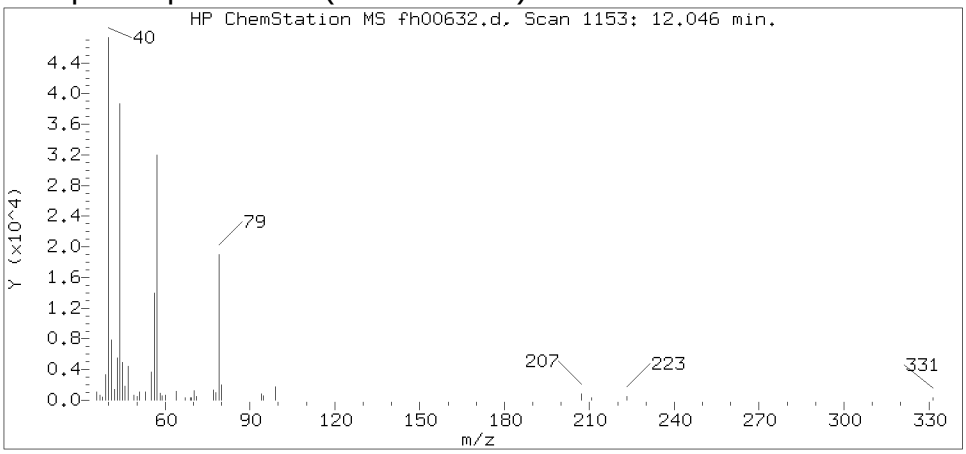
Reference Standard Spectrum for Isooctane

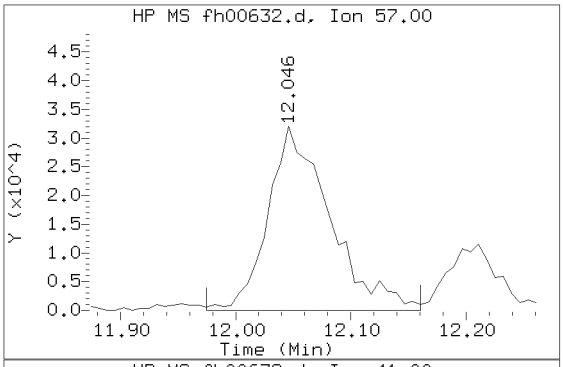


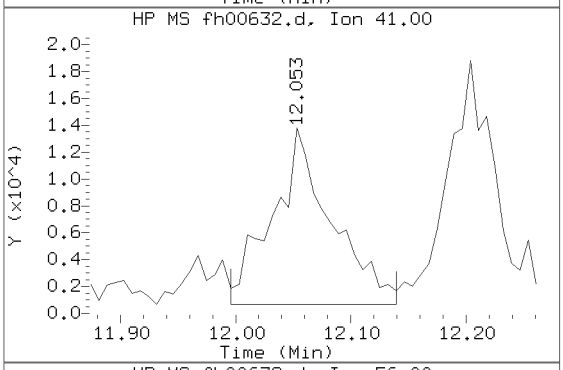
Sample Spectrum (Background Subtracted)

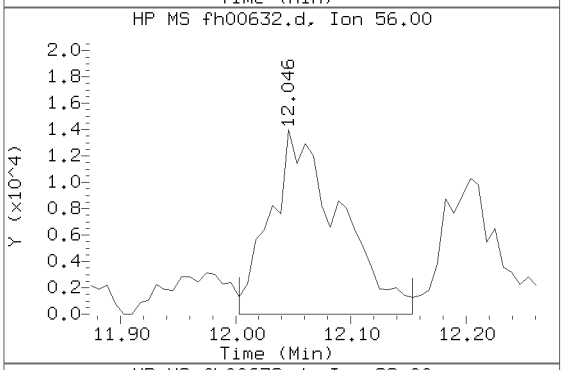


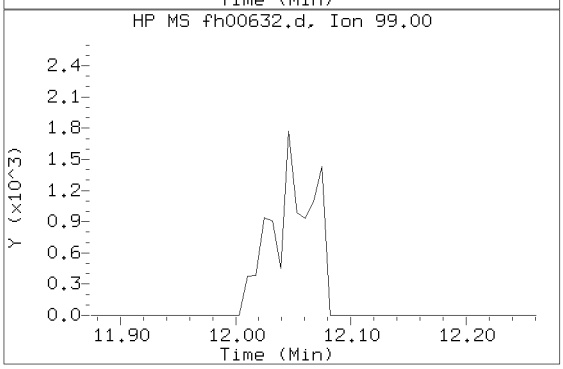
Sample Spectrum (Unaltered)











Data File: /chem/HP26379.i/18aug27.b/fh00632.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 19:49 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Sample Name: 851-- Lab Sample ID: 9766350

Compound Number	: 46
Compound Name	: Isooctane
Scan Number	: 1153
Retention Time (minutes)	: 12.046
Relative Retention Time	: 0.00048
Quant Ion	: 57.00
Area (flag)	: 119288
Concentration (ppb(v))	: 0.3303

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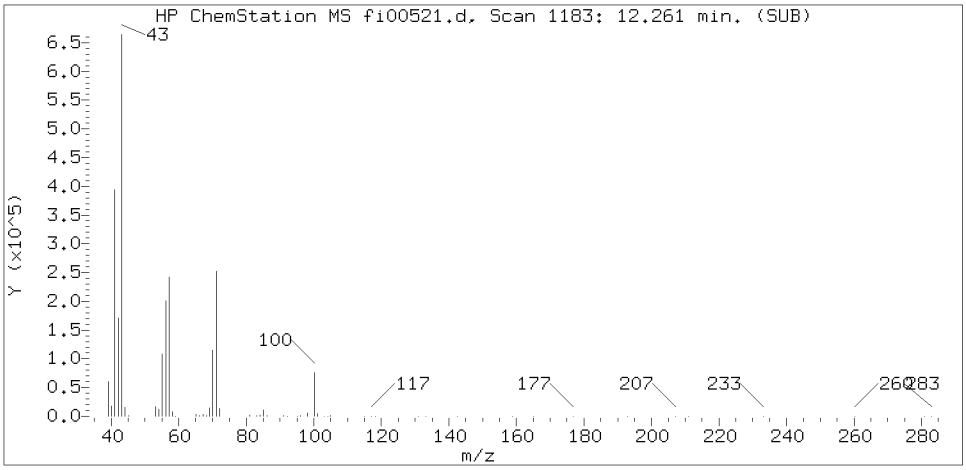
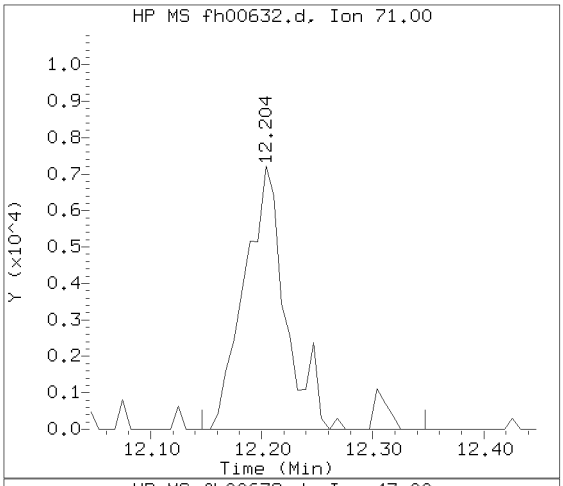
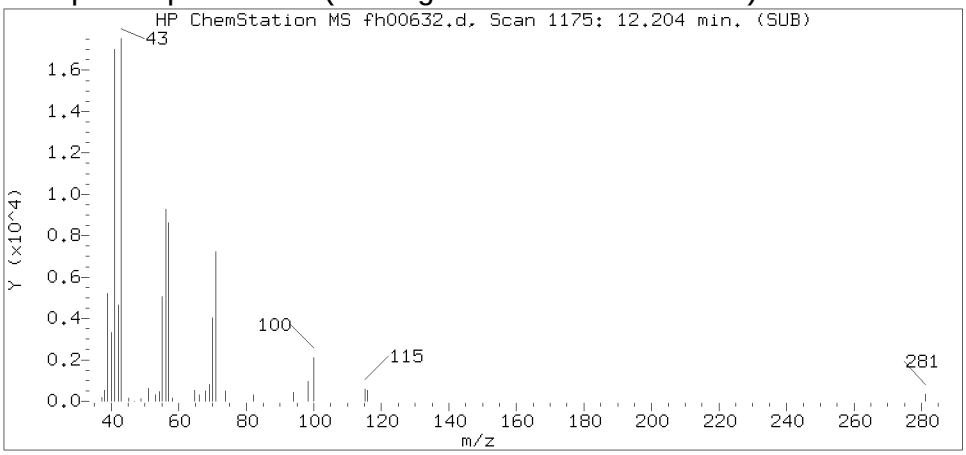
Target 3.5 esignature user ID: jeb07445

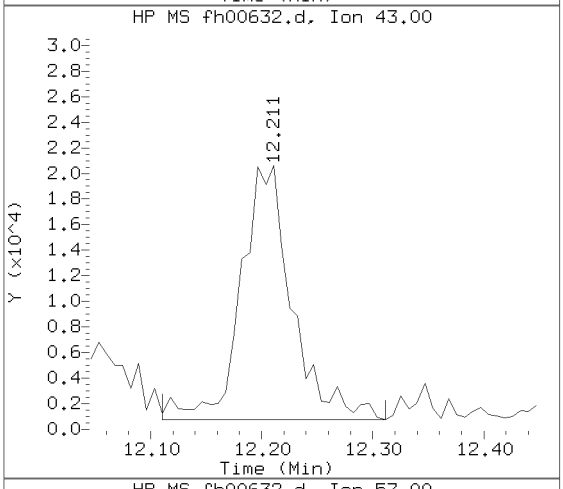
Reference Standard Spectrum for Heptane



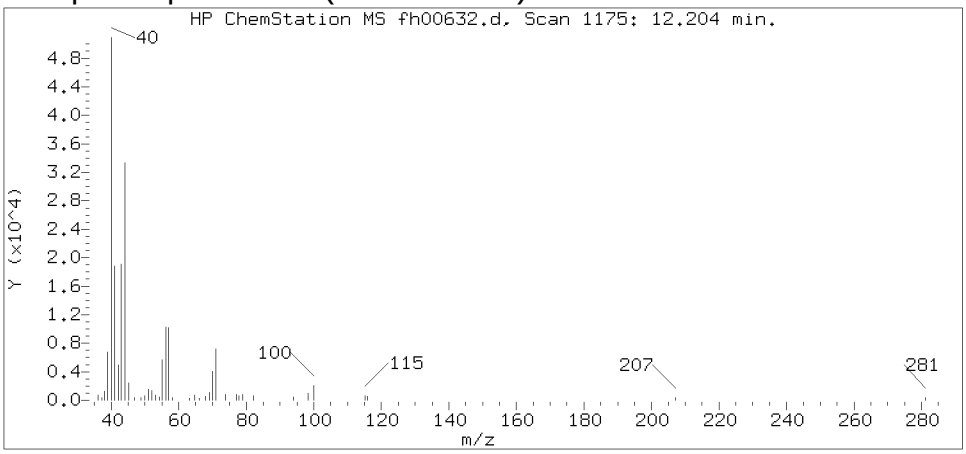


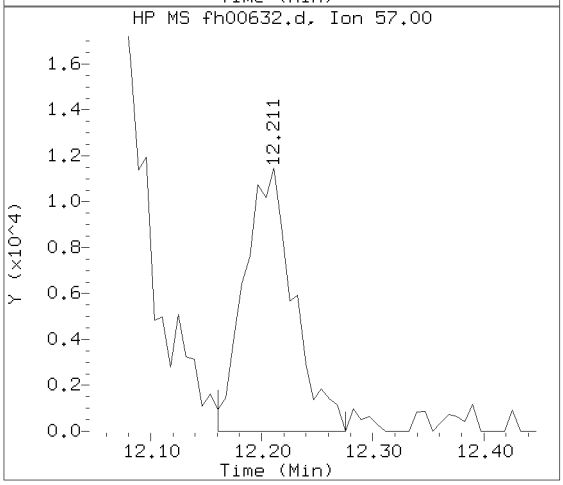
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00632.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 19:49 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Sample Name: 851-- Lab Sample ID: 9766350

Compound Number	: 47
Compound Name	: Heptane
Scan Number	: 1175
Retention Time (minutes)	: 12.204
Relative Retention Time	: 0.00049
Quant Ion	: 71.00
Area (flag)	: 19552
Concentration (ppb(v))	: 0.3760

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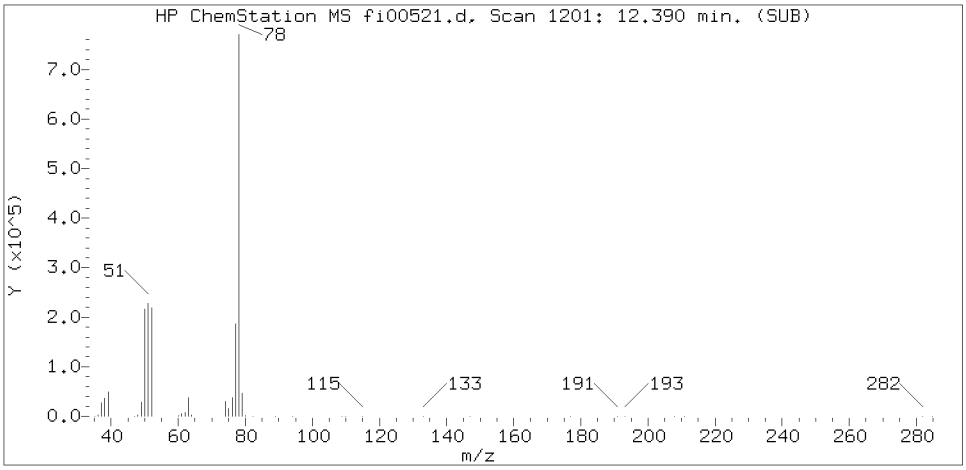
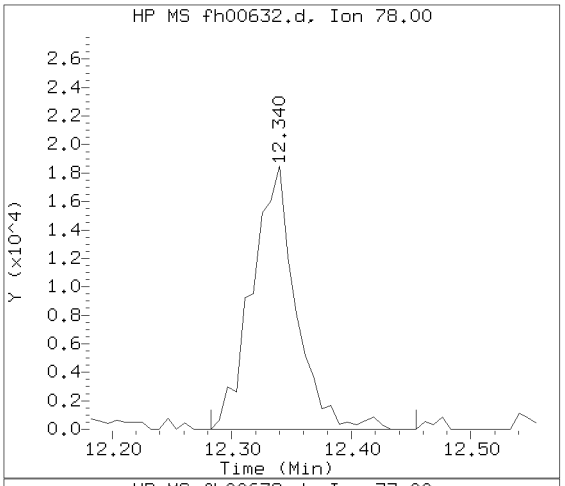
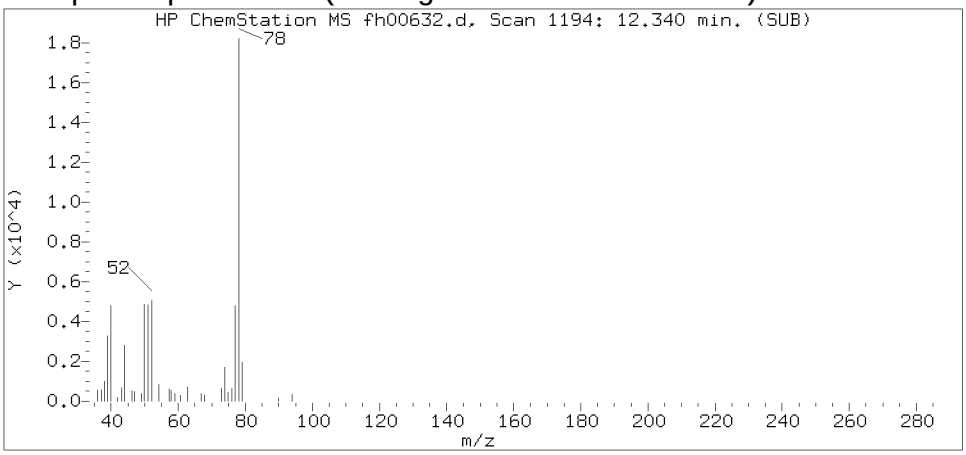
Target 3.5 esignature user ID: jeb07445

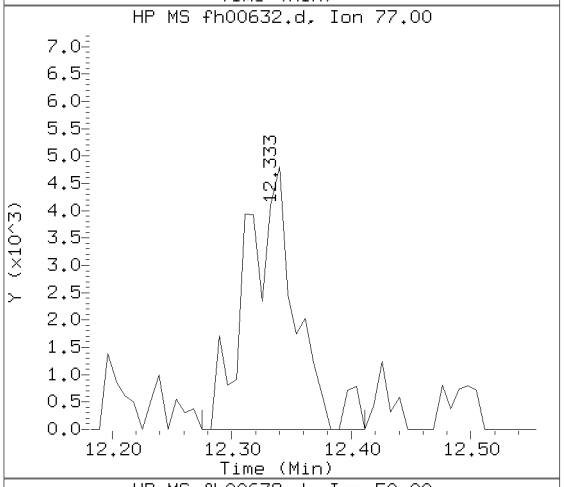
Reference Standard Spectrum for Benzene



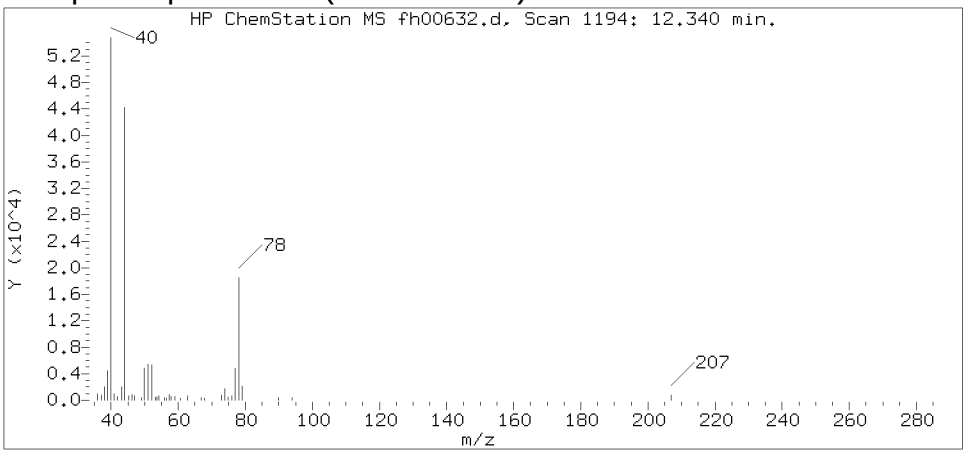


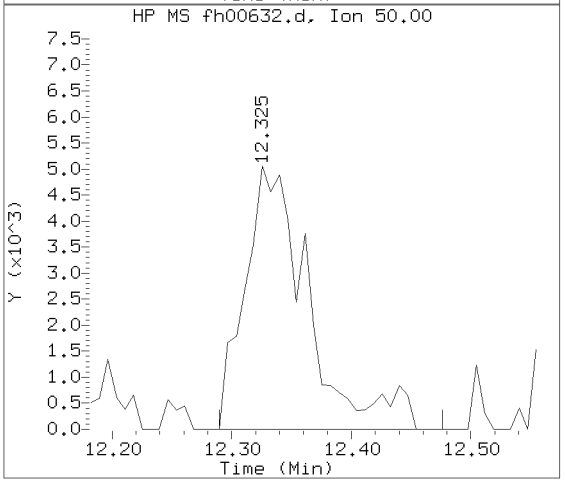
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00632.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 19:49 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Sample Name: 851-- Lab Sample ID: 9766350

Compound Number : 48
Compound Name : Benzene
Scan Number : 1194
Retention Time (minutes): 12.340
Relative Retention Time :-0.00058
Quant Ion : 78.00
Area (flag) : 47236
Concentration (ppb(v)) : 0.2938

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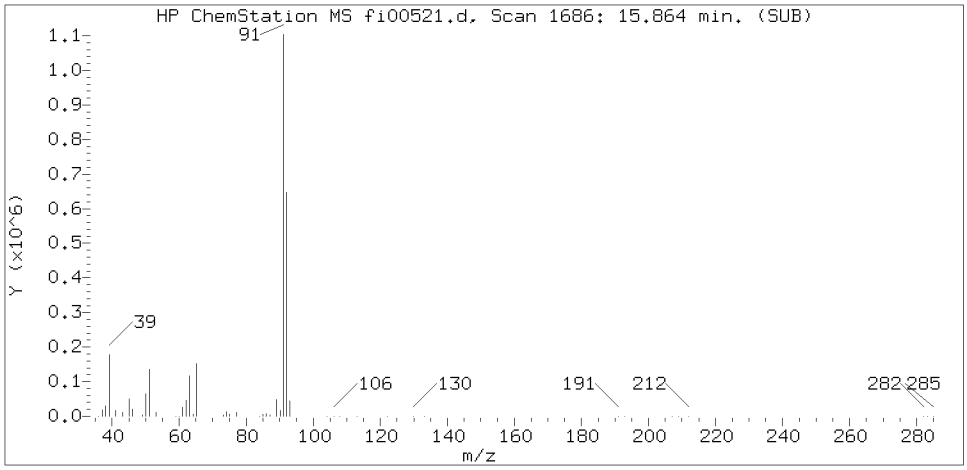
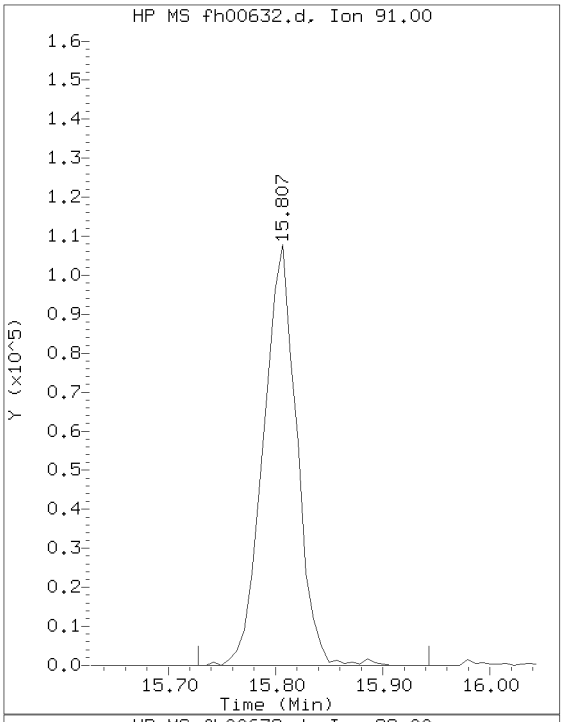
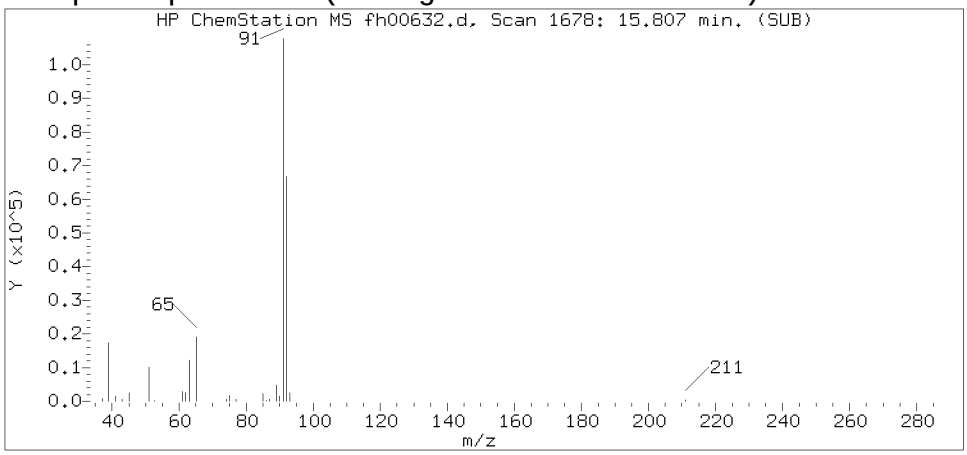
Target 3.5 esignature user ID: jeb07445

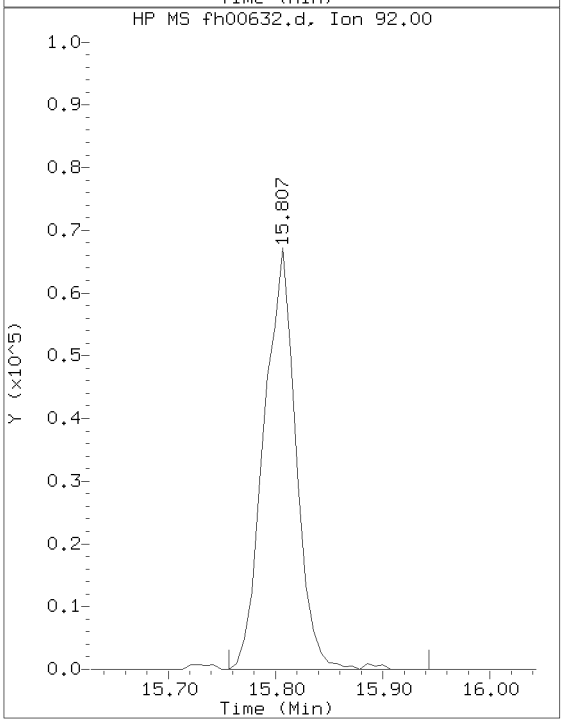
Reference Standard Spectrum for Toluene



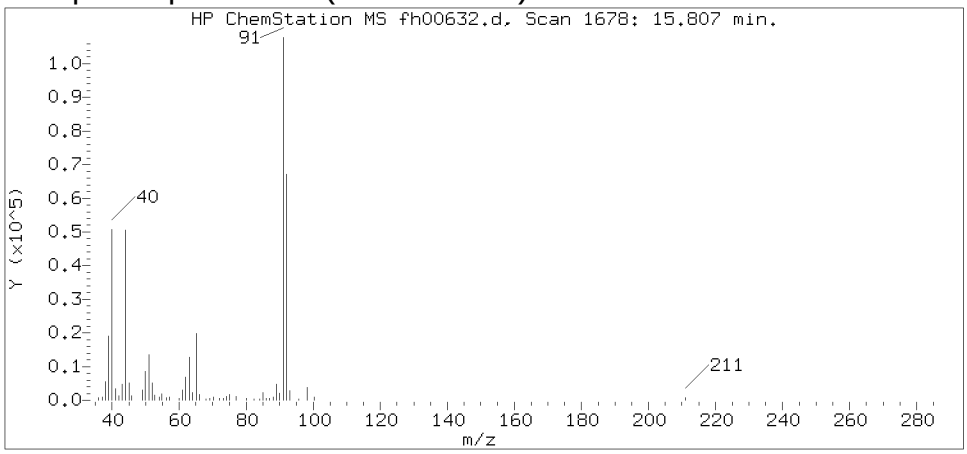


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00632.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 19:49 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Sample Name: 851-- Lab Sample ID: 9766350

Compound Number : 61
Compound Name : Toluene
Scan Number : 1678
Retention Time (minutes): 15.807
Relative Retention Time :-0.00073
Quant Ion : 91.00
Area (flag) : 233524
Concentration (ppb(v)) : 1.2221

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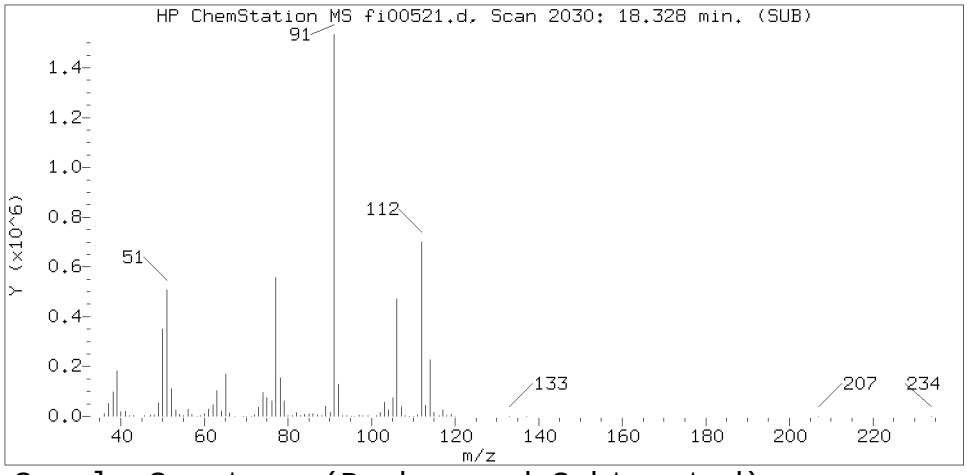
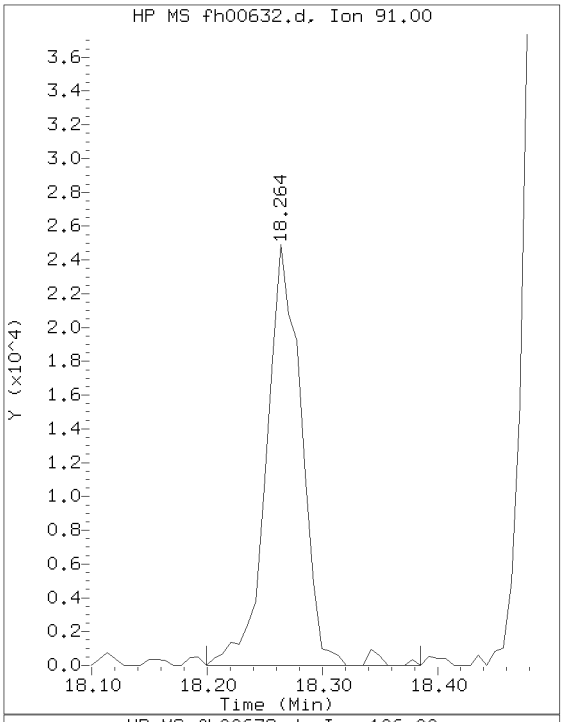
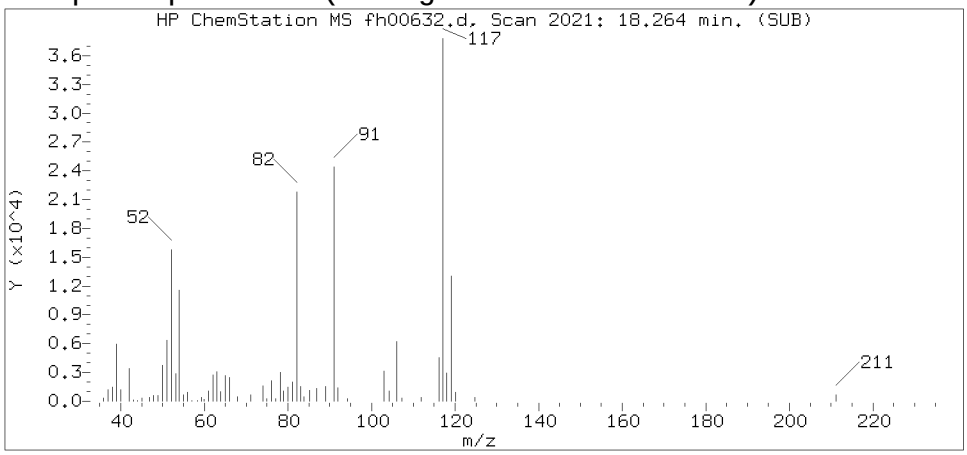
Target 3.5 esignature user ID: jeb07445

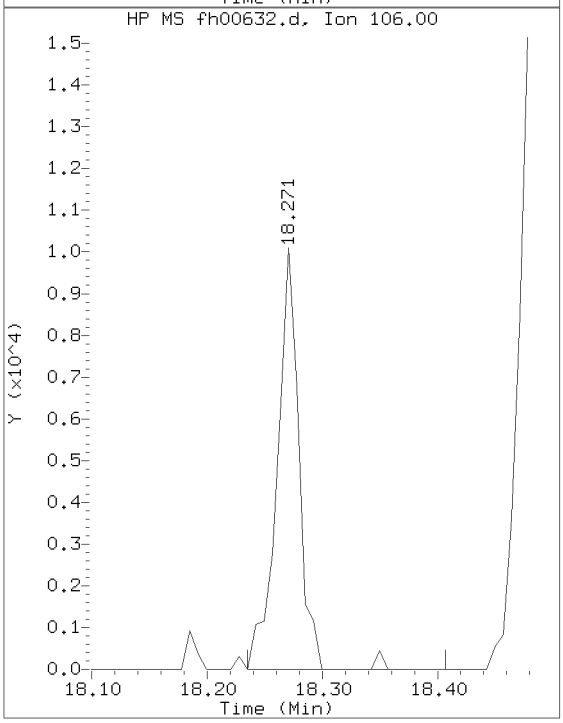
Reference Standard Spectrum for Ethylbenzene



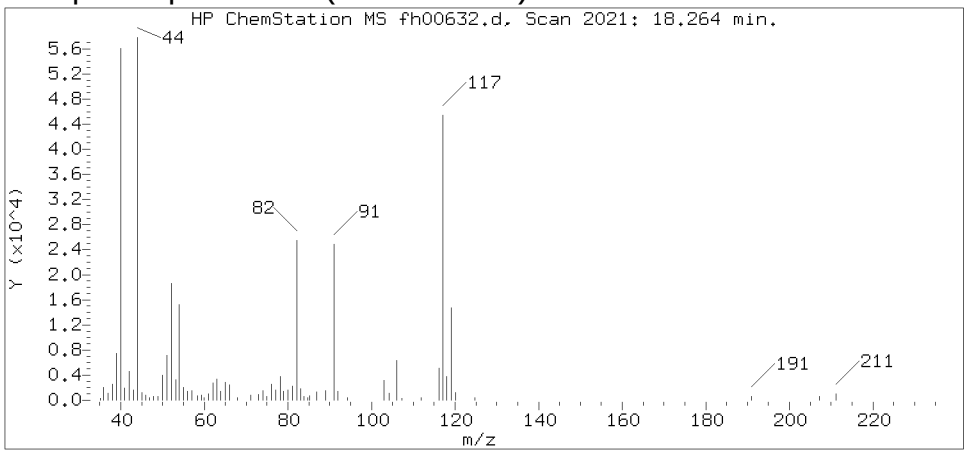


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00632.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 19:49 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Sample Name: 851-- Lab Sample ID: 9766350

Compound Number : 73
Compound Name : Ethylbenzene
Scan Number : 2021
Retention Time (minutes): 18.264
Relative Retention Time :-0.00000
Quant Ion : 91.00
Area (flag) : 53244
Concentration (ppb(v)) : 0.2042

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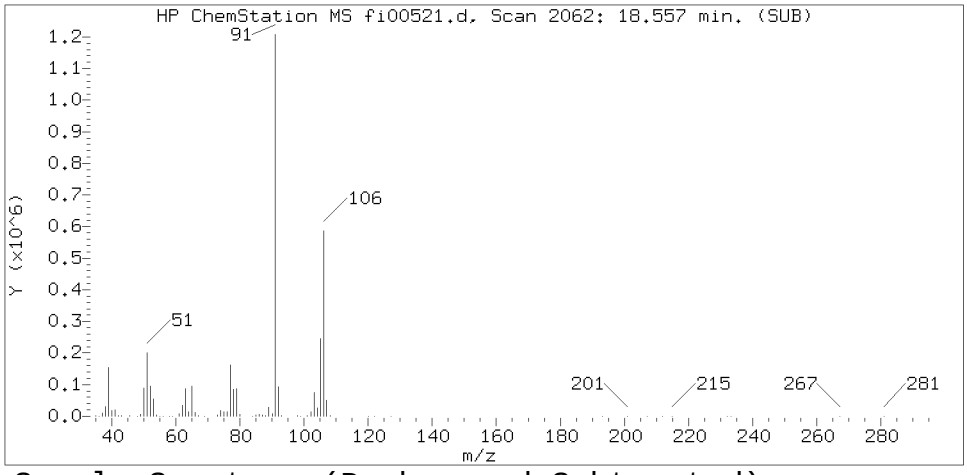
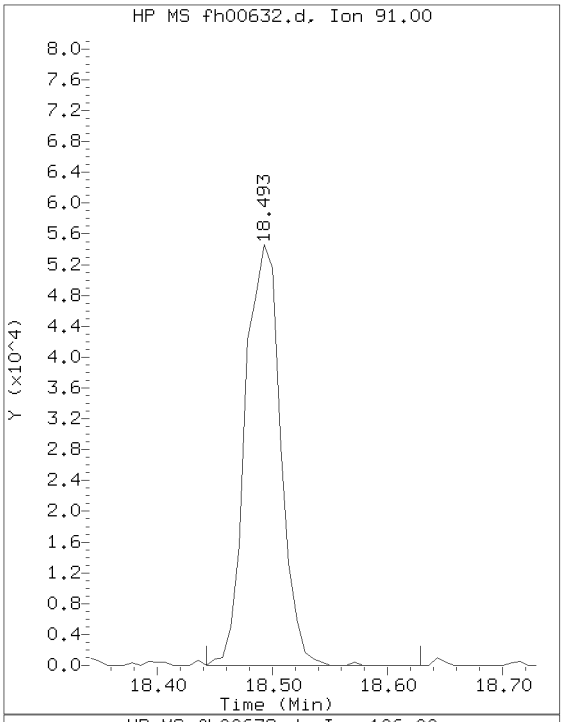
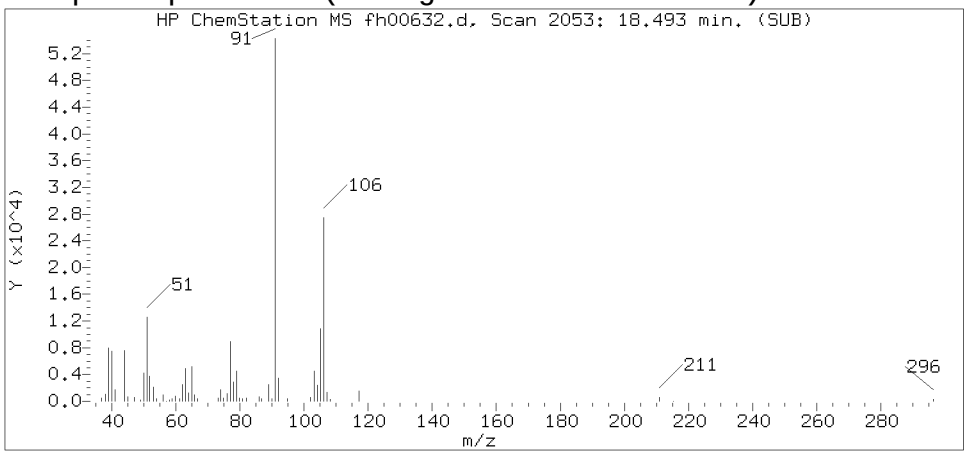
Target 3.5 esignature user ID: jeb07445

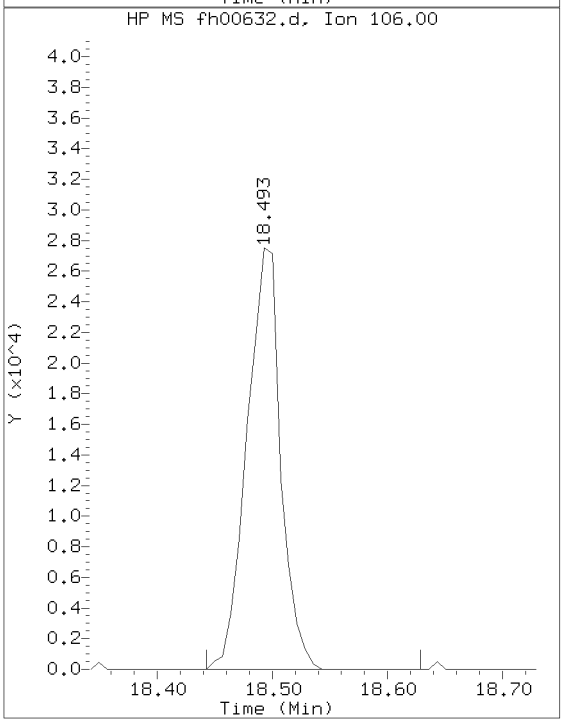
Reference Standard Spectrum for m/p-Xylene



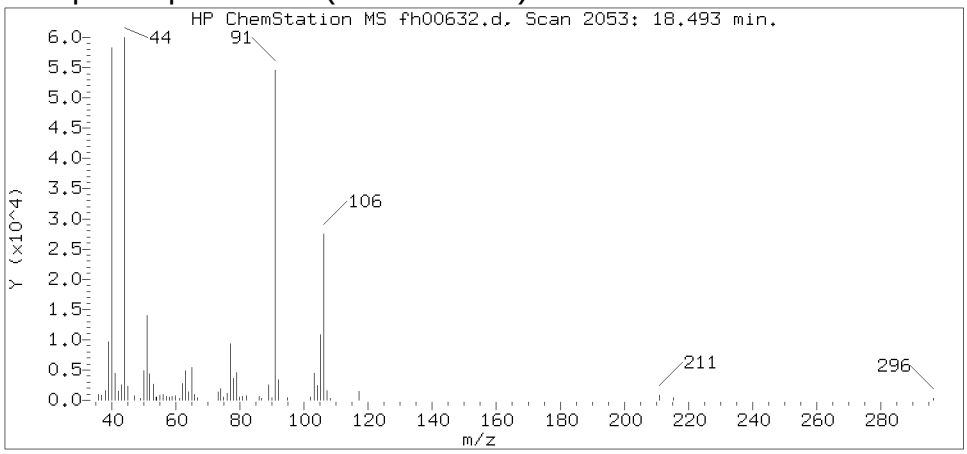


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00632.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 19:49 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Sample Name: 851-- Lab Sample ID: 9766350

Compound Number : 75
Compound Name : m/p-Xylene
Scan Number : 2053
Retention Time (minutes): 18.493
Relative Retention Time :-0.00040
Quant Ion : 91.00
Area (flag) : 115909
Concentration (ppb(v)) : 0.6184

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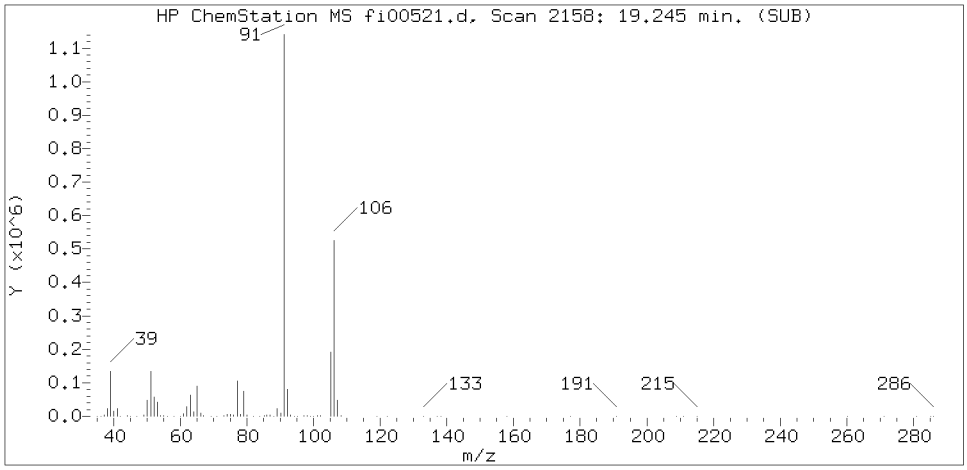
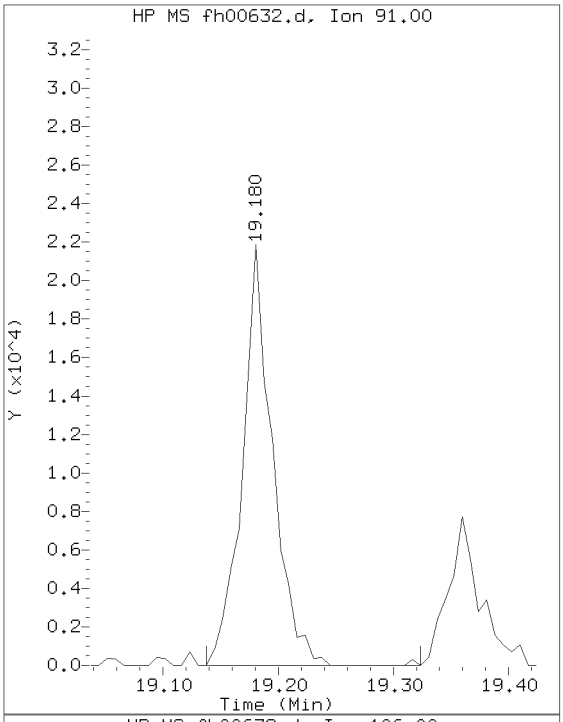
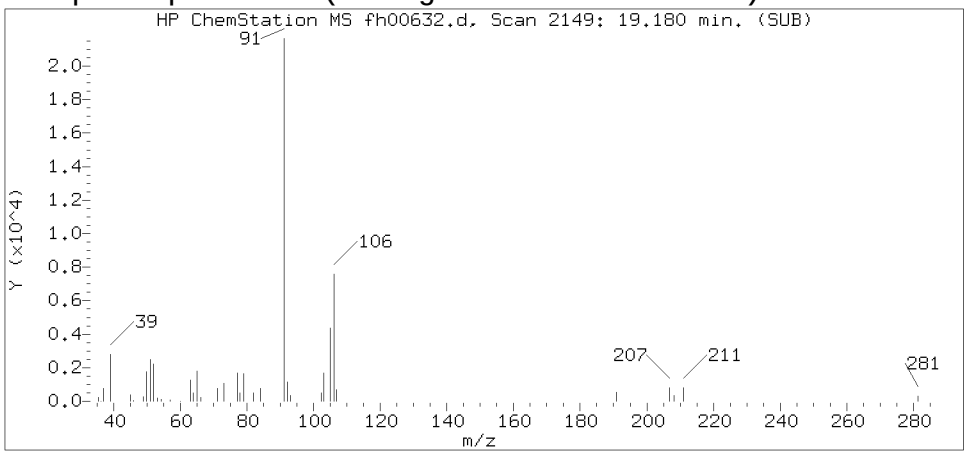
Target 3.5 esignature user ID: jeb07445

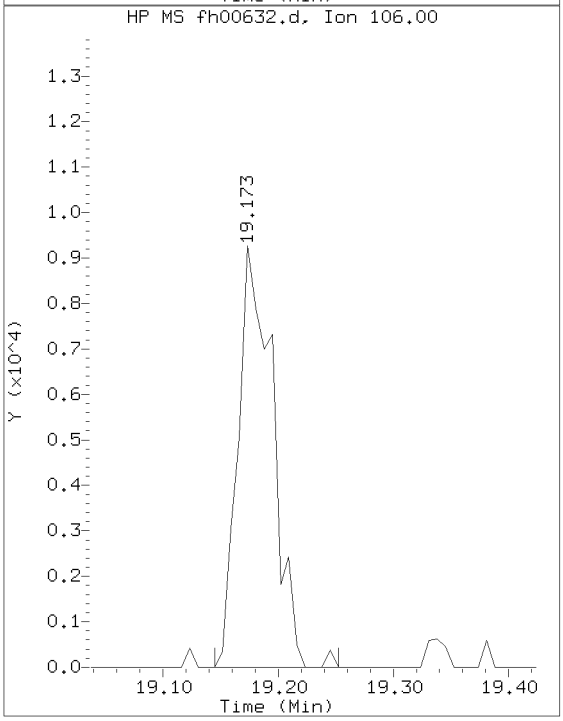
Reference Standard Spectrum for o-Xylene



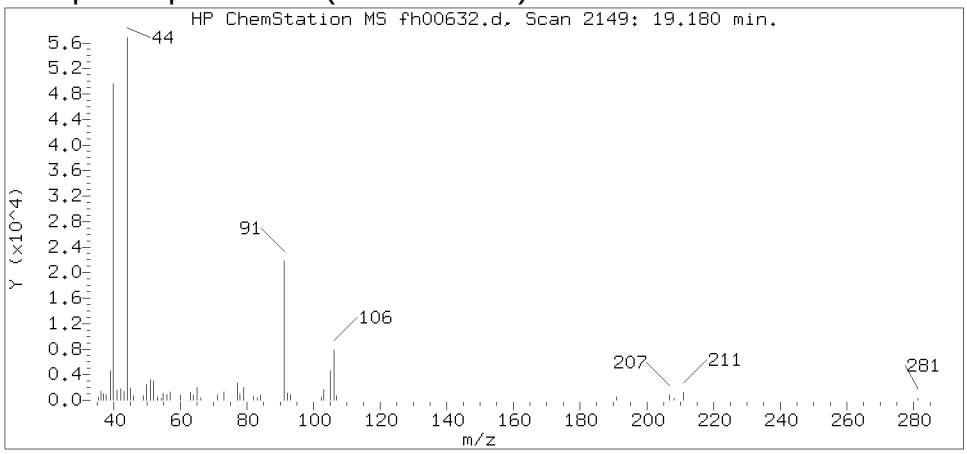


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00632.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 19:49 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Sample Name: 851-- Lab Sample ID: 9766350

Compound Number : 76
Compound Name : o-Xylene
Scan Number : 2149
Retention Time (minutes): 19.180
Relative Retention Time :-0.00002
Quant Ion : 91.00
Area (flag) : 39744
Concentration (ppb(v)) : 0.2176

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Target 3.5 esignature user ID: jeb07445

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766351
Canister ID:	894	Lab File ID:	fh00633.d
Pressure Received:	9.9 psia	Date Collected:	08/18/2018
Final Pressure:	19.8 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	20:20
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	1.5	J
75-45-6	Chlorodifluoromethane	0.53	U
76-14-2	Freon 114	0.84	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.31	U
106-99-0	1,3-Butadiene	0.38	U
74-83-9	Bromomethane	0.70	U
75-00-3	Chloroethane	0.50	U
75-43-4	Dichlorofluoromethane	0.46	U
75-69-4	Trichlorofluoromethane	0.84	U
109-66-0	Pentane	0.88	J
75-35-4	1,1-Dichloroethene	0.56	U
76-13-1	Freon 113	1.7	J
67-64-1	Acetone	9.3	J
75-15-0	Carbon Disulfide	0.40	U
107-05-1	3-Chloropropene	0.47	U
75-09-2	Methylene Chloride	0.87	U
156-60-5	trans-1,2-Dichloroethene	0.34	U
1634-04-4	Methyl t-Butyl Ether	0.54	U
110-54-3	Hexane	0.46	U
75-34-3	1,1-Dichloroethane	0.36	U
156-59-2	cis-1,2-Dichloroethene	0.48	U
78-93-3	2-Butanone	5.5	
67-66-3	Chloroform	0.45	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766351
Canister ID:	894	Lab File ID:	fh00633.d
Pressure Received:	9.9 psia	Date Collected:	08/18/2018
Final Pressure:	19.8 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	20:20
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
71-55-6	1,1,1-Trichloroethane	0.65	U
56-23-5	Carbon Tetrachloride	0.88	U
71-43-2	Benzene	0.35	U
107-06-2	1,2-Dichloroethane	0.32	U
540-84-1	Isooctane	0.61	U
142-82-5	Heptane	0.94	U
79-01-6	Trichloroethene	0.97	U
78-87-5	1,2-Dichloropropane	0.60	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	0.80	U
10061-01-5	cis-1,3-Dichloropropene	0.45	U
108-10-1	4-Methyl-2-Pentanone	0.61	U
108-88-3	Toluene	0.74	J
111-65-9	Octane	1.9	U
10061-02-6	trans-1,3-Dichloropropene	0.54	U
79-00-5	1,1,2-Trichloroethane	0.65	U
127-18-4	Tetrachloroethene	1.7	U
591-78-6	2-Hexanone	0.74	U
124-48-1	Dibromochloromethane	1.1	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	0.60	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	0.83	U
179601-23-1	m/p-Xylene	1.1	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766351
Canister ID:	894	Lab File ID:	fh00633.d
Pressure Received:	9.9 psia	Date Collected:	08/18/2018
Final Pressure:	19.8 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	20:20
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
95-47-6	o-Xylene	0.83	U
100-42-5	Styrene	0.85	U
75-25-2	Bromoform	1.8	U
98-82-8	Cumene	1.2	U
108-86-1	Bromobenzene	0.64	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	0.84	U
622-96-8	4-Ethyltoluene	0.88	U
108-67-8	1,3,5-Trimethylbenzene	1.6	U
95-63-6	1,2,4-Trimethylbenzene	1.4	U
541-73-1	1,3-Dichlorobenzene	1.1	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.2	U
67-72-1	Hexachloroethane	2.6	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Volatiles in Air 9766351

Data file: /chem/HP26379.i/18aug27.b/fh00633.d Injection date and time: **27-AUG-2018 20:20**
Data file Sample Info. Line: 9766351;400;F1823930AA;894--;0;0;SAMPLE; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.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): 19.8 psia Canister Pressure before dilution (Ya): 9.9 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 400 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.115(-0.022)	1023	130	354952 (-17)	10.00		255500 - 596166
52) 1,4-Difluorobenzene	13.400(-0.007)	1342	114	1170792 (-22)	10.00		906195 - 2114453
71) Chlorobenzene-d5	18.228(0.007)	2016	117	1229272 (-17)	10.00		883644 - 2061835

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)	4.009(0.000)	85	36428M	0.307	0.31		J	0.13	1
3) Chlorodifluoromethane	(1)			Not Detected					0.15	1
4) Freon 114	(1)			Not Detected					0.12	1
5) Chloromethane	(1)			Not Detected					0.24	1
6) Vinyl Chloride	(1)			Not Detected					0.12	1
7) 1,3-Butadiene	(1)			Not Detected					0.17	1
8) Bromomethane	(1)			Not Detected					0.18	1
9) Chloroethane	(1)			Not Detected					0.19	1
13) Dichlorofluoromethane	(1)			Not Detected					0.11	1
12) Trichlorofluoromethane	(1)			Not Detected					0.15	1
11) Pentane	(1)	5.864(0.001)	43	38468	0.299	0.30		J	0.13	1
16) 1,1-Dichloroethene	(1)			Not Detected					0.14	1
17) Freon 113	(1)	6.932(-0.000)	103	14982	0.217	0.22		J	0.11	1
24) Acetone	(1)	8.092(-0.001)	43	442896	3.900	3.90		J	0.53	5
18) Carbon Disulfide	(1)			Not Detected					0.13	1
22) 3-Chloropropene	(1)			Not Detected					0.15	1
23) Methylene Chloride	(1)			Not Detected					0.25	2
25) trans-1,2-Dichloroethene	(1)			Not Detected					0.086	1
27) Methyl t-Butyl Ether	(1)			Not Detected					0.15	1
26) Hexane	(1)			Not Detected					0.13	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.089	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.12	1
45) 2-Butanone	(1)	11.810(0.002)	43	299235	1.856	1.86			0.21	1
39) Chloroform	(1)			Not Detected					0.092	1
44) 1,1,1-Trichloroethane	(1)			Not Detected					0.12	1
42) Carbon Tetrachloride	(1)			Not Detected					0.14	1
48) Benzene	(2)			Not Detected					0.11	1
50) 1,2-Dichloroethane	(2)			Not Detected					0.08	1
46) Isooctane	(2)			Not Detected					0.13	1
47) Heptane	(2)			Not Detected					0.23	1
51) Trichloroethene	(2)			Not Detected					0.18	1
55) 1,2-Dichloropropane	(2)			Not Detected					0.13	1
53) Dibromomethane	(2)			Not Detected					0.14	1
56) Bromodichloromethane	(2)			Not Detected					0.12	1
59) cis-1,3-Dichloropropene	(2)			Not Detected					0.1	1
62) 4-Methyl-2-Pentanone	(2)			Not Detected					0.15	1
61) Toluene	(3)	15.800(-0.000)	91	35489	0.195	0.20		J	0.12	1
60) Octane	(3)			Not Detected					0.4	2
64) trans-1,3-Dichloropropene	(3)			Not Detected					0.12	1
67) 1,1,2-Trichloroethane	(3)			Not Detected					0.12	1
63) Tetrachloroethene	(3)			Not Detected					0.25	2
70) 2-Hexanone	(3)			Not Detected					0.18	1
68) Dibromochloromethane	(3)			Not Detected					0.13	1

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:59. Target 3.5 esignature user ID: jeb07445

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Volatiles in Air 9766351

Data file: /chem/HP26379.i/18aug27.b/fh00633.d Injection date and time: **27-AUG-2018 20:20**
Data file Sample Info. Line: 9766351;400;F1823930AA;894--;0;0;SAMPLE; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.d**

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

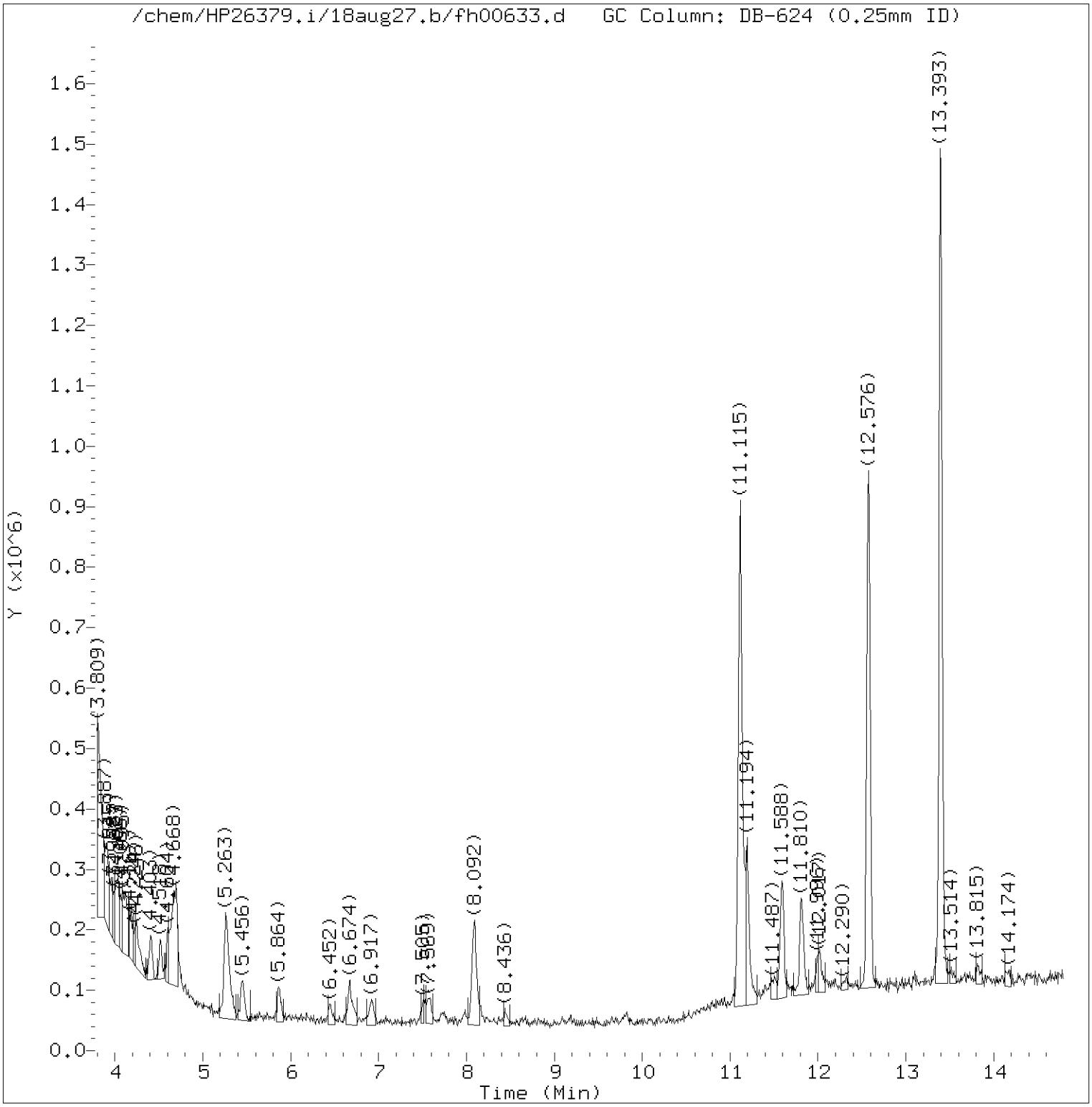
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 19.8 psia Canister Pressure before dilution (Ya): 9.9 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 400 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
69) 1,2-Dibromoethane	(3)			Not Detected					0.13	1
72) Chlorobenzene	(3)			Not Detected					0.13	1
74) 1,1,1,2-Tetrachloroethane	(3)			Not Detected					0.15	1
73) Ethylbenzene	(3)			Not Detected					0.19	1
75) m/p-Xylene	(3)			Not Detected					0.26	2
76) o-Xylene	(3)			Not Detected					0.19	1
78) Styrene	(3)			Not Detected					0.2	1
79) Bromoform	(3)			Not Detected					0.17	1
80) Cumene	(3)			Not Detected					0.24	1
82) Bromobenzene	(3)			Not Detected					0.1	1
83) 1,1,2,2-Tetrachloroethane	(3)			Not Detected					0.15	1
87) 1,2,3-Trichloropropane	(3)			Not Detected					0.14	1
84) 4-Ethyltoluene	(3)			Not Detected					0.18	1
86) 1,3,5-Trimethylbenzene	(3)			Not Detected					0.32	2
90) 1,2,4-Trimethylbenzene	(3)			Not Detected					0.28	2
93) 1,3-Dichlorobenzene	(3)			Not Detected					0.19	1
94) 1,4-Dichlorobenzene	(3)			Not Detected					0.17	1
98) 1,2-Dichlorobenzene	(3)			Not Detected					0.2	1
97) Hexachloroethane	(3)			Not Detected					0.27	2

Total number of targets = 62

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:59. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:40. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

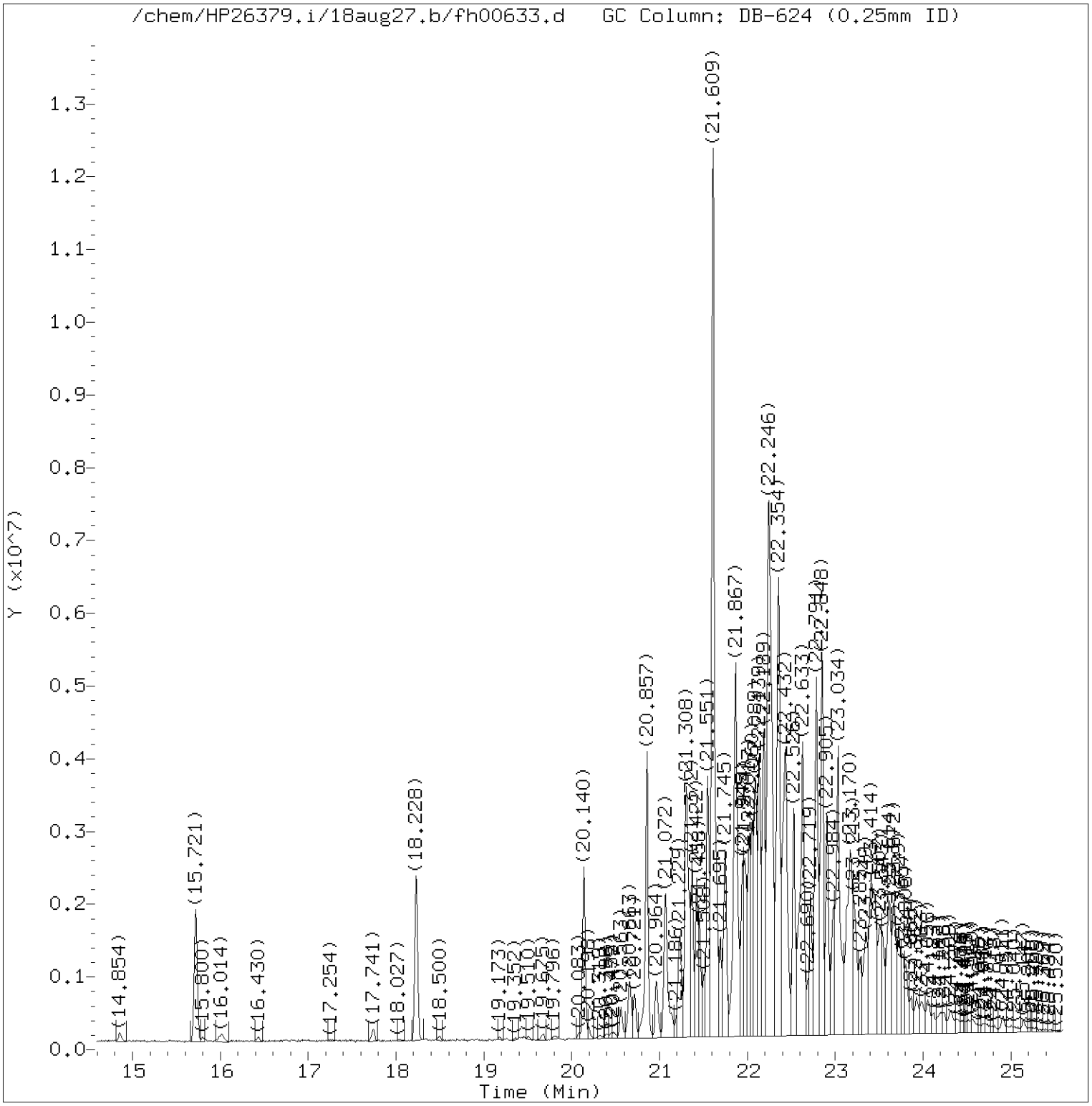
Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00633.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 20:20 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Sample Name: 894-- Lab Sample ID: 9766351

Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00633.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 20:20 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Sample Name: 894-- Lab Sample ID: 9766351

Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00633.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 20:20 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

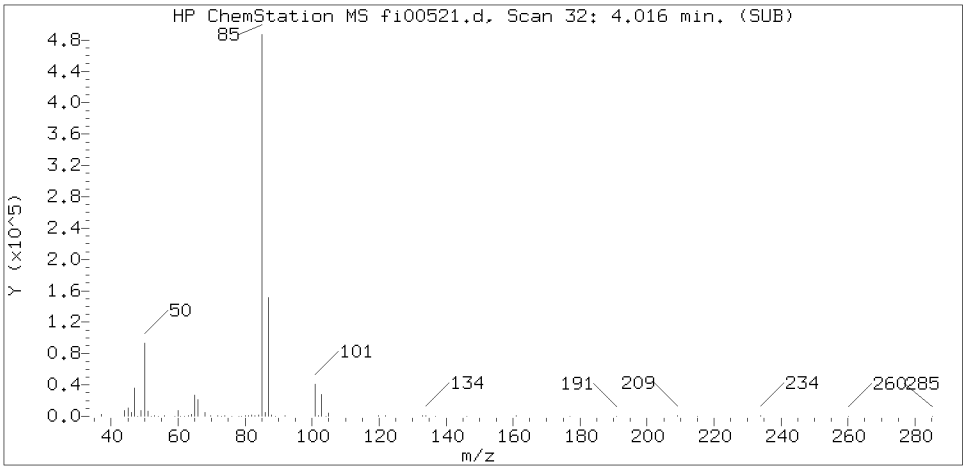
Sample Name: 894-- Lab Sample ID: 9766351

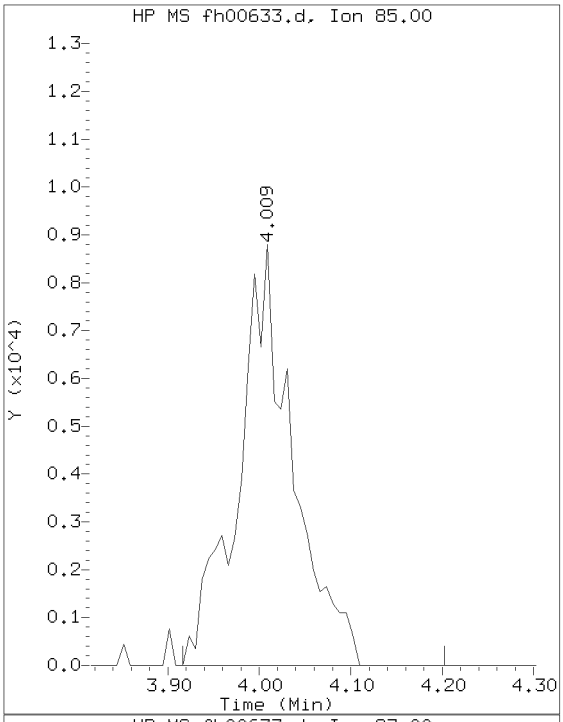
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
2) Dichlorodifluoromethane	(1)	4.009	85	36428M	0.307
11) Pentane	(1)	5.864	43	38468	0.299
17) Freon 113	(1)	6.932	103	14982	0.217
24) Acetone	(1)	8.092	43	442896	3.900
37)*Bromochloromethane	(1)	11.115	130	354952	10.000
45) 2-Butanone	(1)	11.810	43	299235	1.856
52)*1,4-Difluorobenzene	(2)	13.400	114	1170792	10.000
61) Toluene	(3)	15.800	91	35489	0.195
71)*Chlorobenzene-d5	(3)	18.228	117	1229272	10.000

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

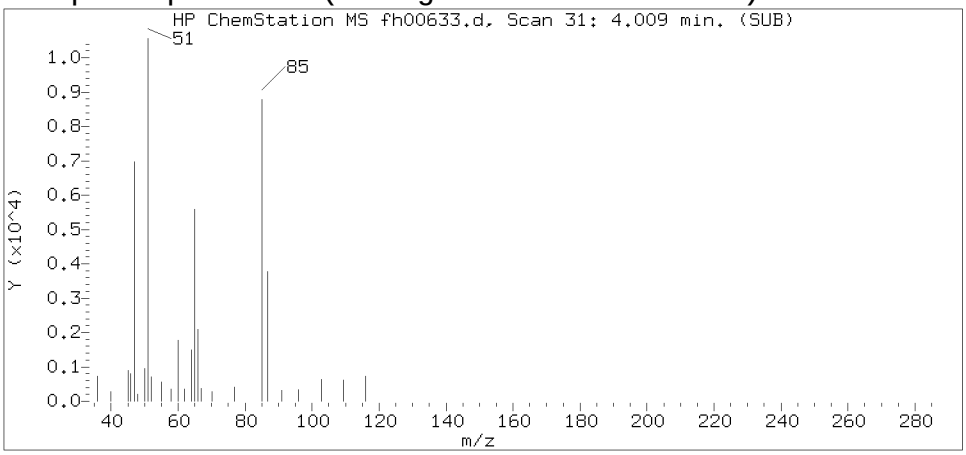
Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07445

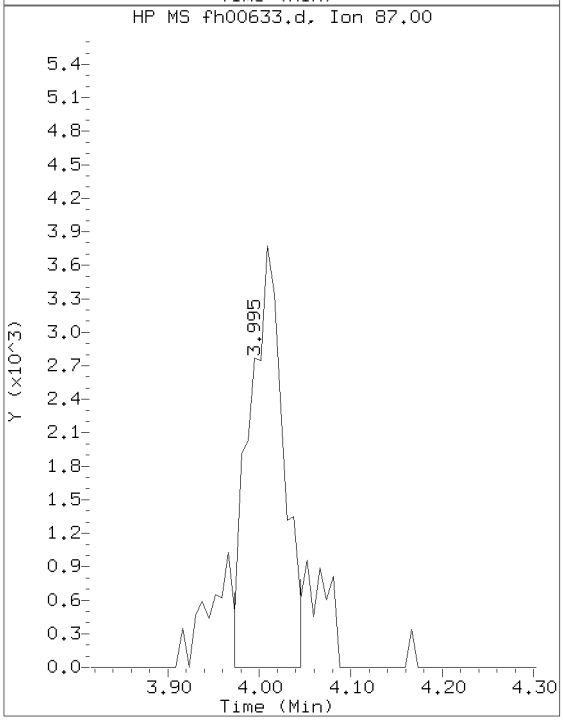
Reference Standard Spectrum for Dichlorodifluoromethane



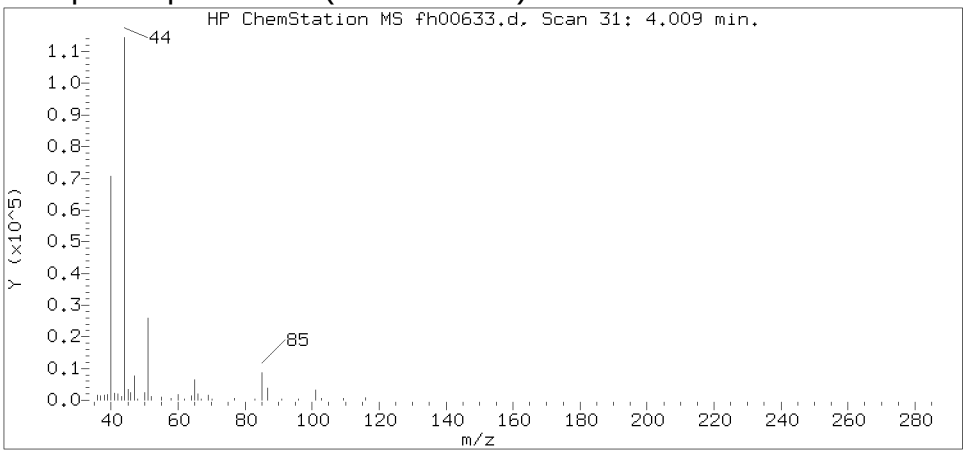


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00633.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 20:20 Analyst ID: jeb07445

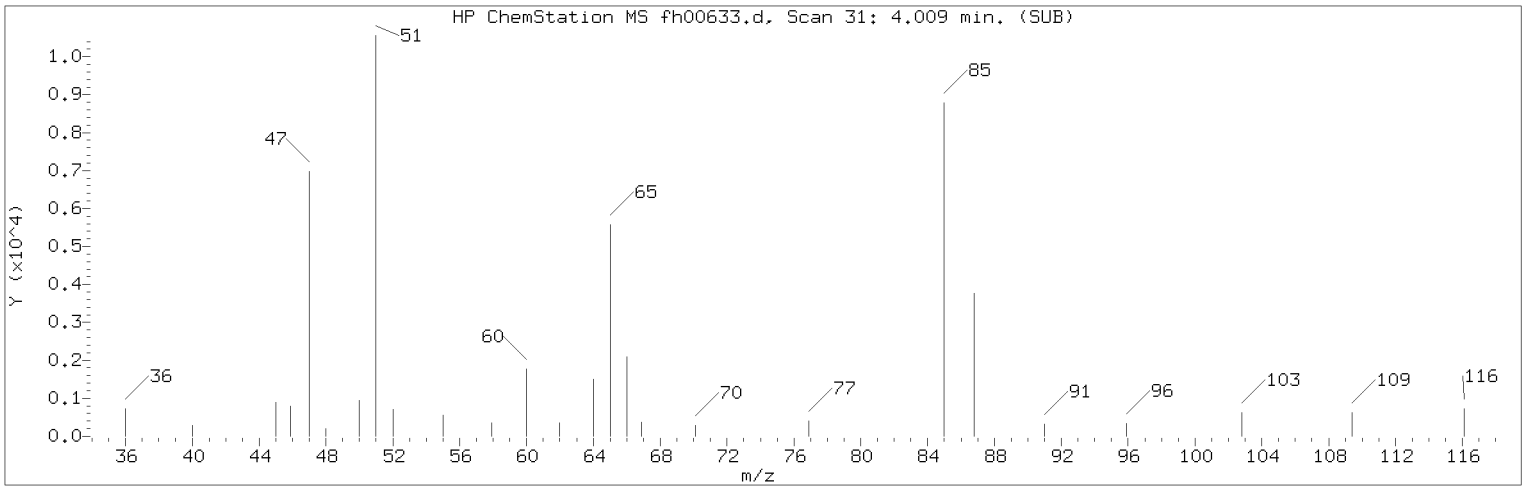
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Sample Name: 894-- Lab Sample ID: 9766351

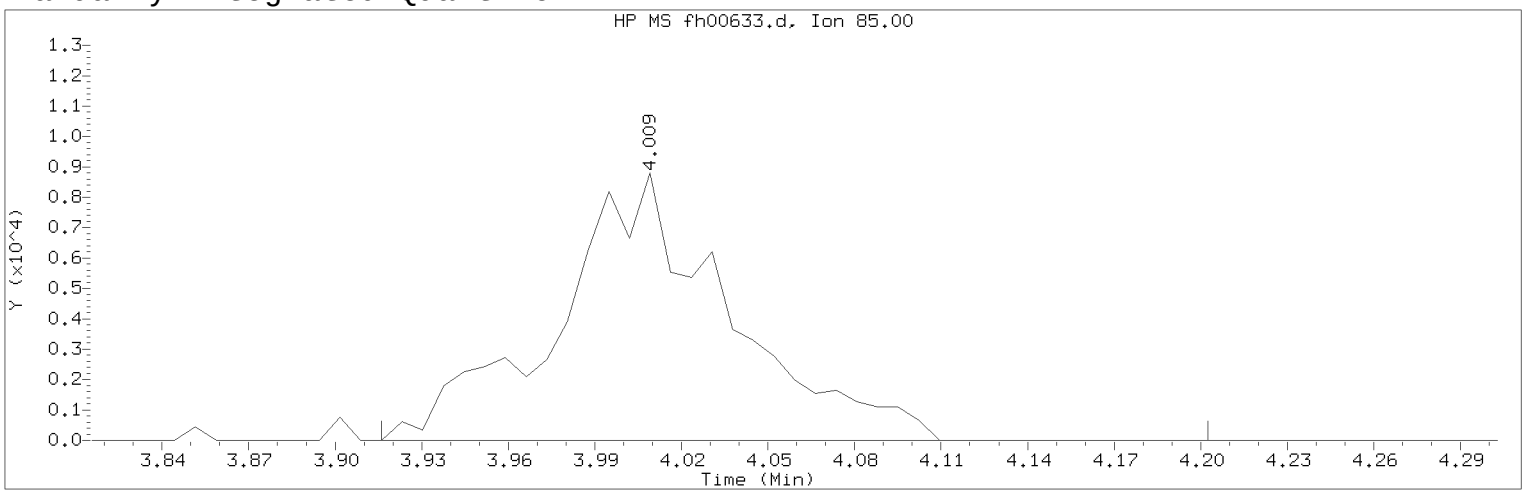
Compound Number	: 2
Compound Name	: Dichlorodifluoromethane
Scan Number	: 31
Retention Time (minutes)	: 4.009
Relative Retention Time	: 0.00005
Quant Ion	: 85.00
Area (flag)	: 36428M
Concentration (ppb(v))	: 0.3073

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug27.b/fh00633.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 20:20 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Sample Name: 894-- Lab Sample ID: 9766351

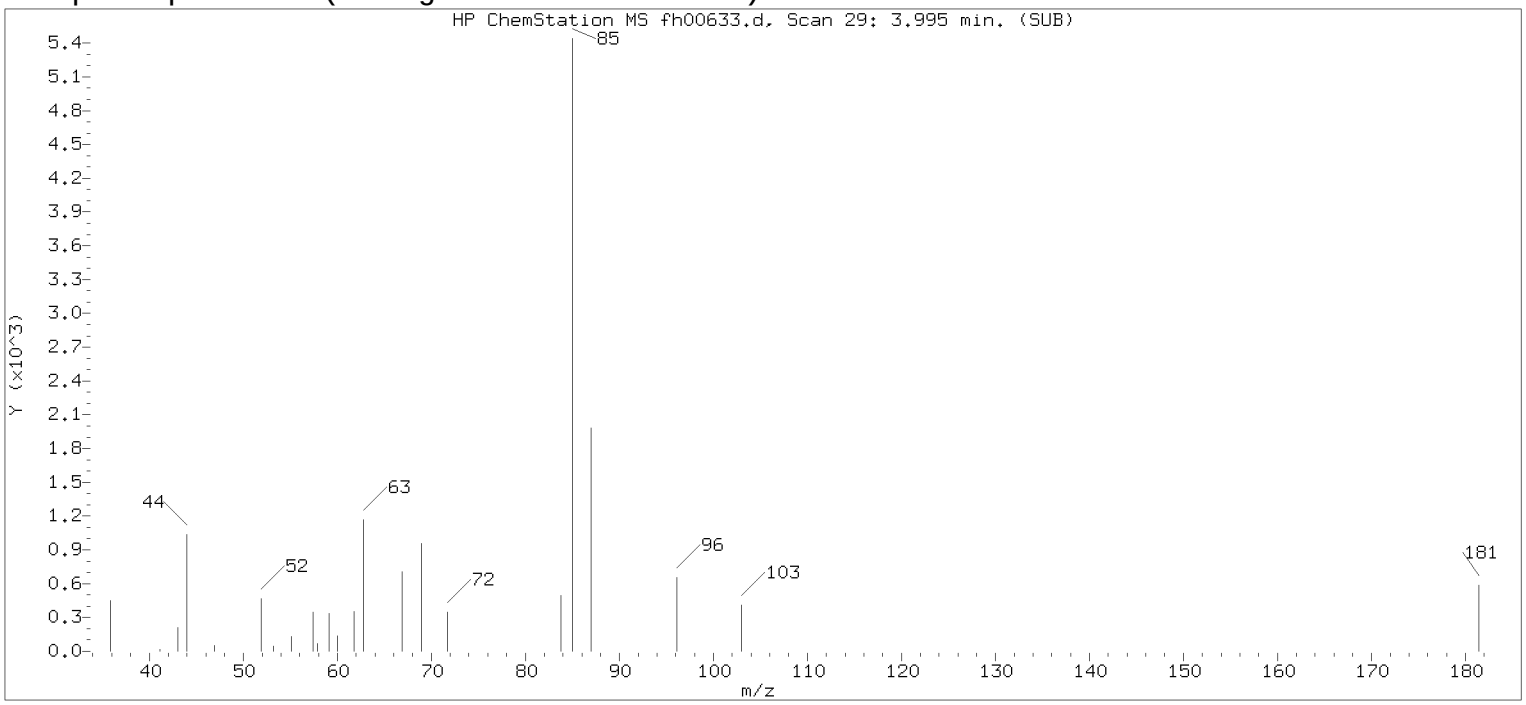
Compound Number : 2
Compound Name : Dichlorodifluoromethane
Scan Number : 31
Retention Time (minutes): 4.009
Quant Ion : 85.00
Area (flag) : 36428M
Concentration (ppb(v)) : 0.3073
Integration start scan : 17 Integration stop scan: 57
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

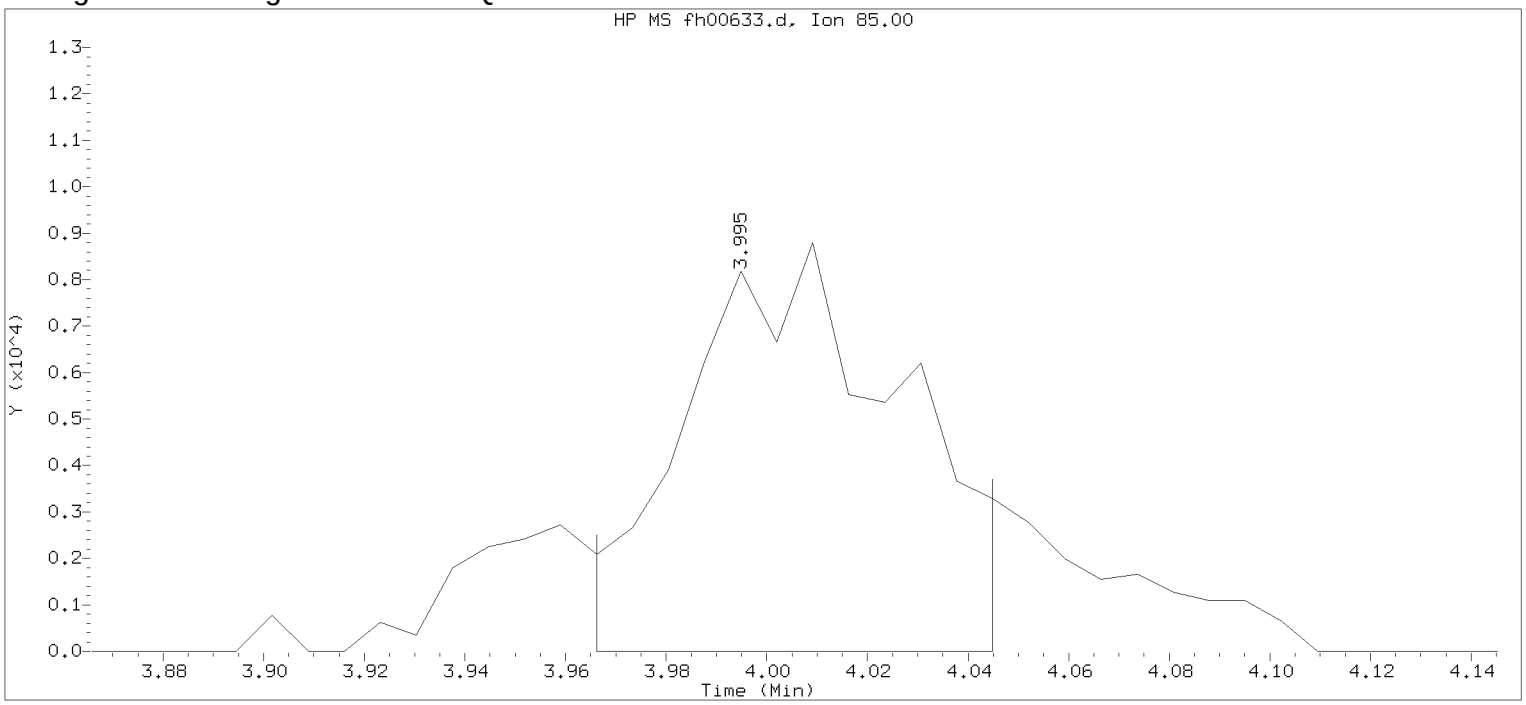
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:40.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug27.b/fh00633.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 20:20 Analyst ID: jeb07445

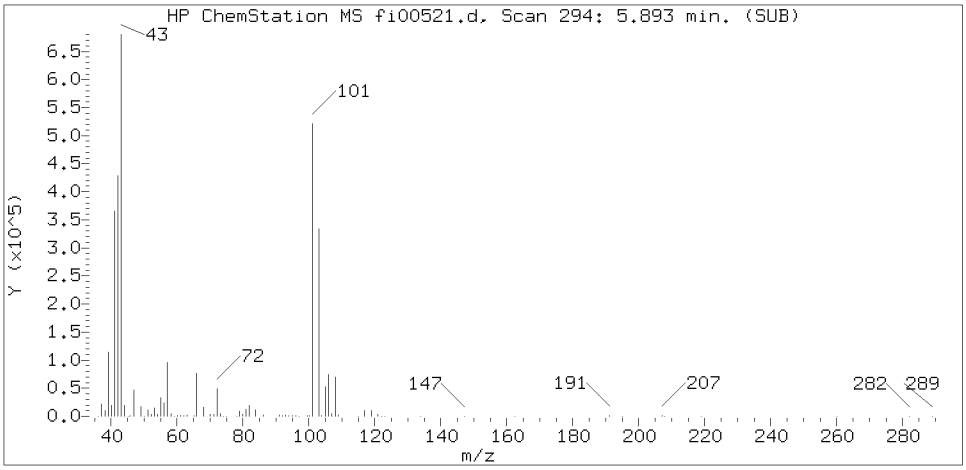
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 20:51 Unknown

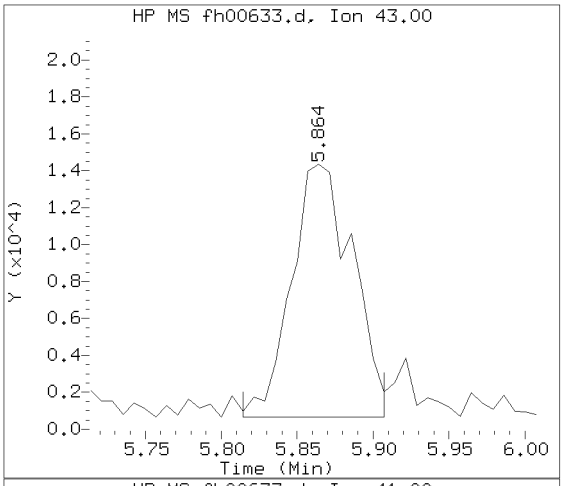
Sample Name: 894-- Lab Sample ID: 9766351

Compound Number : 2
Compound Name : Dichlorodifluoromethane
Scan Number : 29
Retention Time (minutes): 3.995
Quant Ion : 85.00
Area : 25725
Concentration (ppb(v)) : 0.2170
Integration start scan : 24 Integration stop scan: 35
Y at integration start : 0 Y at integration end: 0

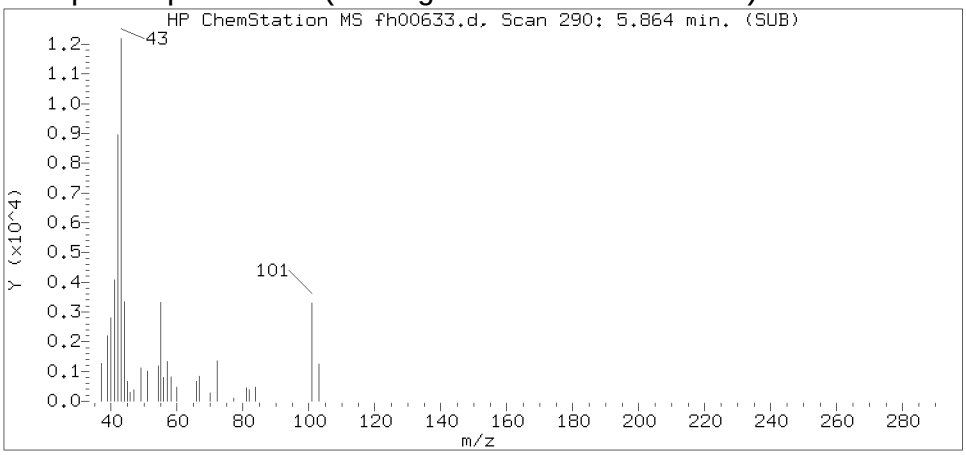
Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07405

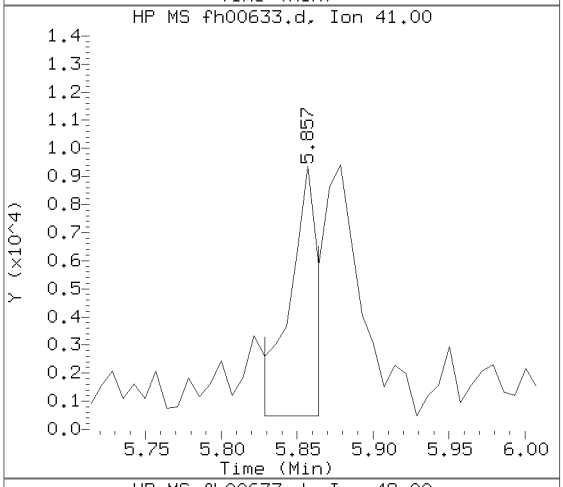
Reference Standard Spectrum for Pentane



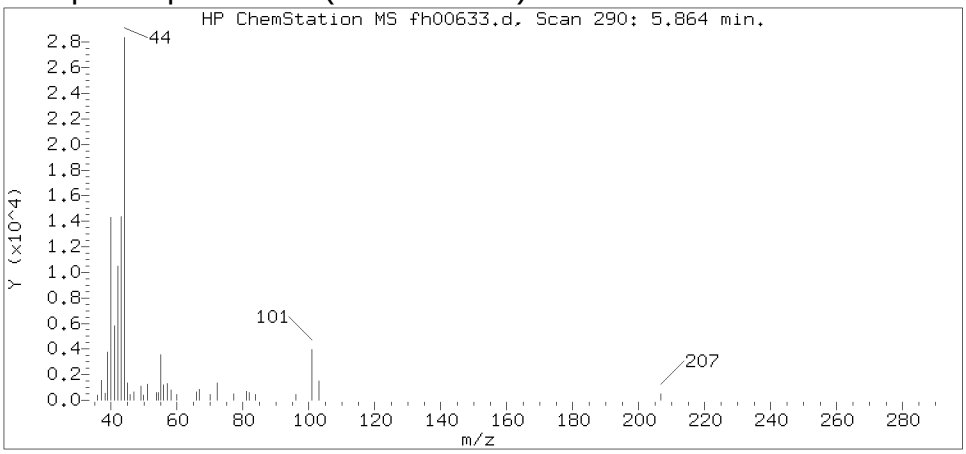


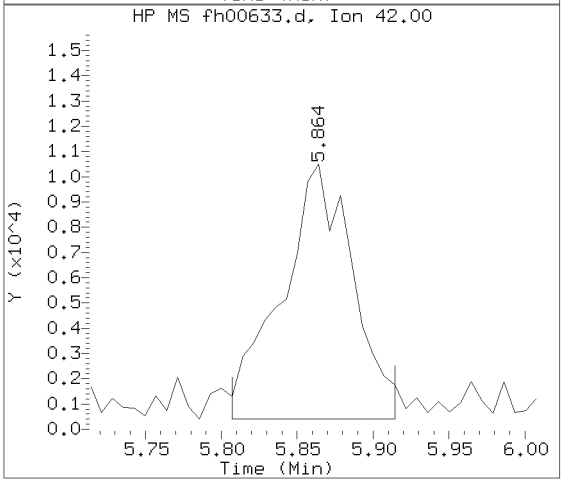
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00633.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 20:20 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Sample Name: 894-- Lab Sample ID: 9766351

Compound Number : 11
Compound Name : Pentane
Scan Number : 290
Retention Time (minutes): 5.864
Relative Retention Time : 0.00102
Quant Ion : 43.00
Area (flag) : 38468
Concentration (ppb(v)) : 0.2990

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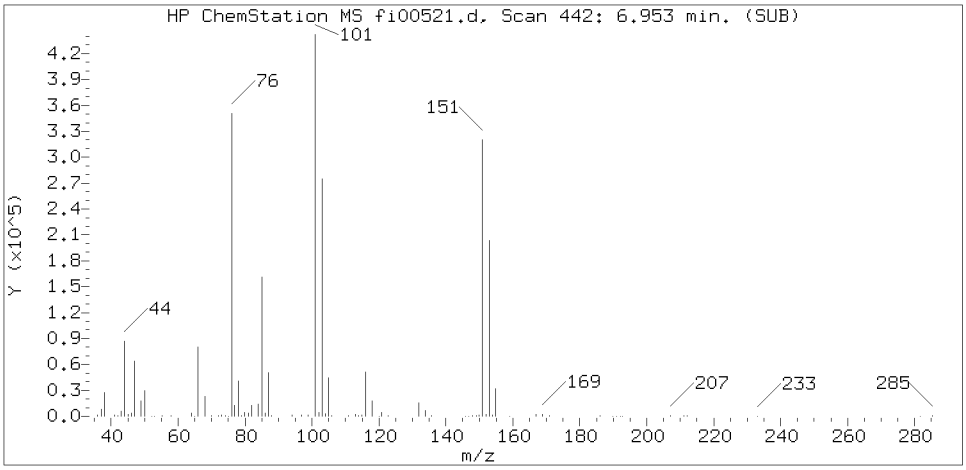
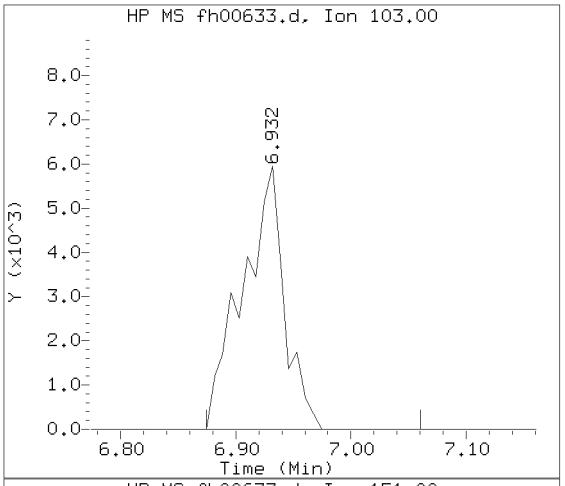
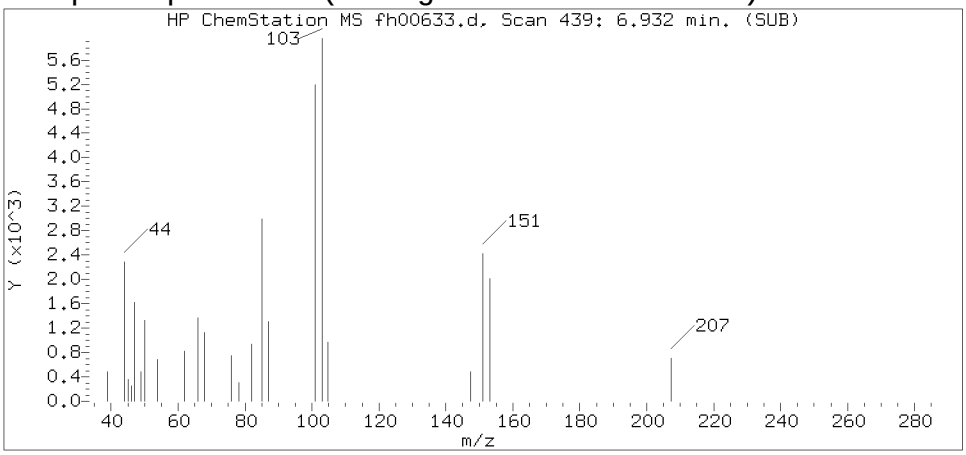
Target 3.5 esignature user ID: jeb07445

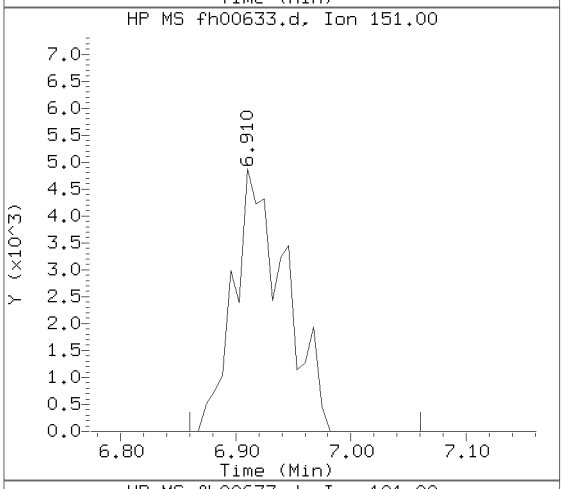
Reference Standard Spectrum for Freon 113



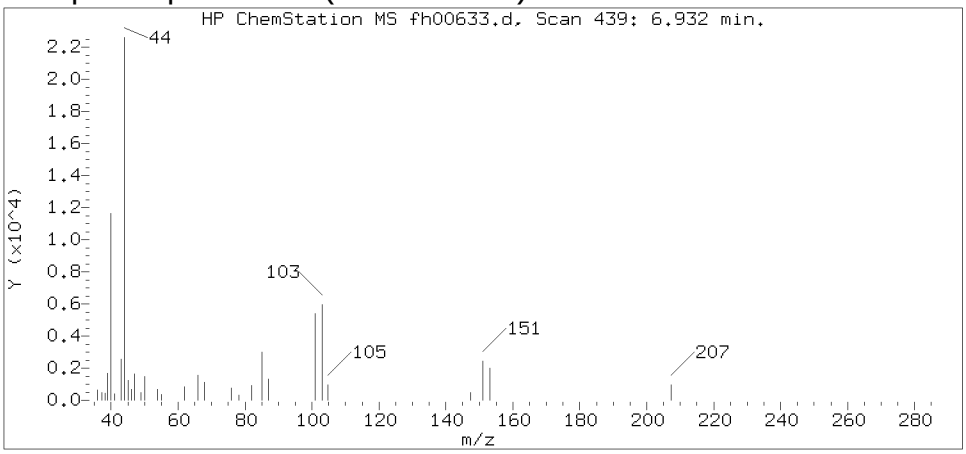


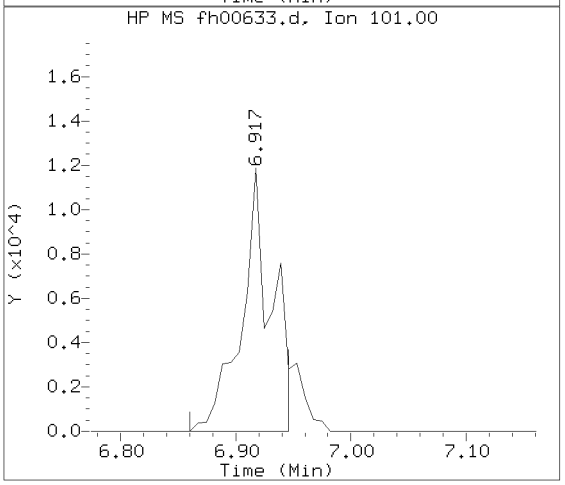
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00633.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 20:20 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Sample Name: 894-- Lab Sample ID: 9766351

Compound Number : 17
Compound Name : Freon 113
Scan Number : 439
Retention Time (minutes): 6.932
Relative Retention Time :-0.00073
Quant Ion : 103.00
Area (flag) : 14982
Concentration (ppb(v)) : 0.2169

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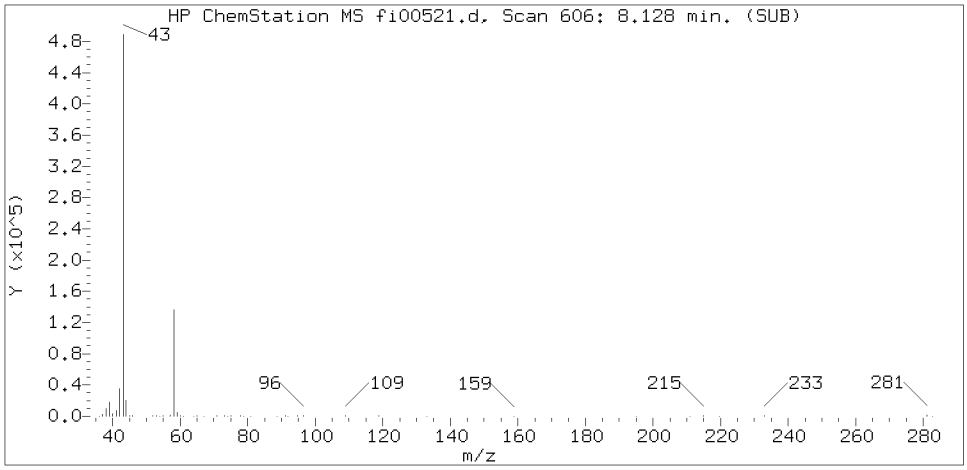
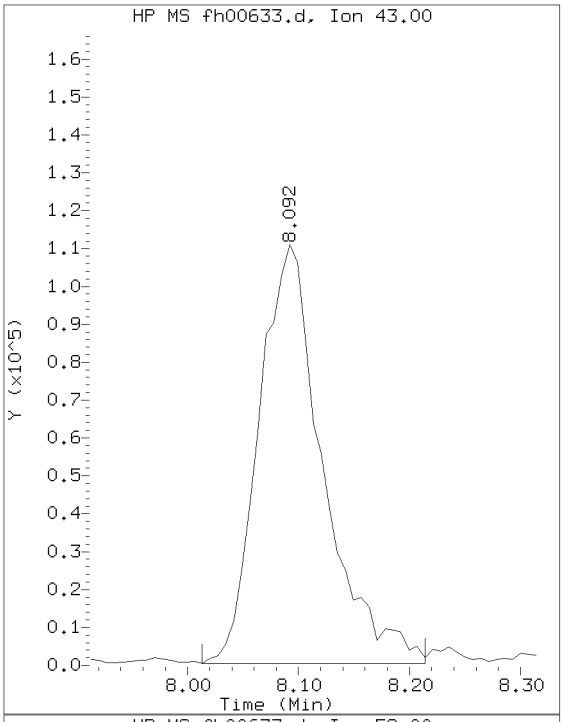
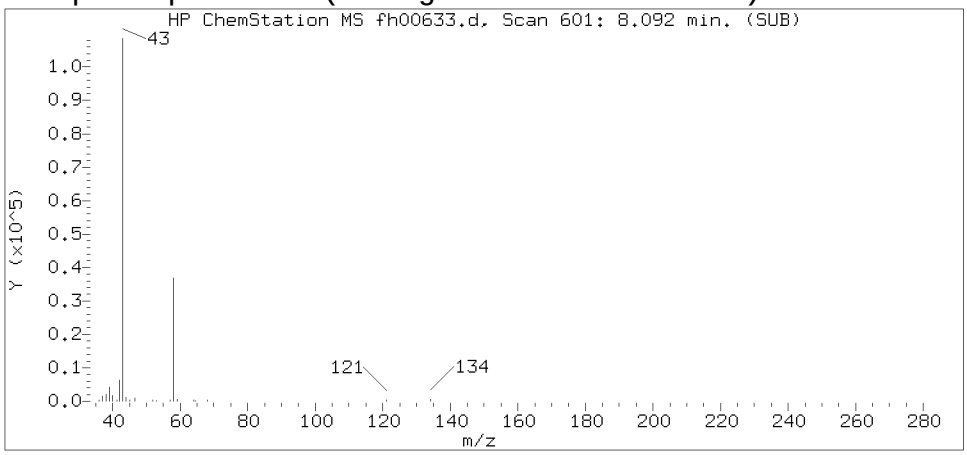
Target 3.5 esignature user ID: jeb07445

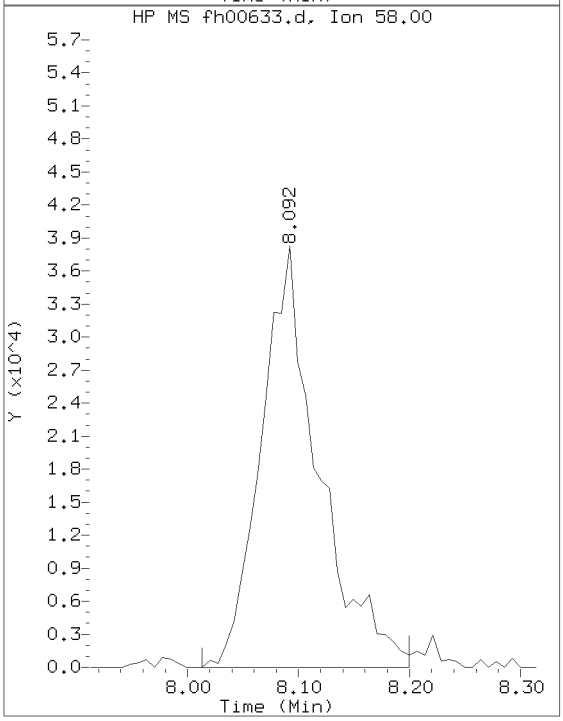
Reference Standard Spectrum for Acetone



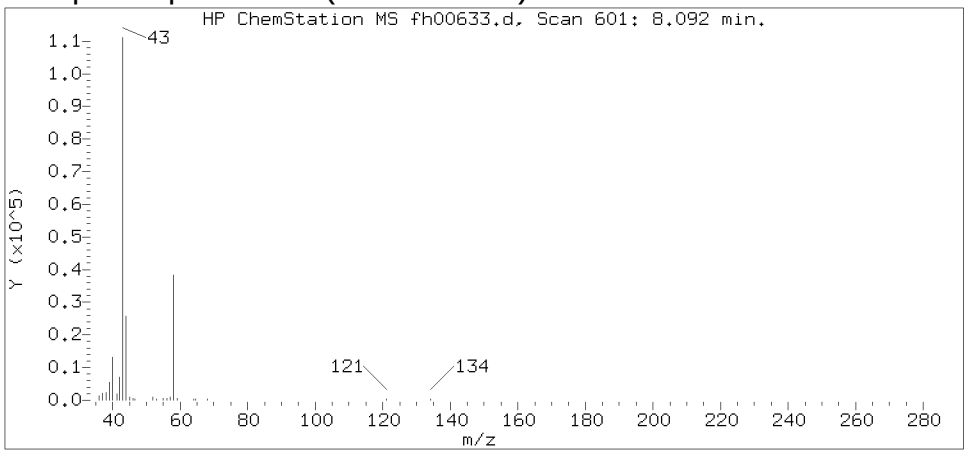


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00633.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 20:20 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Sample Name: 894-- Lab Sample ID: 9766351

Compound Number : 24
Compound Name : Acetone
Scan Number : 601
Retention Time (minutes): 8.092
Relative Retention Time :-0.00117
Quant Ion : 43.00
Area (flag) : 442896
Concentration (ppb(v)) : 3.8996

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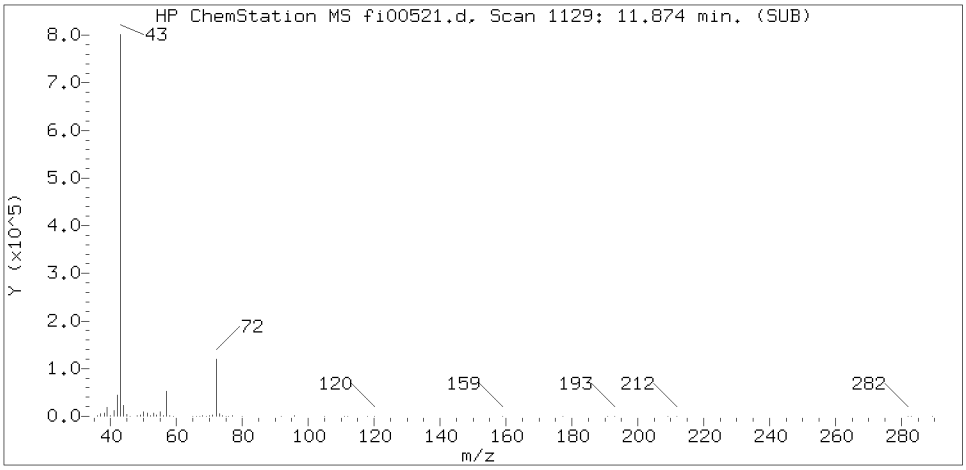
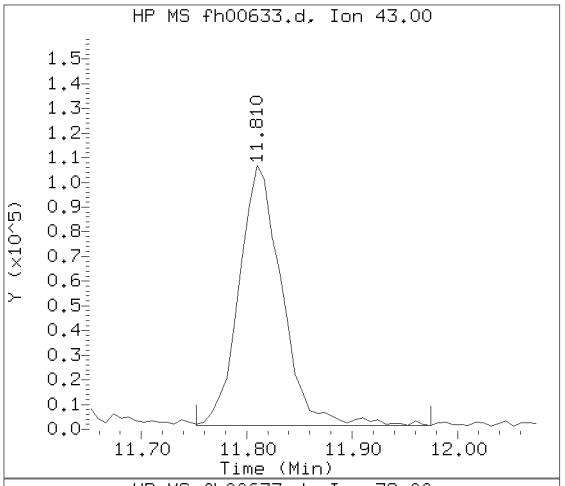
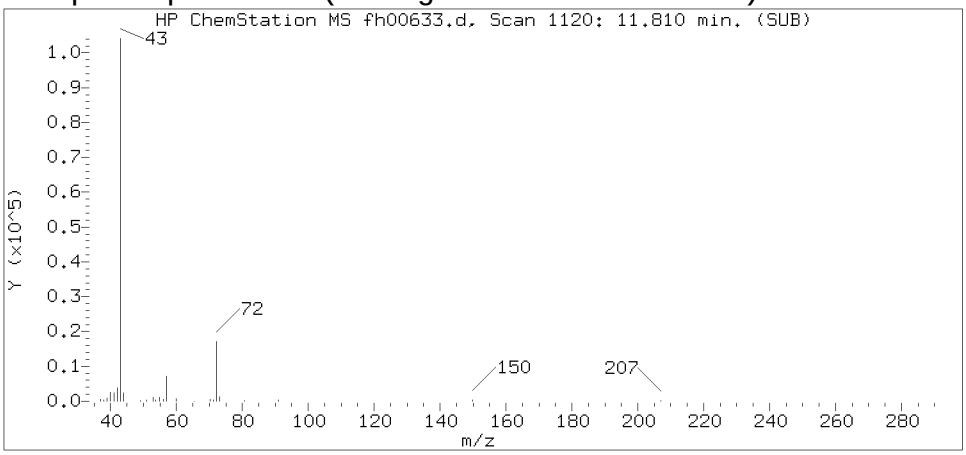
Target 3.5 esignature user ID: jeb07445

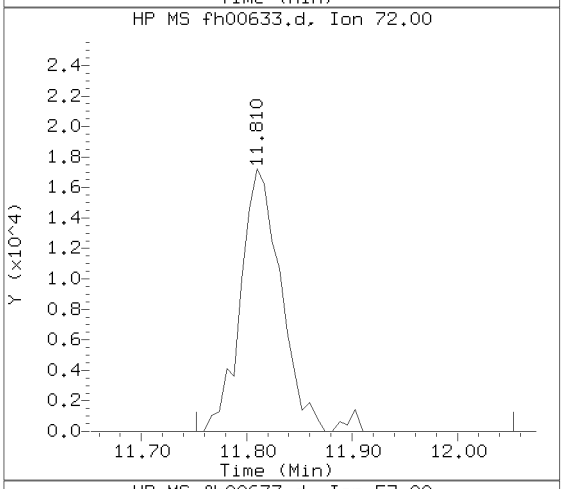
Reference Standard Spectrum for 2-Butanone



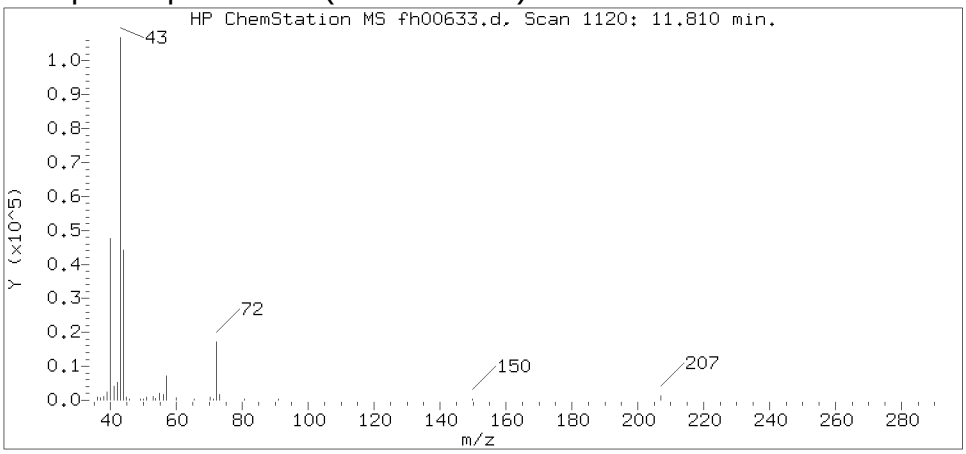


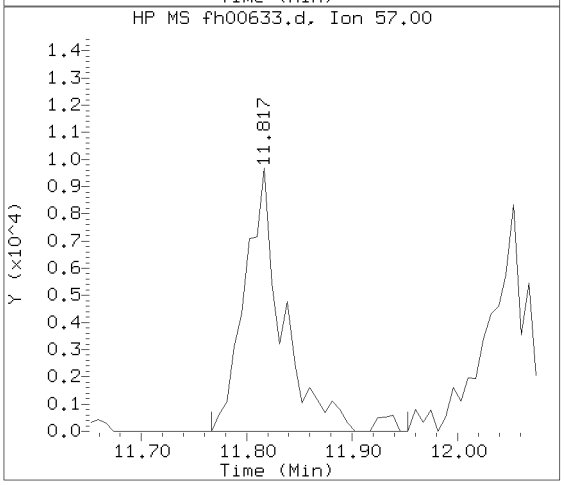
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00633.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 20:20 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Sample Name: 894-- Lab Sample ID: 9766351

Compound Number : 45
Compound Name : 2-Butanone
Scan Number : 1120
Retention Time (minutes): 11.810
Relative Retention Time : 0.00206
Quant Ion : 43.00
Area (flag) : 299235
Concentration (ppb(v)) : 1.8562

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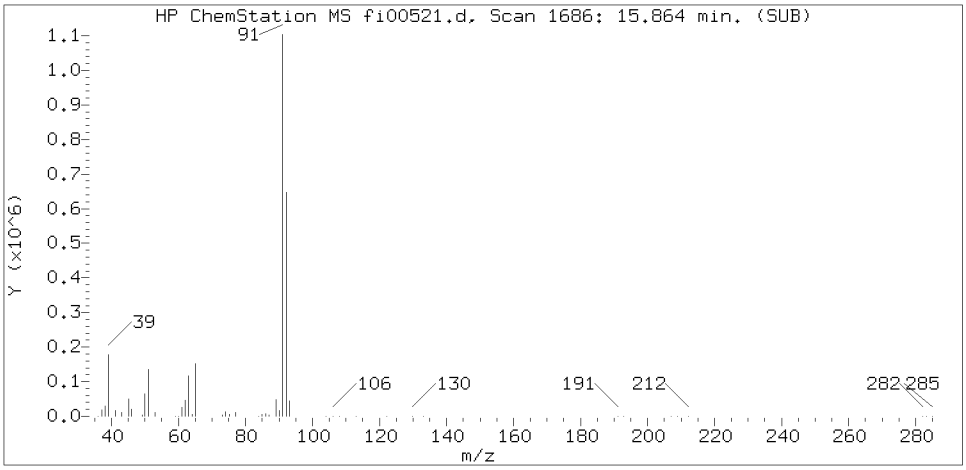
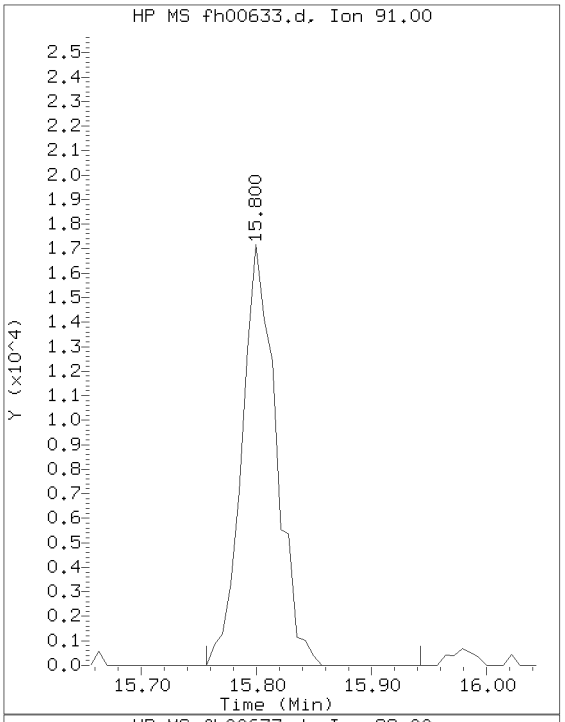
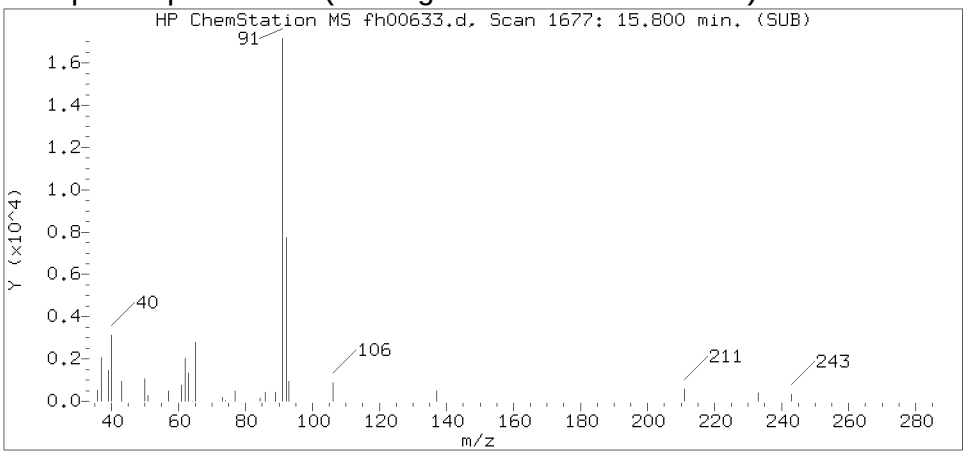
Target 3.5 esignature user ID: jeb07445

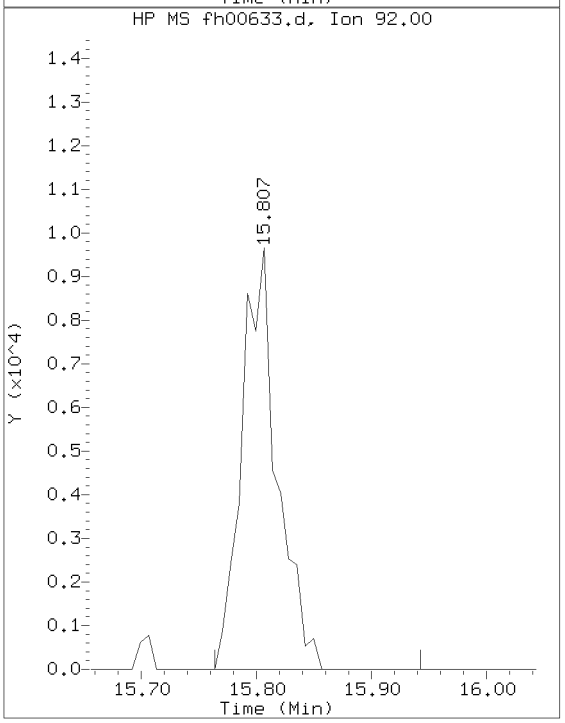
Reference Standard Spectrum for Toluene



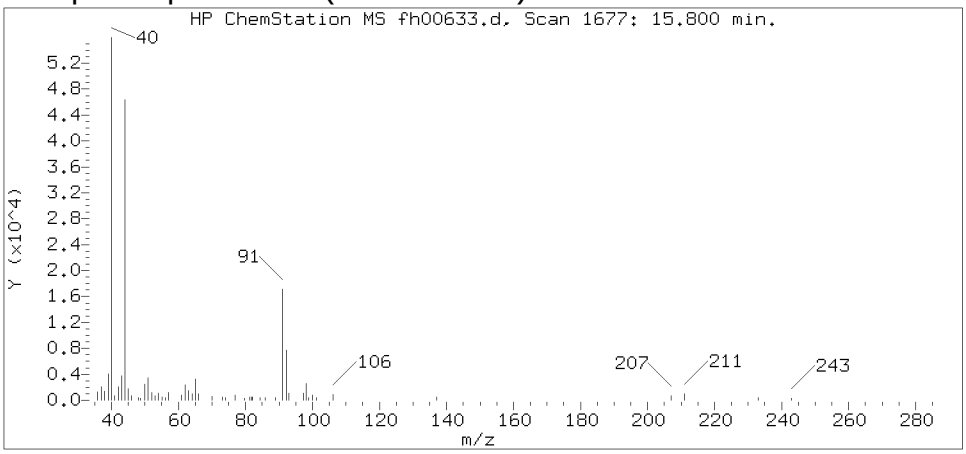


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00633.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 20:20 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:46 jeb07445

Sample Name: 894-- Lab Sample ID: 9766351

Compound Number	: 61
Compound Name	: Toluene
Scan Number	: 1677
Retention Time (minutes)	: 15.800
Relative Retention Time	:-0.00034
Quant Ion	: 91.00
Area (flag)	: 35489
Concentration (ppb(v))	: 0.1954

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Target 3.5 esignature user ID: jeb07445

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766352
Canister ID:	1157	Lab File ID:	fh00634.d
Pressure Received:	13.2 psia	Date Collected:	08/18/2018
Final Pressure:	26.5 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	20:51
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	3.5	J
75-45-6	Chlorodifluoromethane	0.53	U
76-14-2	Freon 114	0.84	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.31	U
106-99-0	1,3-Butadiene	0.38	U
74-83-9	Bromomethane	0.70	U
75-00-3	Chloroethane	0.50	U
75-43-4	Dichlorofluoromethane	0.46	U
75-69-4	Trichlorofluoromethane	1.7	J
109-66-0	Pentane	1.9	J
75-35-4	1,1-Dichloroethene	0.56	U
76-13-1	Freon 113	3.5	J
67-64-1	Acetone	12	
75-15-0	Carbon Disulfide	0.40	U
107-05-1	3-Chloropropene	0.47	U
75-09-2	Methylene Chloride	0.87	U
156-60-5	trans-1,2-Dichloroethene	0.34	U
1634-04-4	Methyl t-Butyl Ether	0.54	U
110-54-3	Hexane	0.46	U
75-34-3	1,1-Dichloroethane	0.36	U
156-59-2	cis-1,2-Dichloroethene	0.76	J
78-93-3	2-Butanone	3.2	
67-66-3	Chloroform	0.45	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766352
Canister ID:	1157	Lab File ID:	fh00634.d
Pressure Received:	13.2 psia	Date Collected:	08/18/2018
Final Pressure:	26.5 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	20:51
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
71-55-6	1,1,1-Trichloroethane	0.65	U
56-23-5	Carbon Tetrachloride	0.88	U
71-43-2	Benzene	0.52	J
107-06-2	1,2-Dichloroethane	0.32	U
540-84-1	Isooctane	0.61	U
142-82-5	Heptane	0.94	U
79-01-6	Trichloroethene	0.97	U
78-87-5	1,2-Dichloropropane	0.60	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	0.80	U
10061-01-5	cis-1,3-Dichloropropene	0.45	U
108-10-1	4-Methyl-2-Pentanone	0.61	U
108-88-3	Toluene	1.1	J
111-65-9	Octane	1.9	U
10061-02-6	trans-1,3-Dichloropropene	0.54	U
79-00-5	1,1,2-Trichloroethane	0.65	U
127-18-4	Tetrachloroethene	2.6	J
591-78-6	2-Hexanone	0.74	U
124-48-1	Dibromochloromethane	1.1	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	0.60	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	0.83	U
179601-23-1	m/p-Xylene	1.1	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766352
Canister ID:	1157	Lab File ID:	fh00634.d
Pressure Received:	13.2 psia	Date Collected:	08/18/2018
Final Pressure:	26.5 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	20:51
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
95-47-6	o-Xylene	0.83	U
100-42-5	Styrene	0.85	U
75-25-2	Bromoform	1.8	U
98-82-8	Cumene	1.2	U
108-86-1	Bromobenzene	0.64	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	0.84	U
622-96-8	4-Ethyltoluene	0.88	U
108-67-8	1,3,5-Trimethylbenzene	1.6	U
95-63-6	1,2,4-Trimethylbenzene	1.4	U
541-73-1	1,3-Dichlorobenzene	1.1	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.2	U
67-72-1	Hexachloroethane	2.6	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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

Data file: /chem/HP26379.i/18aug27.b/fh00634.d Injection date and time: **27-AUG-2018 20:51**
Data file Sample Info. Line: 9766352;400;F1823930AA;1157-;0;0;SAMPLE; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 28-Aug-2018 12:47 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.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): 200 cc Actual injection Volume (IVa): 400 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.115(-0.021)	1023	130	357390 (-16)	10.00		255500 - 596166
52) 1,4-Difluorobenzene	13.400(-0.007)	1342	114	1200809 (-20)	10.00		906195 - 2114453
71) Chlorobenzene-d5	18.235(0.000)	2017	117	1231606 (-16)	10.00		883644 - 2061835

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)	4.016(-0.000)	85	84263M	0.706	0.71		J	0.13	1
3) Chlorodifluoromethane	(1)			Not Detected					0.15	1
4) Freon 114	(1)			Not Detected					0.12	1
5) Chloromethane	(1)			Not Detected					0.24	1
6) Vinyl Chloride	(1)			Not Detected					0.12	1
7) 1,3-Butadiene	(1)			Not Detected					0.17	1
8) Bromomethane	(1)			Not Detected					0.18	1
9) Chloroethane	(1)			Not Detected					0.19	1
13) Dichlorofluoromethane	(1)			Not Detected					0.11	1
12) Trichlorofluoromethane	(1)	5.864(0.001)	101	35727	0.305	0.30		J	0.15	1
11) Pentane	(1)	5.843(0.002)	43	82337	0.636	0.64		J	0.13	1
16) 1,1-Dichloroethene	(1)			Not Detected					0.14	1
17) Freon 113	(1)	6.903(0.001)	103	31337	0.451	0.45		J	0.11	1
24) Acetone	(1)	8.128(-0.004)	43	588465	5.146	5.15			0.53	5
18) Carbon Disulfide	(1)			Not Detected					0.13	1
22) 3-Chloropropene	(1)			Not Detected					0.15	1
23) Methylene Chloride	(1)			Not Detected					0.25	2
25) trans-1,2-Dichloroethene	(1)			Not Detected					0.086	1
27) Methyl t-Butyl Ether	(1)			Not Detected					0.15	1
26) Hexane	(1)			Not Detected					0.13	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.089	1
35) cis-1,2-Dichloroethene	(1)	10.714(0.001)	61	18522	0.191	0.19		J	0.12	1
45) 2-Butanone	(1)	11.831(0.000)	43	173451	1.069	1.07			0.21	1
39) Chloroform	(1)			Not Detected					0.092	1
44) 1,1,1-Trichloroethane	(1)			Not Detected					0.12	1
42) Carbon Tetrachloride	(1)			Not Detected					0.14	1
48) Benzene	(2)	12.318(0.001)	78	25438	0.164	0.16		J	0.11	1
50) 1,2-Dichloroethane	(2)			Not Detected					0.08	1
46) Isooctane	(2)			Not Detected					0.13	1
47) Heptane	(2)			Not Detected					0.23	1
51) Trichloroethene	(2)			Not Detected					0.18	1
55) 1,2-Dichloropropane	(2)			Not Detected					0.13	1
53) Dibromomethane	(2)			Not Detected					0.14	1
56) Bromodichloromethane	(2)			Not Detected					0.12	1
59) cis-1,3-Dichloropropene	(2)			Not Detected					0.1	1
62) 4-Methyl-2-Pentanone	(2)			Not Detected					0.15	1
61) Toluene	(3)	15.806(-0.000)	91	55192	0.303	0.30		J	0.12	1
60) Octane	(3)			Not Detected					0.4	2
64) trans-1,3-Dichloropropene	(3)			Not Detected					0.12	1
67) 1,1,2-Trichloroethane	(3)			Not Detected					0.12	1
63) Tetrachloroethene	(3)	16.430(-0.000)	166	33333	0.386	0.39		J	0.25	2
70) 2-Hexanone	(3)			Not Detected					0.18	1
68) Dibromochloromethane	(3)			Not Detected					0.13	1

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:59. Target 3.5 esignature user ID: jeb07445

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

Data file: /chem/HP26379.i/18aug27.b/fh00634.d Injection date and time: **27-AUG-2018 20:51**
Data file Sample Info. Line: 9766352;400;F1823930AA;1157-;0;0;SAMPLE; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 28-Aug-2018 12:47 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.d**

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

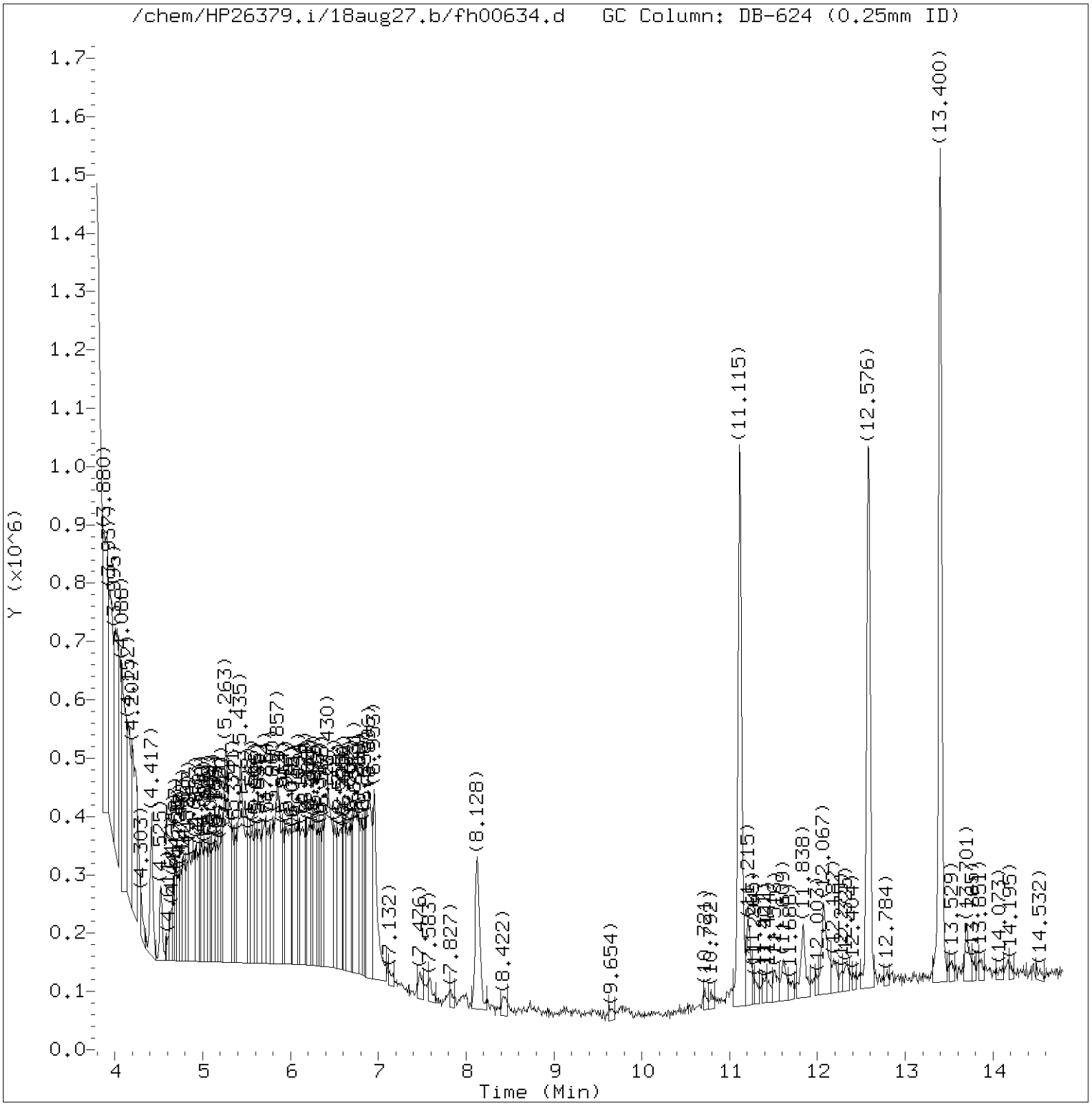
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 26.5 psia Canister Pressure before dilution (Ya): 13.2 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 400 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
69) 1,2-Dibromoethane	(3)			Not Detected					0.13	1
72) Chlorobenzene	(3)			Not Detected					0.13	1
74) 1,1,1,2-Tetrachloroethane	(3)			Not Detected					0.15	1
73) Ethylbenzene	(3)			Not Detected					0.19	1
75) m/p-Xylene	(3)			Not Detected					0.26	2
76) o-Xylene	(3)			Not Detected					0.19	1
78) Styrene	(3)			Not Detected					0.2	1
79) Bromoform	(3)			Not Detected					0.17	1
80) Cumene	(3)			Not Detected					0.24	1
82) Bromobenzene	(3)			Not Detected					0.1	1
83) 1,1,2,2-Tetrachloroethane	(3)			Not Detected					0.15	1
87) 1,2,3-Trichloropropane	(3)			Not Detected					0.14	1
84) 4-Ethyltoluene	(3)			Not Detected					0.18	1
86) 1,3,5-Trimethylbenzene	(3)			Not Detected					0.32	2
90) 1,2,4-Trimethylbenzene	(3)			Not Detected					0.28	2
93) 1,3-Dichlorobenzene	(3)			Not Detected					0.19	1
94) 1,4-Dichlorobenzene	(3)			Not Detected					0.17	1
98) 1,2-Dichlorobenzene	(3)			Not Detected					0.2	1
97) Hexachloroethane	(3)			Not Detected					0.27	2

Total number of targets = 62

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:59. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:40. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

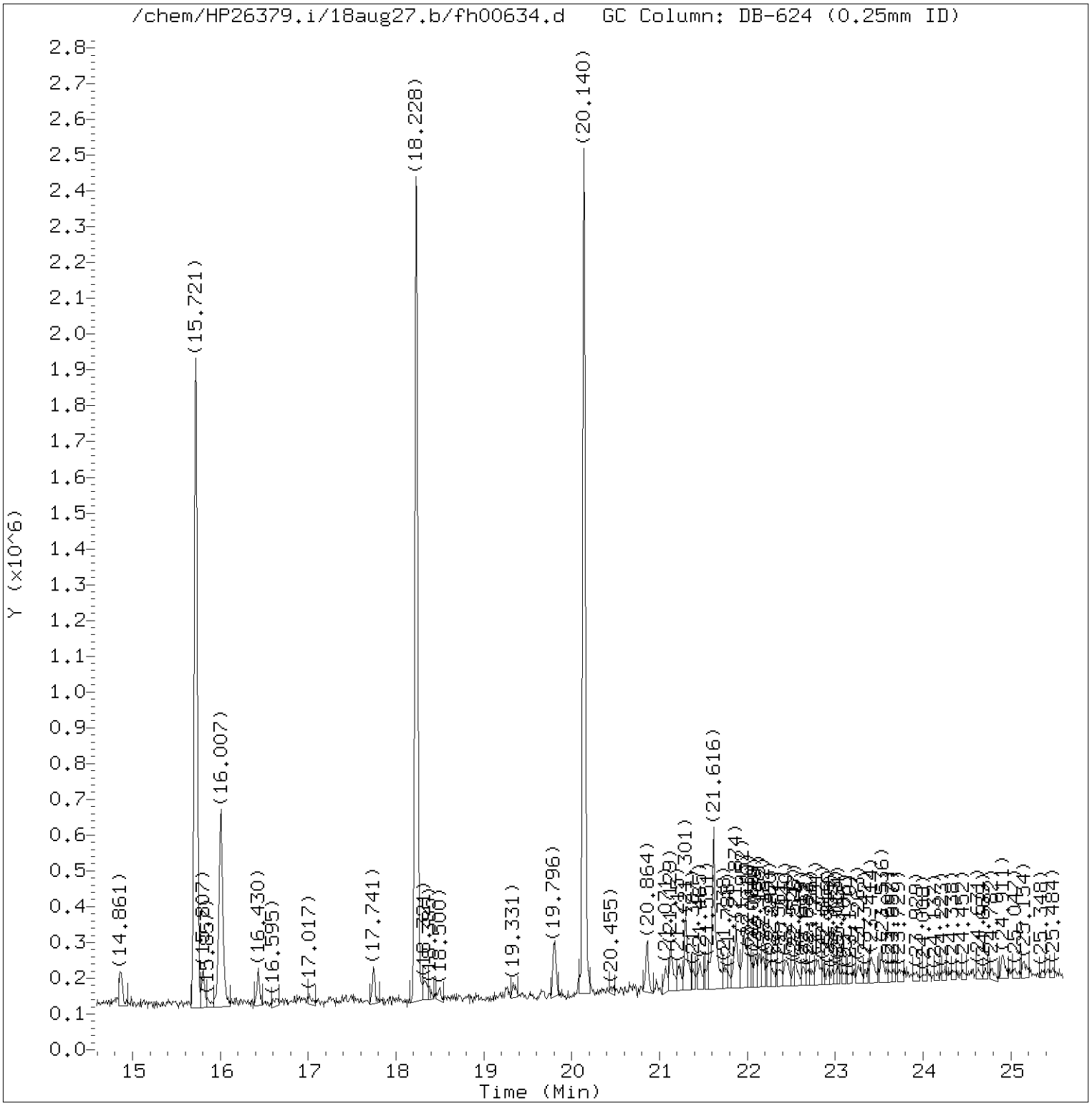
Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00634.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 20:51 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:47 jeb07445

Sample Name: 1157- Lab Sample ID: 9766352

Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00634.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 20:51 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:47 jeb07445

Sample Name: 1157- Lab Sample ID: 9766352

Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00634.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 20:51 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:47 jeb07445

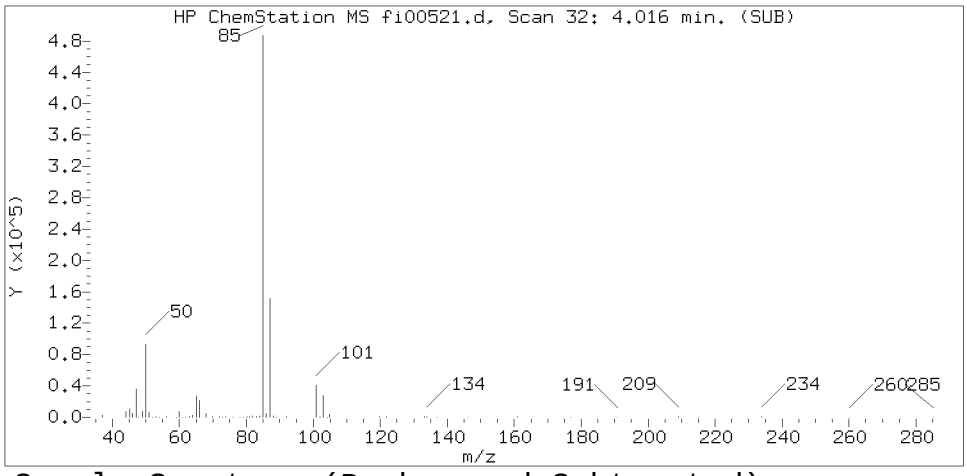
Sample Name: 1157- Lab Sample ID: 9766352

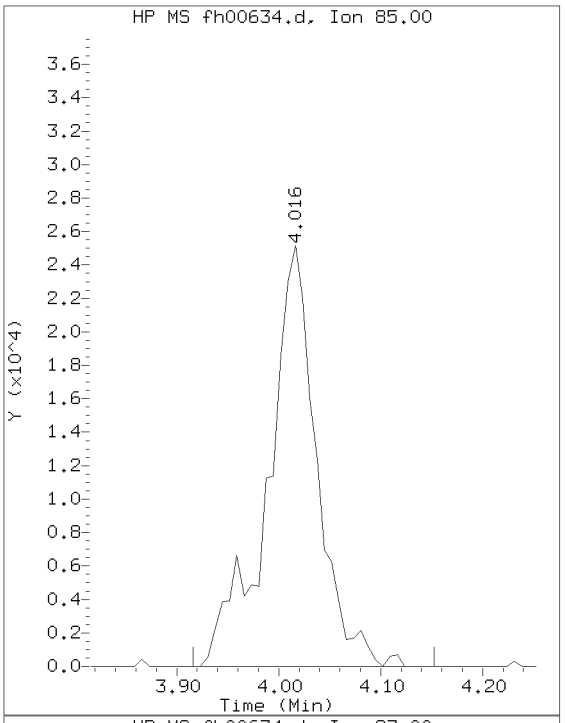
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
2) Dichlorodifluoromethane	(1)	4.016	85	84263M	0.706
11) Pentane	(1)	5.843	43	82337	0.636
12) Trichlorofluoromethane	(1)	5.864	101	35727	0.305
17) Freon 113	(1)	6.903	103	31337	0.451
24) Acetone	(1)	8.128	43	588465	5.146
35) cis-1,2-Dichloroethene	(1)	10.714	61	18522	0.191
37)*Bromochloromethane	(1)	11.115	130	357390	10.000
45) 2-Butanone	(1)	11.831	43	173451	1.069
48) Benzene	(2)	12.318	78	25438	0.164
52)*1,4-Difluorobenzene	(2)	13.400	114	1200809	10.000
61) Toluene	(3)	15.807	91	55192	0.303
63) Tetrachloroethene	(3)	16.430	166	33333	0.386
71)*Chlorobenzene-d5	(3)	18.235	117	1231606	10.000

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

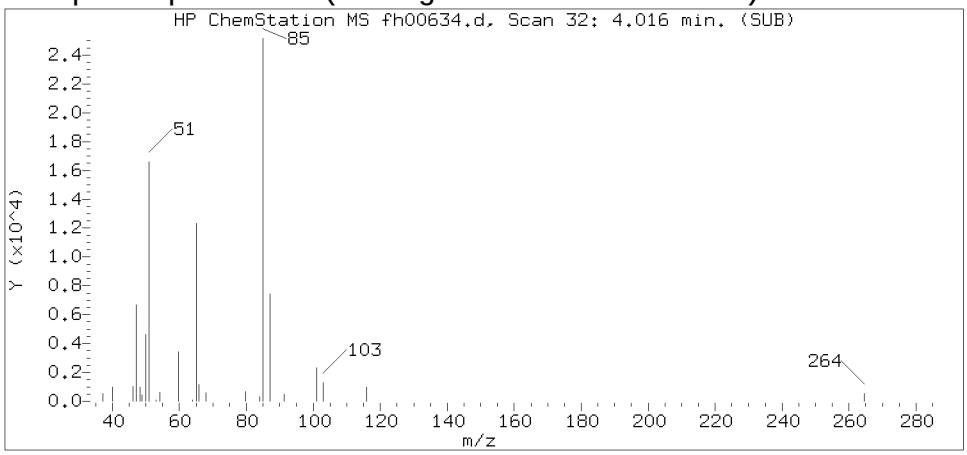
Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07445

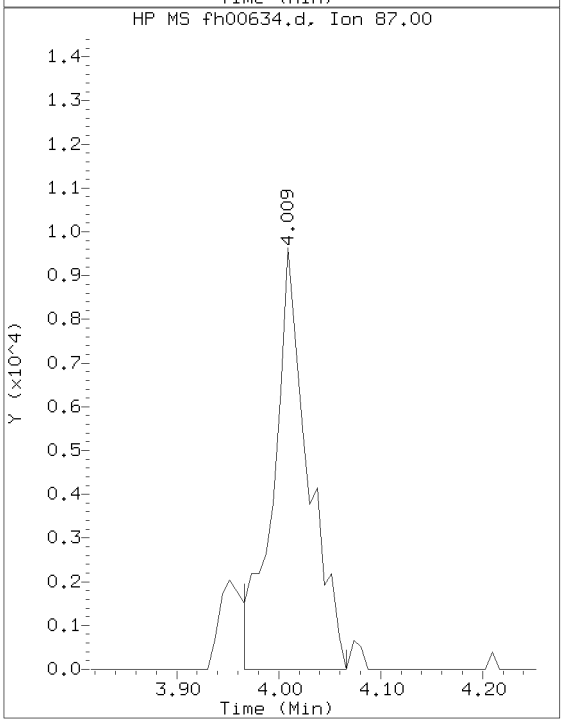
Reference Standard Spectrum for Dichlorodifluoromethane



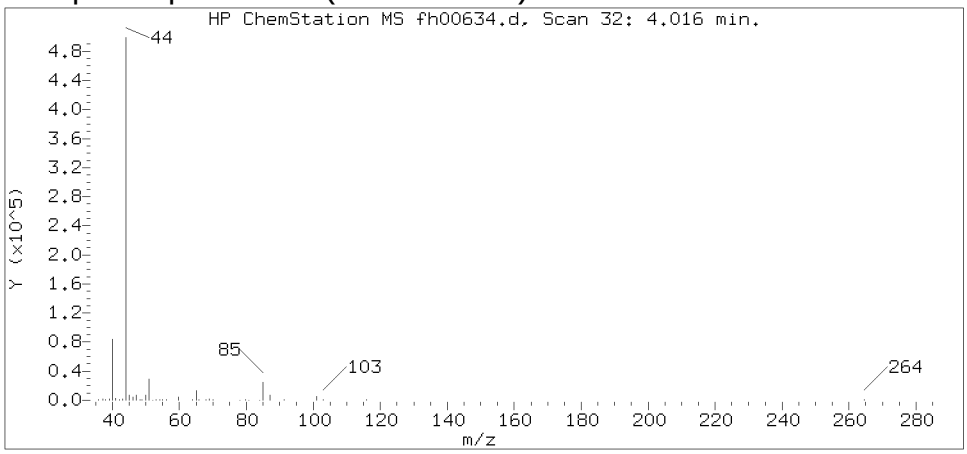


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00634.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 20:51 Analyst ID: jeb07445

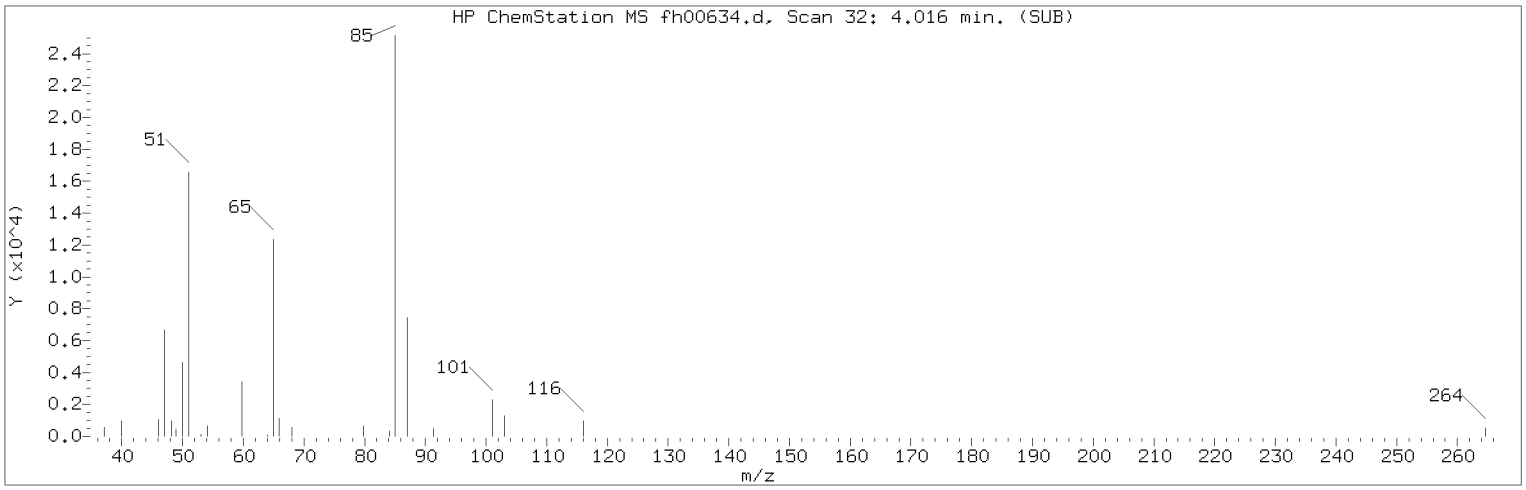
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:47 jeb07445

Sample Name: 1157- Lab Sample ID: 9766352

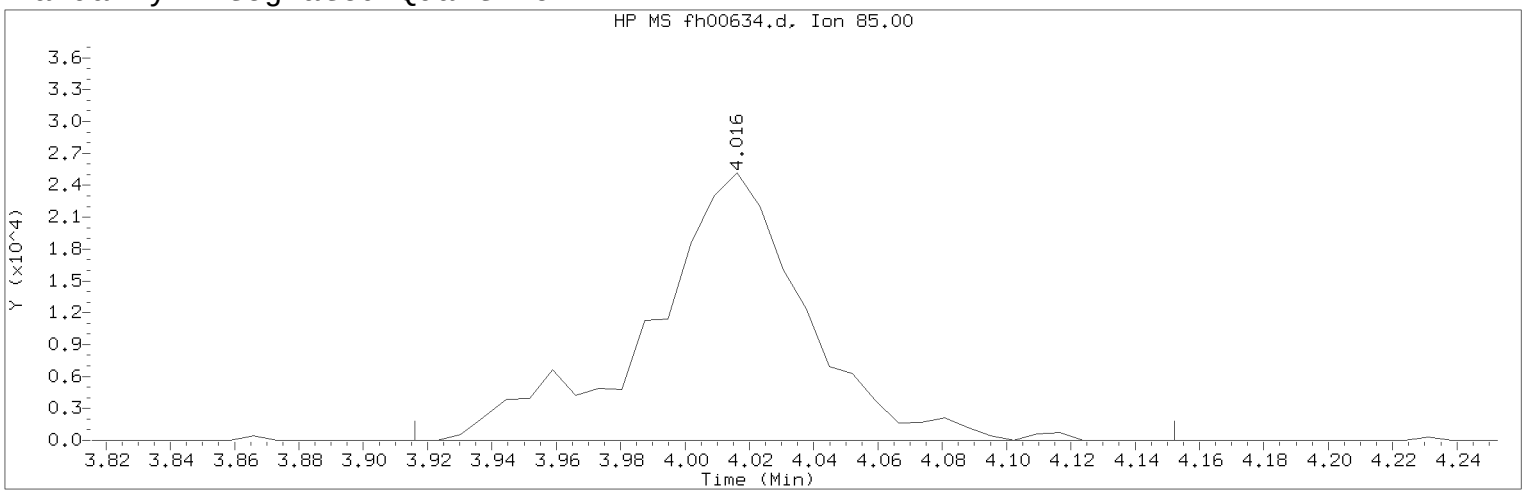
Compound Number : 2
Compound Name : Dichlorodifluoromethane
Scan Number : 32
Retention Time (minutes): 4.016
Relative Retention Time :-0.00059
Quant Ion : 85.00
Area (flag) : 84263M
Concentration (ppb(v)) : 0.7060

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug27.b/fh00634.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 20:51 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:47 jeb07445

Sample Name: 1157- Lab Sample ID: 9766352

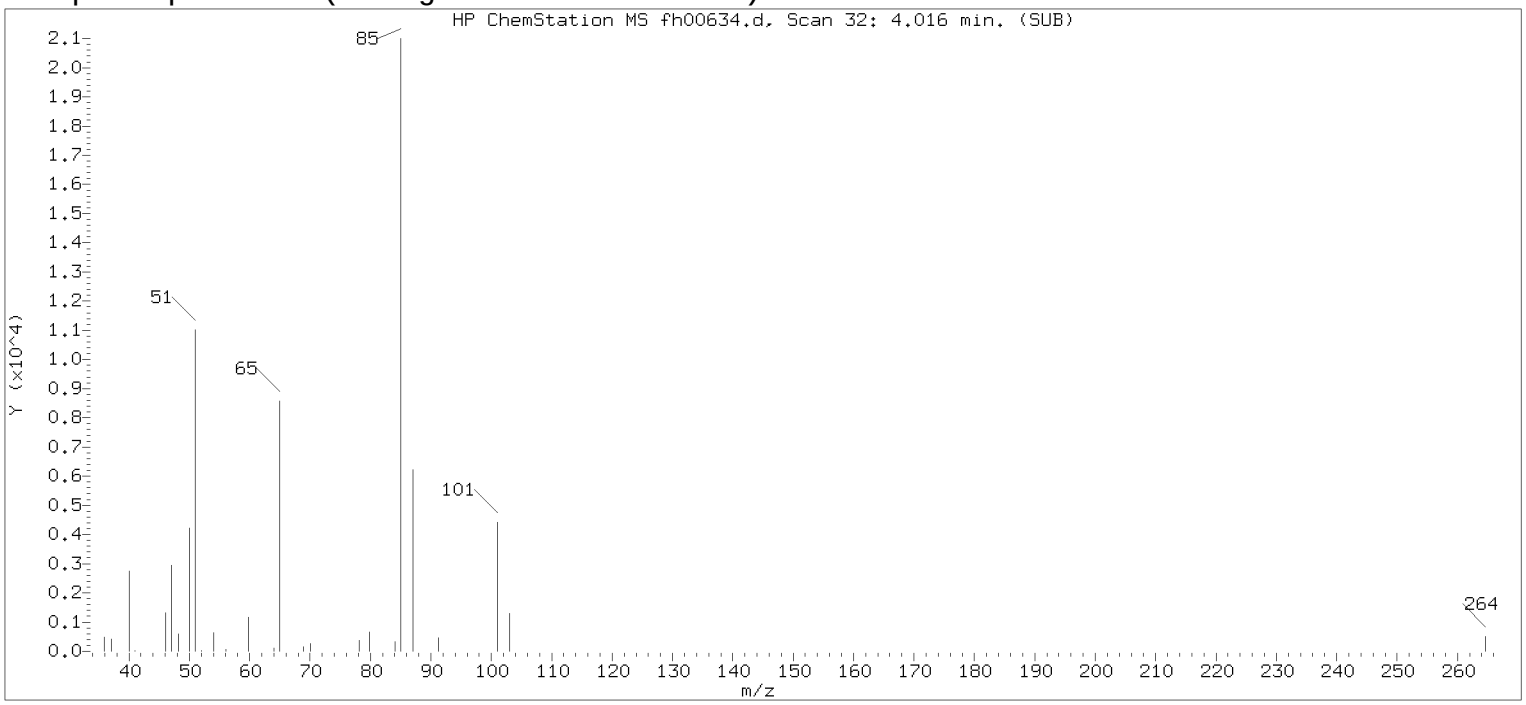
Compound Number : 2
Compound Name : Dichlorodifluoromethane
Scan Number : 32
Retention Time (minutes): 4.016
Quant Ion : 85.00
Area (flag) : 84263M
Concentration (ppb(v)) : 0.7060
Integration start scan : 17 Integration stop scan: 50
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

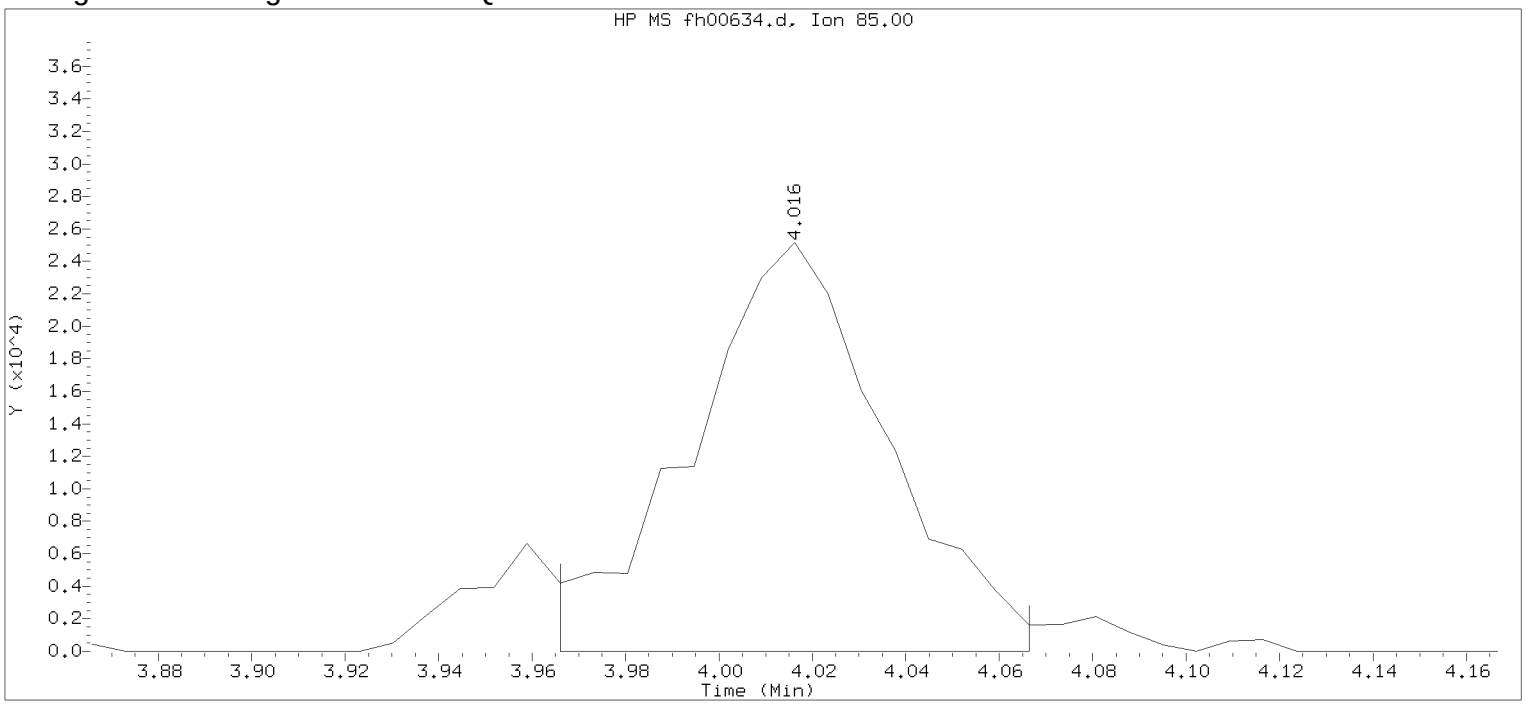
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:40.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug27.b/fh00634.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 20:51 Analyst ID: jeb07445

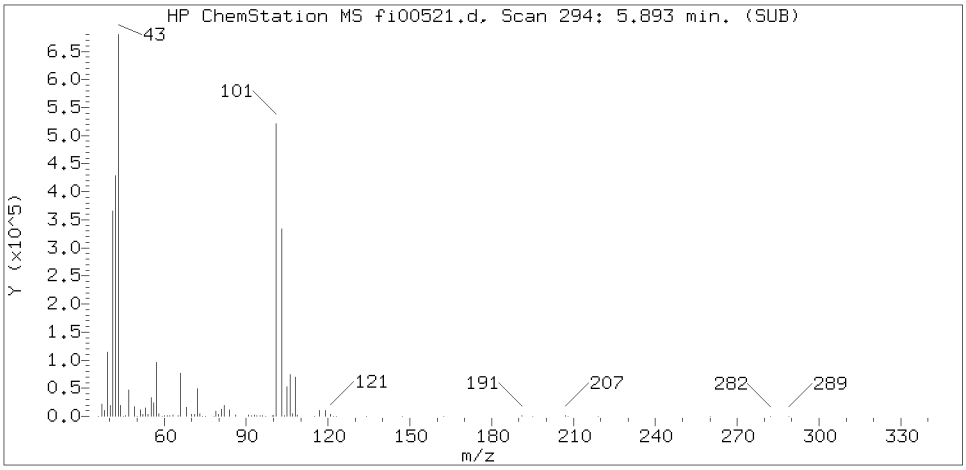
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 21:20 Unknown

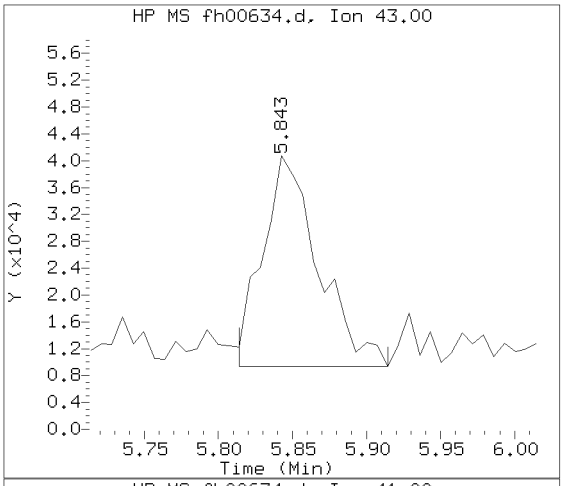
Sample Name: 1157- Lab Sample ID: 9766352

Compound Number : 2
Compound Name : Dichlorodifluoromethane
Scan Number : 32
Retention Time (minutes): 4.016
Quant Ion : 85.00
Area : 72774
Concentration (ppb(v)) : 0.6097
Integration start scan : 24 Integration stop scan: 38
Y at integration start : 0 Y at integration end: 0

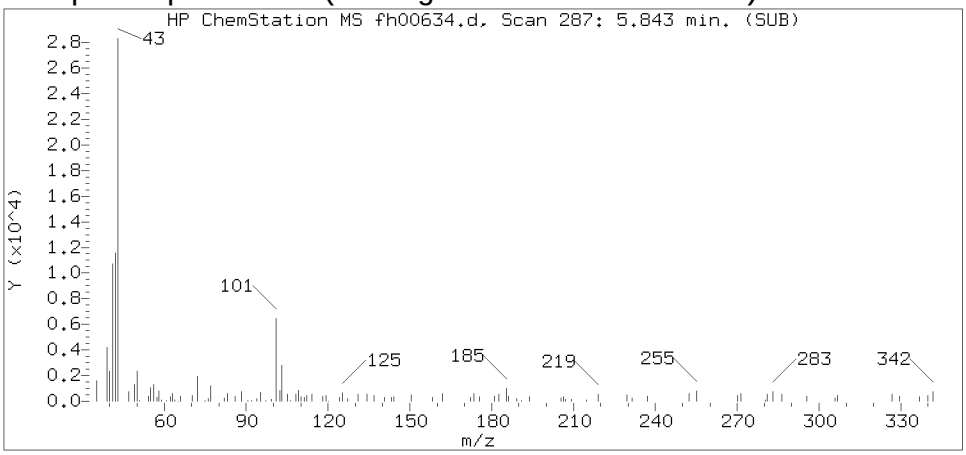
Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07445

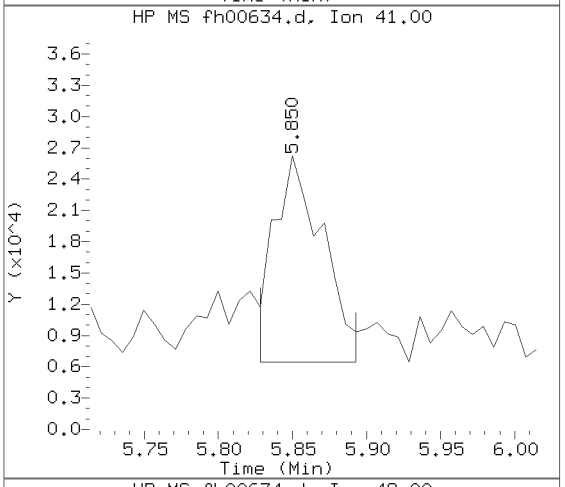
Reference Standard Spectrum for Pentane



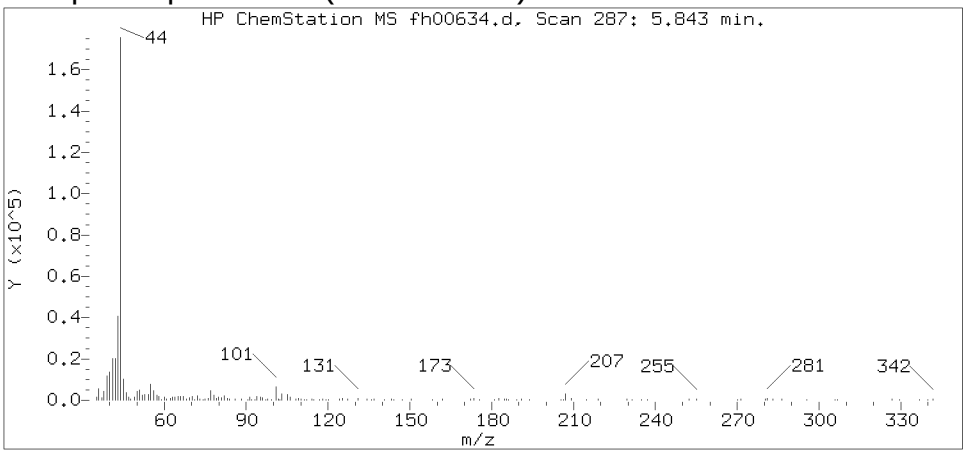


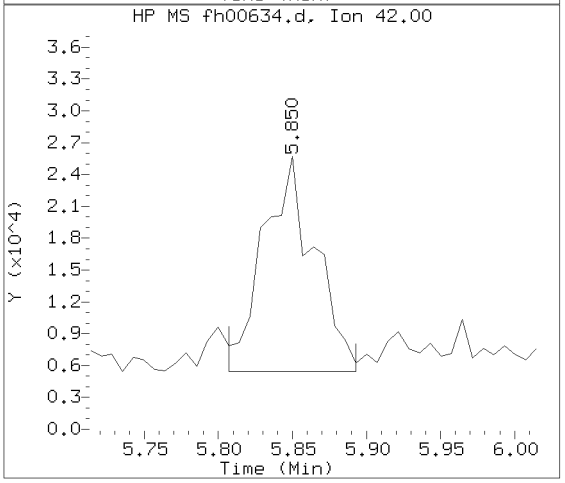
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00634.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 20:51 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:47 jeb07445

Sample Name: 1157- Lab Sample ID: 9766352

Compound Number : 11
Compound Name : Pentane
Scan Number : 287
Retention Time (minutes): 5.843
Relative Retention Time : 0.00296
Quant Ion : 43.00
Area (flag) : 82337
Concentration (ppb(v)) : 0.6356

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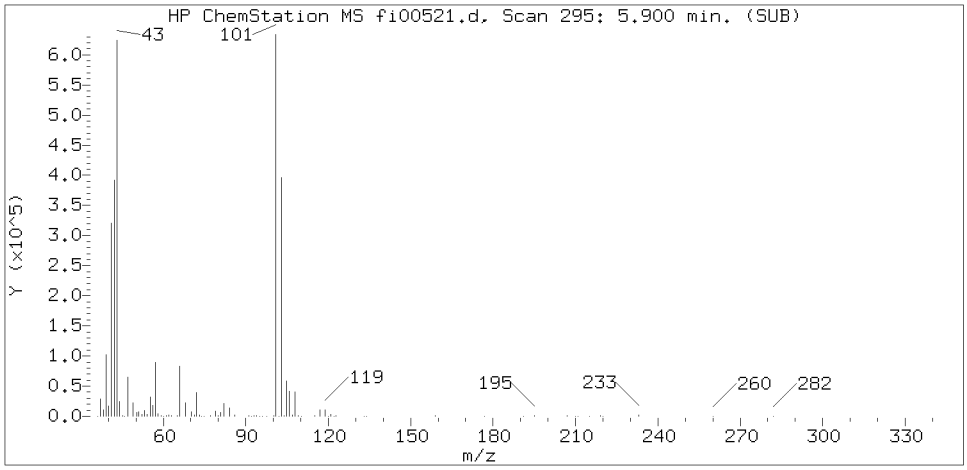
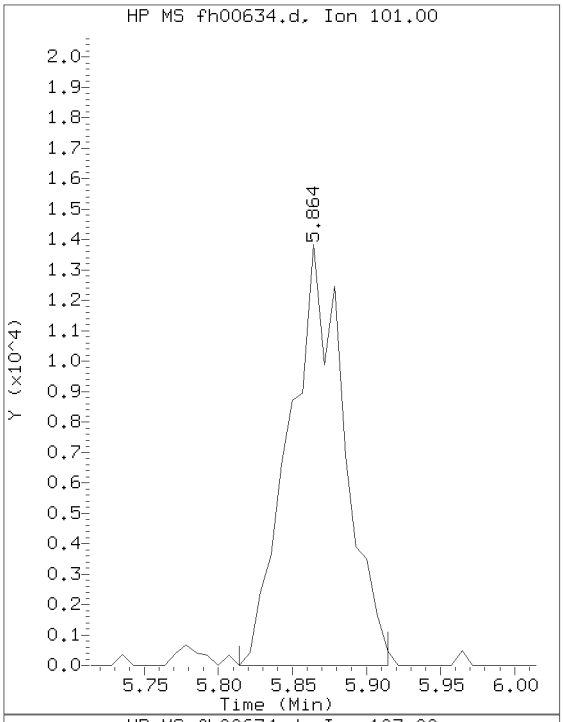
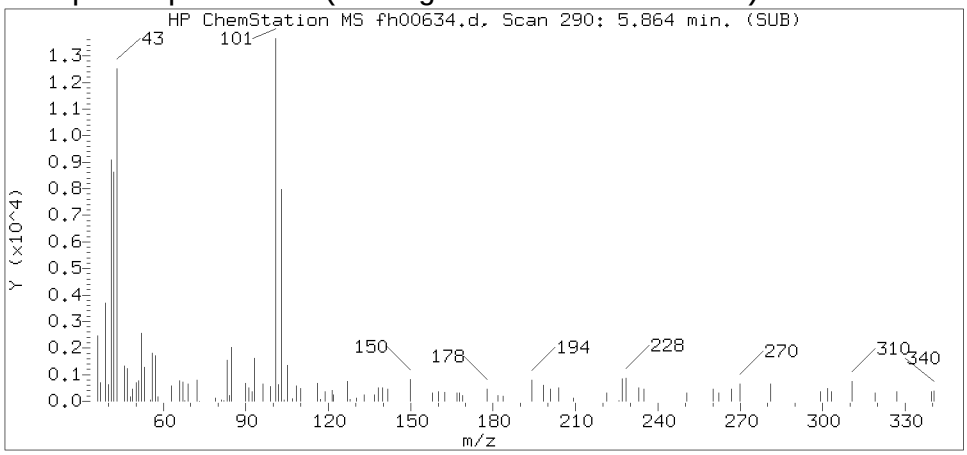
Target 3.5 esignature user ID: jeb07445

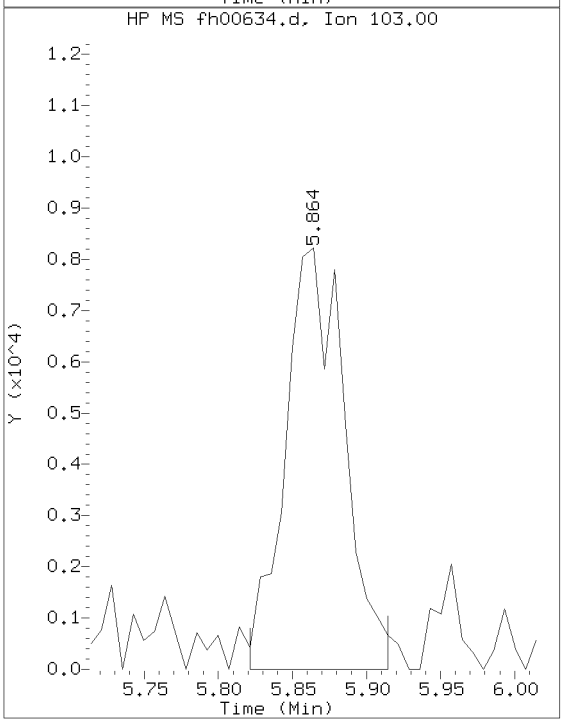
Reference Standard Spectrum for Trichlorofluoromethane



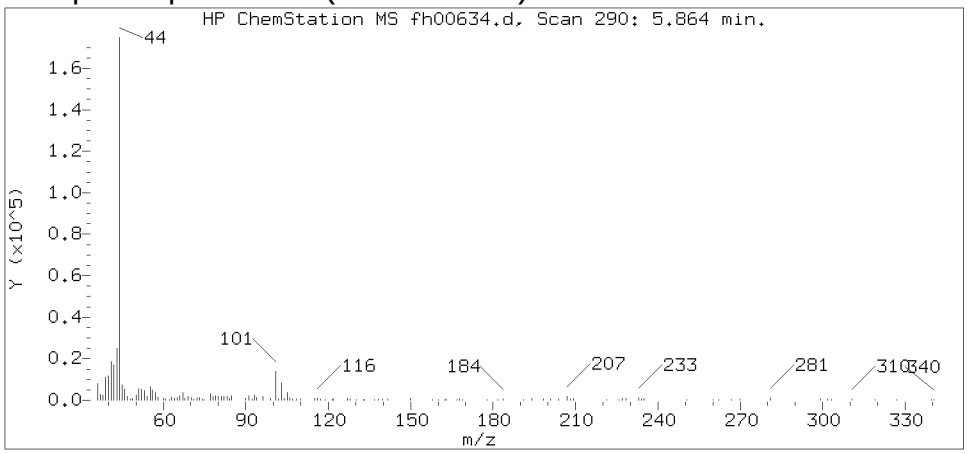


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00634.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 20:51 Analyst ID: jeb07445

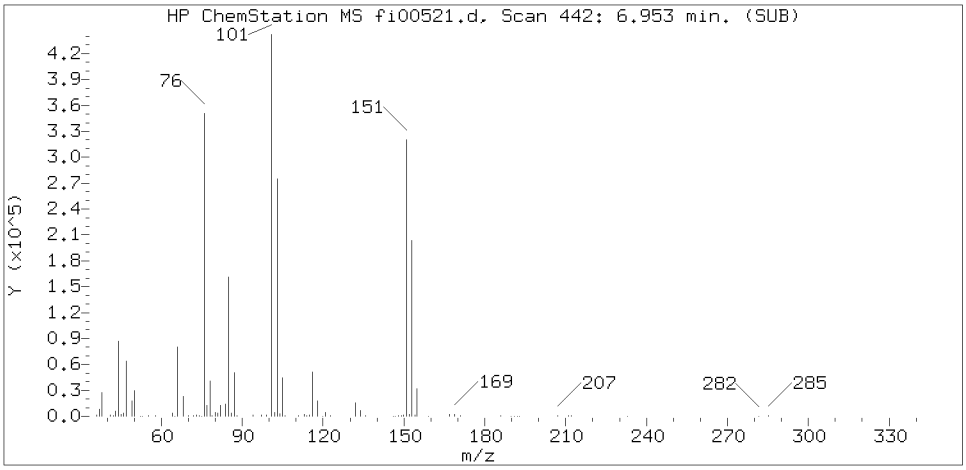
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:47 jeb07445

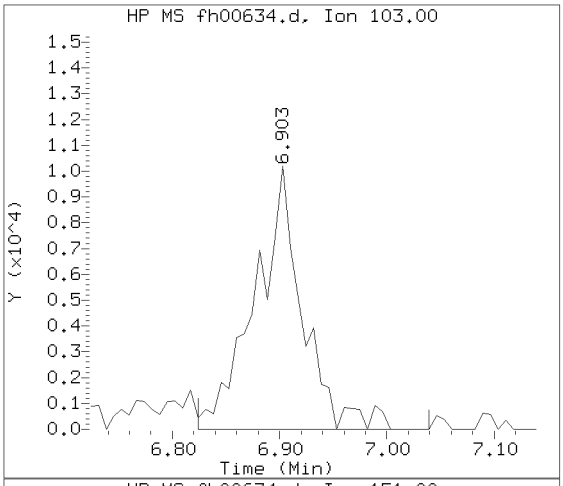
Sample Name: 1157- Lab Sample ID: 9766352

Compound Number	: 12
Compound Name	: Trichlorofluoromethane
Scan Number	: 290
Retention Time (minutes)	: 5.864
Relative Retention Time	: 0.00167
Quant Ion	: 101.00
Area (flag)	: 35727
Concentration (ppb(v))	: 0.3049

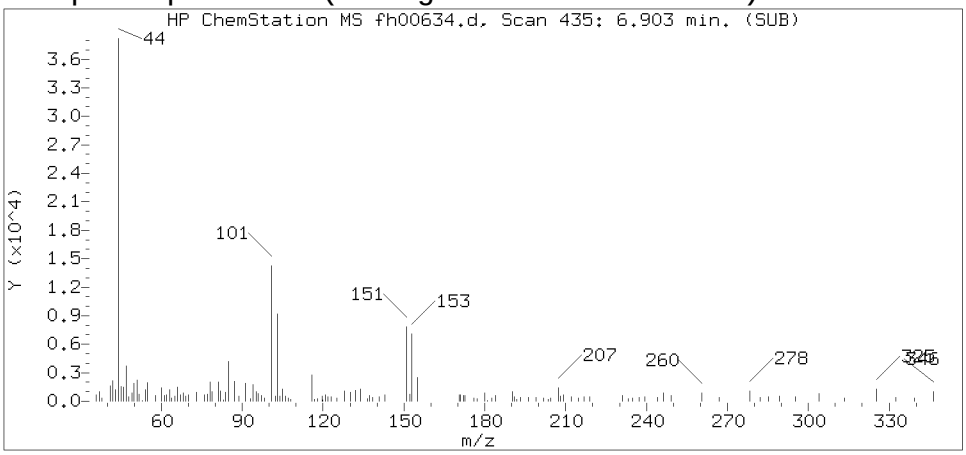
Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07445

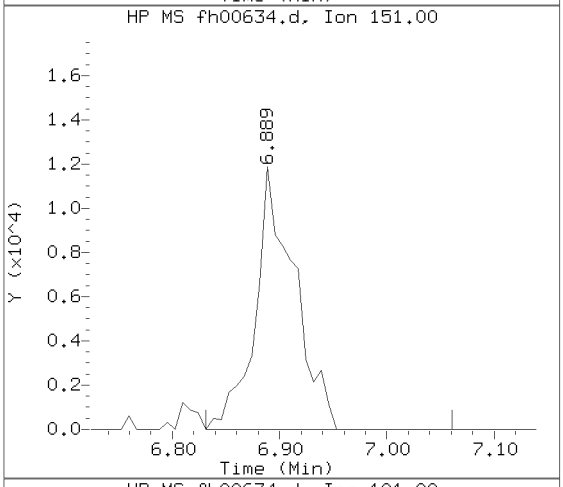
Reference Standard Spectrum for Freon 113



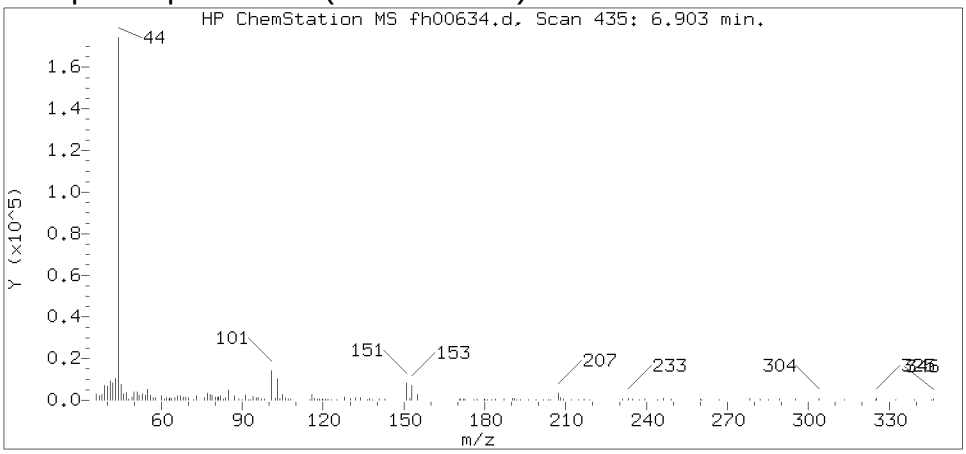


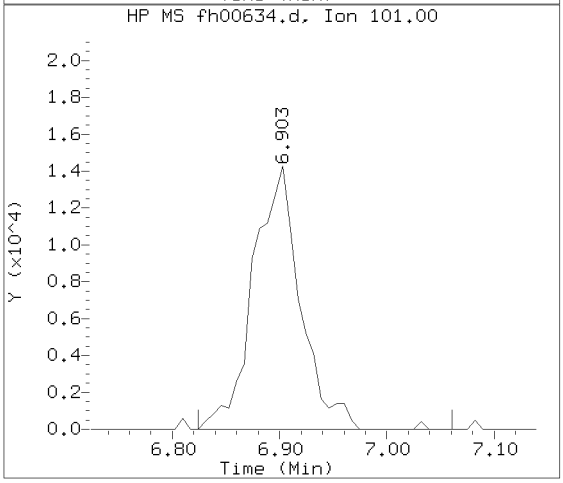
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00634.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 20:51 Analyst ID: jeb07445

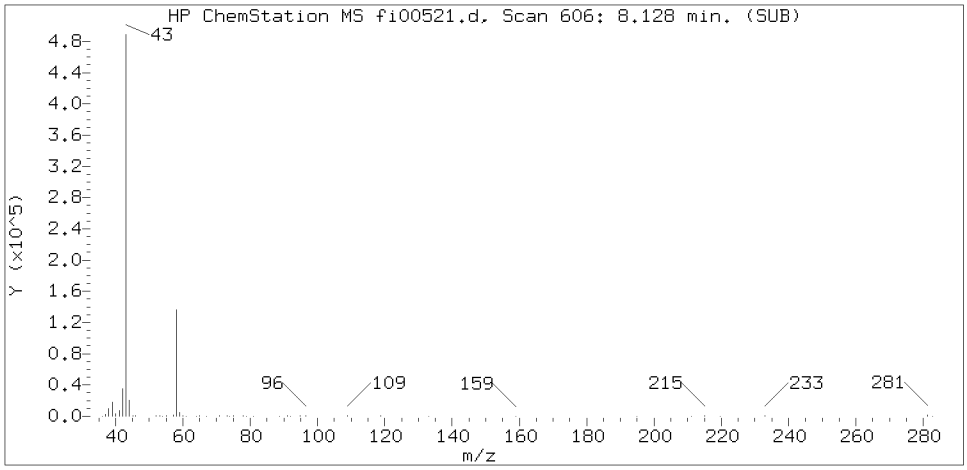
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:47 jeb07445

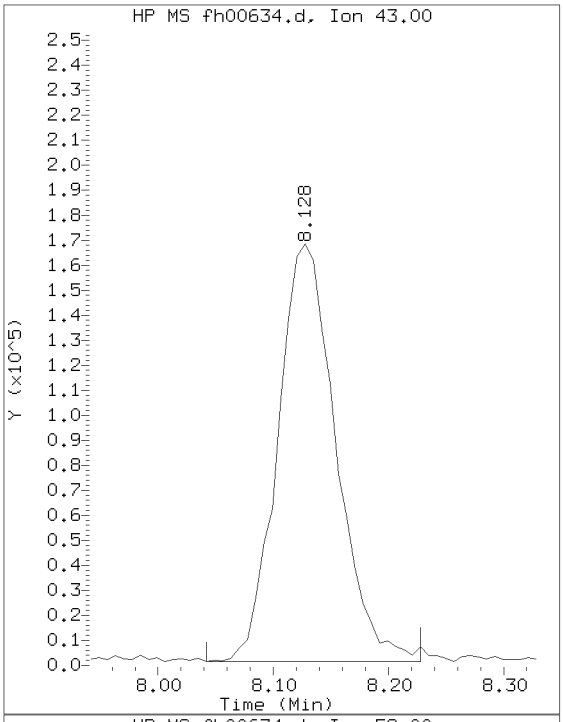
Sample Name: 1157- Lab Sample ID: 9766352

Compound Number	: 17
Compound Name	: Freon 113
Scan Number	: 435
Retention Time (minutes)	: 6.903
Relative Retention Time	: 0.00185
Quant Ion	: 103.00
Area (flag)	: 31337
Concentration (ppb(v))	: 0.4507

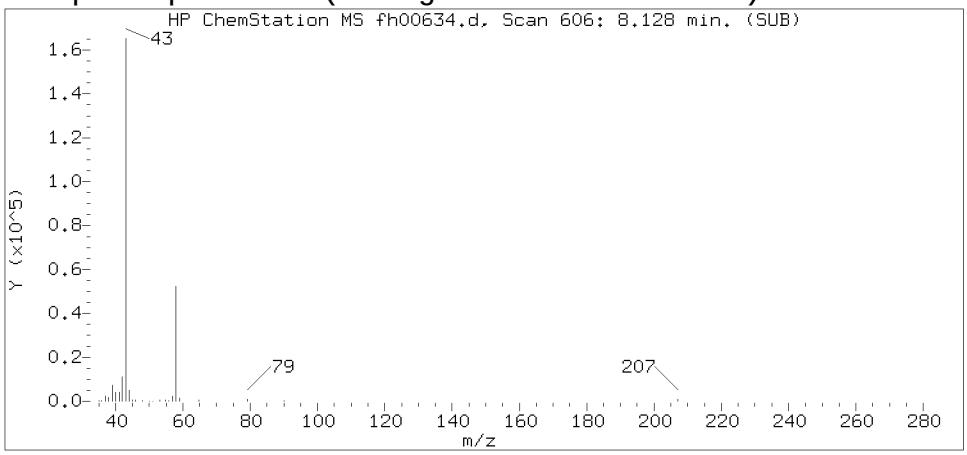
Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07445

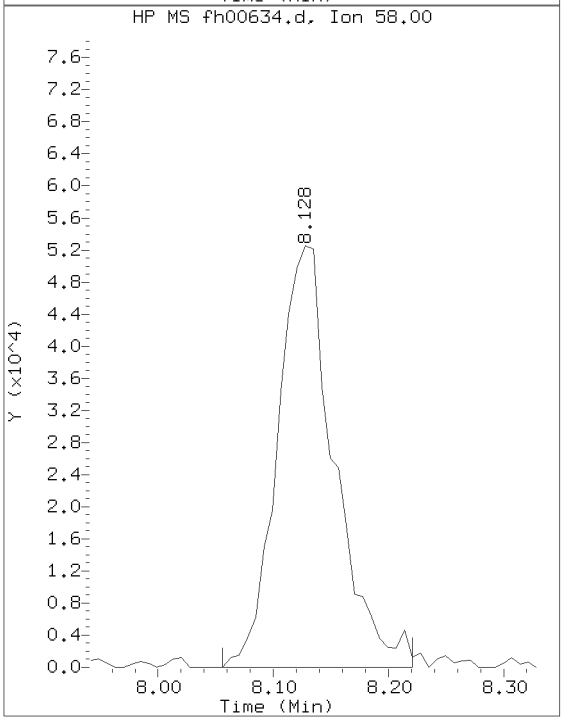
Reference Standard Spectrum for Acetone



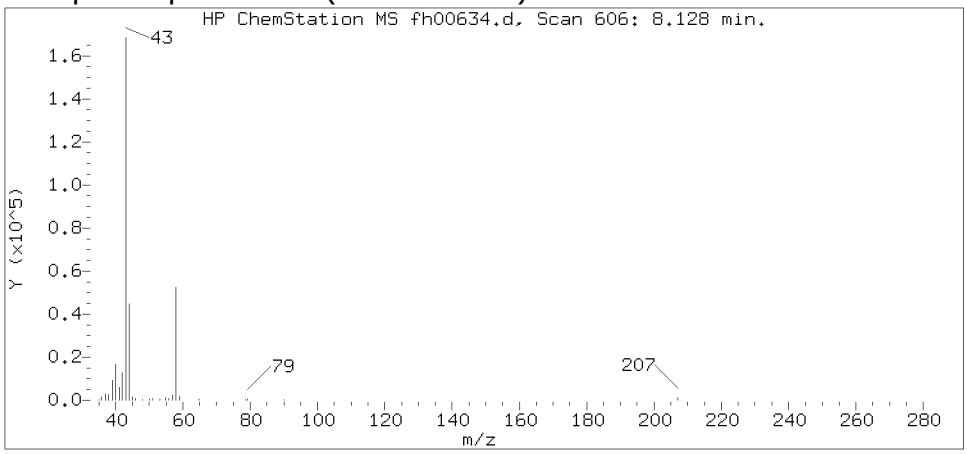


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00634.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 20:51 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:47 jeb07445

Sample Name: 1157- Lab Sample ID: 9766352

Compound Number : 24
Compound Name : Acetone
Scan Number : 606
Retention Time (minutes): 8.128
Relative Retention Time :-0.00439
Quant Ion : 43.00
Area (flag) : 588465
Concentration (ppb(v)) : 5.1459

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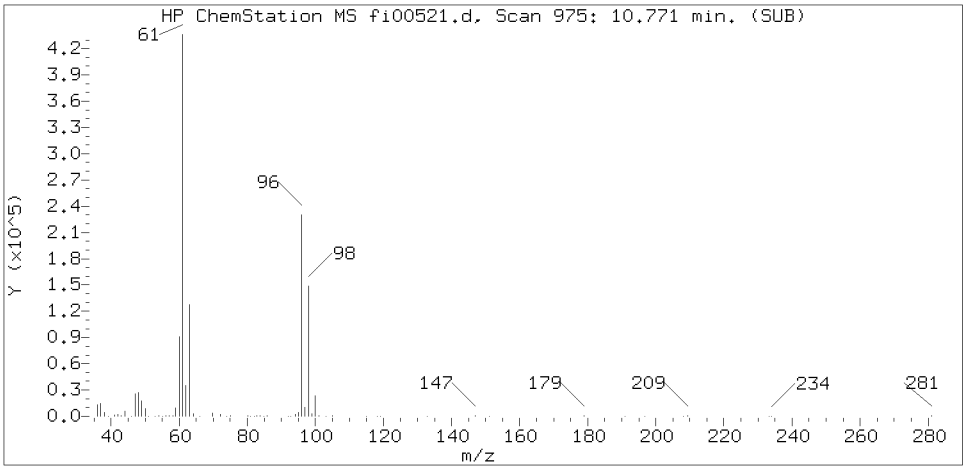
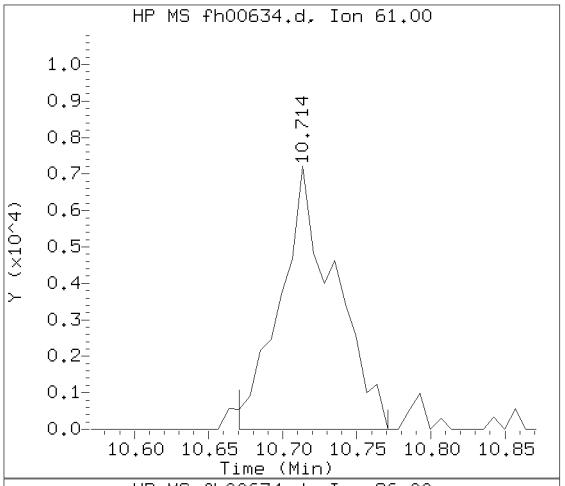
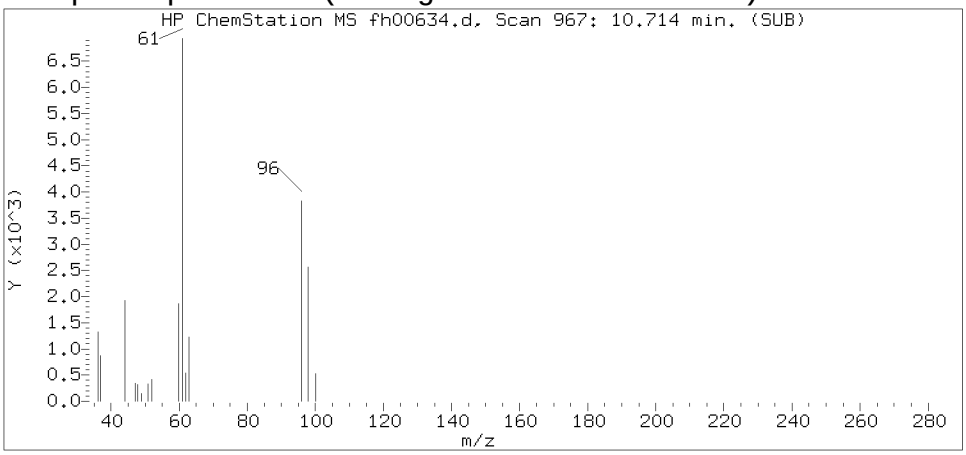
Target 3.5 esignature user ID: jeb07445

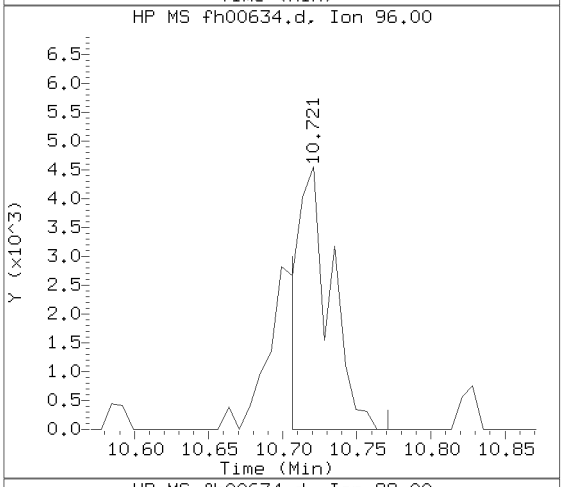
Reference Standard Spectrum for cis-1,2-Dichloroethene



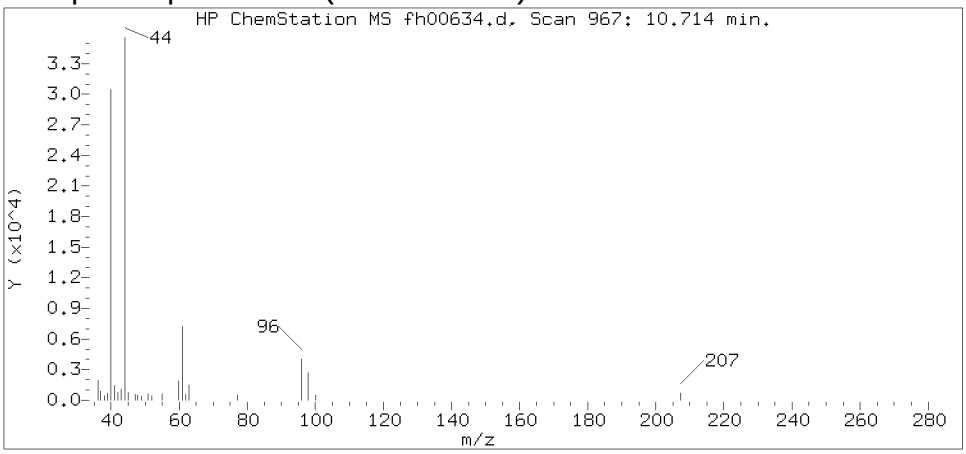


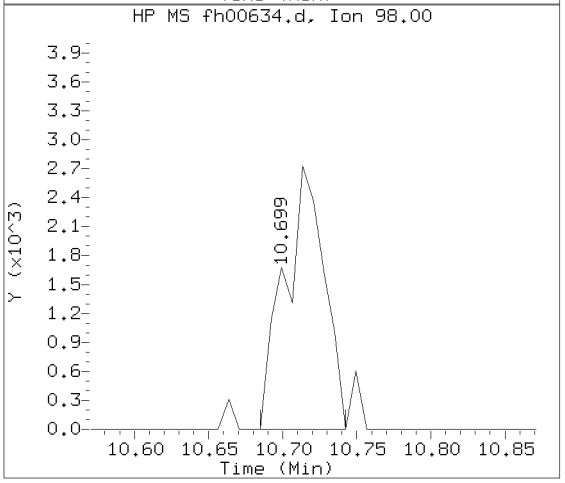
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00634.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 20:51 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:47 jeb07445

Sample Name: 1157- Lab Sample ID: 9766352

Compound Number : 35
Compound Name : cis-1,2-Dichloroethene
Scan Number : 967
Retention Time (minutes): 10.714
Relative Retention Time : 0.00187
Quant Ion : 61.00
Area (flag) : 18522
Concentration (ppb(v)) : 0.1913

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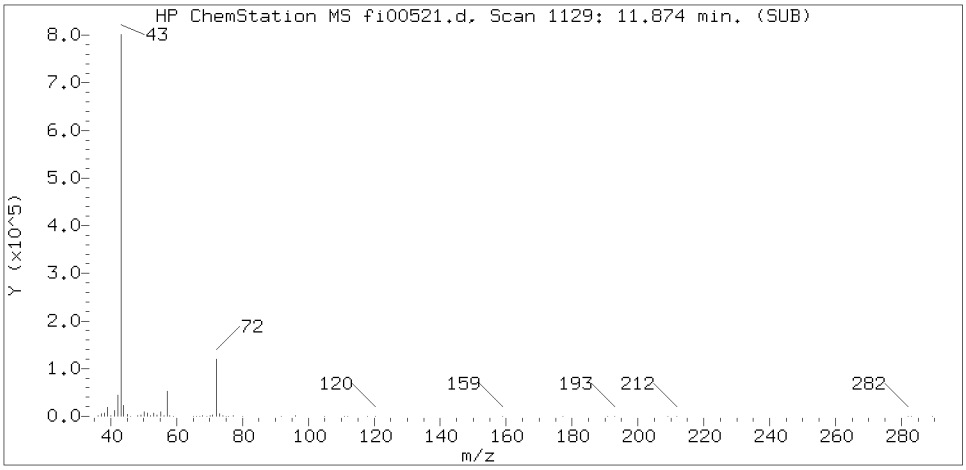
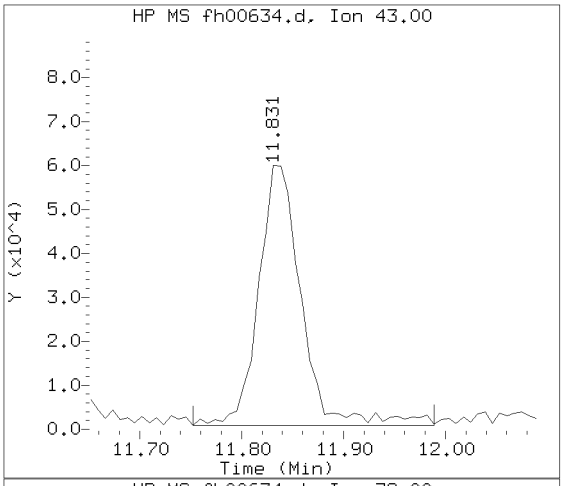
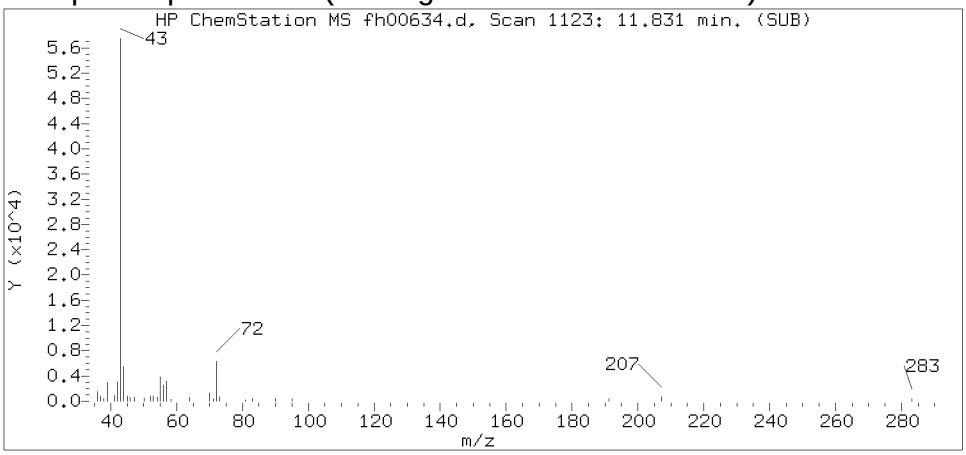
Target 3.5 esignature user ID: jeb07445

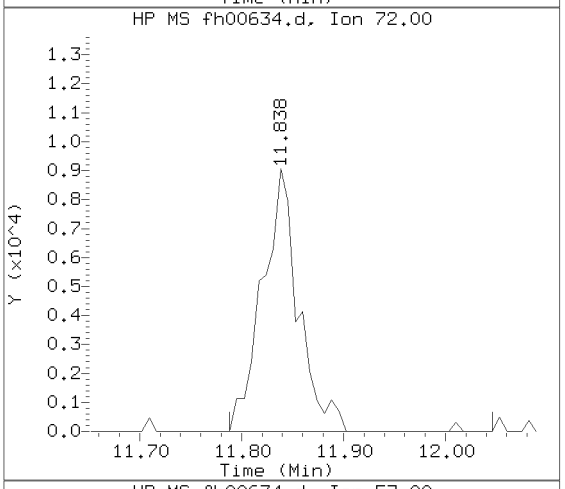
Reference Standard Spectrum for 2-Butanone



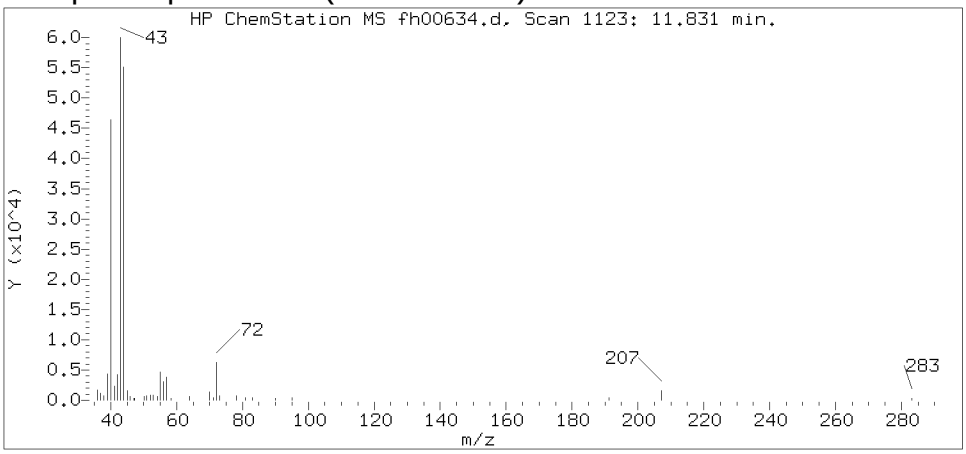


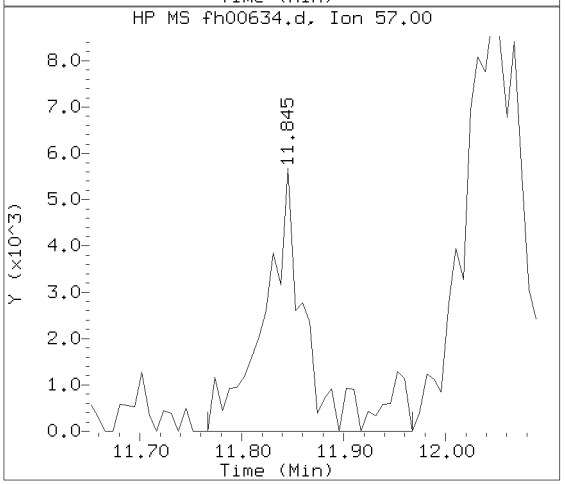
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00634.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 20:51 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:47 jeb07445

Sample Name: 1157- Lab Sample ID: 9766352

Compound Number : 45
Compound Name : 2-Butanone
Scan Number : 1123
Retention Time (minutes): 11.831
Relative Retention Time : 0.00012
Quant Ion : 43.00
Area (flag) : 173451
Concentration (ppb(v)) : 1.0686

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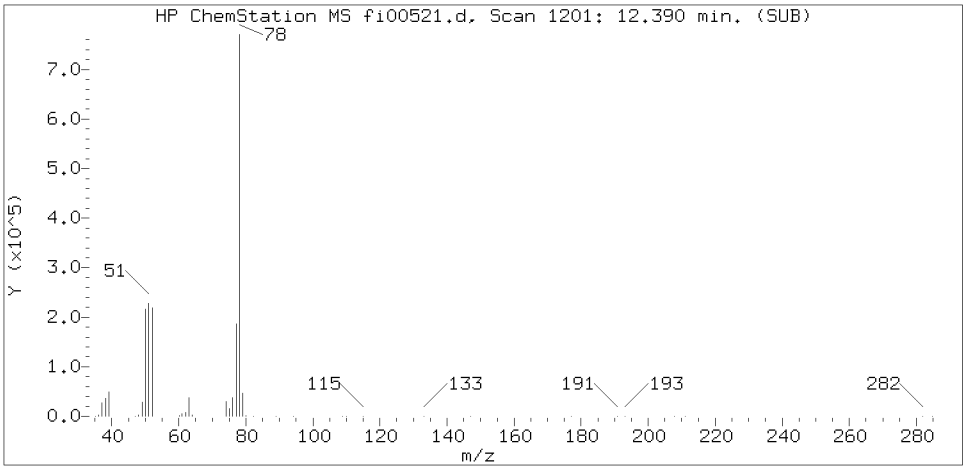
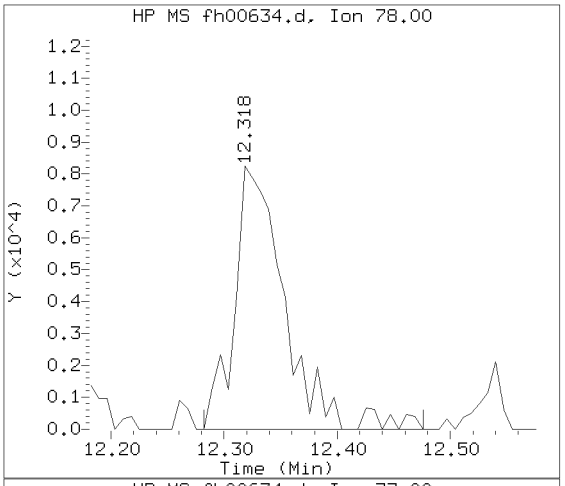
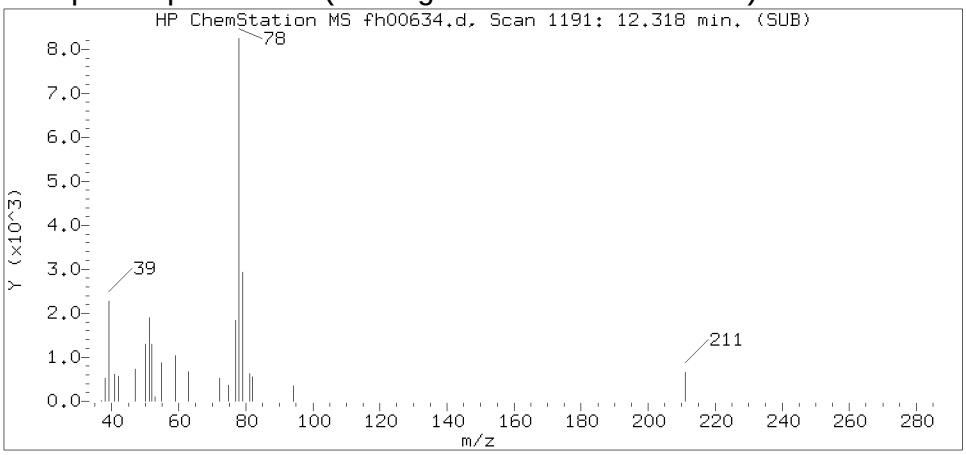
Target 3.5 esignature user ID: jeb07445

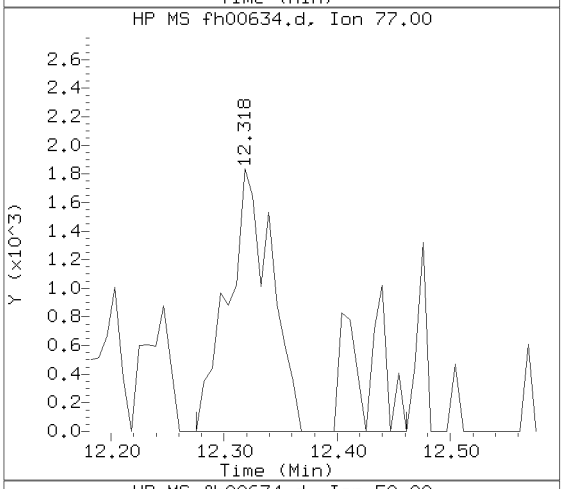
Reference Standard Spectrum for Benzene



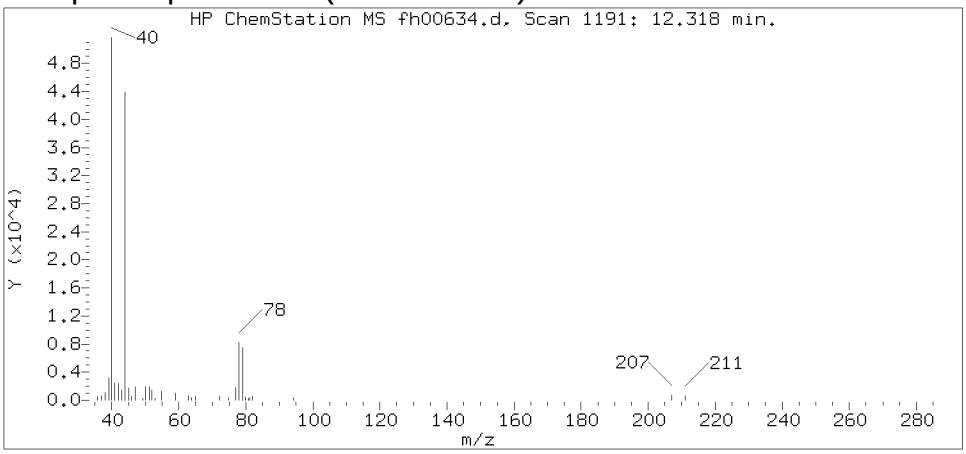


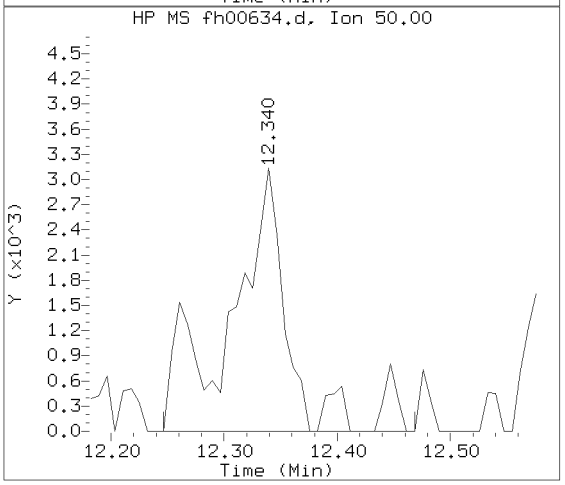
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00634.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 20:51 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:47 jeb07445

Sample Name: 1157- Lab Sample ID: 9766352

Compound Number	: 48
Compound Name	: Benzene
Scan Number	: 1191
Retention Time (minutes)	: 12.318
Relative Retention Time	: 0.00103
Quant Ion	: 78.00
Area (flag)	: 25438
Concentration (ppb(v))	: 0.1640

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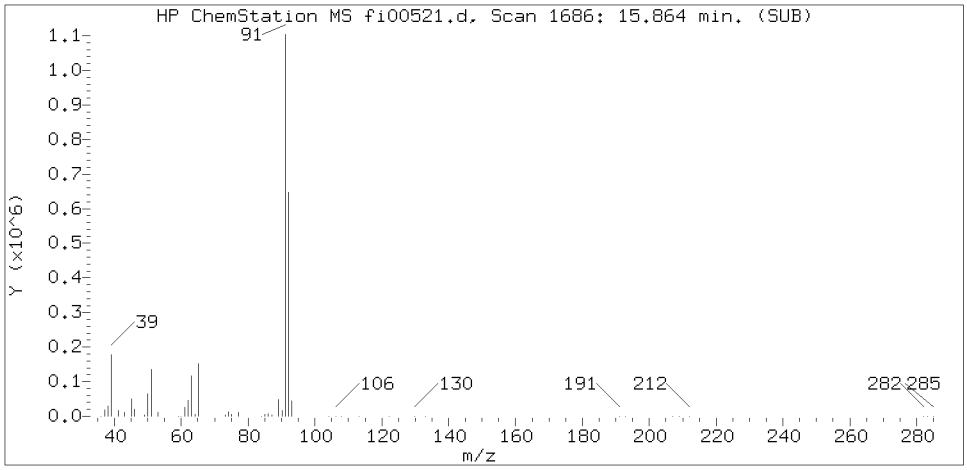
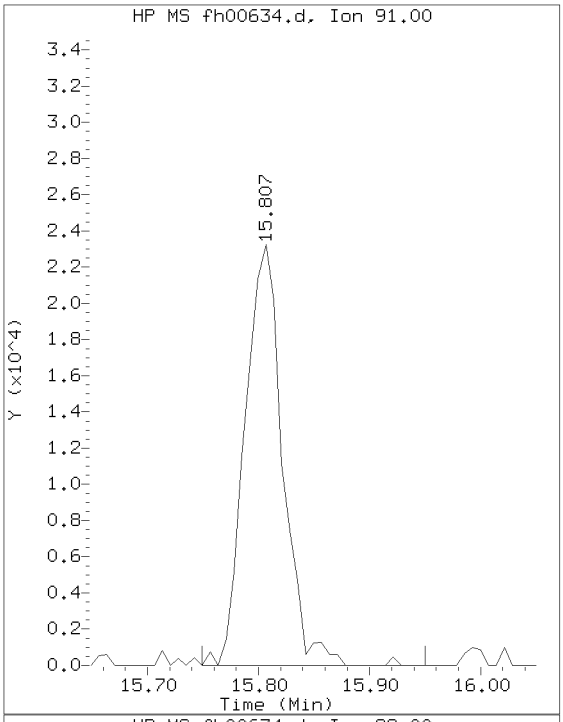
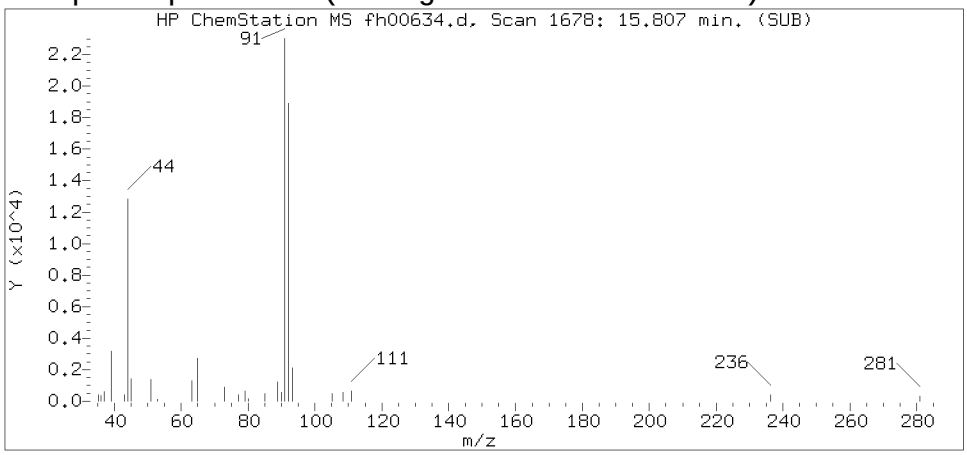
Target 3.5 esignature user ID: jeb07445

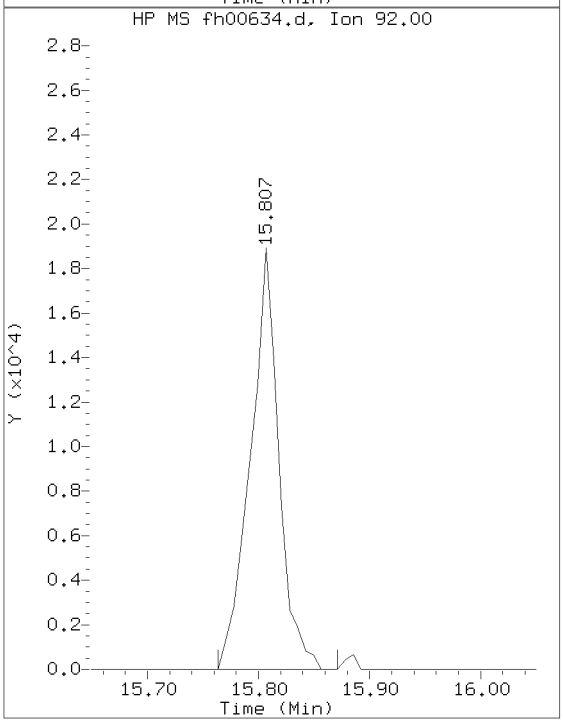
Reference Standard Spectrum for Toluene



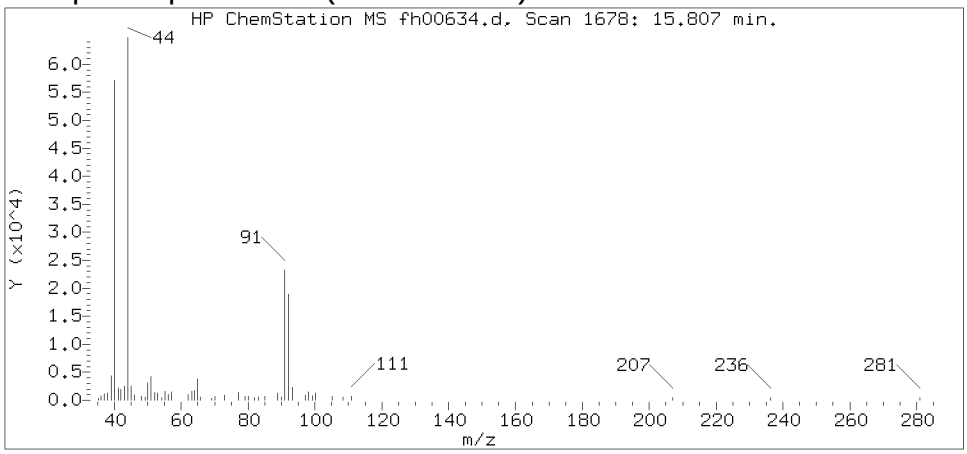


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00634.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 20:51 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:47 jeb07445

Sample Name: 1157- Lab Sample ID: 9766352

Compound Number : 61
Compound Name : Toluene
Scan Number : 1678
Retention Time (minutes): 15.807
Relative Retention Time :-0.00039
Quant Ion : 91.00
Area (flag) : 55192
Concentration (ppb(v)) : 0.3034

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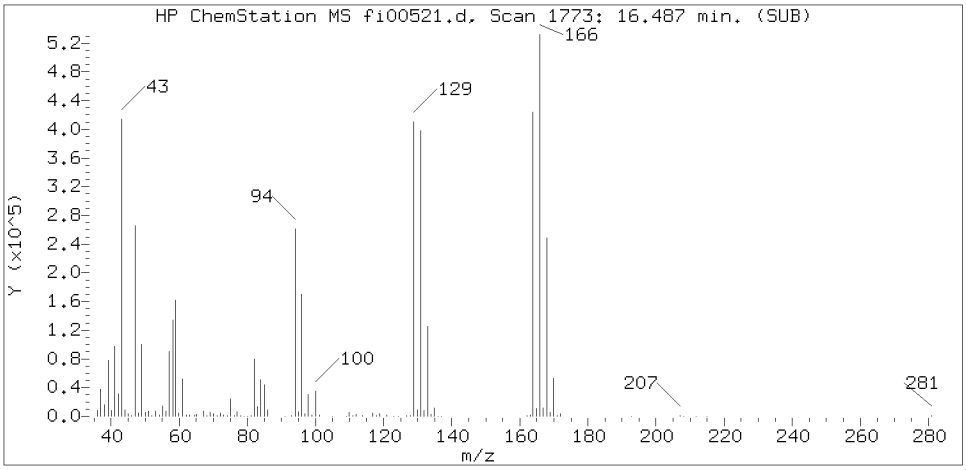
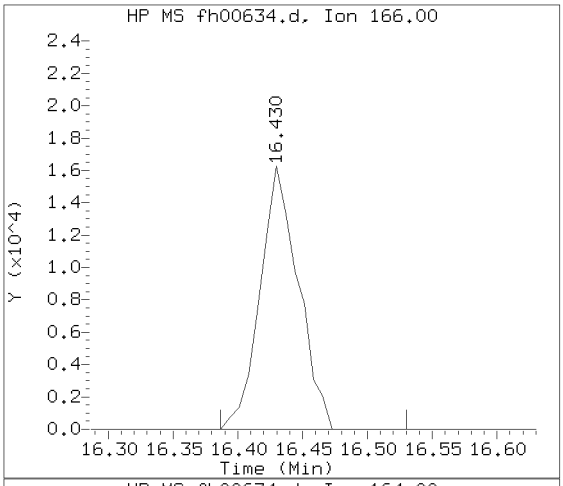
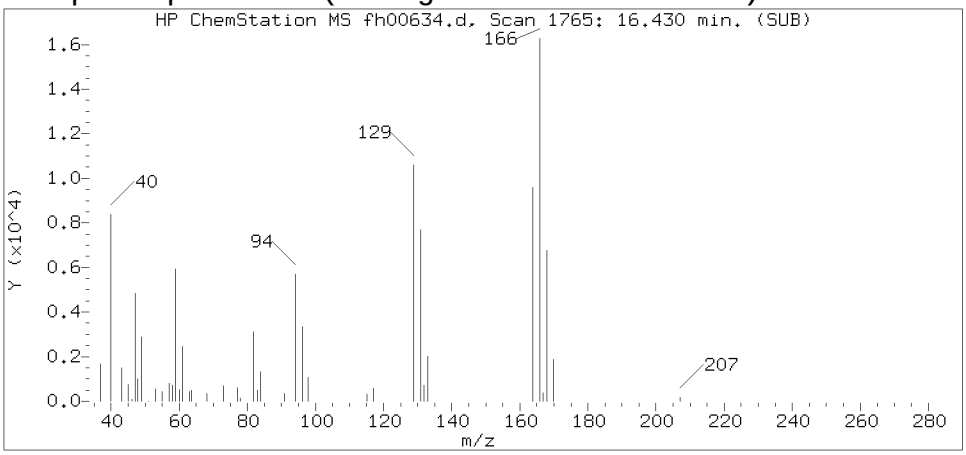
Target 3.5 esignature user ID: jeb07445

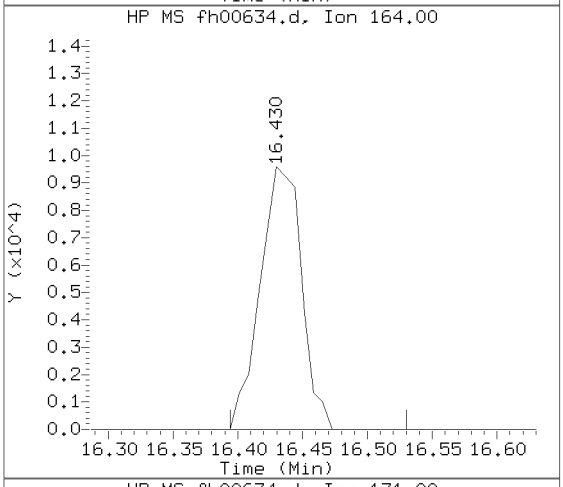
Reference Standard Spectrum for Tetrachloroethene



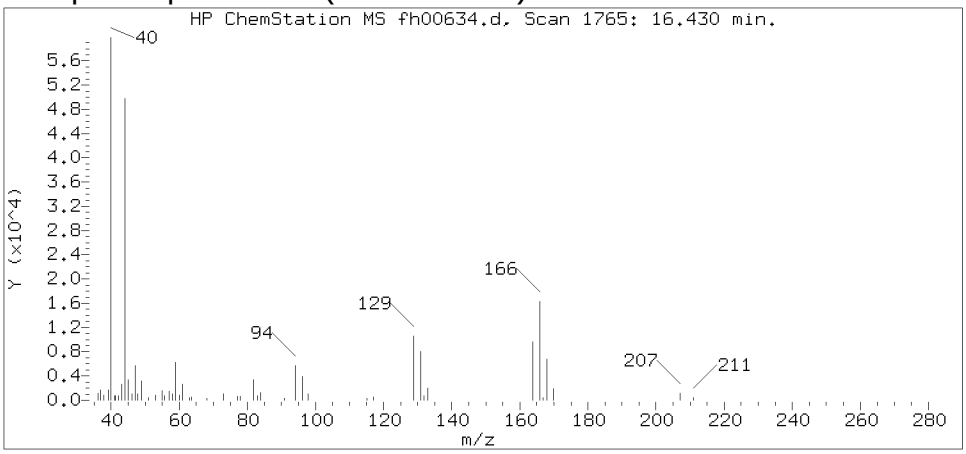


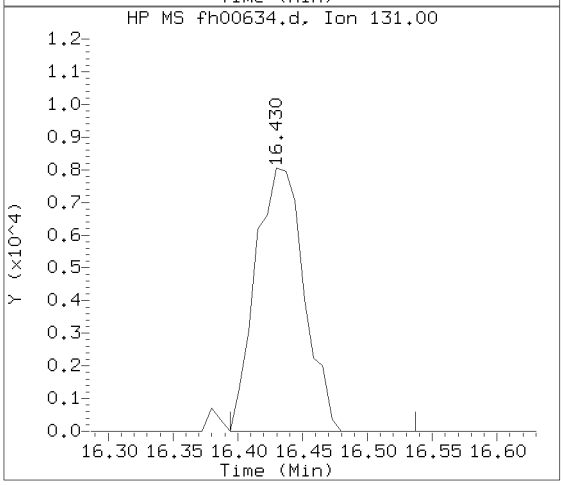
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00634.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 20:51 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:47 jeb07445

Sample Name: 1157- Lab Sample ID: 9766352

Compound Number : 63
Compound Name : Tetrachloroethene
Scan Number : 1765
Retention Time (minutes): 16.430
Relative Retention Time :-0.00000
Quant Ion : 166.00
Area (flag) : 33333
Concentration (ppb(v)) : 0.3865

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Target 3.5 esignature user ID: jeb07445

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766353
Canister ID:	1178	Lab File ID:	fh00635.d
Pressure Received:	13.1 psia	Date Collected:	08/18/2018
Final Pressure:	26.3 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	21:21
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	2.8	J
75-45-6	Chlorodifluoromethane	0.53	U
76-14-2	Freon 114	0.84	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.31	U
106-99-0	1,3-Butadiene	0.38	U
74-83-9	Bromomethane	0.70	U
75-00-3	Chloroethane	0.50	U
75-43-4	Dichlorofluoromethane	0.46	U
75-69-4	Trichlorofluoromethane	1.6	J
109-66-0	Pentane	4.6	
75-35-4	1,1-Dichloroethene	0.56	U
76-13-1	Freon 113	1.0	J
67-64-1	Acetone	30	
75-15-0	Carbon Disulfide	0.40	U
107-05-1	3-Chloropropene	0.47	U
75-09-2	Methylene Chloride	0.87	U
156-60-5	trans-1,2-Dichloroethene	0.34	U
1634-04-4	Methyl t-Butyl Ether	0.54	U
110-54-3	Hexane	2.3	J
75-34-3	1,1-Dichloroethane	0.36	U
156-59-2	cis-1,2-Dichloroethene	0.48	U
78-93-3	2-Butanone	9.1	
67-66-3	Chloroform	0.45	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766353
Canister ID:	1178	Lab File ID:	fh00635.d
Pressure Received:	13.1 psia	Date Collected:	08/18/2018
Final Pressure:	26.3 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	21:21
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
71-55-6	1,1,1-Trichloroethane	0.65	U
56-23-5	Carbon Tetrachloride	0.88	U
71-43-2	Benzene	1.3	J
107-06-2	1,2-Dichloroethane	0.32	U
540-84-1	Isooctane	2.0	J
142-82-5	Heptane	1.8	J
79-01-6	Trichloroethene	0.97	U
78-87-5	1,2-Dichloropropane	0.60	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	0.80	U
10061-01-5	cis-1,3-Dichloropropene	0.45	U
108-10-1	4-Methyl-2-Pentanone	0.70	J
108-88-3	Toluene	7.0	
111-65-9	Octane	1.9	U
10061-02-6	trans-1,3-Dichloropropene	0.54	U
79-00-5	1,1,2-Trichloroethane	0.65	U
127-18-4	Tetrachloroethene	1.7	U
591-78-6	2-Hexanone	0.74	U
124-48-1	Dibromochloromethane	1.1	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	0.60	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.1	J
179601-23-1	m/p-Xylene	3.6	J

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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Final Pressure:	26.3 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	21:21
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
95-47-6	o-Xylene	1.1	J
100-42-5	Styrene	0.85	U
75-25-2	Bromoform	1.8	U
98-82-8	Cumene	1.2	U
108-86-1	Bromobenzene	0.64	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	0.84	U
622-96-8	4-Ethyltoluene	0.88	U
108-67-8	1,3,5-Trimethylbenzene	1.6	U
95-63-6	1,2,4-Trimethylbenzene	1.4	U
541-73-1	1,3-Dichlorobenzene	1.1	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.2	U
67-72-1	Hexachloroethane	2.6	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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

Data file: /chem/HP26379.i/18aug27.b/fh00635.d Injection date and time: **27-AUG-2018 21:21**
Data file Sample Info. Line: 9766353;400;F1823930AA;1178-;0;0;SAMPLE; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 28-Aug-2018 12:48 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.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): 26.3 psia Canister Pressure before dilution (Ya): 13.1 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 400 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.108(-0.015)	1022	130	349883 (-18)	10.00		255500 - 596166
52) 1,4-Difluorobenzene	13.393(0.000)	1341	114	1133791 (-25)	10.00		906195 - 2114453
71) Chlorobenzene-d5	18.228(0.007)	2016	117	1176862 (-20)	10.00		883644 - 2061835

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)	4.002(0.000)	85	66418M	0.568	0.57		J	0.13	1
3) Chlorodifluoromethane	(1)			Not Detected					0.15	1
4) Freon 114	(1)			Not Detected					0.12	1
5) Chloromethane	(1)			Not Detected					0.24	1
6) Vinyl Chloride	(1)			Not Detected					0.12	1
7) 1,3-Butadiene	(1)			Not Detected					0.17	1
8) Bromomethane	(1)			Not Detected					0.18	1
9) Chloroethane	(1)			Not Detected					0.19	1
13) Dichlorofluoromethane	(1)			Not Detected					0.11	1
12) Trichlorofluoromethane	(1)	5.872(0.000)	101	33134	0.289	0.29		J	0.15	1
11) Pentane	(1)	5.864(0.000)	43	197018	1.554	1.55			0.13	1
16) 1,1-Dichloroethene	(1)			Not Detected					0.14	1
17) Freon 113	(1)	6.910(0.000)	103	9175	0.135	0.13		J	0.11	1
24) Acetone	(1)	8.085(-0.001)	43	1407136	12.569	12.57			0.53	5
18) Carbon Disulfide	(1)			Not Detected					0.13	1
22) 3-Chloropropene	(1)			Not Detected					0.15	1
23) Methylene Chloride	(1)			Not Detected					0.25	2
25) trans-1,2-Dichloroethene	(1)			Not Detected					0.086	1
27) Methyl t-Butyl Ether	(1)			Not Detected					0.15	1
26) Hexane	(1)	8.450(0.000)	56	52553	0.651	0.65		J	0.13	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.089	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.12	1
45) 2-Butanone	(1)	11.810(0.001)	43	490100	3.084	3.08			0.21	1
39) Chloroform	(1)			Not Detected					0.092	1
44) 1,1,1-Trichloroethane	(1)			Not Detected					0.12	1
42) Carbon Tetrachloride	(1)			Not Detected					0.14	1
48) Benzene	(2)	12.333(-0.000)	78	59605	0.407	0.41		J	0.11	1
50) 1,2-Dichloroethane	(2)			Not Detected					0.08	1
46) Isooctane	(2)	12.046(-0.000)	57	141301	0.429	0.43		J	0.13	1
47) Heptane	(2)	12.211(-0.000)	71	20787	0.439	0.44		J	0.23	1
51) Trichloroethene	(2)			Not Detected					0.18	1
55) 1,2-Dichloropropane	(2)			Not Detected					0.13	1
53) Dibromomethane	(2)			Not Detected					0.14	1
56) Bromodichloromethane	(2)			Not Detected					0.12	1
59) cis-1,3-Dichloropropene	(2)			Not Detected					0.1	1
62) 4-Methyl-2-Pentanone	(2)	16.401(0.000)	43	32446	0.171	0.17		J	0.15	1
61) Toluene	(3)	15.800(-0.000)	91	321447	1.849	1.85			0.12	1
60) Octane	(3)			Not Detected					0.4	2
64) trans-1,3-Dichloropropene	(3)			Not Detected					0.12	1
67) 1,1,2-Trichloroethane	(3)			Not Detected					0.12	1
63) Tetrachloroethene	(3)			Not Detected					0.25	2
70) 2-Hexanone	(3)			Not Detected					0.18	1
68) Dibromochloromethane	(3)			Not Detected					0.13	1

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:59. Target 3.5 esignature user ID: jeb07445

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

Data file: /chem/HP26379.i/18aug27.b/fh00635.d Injection date and time: **27-AUG-2018 21:21**
Data file Sample Info. Line: 9766353;400;F1823930AA;1178-;0;0;SAMPLE; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 28-Aug-2018 12:48 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.d**

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

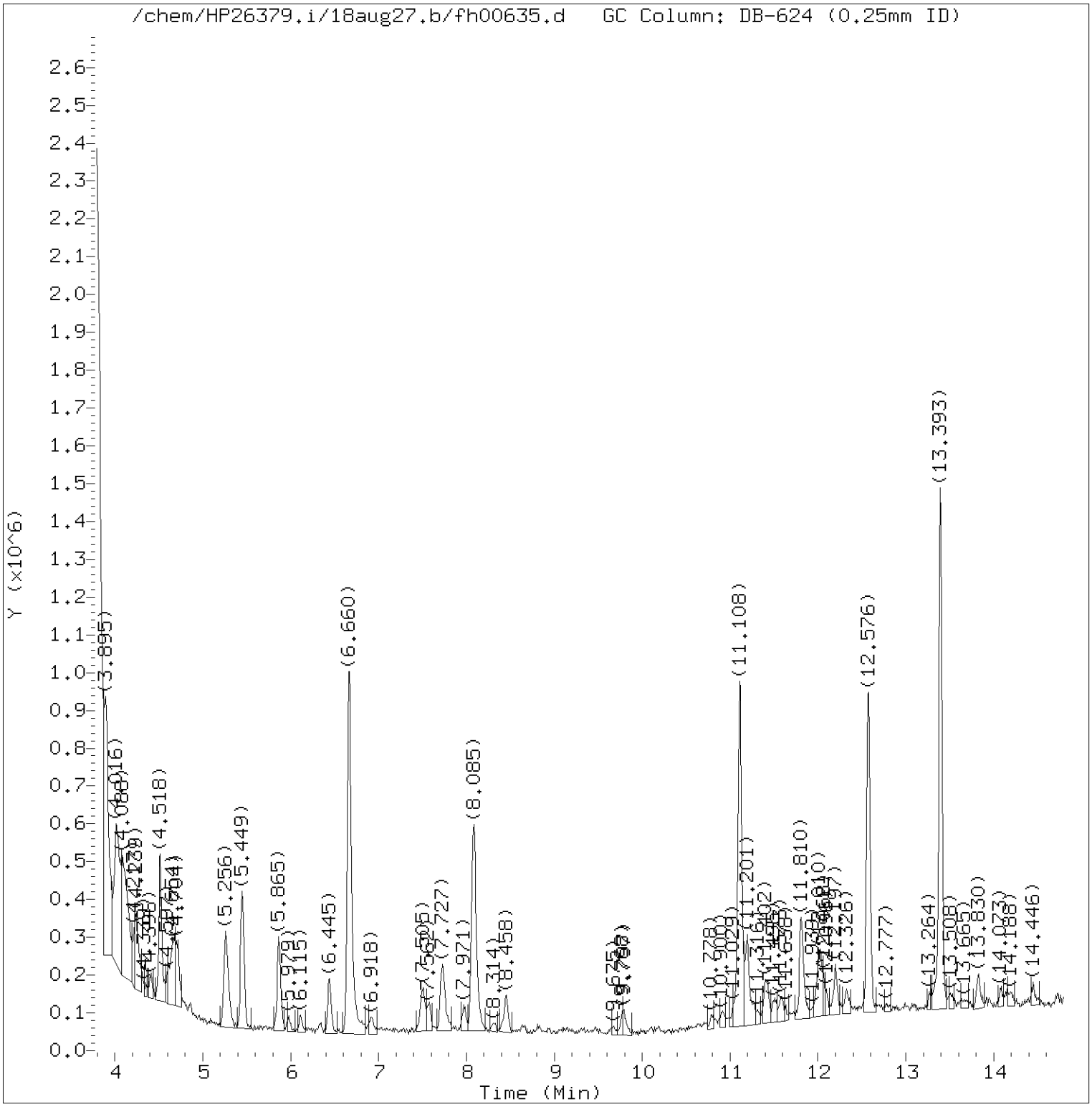
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 26.3 psia Canister Pressure before dilution (Ya): 13.1 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 400 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
69) 1,2-Dibromoethane	(3)			Not Detected					0.13	1
72) Chlorobenzene	(3)			Not Detected					0.13	1
74) 1,1,1,2-Tetrachloroethane	(3)			Not Detected					0.15	1
73) Ethylbenzene	(3)	18.271(-0.000)	91	59677	0.252	0.25		J	0.19	1
75) m/p-Xylene	(3)	18.493(-0.000)	91	142806	0.837	0.84		J	0.26	2
76) o-Xylene	(3)	19.188(-0.000)	91	43421	0.261	0.26		J	0.19	1
78) Styrene	(3)			Not Detected					0.2	1
79) Bromoform	(3)			Not Detected					0.17	1
80) Cumene	(3)			Not Detected					0.24	1
82) Bromobenzene	(3)			Not Detected					0.1	1
83) 1,1,2,2-Tetrachloroethane	(3)			Not Detected					0.15	1
87) 1,2,3-Trichloropropane	(3)			Not Detected					0.14	1
84) 4-Ethyltoluene	(3)			Not Detected					0.18	1
86) 1,3,5-Trimethylbenzene	(3)			Not Detected					0.32	2
90) 1,2,4-Trimethylbenzene	(3)			Not Detected					0.28	2
93) 1,3-Dichlorobenzene	(3)			Not Detected					0.19	1
94) 1,4-Dichlorobenzene	(3)			Not Detected					0.17	1
98) 1,2-Dichlorobenzene	(3)			Not Detected					0.2	1
97) Hexachloroethane	(3)			Not Detected					0.27	2

Total number of targets = 62

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:59. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:40. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

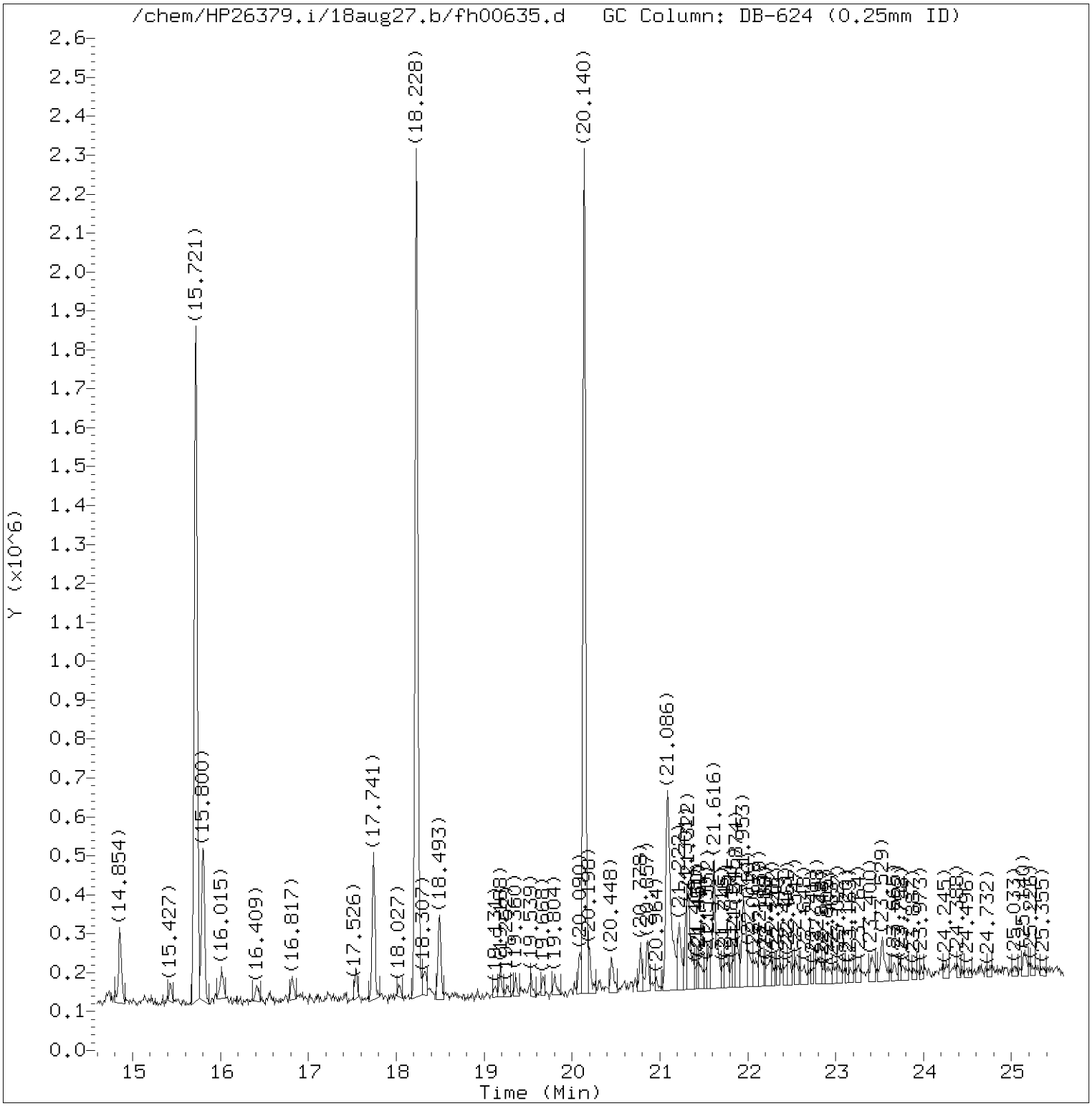
Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00635.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:21 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:48 jeb07445

Sample Name: 1178- Lab Sample ID: 9766353

Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00635.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:21 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:48 jeb07445

Sample Name: 1178- Lab Sample ID: 9766353

Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00635.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:21 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:48 jeb07445

Sample Name: 1178- Lab Sample ID: 9766353

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
2) Dichlorodifluoromethane	(1)	4.002	85	66418M	0.568
11) Pentane	(1)	5.865	43	197018	1.554
12) Trichlorofluoromethane	(1)	5.872	101	33134	0.289
17) Freon 113	(1)	6.910	103	9175	0.135
24) Acetone	(1)	8.085	43	1407136	12.569
26) Hexane	(1)	8.450	56	52553	0.651
37)*Bromochloromethane	(1)	11.108	130	349883	10.000
45) 2-Butanone	(1)	11.810	43	490100	3.084
46) Isooctane	(2)	12.046	57	141301	0.429
47) Heptane	(2)	12.211	71	20787	0.439
48) Benzene	(2)	12.333	78	59605	0.407
52)*1,4-Difluorobenzene	(2)	13.393	114	1133791	10.000
61) Toluene	(3)	15.800	91	321447	1.849
62) 4-Methyl-2-Pentanone	(2)	16.401	43	32446	0.171
71)*Chlorobenzene-d5	(3)	18.228	117	1176862	10.000
73) Ethylbenzene	(3)	18.271	91	59677	0.252
75) m/p-Xylene	(3)	18.493	91	142806	0.837
76) o-Xylene	(3)	19.188	91	43421	0.261

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

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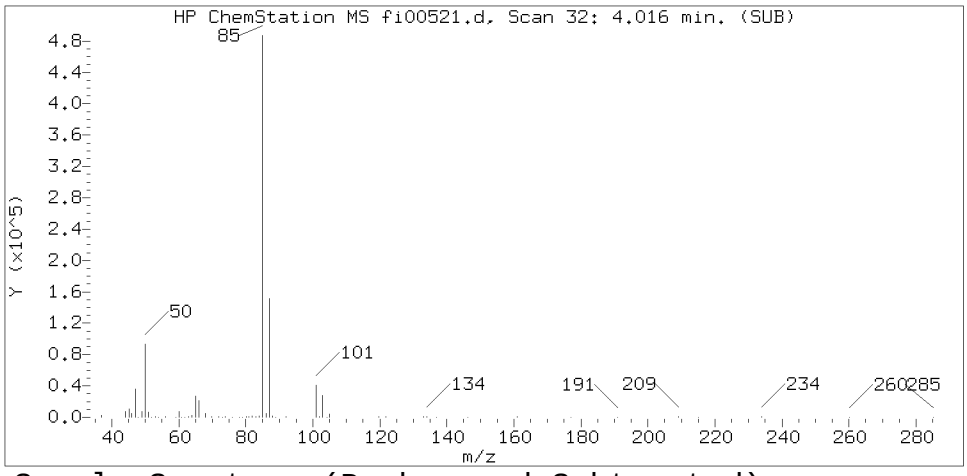
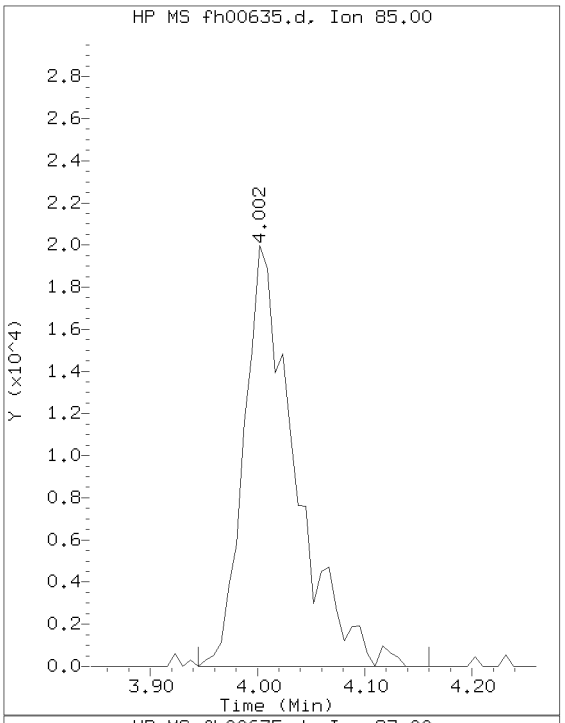
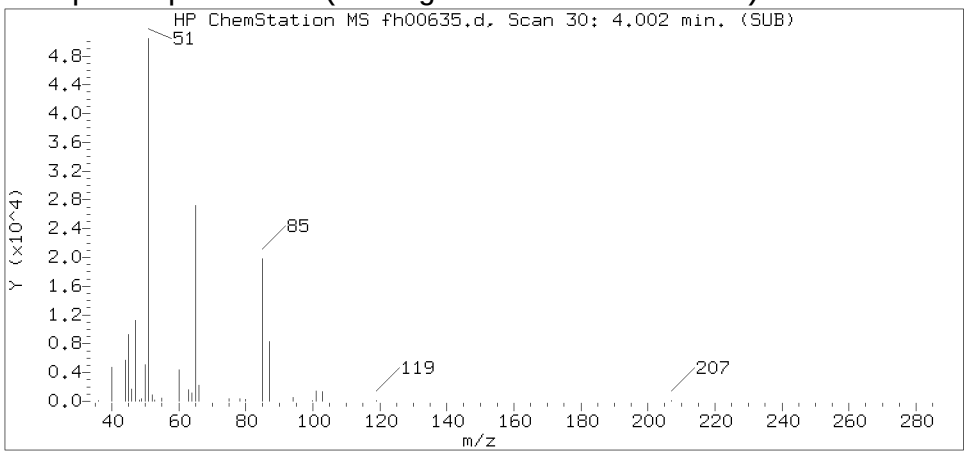
on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07445

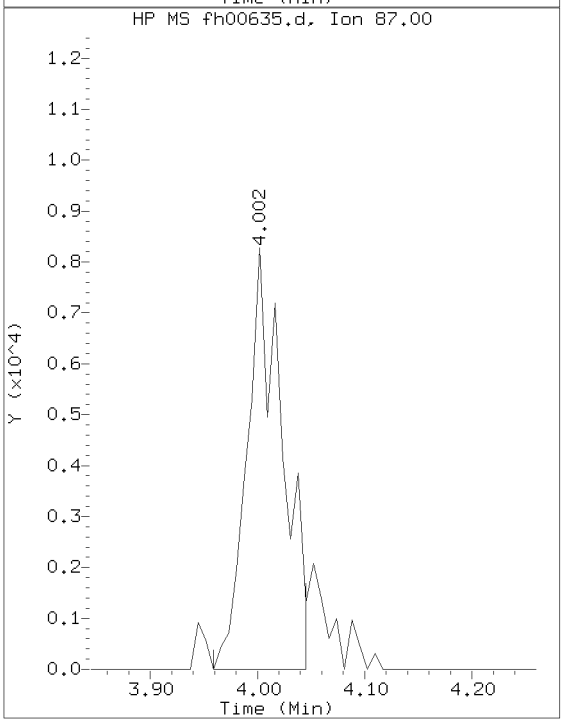
Reference Standard Spectrum for Dichlorodifluoromethane



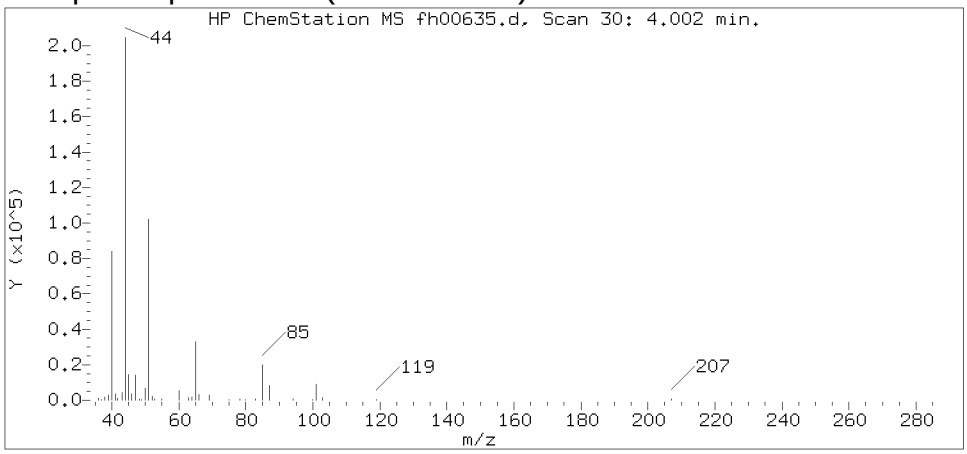


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00635.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:21 Analyst ID: jeb07445

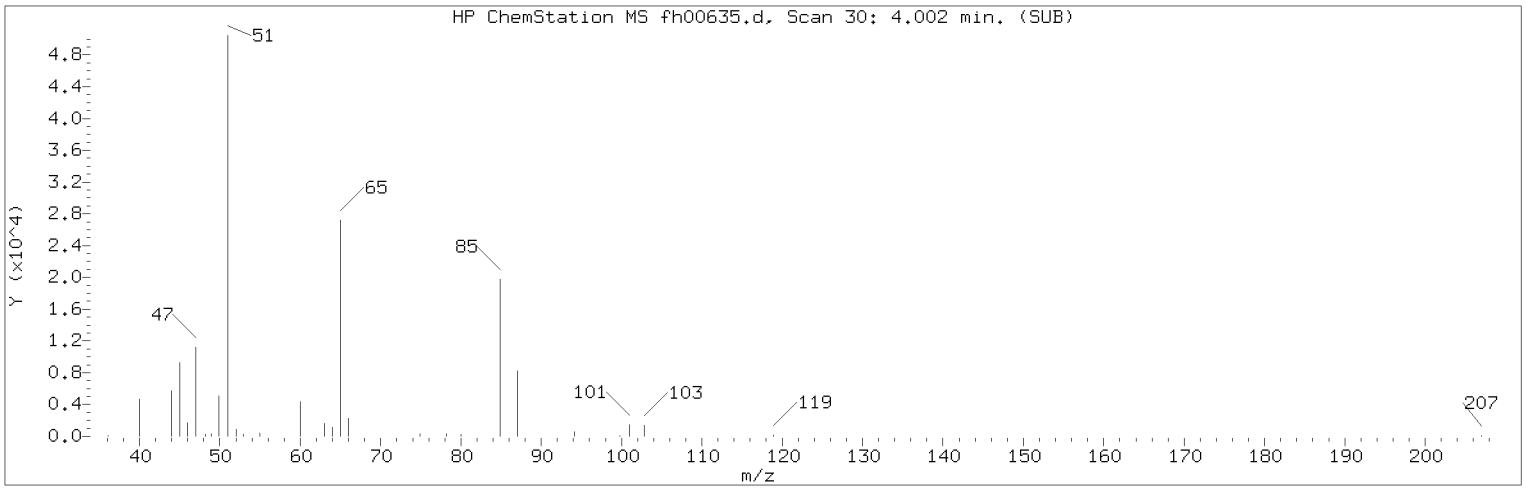
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:48 jeb07445

Sample Name: 1178- Lab Sample ID: 9766353

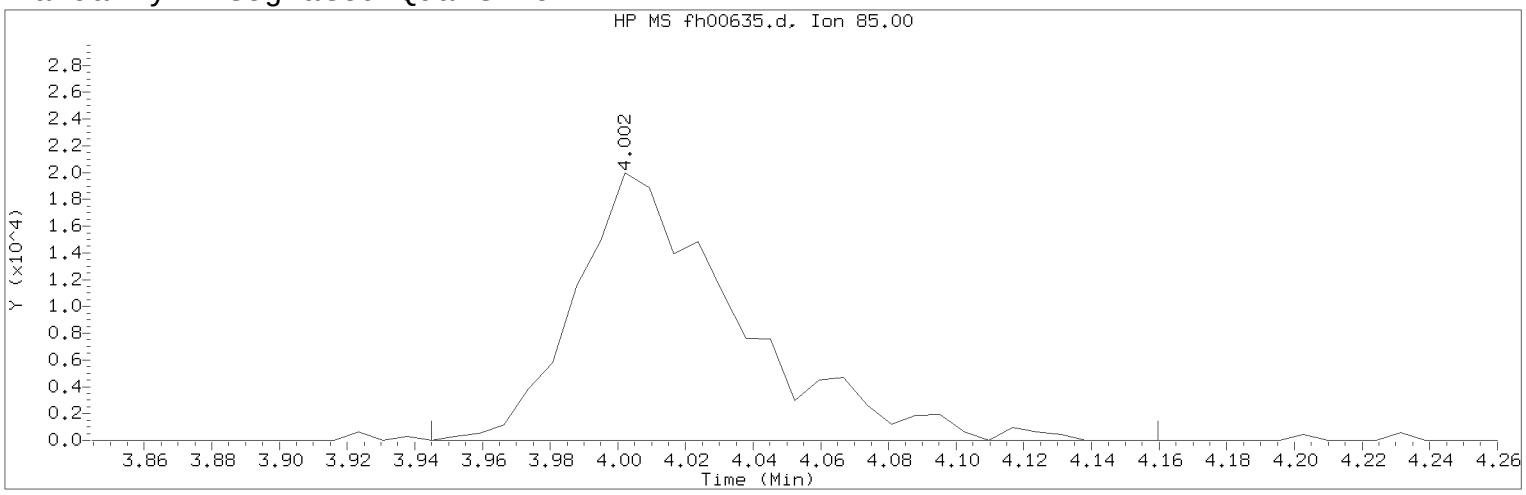
Compound Number	: 2
Compound Name	: Dichlorodifluoromethane
Scan Number	: 30
Retention Time (minutes)	: 4.002
Relative Retention Time	: 0.00045
Quant Ion	: 85.00
Area (flag)	: 66418M
Concentration (ppb(v))	: 0.5684

Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug27.b/fh00635.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:21 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:48 jeb07445

Sample Name: 1178- Lab Sample ID: 9766353

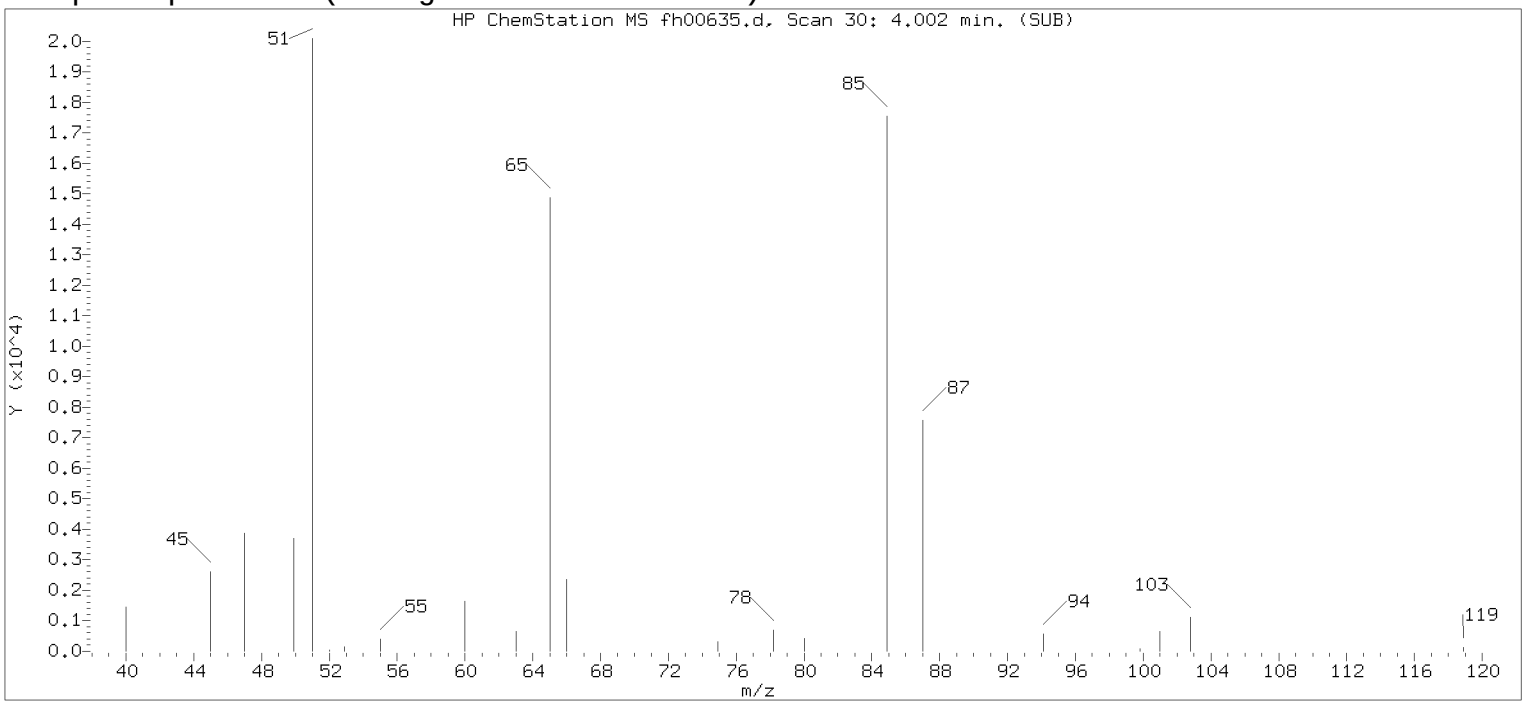
Compound Number : 2
Compound Name : Dichlorodifluoromethane
Scan Number : 30
Retention Time (minutes): 4.002
Quant Ion : 85.00
Area (flag) : 66418M
Concentration (ppb(v)) : 0.5684
Integration start scan : 21 Integration stop scan: 51
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

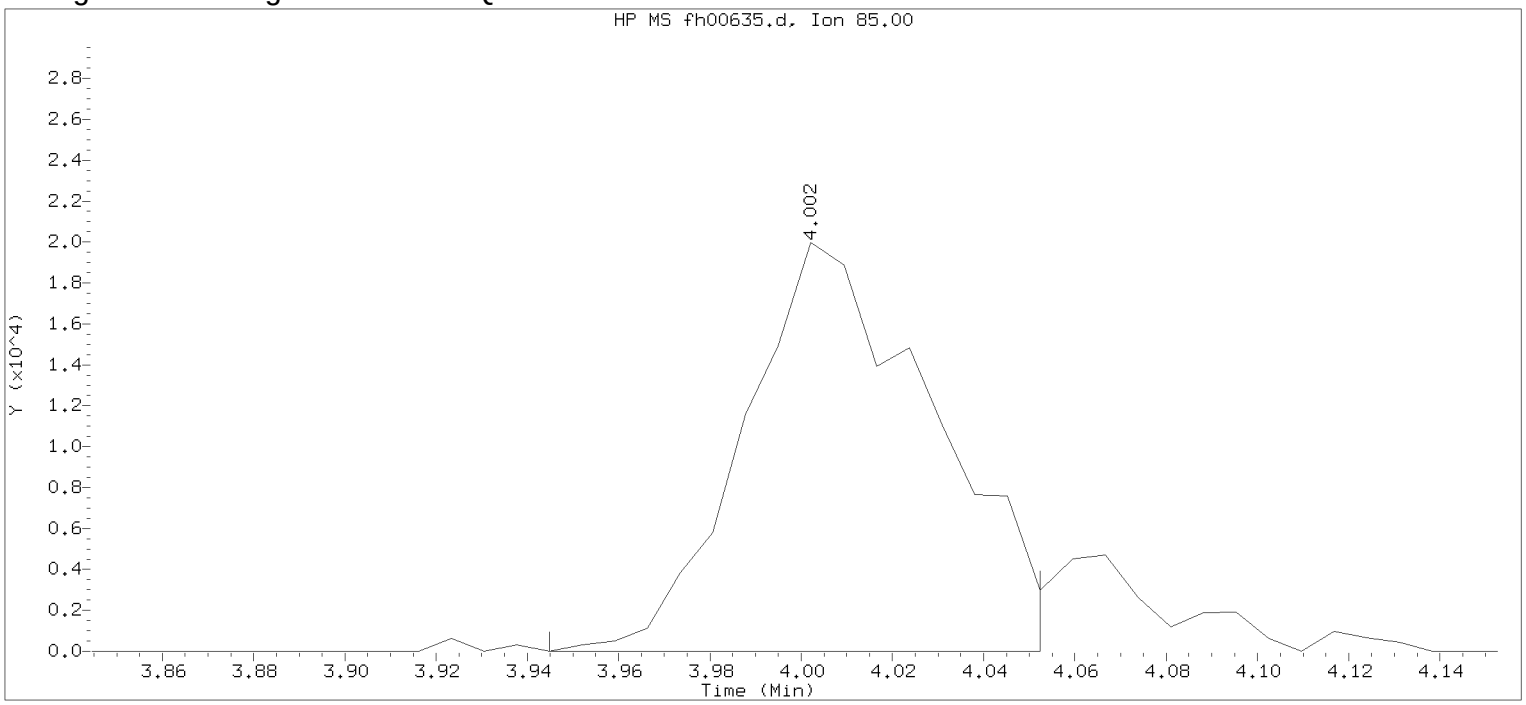
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:40.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug27.b/fh00635.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:21 Analyst ID: jeb07445

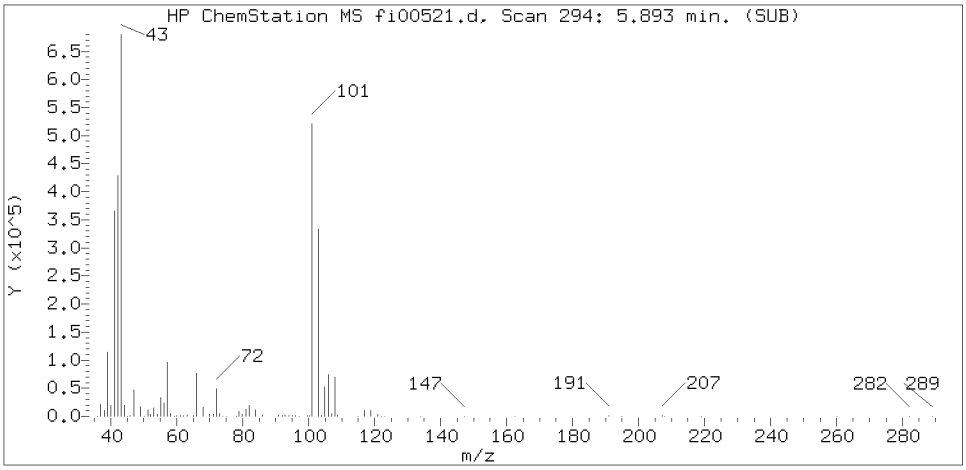
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 21:51 Unknown

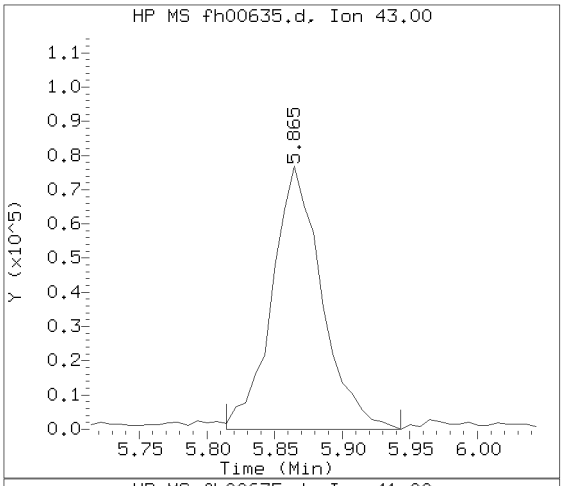
Sample Name: 1178- Lab Sample ID: 9766353

Compound Number : 2
Compound Name : Dichlorodifluoromethane
Scan Number : 30
Retention Time (minutes): 4.002
Quant Ion : 85.00
Area : 57388
Concentration (ppb(v)) : 0.4911
Integration start scan : 21 Integration stop scan: 36
Y at integration start : 0 Y at integration end: 0

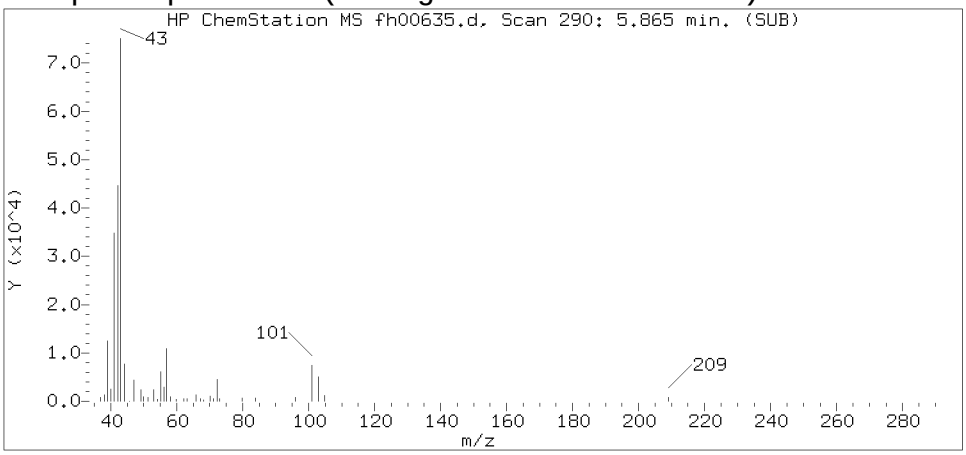
Digitally signed by Jacob E. Bailey on 08/28/2018 at 12:59.
Target 3.5 esignature user ID: jeb07445

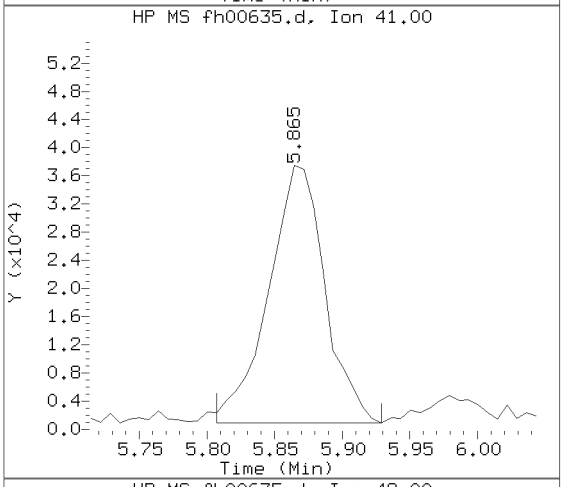
Reference Standard Spectrum for Pentane



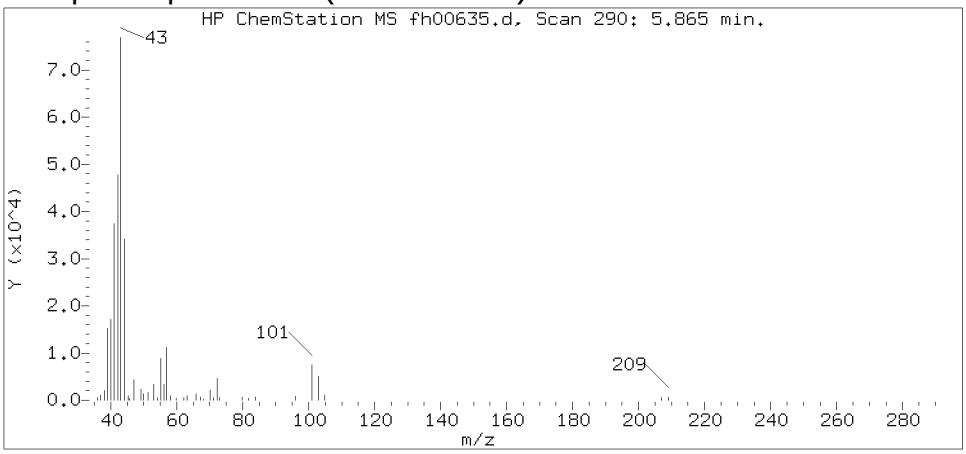


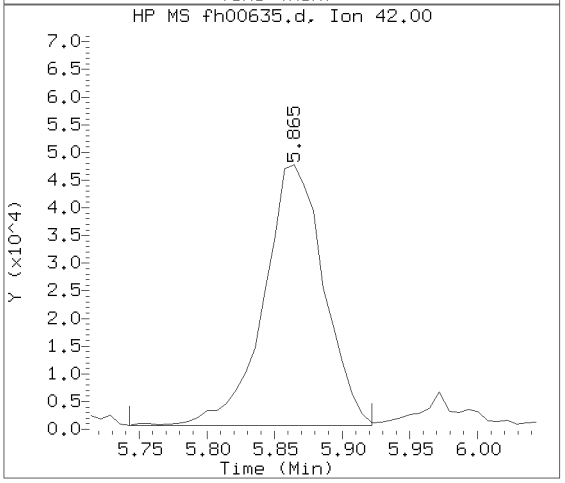
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00635.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:21 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:48 jeb07445

Sample Name: 1178- Lab Sample ID: 9766353

Compound Number : 11
Compound Name : Pentane
Scan Number : 290
Retention Time (minutes): 5.865
Relative Retention Time : 0.00067
Quant Ion : 43.00
Area (flag) : 197018
Concentration (ppb(v)) : 1.5536

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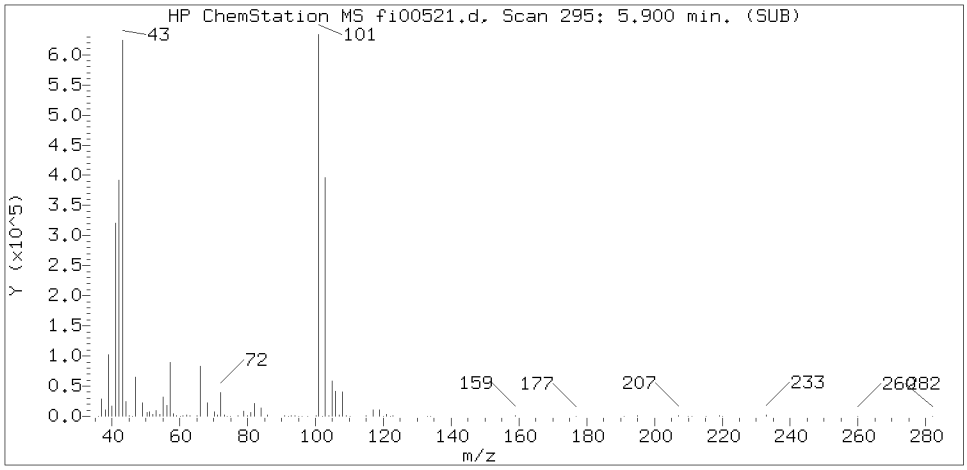
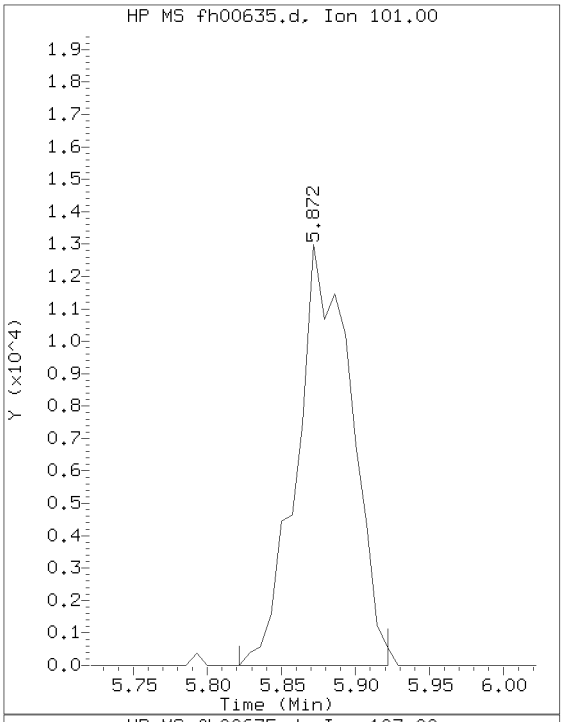
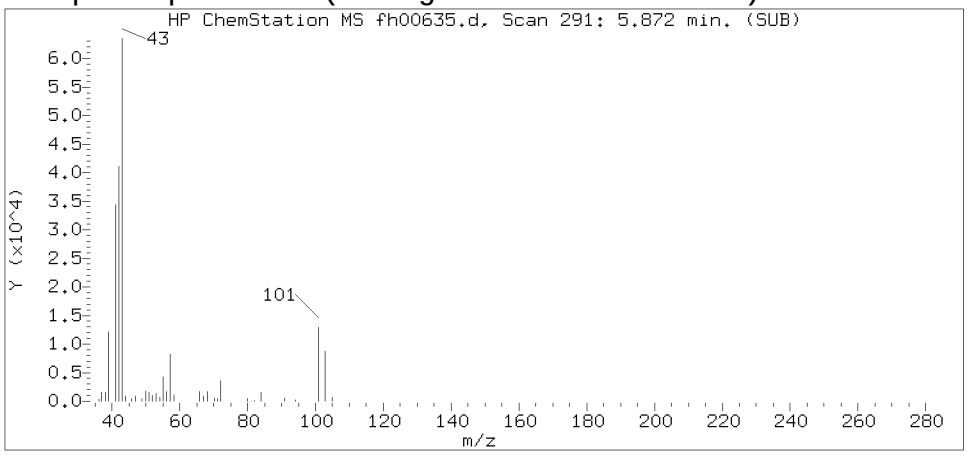
Target 3.5 esignature user ID: jeb07445

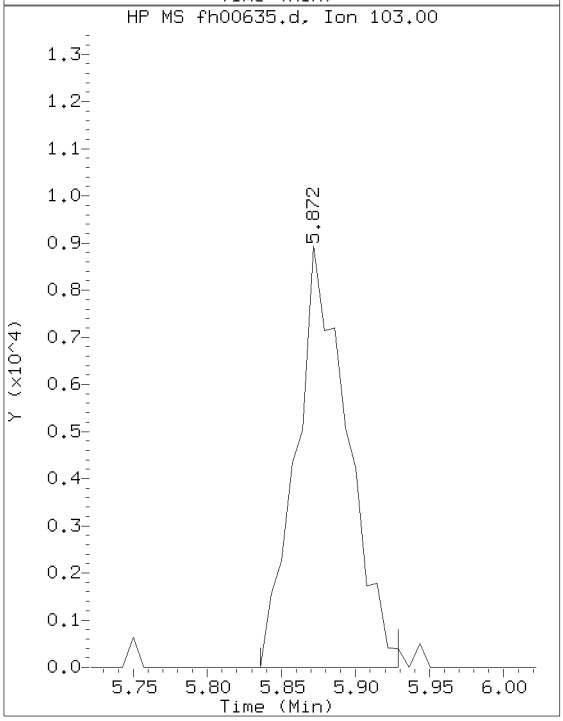
Reference Standard Spectrum for Trichlorofluoromethane



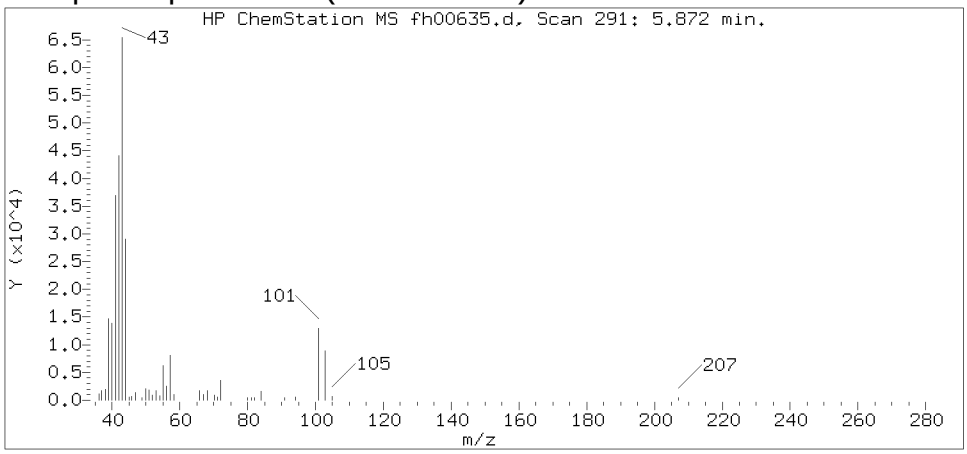


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00635.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:21 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:48 jeb07445

Sample Name: 1178- Lab Sample ID: 9766353

Compound Number	: 12
Compound Name	: Trichlorofluoromethane
Scan Number	: 291
Retention Time (minutes)	: 5.872
Relative Retention Time	: 0.00067
Quant Ion	: 101.00
Area (flag)	: 33134
Concentration (ppb(v))	: 0.2888

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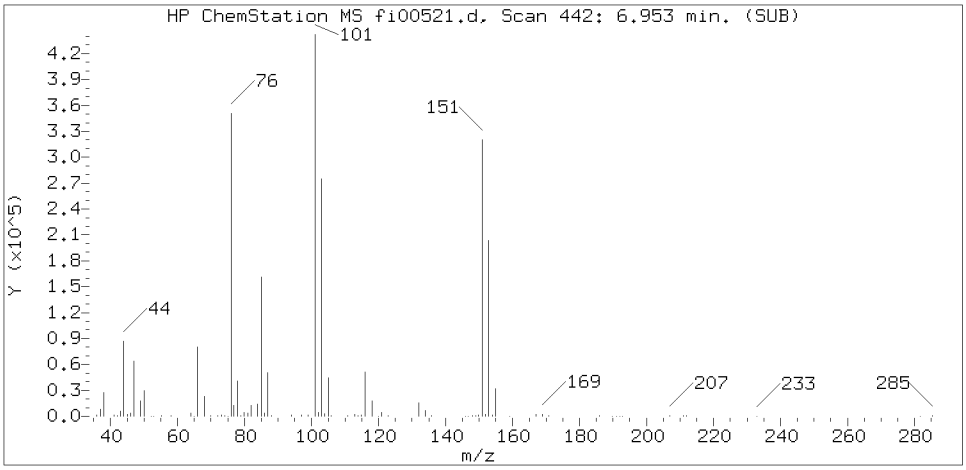
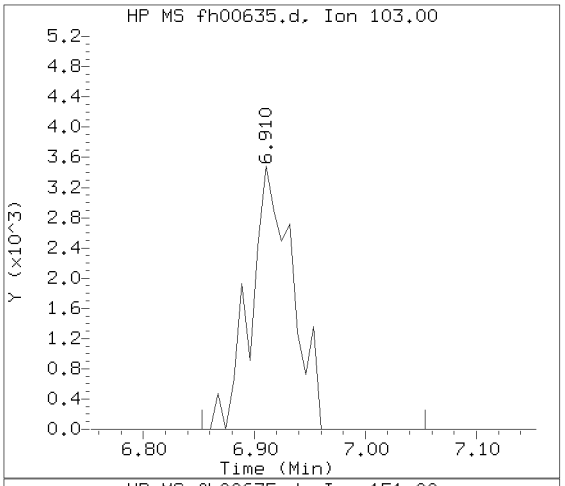
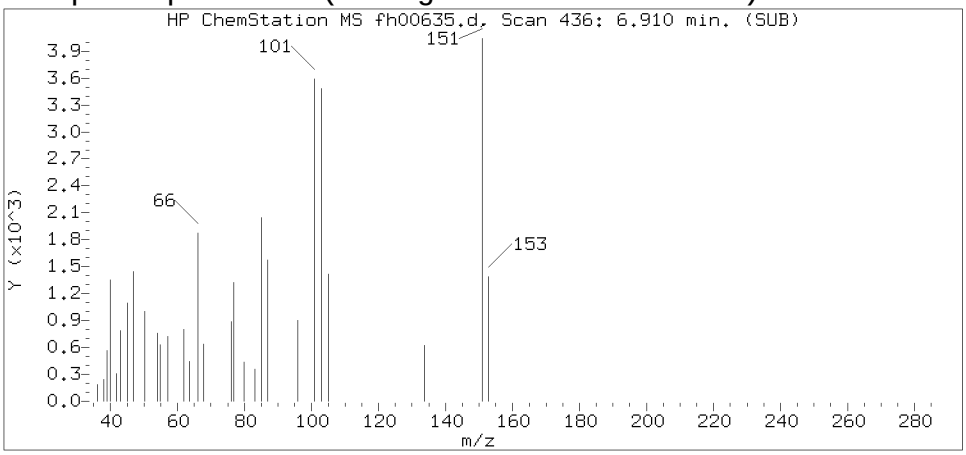
Target 3.5 esignature user ID: jeb07445

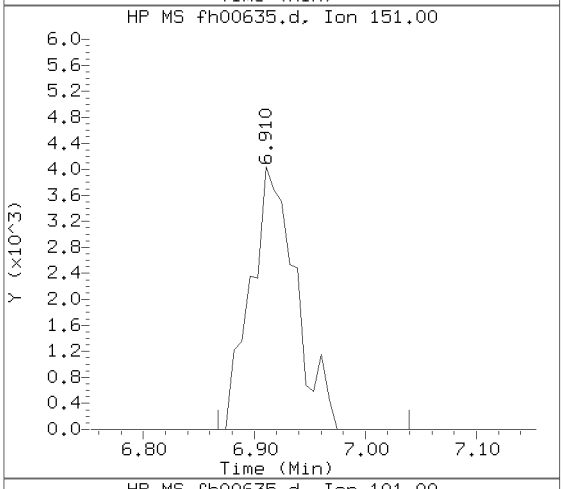
Reference Standard Spectrum for Freon 113



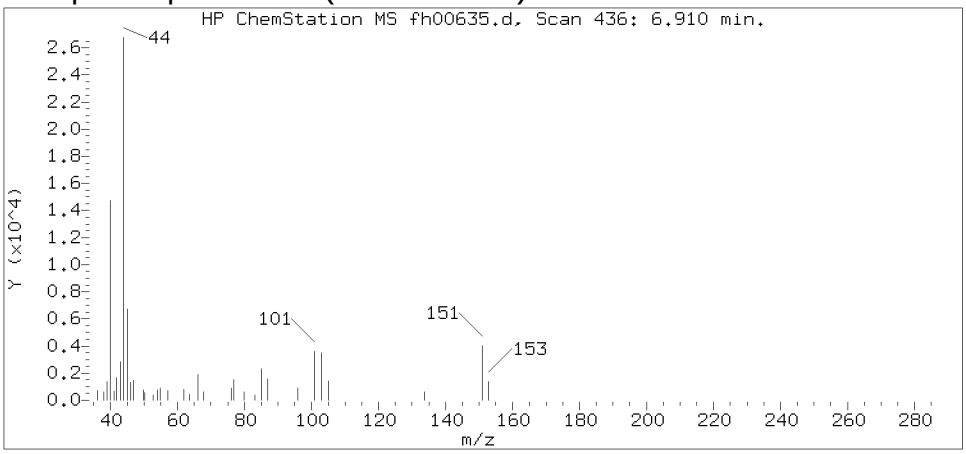


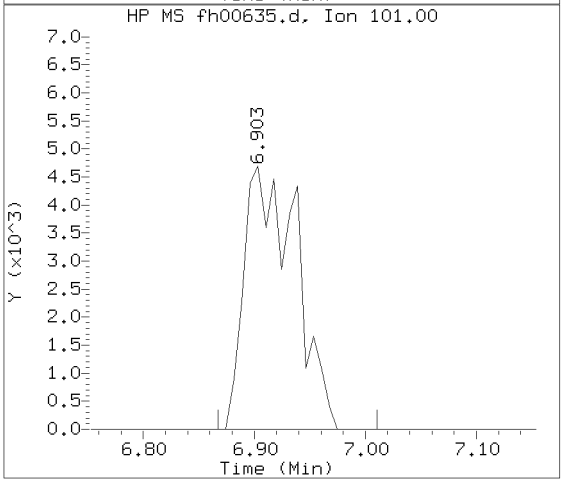
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00635.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:21 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:48 jeb07445

Sample Name: 1178- Lab Sample ID: 9766353

Compound Number	: 17
Compound Name	: Freon 113
Scan Number	: 436
Retention Time (minutes)	: 6.910
Relative Retention Time	: 0.00080
Quant Ion	: 103.00
Area (flag)	: 9175
Concentration (ppb(v))	: 0.1348

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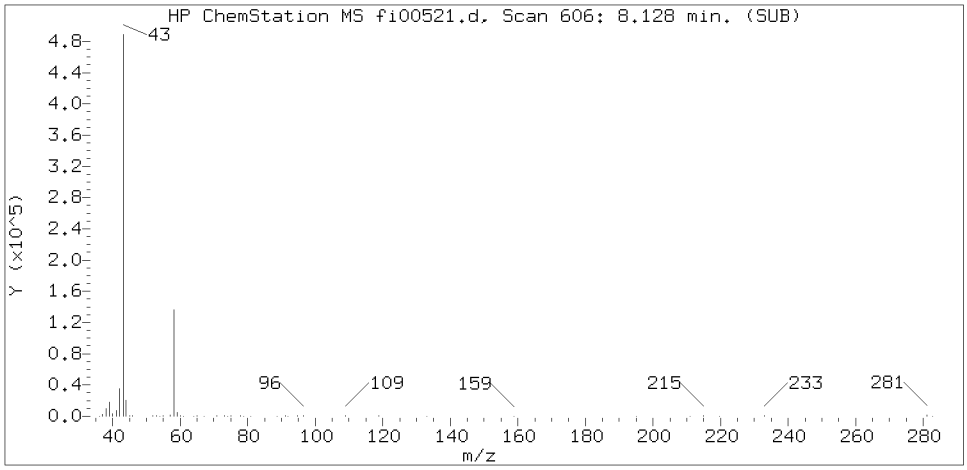
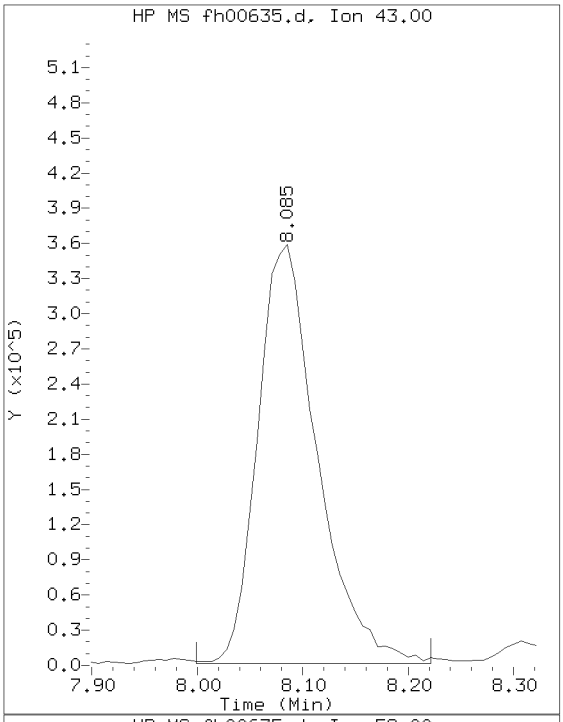
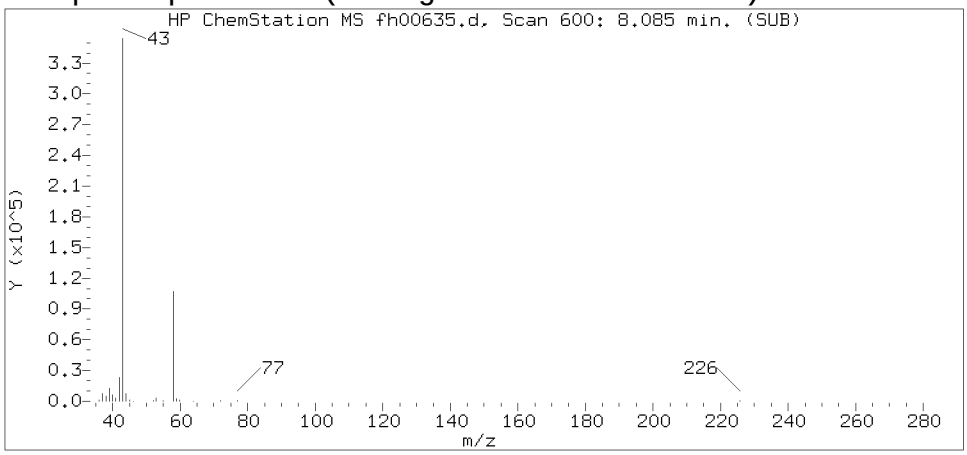
Target 3.5 esignature user ID: jeb07445

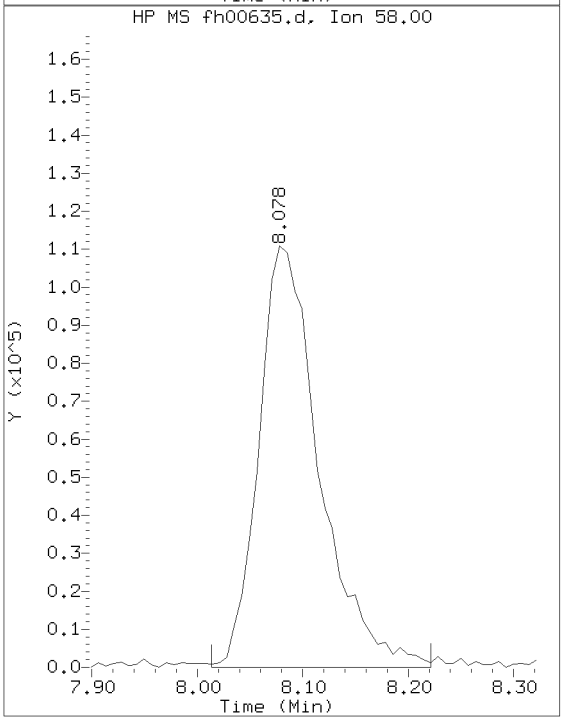
Reference Standard Spectrum for Acetone



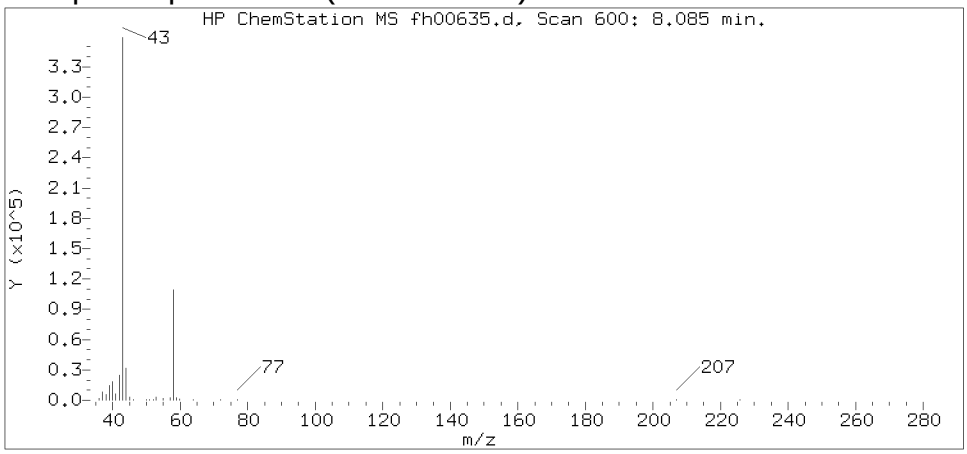


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00635.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:21 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:48 jeb07445

Sample Name: 1178- Lab Sample ID: 9766353

Compound Number : 24
Compound Name : Acetone
Scan Number : 600
Retention Time (minutes): 8.085
Relative Retention Time :-0.00100
Quant Ion : 43.00
Area (flag) : 1407136
Concentration (ppb(v)) : 12.5689

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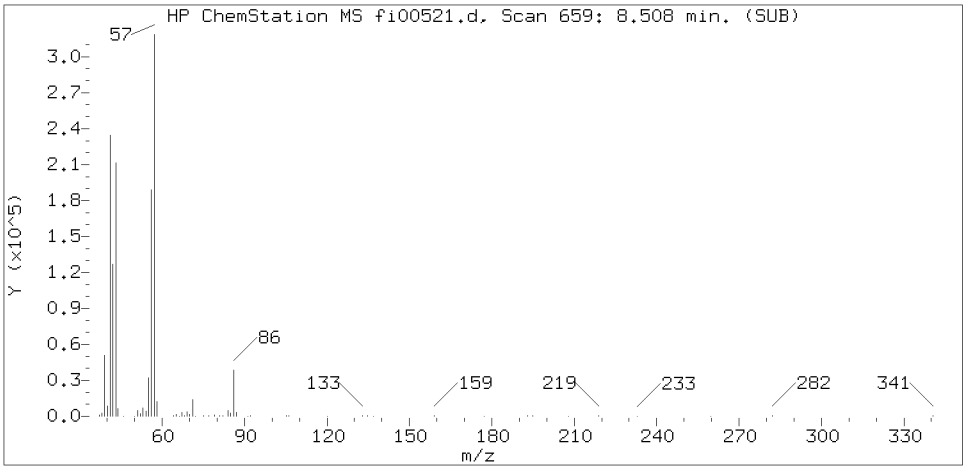
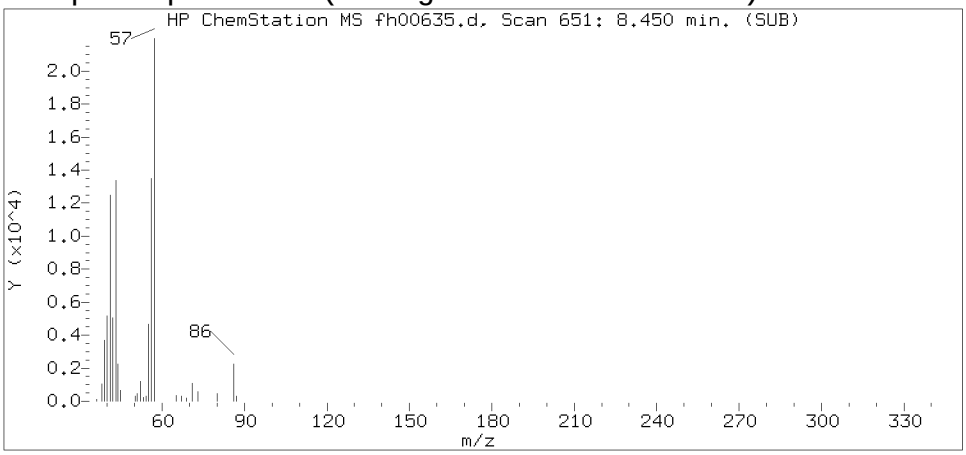
Target 3.5 esignature user ID: jeb07445

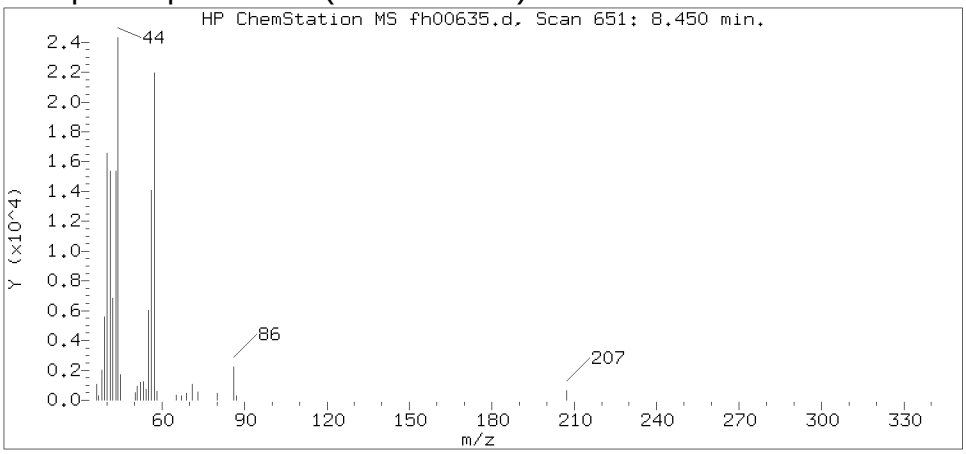
Reference Standard Spectrum for Hexane

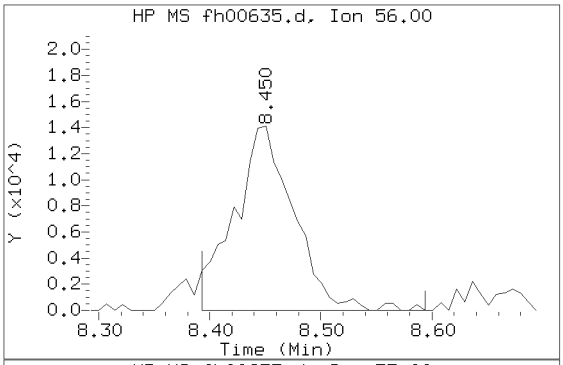


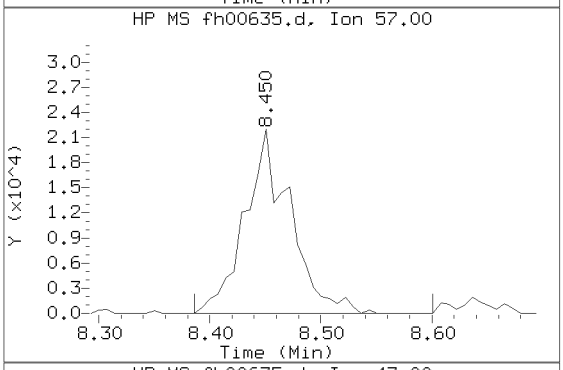
Sample Spectrum (Background Subtracted)

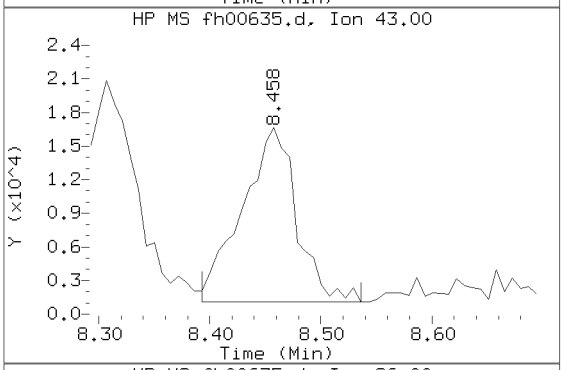


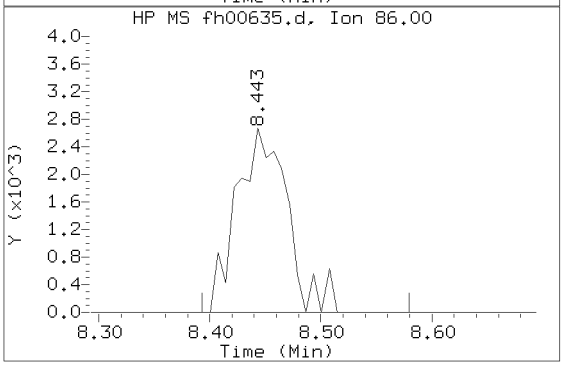
Sample Spectrum (Unaltered)











Data File: /chem/HP26379.i/18aug27.b/fh00635.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:21 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:48 jeb07445

Sample Name: 1178- Lab Sample ID: 9766353

Compound Number : 26
Compound Name : Hexane
Scan Number : 651
Retention Time (minutes): 8.450
Relative Retention Time : 0.00098
Quant Ion : 56.00
Area (flag) : 52553
Concentration (ppb(v)) : 0.6513

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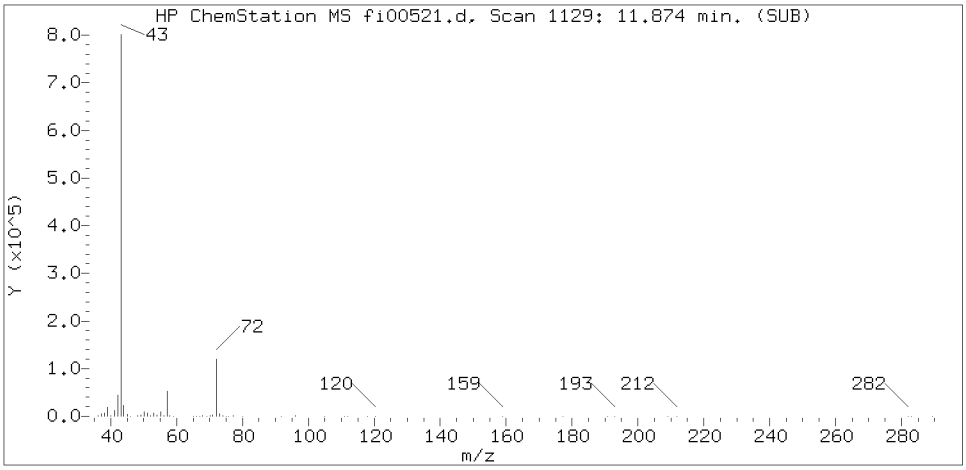
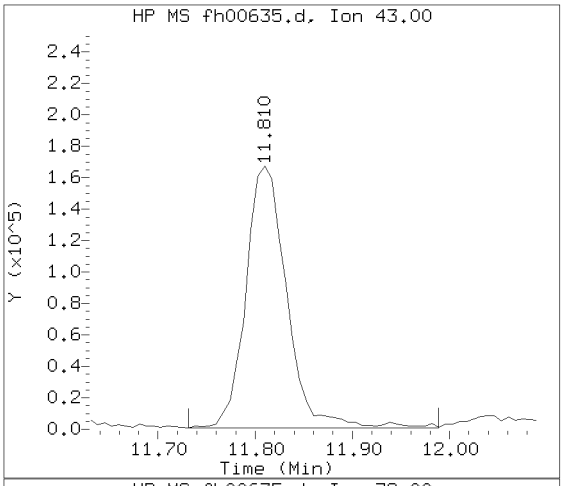
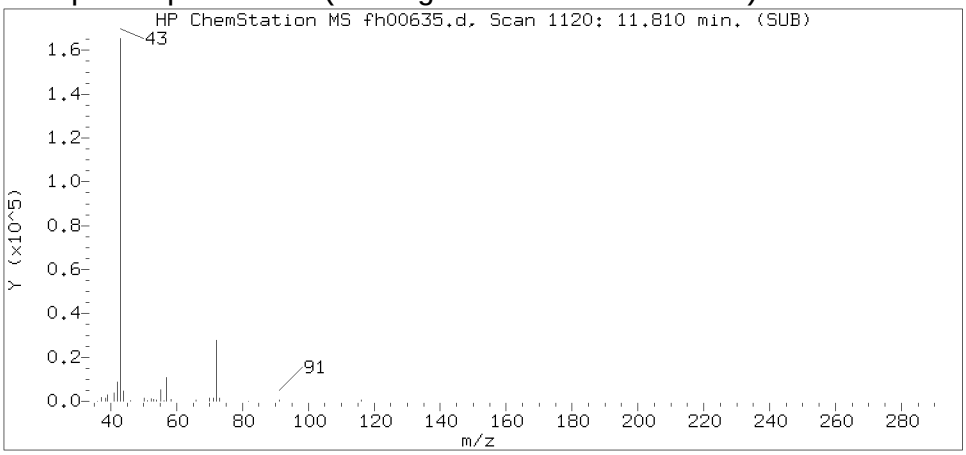
Target 3.5 esignature user ID: jeb07445

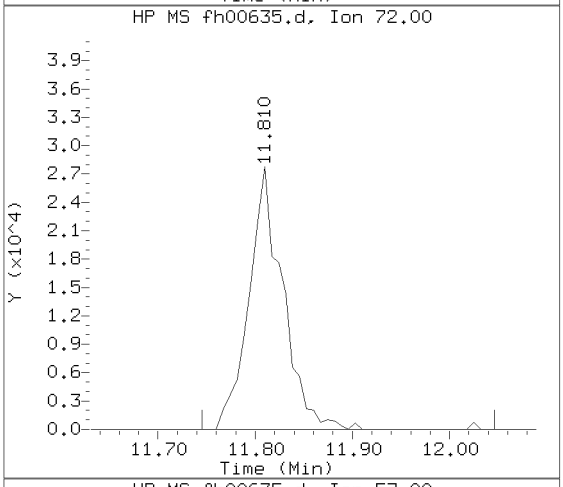
Reference Standard Spectrum for 2-Butanone



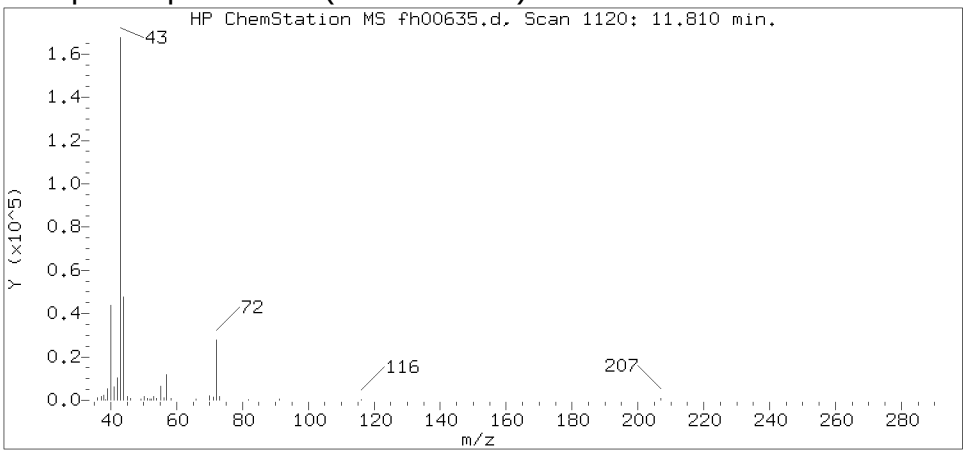


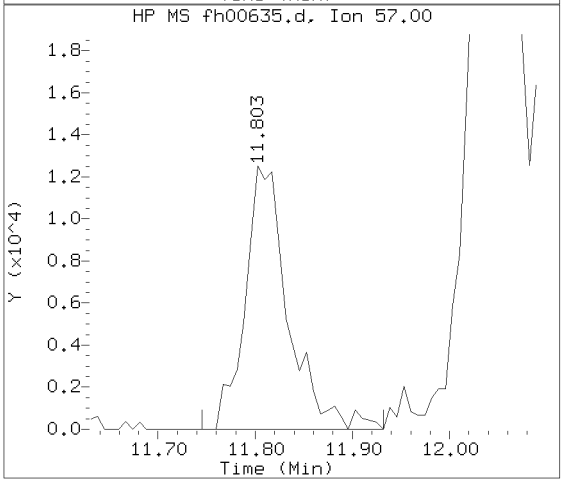
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00635.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:21 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:48 jeb07445

Sample Name: 1178- Lab Sample ID: 9766353

Compound Number : 45
Compound Name : 2-Butanone
Scan Number : 1120
Retention Time (minutes): 11.810
Relative Retention Time : 0.00137
Quant Ion : 43.00
Area (flag) : 490100
Concentration (ppb(v)) : 3.0841

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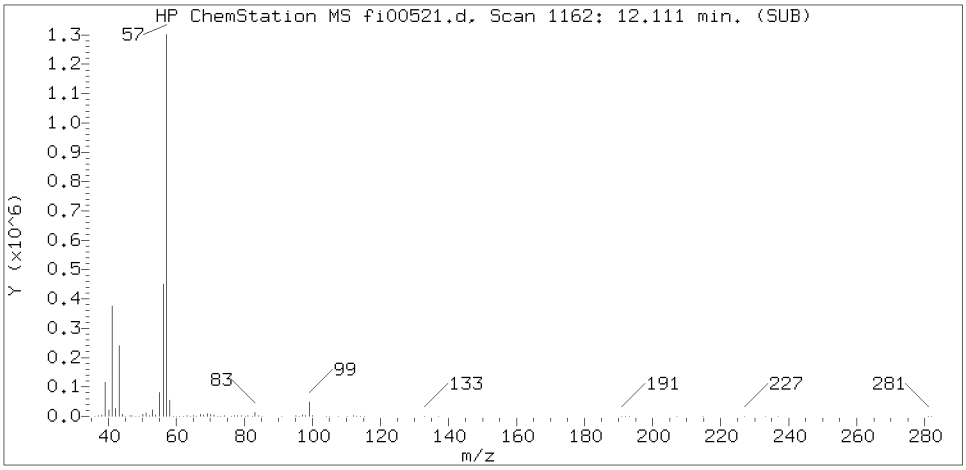
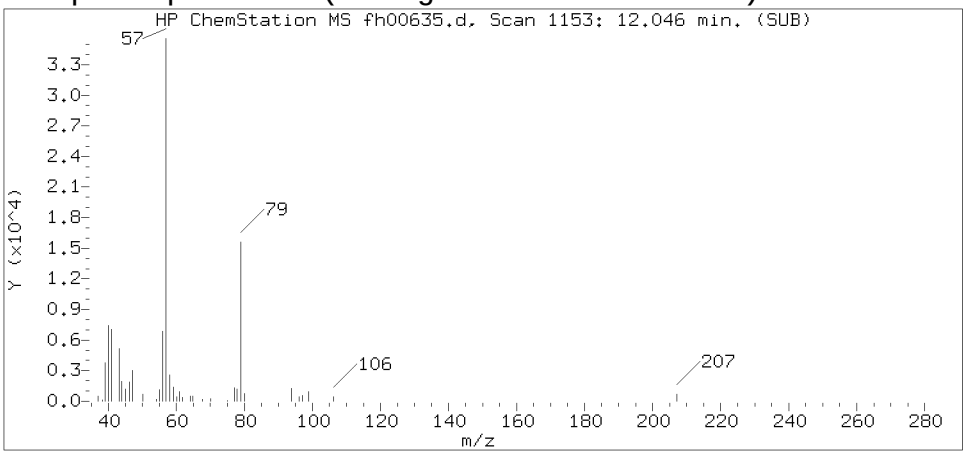
Target 3.5 esignature user ID: jeb07445

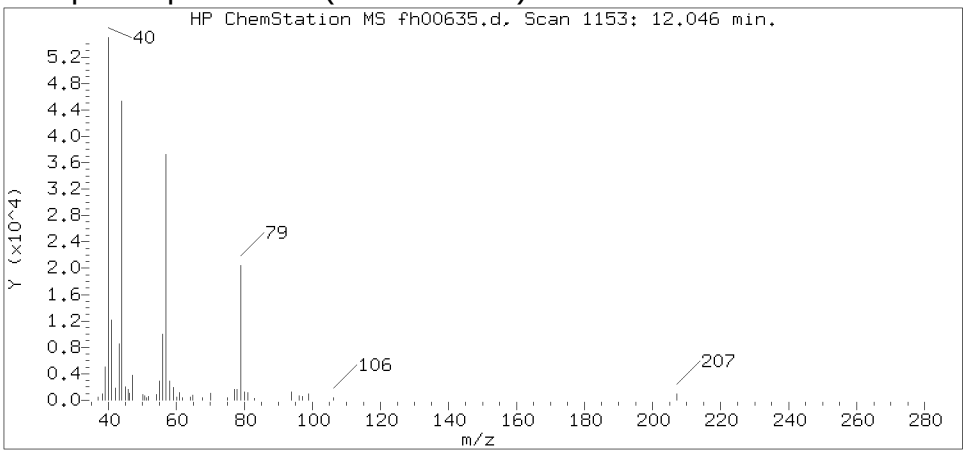
Reference Standard Spectrum for Isooctane

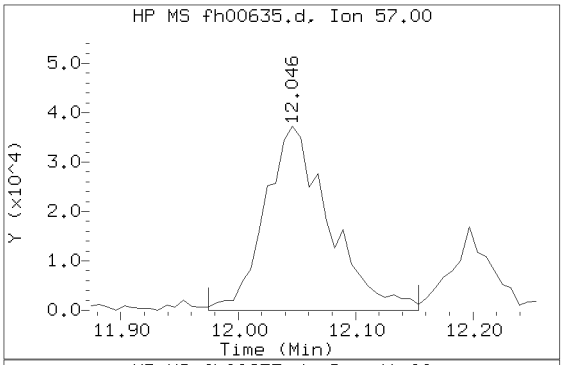


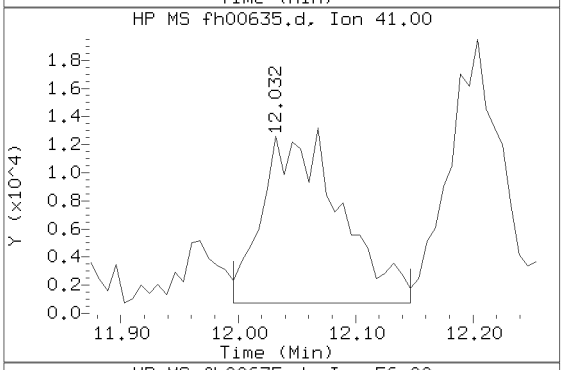
Sample Spectrum (Background Subtracted)

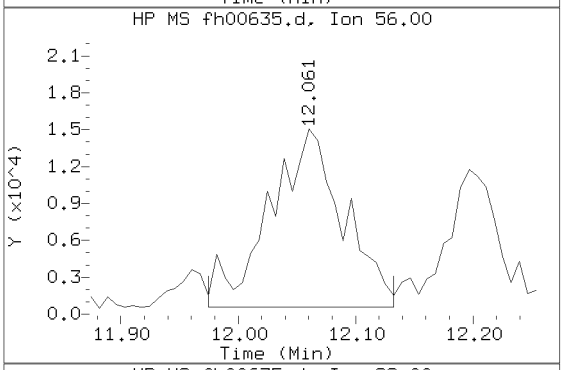


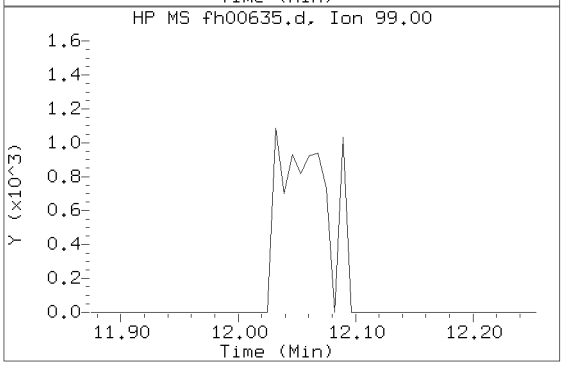
Sample Spectrum (Unaltered)











Data File: /chem/HP26379.i/18aug27.b/fh00635.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:21 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:48 jeb07445

Sample Name: 1178- Lab Sample ID: 9766353

Compound Number : 46
Compound Name : Isooctane
Scan Number : 1153
Retention Time (minutes): 12.046
Relative Retention Time :-0.00000
Quant Ion : 57.00
Area (flag) : 141301
Concentration (ppb(v)) : 0.4294

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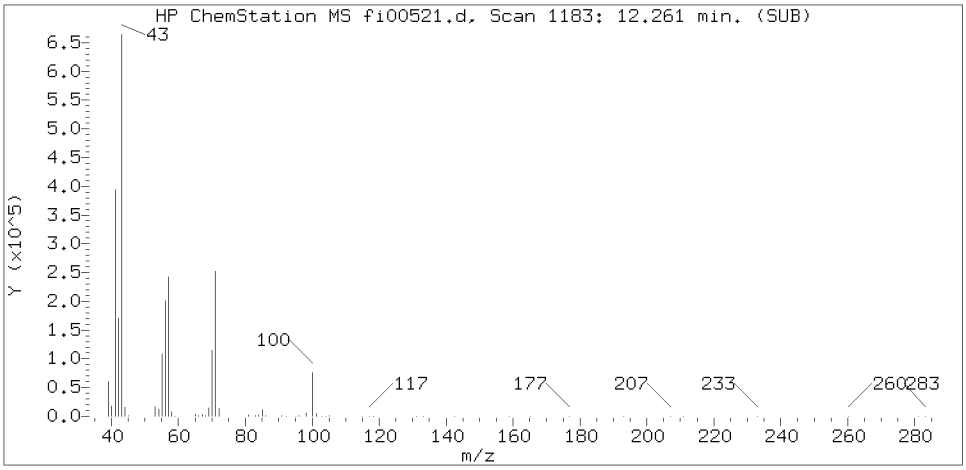
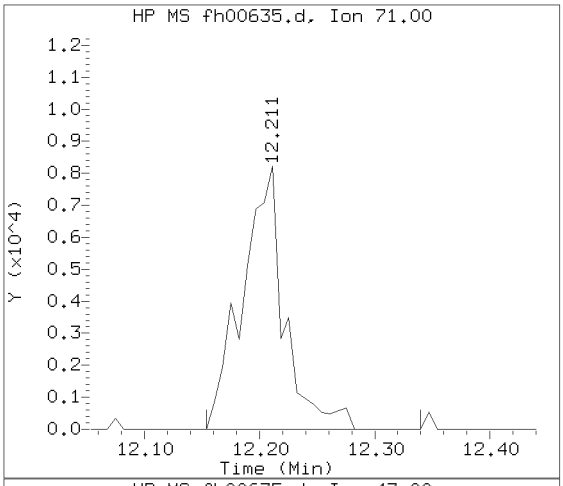
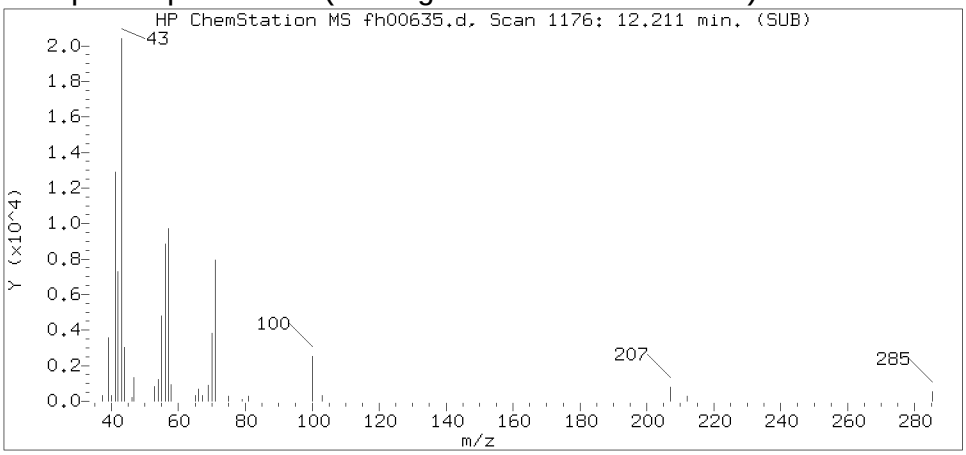
Target 3.5 esignature user ID: jeb07445

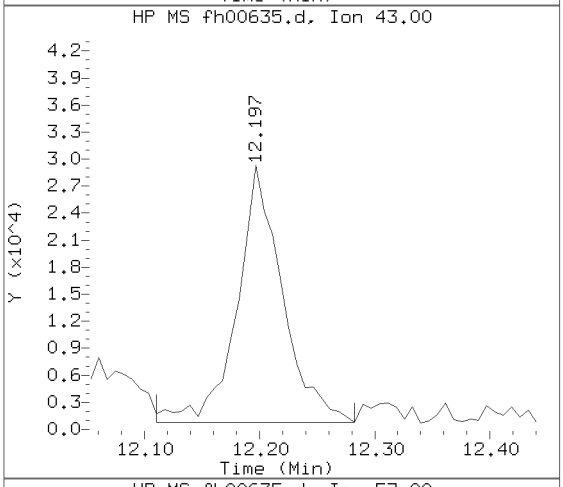
Reference Standard Spectrum for Heptane



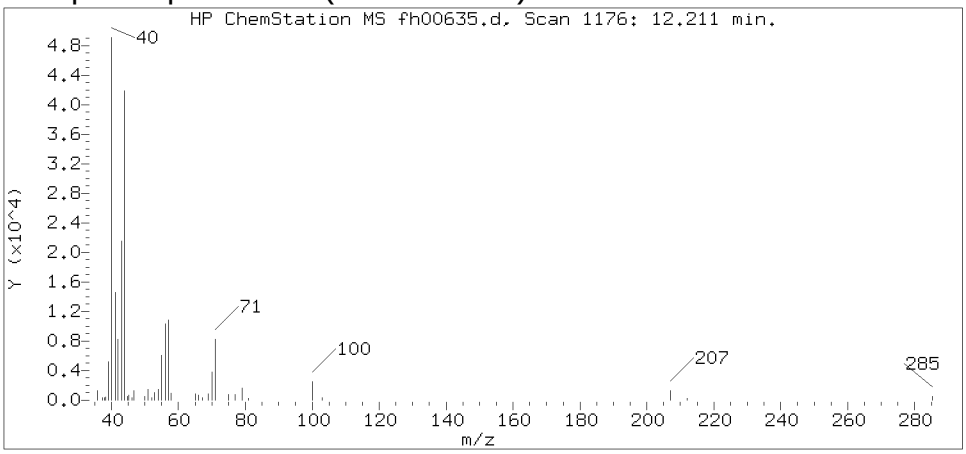


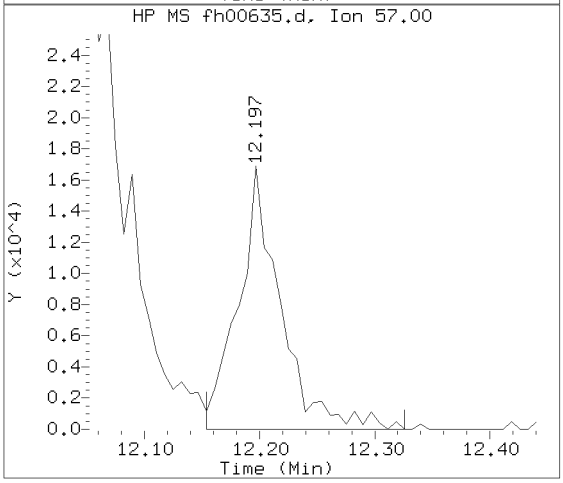
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00635.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:21 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:48 jeb07445

Sample Name: 1178- Lab Sample ID: 9766353

Compound Number : 47
Compound Name : Heptane
Scan Number : 1176
Retention Time (minutes): 12.211
Relative Retention Time :-0.00054
Quant Ion : 71.00
Area (flag) : 20787
Concentration (ppb(v)) : 0.4388

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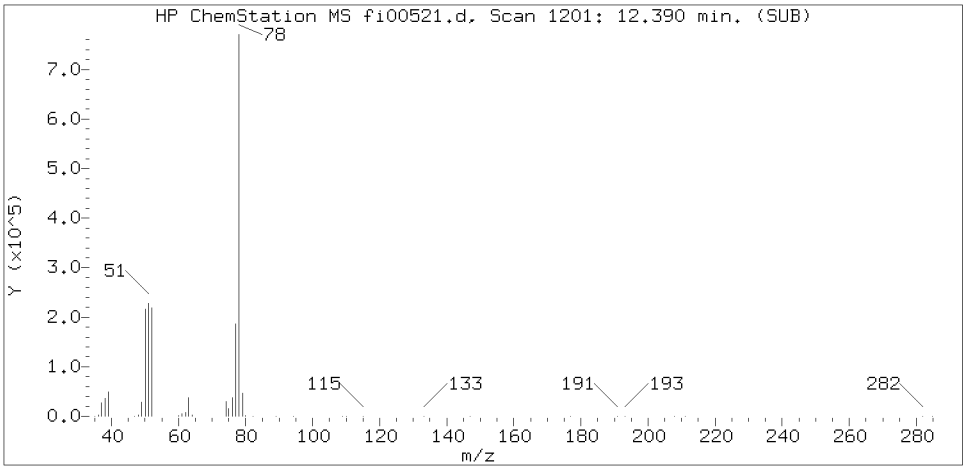
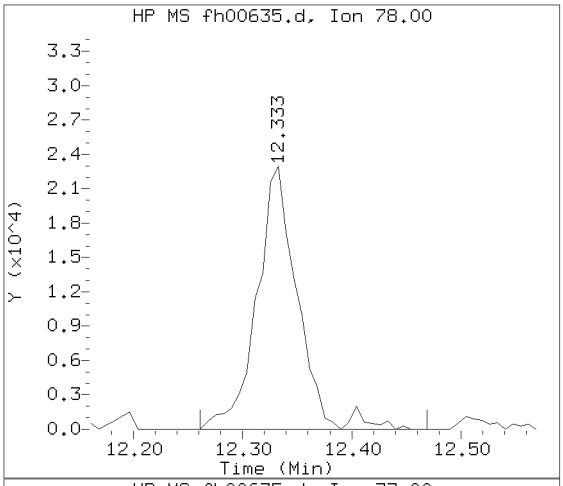
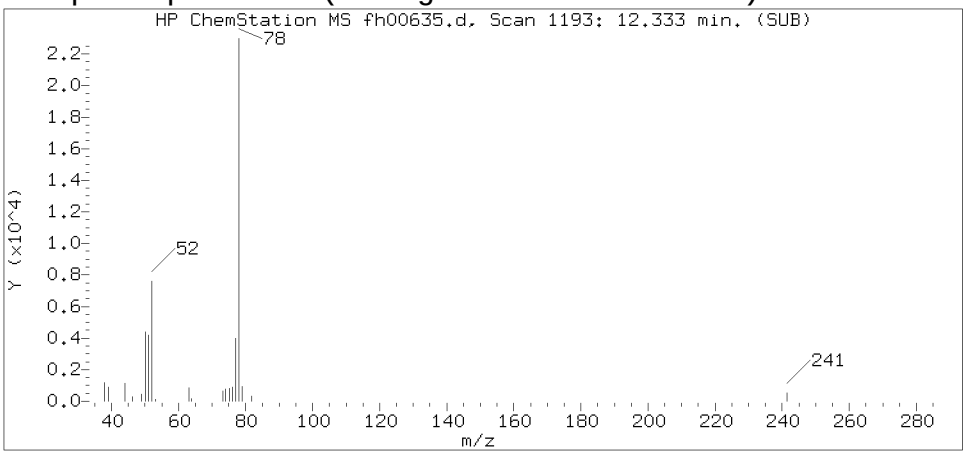
Target 3.5 esignature user ID: jeb07445

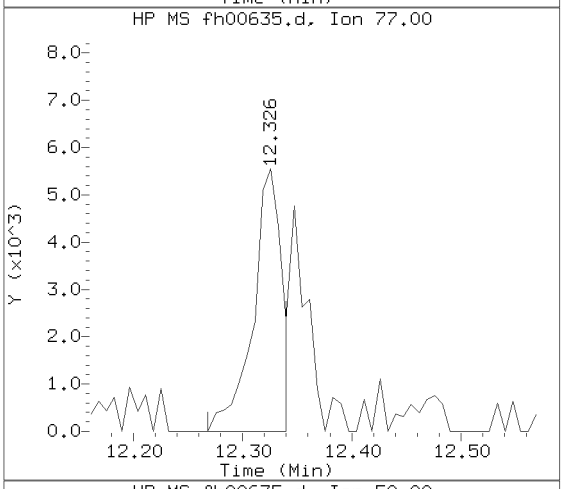
Reference Standard Spectrum for Benzene



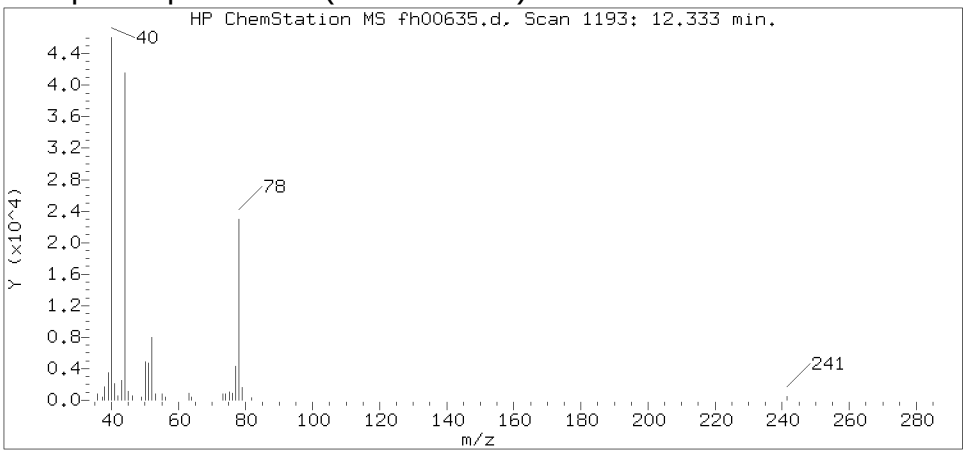


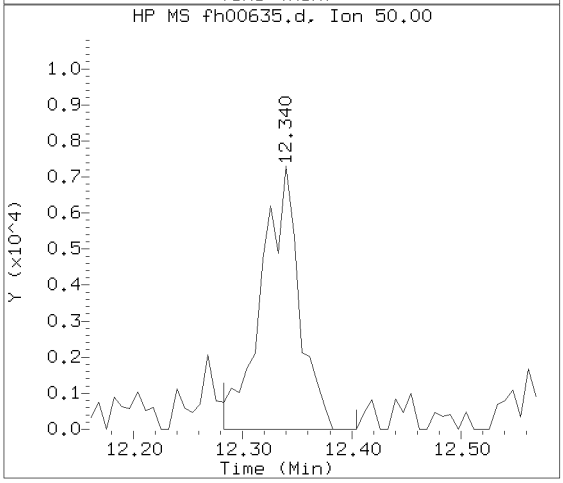
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00635.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:21 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:48 jeb07445

Sample Name: 1178- Lab Sample ID: 9766353

Compound Number : 48
Compound Name : Benzene
Scan Number : 1193
Retention Time (minutes): 12.333
Relative Retention Time :-0.00054
Quant Ion : 78.00
Area (flag) : 59605
Concentration (ppb(v)) : 0.4069

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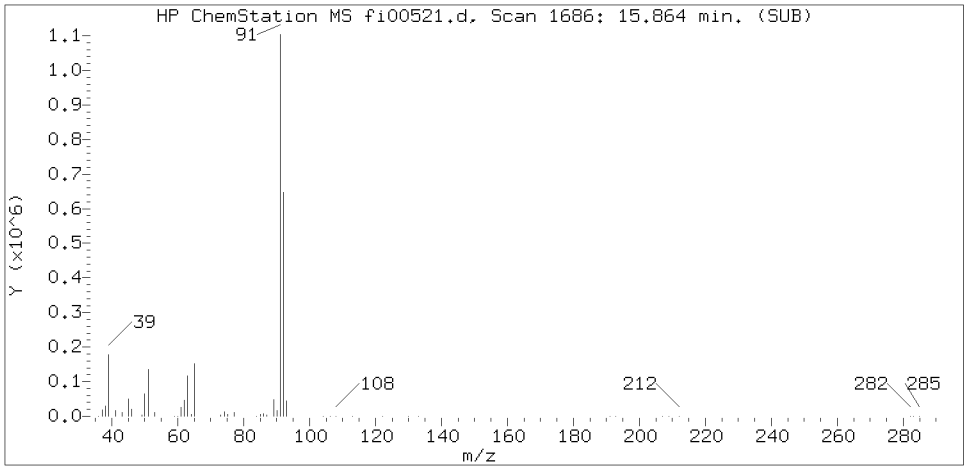
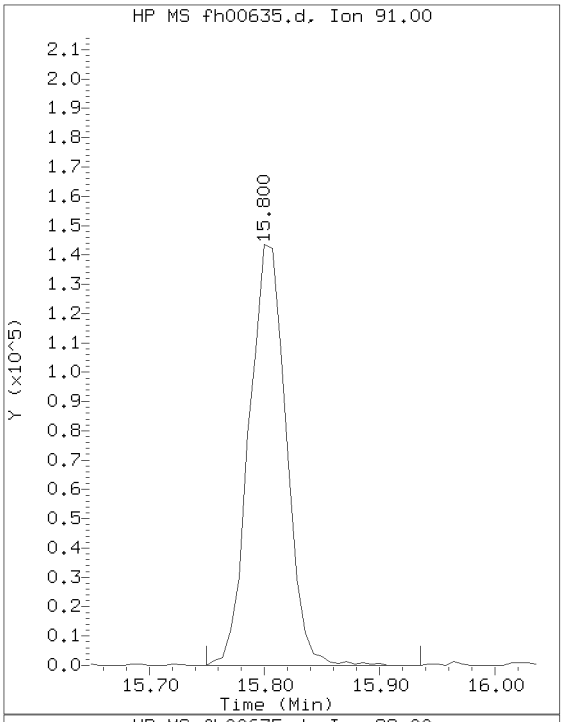
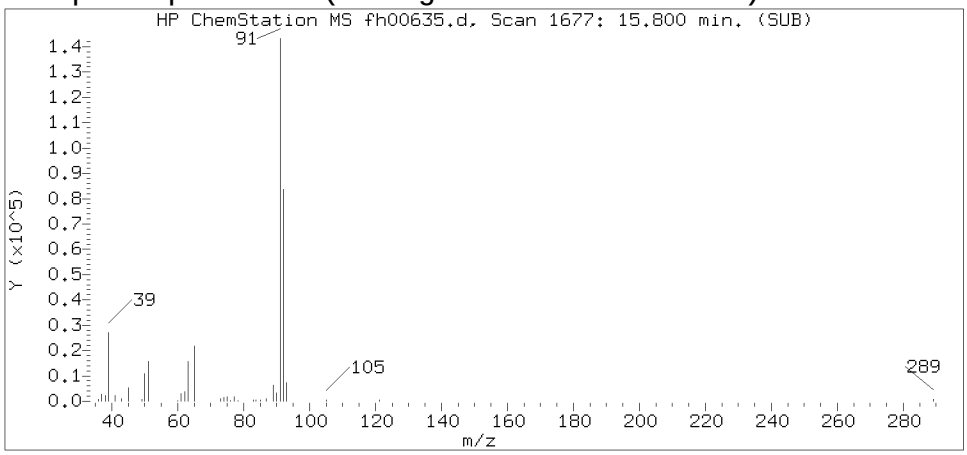
Target 3.5 esignature user ID: jeb07445

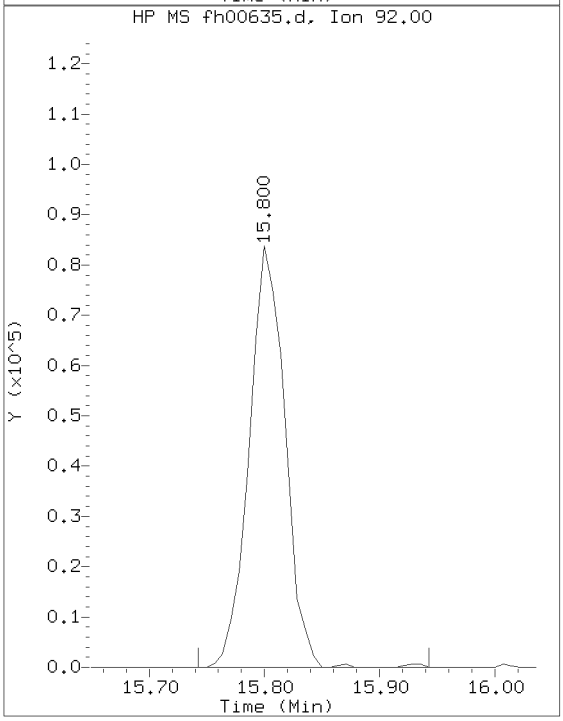
Reference Standard Spectrum for Toluene



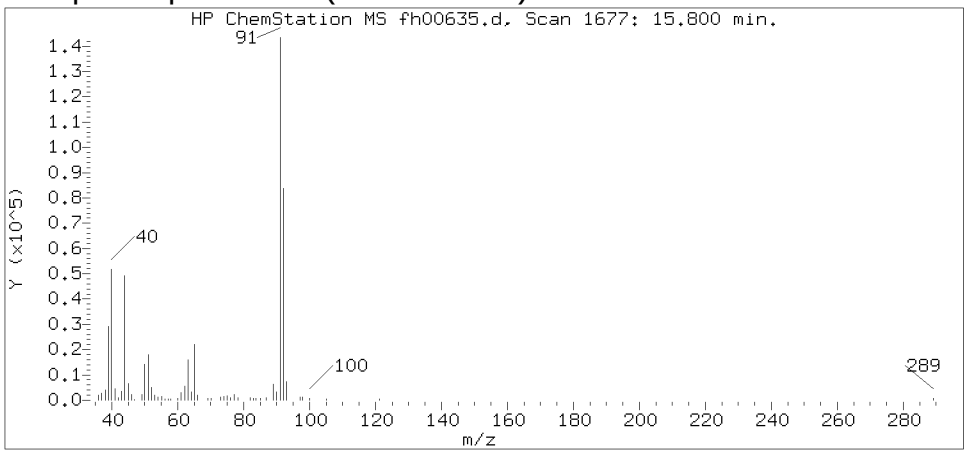


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00635.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:21 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:48 jeb07445

Sample Name: 1178- Lab Sample ID: 9766353

Compound Number : 61
Compound Name : Toluene
Scan Number : 1677
Retention Time (minutes): 15.800
Relative Retention Time :-0.00034
Quant Ion : 91.00
Area (flag) : 321447
Concentration (ppb(v)) : 1.8490

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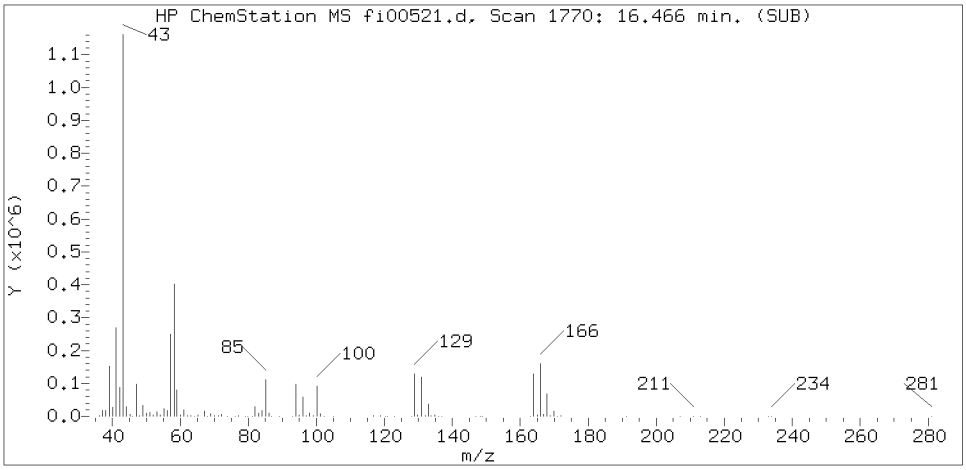
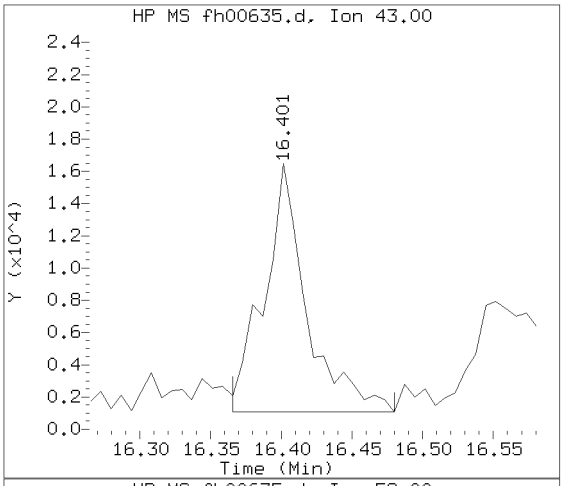
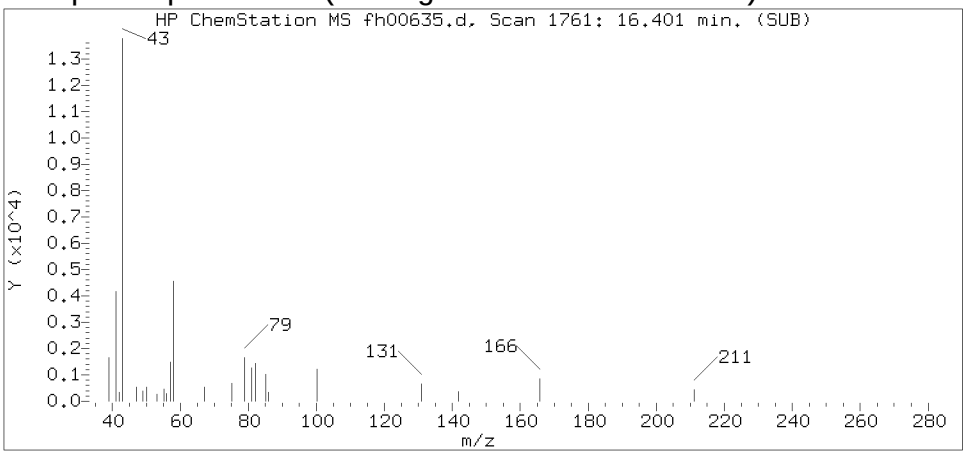
Target 3.5 esignature user ID: jeb07445

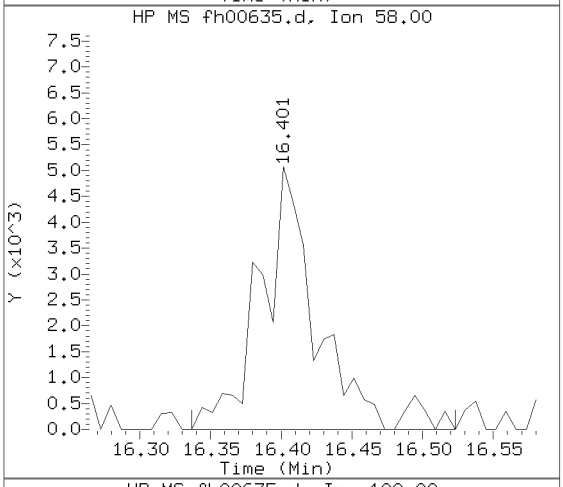
Reference Standard Spectrum for 4-Methyl-2-Pentanone



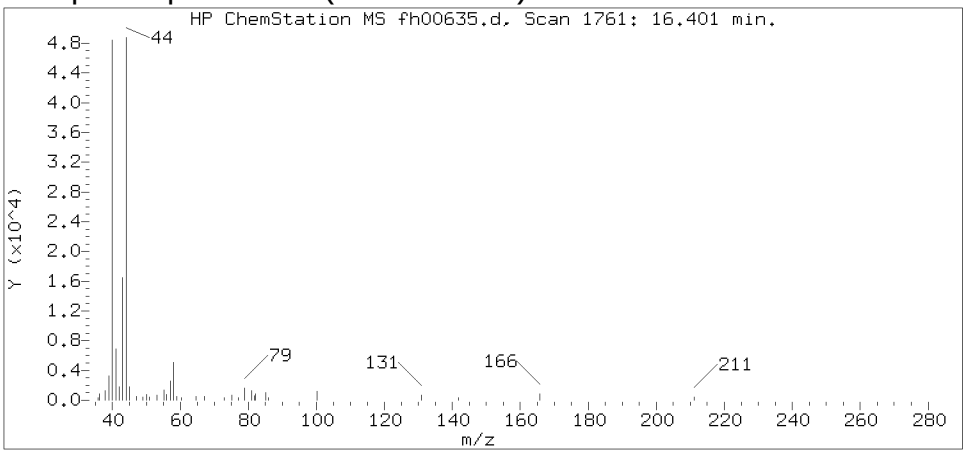


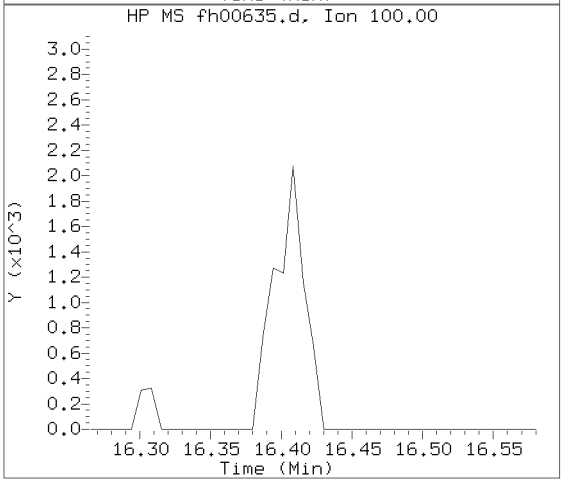
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00635.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:21 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:48 jeb07445

Sample Name: 1178- Lab Sample ID: 9766353

Compound Number : 62
Compound Name : 4-Methyl-2-Pentanone
Scan Number : 1761
Retention Time (minutes): 16.401
Relative Retention Time : 0.00000
Quant Ion : 43.00
Area (flag) : 32446
Concentration (ppb(v)) : 0.1705

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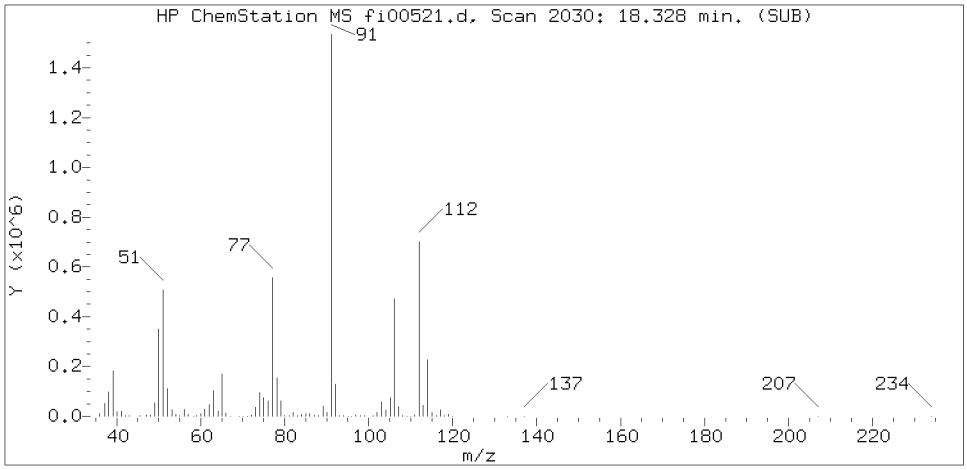
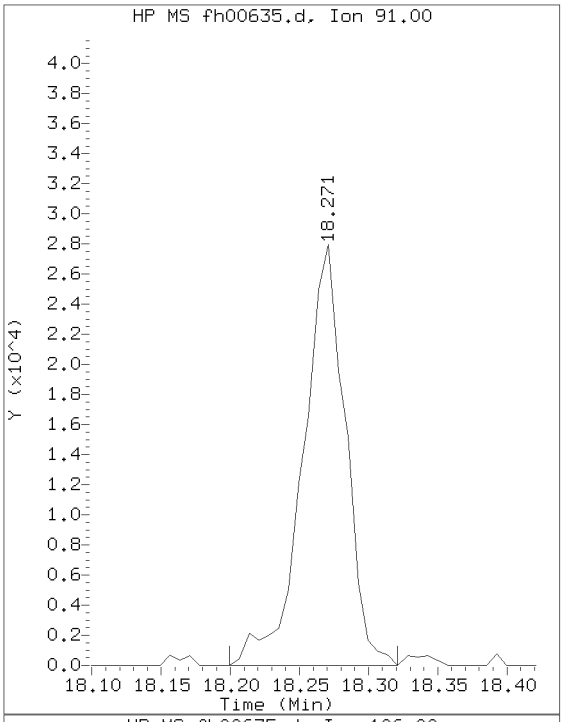
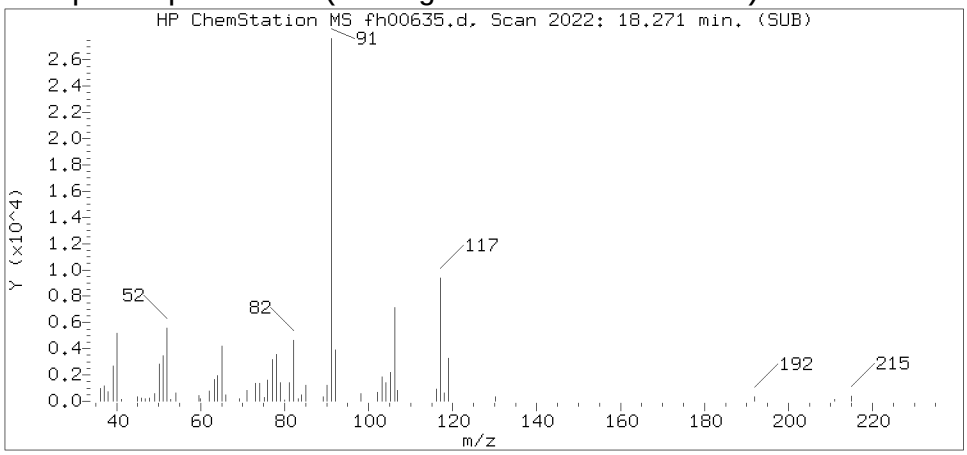
Target 3.5 esignature user ID: jeb07445

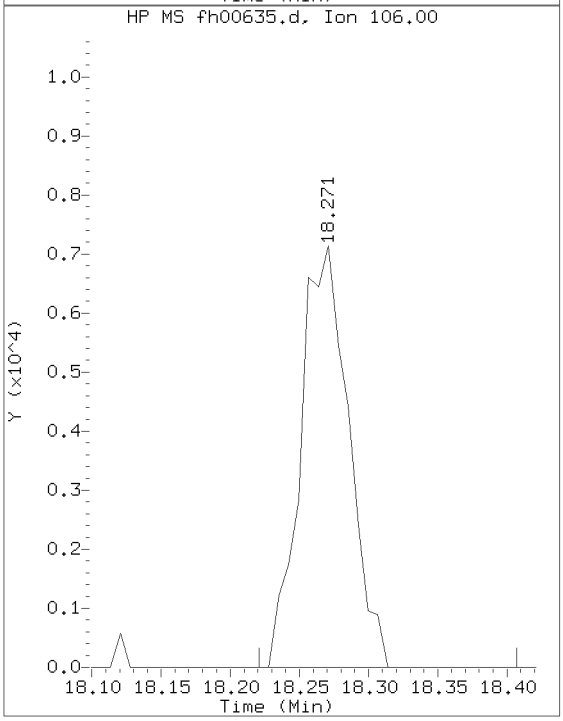
Reference Standard Spectrum for Ethylbenzene



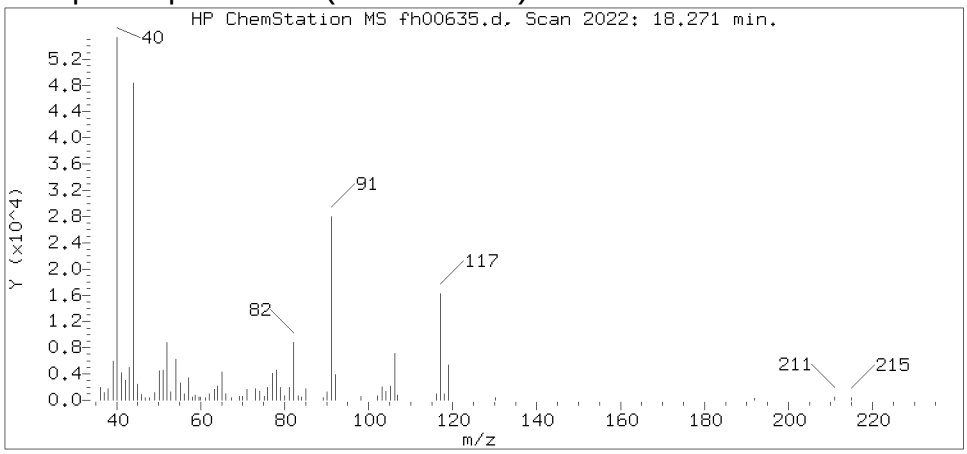


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00635.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:21 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:48 jeb07445

Sample Name: 1178- Lab Sample ID: 9766353

Compound Number : 73
Compound Name : Ethylbenzene
Scan Number : 2022
Retention Time (minutes): 18.271
Relative Retention Time :-0.00039
Quant Ion : 91.00
Area (flag) : 59677
Concentration (ppb(v)) : 0.2515

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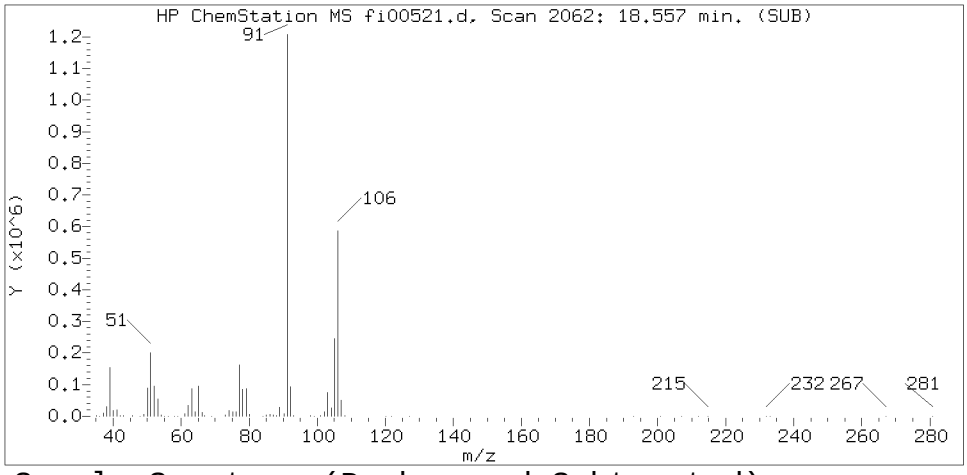
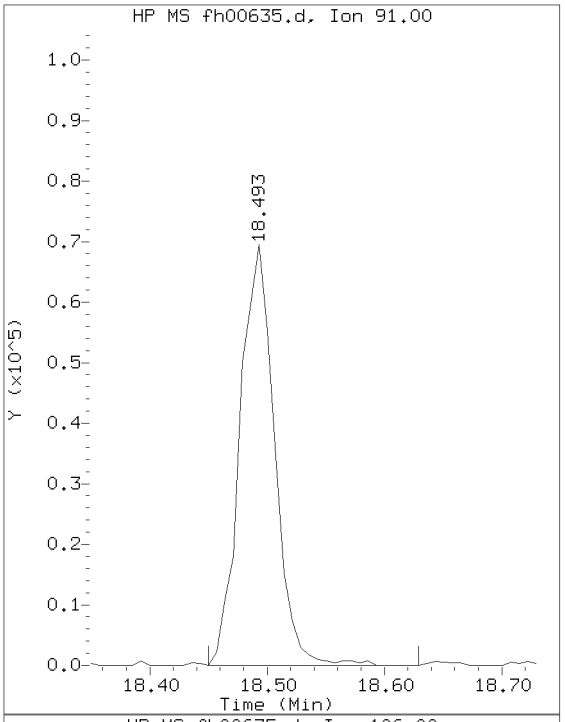
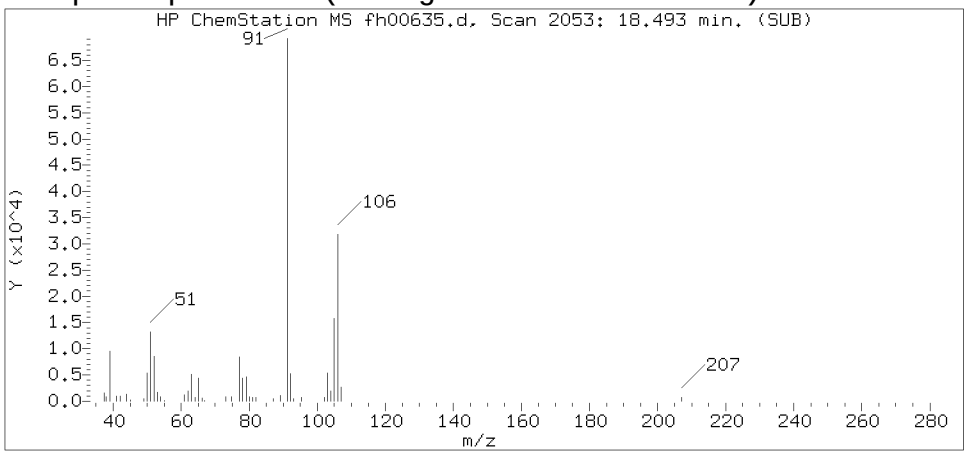
Target 3.5 esignature user ID: jeb07445

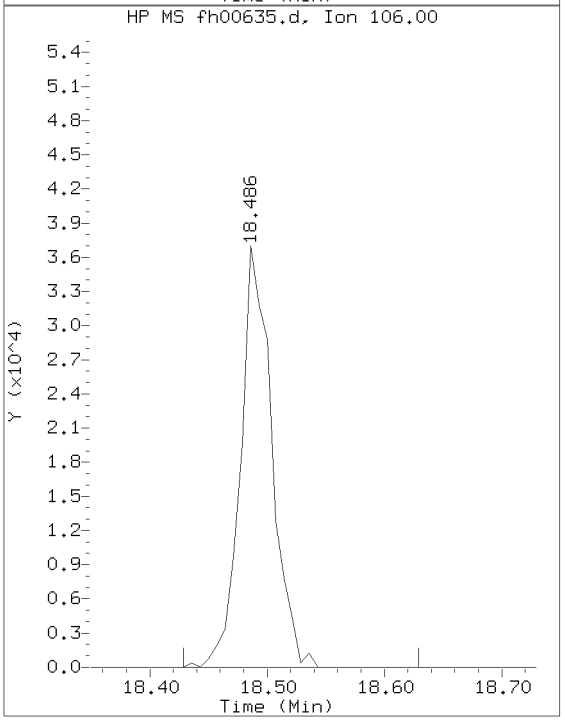
Reference Standard Spectrum for m/p-Xylene



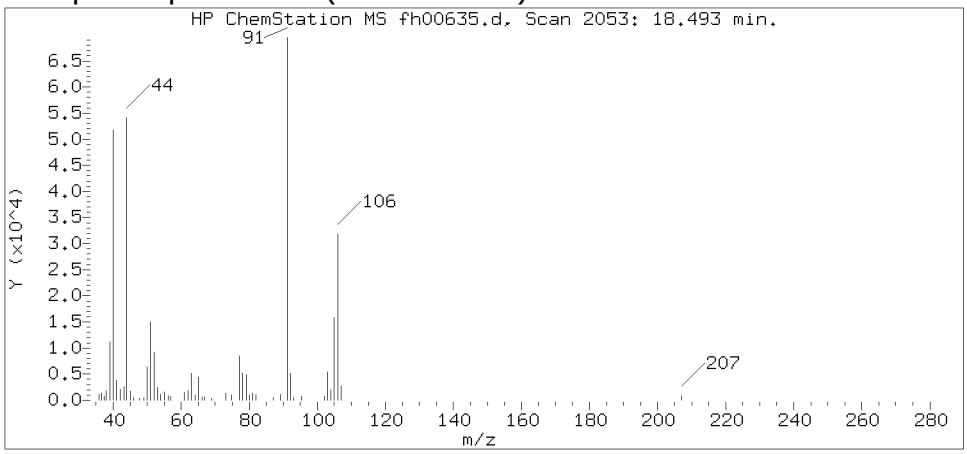


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00635.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:21 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:48 jeb07445

Sample Name: 1178- Lab Sample ID: 9766353

Compound Number : 75
Compound Name : m/p-Xylene
Scan Number : 2053
Retention Time (minutes): 18.493
Relative Retention Time :-0.00040
Quant Ion : 91.00
Area (flag) : 142806
Concentration (ppb(v)) : 0.8374

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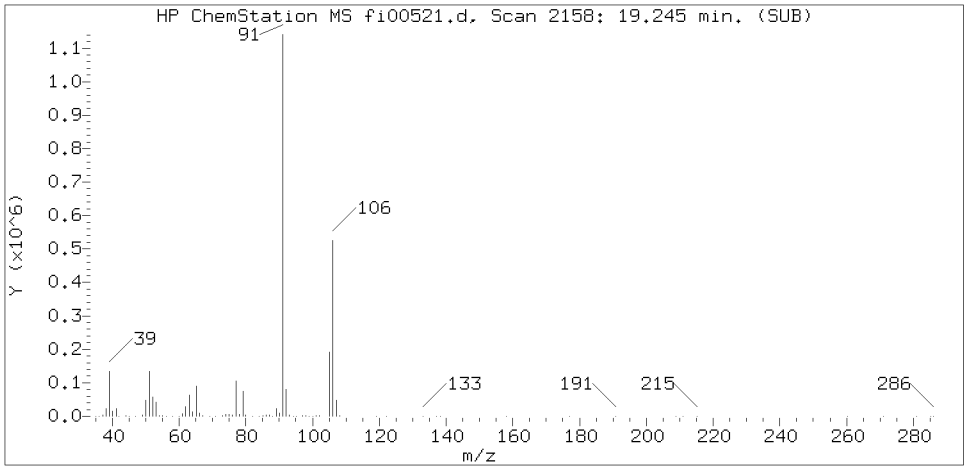
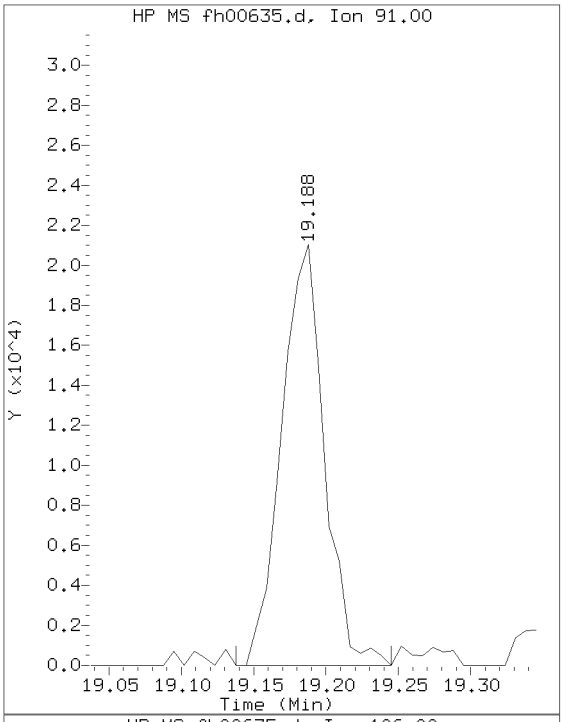
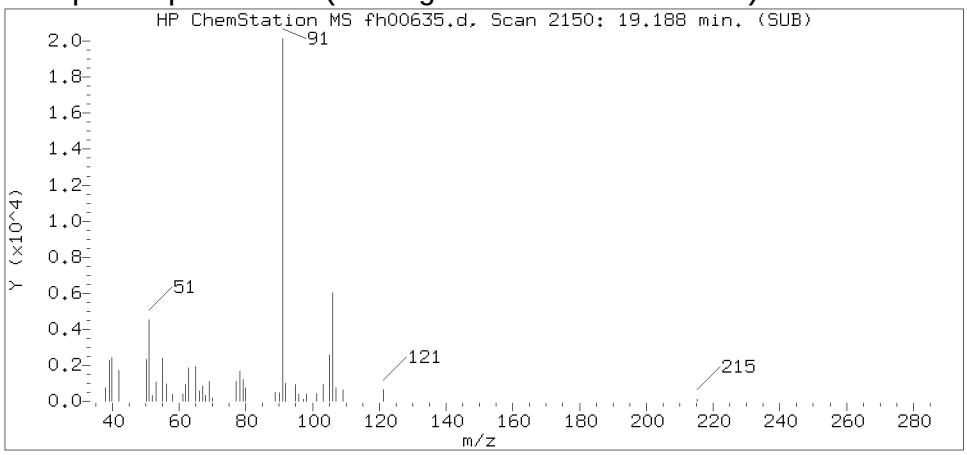
Target 3.5 esignature user ID: jeb07445

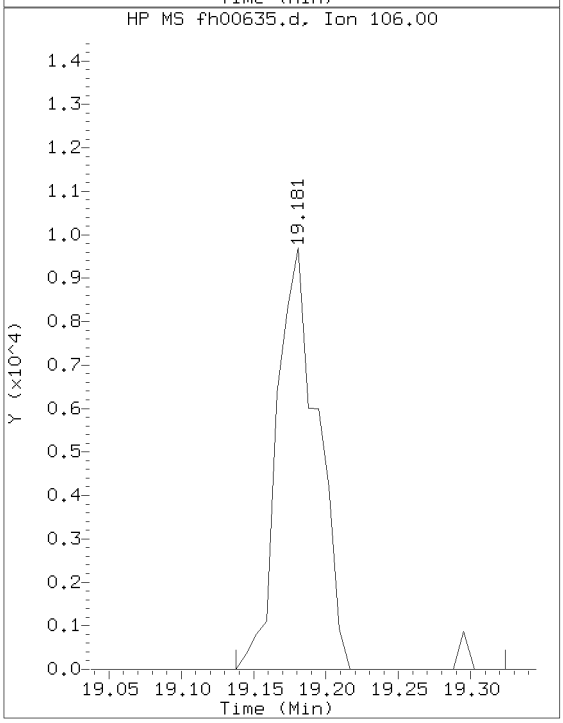
Reference Standard Spectrum for o-Xylene



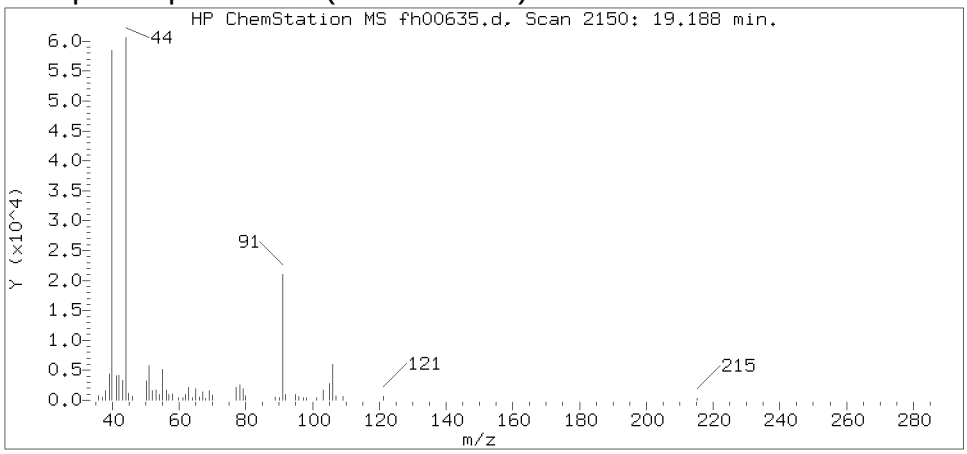


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00635.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:21 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:48 jeb07445

Sample Name: 1178- Lab Sample ID: 9766353

Compound Number	: 76
Compound Name	: o-Xylene
Scan Number	: 2150
Retention Time (minutes)	: 19.188
Relative Retention Time	:-0.00041
Quant Ion	: 91.00
Area (flag)	: 43421
Concentration (ppb(v))	: 0.2612

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Target 3.5 esignature user ID: jeb07445

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766354
Canister ID:	1506	Lab File ID:	fh00636.d
Pressure Received:	11.8 psia	Date Collected:	08/18/2018
Final Pressure:	23.5 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	21:52
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	2.7	J
75-45-6	Chlorodifluoromethane	0.53	U
76-14-2	Freon 114	0.84	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.31	U
106-99-0	1,3-Butadiene	0.38	U
74-83-9	Bromomethane	0.70	U
75-00-3	Chloroethane	0.50	U
75-43-4	Dichlorofluoromethane	0.46	U
75-69-4	Trichlorofluoromethane	1.6	J
109-66-0	Pentane	1.5	J
75-35-4	1,1-Dichloroethene	0.56	U
76-13-1	Freon 113	0.84	U
67-64-1	Acetone	20	
75-15-0	Carbon Disulfide	0.40	U
107-05-1	3-Chloropropene	0.47	U
75-09-2	Methylene Chloride	0.87	U
156-60-5	trans-1,2-Dichloroethene	0.34	U
1634-04-4	Methyl t-Butyl Ether	0.54	U
110-54-3	Hexane	0.46	U
75-34-3	1,1-Dichloroethane	0.36	U
156-59-2	cis-1,2-Dichloroethene	0.48	U
78-93-3	2-Butanone	5.1	
67-66-3	Chloroform	0.45	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766354
Canister ID:	1506	Lab File ID:	fh00636.d
Pressure Received:	11.8 psia	Date Collected:	08/18/2018
Final Pressure:	23.5 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	21:52
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
71-55-6	1,1,1-Trichloroethane	0.65	U
56-23-5	Carbon Tetrachloride	0.88	U
71-43-2	Benzene	0.45	J
107-06-2	1,2-Dichloroethane	0.32	U
540-84-1	Isooctane	0.61	U
142-82-5	Heptane	0.94	U
79-01-6	Trichloroethene	0.97	U
78-87-5	1,2-Dichloropropane	0.60	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	0.80	U
10061-01-5	cis-1,3-Dichloropropene	0.45	U
108-10-1	4-Methyl-2-Pentanone	0.61	U
108-88-3	Toluene	0.55	J
111-65-9	Octane	1.9	U
10061-02-6	trans-1,3-Dichloropropene	0.54	U
79-00-5	1,1,2-Trichloroethane	0.65	U
127-18-4	Tetrachloroethene	1.7	U
591-78-6	2-Hexanone	0.74	U
124-48-1	Dibromochloromethane	1.1	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	0.60	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	0.83	U
179601-23-1	m/p-Xylene	1.1	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766354
Canister ID:	1506	Lab File ID:	fh00636.d
Pressure Received:	11.8 psia	Date Collected:	08/18/2018
Final Pressure:	23.5 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	21:52
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
95-47-6	o-Xylene	0.83	U
100-42-5	Styrene	0.85	U
75-25-2	Bromoform	1.8	U
98-82-8	Cumene	1.2	U
108-86-1	Bromobenzene	0.64	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	0.84	U
622-96-8	4-Ethyltoluene	0.88	U
108-67-8	1,3,5-Trimethylbenzene	1.6	U
95-63-6	1,2,4-Trimethylbenzene	1.4	U
541-73-1	1,3-Dichlorobenzene	1.1	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.2	U
67-72-1	Hexachloroethane	2.6	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18aug27.b/fh00636.d Injection date and time: **27-AUG-2018 21:52**
Data file Sample Info. Line: 9766354;400;F1823930AA;1506-;0;0;SAMPLE; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 28-Aug-2018 12:49 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.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): 23.5 psia Canister Pressure before dilution (Ya): 11.8 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 400 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.115(-0.021)	1023	130	339893 (-20)	10.00		255500 - 596166
52) 1,4-Difluorobenzene	13.400(-0.007)	1342	114	1123194 (-26)	10.00		906195 - 2114453
71) Chlorobenzene-d5	18.235(0.000)	2017	117	1152201 (-22)	10.00		883644 - 2061835

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)	4.009(0.000)	85	61922M	0.546	0.55		J	0.13	1
3) Chlorodifluoromethane	(1)			Not Detected					0.15	1
4) Freon 114	(1)			Not Detected					0.12	1
5) Chloromethane	(1)			Not Detected					0.24	1
6) Vinyl Chloride	(1)			Not Detected					0.12	1
7) 1,3-Butadiene	(1)			Not Detected					0.17	1
8) Bromomethane	(1)			Not Detected					0.18	1
9) Chloroethane	(1)			Not Detected					0.19	1
13) Dichlorofluoromethane	(1)			Not Detected					0.11	1
12) Trichlorofluoromethane	(1)	5.850(0.002)	101	30930	0.278	0.28		J	0.15	1
11) Pentane	(1)	5.843(0.002)	43	63297	0.514	0.51		J	0.13	1
16) 1,1-Dichloroethene	(1)			Not Detected					0.14	1
17) Freon 113	(1)			Not Detected					0.11	1
24) Acetone	(1)	8.114(-0.003)	43	893274	8.213	8.21			0.53	5
18) Carbon Disulfide	(1)			Not Detected					0.13	1
22) 3-Chloropropene	(1)			Not Detected					0.15	1
23) Methylene Chloride	(1)			Not Detected					0.25	2
25) trans-1,2-Dichloroethene	(1)			Not Detected					0.086	1
27) Methyl t-Butyl Ether	(1)			Not Detected					0.15	1
26) Hexane	(1)			Not Detected					0.13	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.089	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.12	1
45) 2-Butanone	(1)	11.824(0.000)	43	269038	1.743	1.74			0.21	1
39) Chloroform	(1)			Not Detected					0.092	1
44) 1,1,1-Trichloroethane	(1)			Not Detected					0.12	1
42) Carbon Tetrachloride	(1)			Not Detected					0.14	1
48) Benzene	(2)	12.340(-0.000)	78	20398	0.141	0.14		J	0.11	1
50) 1,2-Dichloroethane	(2)			Not Detected					0.08	1
46) Isooctane	(2)			Not Detected					0.13	1
47) Heptane	(2)			Not Detected					0.23	1
51) Trichloroethene	(2)			Not Detected					0.18	1
55) 1,2-Dichloropropane	(2)			Not Detected					0.13	1
53) Dibromomethane	(2)			Not Detected					0.14	1
56) Bromodichloromethane	(2)			Not Detected					0.12	1
59) cis-1,3-Dichloropropene	(2)			Not Detected					0.1	1
62) 4-Methyl-2-Pentanone	(2)			Not Detected					0.15	1
61) Toluene	(3)	15.800(-0.000)	91	24647	0.145	0.14		J	0.12	1
60) Octane	(3)			Not Detected					0.4	2
64) trans-1,3-Dichloropropene	(3)			Not Detected					0.12	1
67) 1,1,2-Trichloroethane	(3)			Not Detected					0.12	1
63) Tetrachloroethene	(3)			Not Detected					0.25	2
70) 2-Hexanone	(3)			Not Detected					0.18	1
68) Dibromochloromethane	(3)			Not Detected					0.13	1

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey on 08/28/2018 at 13:00. Target 3.5 esignature user ID: jeb07445

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

Data file: /chem/HP26379.i/18aug27.b/fh00636.d Injection date and time: **27-AUG-2018 21:52**
Data file Sample Info. Line: 9766354;400;F1823930AA;1506-;0;0;SAMPLE; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 28-Aug-2018 12:49 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.d**

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

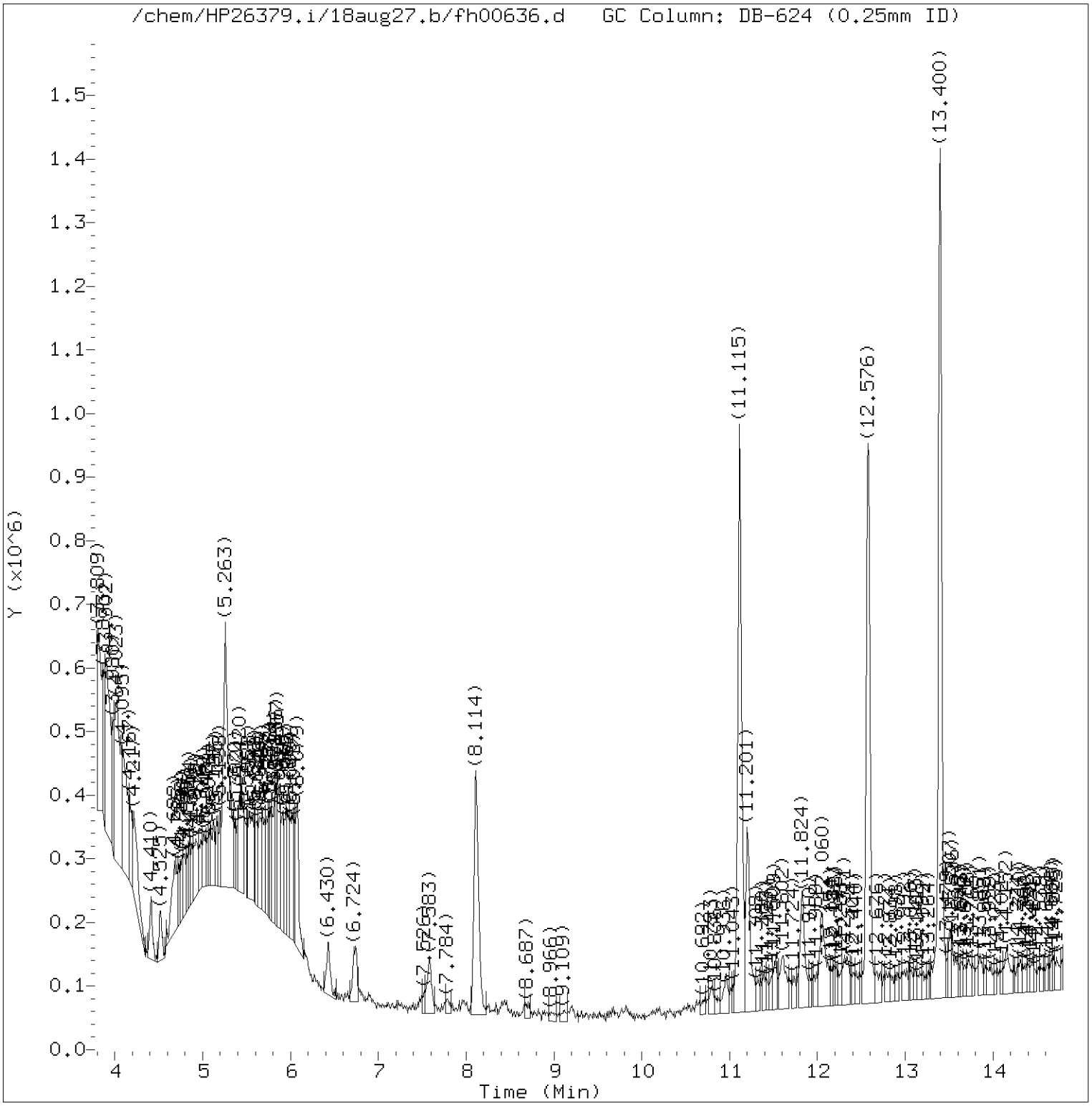
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 23.5 psia Canister Pressure before dilution (Ya): 11.8 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 400 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
69) 1,2-Dibromoethane	(3)			Not Detected					0.13	1
72) Chlorobenzene	(3)			Not Detected					0.13	1
74) 1,1,1,2-Tetrachloroethane	(3)			Not Detected					0.15	1
73) Ethylbenzene	(3)			Not Detected					0.19	1
75) m/p-Xylene	(3)			Not Detected					0.26	2
76) o-Xylene	(3)			Not Detected					0.19	1
78) Styrene	(3)			Not Detected					0.2	1
79) Bromoform	(3)			Not Detected					0.17	1
80) Cumene	(3)			Not Detected					0.24	1
82) Bromobenzene	(3)			Not Detected					0.1	1
83) 1,1,2,2-Tetrachloroethane	(3)			Not Detected					0.15	1
87) 1,2,3-Trichloropropane	(3)			Not Detected					0.14	1
84) 4-Ethyltoluene	(3)			Not Detected					0.18	1
86) 1,3,5-Trimethylbenzene	(3)			Not Detected					0.32	2
90) 1,2,4-Trimethylbenzene	(3)			Not Detected					0.28	2
93) 1,3-Dichlorobenzene	(3)			Not Detected					0.19	1
94) 1,4-Dichlorobenzene	(3)			Not Detected					0.17	1
98) 1,2-Dichlorobenzene	(3)			Not Detected					0.2	1
97) Hexachloroethane	(3)			Not Detected					0.27	2

Total number of targets = 62

Digitally signed by Jacob E. Bailey on 08/28/2018 at 13:00. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:40. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

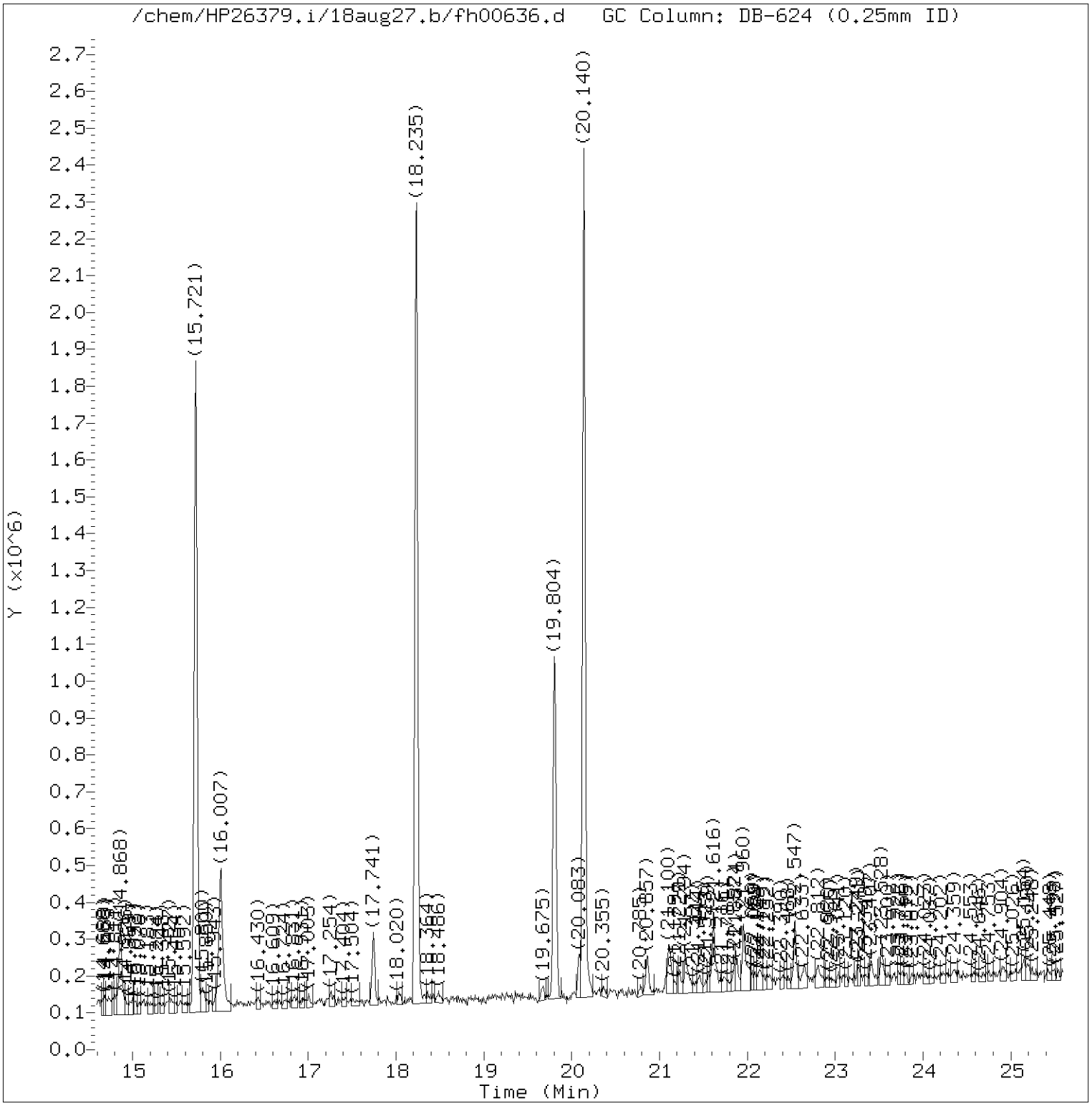
Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00636.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:52 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:49 jeb07445

Sample Name: 1506- Lab Sample ID: 9766354

Digitally signed by Jacob E. Bailey
on 08/28/2018 at 13:00.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00636.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:52 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:49 jeb07445

Sample Name: 1506- Lab Sample ID: 9766354

Digitally signed by Jacob E. Bailey
on 08/28/2018 at 13:00.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00636.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:52 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:49 jeb07445

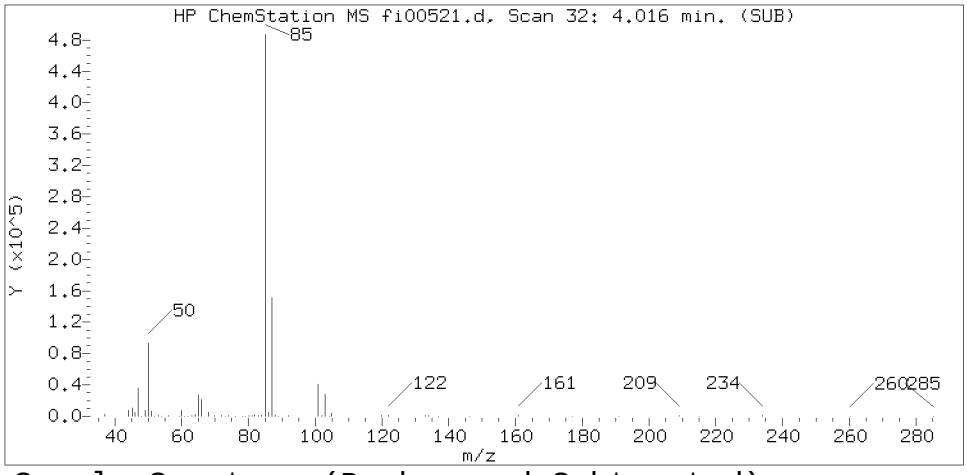
Sample Name: 1506- Lab Sample ID: 9766354

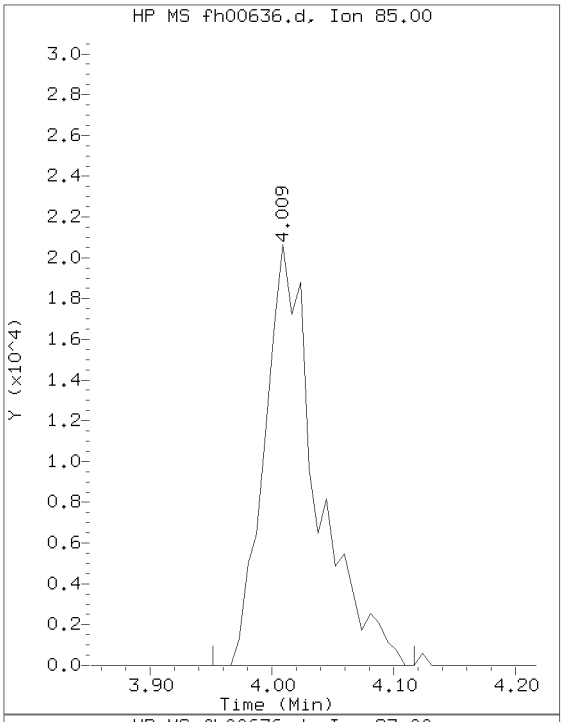
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
2) Dichlorodifluoromethane	(1)	4.009	85	61922M	0.546
11) Pentane	(1)	5.843	43	63297	0.514
12) Trichlorofluoromethane	(1)	5.850	101	30930	0.278
24) Acetone	(1)	8.114	43	893274	8.213
37)*Bromochloromethane	(1)	11.115	130	339893	10.000
45) 2-Butanone	(1)	11.824	43	269038	1.743
48) Benzene	(2)	12.340	78	20398	0.141
52)*1,4-Difluorobenzene	(2)	13.400	114	1123194	10.000
61) Toluene	(3)	15.800	91	24647	0.145
71)*Chlorobenzene-d5	(3)	18.235	117	1152201	10.000

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

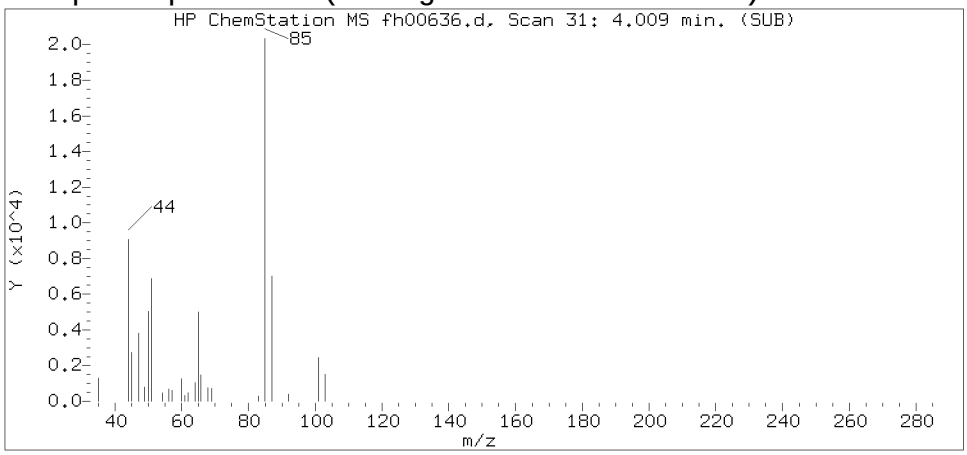
Digitally signed by Jacob E. Bailey
on 08/28/2018 at 13:00.
Target 3.5 esignature user ID: jeb07445

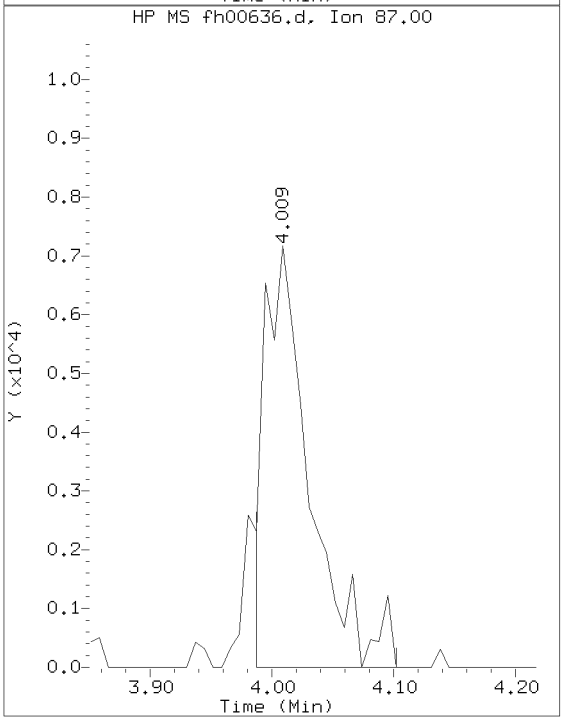
Reference Standard Spectrum for Dichlorodifluoromethane



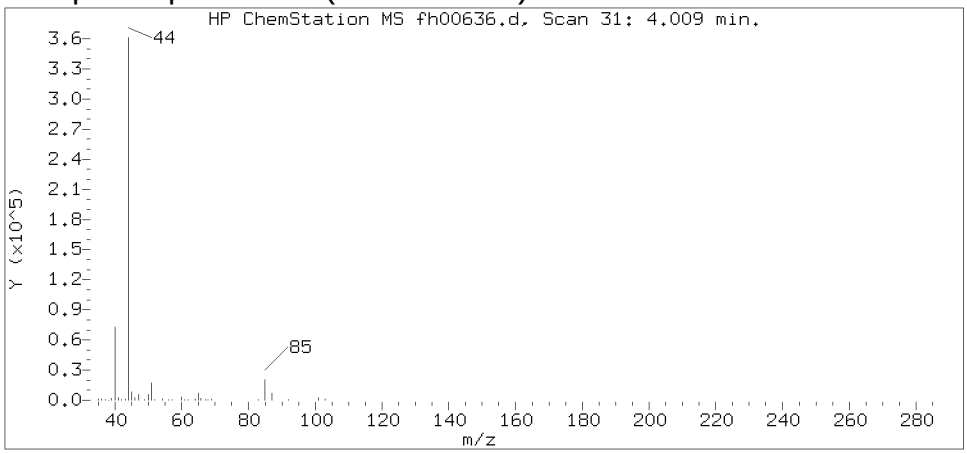


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00636.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:52 Analyst ID: jeb07445

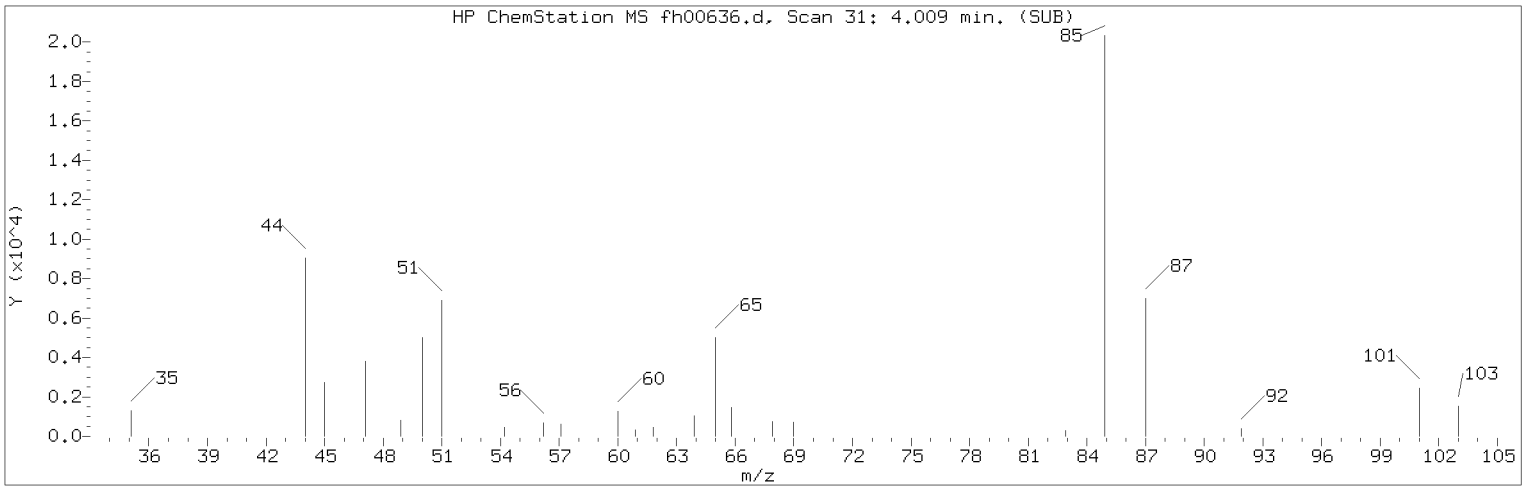
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:49 jeb07445

Sample Name: 1506- Lab Sample ID: 9766354

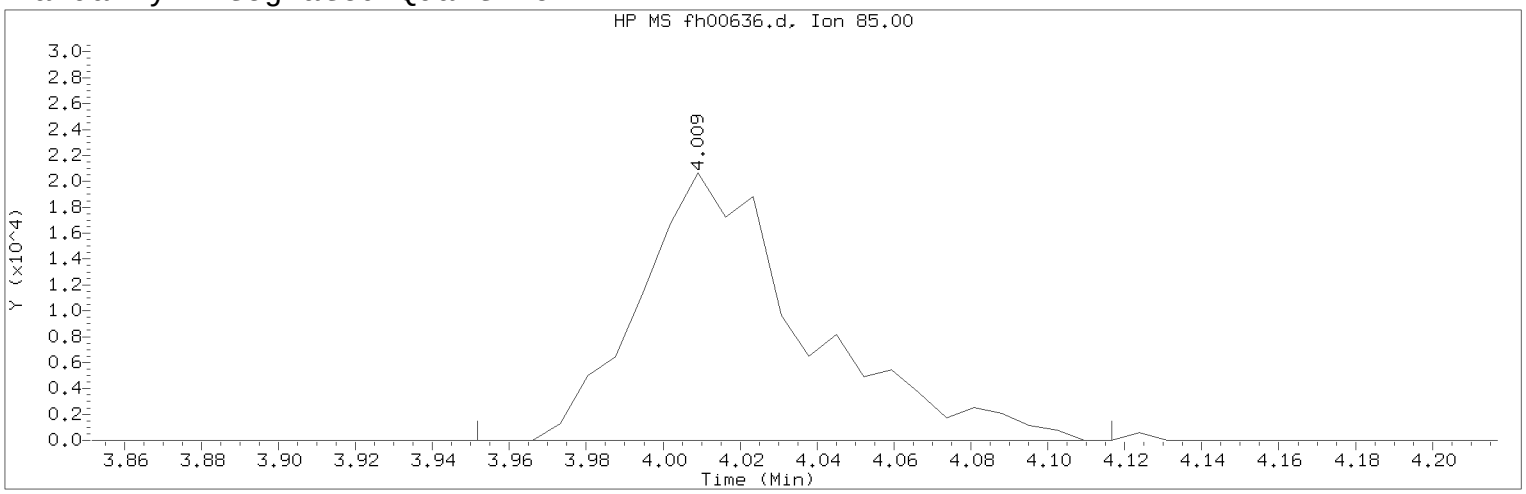
Compound Number	: 2
Compound Name	: Dichlorodifluoromethane
Scan Number	: 31
Retention Time (minutes)	: 4.009
Relative Retention Time	: 0.00005
Quant Ion	: 85.00
Area (flag)	: 61922M
Concentration (ppb(v))	: 0.5455

Digitally signed by Jacob E. Bailey on 08/28/2018 at 13:00.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug27.b/fh00636.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:52 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:49 jeb07445

Sample Name: 1506- Lab Sample ID: 9766354

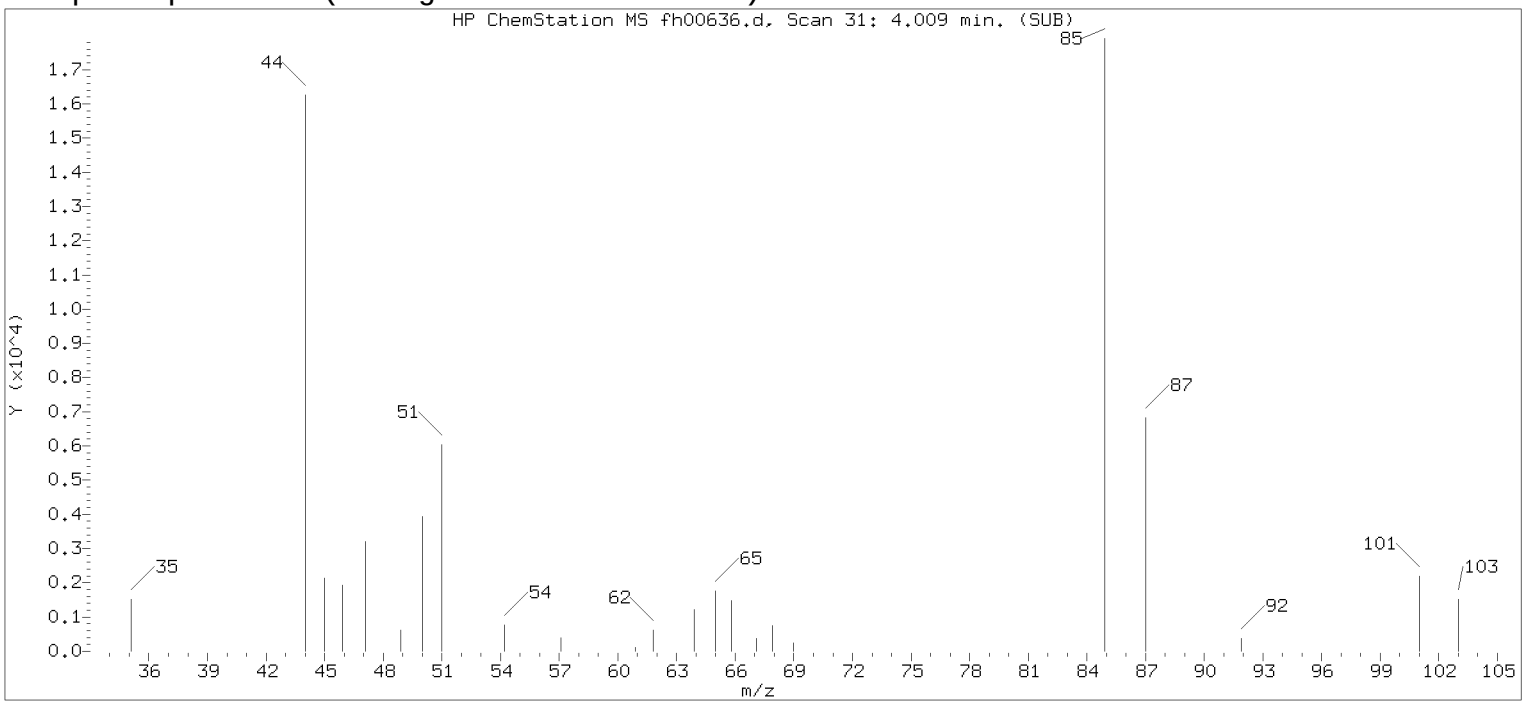
Compound Number : 2
Compound Name : Dichlorodifluoromethane
Scan Number : 31
Retention Time (minutes): 4.009
Quant Ion : 85.00
Area (flag) : 61922M
Concentration (ppb(v)) : 0.5455
Integration start scan : 22 Integration stop scan: 45
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

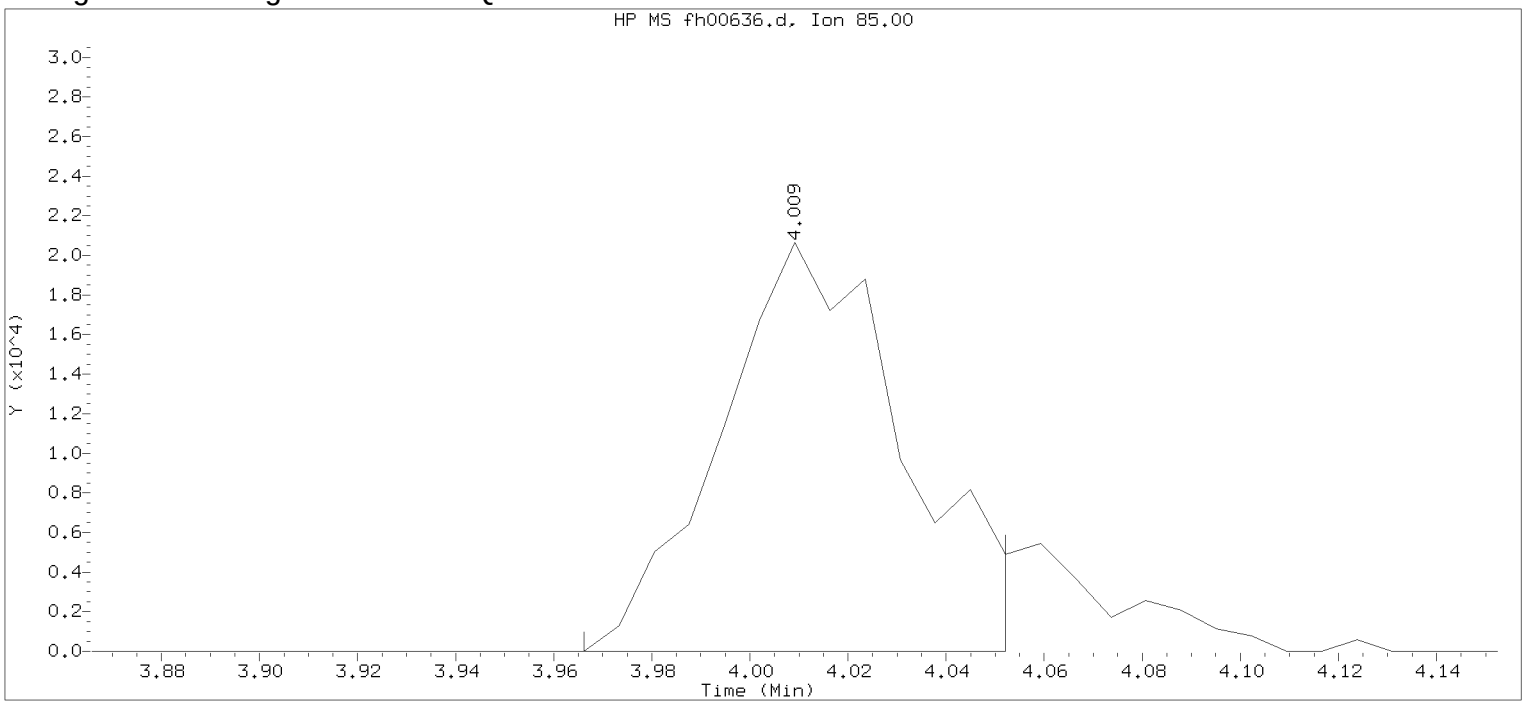
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/28/2018 at 13:00.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:40.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug27.b/fh00636.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:52 Analyst ID: jeb07445

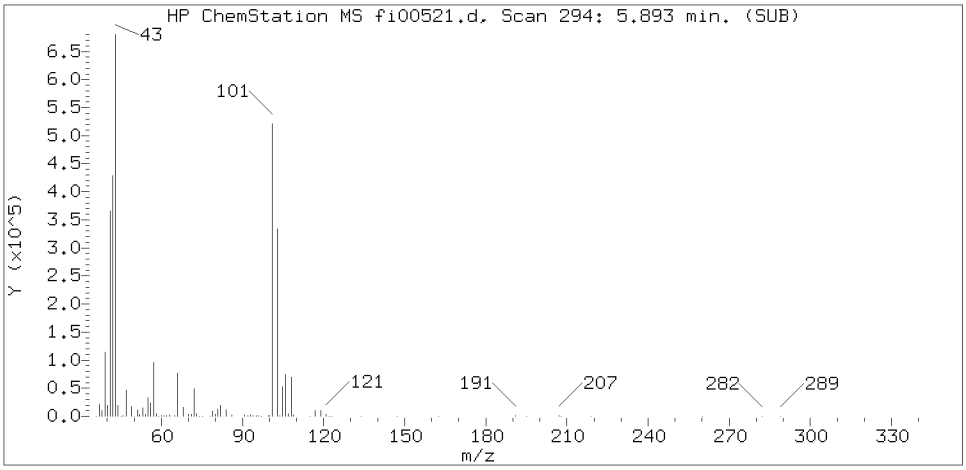
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 22:23 Unknown

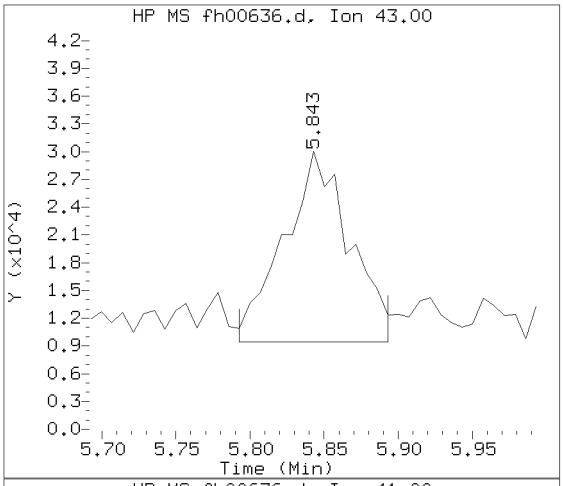
Sample Name: 1506- Lab Sample ID: 9766354

Compound Number : 2
Compound Name : Dichlorodifluoromethane
Scan Number : 31
Retention Time (minutes): 4.009
Quant Ion : 85.00
Area : 53400
Concentration (ppb(v)) : 0.4704
Integration start scan : 24 Integration stop scan: 36
Y at integration start : 0 Y at integration end: 0

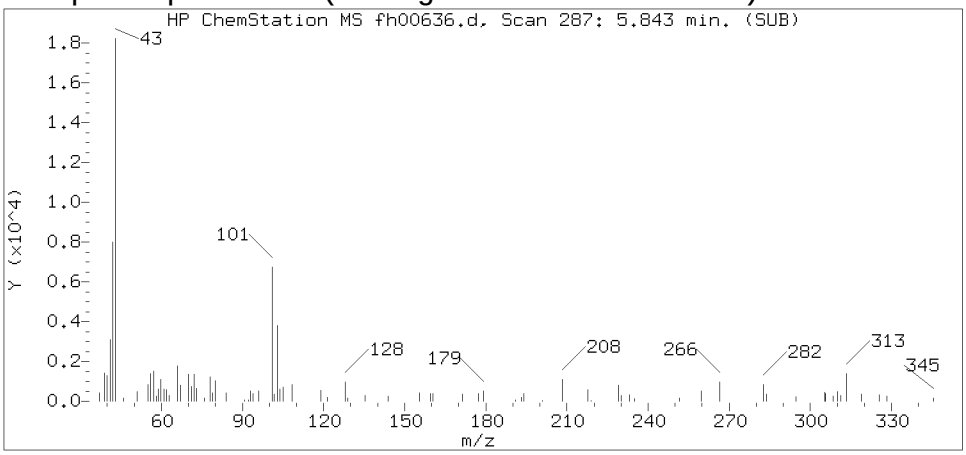
Digitally signed by Jacob E. Bailey on 08/28/2018 at 13:00.
Target 3.5 esignature user ID: jeb07445

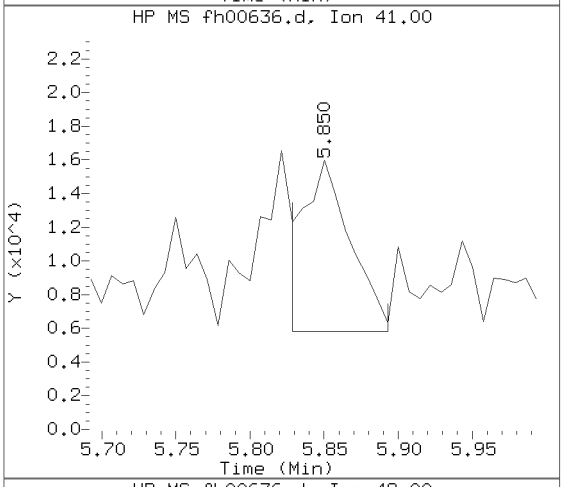
Reference Standard Spectrum for Pentane



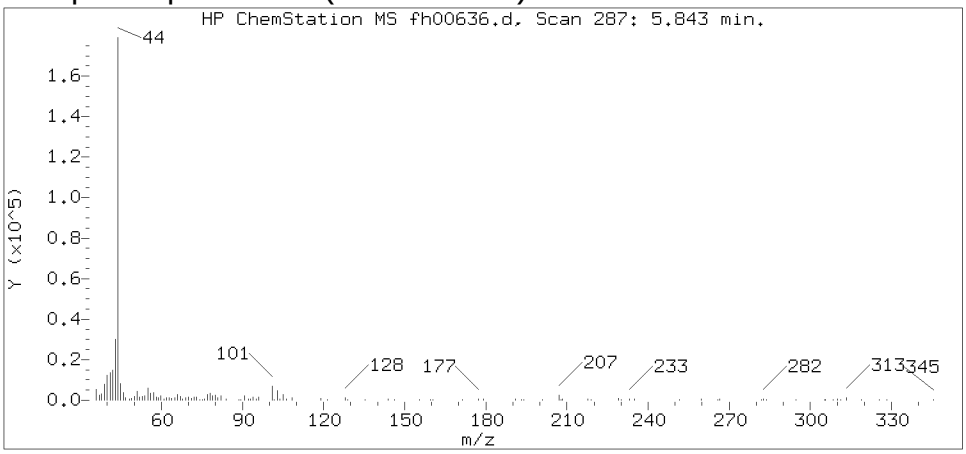


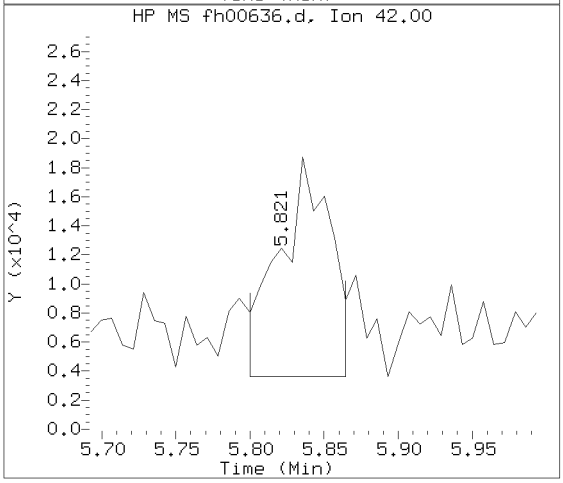
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00636.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:52 Analyst ID: jeb07445

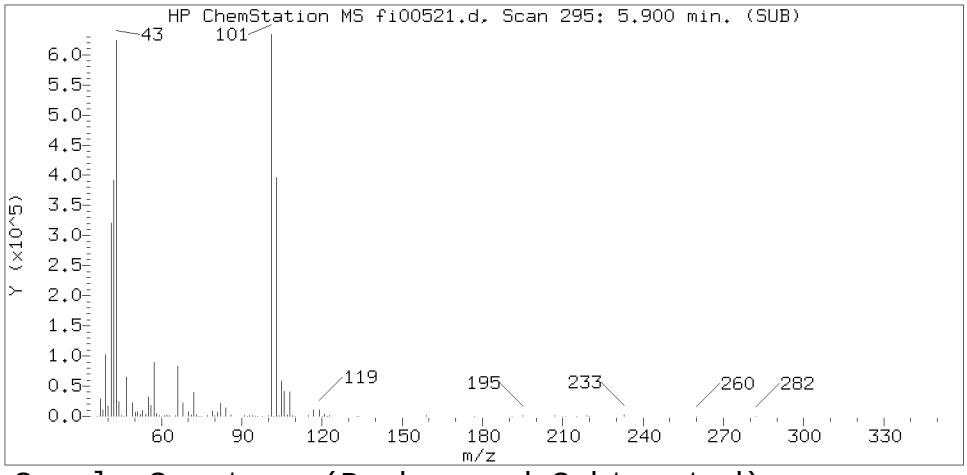
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:49 jeb07445

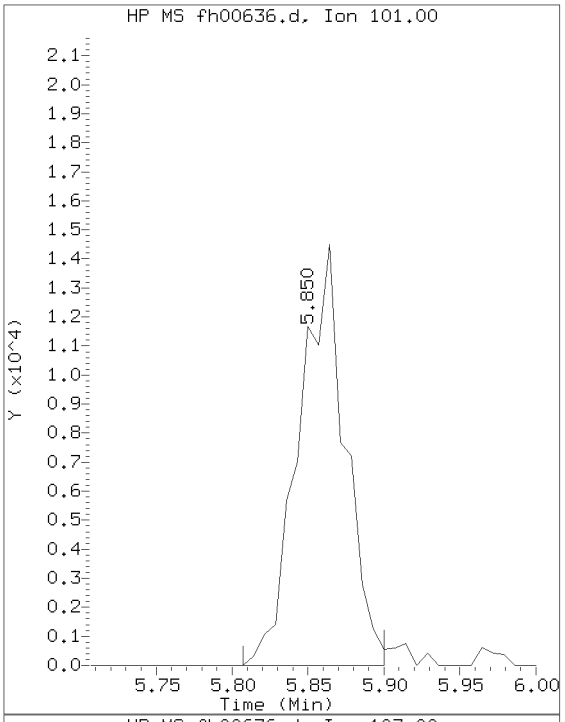
Sample Name: 1506- Lab Sample ID: 9766354

Compound Number : 11
Compound Name : Pentane
Scan Number : 287
Retention Time (minutes): 5.843
Relative Retention Time : 0.00295
Quant Ion : 43.00
Area (flag) : 63297
Concentration (ppb(v)) : 0.5138

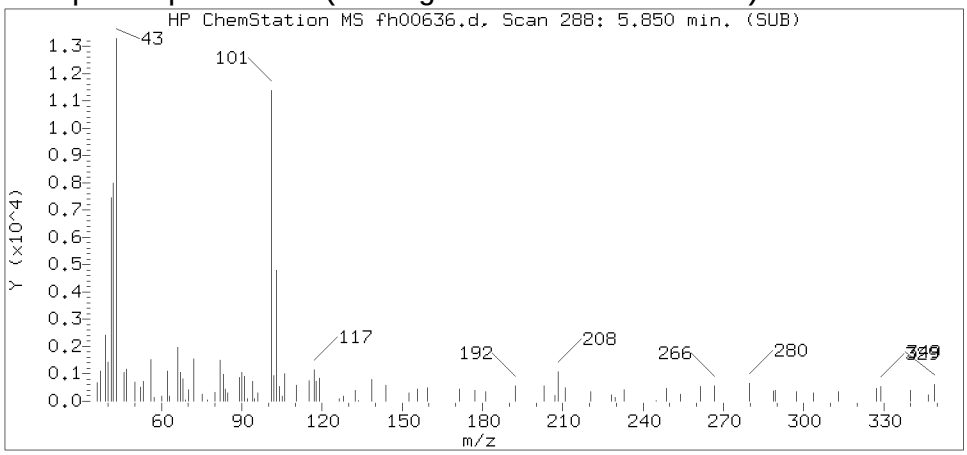
Digitally signed by Jacob E. Bailey on 08/28/2018 at 13:00.
Target 3.5 esignature user ID: jeb07445

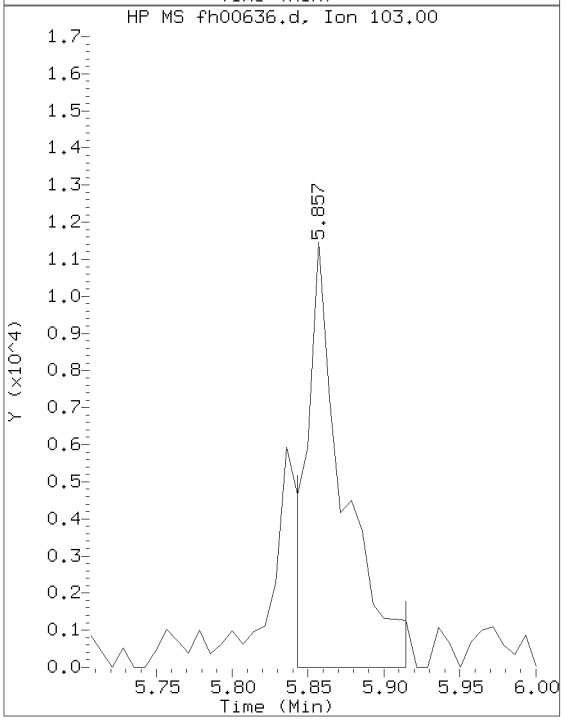
Reference Standard Spectrum for Trichlorofluoromethane



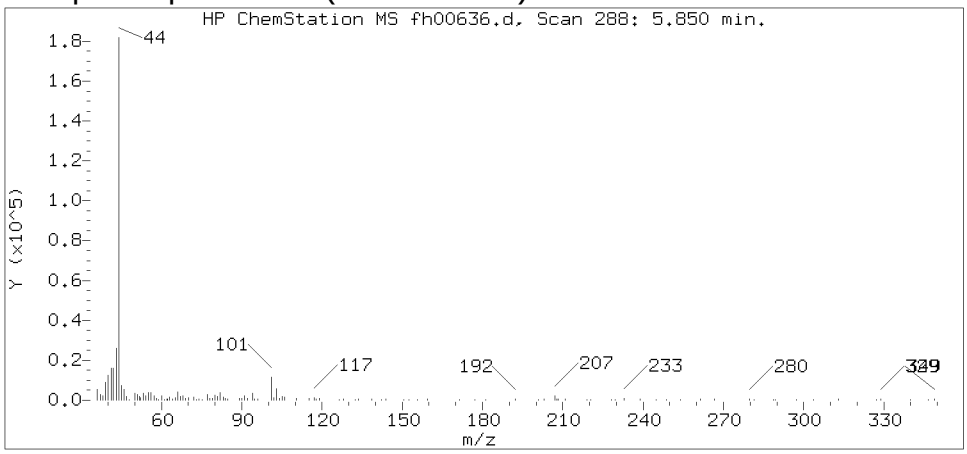


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00636.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:52 Analyst ID: jeb07445

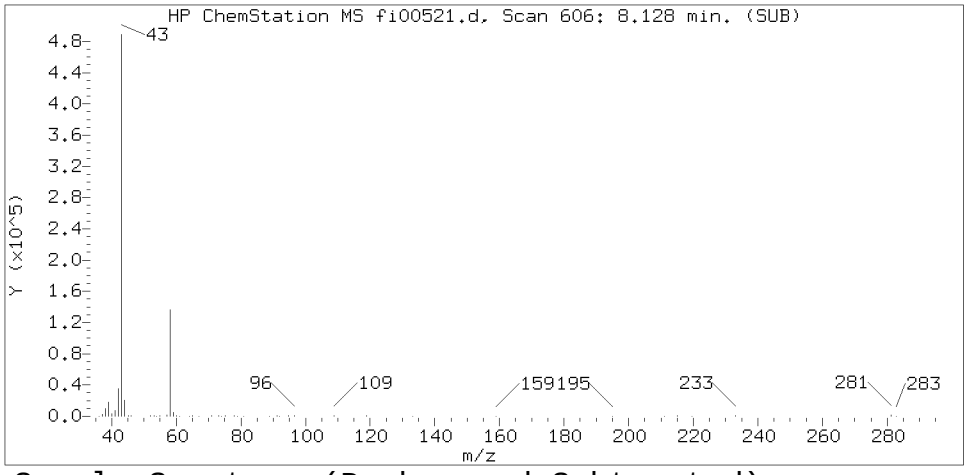
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:49 jeb07445

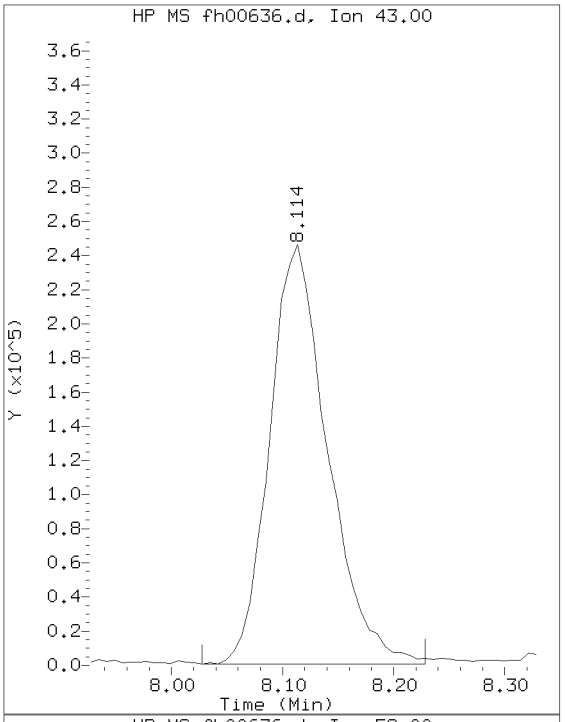
Sample Name: 1506- Lab Sample ID: 9766354

Compound Number	: 12
Compound Name	: Trichlorofluoromethane
Scan Number	: 288
Retention Time (minutes)	: 5.850
Relative Retention Time	: 0.00296
Quant Ion	: 101.00
Area (flag)	: 30930
Concentration (ppb(v))	: 0.2775

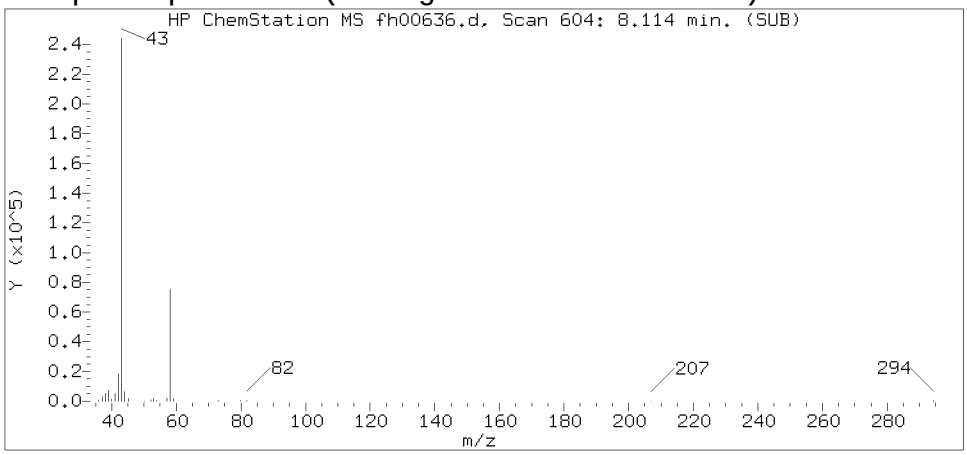
Digitally signed by Jacob E. Bailey on 08/28/2018 at 13:00.
Target 3.5 esignature user ID: jeb07445

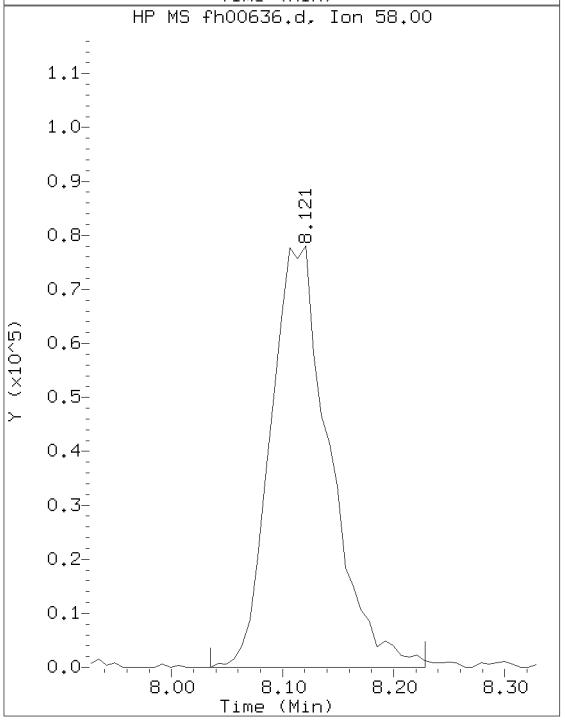
Reference Standard Spectrum for Acetone



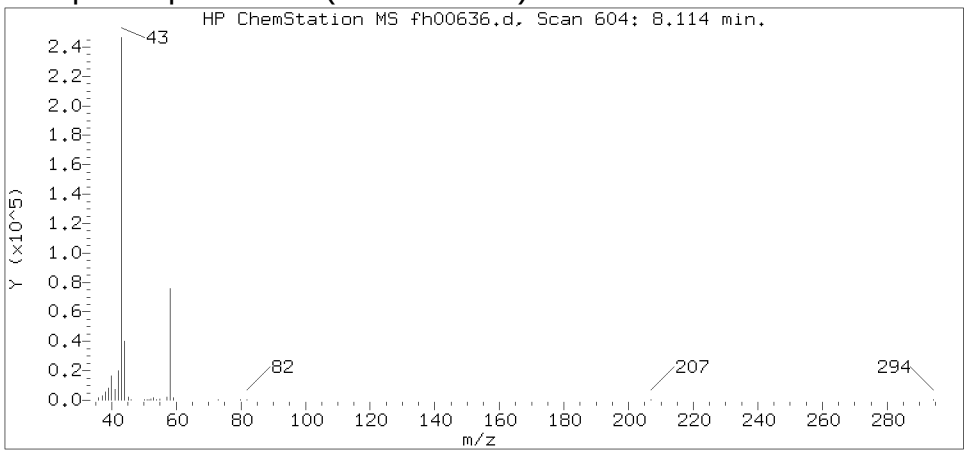


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00636.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:52 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:49 jeb07445

Sample Name: 1506- Lab Sample ID: 9766354

Compound Number : 24
Compound Name : Acetone
Scan Number : 604
Retention Time (minutes): 8.114
Relative Retention Time :-0.00311
Quant Ion : 43.00
Area (flag) : 893274
Concentration (ppb(v)) : 8.2134

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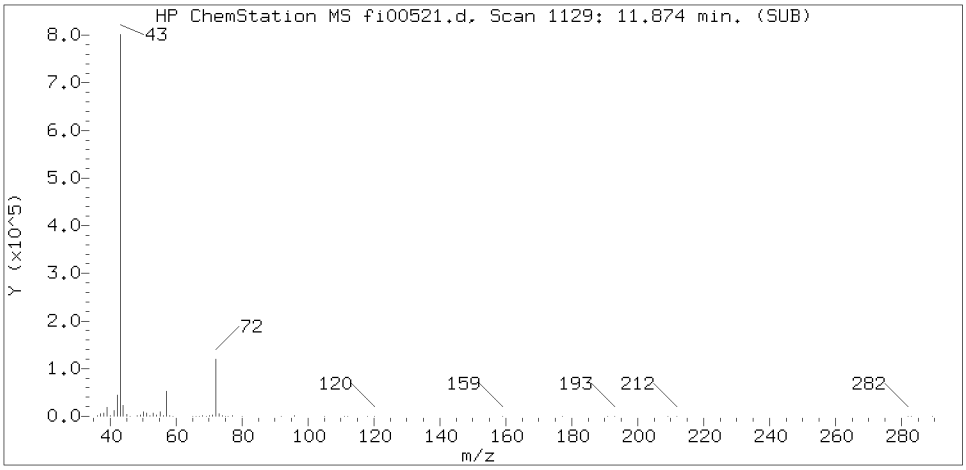
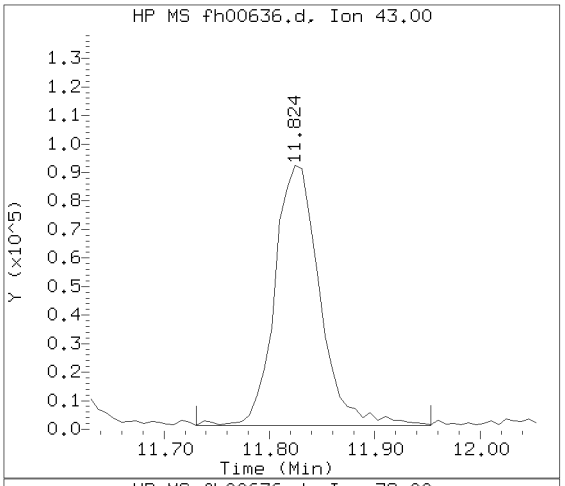
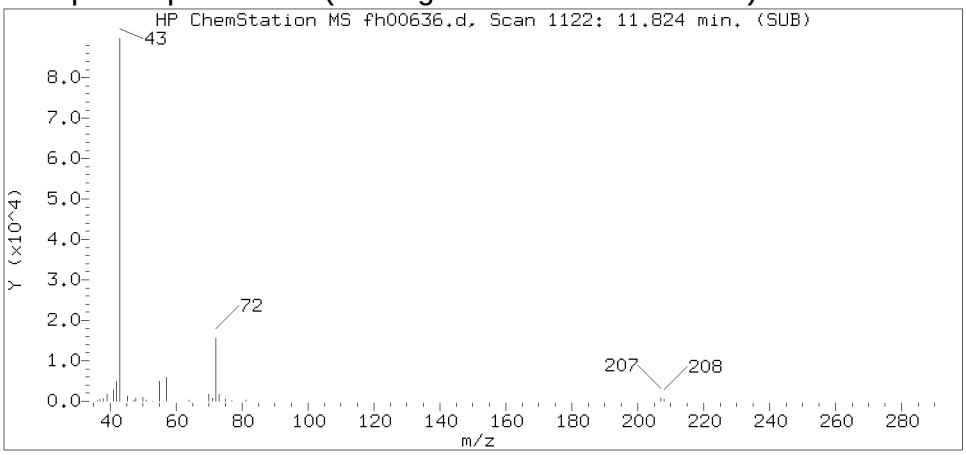
Target 3.5 esignature user ID: jeb07445

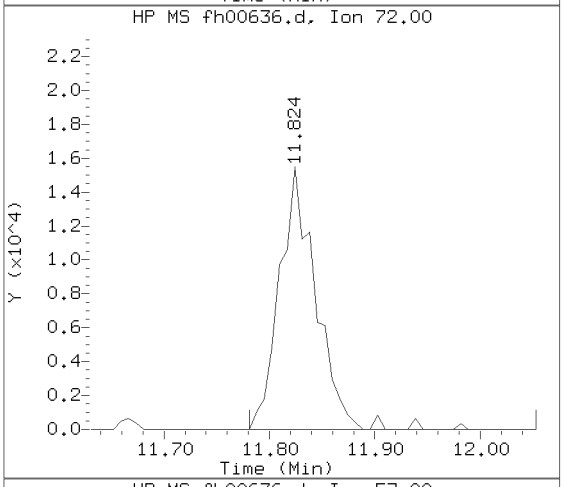
Reference Standard Spectrum for 2-Butanone



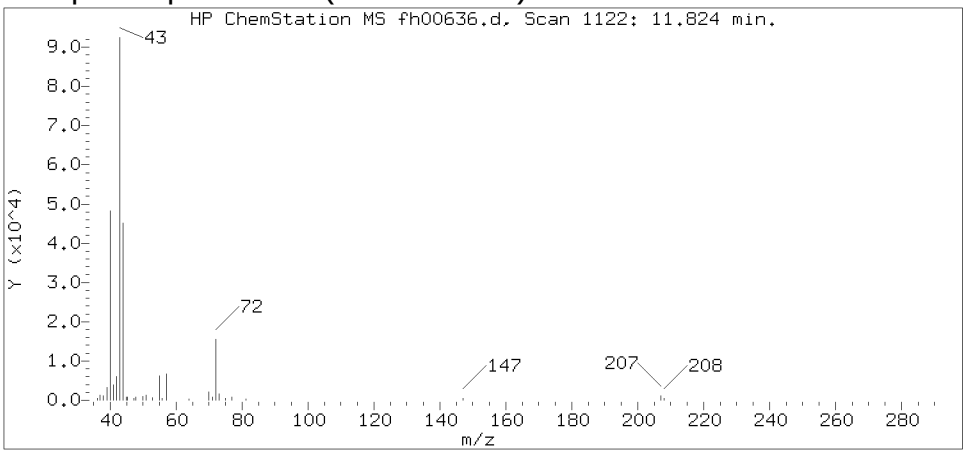


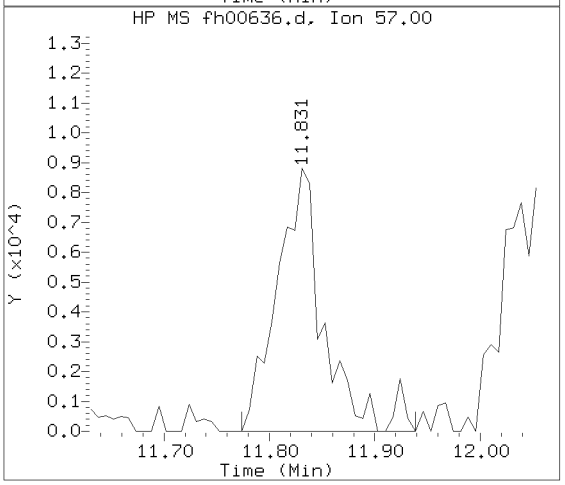
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00636.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:52 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:49 jeb07445

Sample Name: 1506- Lab Sample ID: 9766354

Compound Number : 45
Compound Name : 2-Butanone
Scan Number : 1122
Retention Time (minutes): 11.824
Relative Retention Time : 0.00077
Quant Ion : 43.00
Area (flag) : 269038
Concentration (ppb(v)) : 1.7428

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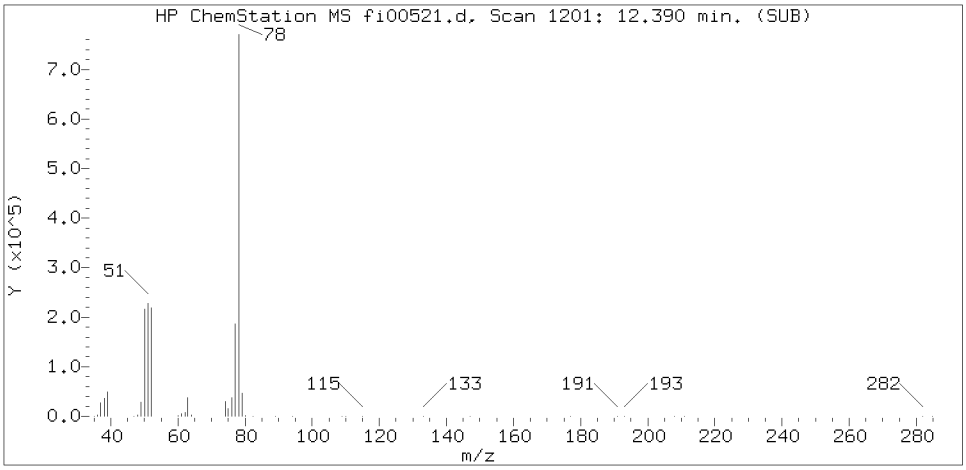
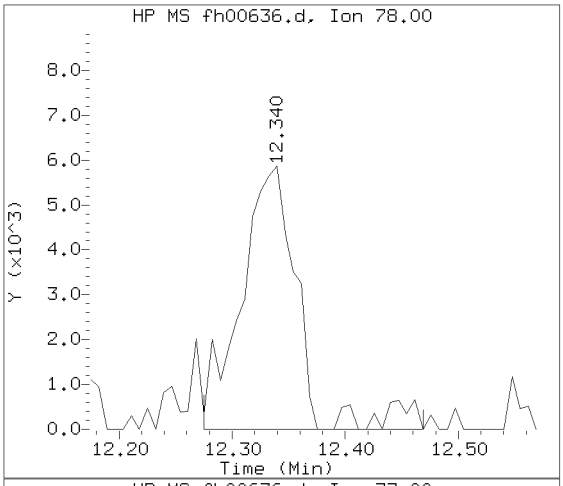
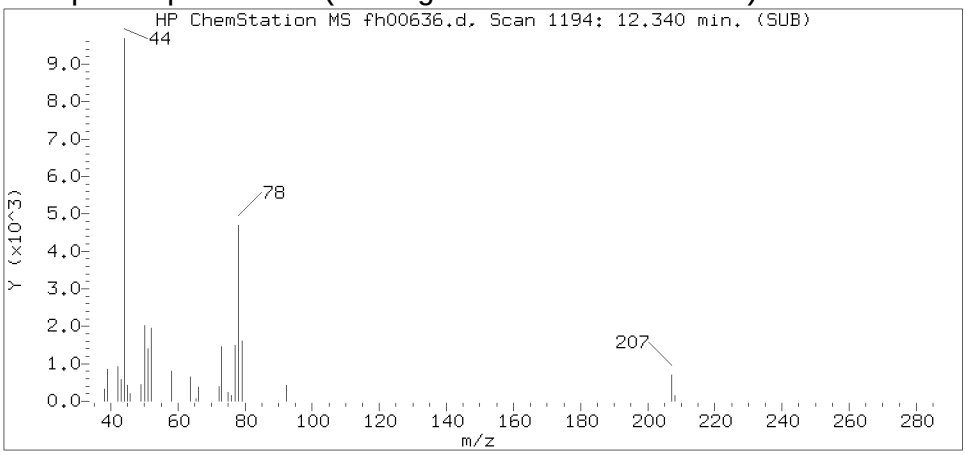
Target 3.5 esignature user ID: jeb07445

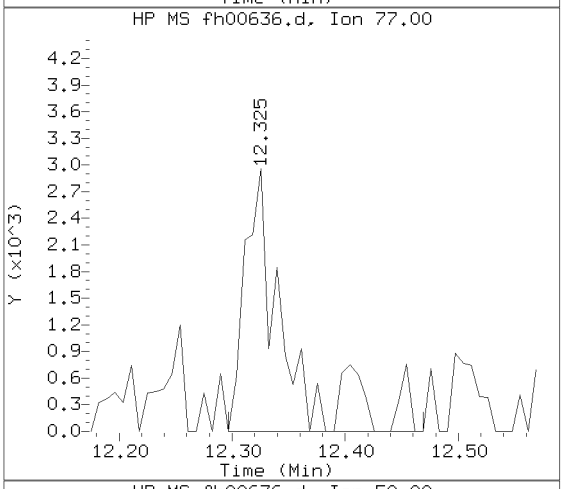
Reference Standard Spectrum for Benzene



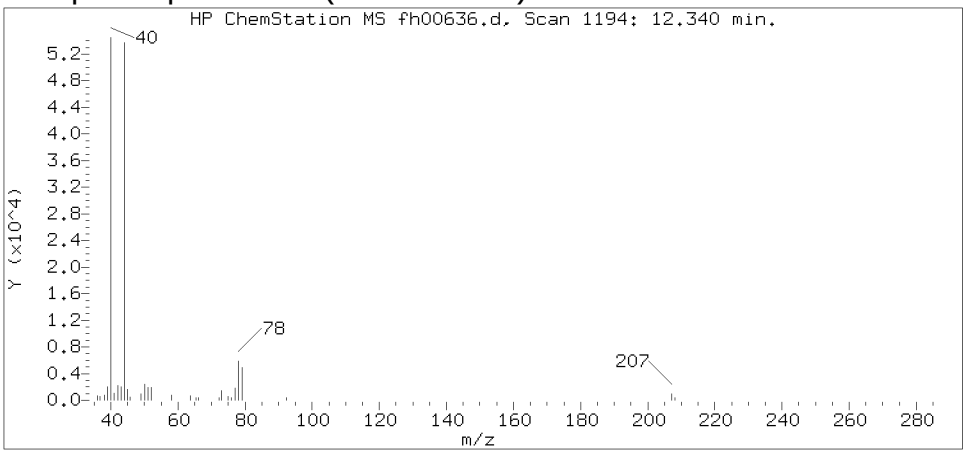


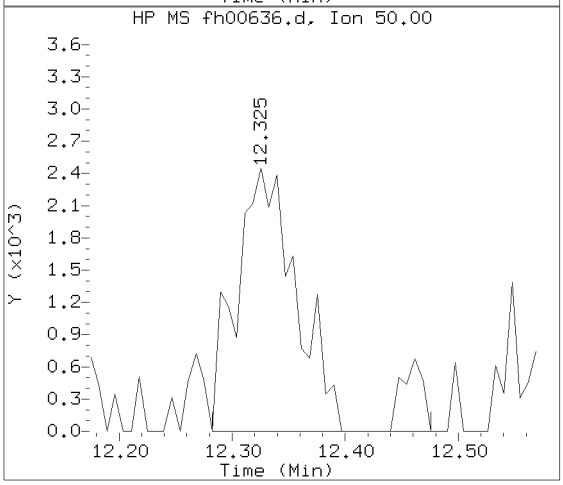
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP26379.i/18aug27.b/fh00636.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:52 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:49 jeb07445

Sample Name: 1506- Lab Sample ID: 9766354

Compound Number : 48
Compound Name : Benzene
Scan Number : 1194
Retention Time (minutes): 12.340
Relative Retention Time :-0.00058
Quant Ion : 78.00
Area (flag) : 20398
Concentration (ppb(v)) : 0.1406

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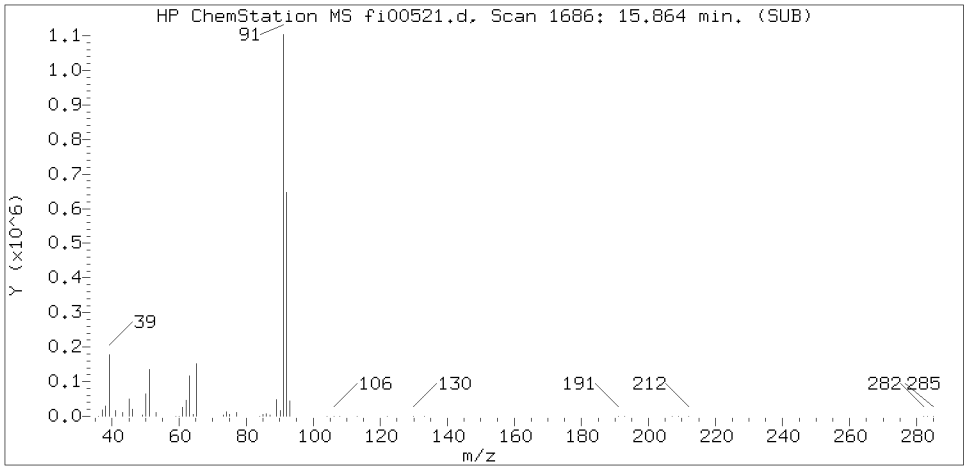
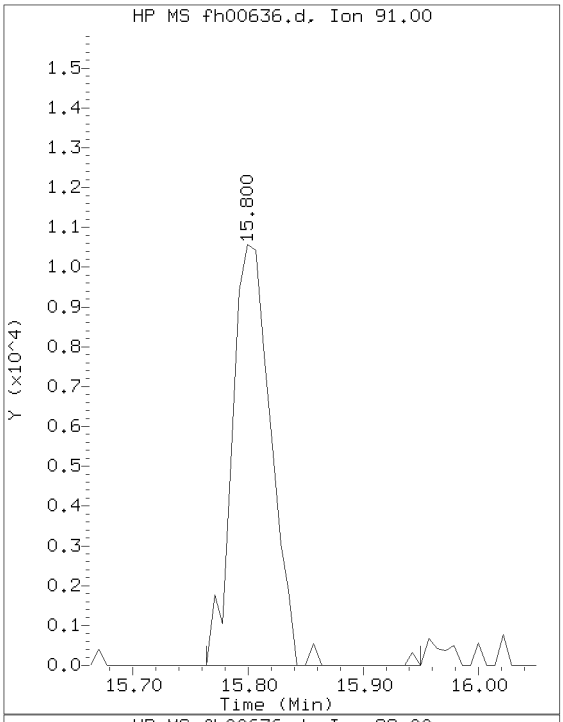
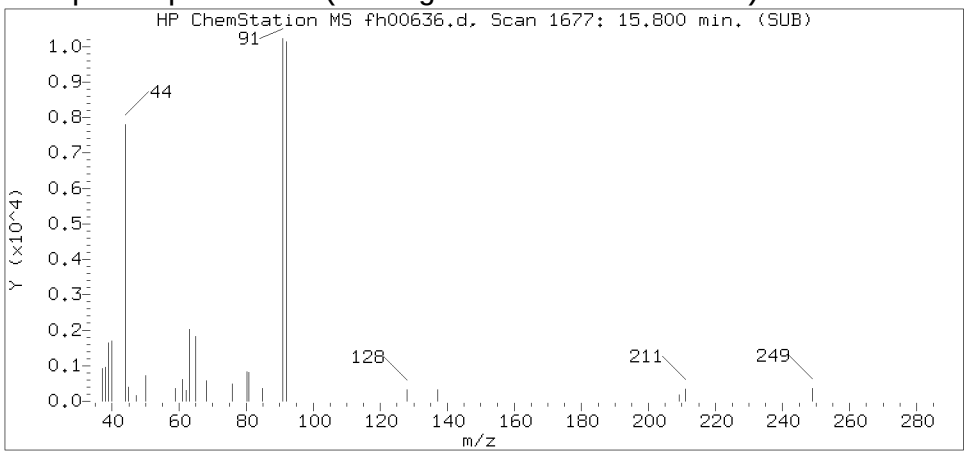
Target 3.5 esignature user ID: jeb07445

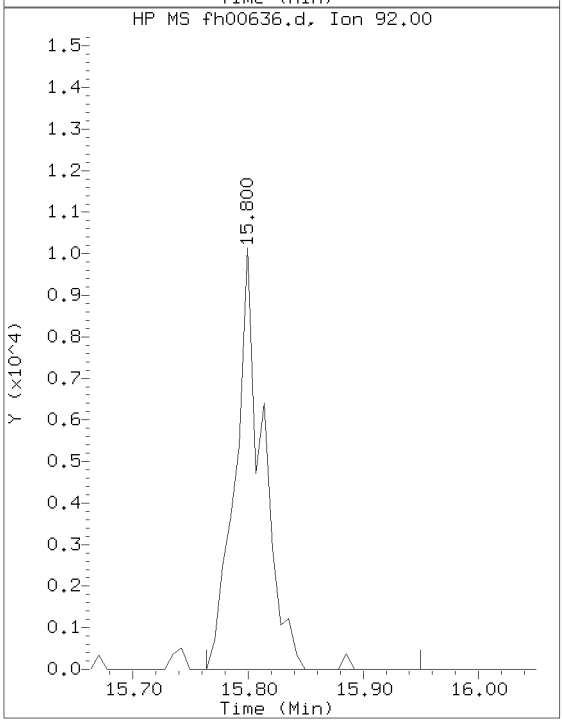
Reference Standard Spectrum for Toluene



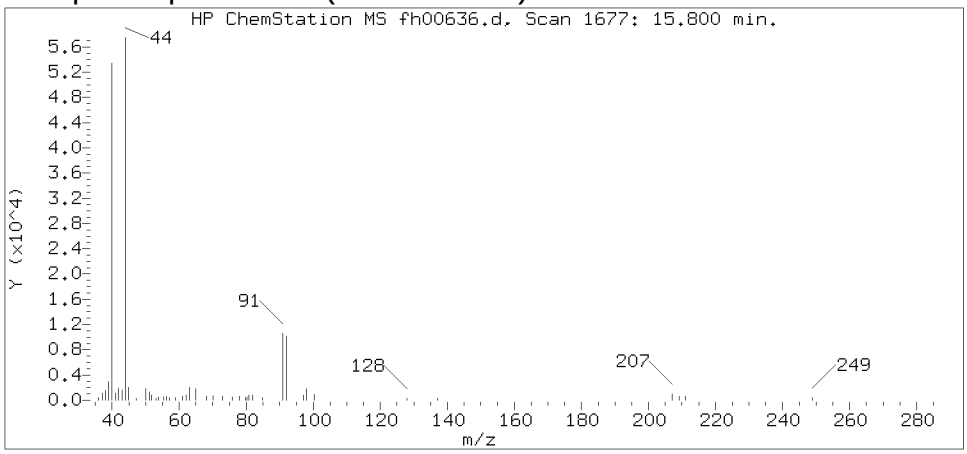


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18aug27.b/fh00636.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 21:52 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 28-Aug-2018 12:49 jeb07445

Sample Name: 1506- Lab Sample ID: 9766354

Compound Number : 61
Compound Name : Toluene
Scan Number : 1677
Retention Time (minutes): 15.800
Relative Retention Time :-0.00000
Quant Ion : 91.00
Area (flag) : 24647
Concentration (ppb(v)) : 0.1448

Digitally signed by Jacob E. Bailey on 08/28/2018 at 13:00.
Target 3.5 esignature user ID: jeb07445

Standards Data

Volatile Organics in Air by GC/MS

Lancaster Laboratories
Volatiles in Air
Runlog for Agilent GC/MS System HP26379 **HP #06**

Data Directory Path is - D:\data\18aug27\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
jeb07445	FH00620.D	50NGBFB	08/27/2018	12:20		
jeb07445	FH00621.D	VSTD010	08/27/2018	13:07		
jeb07445	FH00622.D	VBLKF32	08/27/2018	13:55	F1823930AA	
jeb07445	FH00623.D	LCSF32	08/27/2018	14:41	F1823930AA	
jeb07445	FH00624.D	LCSDF32	08/27/2018	15:11	F1823930AA	
jeb07445	FH00625.D	9766344	08/27/2018	16:11	F1823930AA	
jeb07445	FH00626.D	9766345	08/27/2018	16:42	F1823930AA	
jeb07445	FH00627.D	9766346	08/27/2018	17:12	F1823930AA	
jeb07445	FH00628.D	9766347	08/27/2018	17:43	F1823930AA	
jeb07445	FH00629.D	9766348	08/27/2018	18:14	F1823930AA	
jeb07445	FH00630.D	9766349	08/27/2018	18:44	F1823930AA	
jeb07445	FH00631.D	9766349	08/27/2018	19:18	F1823930AA	
jeb07445	FH00632.D	9766350	08/27/2018	19:49	F1823930AA	
jeb07445	FH00633.D	9766351	08/27/2018	20:20	F1823930AA	
jeb07445	FH00634.D	9766352	08/27/2018	20:51	F1823930AA	
jeb07445	FH00635.D	9766353	08/27/2018	21:21	F1823930AA	
jeb07445	FH00636.D	9766354	08/27/2018	21:52	F1823930AA	
jeb07445	FH00637.D	9767476	08/27/2018	22:23	F1823930AA	
jeb07445	FH00638.D	9765349	08/27/2018	22:54	F1823930AA	10
jeb07445	FH00639.D	9765349DL	08/27/2018	23:25	F1823930AA	1000
jeb07445	FH00640.D	9765352	08/27/2018	23:56	F1823930AA	10
jeb07445	FH00641.D	9765352DL	08/28/2018	00:27	F1823930AA	1000
jeb07445	FH00642.D	fc1	08/28/2018	08:47	F1823930AA	
jeb07445	FH00643.D	fc2	08/28/2018	09:59	F1823930AA	
jeb07445	FH00644.D	fc3	08/28/2018	11:04	F1823930AA	

Lancaster Laboratories
Volatiles in Air
Runlog for Agilent GC/MS System HP26379 **HP #06**

Data Directory Path is - D:\data\18aug24\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
jeb07445	FH00570.D	50NGBFB	08/24/2018	15:03		
jeb07445	FH00571.D	VSTD010	08/24/2018	15:57		
jeb07445	FH00572.D	VSTD005	08/24/2018	16:27		
jeb07445	FH00573.D	VSTD002	08/24/2018	16:58		
jeb07445	FH00574.D	VSTD001	08/24/2018	17:29		
jeb07445	FH00575.D	VSTD025	08/24/2018	17:59		
jeb07445	FH00576.D	VSTD070	08/24/2018	18:30		
jeb07445	FH00577.D	VBLKF30	08/24/2018	19:01	F1823630AA	
jeb07445	FH00578.D	VBLKF30	08/24/2018	19:31	F1823630AA	
jeb07445	FH00579.D	VBLKF30	08/24/2018	20:02	F1823630AA	
jeb07445	FH00580.D	VBLKF30	08/24/2018	20:33	F1823630AA	
jeb07445	FH00581.D	LCSF30	08/24/2018	21:03	F1823630AA	
jeb07445	FH00582.D	LCSDF30	08/24/2018	21:34	F1823630AA	
jeb07445	FH00583.D	mdlv0.5	08/24/2018	22:04	F1823630AA	
jeb07445	FH00584.D	mdlv0.2	08/24/2018	22:35	F1823630AA	

Data File: /chem/HP26379.i/18aug24.b/fh00570.d

Page 1

Date : 24-AUG-2018 15:03

Client ID: BFB

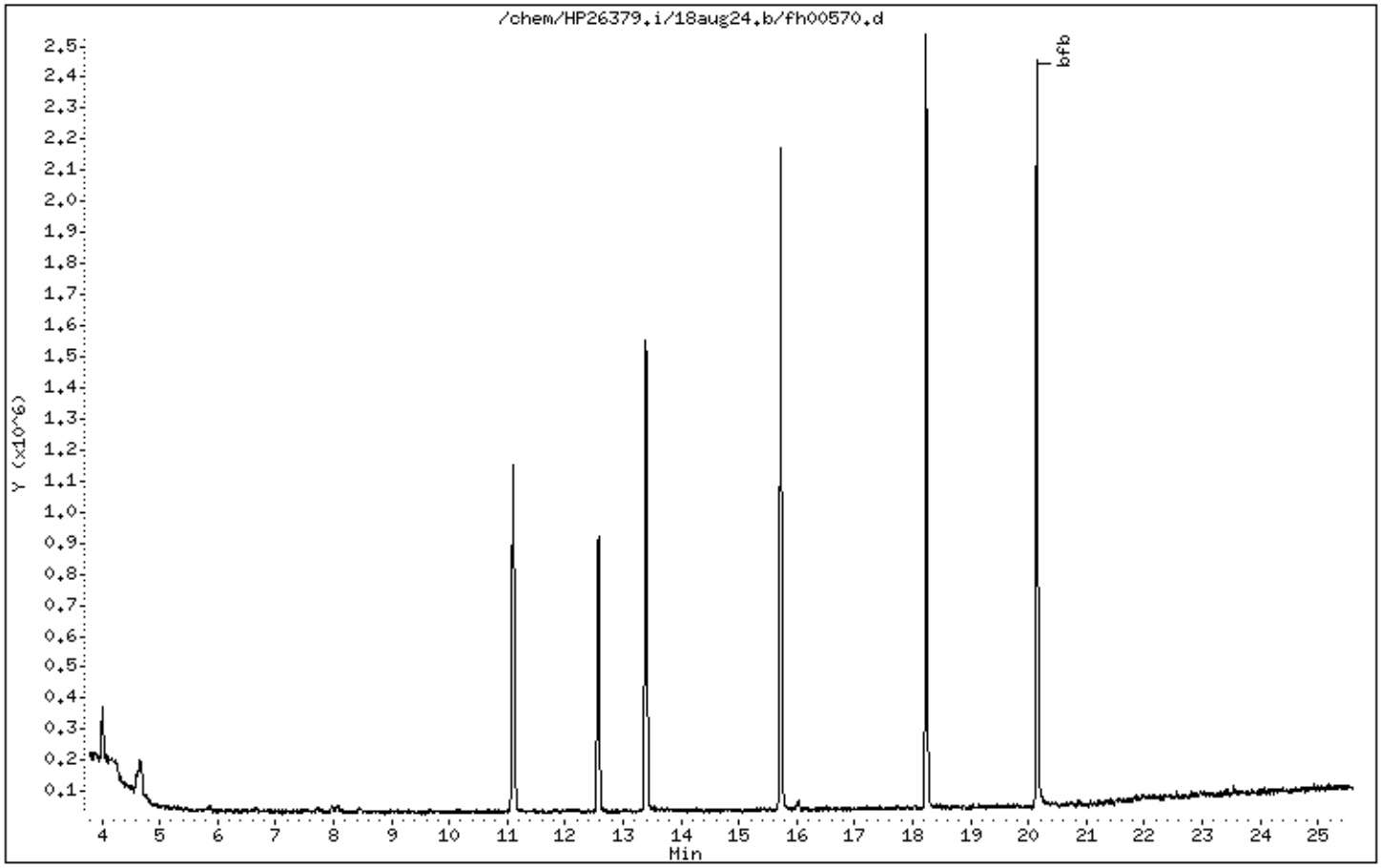
Instrument: HP26379.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25



Digitally signed by Jacob E. Bailey on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Data File: /chem/HP26379.i/18aug24.b/fh00570.d

Date : 24-AUG-2018 15:03

Client ID: BFB

Instrument: HP26379.i

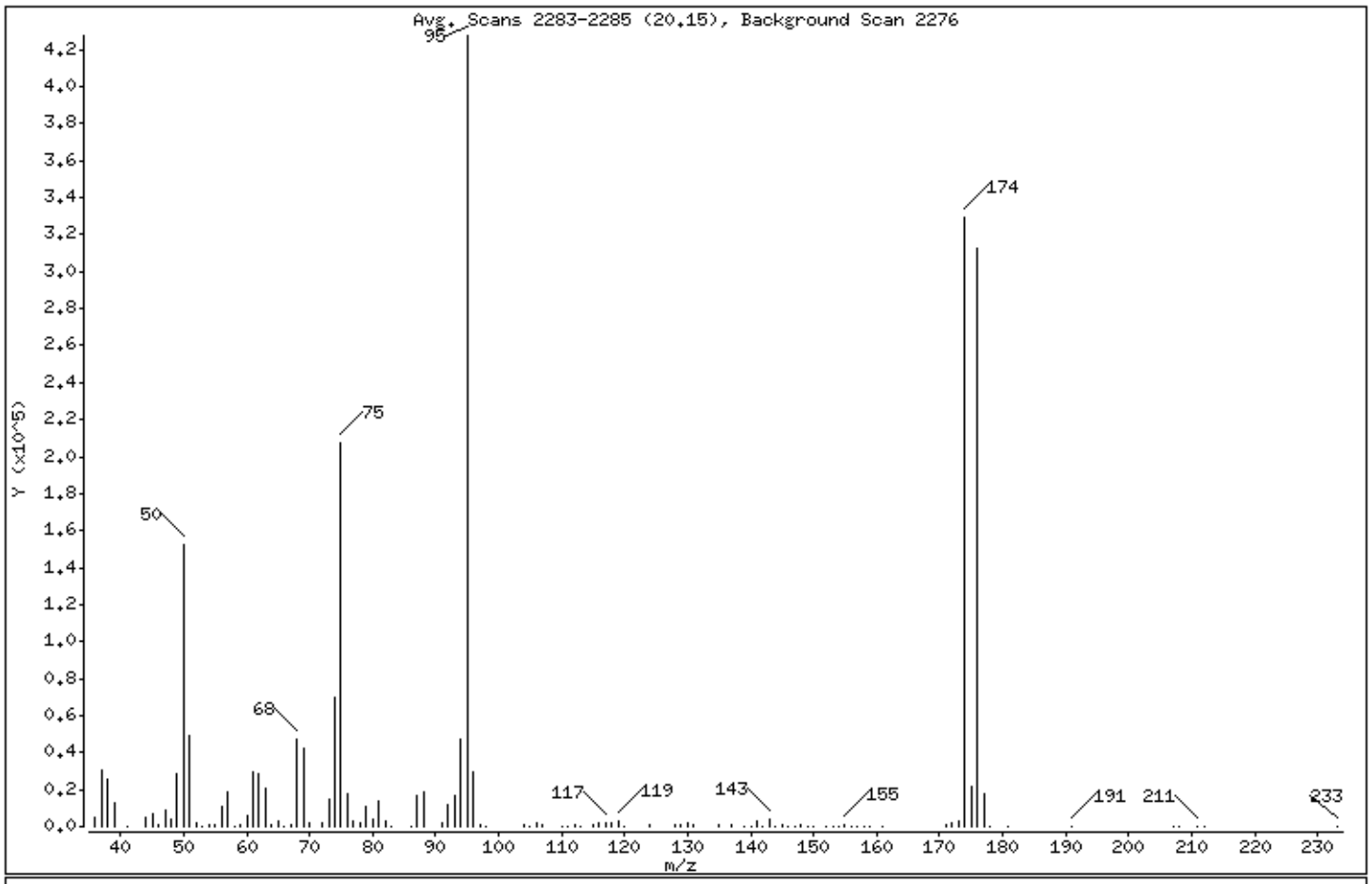
Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	35.64
75	30.00 - 66.00% of mass 95	48.42
96	5.00 - 9.00% of mass 95	6.86
173	Less than 2.00% of mass 174	0.59 (0.76)
174	50.00 - 120.00% of mass 95	76.93
175	4.00 - 9.00% of mass 174	4.95 (6.44)
176	93.00 - 101.00% of mass 174	73.07 (94.98)
177	5.00 - 9.00% of mass 176	4.21 (5.76)

Digitally signed by Jacob E. Bailey on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Date : 24-AUG-2018 15:03

Client ID: BFB Instrument: HP26379.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624 Column diameter: 0.25

Data File: fh00570.d
Spectrum: Avg. Scans 2283-2285 (20.15), Background Scan 2276
Location of Maximum: 95.00
Number of points: 112

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4733	68.00	47632	107.00	662	150.00	283
37.00	30528	69.00	42552	110.00	103	152.00	146
38.00	25824	70.00	2439	111.00	356	153.00	139
39.00	12522	72.00	2194	112.00	545	154.00	113
41.00	130	73.00	14744	113.00	350	155.00	1152
44.00	5210	74.00	70056	115.00	583	156.00	225
45.00	6701	75.00	207040	116.00	1577	157.00	272
46.00	1288	76.00	17696	117.00	2267	158.00	112
47.00	8617	77.00	2661	118.00	1533	159.00	343
48.00	4055	78.00	2111	119.00	2643	161.00	251
49.00	28368	79.00	10693	120.00	277	171.00	494
50.00	152384	80.00	3516	124.00	653	172.00	2388
51.00	48712	81.00	13417	128.00	1335	173.00	2503
52.00	1777	82.00	2643	129.00	631	174.00	328960
53.00	178	83.00	341	130.00	1506	175.00	21184
54.00	653	86.00	465	131.00	671	176.00	312448
55.00	565	87.00	17128	135.00	797	177.00	17992
56.00	11240	88.00	18888	137.00	723	178.00	408
57.00	18760	91.00	1782	139.00	121	181.00	127
58.00	280	92.00	12144	140.00	123	191.00	155
59.00	535	93.00	16656	141.00	3270	207.00	164
60.00	5427	94.00	47656	142.00	341	208.00	167
61.00	29344	95.00	427584	143.00	4354	211.00	401
62.00	28104	96.00	29336	144.00	199	212.00	247
63.00	20624	97.00	1120	145.00	600	233.00	244
64.00	1304	98.00	104	146.00	349		
65.00	2470	104.00	1345	147.00	193		
66.00	385	105.00	418	148.00	1211		
67.00	1200	106.00	1603	149.00	270		

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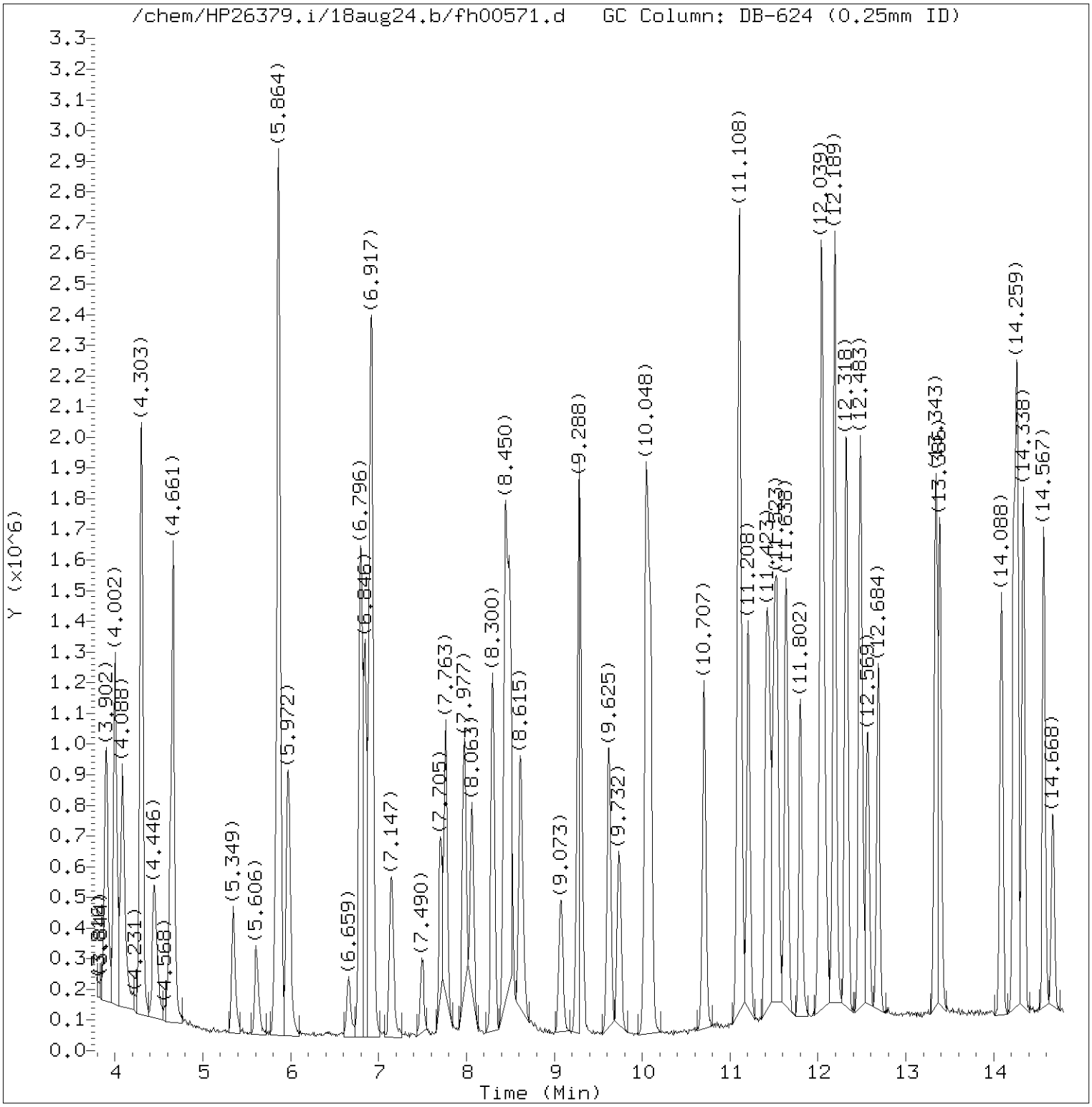
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

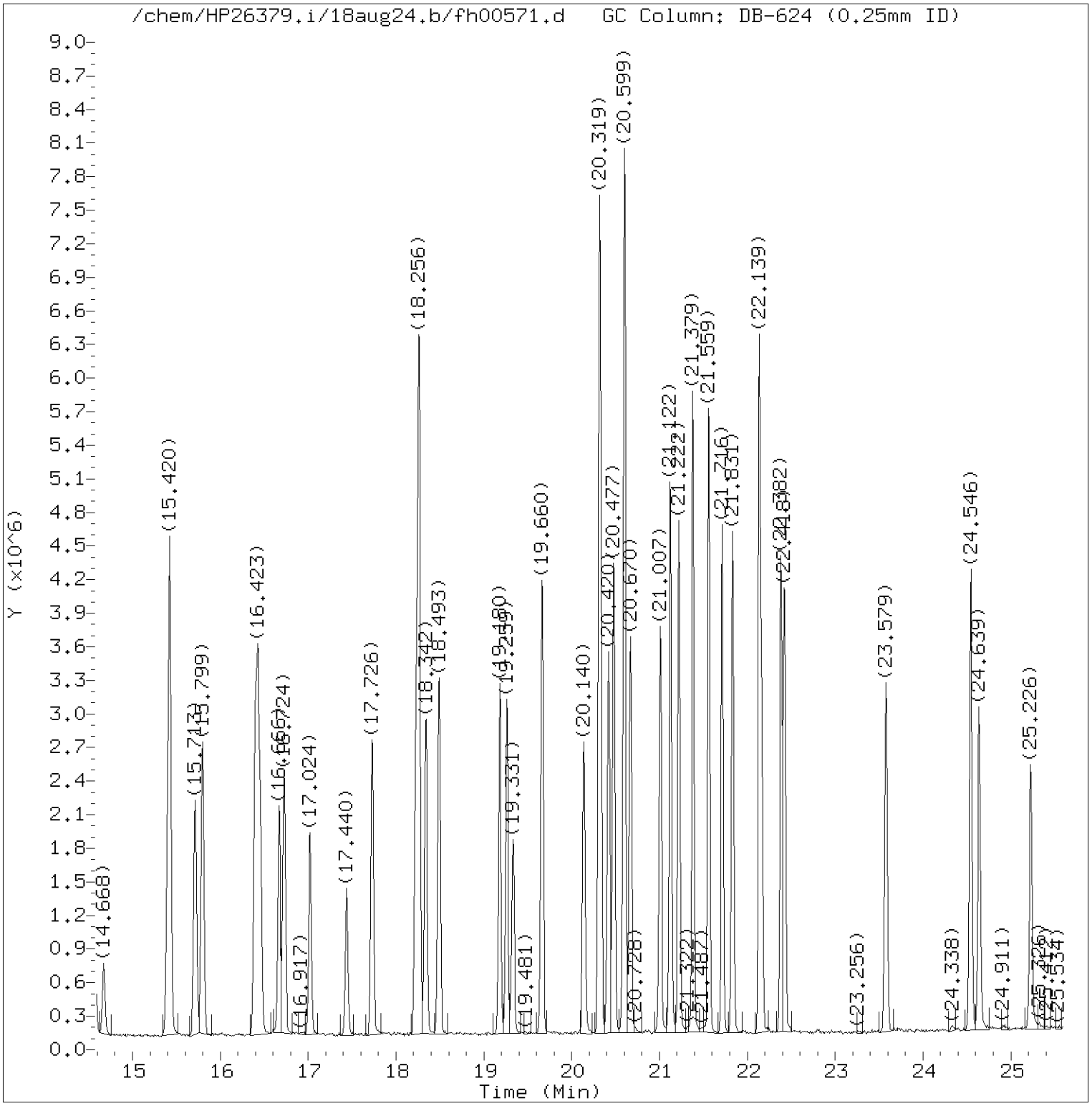
Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00571.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 15:57 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:18
Date, time and analyst ID of latest file update: 26-Aug-2018 17:18 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:18.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00571.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 15:57 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:18
Date, time and analyst ID of latest file update: 26-Aug-2018 17:18 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:19.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00571.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 15:57 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:18
Date, time and analyst ID of latest file update: 26-Aug-2018 17:18 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	731392	10.525
2) Dichlorodifluoromethane	(1)	4.002	85	1539959	11.382
3) Chlorodifluoromethane	(1)	4.088	51	1813519	11.040
4) Freon 114	(1)	4.303	85	1579053	10.920
5) Chloromethane	(1)	4.453	50	921173	10.501
6) Vinyl Chloride	(1)	4.632	62	765015	11.120
7) 1,3-Butadiene	(1)	4.661	54	713945	10.657
8) Bromomethane	(1)	5.349	94	475807	11.436
9) Chloroethane	(1)	5.606	64	428847	11.228
10) Bromoethene	(1)	5.829	106	445848	10.915
11) Pentane	(1)	5.857	43	1537065	10.468
12) Trichlorofluoromethane	(1)	5.864	101	1382294	10.406
13) Dichlorofluoromethane	(1)	5.972	67	1530038	11.392
14) Ethanol	(1)	6.659	45	291307	9.832
15) Freon123a	(1)	6.796	67	1512996	11.486
16) 1,1-Dichloroethene	(1)	6.846	61	1334811	10.828
17) Freon 113	(1)	6.910	103	780154	9.898
18) Carbon Disulfide	(1)	6.932	76	1693280	11.457
19) Methyl Iodide	(1)	7.147	142	1011089	10.404
20) Acrolein	(1)	7.490	56	348968M	10.835
21) Isopropanol	(1)	7.698	45	1320213	10.493
22) 3-Chloropropene	(1)	7.770	41	1204457M	12.142
23) Methylene Chloride	(1)	7.977	84	559563	12.364
24) Acetone	(1)	8.063	43	1465419	11.305
25) trans-1,2-Dichloroethene	(1)	8.300	61	1277996	11.081
26) Hexane	(1)	8.450	56	970554	10.388
27) Methyl t-Butyl Ether	(1)	8.493	73	1513221	10.542
28) tert-Butyl Alcohol	(1)	8.615	59	1731688	10.966
29) Acetonitrile	(1)	9.081	41	824382	11.054
30) Di-Isopropyl Ether	(1)	9.288	45	2850812	10.150
31) 1,1-Dichloroethane	(1)	9.625	63	1638144	10.822
32) Acrylonitrile	(1)	9.732	53	800299	10.741
33) Ethyl Tert-Butyl Ether	(1)	10.048	59	2596799	10.558
34) Vinyl Acetate	(1)	10.098	43	2713062M	12.141
35) cis-1,2-Dichloroethene	(1)	10.707	61	1190032	10.845
36) 1,2-Dichloroethene (total)	(1)		61	2468028	21.926
37)*Bromochloromethane	(1)	11.101	130	405127	10.000
38) Cyclohexane	(1)	11.108	56	1405341	10.085

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

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on 08/26/2018 at 17:19.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00571.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 15:57 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:18
Date, time and analyst ID of latest file update: 26-Aug-2018 17:18 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.208	83	1274955	10.772
40) Ethyl Acetate	(1)	11.416	43	2088159	10.511
41) Methyl Acrylate	(1)	11.451	55	1697222	10.899
42) Carbon Tetrachloride	(1)	11.502	117	980925	9.706
43) Tetrahydrofuran	(1)	11.537	42	1027494	10.870
44) 1,1,1-Trichloroethane	(1)	11.638	97	1200830	10.309
45) 2-Butanone	(1)	11.802	43	1946317	10.578
46) Isooctane	(2)	12.039	57	4469241	10.964
47) Heptane	(2)	12.189	71	622256	10.603
48) Benzene	(2)	12.318	78	1938766	10.683
49) Tert-Amyl Methyl Ether	(2)	12.483	73	1471279	10.551
50) 1,2-Dichloroethane	(2)	12.684	62	1265947	10.702
51) Trichloroethene	(2)	13.343	130	656292	10.483
52)*1,4-Difluorobenzene	(2)	13.393	114	1404671	10.000
53) Dibromomethane	(2)	14.088	174	650517	10.736
54) Ethyl Acrylate	(2)	14.224	55	2012208	10.180
55) 1,2-Dichloropropane	(2)	14.267	63	1093707	10.448
56) Bromodichloromethane	(2)	14.338	83	1303401	10.573
57) Methyl Methacrylate	(2)	14.567	69	592246	10.146
58) 1,4-Dioxane	(2)	14.675	88	389450	10.325
59) cis-1,3-Dichloropropene	(2)	15.398	75	1088079	10.514
60) Octane	(3)	15.427	43	2365966	10.656
61) Toluene	(3)	15.799	91	2051122	10.109
62) 4-Methyl-2-Pentanone	(2)	16.394	43	2409686	10.223
63) Tetrachloroethene	(3)	16.430	166	1008672	10.486
64) trans-1,3-Dichloropropene	(3)	16.458	75	951920	10.392
66) Ethyl Methacrylate	(3)	16.666	69	1031391	10.181
65) 1,3-Dichloropropene (total)	(3)		75	2039999	20.762
67) 1,1,2-Trichloroethane	(3)	16.724	97	821310	10.176
68) Dibromochloromethane	(3)	17.024	127	832965	10.210
69) 1,2-Dibromoethane	(3)	17.440	107	1159798	10.394
70) 2-Hexanone	(3)	17.726	43	2257976	10.436
71)*Chlorobenzene-d5	(3)	18.228	117	1373592	10.000
72) Chlorobenzene	(3)	18.256	112	1709846	10.012
73) Ethylbenzene	(3)	18.264	91	2862909	10.339
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	807590	9.963
75) m/p-Xylene	(3)	18.493	91	2059781	10.349
76) o-Xylene	(3)	19.180	91	2011851	10.371

* = Compound is an internal standard.

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on 08/26/2018 at 17:19.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00571.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 15:57 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:18
Date, time and analyst ID of latest file update: 26-Aug-2018 17:18 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	4071632	20.719
78) Styrene	(3)	19.266	104	1488023	10.593
79) Bromoform	(3)	19.331	173	986244	9.740
80) Cumene	(3)	19.668	105	2858165	10.692
81) n-Propylbenzene	(3)	20.319	120	828135	10.679
82) Bromobenzene	(3)	20.326	156	999699	10.443
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	1981086	10.171
84) 4-Ethyltoluene	(3)	20.477	105	2985106	10.759
85) 2-Chlorotoluene	(3)	20.599	126	759112	10.636
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	2624703	11.013
87) 1,2,3-Trichloropropane	(3)	20.670	110	546881	10.400
88) Alpha Methyl Styrene	(3)	21.007	118	1158872	10.807
89) tert-Butylbenzene	(3)	21.129	119	2405196	11.303
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	2525118	10.969
91) sec-Butylbenzene	(3)	21.379	105	3910402	11.001
92) p-Isopropyltoluene	(3)	21.559	119	3025658	11.212
93) 1,3-Dichlorobenzene	(3)	21.716	146	1736620	10.205
94) 1,4-Dichlorobenzene	(3)	21.831	146	1701019	10.140
95) n-Butylbenzene	(3)	22.139	92	1943197	11.189
96) Benzyl Chloride	(3)	22.160	126	388006	10.432
97) Hexachloroethane	(3)	22.382	117	694024	9.206
98) 1,2-Dichlorobenzene	(3)	22.425	146	1640740	10.378
99) 1,2-Dibromo-3-chloropropane	(3)	23.579	157	779443	10.068
100) Hexachlorobutadiene	(3)	24.546	225	999246	10.084
101) 1,2,4-Trichlorobenzene	(3)	24.639	180	1085435	10.048
102) Naphthalene	(3)	25.226	128	2288132	10.814

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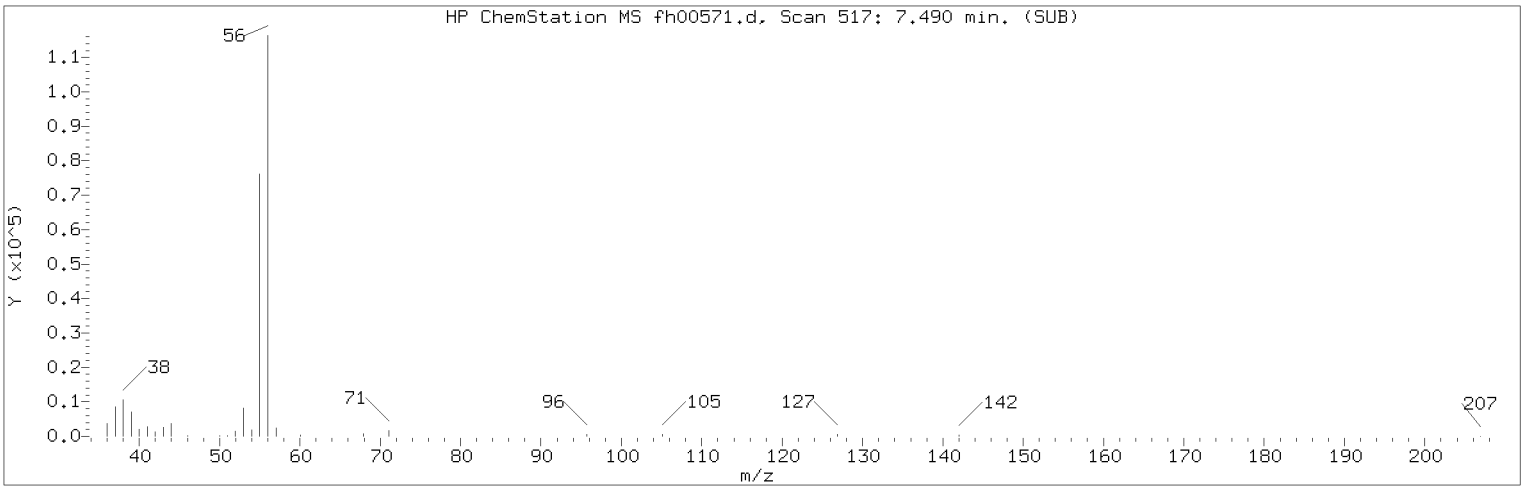
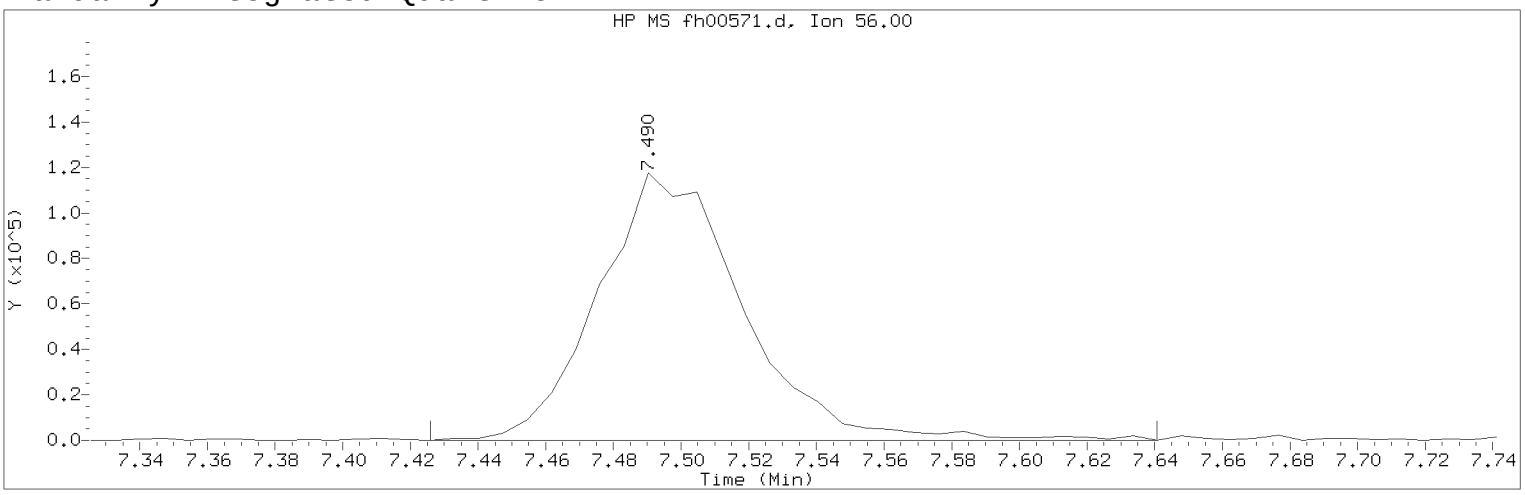
on 08/26/2018 at 17:19.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



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Injection date and time: 24-AUG-2018 15:57 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:18
Date, time and analyst ID of latest file update: 26-Aug-2018 17:18 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

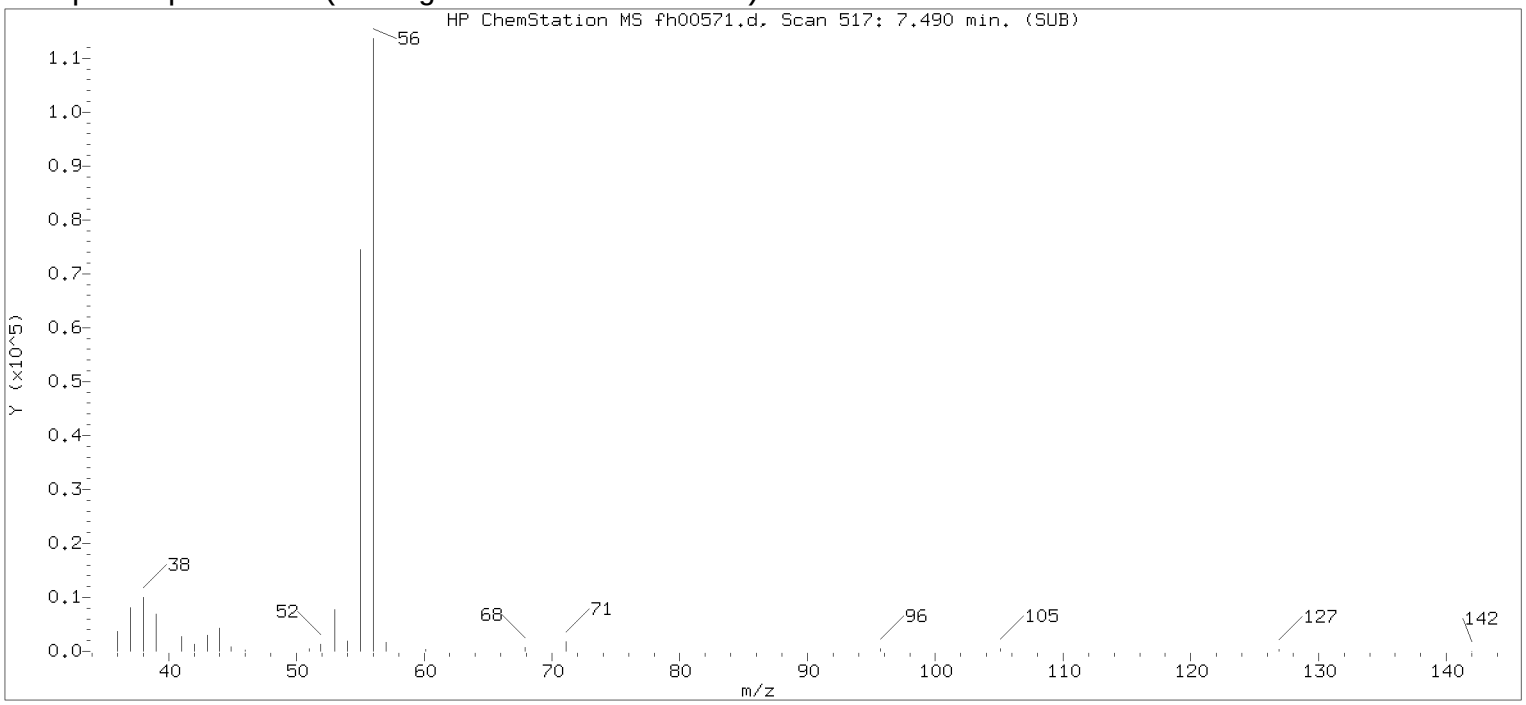
Compound Number : 20
Compound Name : Acrolein
Scan Number : 517
Retention Time (minutes): 7.490
Quant Ion : 56.00
Area (flag) : 348968M
Concentration (ppb(v)) : 10.8351
Integration start scan : 507 Integration stop scan: 537
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

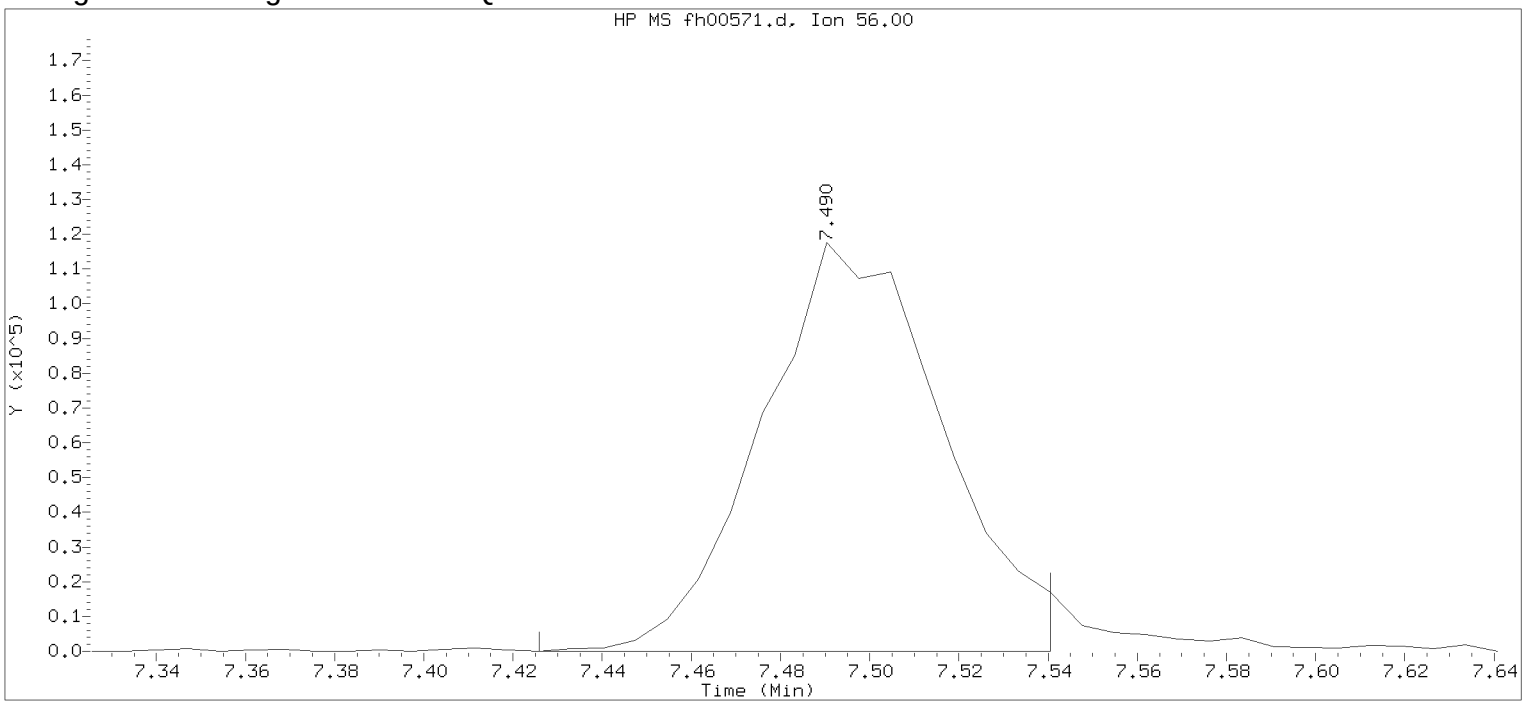
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:19.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Alexander D. Sechrist on 08/27/2018 at 13:50.
PARALLAX ID: ads07818

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug24.b/fh00571.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 15:57 Analyst ID: jeb07445

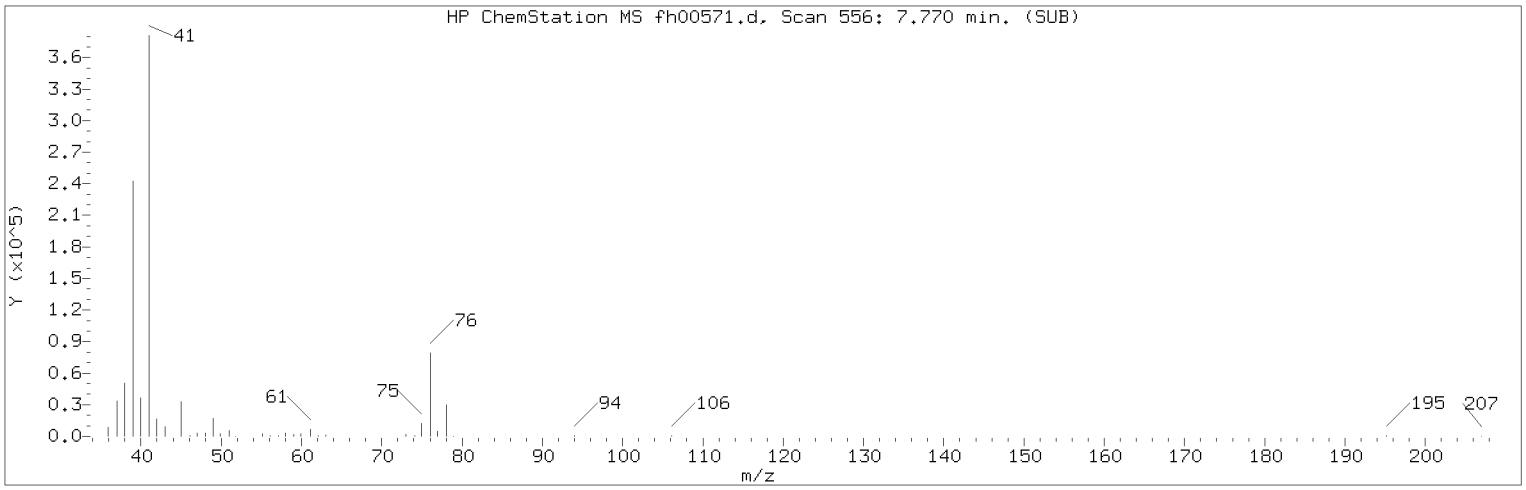
Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 24-Aug-2018 16:27 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

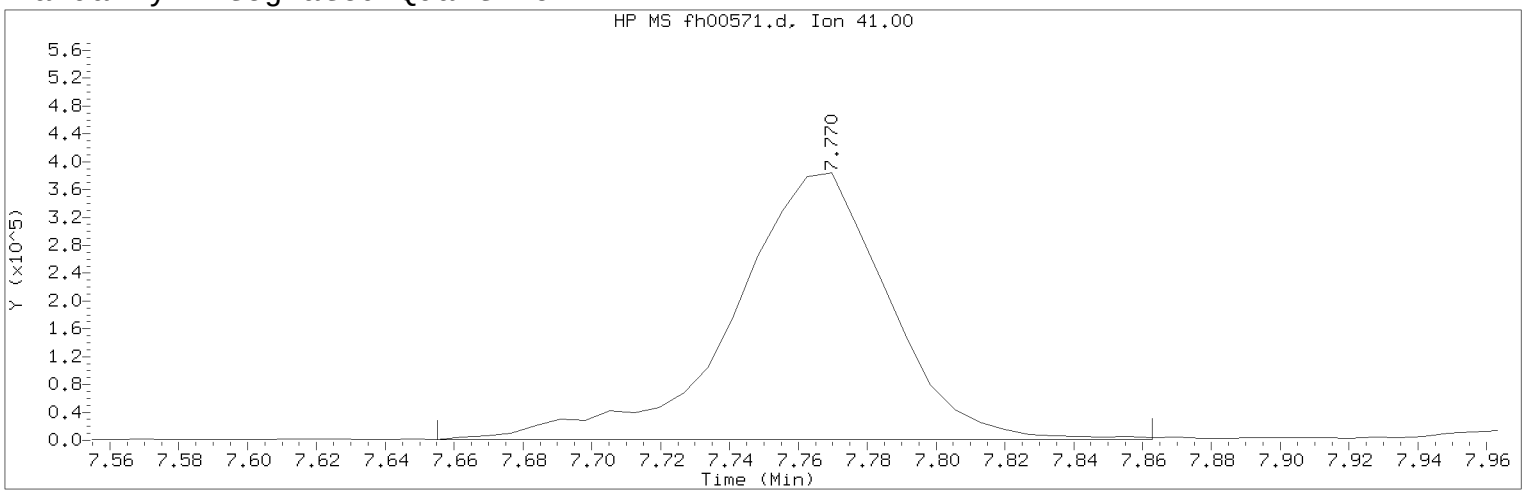
Compound Number : 20
Compound Name : Acrolein
Scan Number : 517
Retention Time (minutes): 7.490
Quant Ion : 56.00
Area : 329392
Concentration (ppb(v)) : 9.1263
Integration start scan : 507 Integration stop scan: 523
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 08/26/2018 at 17:19.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug24.b/fh00571.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 15:57 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:18
Date, time and analyst ID of latest file update: 26-Aug-2018 17:18 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

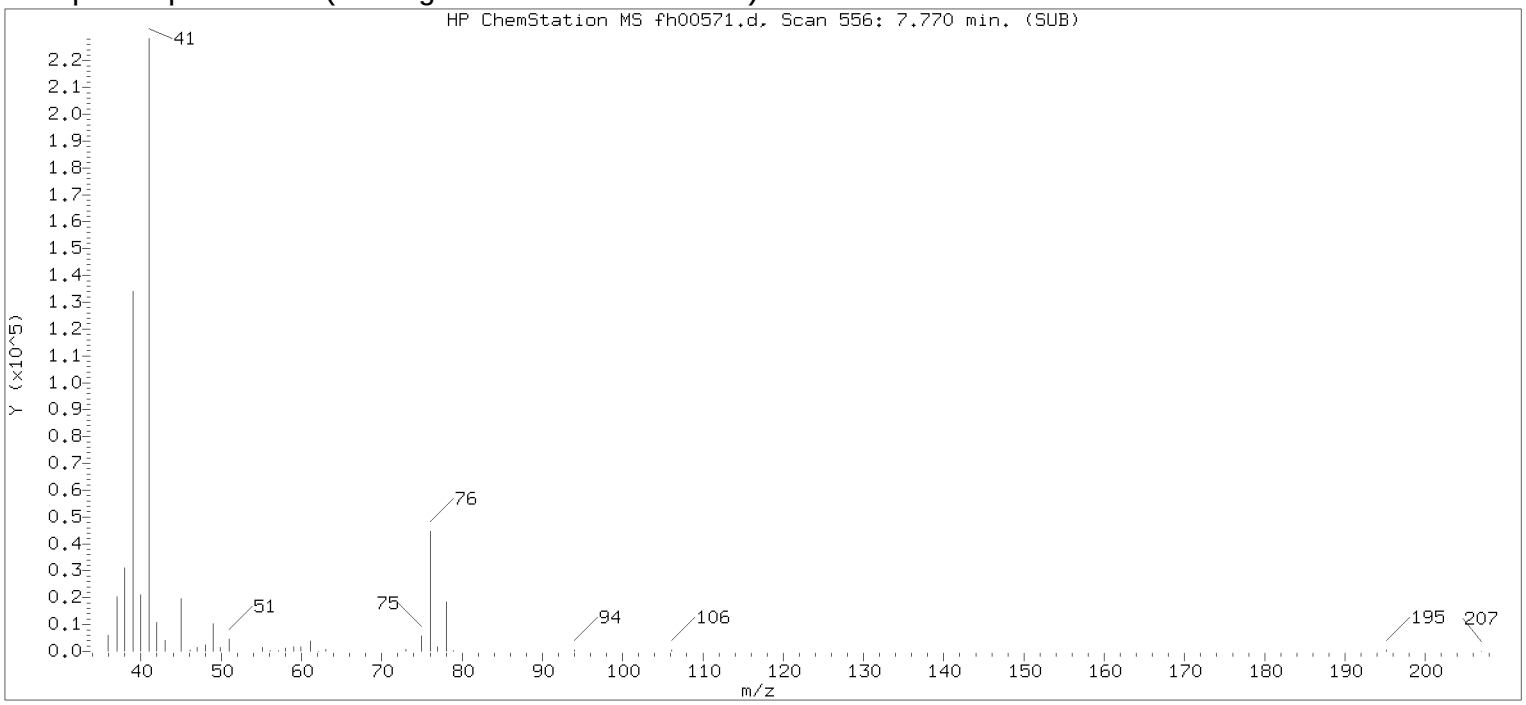
Compound Number : 22
Compound Name : 3-Chloropropene
Scan Number : 556
Retention Time (minutes): 7.770
Quant Ion : 41.00
Area (flag) : 1204457M
Concentration (ppb(v)) : 12.1424
Integration start scan : 539 Integration stop scan: 568
Y at integration start : 857 Y at integration end: 857

Reason for manual integration: improper integration

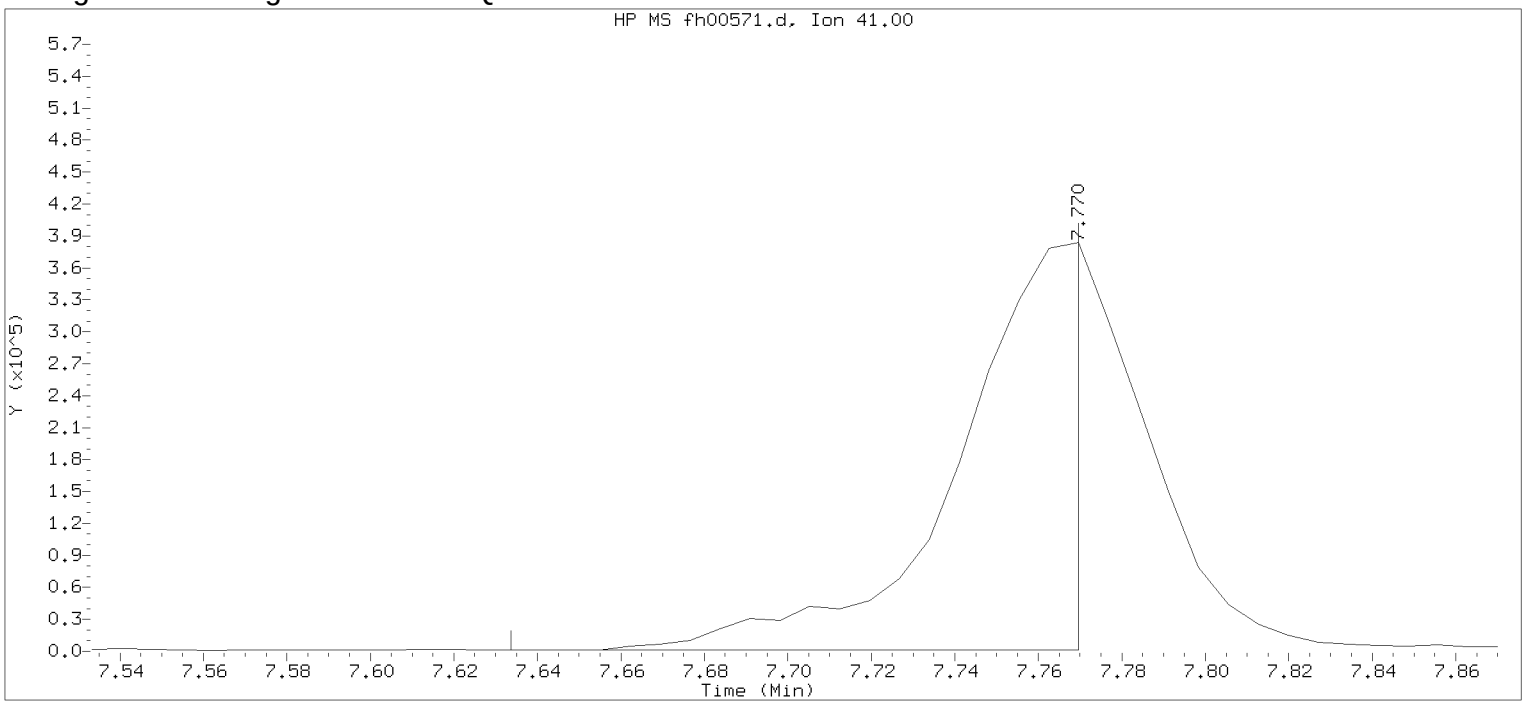
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:19.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Alexander D. Sechrist on 08/27/2018 at 13:50.
PARALLAX ID: ads07818

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug24.b/fh00571.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 15:57 Analyst ID: jeb07445

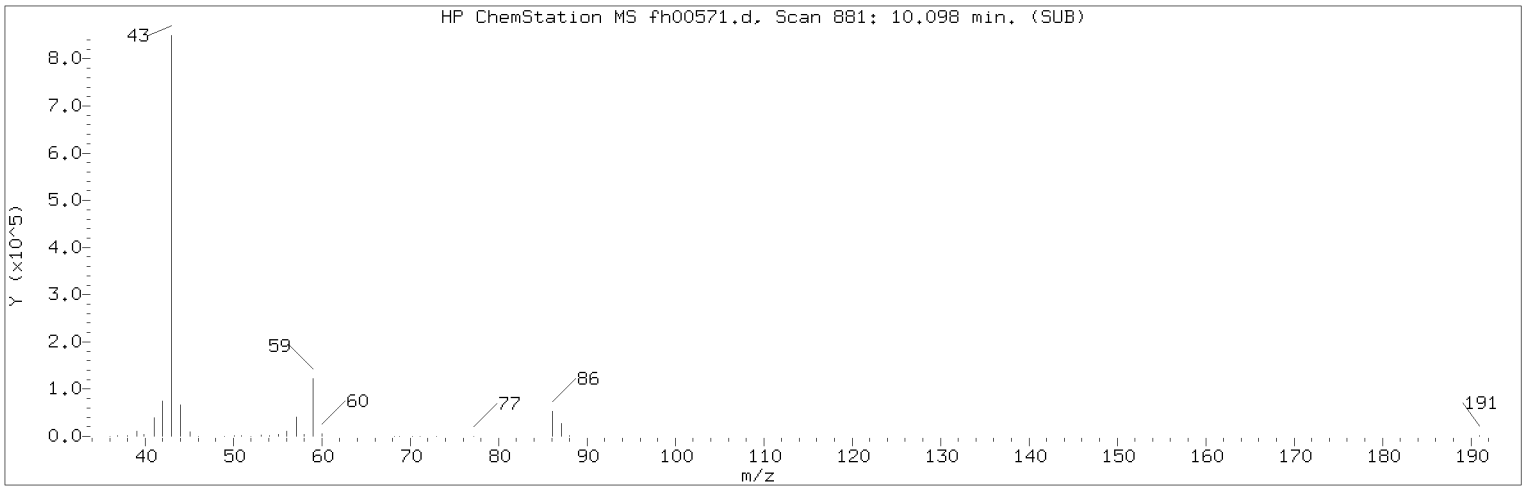
Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 24-Aug-2018 16:27 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

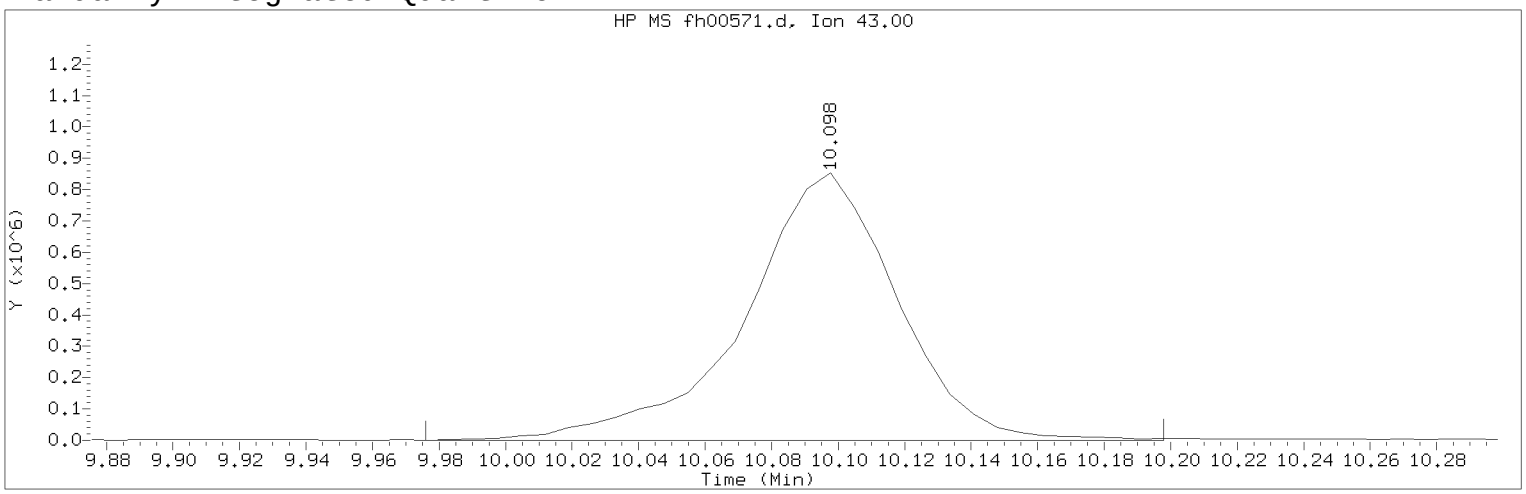
Compound Number : 22
Compound Name : 3-Chloropropene
Scan Number : 556
Retention Time (minutes): 7.770
Quant Ion : 41.00
Area : 742078
Concentration (ppb(v)) : 6.9928
Integration start scan : 536 Integration stop scan: 555
Y at integration start : 1256 Y at integration end: 1256

Digitally signed by Jacob E. Bailey on 08/26/2018 at 17:19.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug24.b/fh00571.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 15:57 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:18
Date, time and analyst ID of latest file update: 26-Aug-2018 17:18 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

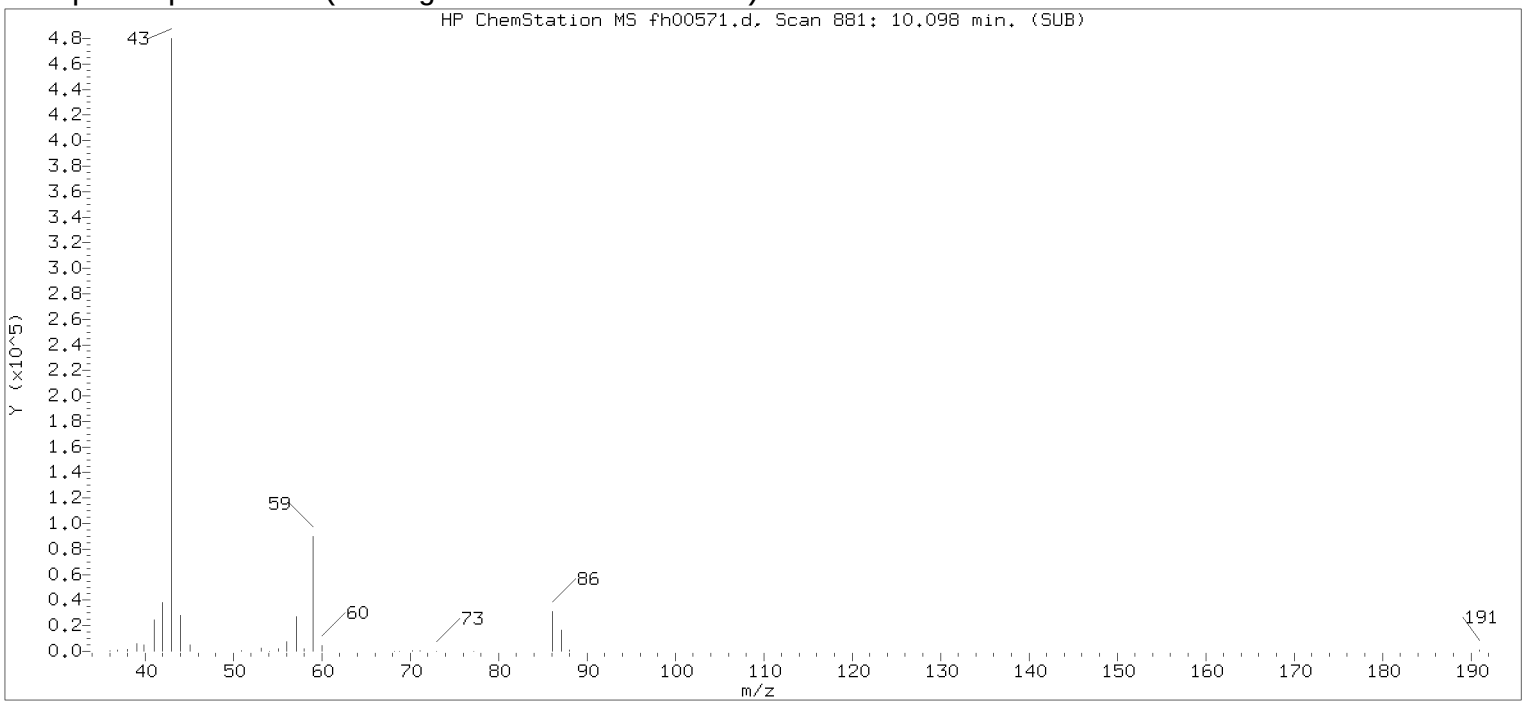
Compound Number : 34
Compound Name : Vinyl Acetate
Scan Number : 881
Retention Time (minutes): 10.098
Quant Ion : 43.00
Area (flag) : 2713062M
Concentration (ppb(v)) : 12.1409
Integration start scan : 863 Integration stop scan: 894
Y at integration start : 339 Y at integration end: 339

Reason for manual integration: improper integration

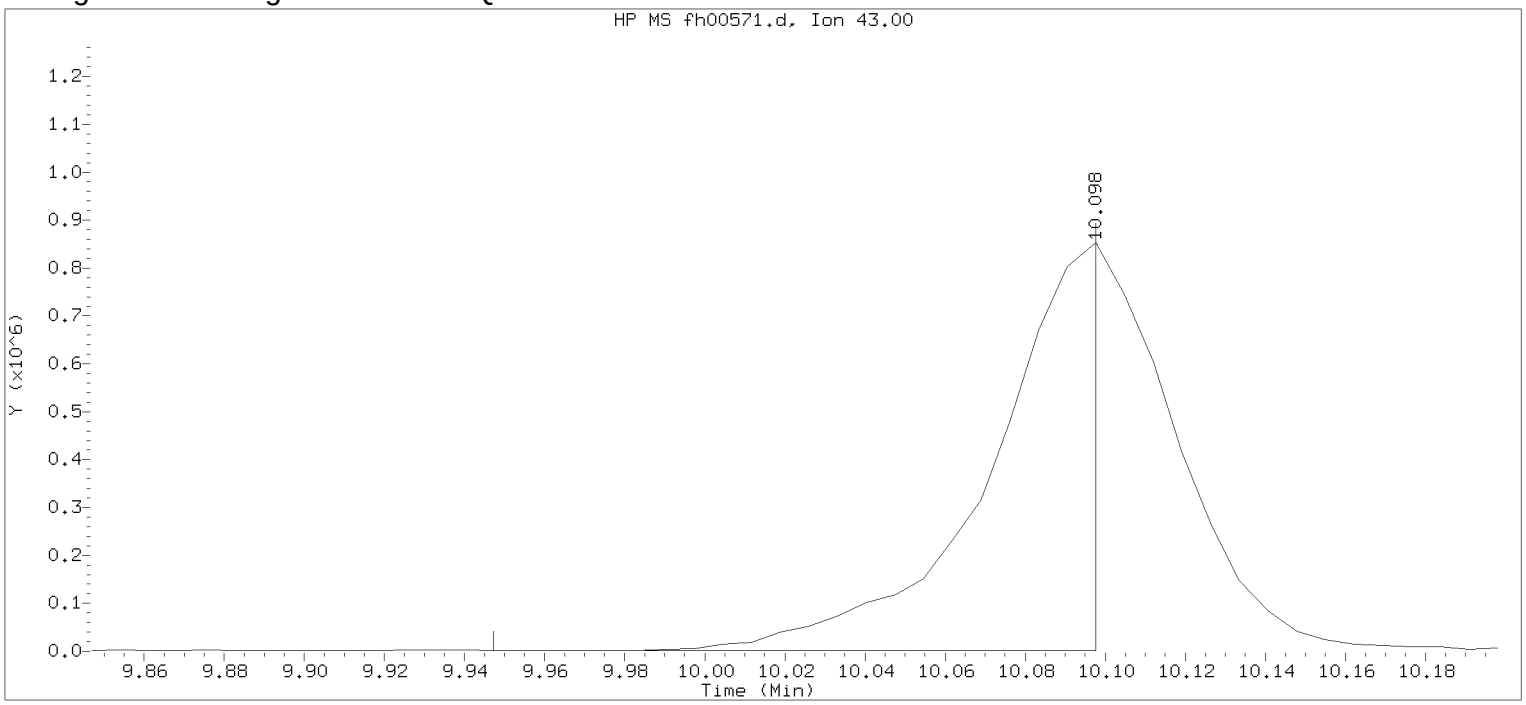
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:19.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Alexander D. Sechrist on 08/27/2018 at 13:50.
PARALLAX ID: ads07818

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug24.b/fh00571.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 15:57 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 24-Aug-2018 16:27 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 34
Compound Name : Vinyl Acetate
Scan Number : 881
Retention Time (minutes): 10.098
Quant Ion : 43.00
Area : 1503536
Concentration (ppb(v)) : 6.3077
Integration start scan : 859 Integration stop scan: 880
Y at integration start : 788 Y at integration end: 788

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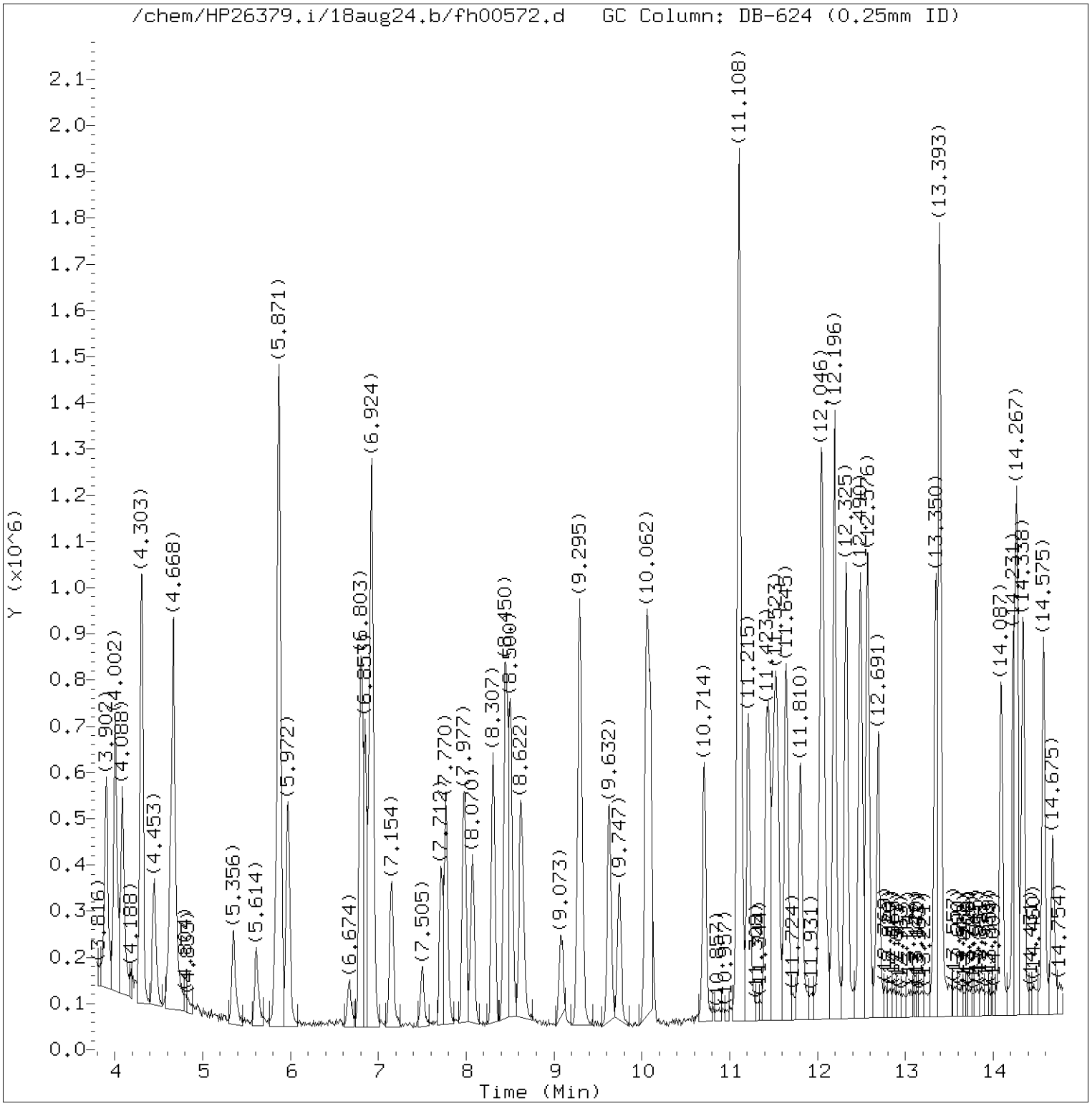
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00572.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 16:27 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:00 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

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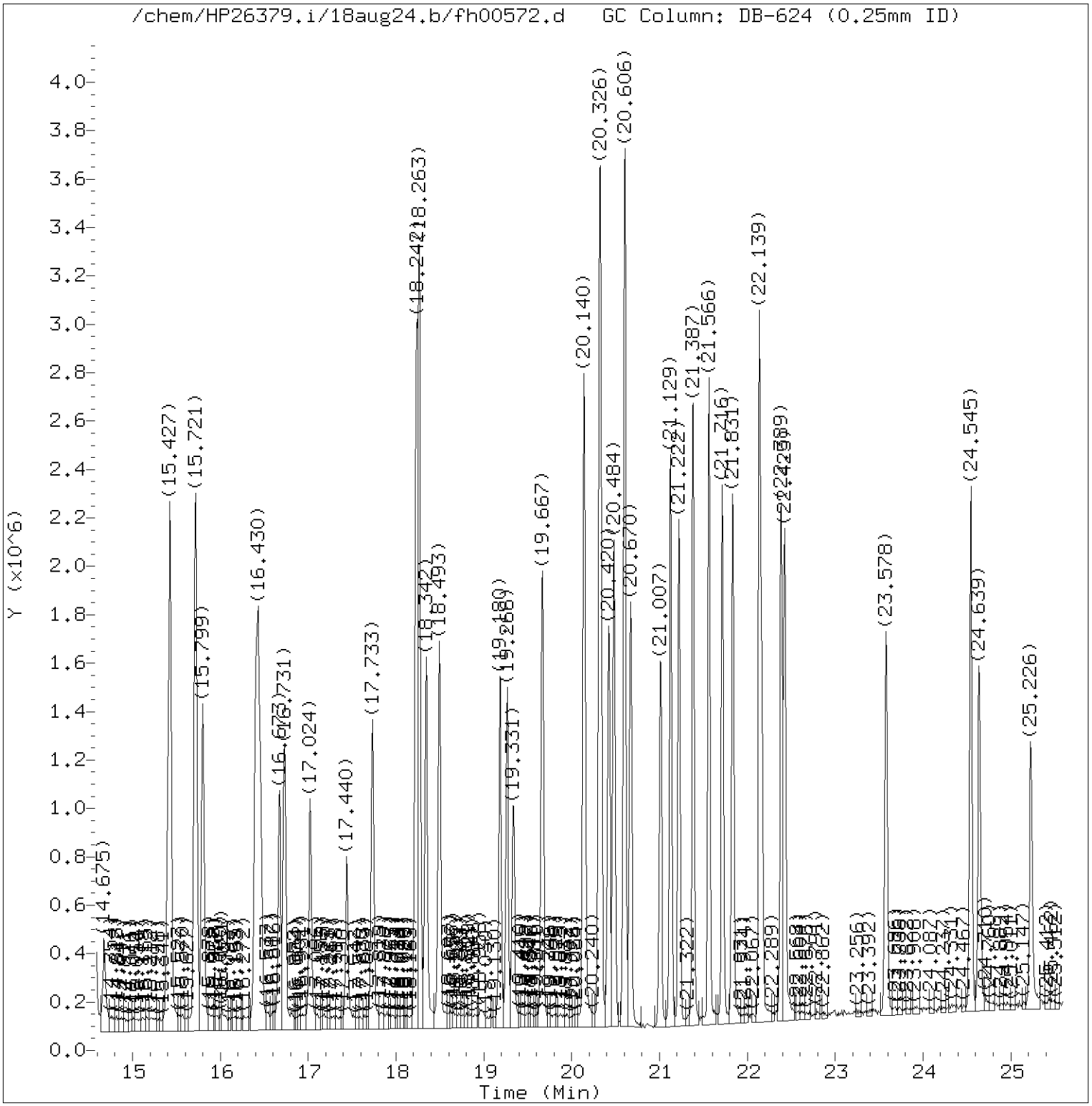
on 08/26/2018 at 17:03.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00572.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 16:27 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:00 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

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on 08/26/2018 at 17:03.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00572.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 16:27 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:00 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	375762	4.922
2) Dichlorodifluoromethane	(1)	4.002	85	761373	4.826
3) Chlorodifluoromethane	(1)	4.088	51	880037	4.780
4) Freon 114	(1)	4.303	85	785565	4.842
5) Chloromethane	(1)	4.453	50	489433	5.006
6) Vinyl Chloride	(1)	4.639	62	373277	4.793
7) 1,3-Butadiene	(1)	4.668	54	348017	4.791
8) Bromomethane	(1)	5.356	94	224583	4.711
9) Chloroethane	(1)	5.614	64	218126	4.897
10) Bromoethene	(1)	5.828	106	228122	4.912
11) Pentane	(1)	5.864	43	749364	4.791
12) Trichlorofluoromethane	(1)	5.871	101	692121	4.858
13) Dichlorofluoromethane	(1)	5.972	67	747746	4.797
14) Ethanol	(1)	6.674	45	147428	4.885
15) Freon123a	(1)	6.810	67	747987	5.357
16) 1,1-Dichloroethene	(1)	6.853	61	654284	4.805
17) Freon 113	(1)	6.910	103	403567	4.939
18) Carbon Disulfide	(1)	6.939	76	799588	4.712
19) Methyl Iodide	(1)	7.154	142	574772	5.175
20) Acrolein	(1)	7.505	56	164656	4.710
21) Isopropanol	(1)	7.712	45	655214	4.836
22) 3-Chloropropene	(1)	7.770	41	577604	5.273
23) Methylene Chloride	(1)	7.970	84	272959	5.320
24) Acetone	(1)	8.070	43	700914	4.744
25) trans-1,2-Dichloroethene	(1)	8.307	61	622842	4.790
26) Hexane	(1)	8.443	56	467337	4.760
27) Methyl t-Butyl Ether	(1)	8.515	73	727181	4.755
28) tert-Butyl Alcohol	(1)	8.622	59	898958	5.492
29) Acetonitrile	(1)	9.073	41	396297	4.756
30) Di-Isopropyl Ether	(1)	9.295	45	1391631	4.794
31) 1,1-Dichloroethane	(1)	9.625	63	806938	4.817
32) Acrylonitrile	(1)	9.747	53	395591	4.826
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	1246143	4.752
34) Vinyl Acetate	(1)	10.105	43	1282653	5.280
35) cis-1,2-Dichloroethene	(1)	10.714	61	580042	4.791
36) 1,2-Dichloroethene (total)	(1)		61	1202884	9.581
37)*Bromochloromethane	(1)	11.100	130	429439	10.000
38) Cyclohexane	(1)	11.122	56	674280	4.751

* = 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/HP26379.i/18aug24.b/fh00572.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 16:27 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:00 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	637665	4.855
40) Ethyl Acetate	(1)	11.423	43	1007472	4.765
41) Methyl Acrylate	(1)	11.459	55	795727	4.694
42) Carbon Tetrachloride	(1)	11.509	117	504731	4.926
43) Tetrahydrofuran	(1)	11.545	42	483846	4.705
44) 1,1,1-Trichloroethane	(1)	11.645	97	602813	4.864
45) 2-Butanone	(1)	11.802	43	946210	4.784
46) Isooctane	(2)	12.046	57	2094219	4.727
47) Heptane	(2)	12.196	71	293621	4.744
48) Benzene	(2)	12.325	78	941784	4.817
49) Tert-Amyl Methyl Ether	(2)	12.490	73	710058	4.800
50) 1,2-Dichloroethane	(2)	12.691	62	623301	4.850
51) Trichloroethene	(2)	13.350	130	331545	4.915
52)*1,4-Difluorobenzene	(2)	13.393	114	1468568	10.000
53) Dibromomethane	(2)	14.095	174	314405	4.804
54) Ethyl Acrylate	(2)	14.231	55	972813	4.805
55) 1,2-Dichloropropane	(2)	14.267	63	534141	4.830
56) Bromodichloromethane	(2)	14.338	83	639923	4.843
57) Methyl Methacrylate	(2)	14.575	69	287715	4.817
58) 1,4-Dioxane	(2)	14.675	88	186688	4.784
59) cis-1,3-Dichloropropene	(2)	15.405	75	516407	4.759
60) Octane	(3)	15.434	43	1080886	4.709
61) Toluene	(3)	15.799	91	1016810	4.913
62) 4-Methyl-2-Pentanone	(2)	16.401	43	1173485	4.823
63) Tetrachloroethene	(3)	16.430	166	481788	4.820
64) trans-1,3-Dichloropropene	(3)	16.458	75	448780	4.788
65) 1,3-Dichloropropene (total)	(3)		75	965187	9.593
66) Ethyl Methacrylate	(3)	16.673	69	479829	4.755
67) 1,1,2-Trichloroethane	(3)	16.731	97	410093	4.931
68) Dibromochloromethane	(3)	17.024	127	406970	4.877
69) 1,2-Dibromoethane	(3)	17.440	107	562648	4.859
70) 2-Hexanone	(3)	17.733	43	1054230	4.764
71)*Chlorobenzene-d5	(3)	18.235	117	1409935	10.000
72) Chlorobenzene	(3)	18.256	112	852907	4.929
73) Ethylbenzene	(3)	18.271	91	1366428	4.819
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	406728	4.953
75) m/p-Xylene	(3)	18.493	91	973172	4.793
76) o-Xylene	(3)	19.180	91	951550	4.796

* = 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/HP26379.i/18aug24.b/fh00572.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 16:27 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:00 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	1924722	9.589
78) Styrene	(3)	19.266	104	712787	4.828
79) Bromoform	(3)	19.338	173	505532	4.997
80) Cumene	(3)	19.667	105	1343102	4.780
81) n-Propylbenzene	(3)	20.319	120	376547	4.698
82) Bromobenzene	(3)	20.326	156	498853	4.930
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	991599	4.937
84) 4-Ethyltoluene	(3)	20.484	105	1417786	4.806
85) 2-Chlorotoluene	(3)	20.599	126	384561	4.967
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	1237952	4.789
87) 1,2,3-Trichloropropane	(3)	20.670	110	265950	4.865
88) Alpha Methyl Styrene	(3)	21.014	118	506106	4.597
89) tert-Butylbenzene	(3)	21.129	119	1113651	4.743
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	1206318	4.821
91) sec-Butylbenzene	(3)	21.379	105	1838192	4.781
92) p-Isopropyltoluene	(3)	21.566	119	1393675	4.730
93) 1,3-Dichlorobenzene	(3)	21.716	146	866324	4.929
94) 1,4-Dichlorobenzene	(3)	21.838	146	853365	4.943
95) n-Butylbenzene	(3)	22.139	92	913341	4.780
96) Benzyl Chloride	(3)	22.167	126	185133	4.818
97) Hexachloroethane	(3)	22.389	117	346349	4.930
98) 1,2-Dichlorobenzene	(3)	22.425	146	817421	4.926
99) 1,2-Dibromo-3-chloropropane	(3)	23.578	157	390328	4.939
100) Hexachlorobutadiene	(3)	24.545	225	527370	5.070
101) 1,2,4-Trichlorobenzene	(3)	24.639	180	571808	5.065
102) Naphthalene	(3)	25.226	128	1139513	4.925

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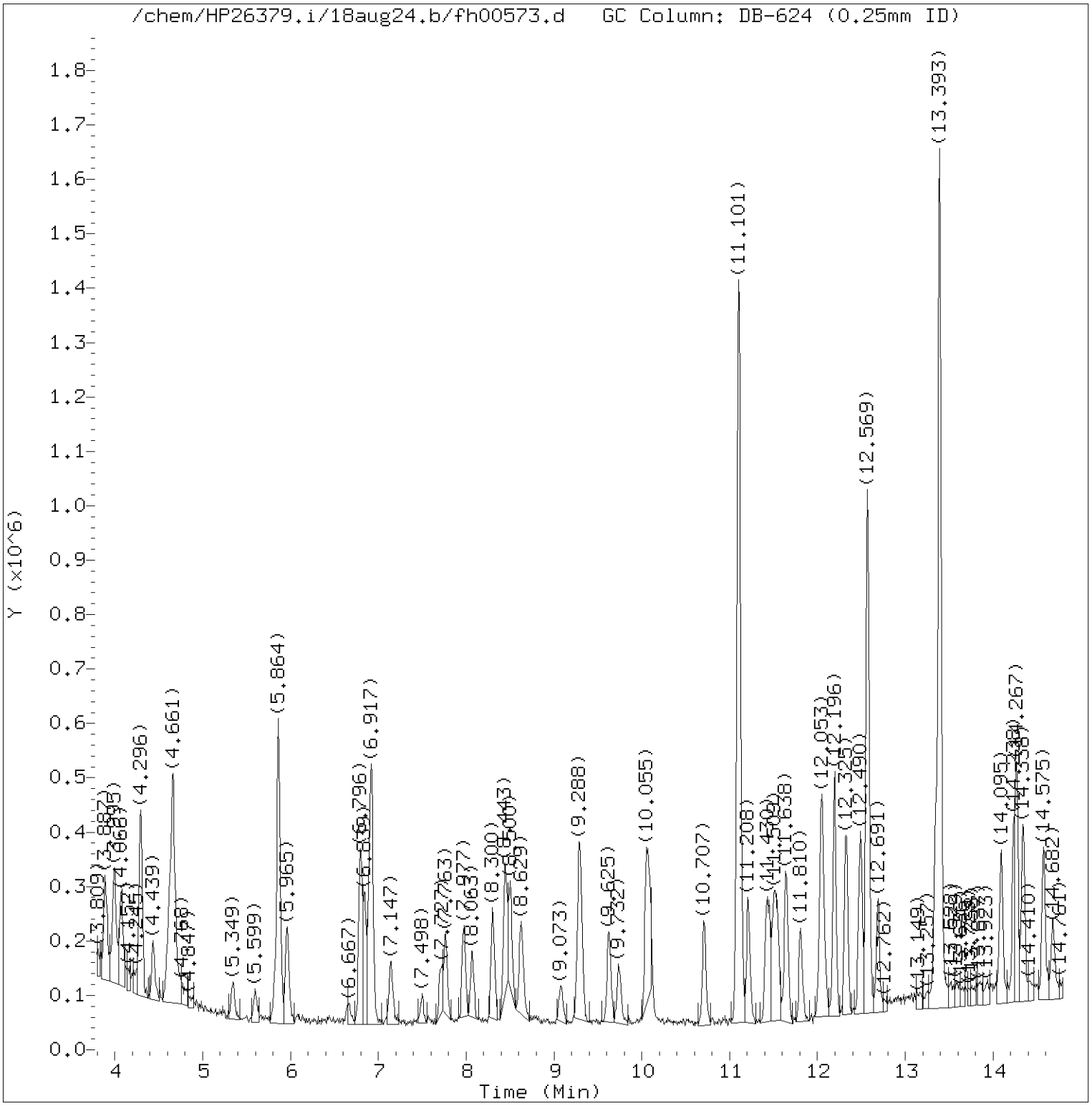
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00573.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 16:58 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:00 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

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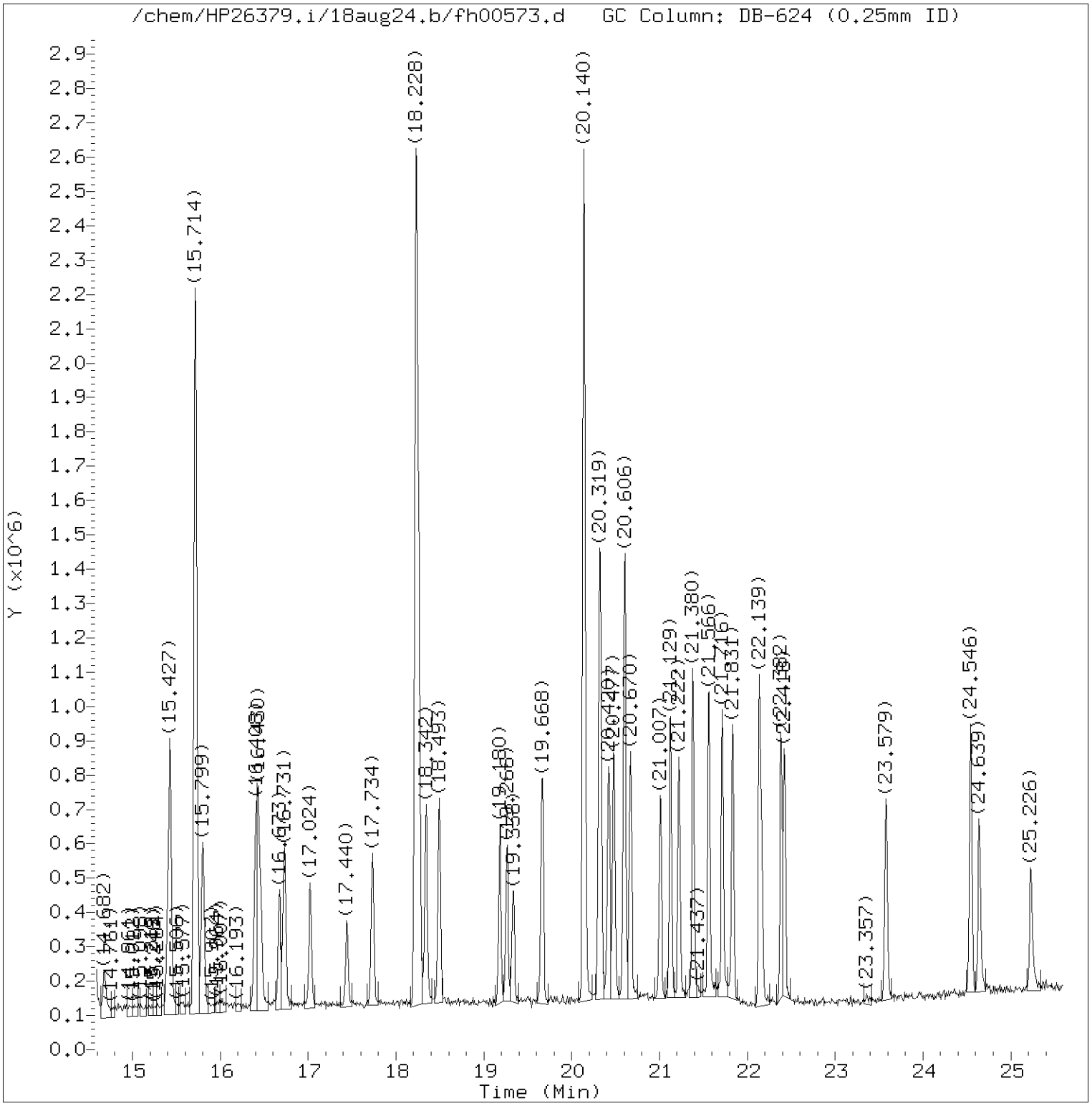
on 08/26/2018 at 17:03.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00573.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 16:58 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:00 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

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on 08/26/2018 at 17:03.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00573.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 16:58 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:00 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.887	41	138042	1.948
2) Dichlorodifluoromethane	(1)	3.988	85	246430	1.761
3) Chlorodifluoromethane	(1)	4.081	51	321499	1.902
4) Freon 114	(1)	4.296	85	269936	1.840
5) Chloromethane	(1)	4.432	50	171739	1.910
6) Vinyl Chloride	(1)	4.625	62	133778	1.881
7) 1,3-Butadiene	(1)	4.661	54	129391	1.928
8) Bromomethane	(1)	5.334	94	70092	1.686
9) Chloroethane	(1)	5.599	64	70076	1.770
10) Bromoethene	(1)	5.814	106	76685	1.830
11) Pentane	(1)	5.864	43	289231	1.978
12) Trichlorofluoromethane	(1)	5.872	101	261290	1.967
13) Dichlorofluoromethane	(1)	5.957	67	249428	1.791
14) Ethanol	(1)	6.659	45	57295	2.013
15) Freon123a	(1)	6.796	67	302137	2.274
16) 1,1-Dichloroethene	(1)	6.853	61	226858	1.842
17) Freon 113	(1)	6.917	103	170174	2.138
18) Carbon Disulfide	(1)	6.924	76	269572	1.782
19) Methyl Iodide	(1)	7.147	142	178921	1.799
20) Acrolein	(1)	7.498	56	55319	1.777
21) Isopropanol	(1)	7.712	45	214931	1.780
22) 3-Chloropropene	(1)	7.770	41	191549	1.966
23) Methylene Chloride	(1)	7.977	84	90318	1.975
24) Acetone	(1)	8.063	43	242822	1.824
25) trans-1,2-Dichloroethene	(1)	8.300	61	205563	1.776
26) Hexane	(1)	8.443	56	171248	1.901
27) Methyl t-Butyl Ether	(1)	8.500	73	264746	1.891
28) tert-Butyl Alcohol	(1)	8.629	59	338448	2.206
29) Acetonitrile	(1)	9.081	41	138354	1.838
30) Di-Isopropyl Ether	(1)	9.288	45	528601	1.957
31) 1,1-Dichloroethane	(1)	9.618	63	280692	1.849
32) Acrylonitrile	(1)	9.732	53	131700	1.796
33) Ethyl Tert-Butyl Ether	(1)	10.055	59	433349	1.831
34) Vinyl Acetate	(1)	10.105	43	430881	1.991
35) cis-1,2-Dichloroethene	(1)	10.714	61	196669	1.810
36) 1,2-Dichloroethene (total)	(1)		61	402232	3.585
37)*Bromochloromethane	(1)	11.101	130	403797	10.000
38) Cyclohexane	(1)	11.115	56	254922	1.939

* = Compound is an internal standard.

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on 08/26/2018 at 17:03.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00573.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 16:58 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:00 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.208	83	223294	1.868
40) Ethyl Acetate	(1)	11.416	43	365519	1.889
41) Methyl Acrylate	(1)	11.459	55	268608	1.778
42) Carbon Tetrachloride	(1)	11.509	117	192912	2.002
43) Tetrahydrofuran	(1)	11.552	42	166270	1.804
44) 1,1,1-Trichloroethane	(1)	11.652	97	225508	1.956
45) 2-Butanone	(1)	11.810	43	341554	1.888
46) Isooctane	(2)	12.053	57	725175	1.863
47) Heptane	(2)	12.189	71	98307	1.825
48) Benzene	(2)	12.333	78	342137	1.950
49) Tert-Amyl Methyl Ether	(2)	12.490	73	251475	1.912
50) 1,2-Dichloroethane	(2)	12.698	62	219798	1.920
51) Trichloroethene	(2)	13.343	130	117405	1.943
52)*1,4-Difluorobenzene	(2)	13.393	114	1334256	10.000
53) Dibromomethane	(2)	14.088	174	111757	1.918
54) Ethyl Acrylate	(2)	14.231	55	347393	1.924
55) 1,2-Dichloropropane	(2)	14.267	63	213712	2.083
56) Bromodichloromethane	(2)	14.338	83	236646	1.981
57) Methyl Methacrylate	(2)	14.582	69	98872	1.878
58) 1,4-Dioxane	(2)	14.682	88	64257	1.871
59) cis-1,3-Dichloropropene	(2)	15.406	75	191232	1.959
60) Octane	(3)	15.427	43	392894	1.853
61) Toluene	(3)	15.799	91	386863	1.968
62) 4-Methyl-2-Pentanone	(2)	16.401	43	455403	2.040
63) Tetrachloroethene	(3)	16.430	166	189048	1.983
64) trans-1,3-Dichloropropene	(3)	16.458	75	163704	1.879
65) 1,3-Dichloropropene (total)	(3)		75	354936	3.783
66) Ethyl Methacrylate	(3)	16.673	69	173177	1.856
67) 1,1,2-Trichloroethane	(3)	16.731	97	155650	1.969
68) Dibromochloromethane	(3)	17.024	127	162152	2.019
69) 1,2-Dibromoethane	(3)	17.440	107	210785	1.933
70) 2-Hexanone	(3)	17.734	43	396186	1.911
71)*Chlorobenzene-d5	(3)	18.228	117	1350358	10.000
72) Chlorobenzene	(3)	18.256	112	341046	2.038
73) Ethylbenzene	(3)	18.271	91	527194	1.960
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	162680	2.045
75) m/p-Xylene	(3)	18.493	91	363730	1.912
76) o-Xylene	(3)	19.188	91	347014	1.881

* = Compound is an internal standard.

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on 08/26/2018 at 17:03.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

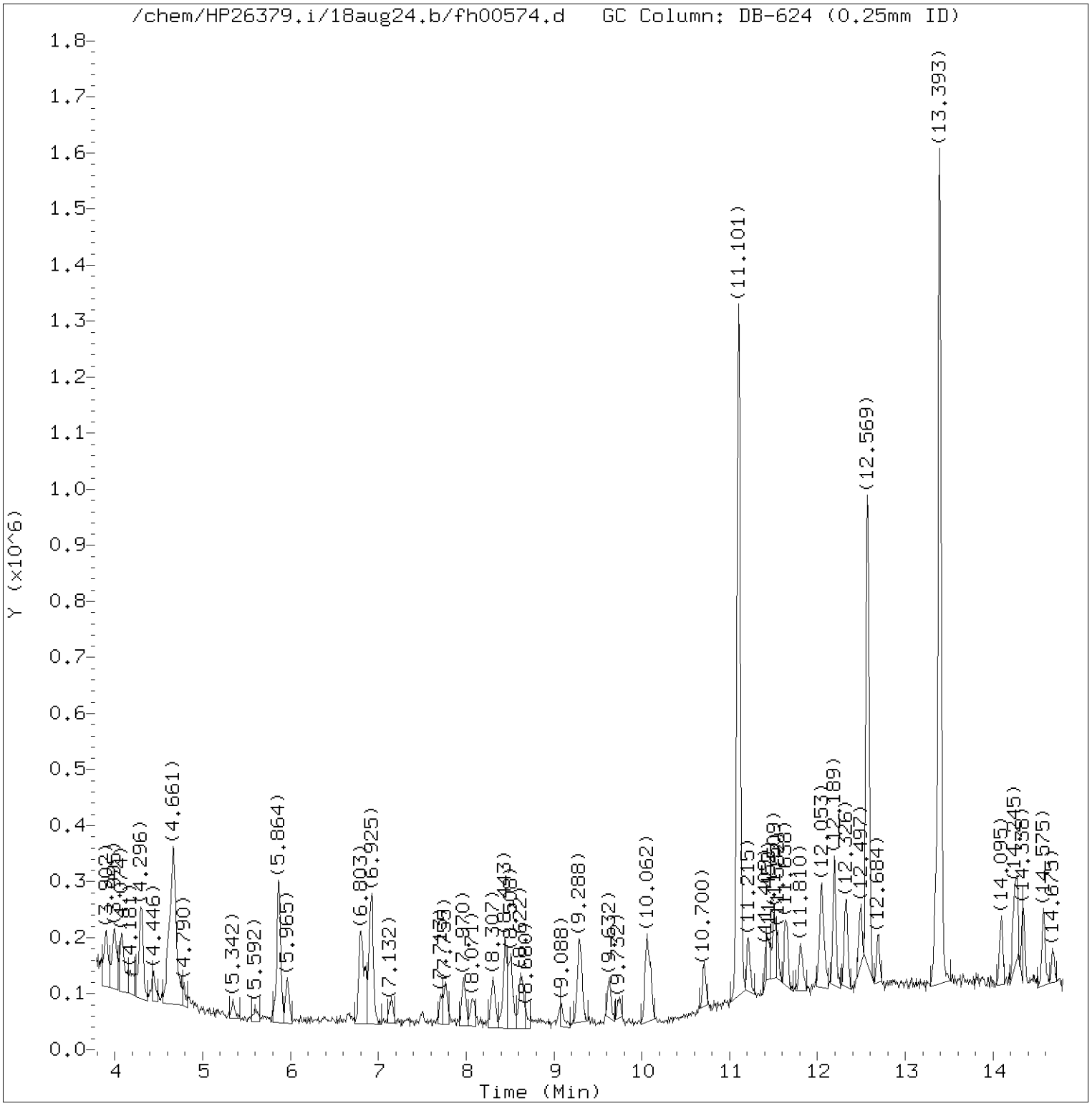
Data File: /chem/HP26379.i/18aug24.b/fh00573.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 16:58 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:00 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	710744	3.793
78) Styrene	(3)	19.266	104	239294	1.784
79) Bromoform	(3)	19.331	173	194462	2.005
80) Cumene	(3)	19.668	105	489480	1.875
81) n-Propylbenzene	(3)	20.319	120	140579	1.884
82) Bromobenzene	(3)	20.327	156	183166	1.925
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	391188	2.022
84) 4-Ethyltoluene	(3)	20.484	105	507160	1.859
85) 2-Chlorotoluene	(3)	20.599	126	137204	1.898
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	426721	1.807
87) 1,2,3-Trichloropropane	(3)	20.670	110	106716	2.025
88) Alpha Methyl Styrene	(3)	21.014	118	198433	1.920
89) tert-Butylbenzene	(3)	21.129	119	379461	1.780
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	407316	1.789
91) sec-Butylbenzene	(3)	21.380	105	652794	1.842
92) p-Isopropyltoluene	(3)	21.566	119	478124	1.785
93) 1,3-Dichlorobenzene	(3)	21.723	146	325618	1.956
94) 1,4-Dichlorobenzene	(3)	21.838	146	321180	1.961
95) n-Butylbenzene	(3)	22.139	92	301612	1.751
96) Benzyl Chloride	(3)	22.160	126	67399	1.884
97) Hexachloroethane	(3)	22.389	117	140914	2.062
98) 1,2-Dichlorobenzene	(3)	22.425	146	305554	1.948
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	155888	2.039
100) Hexachlorobutadiene	(3)	24.546	225	208034	2.058
101) 1,2,4-Trichlorobenzene	(3)	24.639	180	221278	2.031
102) Naphthalene	(3)	25.233	128	380680	1.803

Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:03.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

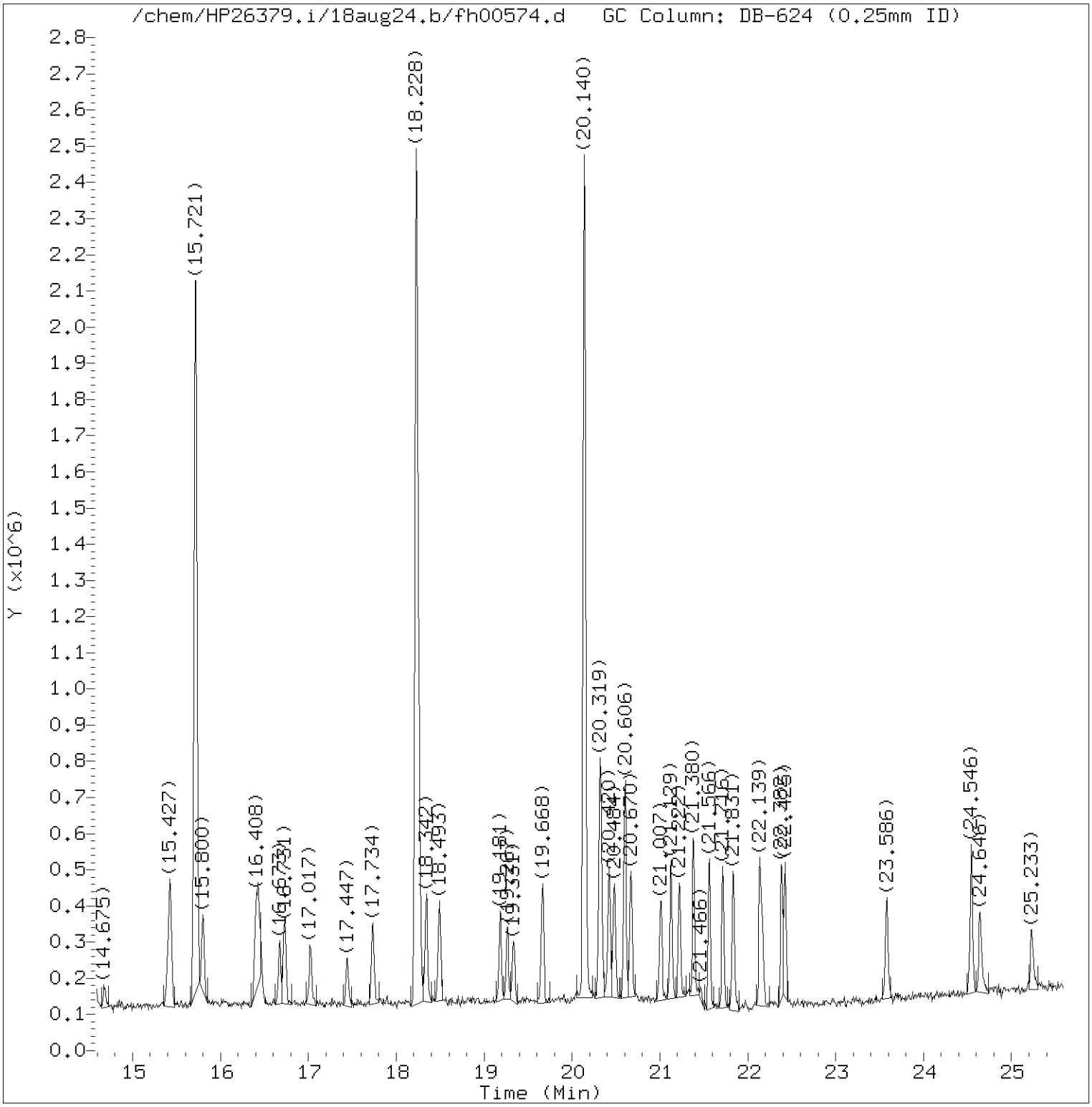
Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00574.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 17:29 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:00 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:03.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00574.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 17:29 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:00 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00574.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 17:29 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:00 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.895	41	54111	0.828
2) Dichlorodifluoromethane	(1)	3.988	85	98115	0.773
3) Chlorodifluoromethane	(1)	4.081	51	144476	0.905
4) Freon 114	(1)	4.303	85	133242	0.948
5) Chloromethane	(1)	4.446	50	80164	0.935
6) Vinyl Chloride	(1)	4.632	62	52844	0.810
7) 1,3-Butadiene	(1)	4.661	54	64798	0.993
8) Bromomethane	(1)	5.349	94	32407	0.842
9) Chloroethane	(1)	5.599	64	24626	0.701
10) Bromoethene	(1)	5.800	106	26327	0.708
11) Pentane	(1)	5.857	43	117003	0.859
12) Trichlorofluoromethane	(1)	5.872	101	135603	1.035
13) Dichlorofluoromethane	(1)	5.965	67	98552	0.779
14) Ethanol	(1)	6.645	45	26304	0.960
15) Freon123a	(1)	6.803	67	149780	1.144
16) 1,1-Dichloroethene	(1)	6.853	61	95655	0.839
17) Freon 113	(1)	6.917	103	85228	1.072
18) Carbon Disulfide	(1)	6.932	76	105009	0.767
19) Methyl Iodide	(1)	7.147	142	68973M	0.767
20) Acrolein	(1)	7.505	56	22697M	0.798
21) Isopropanol	(1)	7.713	45	98599	0.873
22) 3-Chloropropene	(1)	7.770	41	78243	0.881
23) Methylene Chloride	(1)	7.978	84	41260	0.966
24) Acetone	(1)	8.071	43	97651	0.802
25) trans-1,2-Dichloroethene	(1)	8.300	61	85113	0.804
26) Hexane	(1)	8.450	56	92606	1.040
27) Methyl t-Butyl Ether	(1)	8.508	73	125420	0.938
28) tert-Butyl Alcohol	(1)	8.622	59	157678	1.068
29) Acetonitrile	(1)	9.073	41	56241	0.814
30) Di-Isopropyl Ether	(1)	9.288	45	241675	0.937
31) 1,1-Dichloroethane	(1)	9.632	63	134612	0.931
32) Acrylonitrile	(1)	9.747	53	57287	0.843
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	190364	0.863
34) Vinyl Acetate	(1)	10.112	43	187060	0.935
35) cis-1,2-Dichloroethene	(1)	10.707	61	85498	0.848
36) 1,2-Dichloroethene (total)	(1)		61	170611	1.652
37)*Bromochloromethane	(1)	11.101	130	393632	10.000
38) Cyclohexane	(1)	11.122	56	123903	0.975

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

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on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00574.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 17:29 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:00 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	104240	0.919
40) Ethyl Acetate	(1)	11.423	43	176396M	0.951
41) Methyl Acrylate	(1)	11.452	55	116995	0.838
42) Carbon Tetrachloride	(1)	11.509	117	103908	1.077
43) Tetrahydrofuran	(1)	11.552	42	75446	0.875
44) 1,1,1-Trichloroethane	(1)	11.645	97	113094	1.005
45) 2-Butanone	(1)	11.810	43	167533	0.962
46) Isooctane	(2)	12.053	57	298239	0.822
47) Heptane	(2)	12.204	71	47428	0.916
48) Benzene	(2)	12.326	78	161957	0.950
49) Tert-Amyl Methyl Ether	(2)	12.490	73	119214	0.937
50) 1,2-Dichloroethane	(2)	12.698	62	103685	0.937
51) Trichloroethene	(2)	13.350	130	53822	0.924
52)*1,4-Difluorobenzene	(2)	13.393	114	1317797	10.000
53) Dibromomethane	(2)	14.095	174	55641	0.975
54) Ethyl Acrylate	(2)	14.231	55	167162	0.952
55) 1,2-Dichloropropane	(2)	14.274	63	95525	0.956
56) Bromodichloromethane	(2)	14.338	83	110383	0.951
57) Methyl Methacrylate	(2)	14.575	69	49473	0.963
58) 1,4-Dioxane	(2)	14.675	88	33947	1.001
59) cis-1,3-Dichloropropene	(2)	15.406	75	87497	0.929
60) Octane	(3)	15.434	43	183405	0.940
61) Toluene	(3)	15.800	91	194144	1.039
62) 4-Methyl-2-Pentanone	(2)	16.401	43	227707	1.024
63) Tetrachloroethene	(3)	16.430	166	93584	1.034
64) trans-1,3-Dichloropropene	(3)	16.459	75	78502	0.970
65) 1,3-Dichloropropene (total)	(3)		75	165999	1.913
66) Ethyl Methacrylate	(3)	16.673	69	87769	1.002
67) 1,1,2-Trichloroethane	(3)	16.724	97	84439	1.101
68) Dibromochloromethane	(3)	17.017	127	70555	0.952
69) 1,2-Dibromoethane	(3)	17.440	107	109397	1.051
70) 2-Hexanone	(3)	17.734	43	187151	0.971
71)*Chlorobenzene-d5	(3)	18.228	117	1266943	10.000
72) Chlorobenzene	(3)	18.257	112	176777	1.092
73) Ethylbenzene	(3)	18.271	91	262581	1.030
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	82165	1.074
75) m/p-Xylene	(3)	18.493	91	181048	1.011
76) o-Xylene	(3)	19.181	91	171043	0.991

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

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on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00574.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 17:29 Analyst ID: jeb07445

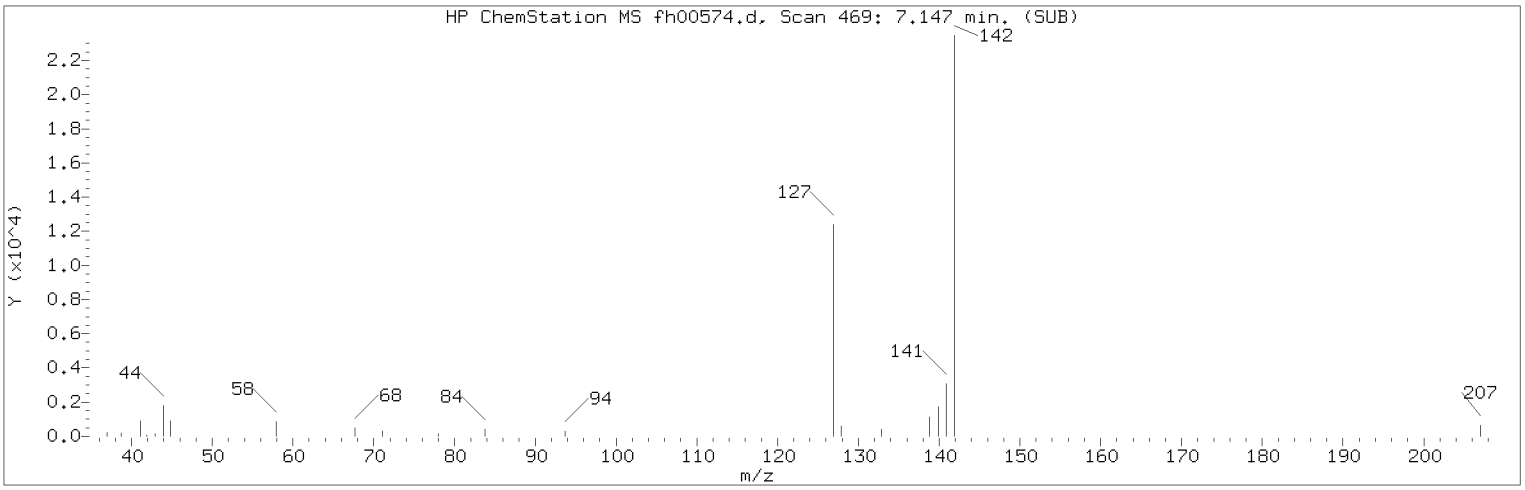
Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:00 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

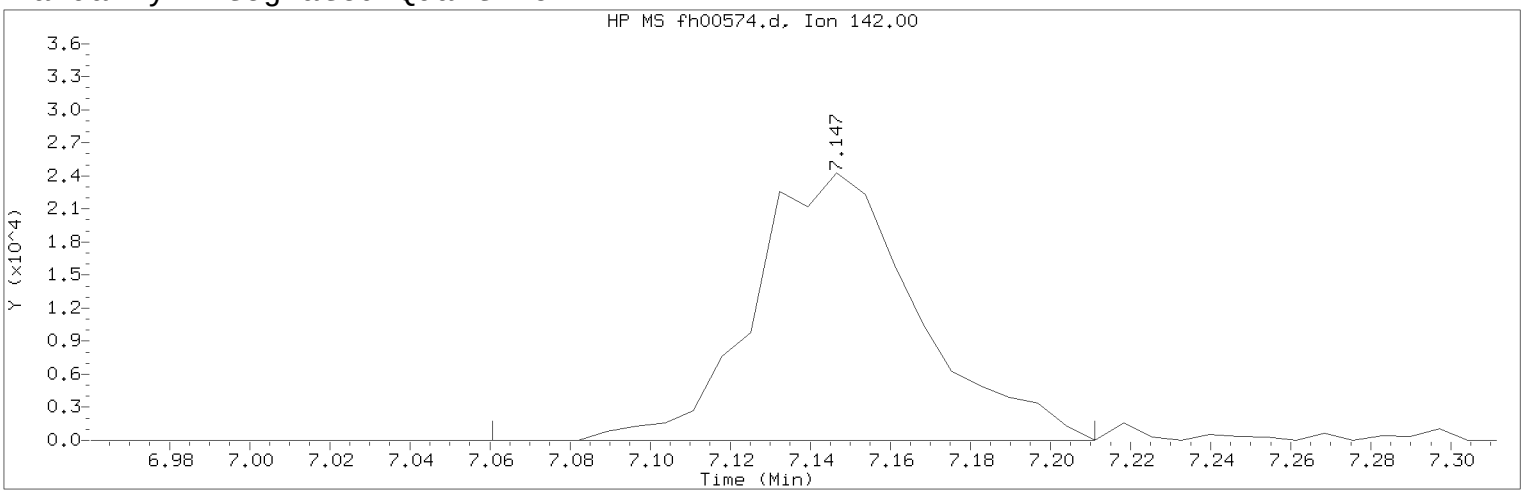
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	352091	2.002
78) Styrene	(3)	19.267	104	111345	0.911
79) Bromoform	(3)	19.331	173	90824	0.998
80) Cumene	(3)	19.668	105	239313	0.983
81) n-Propylbenzene	(3)	20.312	120	68488	0.984
82) Bromobenzene	(3)	20.327	156	93918	1.039
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	211099	1.118
84) 4-Ethyltoluene	(3)	20.484	105	243882	0.964
85) 2-Chlorotoluene	(3)	20.592	126	59981	0.911
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	202485	0.934
87) 1,2,3-Trichloropropane	(3)	20.670	110	52469	1.045
88) Alpha Methyl Styrene	(3)	21.007	118	93214	0.971
89) tert-Butylbenzene	(3)	21.129	119	176869	0.911
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	191328	0.920
91) sec-Butylbenzene	(3)	21.380	105	300728	0.927
92) p-Isopropyltoluene	(3)	21.566	119	224282	0.917
93) 1,3-Dichlorobenzene	(3)	21.716	146	166229	1.047
94) 1,4-Dichlorobenzene	(3)	21.838	146	161606	1.038
95) n-Butylbenzene	(3)	22.139	92	136937	0.881
96) Benzyl Chloride	(3)	22.168	126	31940	0.963
97) Hexachloroethane	(3)	22.382	117	64763	1.007
98) 1,2-Dichlorobenzene	(3)	22.425	146	156157	1.045
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	71645	0.999
100) Hexachlorobutadiene	(3)	24.546	225	97769	1.023
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	95148	0.947
102) Naphthalene	(3)	25.233	128	179473	0.928

Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



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Injection date and time: 24-AUG-2018 17:29 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:00 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

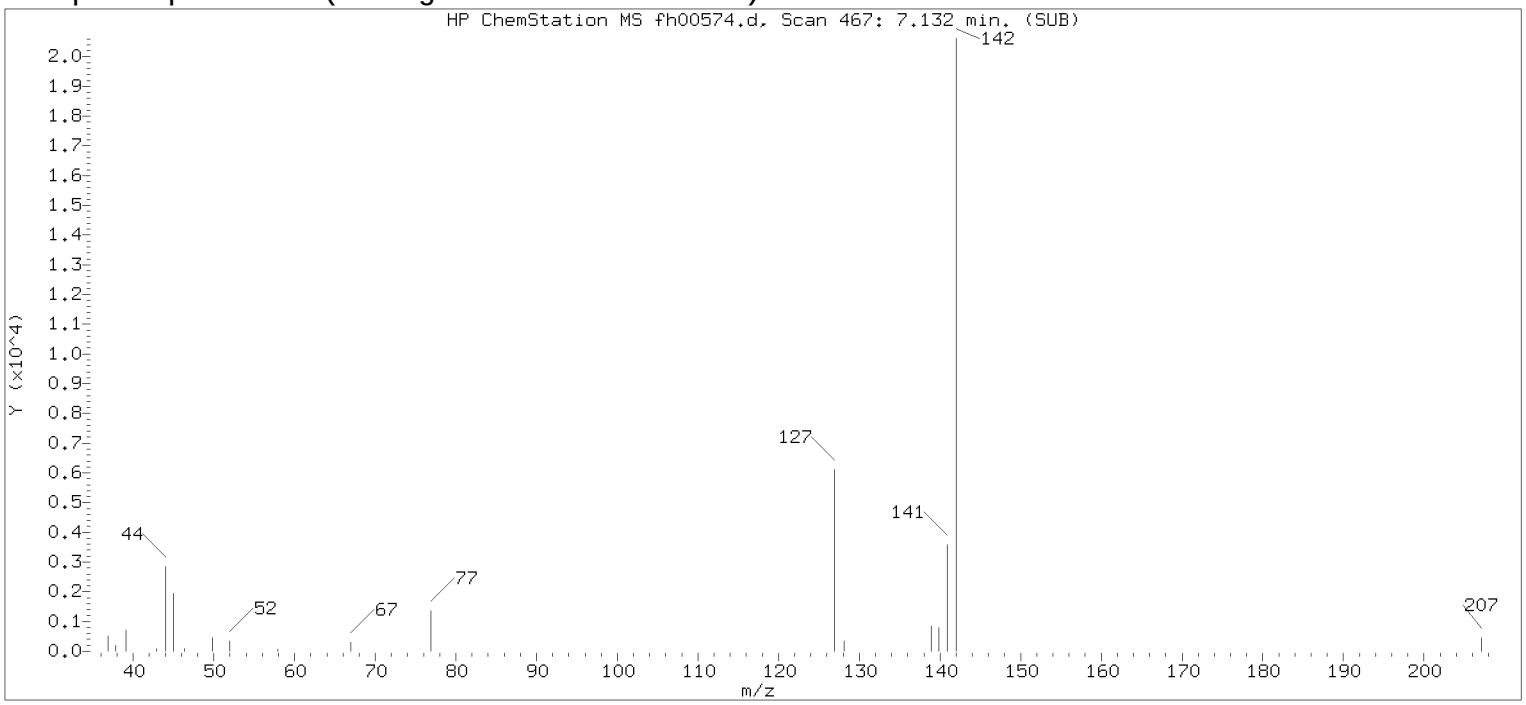
Compound Number : 19
Compound Name : Methyl Iodide
Scan Number : 469
Retention Time (minutes): 7.147
Quant Ion : 142.00
Area (flag) : 68973M
Concentration (ppb(v)) : 0.7668
Integration start scan : 456 Integration stop scan: 477
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

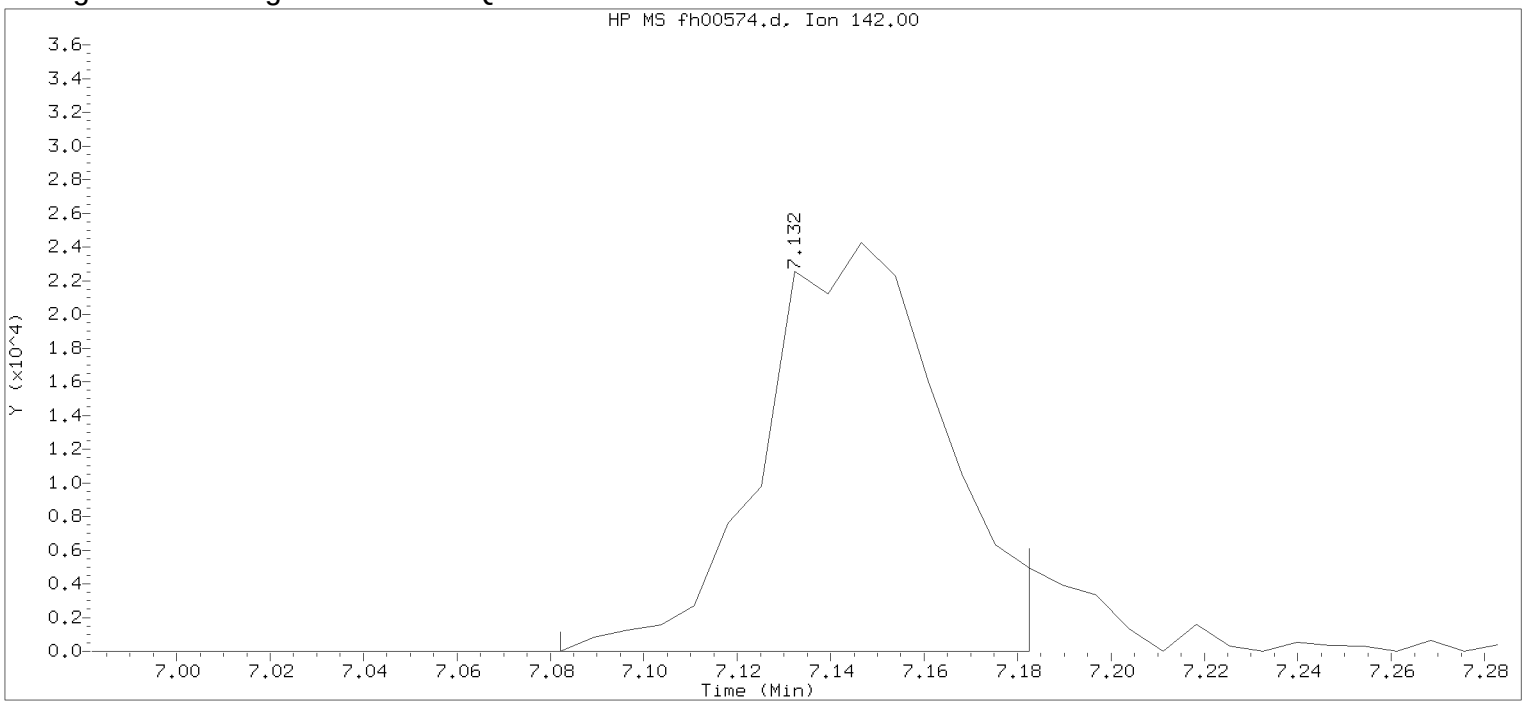
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Alexander D. Sechrist on 08/27/2018 at 13:50.
PARALLAX ID: ads07818

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



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Injection date and time: 24-AUG-2018 17:29 Analyst ID: jeb07445

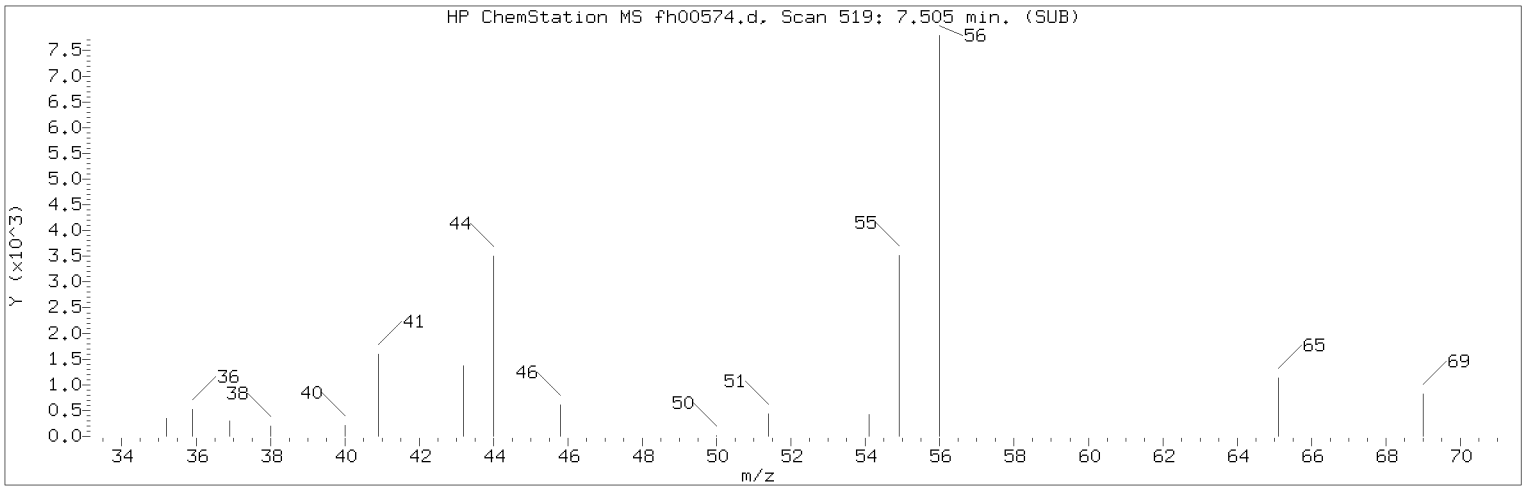
Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 24-AUG-2018 17:03
Date, time and analyst ID of latest file update: 24-Aug-2018 17:59 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

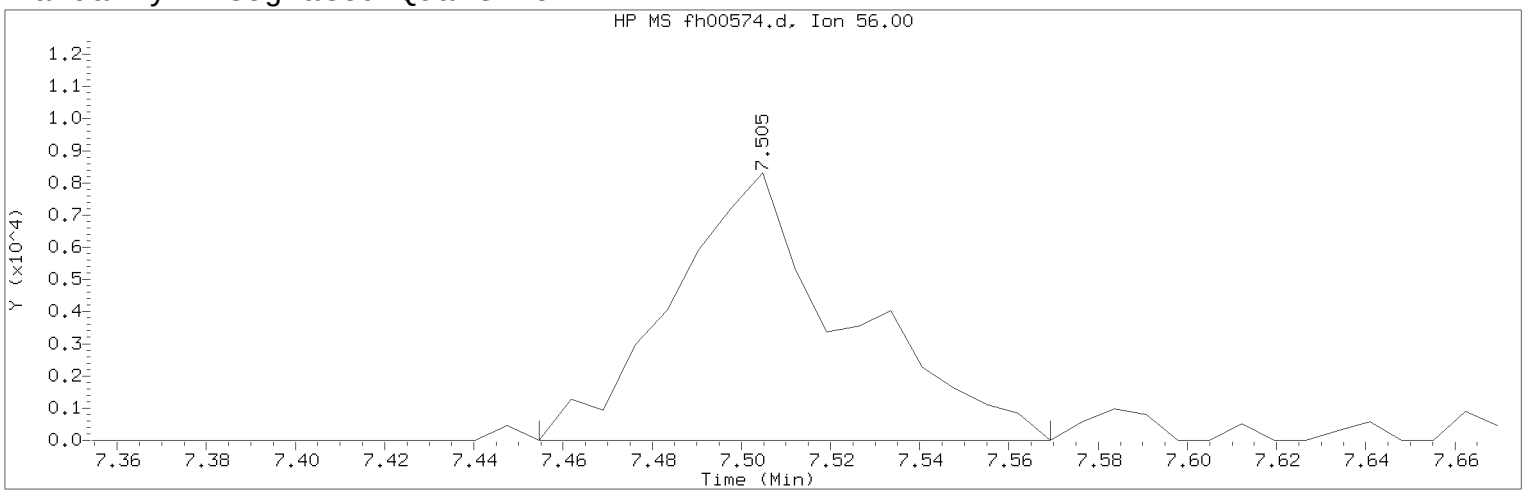
Compound Number : 19
Compound Name : Methyl Iodide
Scan Number : 467
Retention Time (minutes): 7.132
Quant Ion : 142.00
Area : 64205
Concentration (ppb(v)) : 0.6307
Integration start scan : 459 Integration stop scan: 473
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug24.b/fh00574.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 17:29 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:00 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

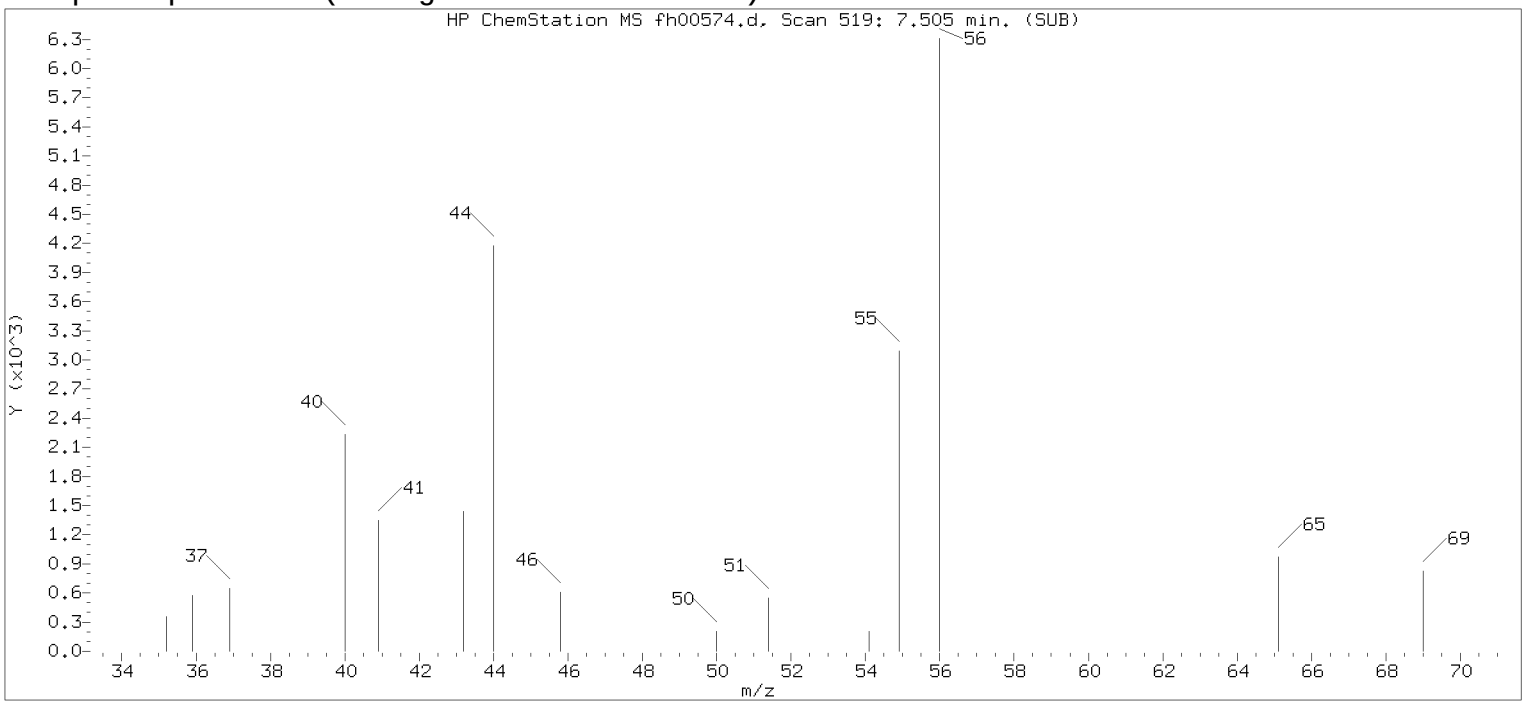
Compound Number : 20
Compound Name : Acrolein
Scan Number : 519
Retention Time (minutes): 7.505
Quant Ion : 56.00
Area (flag) : 22697M
Concentration (ppb(v)) : 0.7981
Integration start scan : 511 Integration stop scan: 527
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

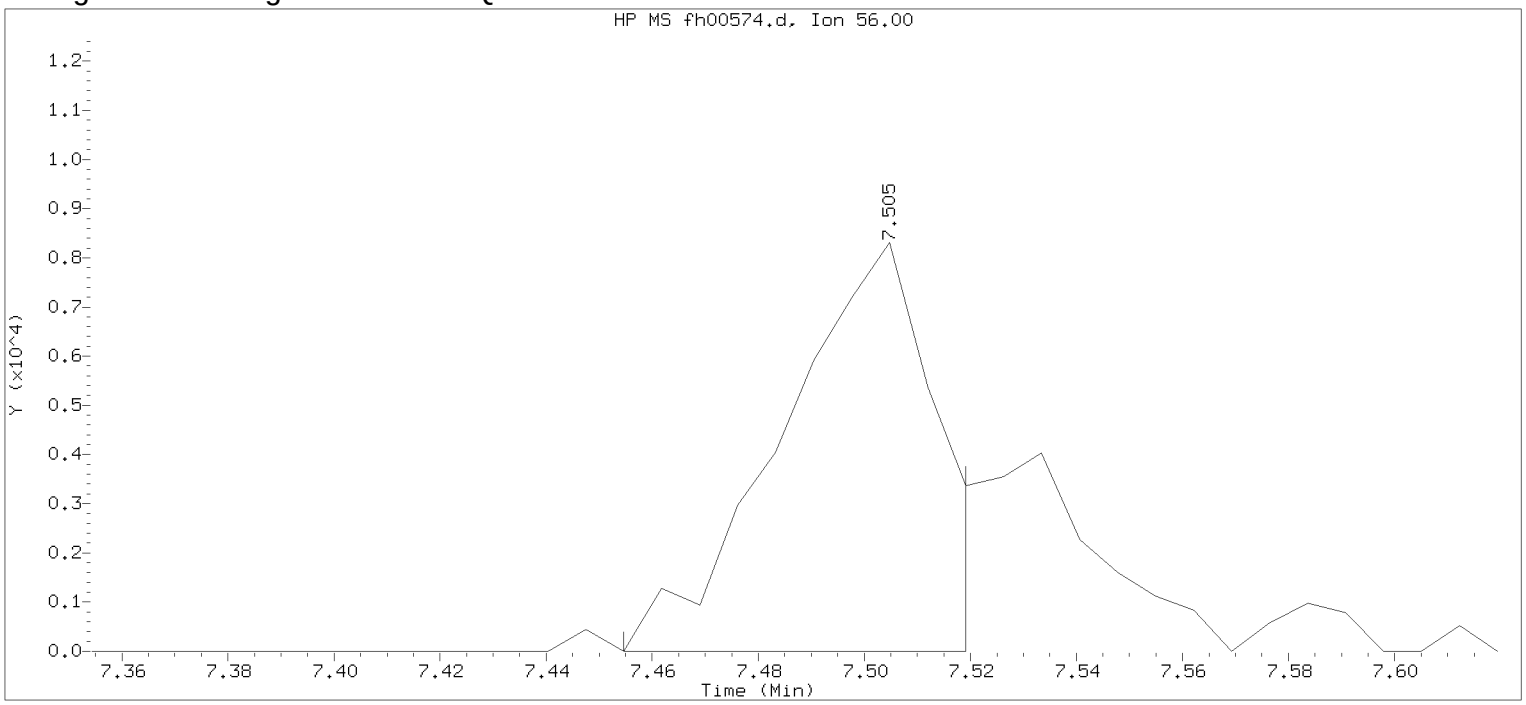
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Alexander D. Sechrist on 08/27/2018 at 13:50.
PARALLAX ID: ads07818

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug24.b/fh00574.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 17:29 Analyst ID: jeb07445

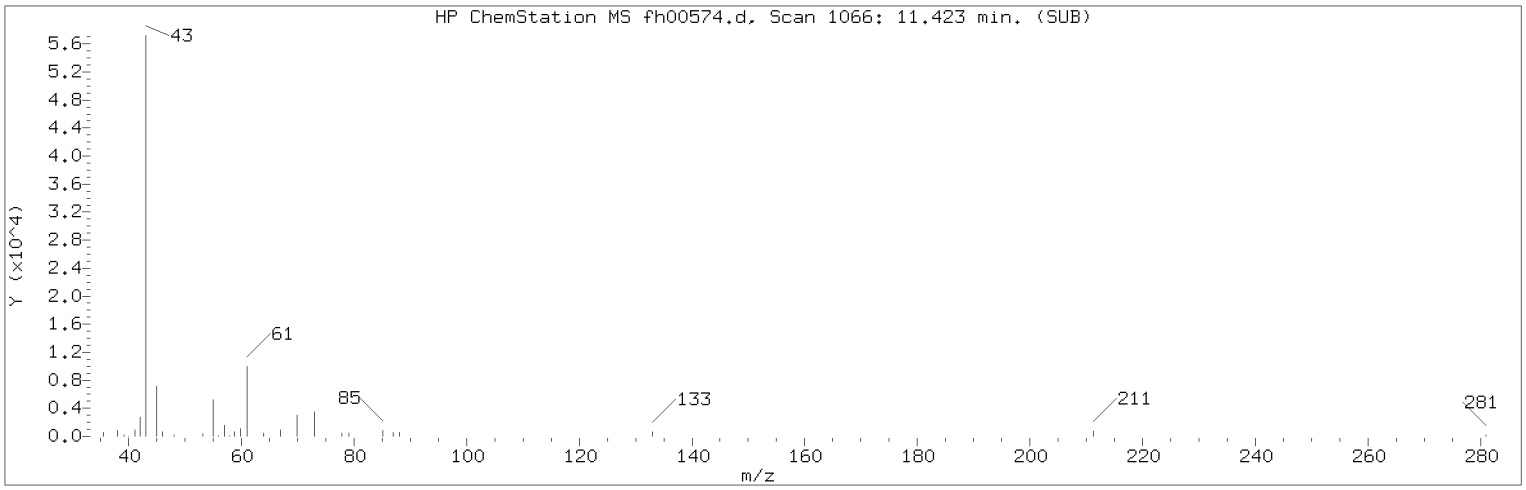
Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 24-AUG-2018 17:03
Date, time and analyst ID of latest file update: 24-Aug-2018 17:59 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

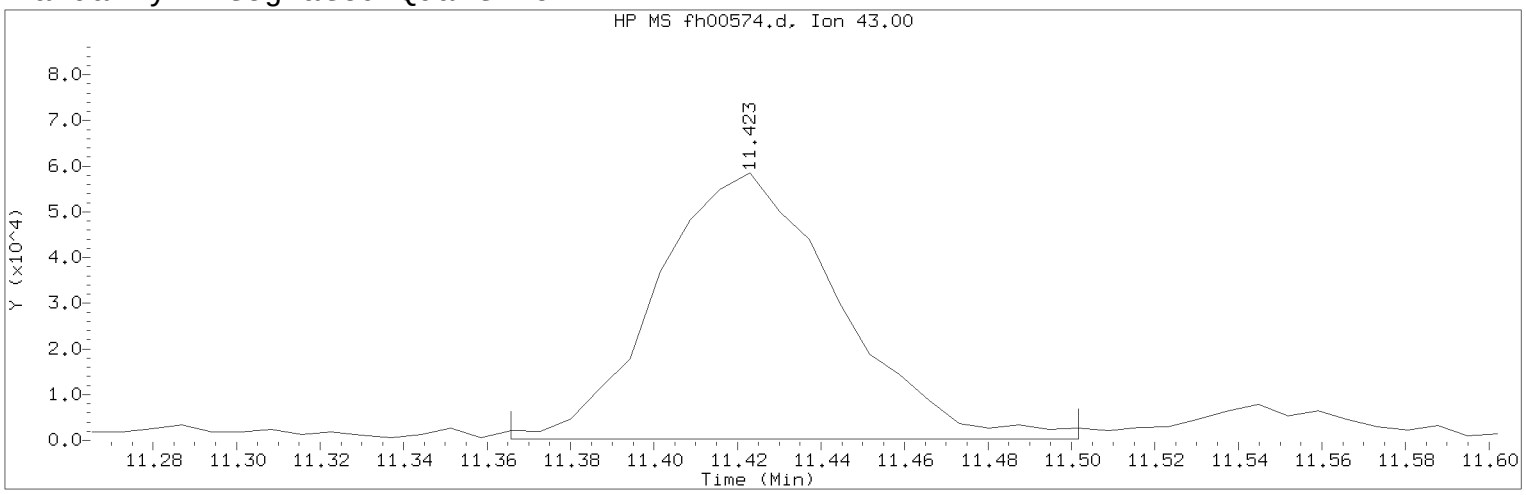
Compound Number : 20
Compound Name : Acrolein
Scan Number : 519
Retention Time (minutes): 7.505
Quant Ion : 56.00
Area : 16211
Concentration (ppb(v)) : 0.5059
Integration start scan : 511 Integration stop scan: 520
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug24.b/fh00574.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 17:29 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:00 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

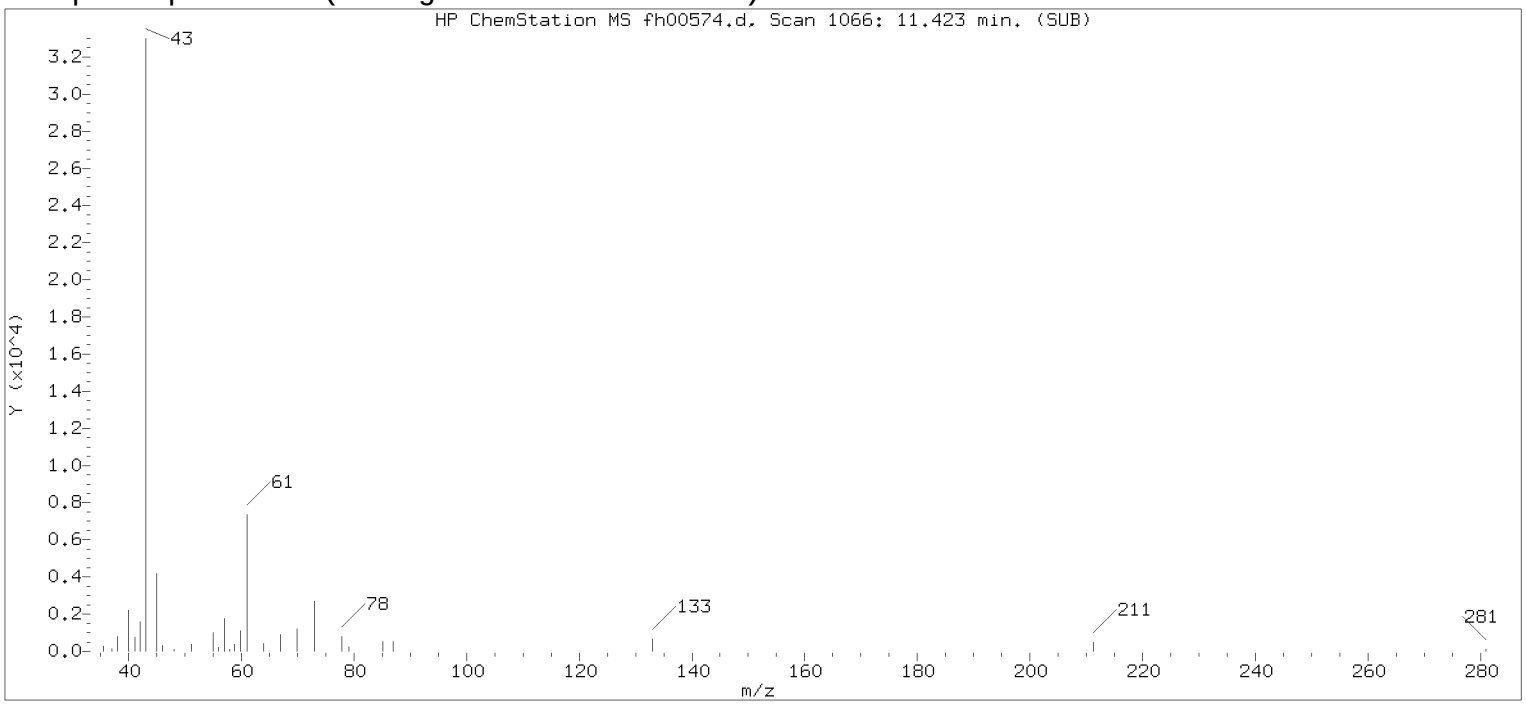
Compound Number : 40
Compound Name : Ethyl Acetate
Scan Number : 1066
Retention Time (minutes): 11.423
Quant Ion : 43.00
Area (flag) : 176396M
Concentration (ppb(v)) : 0.9507
Integration start scan : 1057 Integration stop scan: 1076
Y at integration start : 350 Y at integration end: 350

Reason for manual integration: improper integration

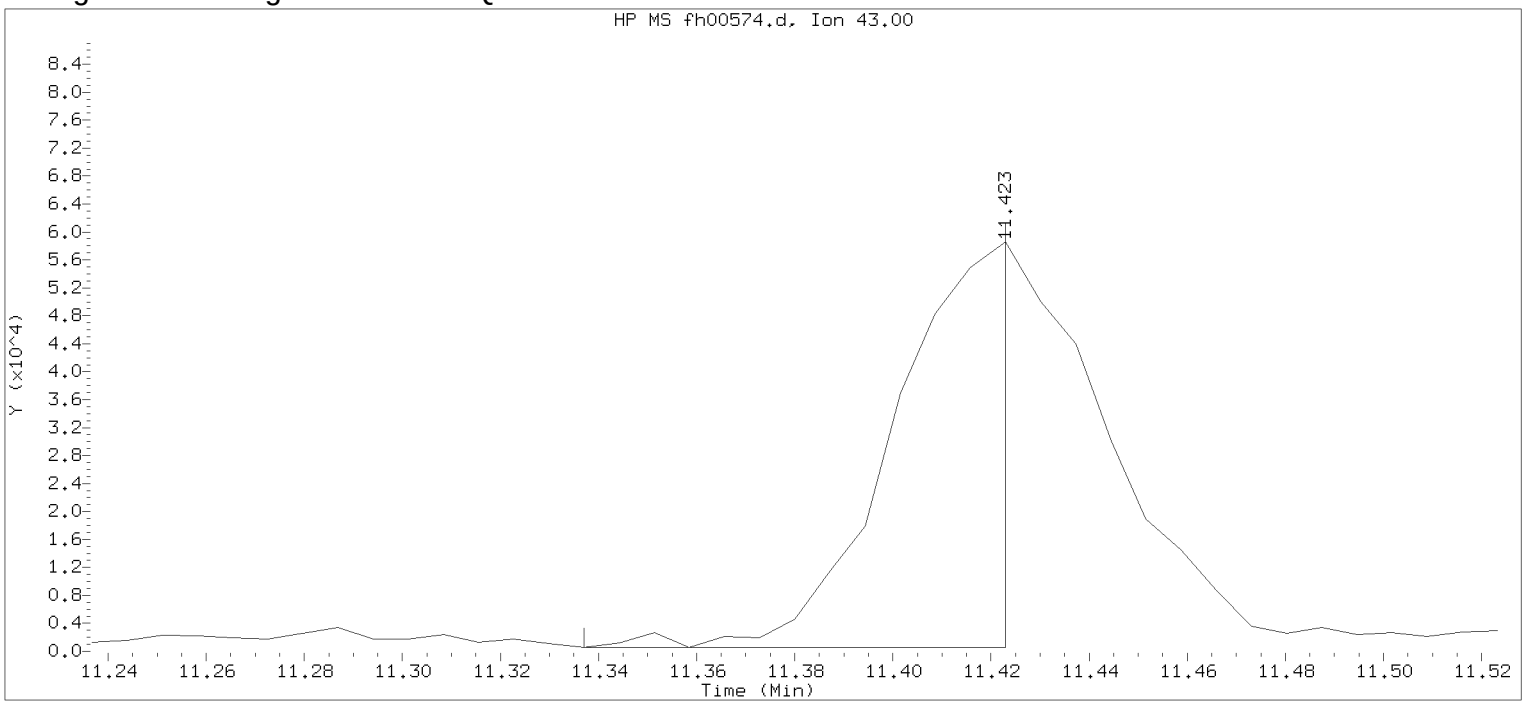
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Alexander D. Sechrist on 08/27/2018 at 13:50.
PARALLAX ID: ads07818

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



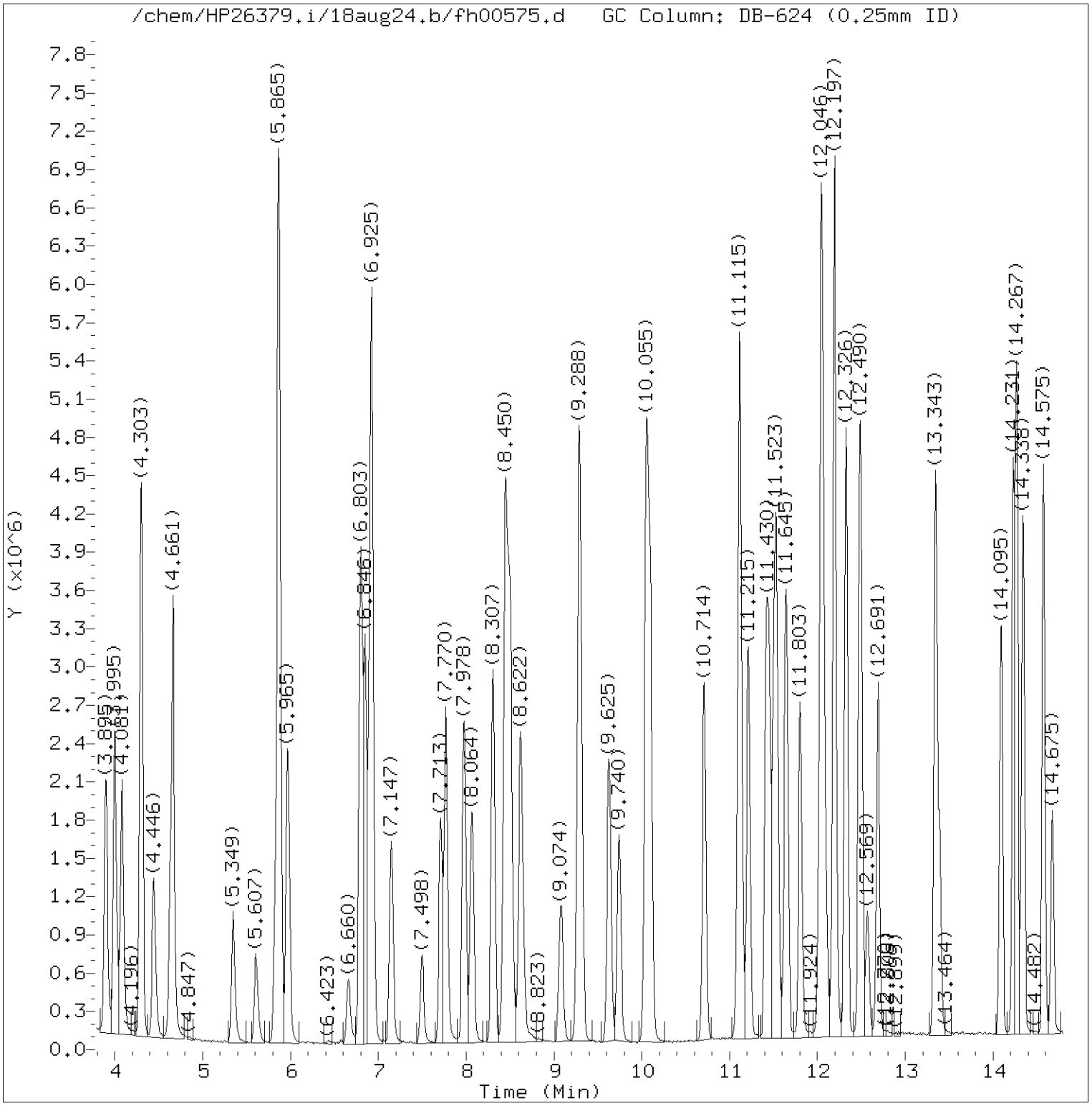
Data File: /chem/HP26379.i/18aug24.b/fh00574.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 17:29 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 24-AUG-2018 17:03
Date, time and analyst ID of latest file update: 24-Aug-2018 17:59 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 40
Compound Name : Ethyl Acetate
Scan Number : 1066
Retention Time (minutes): 11.423
Quant Ion : 43.00
Area : 88154
Concentration (ppb(v)) : 0.4549
Integration start scan : 1053 Integration stop scan: 1065
Y at integration start : 587 Y at integration end: 587

Digitally signed by Jacob E. Bailey on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

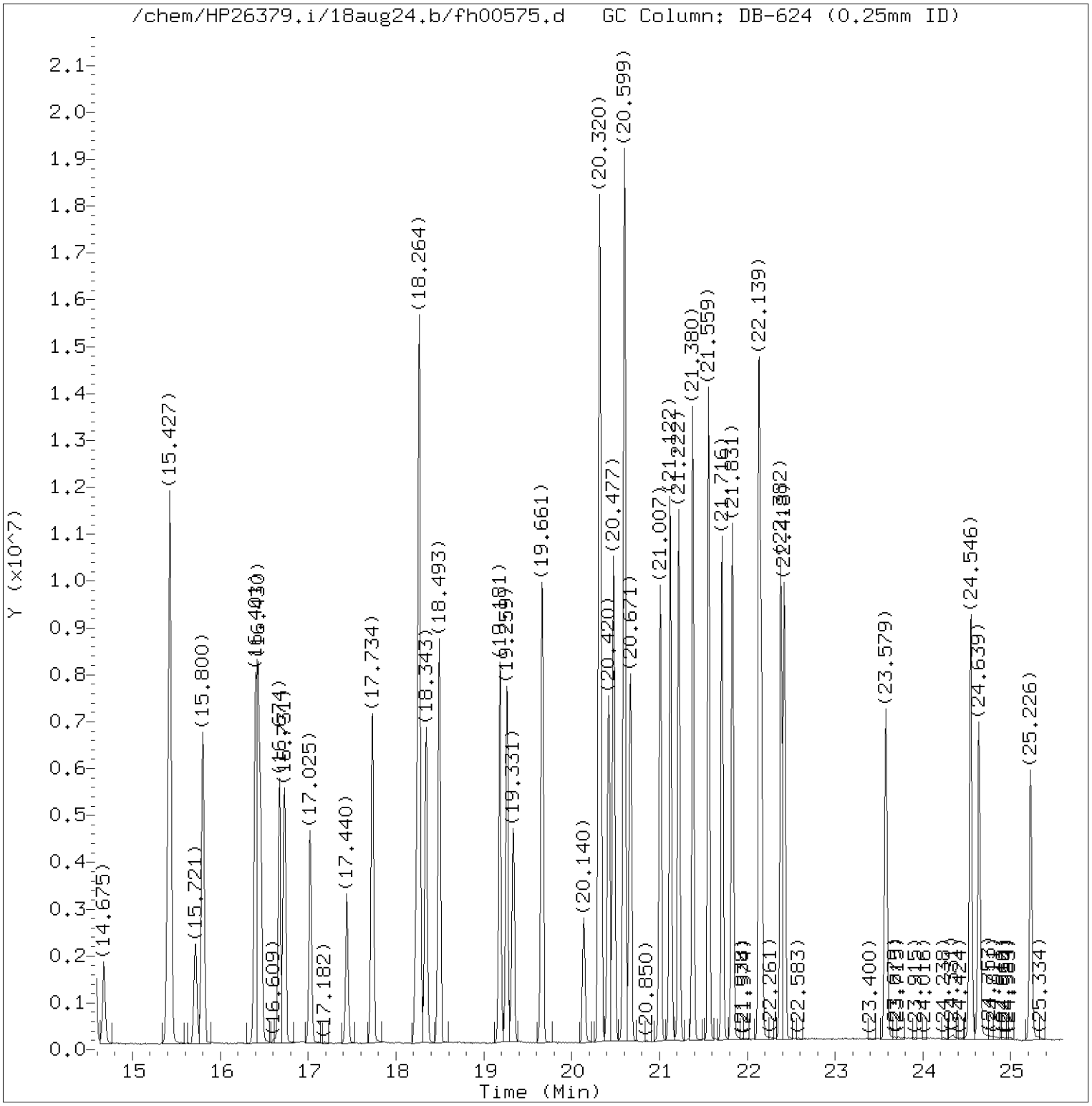
Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00575.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 17:59 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:00 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00575.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 17:59 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:00 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00575.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 17:59 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:00 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.895	41	1835730	26.087
2) Dichlorodifluoromethane	(1)	3.995	85	3603598	26.314
3) Chlorodifluoromethane	(1)	4.081	51	4238430	24.932
4) Freon 114	(1)	4.303	85	3608192	24.271
5) Chloromethane	(1)	4.446	50	2242777	24.633
6) Vinyl Chloride	(1)	4.632	62	1851295	26.304
7) 1,3-Butadiene	(1)	4.661	54	1689532	24.438
8) Bromomethane	(1)	5.349	94	1109188	26.612
9) Chloroethane	(1)	5.607	64	1051733	27.434
10) Bromoethene	(1)	5.829	106	1113088	27.403
11) Pentane	(1)	5.865	43	4038345	27.219
12) Trichlorofluoromethane	(1)	5.872	101	3273137	23.741
13) Dichlorofluoromethane	(1)	5.965	67	3611156	26.421
14) Ethanol	(1)	6.660	45	778348	26.321
15) Freon123a	(1)	6.803	67	3571031	26.009
16) 1,1-Dichloroethene	(1)	6.853	61	3326626	26.883
17) Freon 113	(1)	6.910	103	1906472	22.970
18) Carbon Disulfide	(1)	6.932	76	4060158	27.224
19) Methyl Iodide	(1)	7.147	142	2822101	28.438
20) Acrolein	(1)	7.498	56	923005	29.189
21) Isopropanol	(1)	7.713	45	3442780	27.810
22) 3-Chloropropene	(1)	7.770	41	3123216	31.791
23) Methylene Chloride	(1)	7.970	84	1322710	28.789
24) Acetone	(1)	8.064	43	3487805	26.494
25) trans-1,2-Dichloroethene	(1)	8.307	61	3167108	27.395
26) Hexane	(1)	8.450	56	2474385	25.867
27) Methyl t-Butyl Ether	(1)	8.501	73	3901836	26.879
28) tert-Butyl Alcohol	(1)	8.622	59	4610093	28.978
29) Acetonitrile	(1)	9.074	41	2055523	27.282
30) Di-Isopropyl Ether	(1)	9.288	45	7847287	27.773
31) 1,1-Dichloroethane	(1)	9.625	63	3910902	25.305
32) Acrylonitrile	(1)	9.740	53	2060486	27.699
33) Ethyl Tert-Butyl Ether	(1)	10.055	59	7102119	29.010
34) Vinyl Acetate	(1)	10.105	43	7235759M	32.578
35) cis-1,2-Dichloroethene	(1)	10.707	61	2961638	27.015
36) 1,2-Dichloroethene (total)	(1)		61	6128746	54.411
37)*Bromochloromethane	(1)	11.101	130	419358	10.000
38) Cyclohexane	(1)	11.122	56	3909506	28.008

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

Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00575.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 17:59 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:00 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	3071840	25.329
40) Ethyl Acetate	(1)	11.416	43	5358023	26.658
41) Methyl Acrylate	(1)	11.452	55	4434636	28.699
42) Carbon Tetrachloride	(1)	11.509	117	2599937	25.243
43) Tetrahydrofuran	(1)	11.538	42	2604797	27.607
44) 1,1,1-Trichloroethane	(1)	11.638	97	2995826	24.988
45) 2-Butanone	(1)	11.803	43	4860990	25.952
46) Isooctane	(2)	12.046	57	11845119	28.775
47) Heptane	(2)	12.197	71	1681074	28.663
48) Benzene	(2)	12.326	78	4708221	25.243
49) Tert-Amyl Methyl Ether	(2)	12.490	73	3963751	27.757
50) 1,2-Dichloroethane	(2)	12.691	62	3079120	25.381
51) Trichloroethene	(2)	13.343	130	1619217	25.382
52)*1,4-Difluorobenzene	(2)	13.393	114	1438484	10.000
53) Dibromomethane	(2)	14.088	174	1542961	24.814
54) Ethyl Acrylate	(2)	14.231	55	5523968	27.974
55) 1,2-Dichloropropane	(2)	14.267	63	2663214	24.539
56) Bromodichloromethane	(2)	14.338	83	3160657	24.953
57) Methyl Methacrylate	(2)	14.575	69	1611287	27.899
58) 1,4-Dioxane	(2)	14.675	88	1041936	27.444
59) cis-1,3-Dichloropropene	(2)	15.406	75	2748976	26.374
60) Octane	(3)	15.427	43	6302640	28.613
61) Toluene	(3)	15.800	91	5122090	25.143
62) 4-Methyl-2-Pentanone	(2)	16.401	43	6203857	25.449
63) Tetrachloroethene	(3)	16.430	166	2365094	24.206
64) trans-1,3-Dichloropropene	(3)	16.459	75	2429935	27.023
65) 1,3-Dichloropropene (total)	(3)		75	5178911	53.794
66) Ethyl Methacrylate	(3)	16.674	69	2726852	27.799
67) 1,1,2-Trichloroethane	(3)	16.731	97	1913785	23.303
68) Dibromochloromethane	(3)	17.025	127	2055144	25.369
69) 1,2-Dibromoethane	(3)	17.440	107	2696162	24.027
70) 2-Hexanone	(3)	17.734	43	5873636	27.347
71)*Chlorobenzene-d5	(3)	18.228	117	1379092	10.000
72) Chlorobenzene	(3)	18.257	112	4100865	23.592
73) Ethylbenzene	(3)	18.271	91	7008729	25.209
74) 1,1,1,2-Tetrachloroethane	(3)	18.343	131	1944708	23.661
75) m/p-Xylene	(3)	18.493	91	5207427	26.346
76) o-Xylene	(3)	19.181	91	5129443	26.808

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00575.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 17:59 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:00 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	10336870	53.146
78) Styrene	(3)	19.267	104	3869955	28.164
79) Bromoform	(3)	19.331	173	2588886	25.908
80) Cumene	(3)	19.661	105	7044434	26.247
81) n-Propylbenzene	(3)	20.312	120	2025667	26.364
82) Bromobenzene	(3)	20.327	156	2311859	23.775
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	4477768	22.355
84) 4-Ethyltoluene	(3)	20.477	105	7283379	26.146
85) 2-Chlorotoluene	(3)	20.599	126	1784721	24.913
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	6311035	26.374
87) 1,2,3-Trichloropropane	(3)	20.671	110	1214870	22.739
88) Alpha Methyl Styrene	(3)	21.007	118	3003647	27.900
89) tert-Butylbenzene	(3)	21.122	119	5565177	26.048
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	6247398	27.030
91) sec-Butylbenzene	(3)	21.380	105	9286271	26.022
92) p-Isopropyltoluene	(3)	21.559	119	7251247	26.762
93) 1,3-Dichlorobenzene	(3)	21.716	146	4080051	23.881
94) 1,4-Dichlorobenzene	(3)	21.831	146	4112473	24.417
95) n-Butylbenzene	(3)	22.132	92	4874732	27.957
96) Benzyl Chloride	(3)	22.160	126	1059110	28.361
97) Hexachloroethane	(3)	22.382	117	2005358	27.844
98) 1,2-Dichlorobenzene	(3)	22.418	146	3796071	23.652
99) 1,2-Dibromo-3-chloropropane	(3)	23.579	157	1858950	24.045
100) Hexachlorobutadiene	(3)	24.546	225	2206303	21.871
101) 1,2,4-Trichlorobenzene	(3)	24.639	180	2540464	23.566
102) Naphthalene	(3)	25.226	128	5494387	25.864

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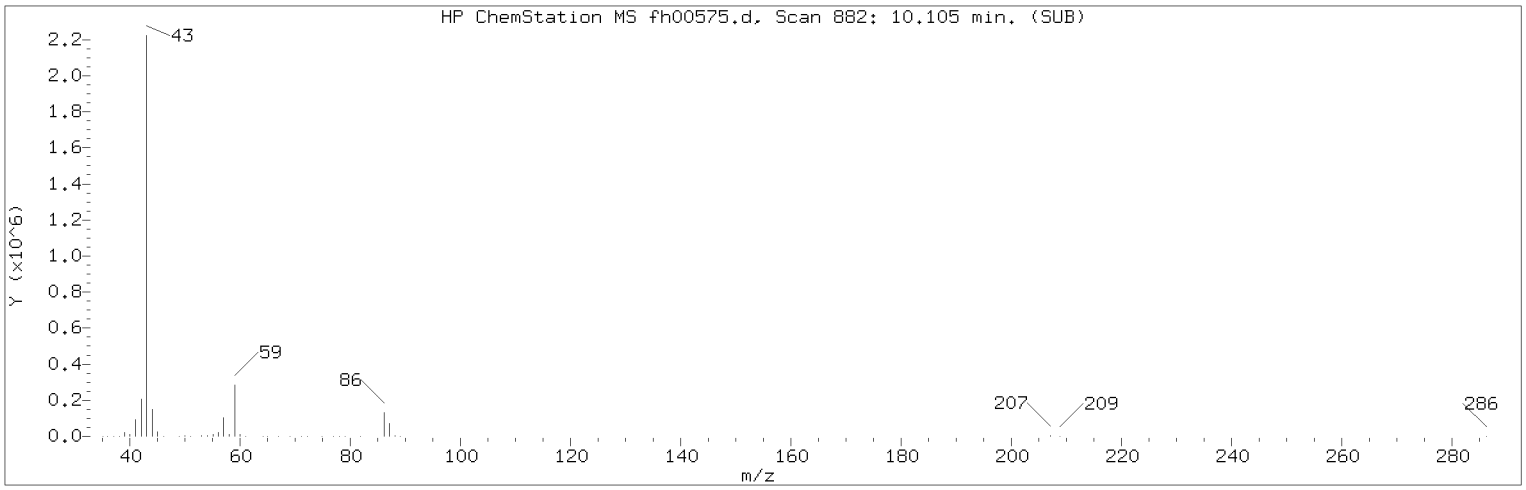
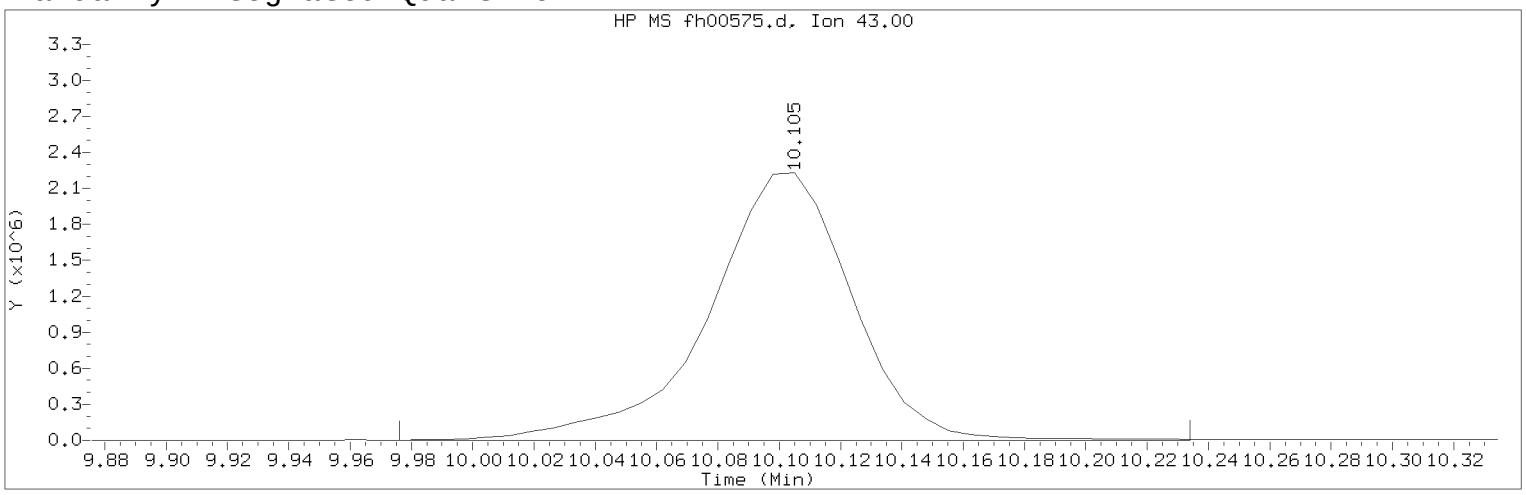
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug24.b/fh00575.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 17:59 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:00 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

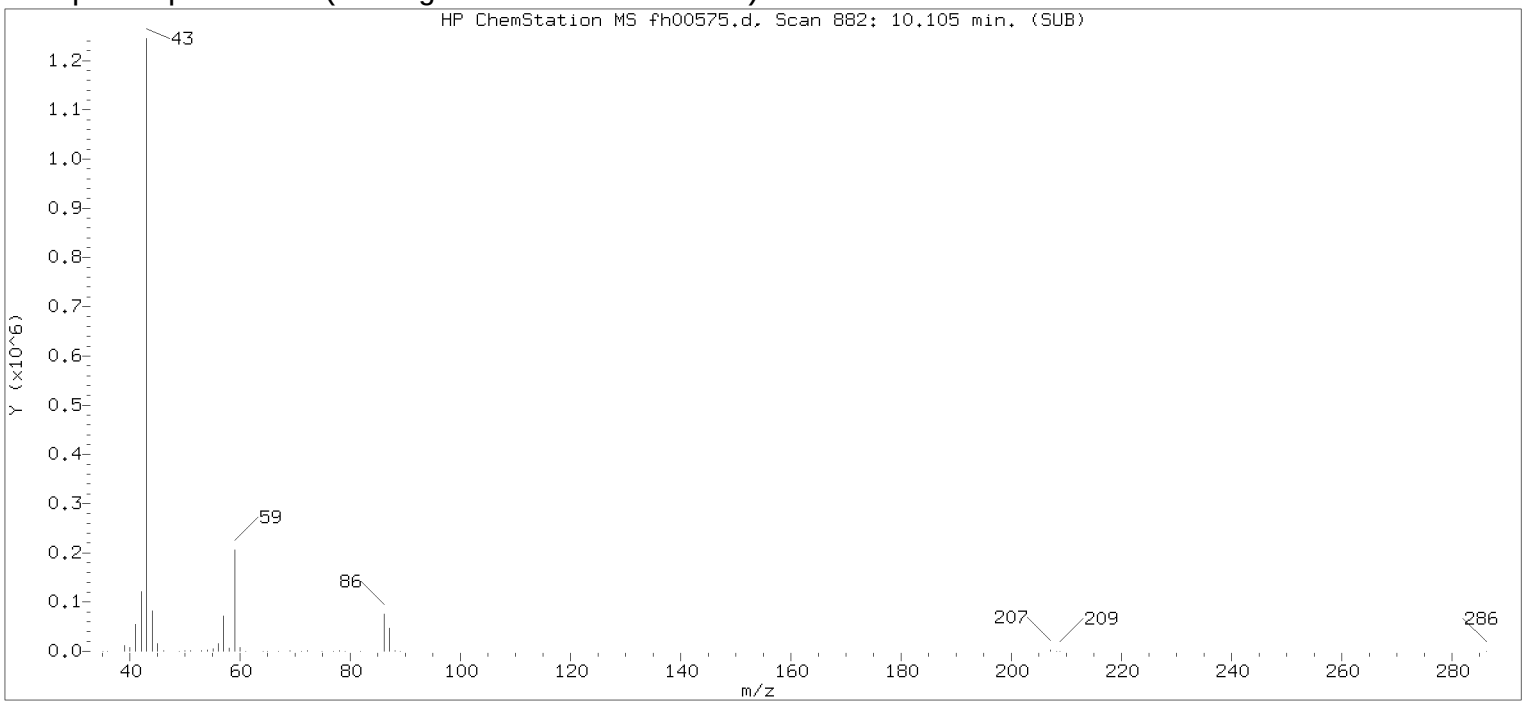
Compound Number : 34
Compound Name : Vinyl Acetate
Scan Number : 882
Retention Time (minutes): 10.105
Quant Ion : 43.00
Area (flag) : 7235759M
Concentration (ppb(v)) : 32.5777
Integration start scan : 863 Integration stop scan: 899
Y at integration start : 1020 Y at integration end: 1020

Reason for manual integration: improper integration

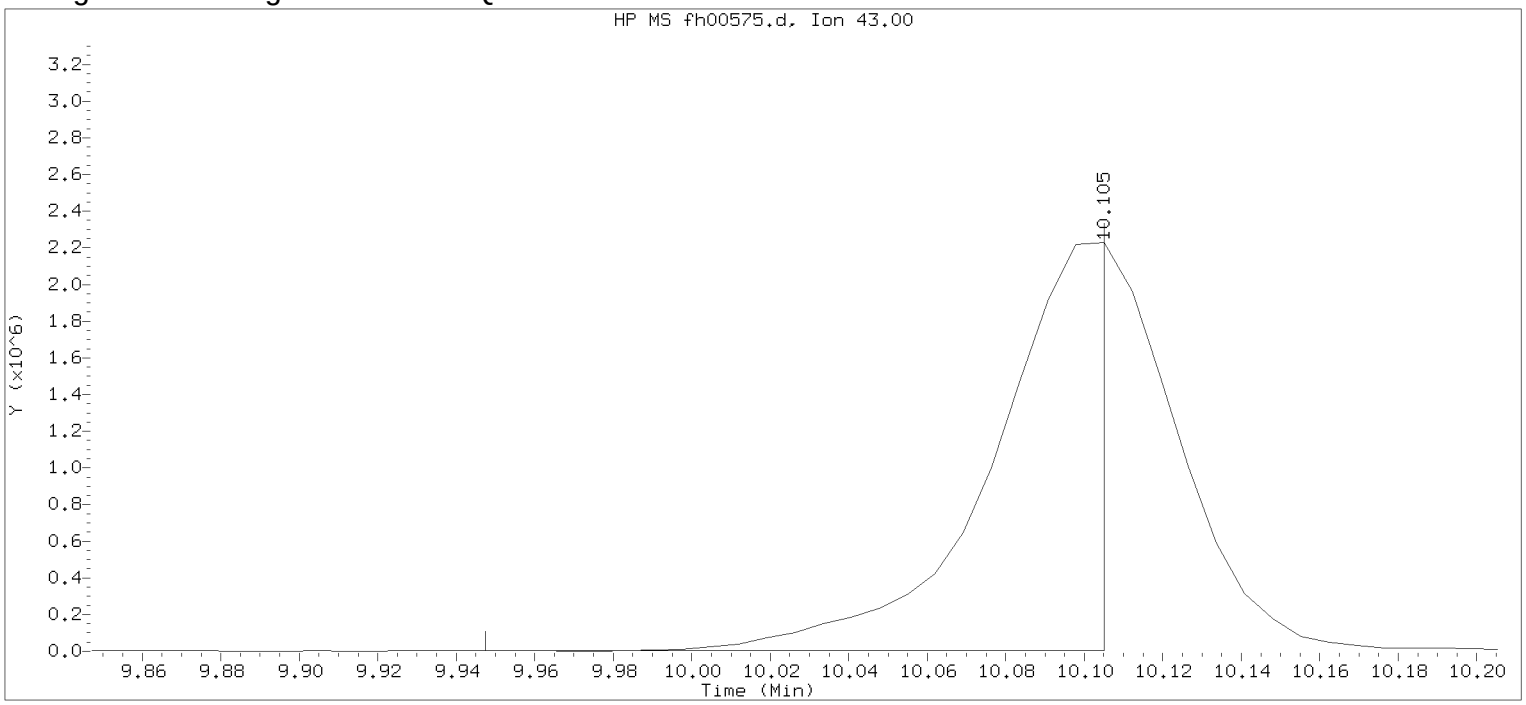
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Alexander D. Sechrist on 08/27/2018 at 13:50.
PARALLAX ID: ads07818

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



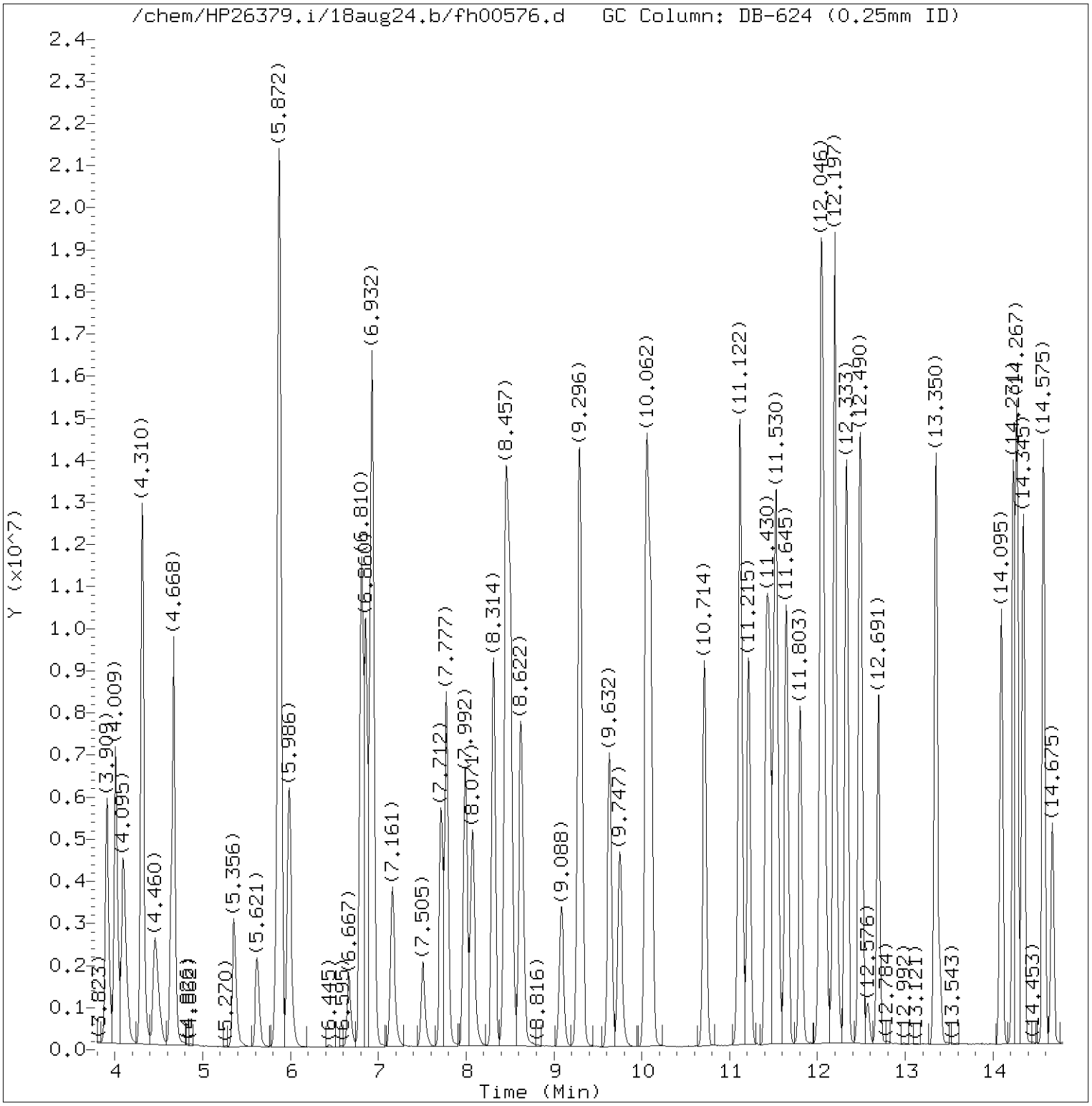
Data File: /chem/HP26379.i/18aug24.b/fh00575.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 17:59 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 24-AUG-2018 18:18
Date, time and analyst ID of latest file update: 24-Aug-2018 18:29 Unknown

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compound Number : 34
Compound Name : Vinyl Acetate
Scan Number : 882
Retention Time (minutes): 10.105
Quant Ion : 43.00
Area : 4251000
Concentration (ppb(v)) : 19.9549
Integration start scan : 859 Integration stop scan: 881
Y at integration start : 1807 Y at integration end: 1807

Digitally signed by Jacob E. Bailey on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

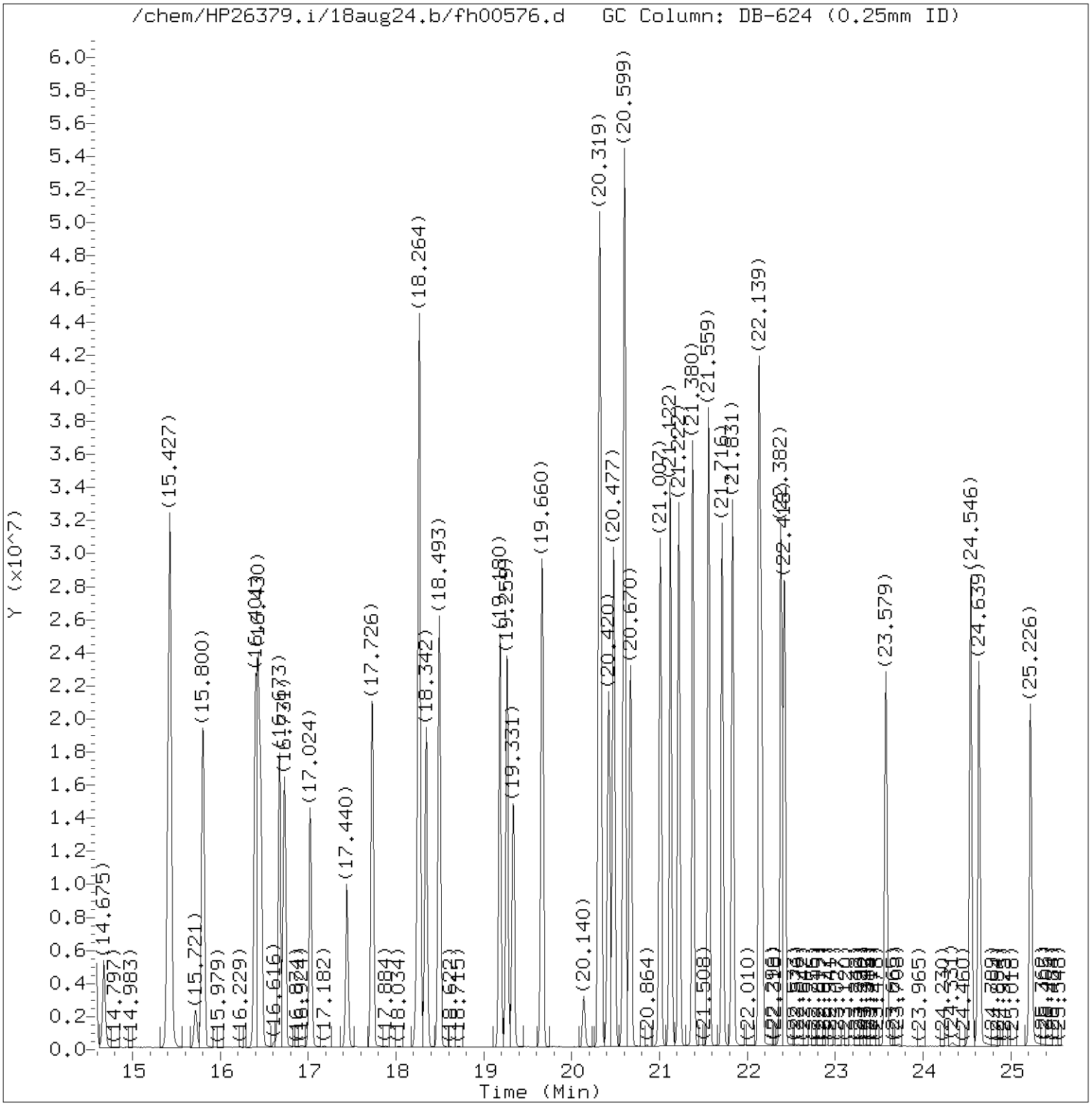
Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00576.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 18:30 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:03
Date, time and analyst ID of latest file update: 26-Aug-2018 17:03 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00576.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 18:30 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:03
Date, time and analyst ID of latest file update: 26-Aug-2018 17:03 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00576.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 18:30 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:03
Date, time and analyst ID of latest file update: 26-Aug-2018 17:03 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.909	41	5758721	77.605
2) Dichlorodifluoromethane	(1)	4.009	85	11233820	77.756
3) Chlorodifluoromethane	(1)	4.095	51	12293492	70.084
4) Freon 114	(1)	4.310	85	11174576	72.371
5) Chloromethane	(1)	4.460	50	6468869	69.059
6) Vinyl Chloride	(1)	4.640	62	5441887	74.079
7) 1,3-Butadiene	(1)	4.675	54	5084650	71.076
8) Bromomethane	(1)	5.356	94	3611342	81.283
9) Chloroethane	(1)	5.621	64	3287213	80.602
10) Bromoethene	(1)	5.843	106	3654296	83.777
11) Pentane	(1)	5.872	43	12286403	78.358
12) Trichlorofluoromethane	(1)	5.879	101	9795119	69.058
13) Dichlorofluoromethane	(1)	5.986	67	10886369	75.909
14) Ethanol	(1)	6.660	45	2610862	82.525
15) Freon123a	(1)	6.810	67	10550059	75.005
16) 1,1-Dichloroethene	(1)	6.860	61	10608867	80.591
17) Freon 113	(1)	6.925	103	5383593	63.962
18) Carbon Disulfide	(1)	6.939	76	12438658	78.813
19) Methyl Iodide	(1)	7.161	142	7752785	74.712
20) Acrolein	(1)	7.505	56	3027362	88.027
21) Isopropanol	(1)	7.712	45	11728024	87.297
22) 3-Chloropropene	(1)	7.777	41	10008690	94.491
23) Methylene Chloride	(1)	7.992	84	4116778	85.185
24) Acetone	(1)	8.071	43	10607138	76.628
25) trans-1,2-Dichloroethene	(1)	8.314	61	9984671	81.074
26) Hexane	(1)	8.457	56	7364323	73.815
27) Methyl t-Butyl Ether	(1)	8.500	73	11962040	78.044
28) tert-Butyl Alcohol	(1)	8.622	59	14852168	88.080
29) Acetonitrile	(1)	9.088	41	6243847	78.406
30) Di-Isopropyl Ether	(1)	9.296	45	23945904	79.844
31) 1,1-Dichloroethane	(1)	9.632	63	12087620	74.780
32) Acrylonitrile	(1)	9.747	53	6557107	82.417
33) Ethyl Tert-Butyl Ether	(1)	10.055	59	21917576	83.450
34) Vinyl Acetate	(1)	10.105	43	22430570	94.001
35) cis-1,2-Dichloroethene	(1)	10.714	61	9631928	82.200
36) 1,2-Dichloroethene (total)	(1)		61	19616599	163.274
37)*Bromochloromethane	(1)	11.108	130	432604	10.000
38) Cyclohexane	(1)	11.122	56	12096589	81.297

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00576.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 18:30 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:03
Date, time and analyst ID of latest file update: 26-Aug-2018 17:03 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	9292051	73.524
40) Ethyl Acetate	(1)	11.416	43	16529949	77.919
41) Methyl Acrylate	(1)	11.459	55	14050867	84.497
42) Carbon Tetrachloride	(1)	11.509	117	8139518	75.421
43) Tetrahydrofuran	(1)	11.545	42	8325557	82.485
44) 1,1,1-Trichloroethane	(1)	11.645	97	8956692	72.005
45) 2-Butanone	(1)	11.803	43	14892563M	75.797
46) Isooctane	(2)	12.046	57	35168666M	74.873
47) Heptane	(2)	12.197	71	5302886	78.423
48) Benzene	(2)	12.333	78	14373023	68.735
49) Tert-Amyl Methyl Ether	(2)	12.490	73	13008794	80.962
50) 1,2-Dichloroethane	(2)	12.698	62	9470564	69.484
51) Trichloroethene	(2)	13.350	130	5176071	71.751
52)*1,4-Difluorobenzene	(2)	13.393	114	1618536	10.000
53) Dibromomethane	(2)	14.095	174	4835500	69.259
54) Ethyl Acrylate	(2)	14.231	55	17892966	78.562
55) 1,2-Dichloropropane	(2)	14.267	63	7921423	65.671
56) Bromodichloromethane	(2)	14.345	83	9778765	68.841
57) Methyl Methacrylate	(2)	14.575	69	5504098	81.837
58) 1,4-Dioxane	(2)	14.675	88	3303776	76.012
59) cis-1,3-Dichloropropene	(2)	15.406	75	9037474	75.788
60) Octane	(3)	15.434	43	17959989	74.162
61) Toluene	(3)	15.807	91	15492203	70.002
62) 4-Methyl-2-Pentanone	(2)	16.401	43	18074346	66.546
63) Tetrachloroethene	(3)	16.430	166	6916307	65.921
64) trans-1,3-Dichloropropene	(3)	16.459	75	7772110	77.791
65) 1,3-Dichloropropene (total)	(3)		75	16809584	156.857
66) Ethyl Methacrylate	(3)	16.673	69	9108481	82.438
67) 1,1,2-Trichloroethane	(3)	16.731	97	5746253	65.277
68) Dibromochloromethane	(3)	17.024	127	6570325	73.840
69) 1,2-Dibromoethane	(3)	17.440	107	8448838	69.422
70) 2-Hexanone	(3)	17.726	43	17453367	73.957
71)*Chlorobenzene-d5	(3)	18.228	117	1498163	10.000
72) Chlorobenzene	(3)	18.256	112	12144306	65.195
73) Ethylbenzene	(3)	18.271	91	19434007	64.345
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	5880813	66.520
75) m/p-Xylene	(3)	18.493	91	16024099	73.814
76) o-Xylene	(3)	19.180	91	16115825	76.166

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

Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00576.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 18:30 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:03
Date, time and analyst ID of latest file update: 26-Aug-2018 17:03 jeb07445

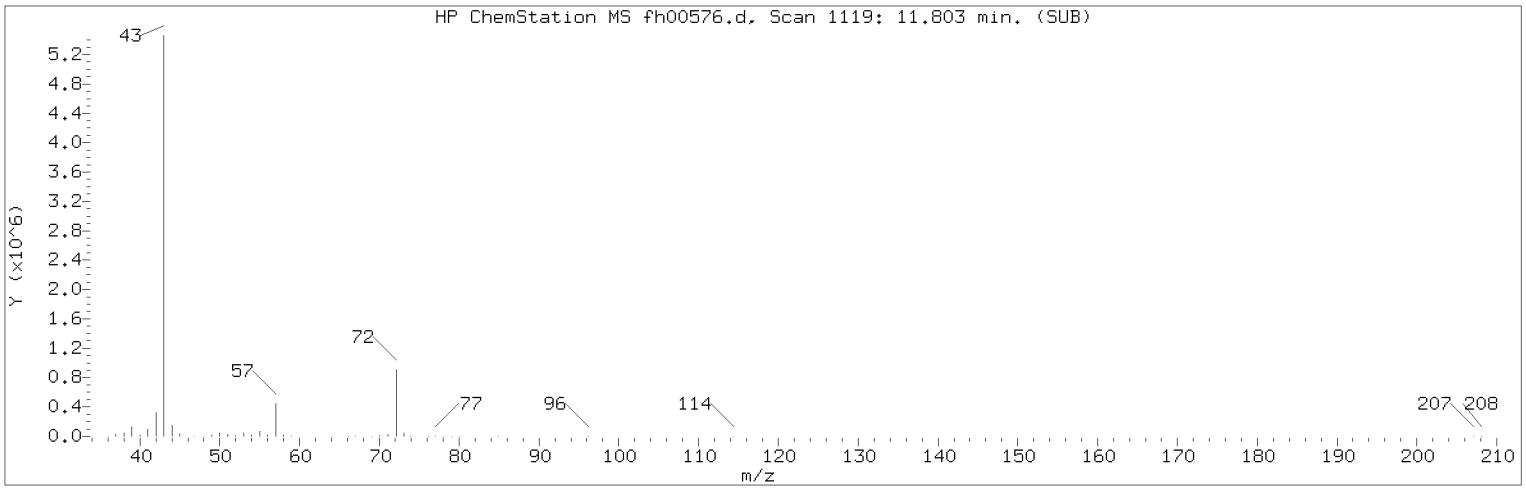
Sample Name: VSTD070 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	32139924	149.950
78) Styrene	(3)	19.266	104	12104912	79.007
79) Bromoform	(3)	19.331	173	8393180	75.994
80) Cumene	(3)	19.668	105	20051955	68.775
81) n-Propylbenzene	(3)	20.312	120	6310781	74.611
82) Bromobenzene	(3)	20.327	156	6880626	65.899
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	13067510	61.509
84) 4-Ethyltoluene	(3)	20.484	105	20079998	66.354
85) 2-Chlorotoluene	(3)	20.599	126	5455530	70.085
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	18151125	69.826
87) 1,2,3-Trichloropropane	(3)	20.670	110	3773601	65.798
88) Alpha Methyl Styrene	(3)	21.007	118	9890185	84.564
89) tert-Butylbenzene	(3)	21.122	119	17114683	73.740
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	17753011	70.704
91) sec-Butylbenzene	(3)	21.394	105	20780693	53.603
92) p-Isopropyltoluene	(3)	21.566	119	18209783	61.866
93) 1,3-Dichlorobenzene	(3)	21.716	146	11990913	64.606
94) 1,4-Dichlorobenzene	(3)	21.831	146	12295278	67.198
95) n-Butylbenzene	(3)	22.132	92	15301203	80.779
96) Benzyl Chloride	(3)	22.160	126	3552674	87.572
97) Hexachloroethane	(3)	22.382	117	7152156	86.980
98) 1,2-Dichlorobenzene	(3)	22.425	146	11396054M	66.091
99) 1,2-Dibromo-3-chloropropane	(3)	23.579	157	6067546	71.860
100) Hexachlorobutadiene	(3)	24.546	225	7036217	65.103
101) 1,2,4-Trichlorobenzene	(3)	24.639	180	8494539	72.099
102) Naphthalene	(3)	25.226	128	19305185	83.653

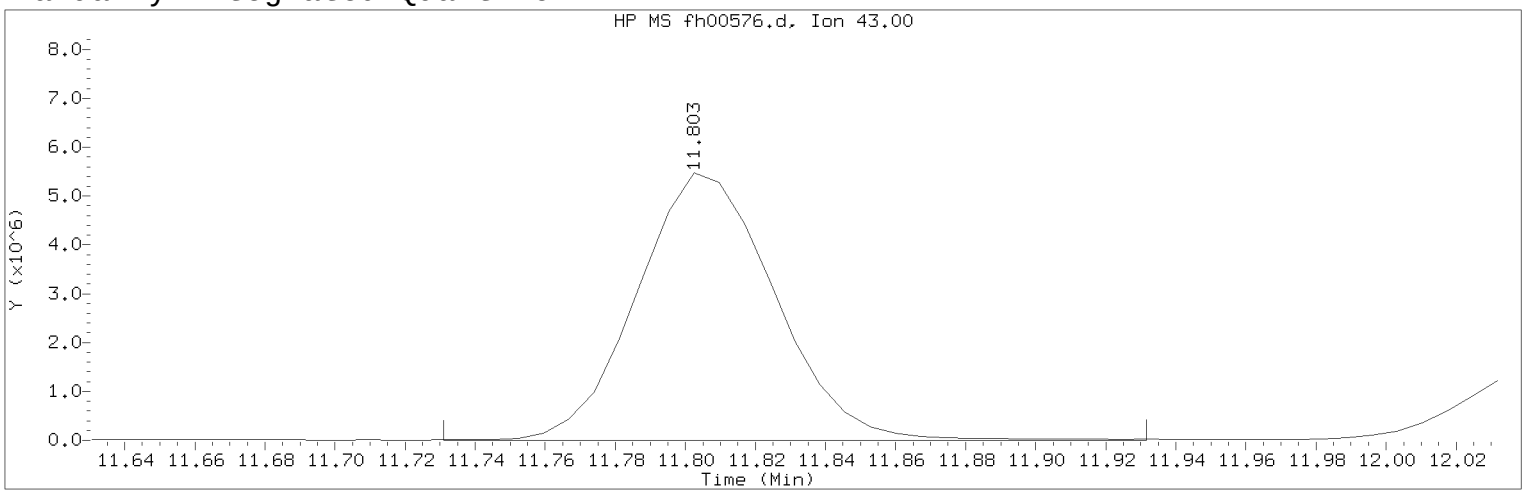
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug24.b/fh00576.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 18:30 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:03
Date, time and analyst ID of latest file update: 26-Aug-2018 17:03 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

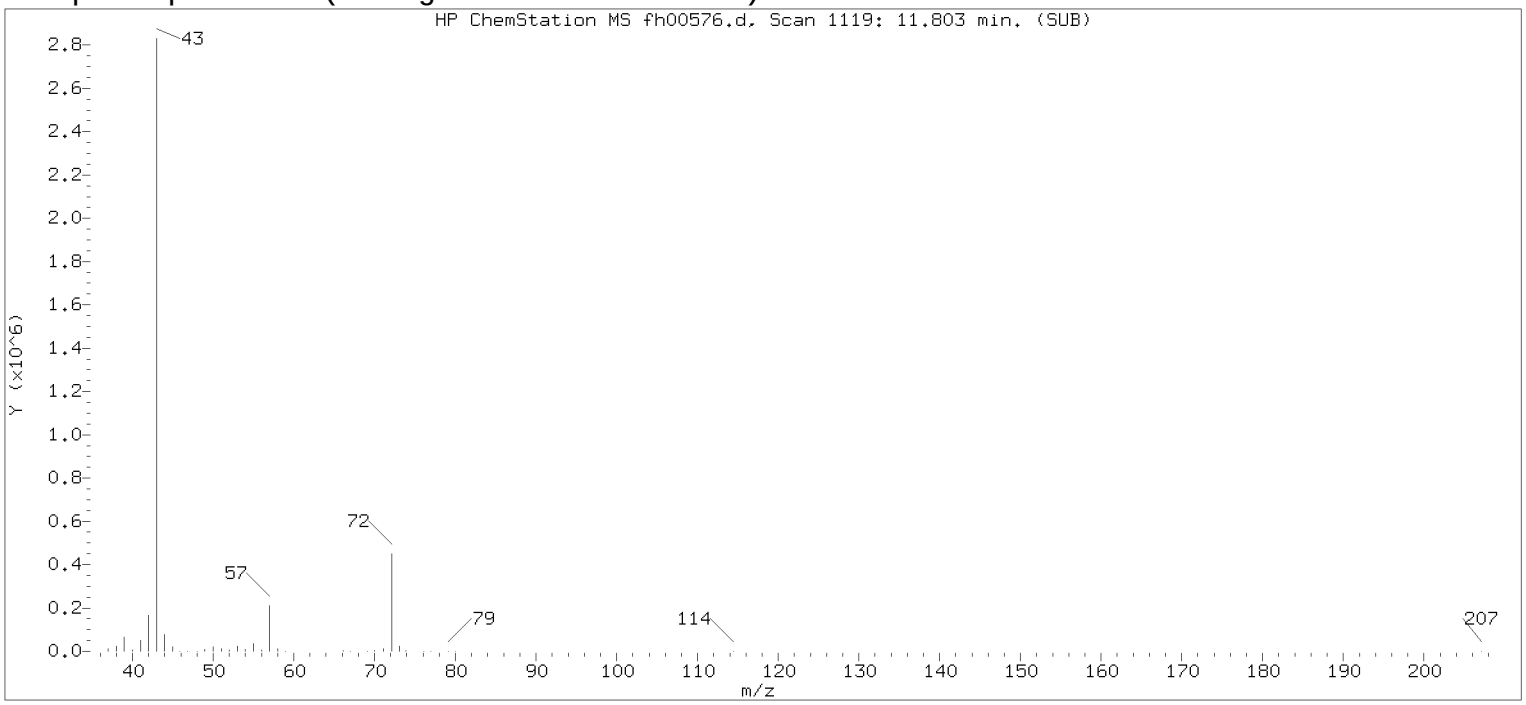
Compound Number : 45
Compound Name : 2-Butanone
Scan Number : 1119
Retention Time (minutes): 11.803
Quant Ion : 43.00
Area (flag) : 14892563M
Concentration (ppb(v)) : 75.7968
Integration start scan : 1108 Integration stop scan: 1136
Y at integration start : 4551 Y at integration end: 4551

Reason for manual integration: improper integration

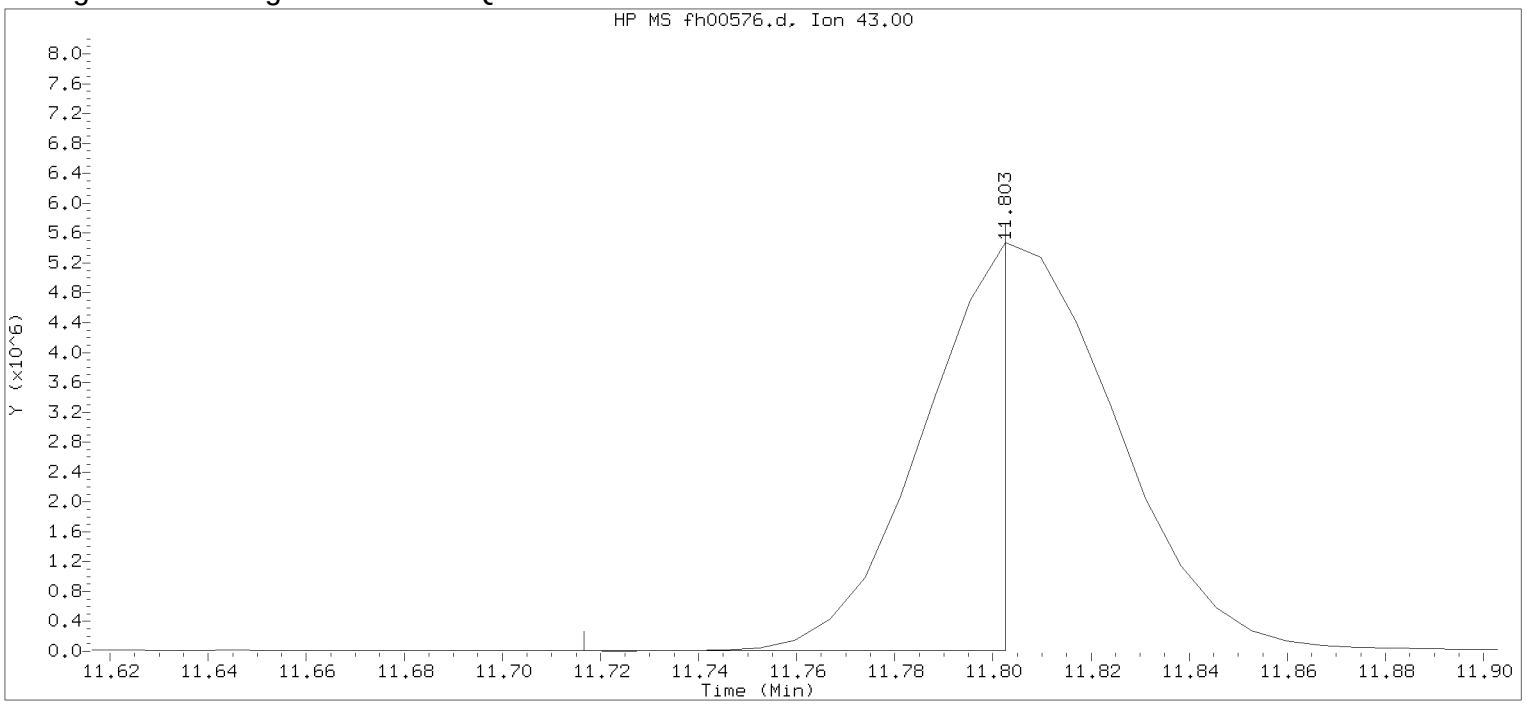
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Alexander D. Sechrist on 08/27/2018 at 13:50.
PARALLAX ID: ads07818

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug24.b/fh00576.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 18:30 Analyst ID: jeb07445

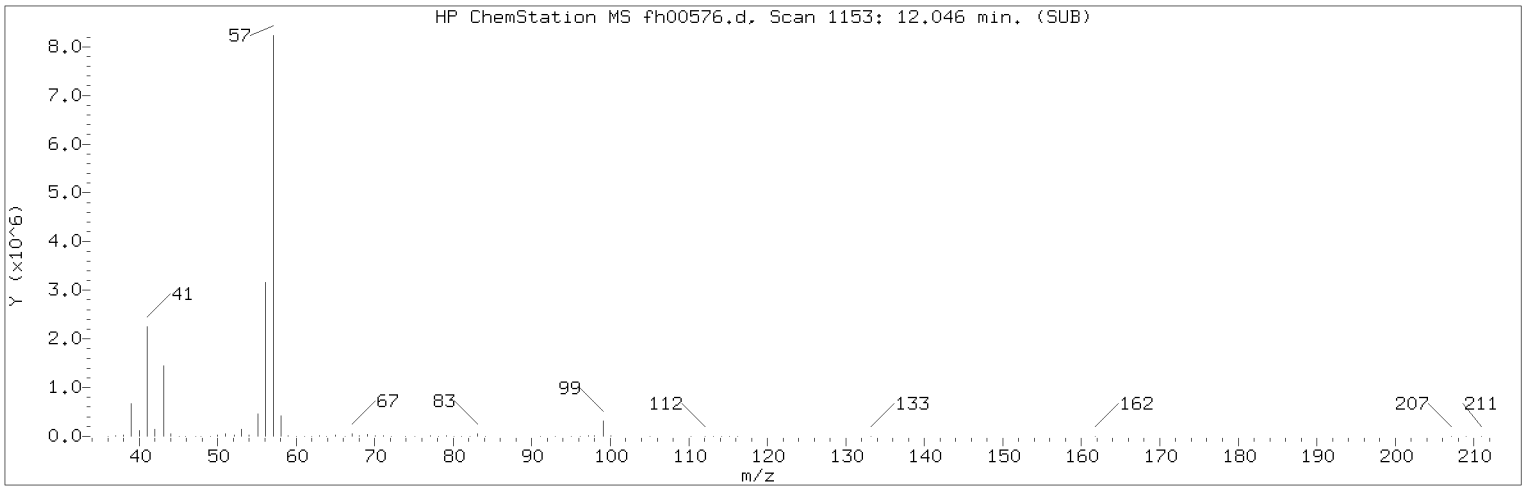
Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 24-AUG-2018 18:18
Date, time and analyst ID of latest file update: 24-Aug-2018 19:00 Unknown

Sample Name: VSTD070 Lab Sample ID: VSTD070

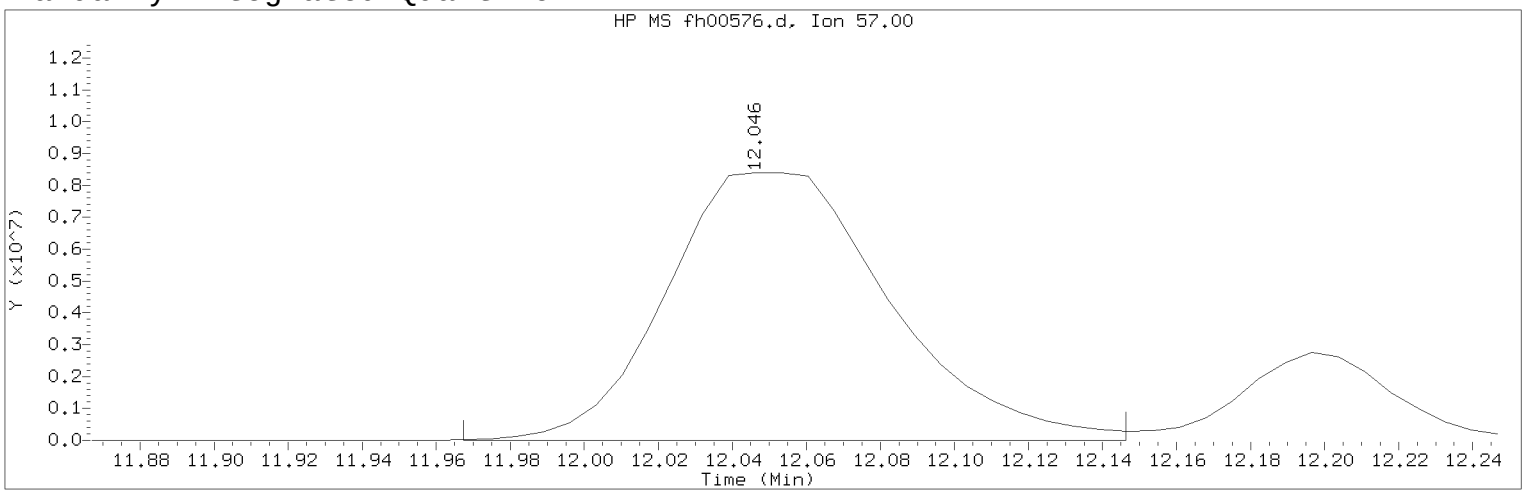
Compound Number : 45
Compound Name : 2-Butanone
Scan Number : 1119
Retention Time (minutes): 11.803
Quant Ion : 43.00
Area : 6230733
Concentration (ppb(v)) : 32.5556
Integration start scan : 1106 Integration stop scan: 1118
Y at integration start : 5561 Y at integration end: 5561

Digitally signed by Jacob E. Bailey on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug24.b/fh00576.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 18:30 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:03
Date, time and analyst ID of latest file update: 26-Aug-2018 17:03 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

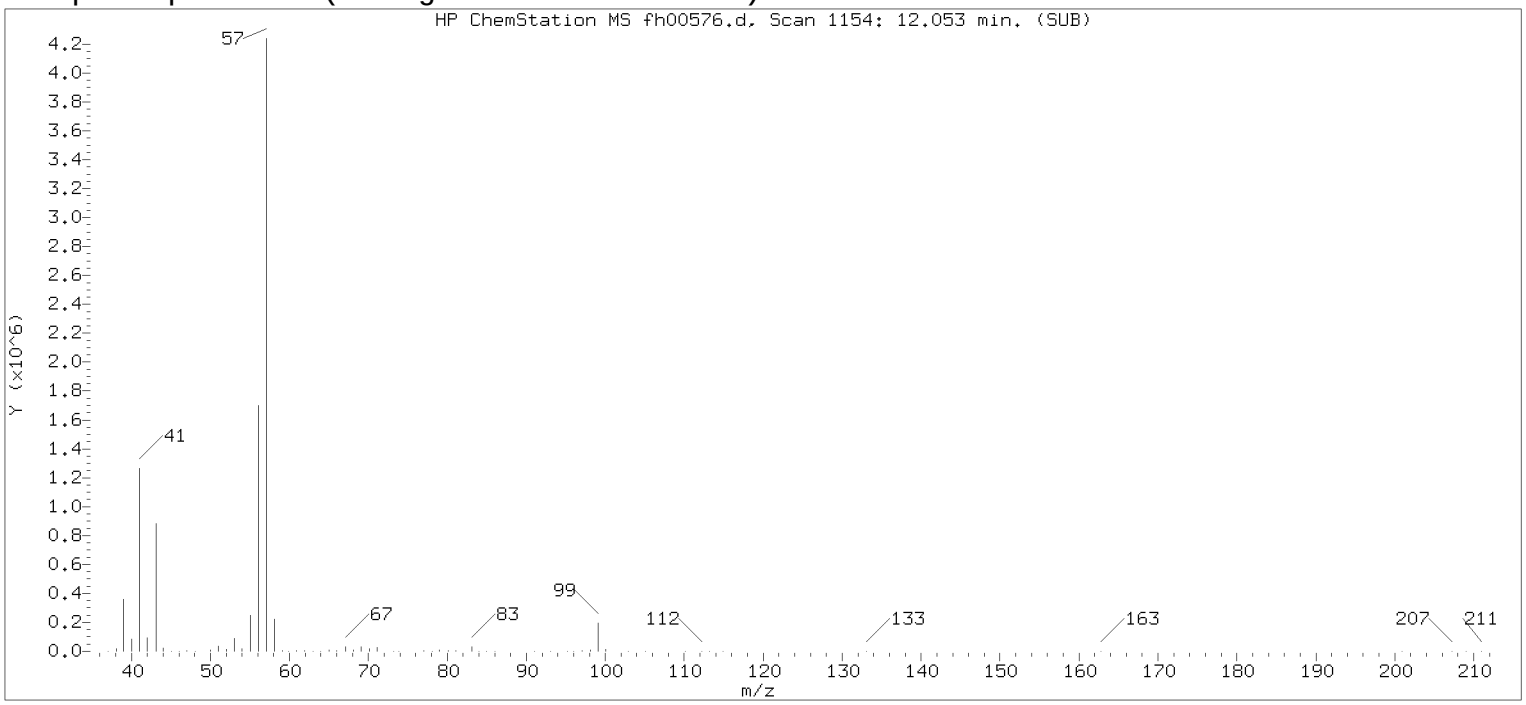
Compound Number : 46
Compound Name : Isooctane
Scan Number : 1153
Retention Time (minutes): 12.046
Quant Ion : 57.00
Area (flag) : 35168666M
Concentration (ppb(v)) : 74.8735
Integration start scan : 1141 Integration stop scan: 1166
Y at integration start : 7036 Y at integration end: 7036

Reason for manual integration: improper integration

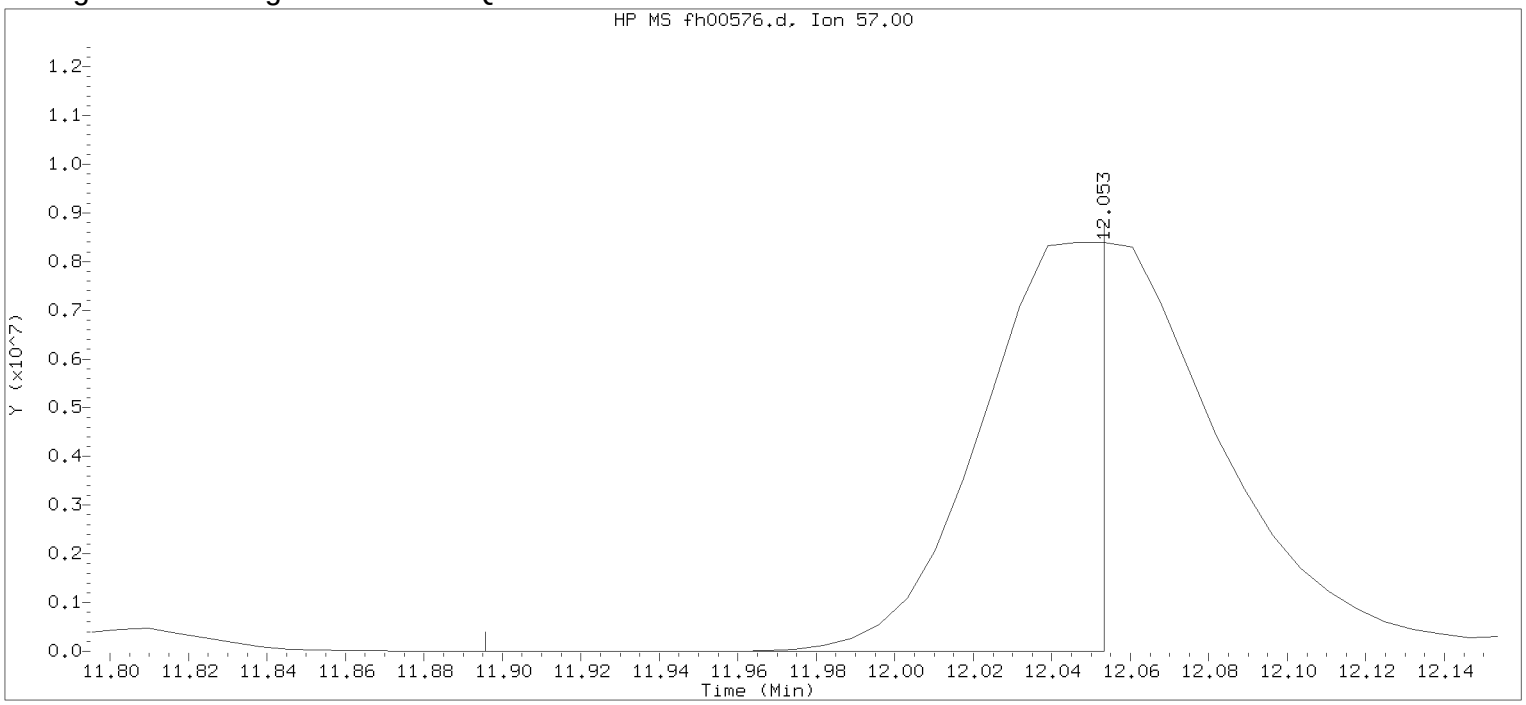
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Alexander D. Sechrist on 08/27/2018 at 13:50.
PARALLAX ID: ads07818

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug24.b/fh00576.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 18:30 Analyst ID: jeb07445

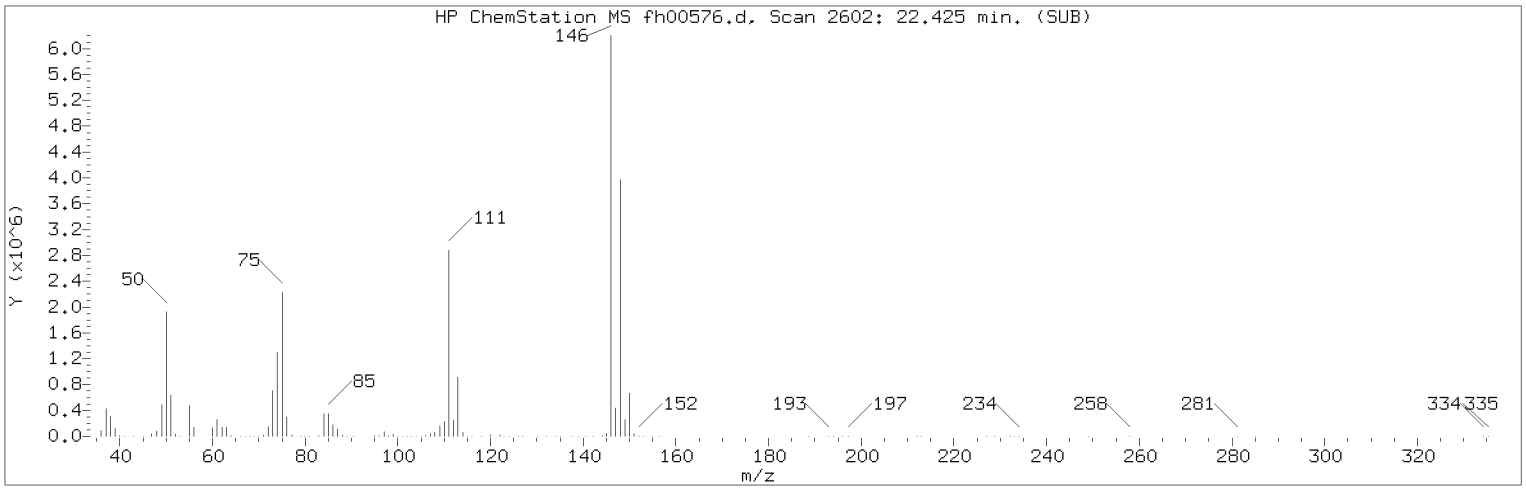
Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 24-AUG-2018 18:18
Date, time and analyst ID of latest file update: 24-Aug-2018 19:00 Unknown

Sample Name: VSTD070 Lab Sample ID: VSTD070

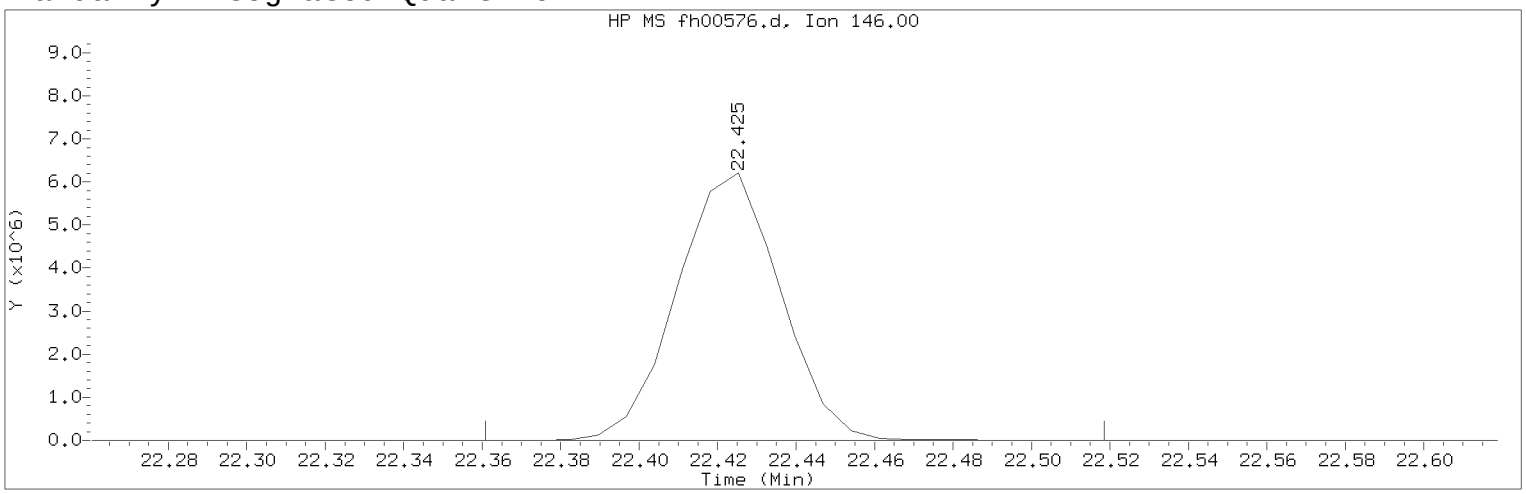
Compound Number : 46
Compound Name : Isooctane
Scan Number : 1154
Retention Time (minutes): 12.053
Quant Ion : 57.00
Area : 17571297
Concentration (ppb(v)) : 39.4256
Integration start scan : 1131 Integration stop scan: 1153
Y at integration start : 2343 Y at integration end: 2343

Digitally signed by Jacob E. Bailey on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug24.b/fh00576.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 18:30 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 26-AUG-2018 17:03
Date, time and analyst ID of latest file update: 26-Aug-2018 17:03 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

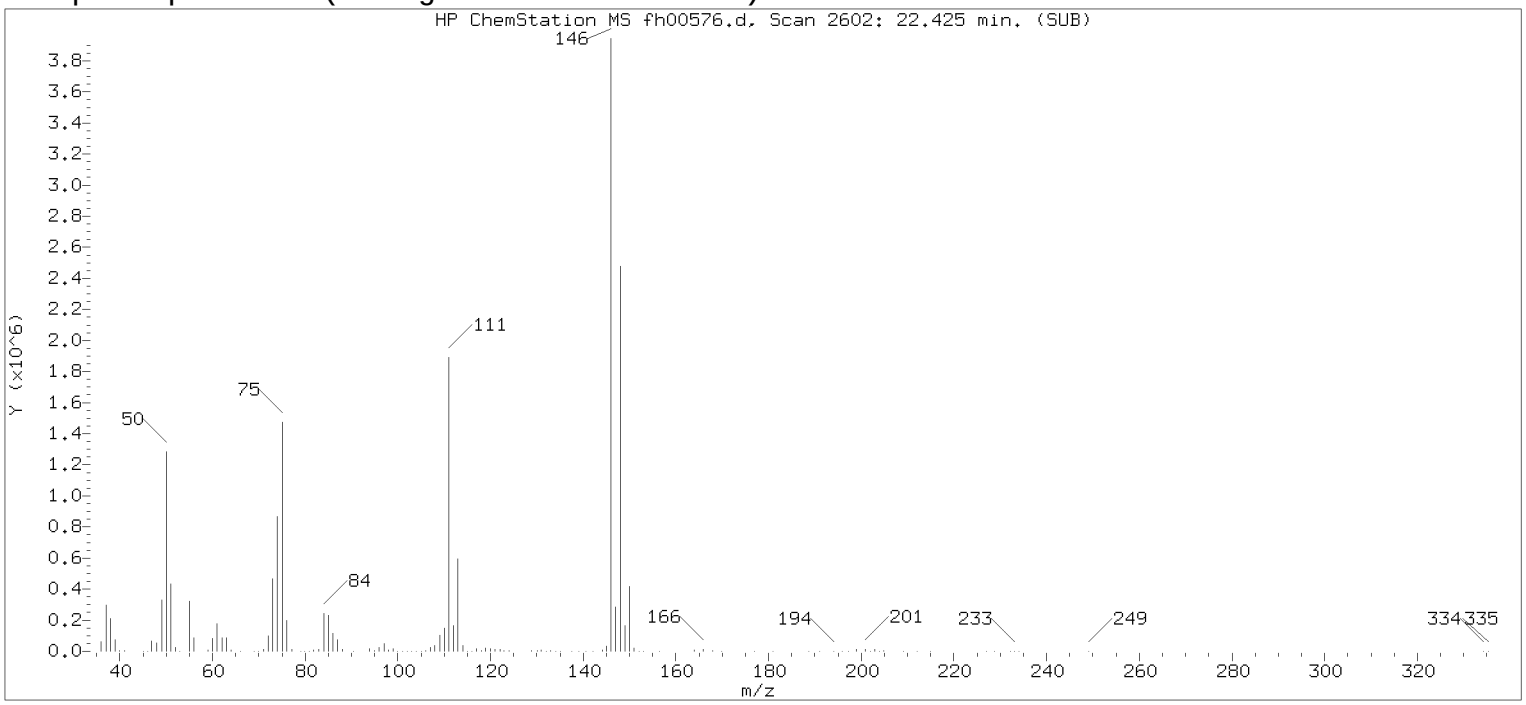
Compound Number : 98
Compound Name : 1,2-Dichlorobenzene
Scan Number : 2602
Retention Time (minutes): 22.425
Quant Ion : 146.00
Area (flag) : 11396054M
Concentration (ppb(v)) : 66.0911
Integration start scan : 2592 Integration stop scan: 2614
Y at integration start : 1778 Y at integration end: 1836

Reason for manual integration: improper integration

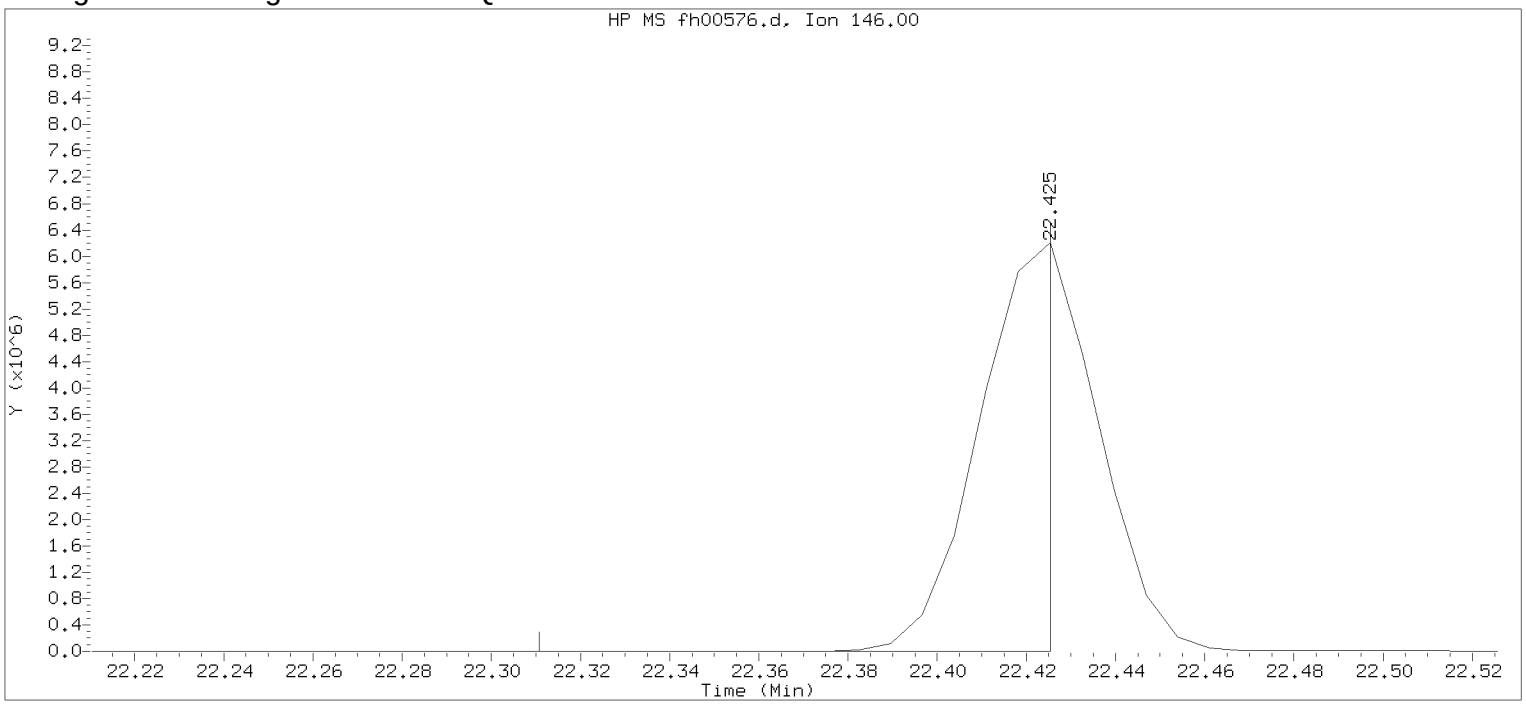
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Alexander D. Sechrist on 08/27/2018 at 13:50.
PARALLAX ID: ads07818

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



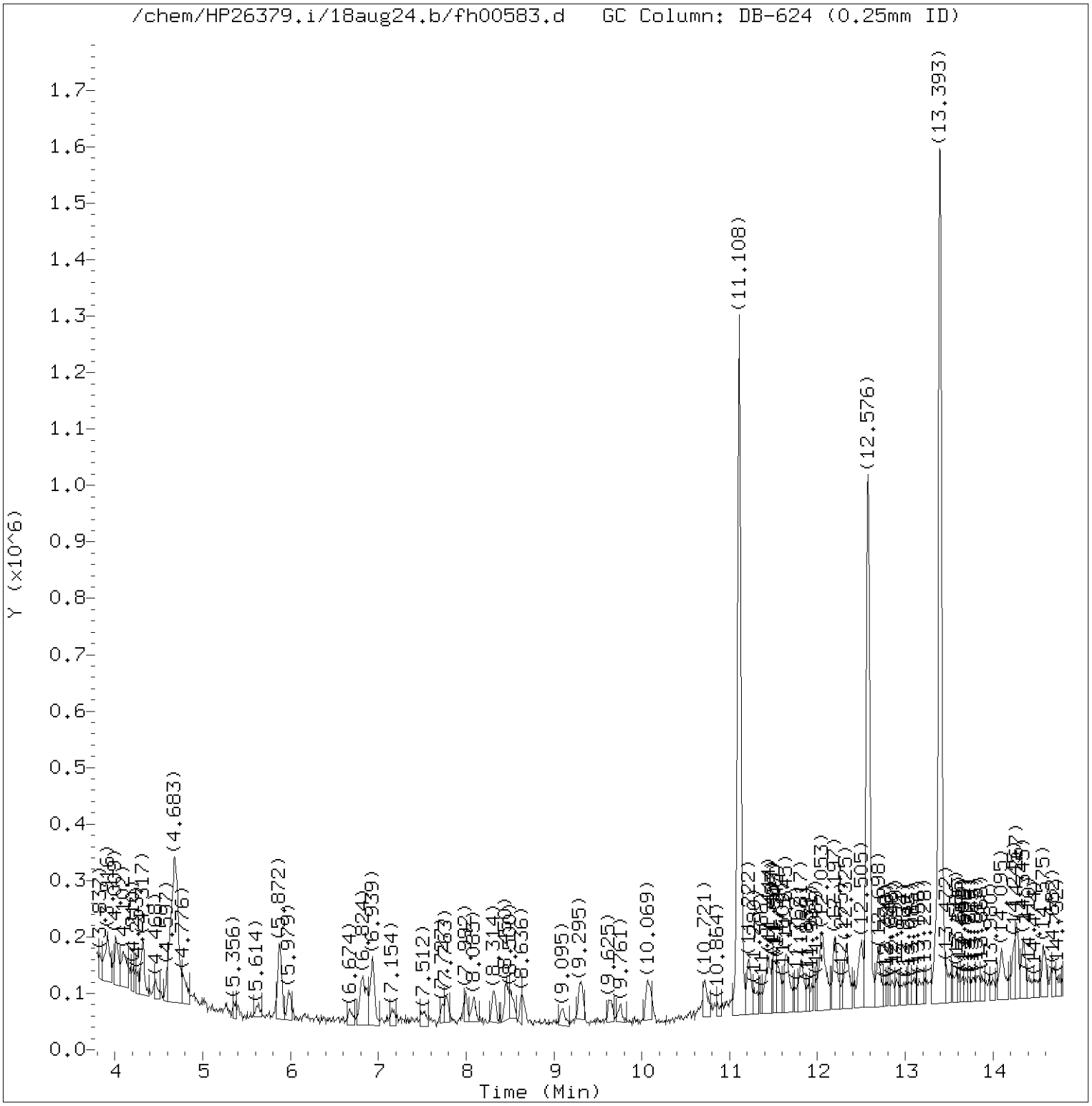
Data File: /chem/HP26379.i/18aug24.b/fh00576.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 18:30 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 24-AUG-2018 18:18
Date, time and analyst ID of latest file update: 24-Aug-2018 19:00 Unknown

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compound Number : 98
Compound Name : 1,2-Dichlorobenzene
Scan Number : 2602
Retention Time (minutes): 22.425
Quant Ion : 146.00
Area : 6583645
Concentration (ppb(v)) : 37.2576
Integration start scan : 2585 Integration stop scan: 2601
Y at integration start : 395 Y at integration end: 395

Digitally signed by Jacob E. Bailey on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

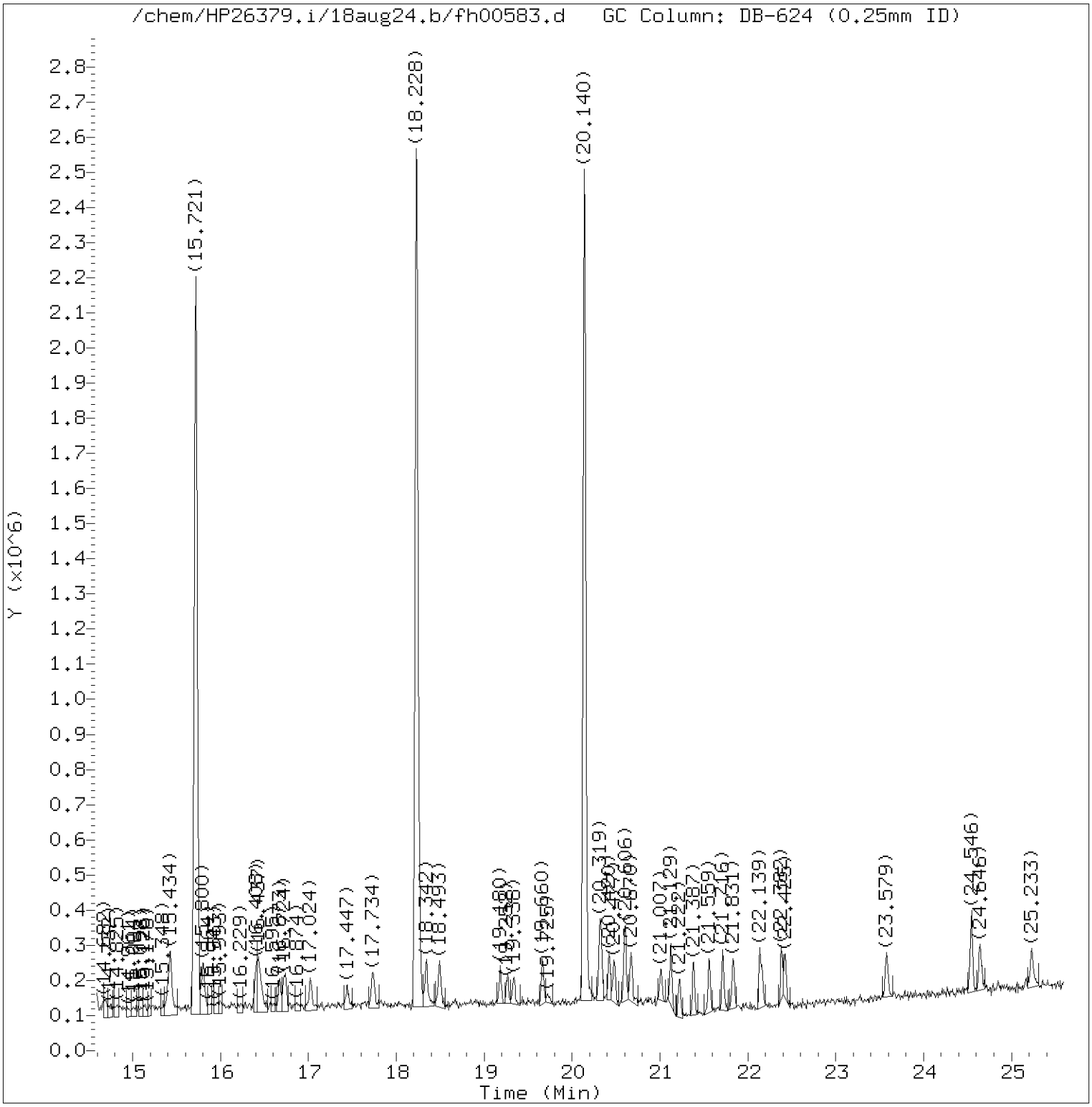
Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00583.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 22:04 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all1
Calibration date and time: 26-AUG-2018 17:18
Date, time and analyst ID of latest file update: 27-Aug-2018 13:54 ads07818

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

Digitally signed by Alexander D. Sechrist
on 08/27/2018 at 13:54.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00583.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 22:04 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all1
Calibration date and time: 26-AUG-2018 17:18
Date, time and analyst ID of latest file update: 27-Aug-2018 13:54 ads07818

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

Digitally signed by Alexander D. Sechrist
on 08/27/2018 at 13:54.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00583.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 22:04 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all1
Calibration date and time: 26-AUG-2018 17:18
Date, time and analyst ID of latest file update: 27-Aug-2018 13:54 ads07818

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.909	41	37872	0.534
2) Dichlorodifluoromethane	(1)	4.016	85	74605	0.540
3) Chlorodifluoromethane	(1)	4.109	51	88130M	0.525
4) Freon 114	(1)	4.317	85	73760	0.499
5) Chloromethane	(1)	4.453	50	49600	0.554
6) Vinyl Chloride	(1)	4.654	62	34417	0.490
7) 1,3-Butadiene	(1)	4.683	54	36066	0.527
8) Bromomethane	(1)	5.356	94	28559	0.672
9) Chloroethane	(1)	5.642	64	25926M	0.665
10) Bromoethene	(1)	5.829	106	16518	0.396
12) Trichlorofluoromethane	(1)	5.879	101	69279	0.511
11) Pentane	(1)	5.879	43	72266	0.482
13) Dichlorofluoromethane	(1)	5.979	67	71688	0.523
14) Ethanol	(1)	6.638	45	24757	0.818
15) Freon123a	(1)	6.810	67	73884	0.549
16) 1,1-Dichloroethene	(1)	6.860	61	59552	0.473
17) Freon 113	(1)	6.932	103	37777	0.469
18) Carbon Disulfide	(1)	6.946	76	74282	0.492
19) Methyl Iodide	(1)	7.161	142	38775	0.391
20) Acrolein	(1)	7.505	56	15919	0.484
21) Isopropanol	(1)	7.727	45	66315	0.516
22) 3-Chloropropene	(1)	7.777	41	63074	0.623
23) Methylene Chloride	(1)	7.992	84	27293	0.590
24) Acetone	(1)	8.092	43	90835	0.686
25) trans-1,2-Dichloroethene	(1)	8.314	61	55714	0.473
26) Hexane	(1)	8.465	56	40728	0.427
27) Methyl t-Butyl Ether	(1)	8.500	73	61305	0.418
28) tert-Butyl Alcohol	(1)	8.644	59	82546	0.512
29) Acetonitrile	(1)	9.102	41	50135	0.658
30) Di-Isopropyl Ether	(1)	9.317	45	108276	0.377
31) 1,1-Dichloroethane	(1)	9.632	63	72288	0.468
32) Acrylonitrile	(1)	9.761	53	39935	0.525
33) Ethyl Tert-Butyl Ether	(1)	10.069	59	100619	0.401
34) Vinyl Acetate	(1)	10.112	43	105438	0.462
35) cis-1,2-Dichloroethene	(1)	10.714	61	47665	0.425
36) 1,2-Dichloroethene (total)	(1)		61	103379	0.898
37)*Bromochloromethane	(1)	11.115	130	413767	10.000
38) Cyclohexane	(1)	11.129	56	56058	0.394

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

Digitally signed by Alexander D. Sechrist
on 08/27/2018 at 13:54.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00583.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 22:04 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all1
Calibration date and time: 26-AUG-2018 17:18
Date, time and analyst ID of latest file update: 27-Aug-2018 13:54 ads07818

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	62649	0.518
40) Ethyl Acetate	(1)	11.430	43	98587	0.486
41) Methyl Acrylate	(1)	11.466	55	69369	0.436
42) Carbon Tetrachloride	(1)	11.509	117	45183	0.438
43) Tetrahydrofuran	(1)	11.566	42	51598	0.534
44) 1,1,1-Trichloroethane	(1)	11.645	97	50314	0.423
45) 2-Butanone	(1)	11.817	43	100993	0.537
46) Isooctane	(2)	12.060	57	165776	0.424
47) Heptane	(2)	12.197	71	22325	0.396
48) Benzene	(2)	12.340	78	82869	0.476
49) Tert-Amyl Methyl Ether	(2)	12.490	73	58242	0.435
50) 1,2-Dichloroethane	(2)	12.698	62	58208	0.512
51) Trichloroethene	(2)	13.350	130	31252	0.520
52)*1,4-Difluorobenzene	(2)	13.400	114	1348728	10.000
53) Dibromomethane	(2)	14.102	174	26893	0.462
54) Ethyl Acrylate	(2)	14.238	55	81875	0.431
55) 1,2-Dichloropropane	(2)	14.267	63	50363	0.501
56) Bromodichloromethane	(2)	14.331	83	57845	0.489
57) Methyl Methacrylate	(2)	14.575	69	23054	0.411
58) 1,4-Dioxane	(2)	14.696	88	13789	0.381
59) cis-1,3-Dichloropropene	(2)	15.398	75	44717	0.450
60) Octane	(3)	15.434	43	94023	0.432
61) Toluene	(3)	15.800	91	81565	0.410
62) 4-Methyl-2-Pentanone	(2)	16.408	43	102921	0.455
63) Tetrachloroethene	(3)	16.430	166	41622	0.441
64) trans-1,3-Dichloropropene	(3)	16.459	75	38633	0.430
65) 1,3-Dichloropropene (total)	(3)		75	83350	0.880
66) Ethyl Methacrylate	(3)	16.681	69	37187	0.374
67) 1,1,2-Trichloroethane	(3)	16.738	97	32601	0.412
68) Dibromochloromethane	(3)	17.032	127	33835	0.423
69) 1,2-Dibromoethane	(3)	17.440	107	47607	0.435
70) 2-Hexanone	(3)	17.734	43	105193	0.496
71)*Chlorobenzene-d5	(3)	18.228	117	1346796	10.000
72) Chlorobenzene	(3)	18.256	112	62945	0.376
73) Ethylbenzene	(3)	18.271	91	112115	0.413
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	34340	0.432
75) m/p-Xylene	(3)	18.493	91	74153	0.380
76) o-Xylene	(3)	19.180	91	72942	0.383

* = Compound is an internal standard.

Digitally signed by Alexander D. Sechrist
on 08/27/2018 at 13:54.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00583.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 22:04 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all1
Calibration date and time: 26-AUG-2018 17:18
Date, time and analyst ID of latest file update: 27-Aug-2018 13:54 ads07818

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	147095	0.763
78) Styrene	(3)	19.266	104	43431	0.315
79) Bromoform	(3)	19.338	173	39061	0.393
80) Cumene	(3)	19.660	105	86338	0.329
81) n-Propylbenzene	(3)	20.312	120	25751	0.339
82) Bromobenzene	(3)	20.334	156	36758	0.392
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	79516	0.416
84) 4-Ethyltoluene	(3)	20.477	105	83561	0.307
85) 2-Chlorotoluene	(3)	20.599	126	23475	0.335
86) 1,3,5-Trimethylbenzene	(3)	20.599	105	74459	0.319
87) 1,2,3-Trichloropropane	(3)	20.678	110	19374	0.376
88) Alpha Methyl Styrene	(3)	21.014	118	38719	0.368
89) tert-Butylbenzene	(3)	21.129	119	73267	0.351
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	64705	0.287
91) sec-Butylbenzene	(3)	21.387	105	101520	0.291
92) p-Isopropyltoluene	(3)	21.559	119	77120	0.291
93) 1,3-Dichlorobenzene	(3)	21.716	146	64462	0.386
94) 1,4-Dichlorobenzene	(3)	21.838	146	61017	0.371
95) n-Butylbenzene	(3)	22.139	92	52807	0.310
96) Benzyl Chloride	(3)	22.160	126	13236	0.363
97) Hexachloroethane	(3)	22.382	117	29642	0.401
98) 1,2-Dichlorobenzene	(3)	22.425	146	60725	0.392
99) 1,2-Dibromo-3-chloropropane	(3)	23.579	157	31564	0.416
100) Hexachlorobutadiene	(3)	24.546	225	54063	0.556
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	60167	0.568
102) Naphthalene	(3)	25.233	128	98733	0.476

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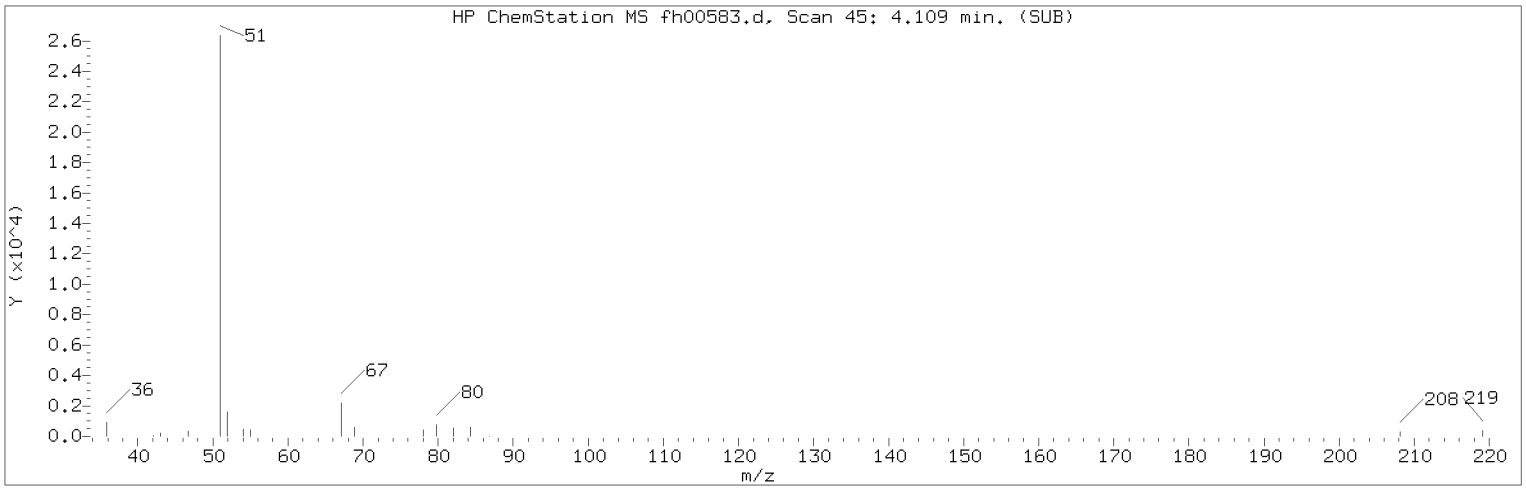
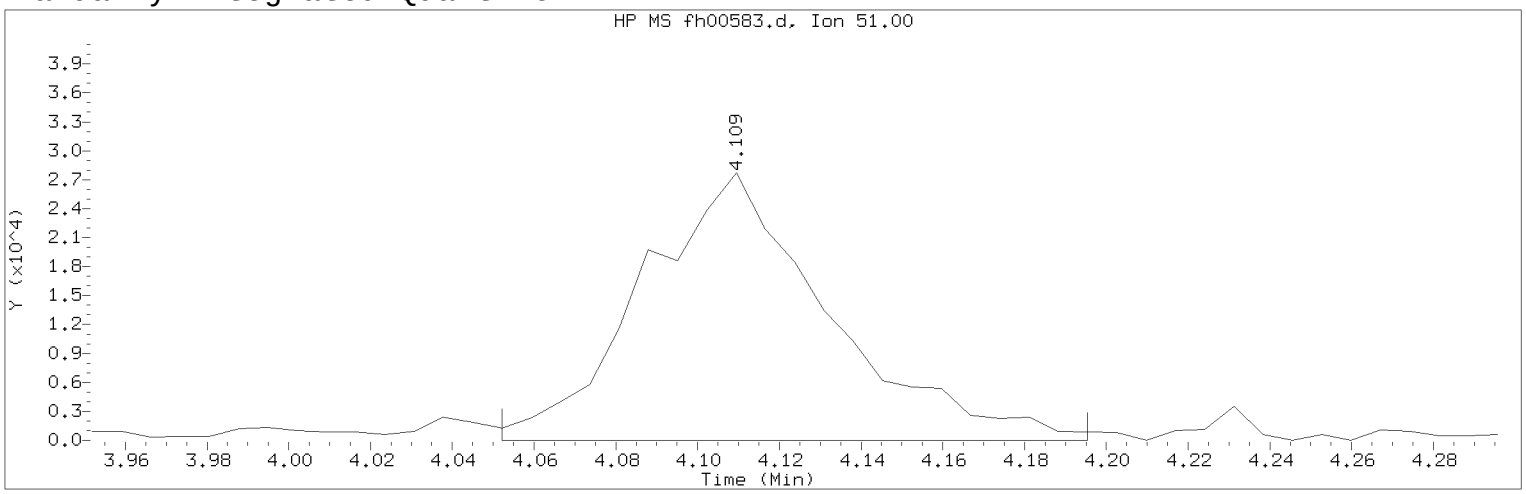
Target 3.5 esignature user ID: ads07818

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug24.b/fh00583.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 22:04 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all1
Calibration date and time: 26-AUG-2018 17:18
Date, time and analyst ID of latest file update: 27-Aug-2018 13:54 ads07818

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

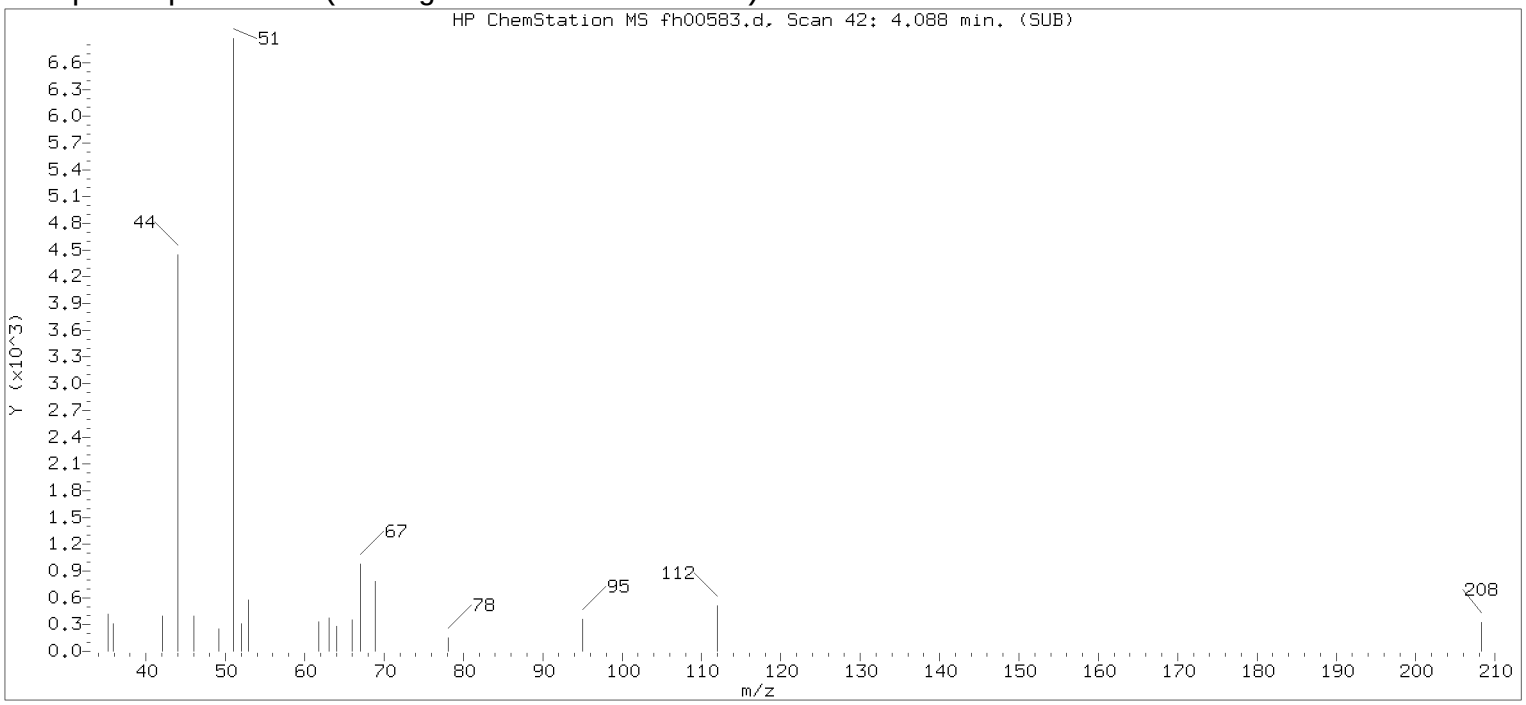
Compound Number : 3
Compound Name : Chlorodifluoromethane
Scan Number : 45
Retention Time (minutes): 4.109
Quant Ion : 51.00
Area (flag) : 88130M
Concentration (ppb(v)) : 0.5253
Integration start scan : 36 Integration stop scan: 56
Y at integration start : 7 Y at integration end: 7

Reason for manual integration: improper integration

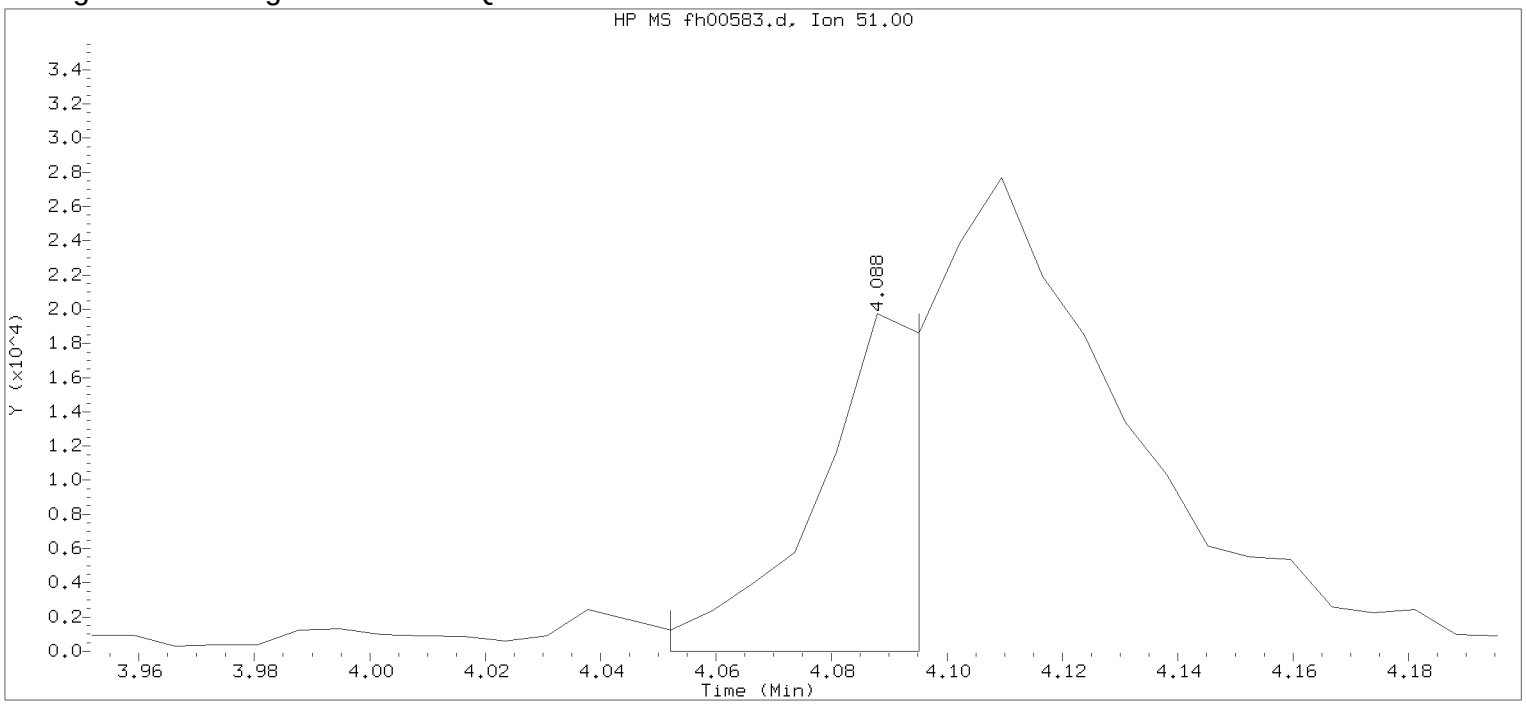
Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 08/27/2018 at 13:54.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Alexander D. Sechrist on 08/27/2018 at 13:53.
PARALLAX ID: ads07818

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug24.b/fh00583.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 22:04 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 24-AUG-2018 18:18
Date, time and analyst ID of latest file update: 24-Aug-2018 22:34 Unknown

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

Compound Number	: 3		
Compound Name	: Chlorodifluoromethane		
Scan Number	: 42		
Retention Time (minutes)	: 4.088		
Quant Ion	: 51.00		
Area	: 22963		
Concentration (ppb(v))	: 0.1368		
Integration start scan	: 36	Integration stop scan:	42
Y at integration start	: 0	Y at integration end:	0

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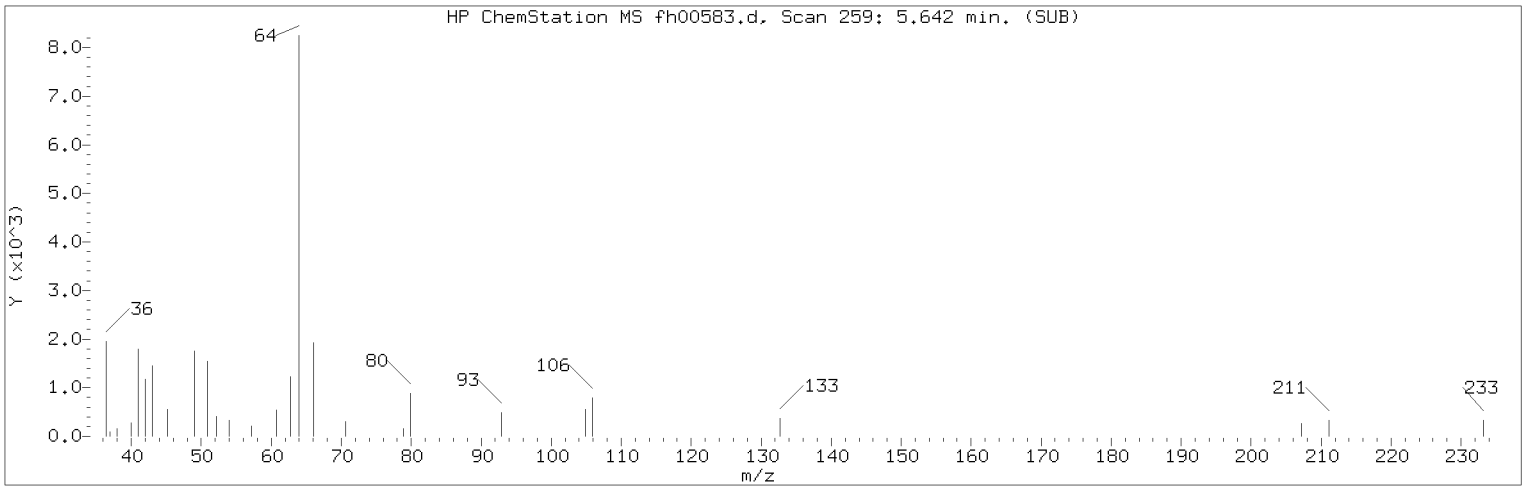
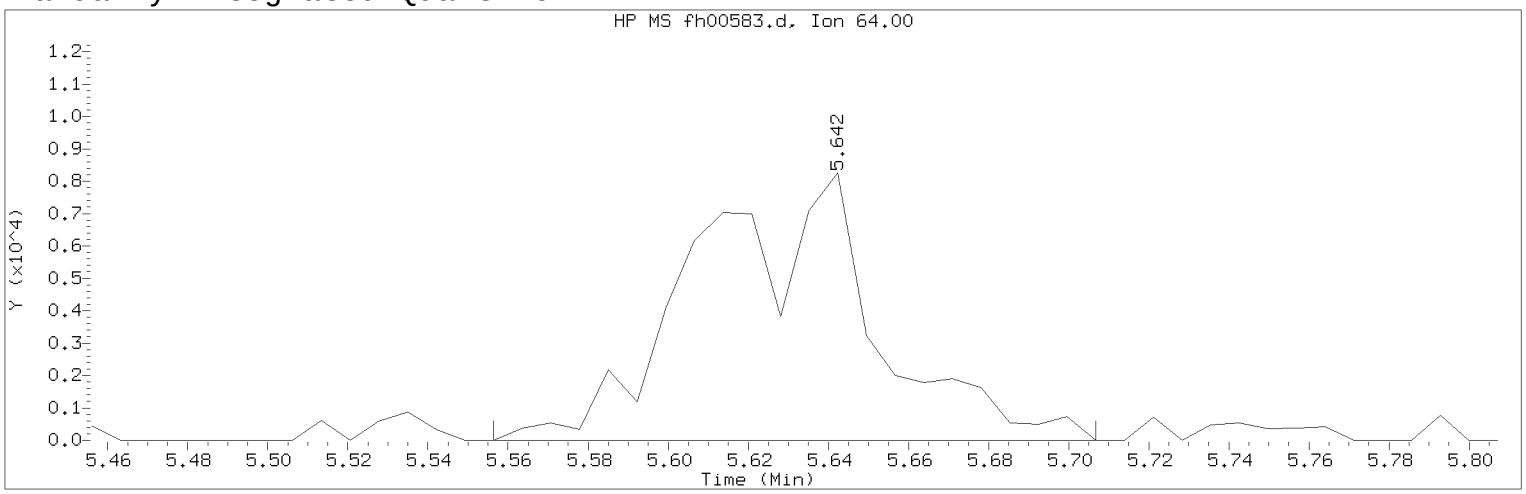
Target 3.5 esignature user ID: 7633

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug24.b/fh00583.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 22:04 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all1
Calibration date and time: 26-AUG-2018 17:18
Date, time and analyst ID of latest file update: 27-Aug-2018 13:54 ads07818

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

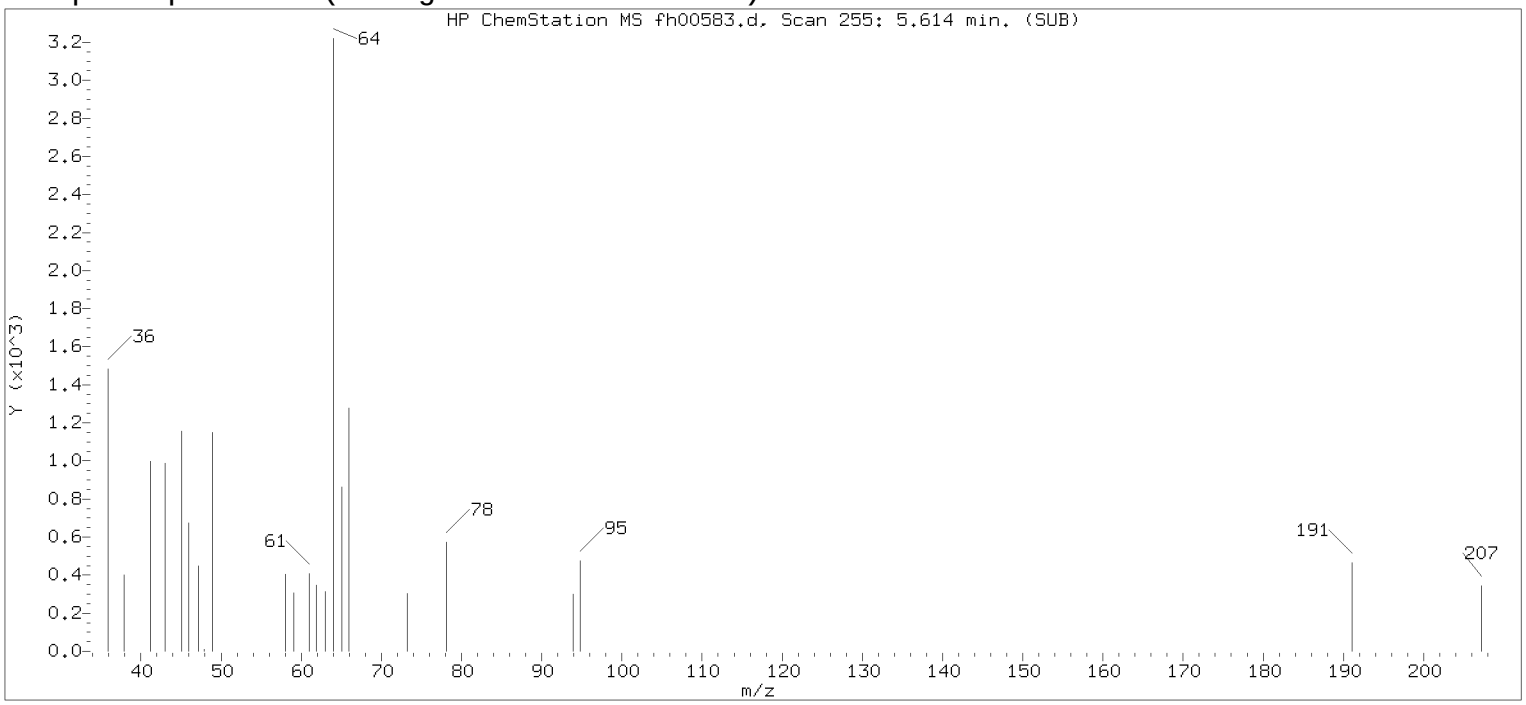
Compound Number : 9
Compound Name : Chloroethane
Scan Number : 259
Retention Time (minutes): 5.642
Quant Ion : 64.00
Area (flag) : 25926M
Concentration (ppb(v)) : 0.6646
Integration start scan : 246 Integration stop scan: 267
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

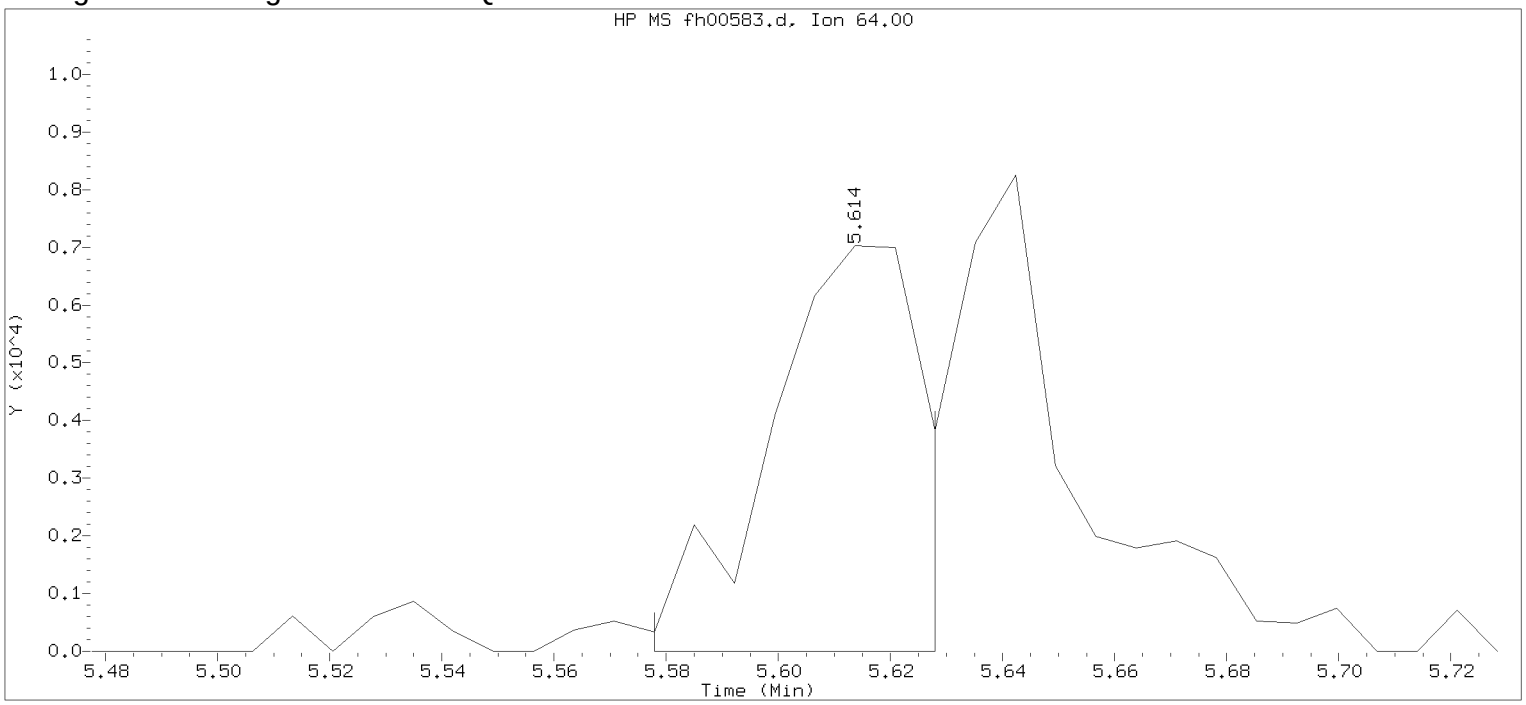
Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 08/27/2018 at 13:54.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Alexander D. Sechrist on 08/27/2018 at 13:53.
PARALLAX ID: ads07818

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



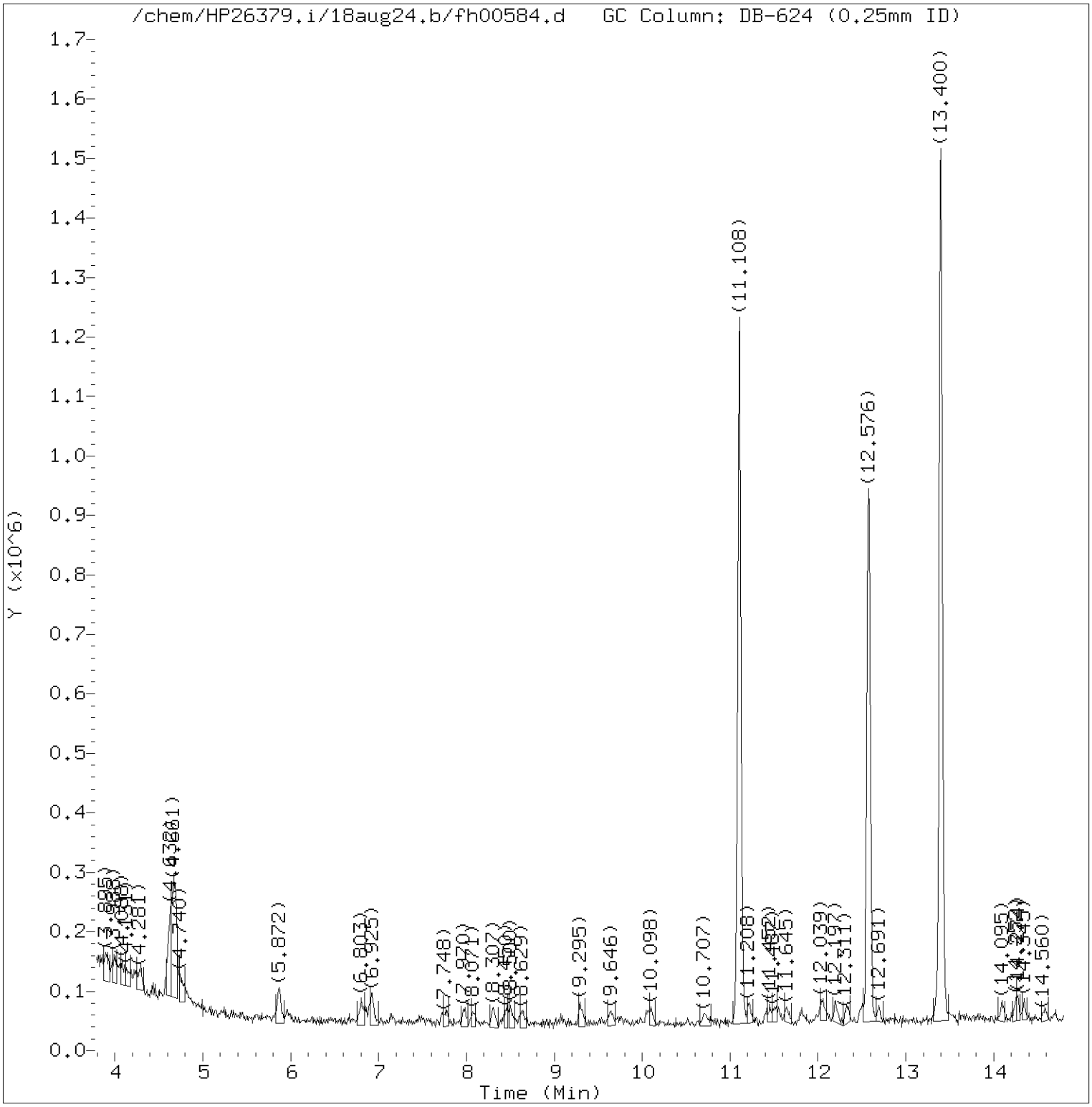
Data File: /chem/HP26379.i/18aug24.b/fh00583.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 22:04 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 24-AUG-2018 18:18
Date, time and analyst ID of latest file update: 24-Aug-2018 22:34 Unknown

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

Compound Number : 9
Compound Name : Chloroethane
Scan Number : 255
Retention Time (minutes): 5.614
Quant Ion : 64.00
Area : 12772
Concentration (ppb(v)) : 0.3461
Integration start scan : 249 Integration stop scan: 256
Y at integration start : 0 Y at integration end: 0

Digitally signed by Alexander D. Sechrist on 08/27/2018 at 13:54.
Target 3.5 esignature user ID: 1 at 08/27/2018



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00584.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 22:35 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all1
Calibration date and time: 26-AUG-2018 17:18
Date, time and analyst ID of latest file update: 27-Aug-2018 13:54 ads07818

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

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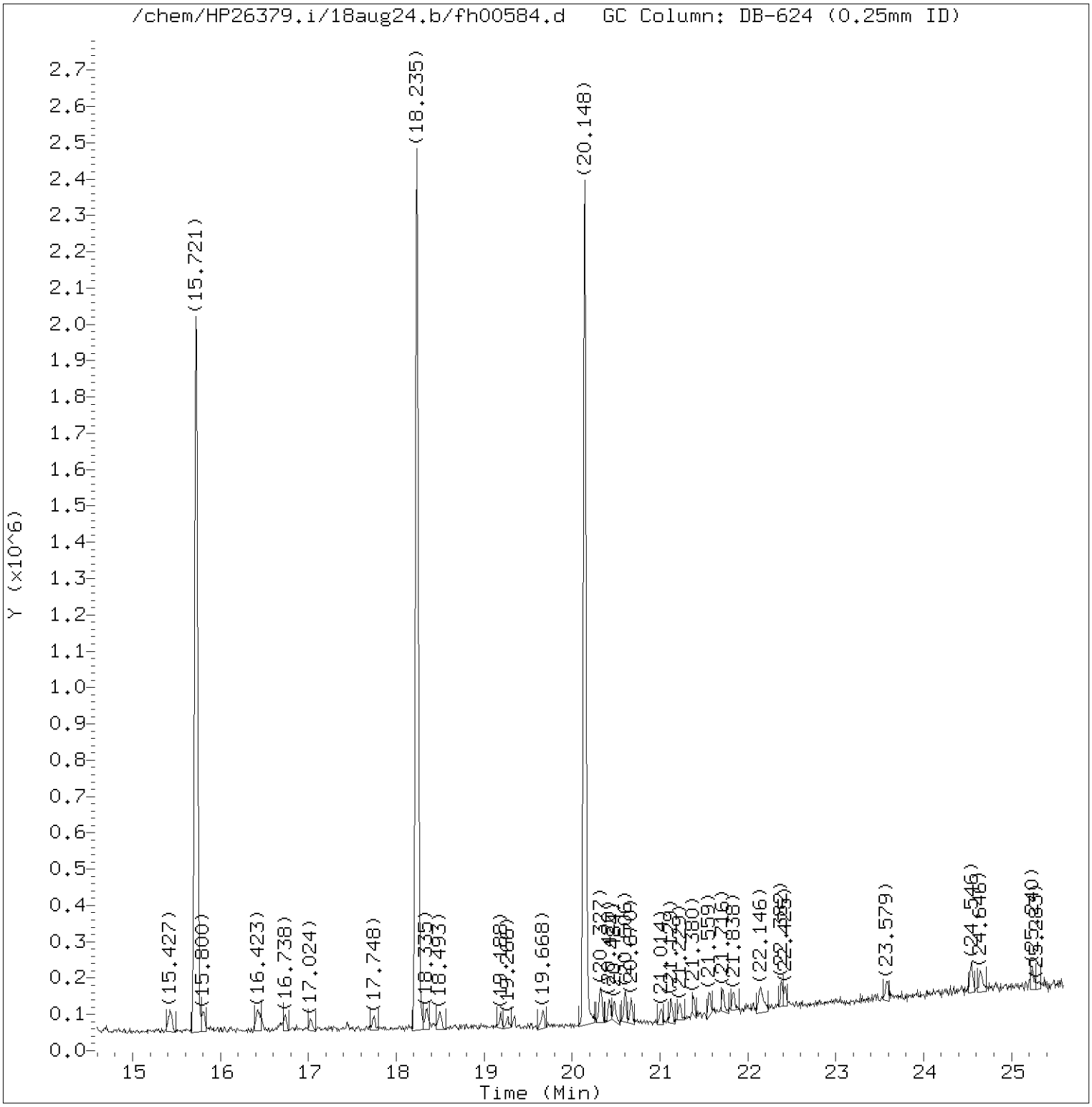
on 08/27/2018 at 13:54.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00584.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 22:35 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all1
Calibration date and time: 26-AUG-2018 17:18
Date, time and analyst ID of latest file update: 27-Aug-2018 13:54 ads07818

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

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on 08/27/2018 at 13:54.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00584.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 22:35 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all1
Calibration date and time: 26-AUG-2018 17:18
Date, time and analyst ID of latest file update: 27-Aug-2018 13:54 ads07818

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.895	41	19161	0.277
2) Dichlorodifluoromethane	(1)	3.995	85	23756	0.177
3) Chlorodifluoromethane	(1)	4.088	51	32655	0.200
4) Freon 114	(1)	4.296	85	28014	0.195
5) Chloromethane	(1)	4.439	50	21923	0.251
6) Vinyl Chloride	(1)	4.632	62	17099	0.250
7) 1,3-Butadiene	(1)	4.668	54	19053	0.286
8) Bromomethane	(1)	5.349	94	7255	0.175
9) Chloroethane	(1)	5.607	64	6475	0.171
10) Bromoethene	(1)	5.821	106	5326	0.131
11) Pentane	(1)	5.864	43	30444	0.209
12) Trichlorofluoromethane	(1)	5.879	101	24421	0.185
13) Dichlorofluoromethane	(1)	5.950	67	23930	0.179
14) Ethanol	(1)	6.667	45	13040	0.443
15) Freon123a	(1)	6.788	67	32248	0.246
16) 1,1-Dichloroethene	(1)	6.846	61	19695	0.161
17) Freon 113	(1)	6.917	103	14186	0.181
18) Carbon Disulfide	(1)	6.925	76	26540	0.181
19) Methyl Iodide	(1)	7.147	142	13252	0.137
20) Acrolein	(1)	7.498	56	5945	0.186
21) Isopropanol	(1)	7.727	45	24955	0.200
22) 3-Chloropropene	(1)	7.763	41	30054	0.305
23) Methylene Chloride	(1)	7.892	84	10350	0.230
24) Acetone	(1)	8.078	43	43893	0.341
25) trans-1,2-Dichloroethene	(1)	8.300	61	18932	0.165
26) Hexane	(1)	8.443	56	16368	0.176
27) Methyl t-Butyl Ether	(1)	8.500	73	22678M	0.159
28) tert-Butyl Alcohol	(1)	8.615	59	32421	0.207
29) Acetonitrile	(1)	9.081	41	15575	0.210
30) Di-Isopropyl Ether	(1)	9.295	45	51239	0.184
31) 1,1-Dichloroethane	(1)	9.639	63	32251	0.214
32) Acrylonitrile	(1)	9.747	53	15292	0.207
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	35025	0.143
34) Vinyl Acetate	(1)	10.105	43	42254	0.190
35) cis-1,2-Dichloroethene	(1)	10.721	61	20811M	0.191
36) 1,2-Dichloroethene (total)	(1)		61	39743	0.356
37)*Bromochloromethane	(1)	11.101	130	402632	10.000
38) Cyclohexane	(1)	11.122	56	26122	0.189

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

Digitally signed by Alexander D. Sechrist
on 08/27/2018 at 13:54.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00584.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 22:35 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all1
Calibration date and time: 26-AUG-2018 17:18
Date, time and analyst ID of latest file update: 27-Aug-2018 13:54 ads07818

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.222	83	23968	0.204
40) Ethyl Acetate	(1)	11.416	43	40940	0.207
41) Methyl Acrylate	(1)	11.480	55	27800	0.180
42) Carbon Tetrachloride	(1)	11.509	117	21927	0.218
43) Tetrahydrofuran	(1)	11.530	42	21608	0.230
44) 1,1,1-Trichloroethane	(1)	11.645	97	22353	0.193
45) 2-Butanone	(1)	11.817	43	38268	0.209
46) Isooctane	(2)	12.053	57	68642	0.185
47) Heptane	(2)	12.204	71	9800	0.184
48) Benzene	(2)	12.333	78	30740	0.187
49) Tert-Amyl Methyl Ether	(2)	12.497	73	25708	0.203
50) 1,2-Dichloroethane	(2)	12.698	62	26232	0.244
51) Trichloroethene	(2)	13.364	130	12266	0.216
52)*1,4-Difluorobenzene	(2)	13.400	114	1275156	10.000
53) Dibromomethane	(2)	14.102	174	10185	0.185
54) Ethyl Acrylate	(2)	14.238	55	33321	0.186
55) 1,2-Dichloropropane	(2)	14.274	63	18745	0.197
56) Bromodichloromethane	(2)	14.345	83	22027	0.197
57) Methyl Methacrylate	(2)	14.582	69	11777	0.222
58) 1,4-Dioxane	(2)	14.689	88	6725	0.196
59) cis-1,3-Dichloropropene	(2)	15.413	75	16827	0.179
60) Octane	(3)	15.441	43	29632	0.139
61) Toluene	(3)	15.800	91	38571	0.197
62) 4-Methyl-2-Pentanone	(2)	16.408	43	41465	0.194
63) Tetrachloroethene	(3)	16.437	166	15176	0.164
64) trans-1,3-Dichloropropene	(3)	16.473	75	13998	0.159
65) 1,3-Dichloropropene (total)	(3)		75	30825	0.338
66) Ethyl Methacrylate	(3)	16.673	69	13686	0.140
67) 1,1,2-Trichloroethane	(3)	16.731	97	13297	0.171
68) Dibromochloromethane	(3)	17.024	127	12257	0.156
69) 1,2-Dibromoethane	(3)	17.440	107	16531	0.154
70) 2-Hexanone	(3)	17.734	43	31984	0.153
71)*Chlorobenzene-d5	(3)	18.235	117	1323547	10.000
72) Chlorobenzene	(3)	18.256	112	30274	0.184
73) Ethylbenzene	(3)	18.271	91	44872	0.168
74) 1,1,1,2-Tetrachloroethane	(3)	18.357	131	16222	0.208
75) m/p-Xylene	(3)	18.493	91	26172	0.136
76) o-Xylene	(3)	19.188	91	26141	0.140

* = Compound is an internal standard.

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on 08/27/2018 at 13:54.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00584.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 22:35 Analyst ID: jeb07445

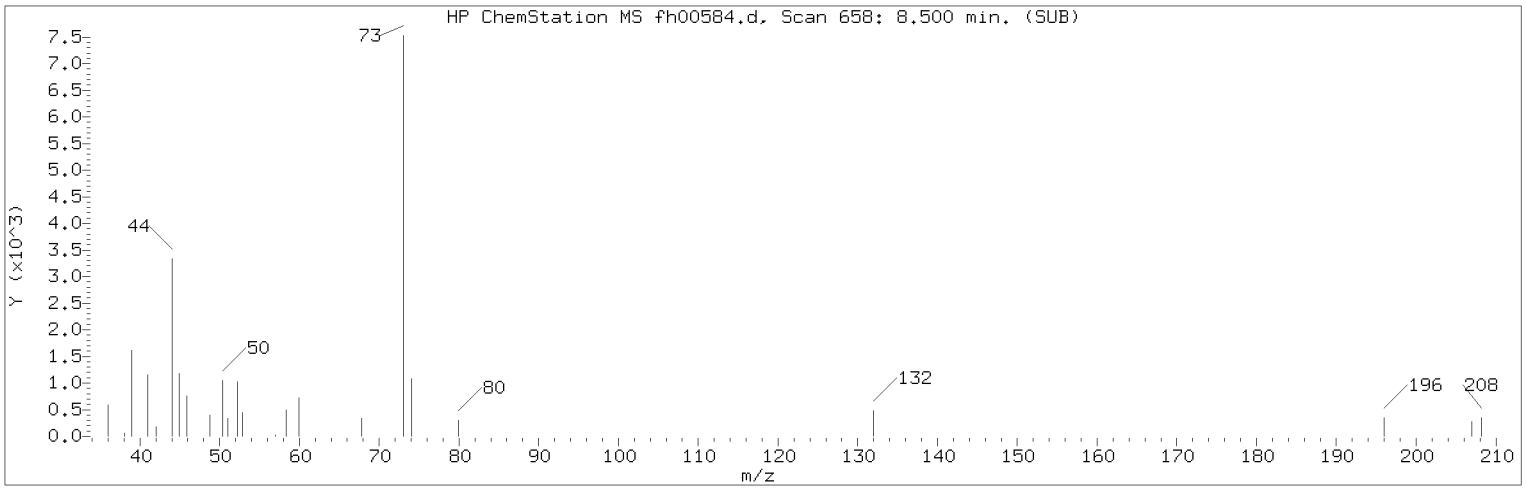
Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all1
Calibration date and time: 26-AUG-2018 17:18
Date, time and analyst ID of latest file update: 27-Aug-2018 13:54 ads07818

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

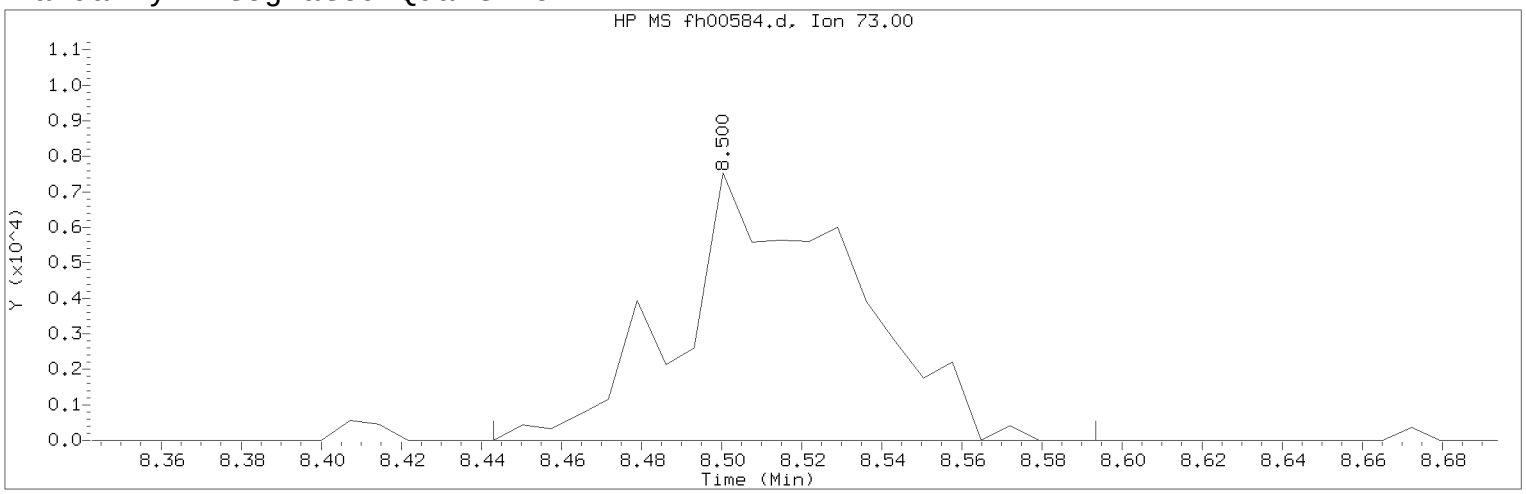
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	52313	0.276
78) Styrene	(3)	19.266	104	11764	0.087
79) Bromoform	(3)	19.345	173	12660	0.130
80) Cumene	(3)	19.668	105	27376	0.106
81) n-Propylbenzene	(3)	20.319	120	8616	0.115
82) Bromobenzene	(3)	20.341	156	13747	0.149
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	31761	0.169
84) 4-Ethyltoluene	(3)	20.484	105	34935	0.131
85) 2-Chlorotoluene	(3)	20.606	126	10072	0.146
86) 1,3,5-Trimethylbenzene	(3)	20.613	105	22771	0.099
87) 1,2,3-Trichloropropane	(3)	20.670	110	8681	0.171
88) Alpha Methyl Styrene	(3)	21.021	118	9150	0.089
89) tert-Butylbenzene	(3)	21.129	119	28114	0.137
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	26654	0.120
91) sec-Butylbenzene	(3)	21.387	105	40564	0.118
92) p-Isopropyltoluene	(3)	21.566	119	30000	0.115
93) 1,3-Dichlorobenzene	(3)	21.716	146	20980	0.128
94) 1,4-Dichlorobenzene	(3)	21.838	146	24556	0.152
95) n-Butylbenzene	(3)	22.139	92	18074	0.108
96) Benzyl Chloride	(3)	22.167	126	4884	0.136
97) Hexachloroethane	(3)	22.382	117	11451	0.158
98) 1,2-Dichlorobenzene	(3)	22.425	146	22084	0.145
99) 1,2-Dibromo-3-chloropropane	(3)	23.579	157	11720	0.157
100) Hexachlorobutadiene	(3)	24.524	225	22166	0.232
101) 1,2,4-Trichlorobenzene	(3)	24.653	180	21126	0.203
102) Naphthalene	(3)	25.240	128	36202	0.178

Digitally signed by Alexander D. Sechrist
on 08/27/2018 at 13:54.
Target 3.5 esignature user ID: ads07818

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug24.b/fh00584.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 22:35 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all1
Calibration date and time: 26-AUG-2018 17:18
Date, time and analyst ID of latest file update: 27-Aug-2018 13:54 ads07818

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

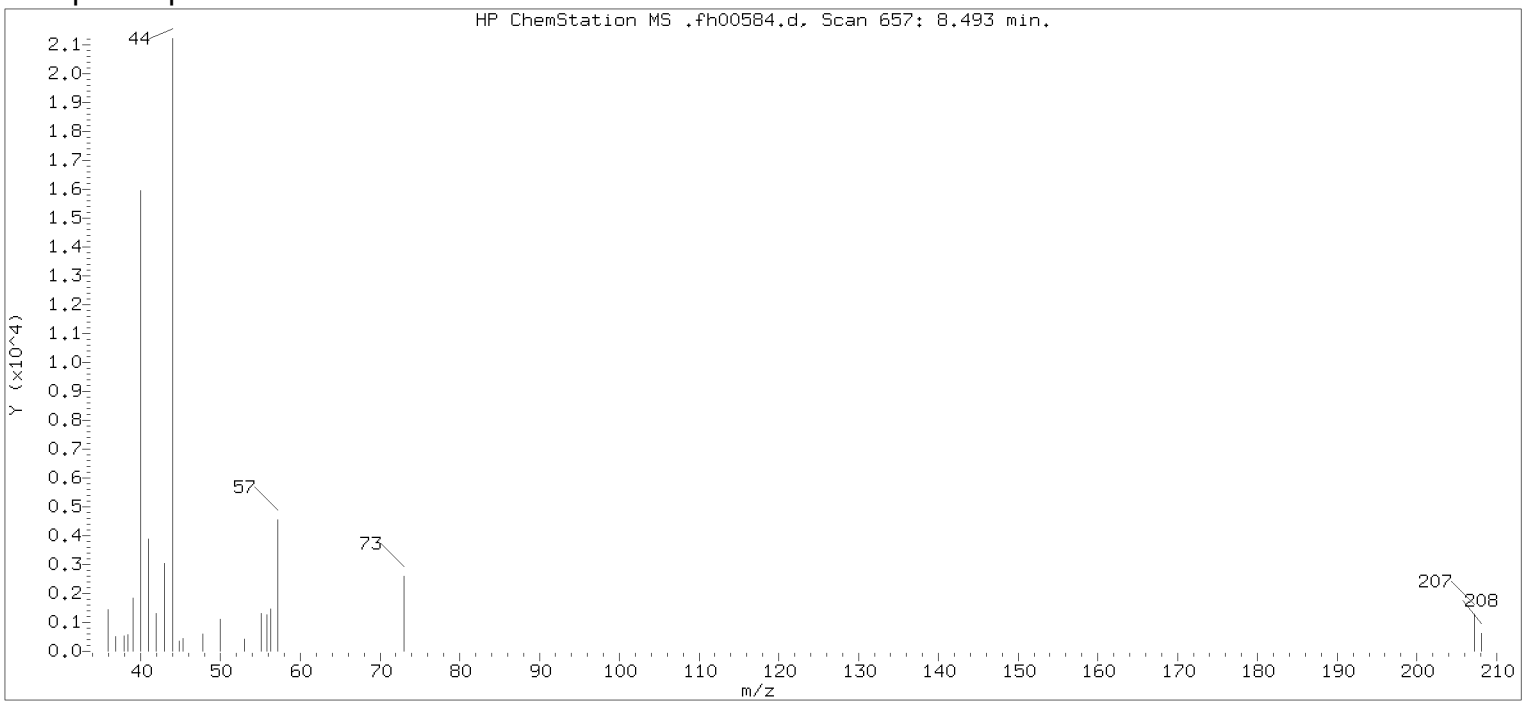
Compound Number : 27
Compound Name : Methyl t-Butyl Ether
Scan Number : 658
Retention Time (minutes): 8.500
Quant Ion : 73.00
Area (flag) : 22678M
Concentration (ppb(v)) : 0.1590
Integration start scan : 649 Integration stop scan: 670
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

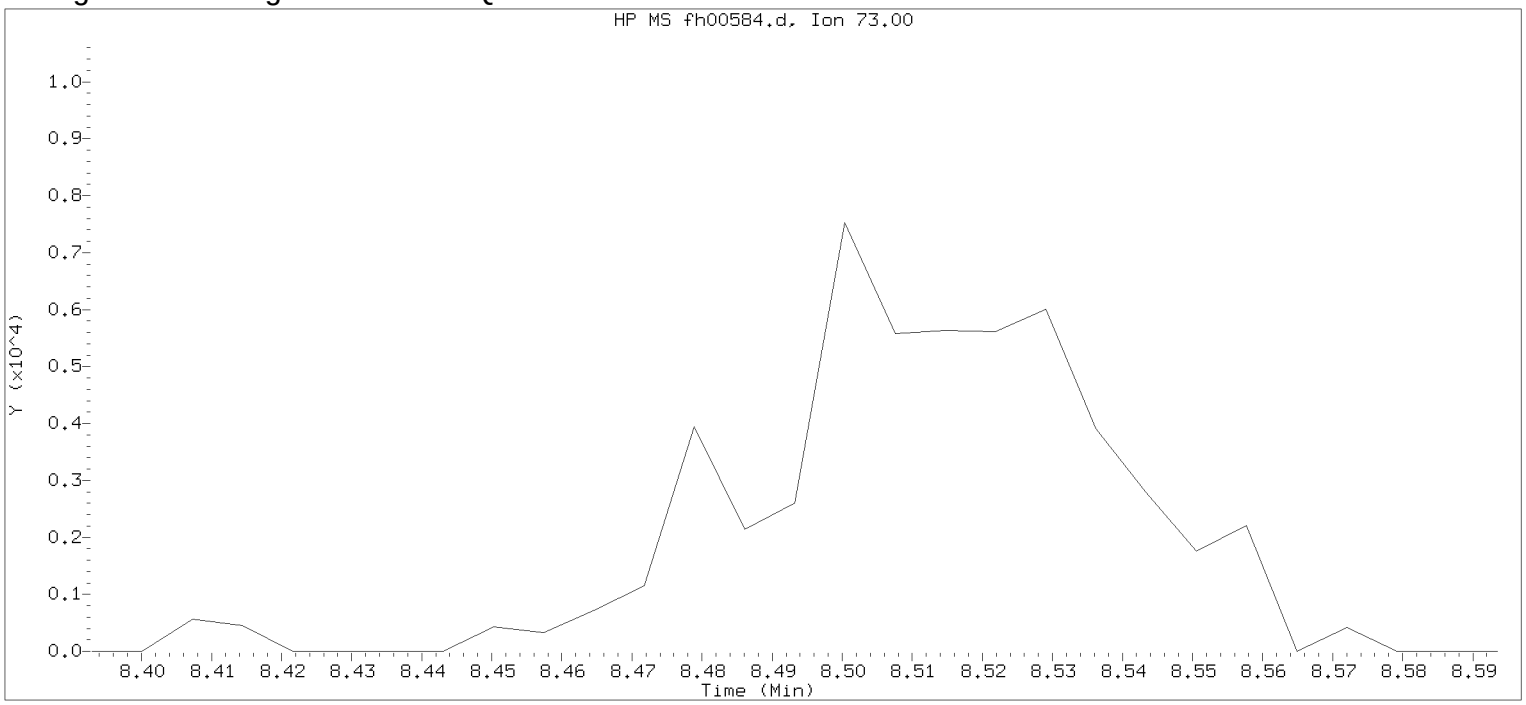
Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 08/27/2018 at 13:54.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Alexander D. Sechrist on 08/27/2018 at 13:53.
PARALLAX ID: ads07818

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug24.b/fh00584.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 22:35 Analyst ID: jeb07445

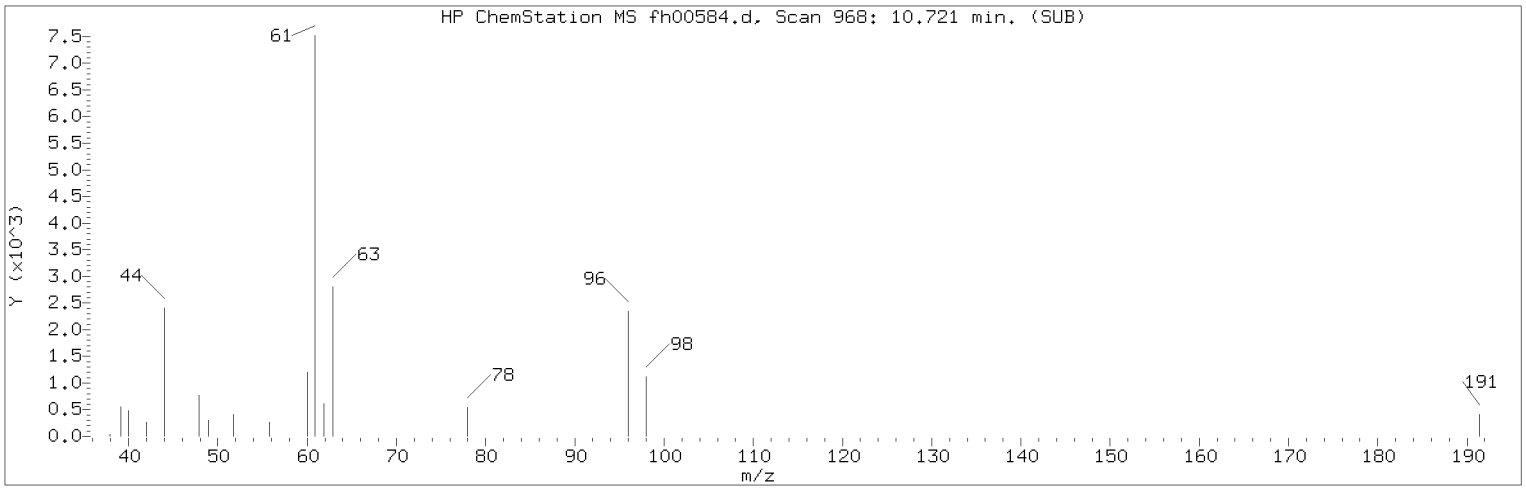
Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 24-AUG-2018 18:18
Date, time and analyst ID of latest file update: 24-Aug-2018 23:06 Unknown

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

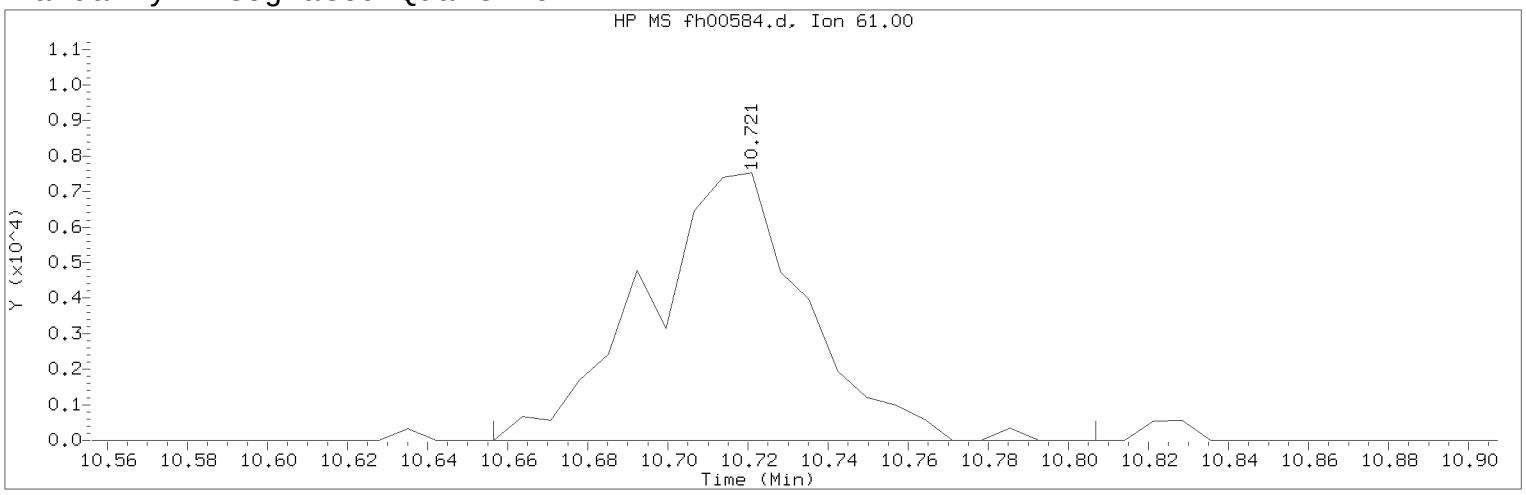
Compound Number : 27
Compound Name : Methyl t-Butyl Ether
Expected RT (minutes) : 8.493
Quant Ion : 73.00

Digitally signed by Alexander D. Sechrist on 08/27/2018 at 13:54.
Target 3.5 esignature user ID: ads07818

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug24.b/fh00584.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 22:35 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all1
Calibration date and time: 26-AUG-2018 17:18
Date, time and analyst ID of latest file update: 27-Aug-2018 13:54 ads07818

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

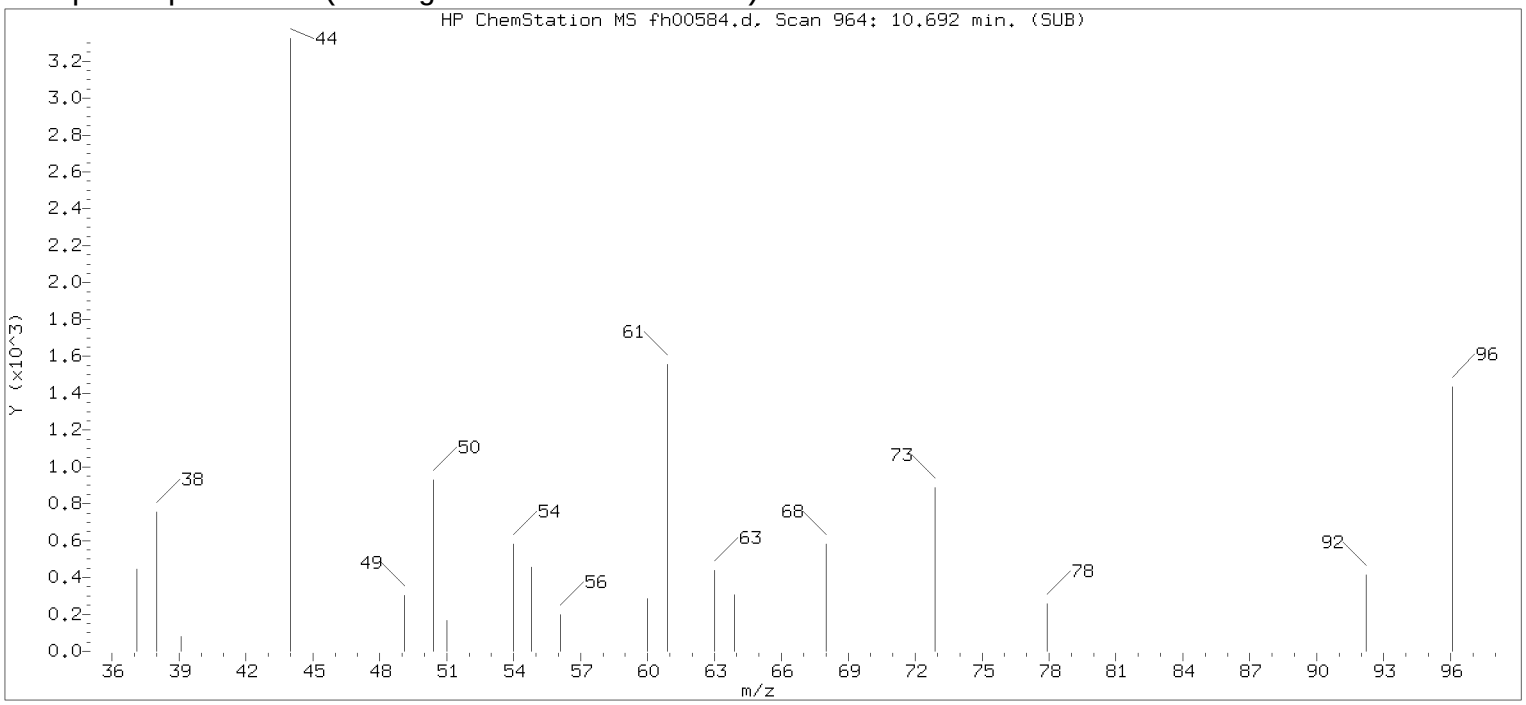
Compound Number : 35
Compound Name : cis-1,2-Dichloroethene
Scan Number : 968
Retention Time (minutes): 10.721
Quant Ion : 61.00
Area (flag) : 20811M
Concentration (ppb(v)) : 0.1908
Integration start scan : 958 Integration stop scan: 979
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

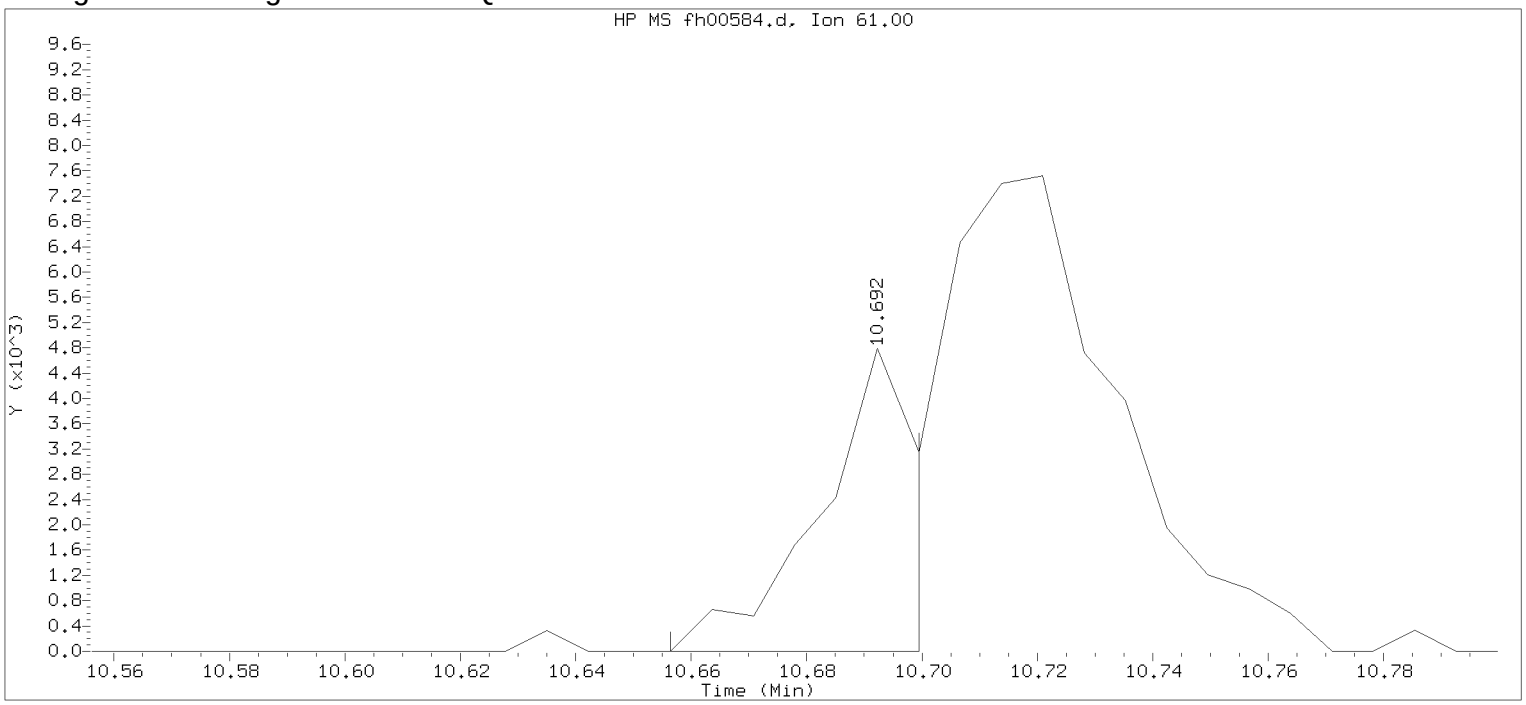
Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 08/27/2018 at 13:54.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Alexander D. Sechrist on 08/27/2018 at 13:53.
PARALLAX ID: ads07818

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



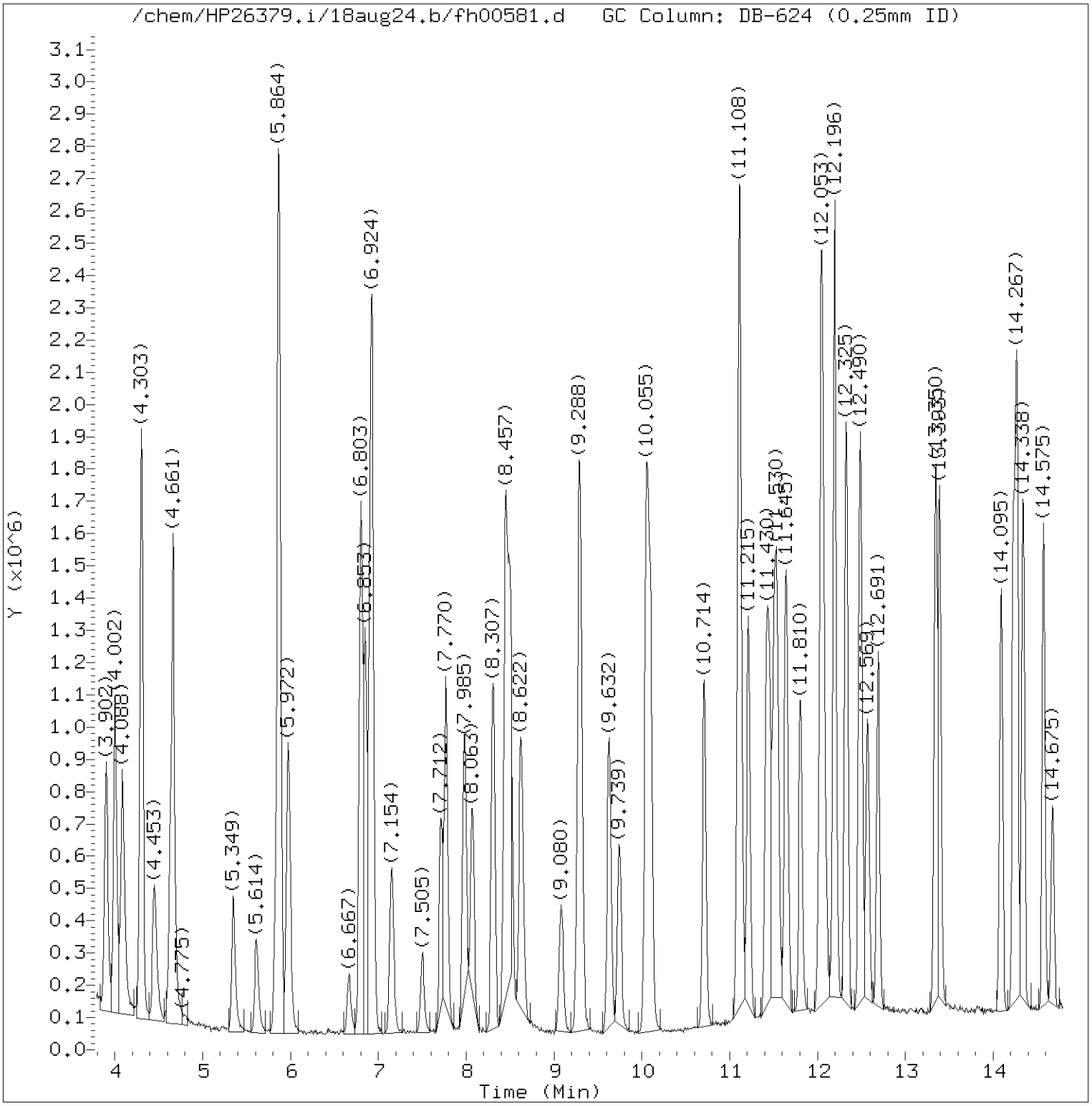
Data File: /chem/HP26379.i/18aug24.b/fh00584.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 22:35 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 24-AUG-2018 18:18
Date, time and analyst ID of latest file update: 24-Aug-2018 23:06 Unknown

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

Compound Number : 35
Compound Name : cis-1,2-Dichloroethene
Scan Number : 964
Retention Time (minutes): 10.692
Quant Ion : 61.00
Area : 5027
Concentration (ppb(v)) : 0.0487
Integration start scan : 958 Integration stop scan: 964
Y at integration start : 0 Y at integration end: 0

Digitally signed by Alexander D. Sechrist on 08/27/2018 at 13:54.
Target 3.5 esignature user ID: 1 at 07:13



Total Ion Chromatogram (TIC)

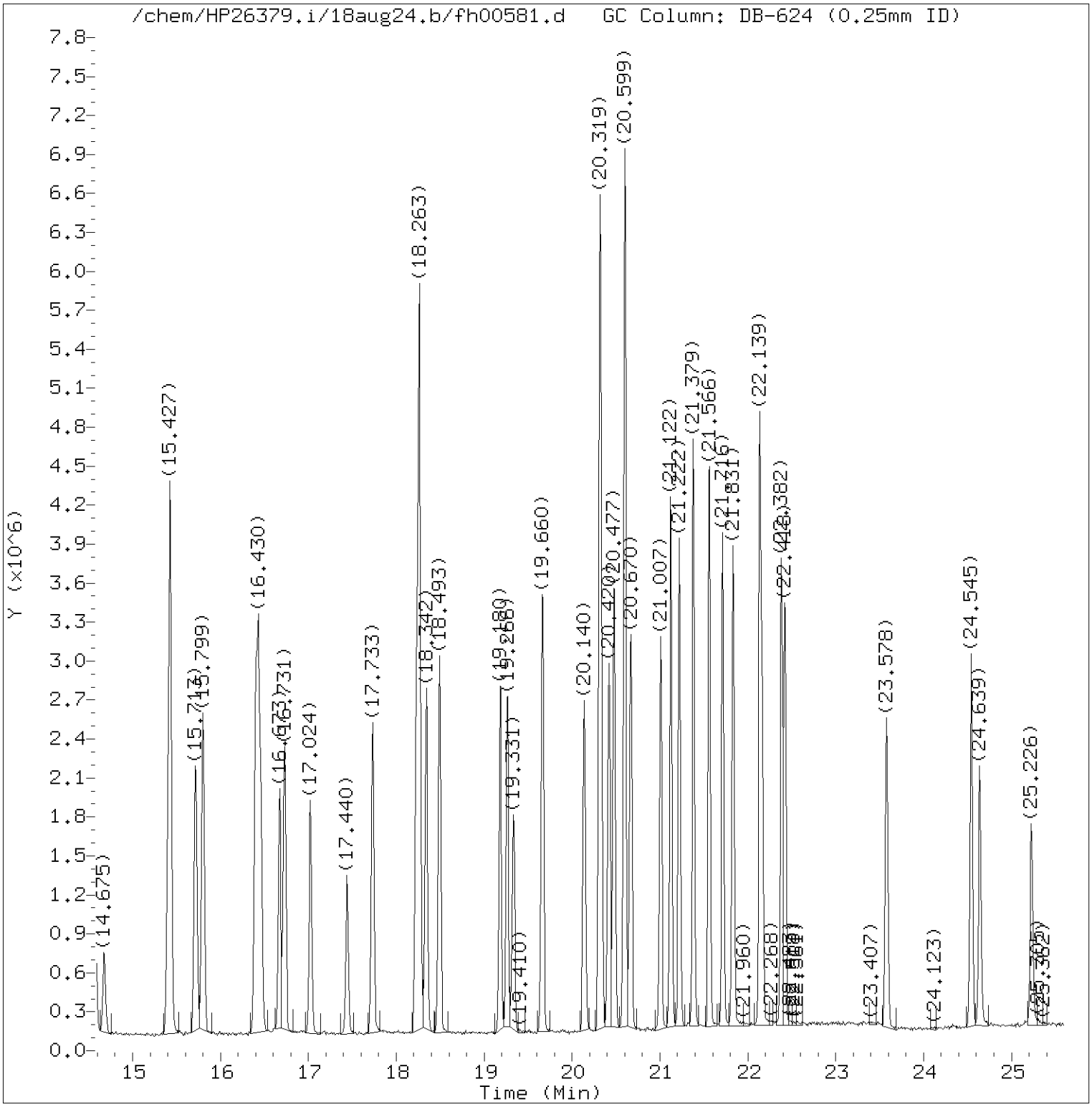
Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00581.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 21:03 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all1
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:01 jeb07445

Sample Name: LCSF30 Lab Sample ID: LCSF30

Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00581.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 21:03 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all1
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:01 jeb07445

Sample Name: LCSF30 Lab Sample ID: LCSF30

Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00581.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 21:03 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all1
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:01 jeb07445

Sample Name: LCSF30 Lab Sample ID: LCSF30

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	686579	9.904
2) Dichlorodifluoromethane	(1)	4.002	85	1476562	10.940
3) Chlorodifluoromethane	(1)	4.088	51	1779031	10.856
4) Freon 114	(1)	4.303	85	1515306	10.505
5) Chloromethane	(1)	4.453	50	904487	10.336
6) Vinyl Chloride	(1)	4.632	62	747456	10.891
7) 1,3-Butadiene	(1)	4.661	54	685086	10.251
8) Bromomethane	(1)	5.349	94	469007	11.299
9) Chloroethane	(1)	5.614	64	426003	11.181
10) Bromoethene	(1)	5.836	106	432410	10.611
11) Pentane	(1)	5.864	43	1443479	9.854
12) Trichlorofluoromethane	(1)	5.871	101	1348043	10.173
13) Dichlorofluoromethane	(1)	5.972	67	1517992	11.330
14) Ethanol	(1)	6.659	45	284154	9.614
15) Freon123a	(1)	6.803	67	1457575	11.092
16) 1,1-Dichloroethene	(1)	6.853	61	1290043	10.490
17) Freon 113	(1)	6.917	103	755424	9.607
18) Carbon Disulfide	(1)	6.932	76	1568820	10.640
19) Methyl Iodide	(1)	7.154	142	1001477	10.330
20) Acrolein	(1)	7.505	56	350436	10.907
21) Isopropanol	(1)	7.712	45	1315150	10.478
22) 3-Chloropropene	(1)	7.770	41	1311176	13.250
23) Methylene Chloride	(1)	7.977	84	553289	12.255
24) Acetone	(1)	8.070	43	1422590	11.001
25) trans-1,2-Dichloroethene	(1)	8.314	61	1222179	10.622
26) Hexane	(1)	8.457	56	940127	10.086
27) Methyl t-Butyl Ether	(1)	8.507	73	1445437	10.094
28) tert-Butyl Alcohol	(1)	8.622	59	1689938	10.728
29) Acetonitrile	(1)	9.080	41	774419	10.409
30) Di-Isopropyl Ether	(1)	9.295	45	2774582	9.903
31) 1,1-Dichloroethane	(1)	9.632	63	1580339	10.465
32) Acrylonitrile	(1)	9.739	53	778940	10.480
33) Ethyl Tert-Butyl Ether	(1)	10.055	59	2468714	10.061
34) Vinyl Acetate	(1)	10.105	43	2693799	12.084
35) cis-1,2-Dichloroethene	(1)	10.706	61	1098546	10.035
36) 1,2-Dichloroethene (total)	(1)		61	2320725	20.658
37)*Bromochloromethane	(1)	11.100	130	404155	10.000
38) Cyclohexane	(1)	11.122	56	1377788	9.911

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00581.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 21:03 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all1
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:01 jeb07445

Sample Name: LCSF30 Lab Sample ID: LCSF30

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	1250307	10.590
40) Ethyl Acetate	(1)	11.423	43	1980346	9.992
41) Methyl Acrylate	(1)	11.451	55	1636895	10.537
42) Carbon Tetrachloride	(1)	11.502	117	1006565	9.983
43) Tetrahydrofuran	(1)	11.545	42	1009630	10.707
44) 1,1,1-Trichloroethane	(1)	11.645	97	1168049	10.051
45) 2-Butanone	(1)	11.802	43	1897494M	10.337
46) Isooctane	(2)	12.053	57	4167475	10.635
47) Heptane	(2)	12.196	71	602177	10.674
48) Benzene	(2)	12.325	78	1849094	10.599
49) Tert-Amyl Methyl Ether	(2)	12.490	73	1414030	10.549
50) 1,2-Dichloroethane	(2)	12.691	62	1256067	11.046
51) Trichloroethene	(2)	13.350	130	629574	10.461
52)*1,4-Difluorobenzene	(2)	13.393	114	1350319	10.000
53) Dibromomethane	(2)	14.095	174	626342	10.753
54) Ethyl Acrylate	(2)	14.231	55	1962769	10.330
55) 1,2-Dichloropropane	(2)	14.267	63	1044084	10.375
56) Bromodichloromethane	(2)	14.338	83	1224498	10.333
57) Methyl Methacrylate	(2)	14.575	69	557612	9.938
58) 1,4-Dioxane	(2)	14.675	88	371777	10.253
59) cis-1,3-Dichloropropene	(2)	15.405	75	1025523	10.308
60) Octane	(3)	15.434	43	2220530	10.283
61) Toluene	(3)	15.799	91	1914974	9.704
62) 4-Methyl-2-Pentanone	(2)	16.401	43	2264968	9.996
63) Tetrachloroethene	(3)	16.430	166	932355	9.966
64) trans-1,3-Dichloropropene	(3)	16.466	75	901924	10.124
65) 1,3-Dichloropropene (total)	(3)		75	1927447	20.432
66) Ethyl Methacrylate	(3)	16.673	69	935636	9.497
67) 1,1,2-Trichloroethane	(3)	16.731	97	763737	9.730
68) Dibromochloromethane	(3)	17.024	127	790040	9.957
69) 1,2-Dibromoethane	(3)	17.440	107	1036628	9.553
70) 2-Hexanone	(3)	17.733	43	2026969	9.633
71)*Chlorobenzene-d5	(3)	18.228	117	1335873	10.000
72) Chlorobenzene	(3)	18.256	112	1571713	9.463
73) Ethylbenzene	(3)	18.271	91	2509484	9.445
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	775865	9.842
75) m/p-Xylene	(3)	18.493	91	1771908	9.154
76) o-Xylene	(3)	19.188	91	1754466	9.299

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

Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00581.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 21:03 Analyst ID: jeb07445

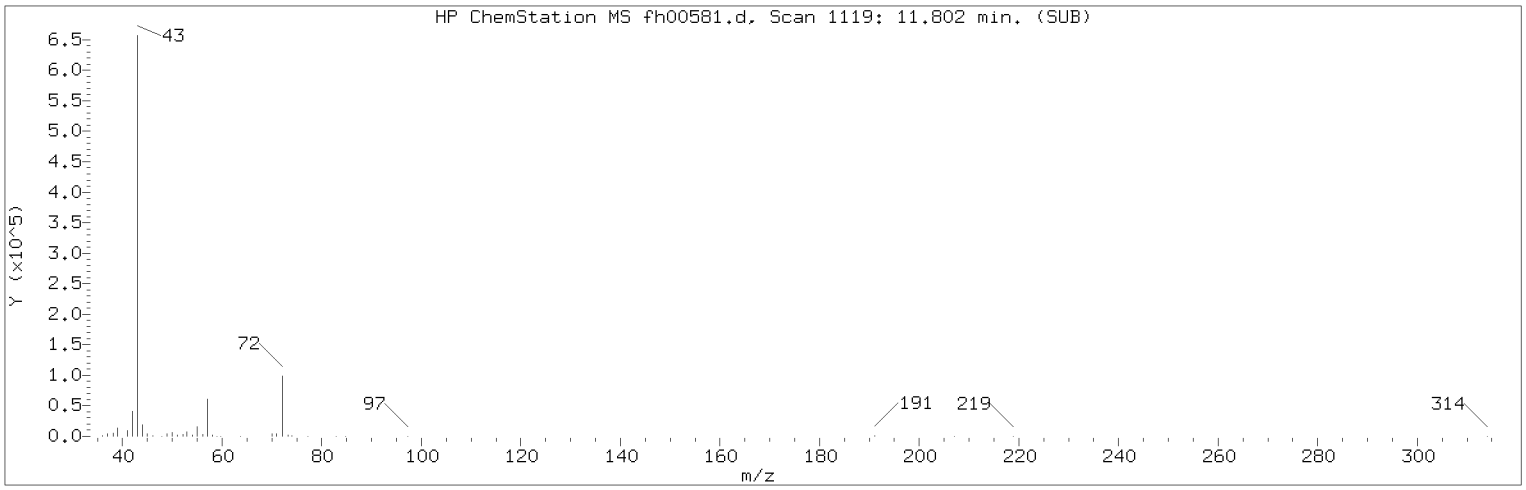
Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all1
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:01 jeb07445

Sample Name: LCSF30 Lab Sample ID: LCSF30

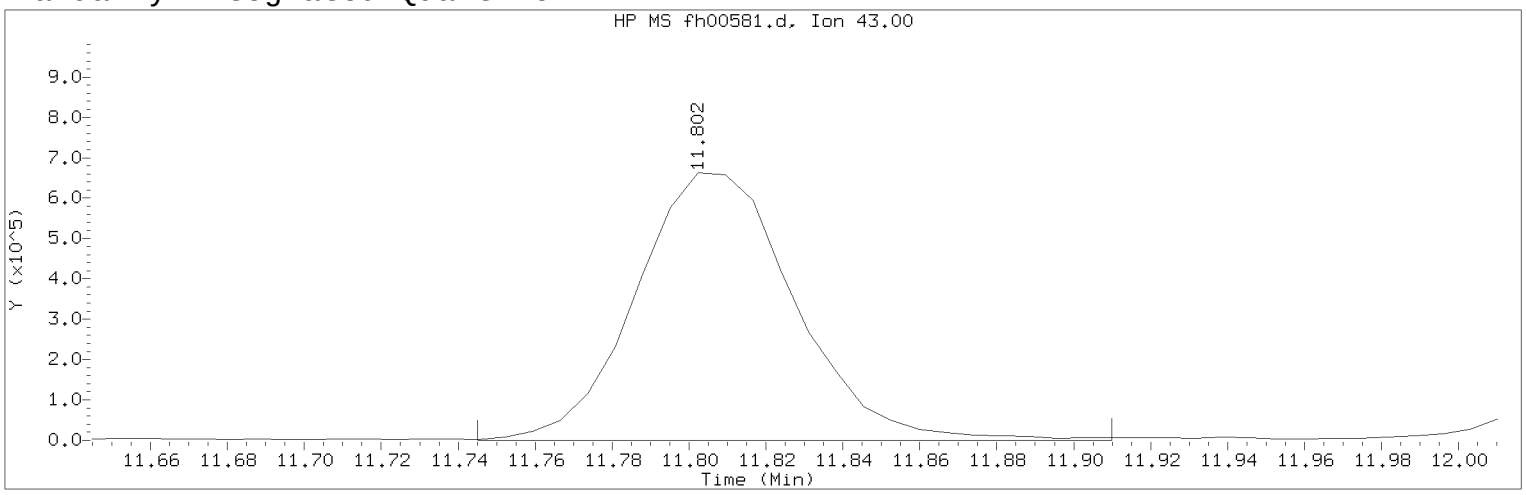
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	3526374	18.453
78) Styrene	(3)	19.259	104	1339273	9.803
79) Bromoform	(3)	19.331	173	950389	9.650
80) Cumene	(3)	19.660	105	2409359	9.295
81) n-Propylbenzene	(3)	20.319	120	685262	9.086
82) Bromobenzene	(3)	20.326	156	887783	9.536
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	1716700	9.062
84) 4-Ethyltoluene	(3)	20.484	105	2424428	9.063
85) 2-Chlorotoluene	(3)	20.599	126	671863	9.680
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	2171917	9.374
87) 1,2,3-Trichloropropane	(3)	20.670	110	461598	9.026
88) Alpha Methyl Styrene	(3)	21.007	118	951337	9.122
89) tert-Butylbenzene	(3)	21.129	119	1912728	9.242
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	2074582	9.251
91) sec-Butylbenzene	(3)	21.379	105	3150991	9.115
92) p-Isopropyltoluene	(3)	21.566	119	2352155	8.962
93) 1,3-Dichlorobenzene	(3)	21.716	146	1445511	8.734
94) 1,4-Dichlorobenzene	(3)	21.831	146	1410613	8.646
95) n-Butylbenzene	(3)	22.139	92	1502574	8.896
96) Benzyl Chloride	(3)	22.160	126	352091	9.733
97) Hexachloroethane	(3)	22.382	117	665774	9.080
98) 1,2-Dichlorobenzene	(3)	22.425	146	1308897	8.513
99) 1,2-Dibromo-3-chloropropane	(3)	23.578	157	620862	8.246
100) Hexachlorobutadiene	(3)	24.545	225	709550	7.363
101) 1,2,4-Trichlorobenzene	(3)	24.639	180	760604	7.240
102) Naphthalene	(3)	25.226	128	1556696	7.565

Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug24.b/fh00581.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 21:03 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all1
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:01 jeb07445

Sample Name: LCSF30 Lab Sample ID: LCSF30

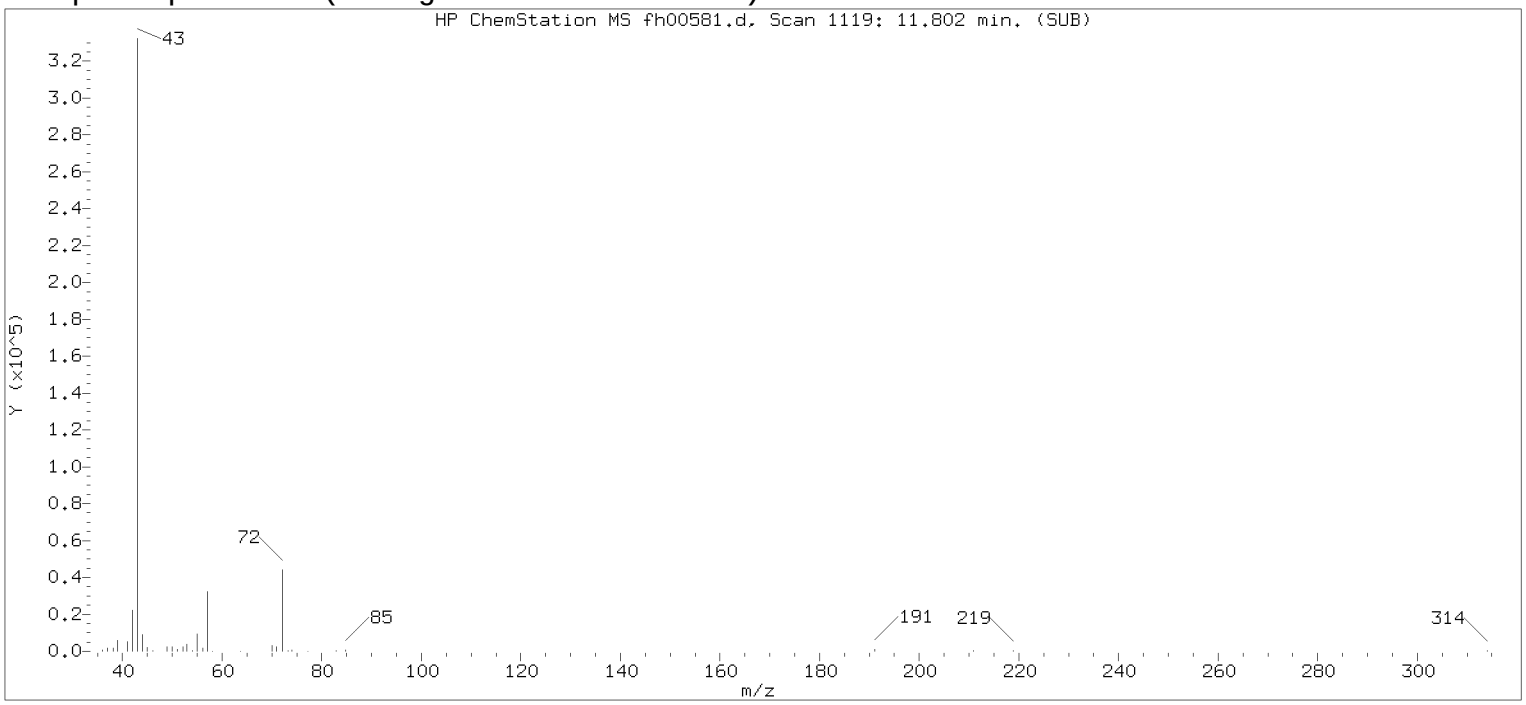
Compound Number : 45
Compound Name : 2-Butanone
Scan Number : 1119
Retention Time (minutes): 11.802
Quant Ion : 43.00
Area (flag) : 1897494M
Concentration (ppb(v)) : 10.3372
Integration start scan : 1110 Integration stop scan: 1133
Y at integration start : 546 Y at integration end: 546

Reason for manual integration: improper integration

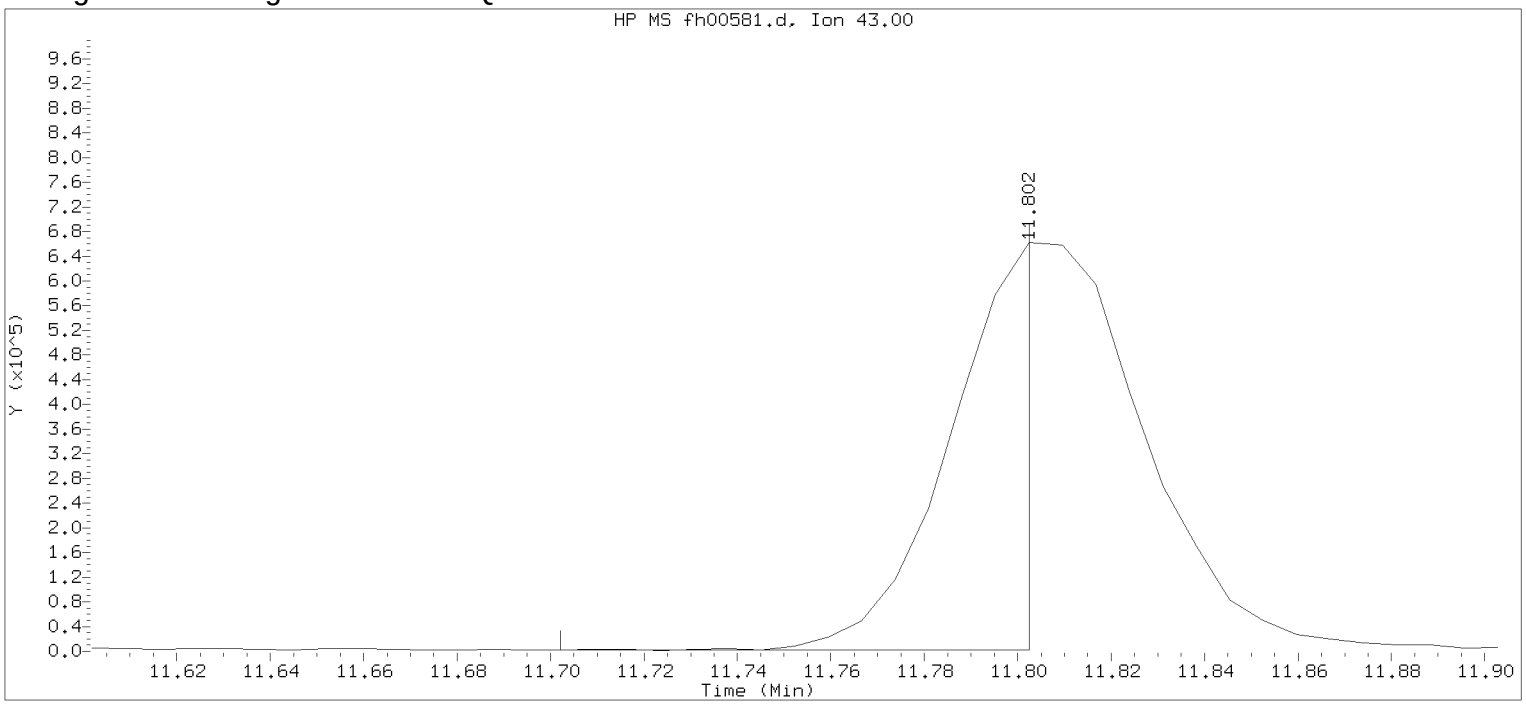
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Alexander D. Sechrist on 08/27/2018 at 13:50.
PARALLAX ID: ads07818

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug24.b/fh00581.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 21:03 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 24-AUG-2018 18:18
Date, time and analyst ID of latest file update: 24-Aug-2018 21:34 Unknown

Sample Name: LCSF30 Lab Sample ID: LCSF30

Compound Number : 45
Compound Name : 2-Butanone
Scan Number : 1119
Retention Time (minutes): 11.802
Quant Ion : 43.00
Area : 749756
Concentration (ppb(v)) : 4.1932
Integration start scan : 1104 Integration stop scan: 1118
Y at integration start : 1658 Y at integration end: 1658

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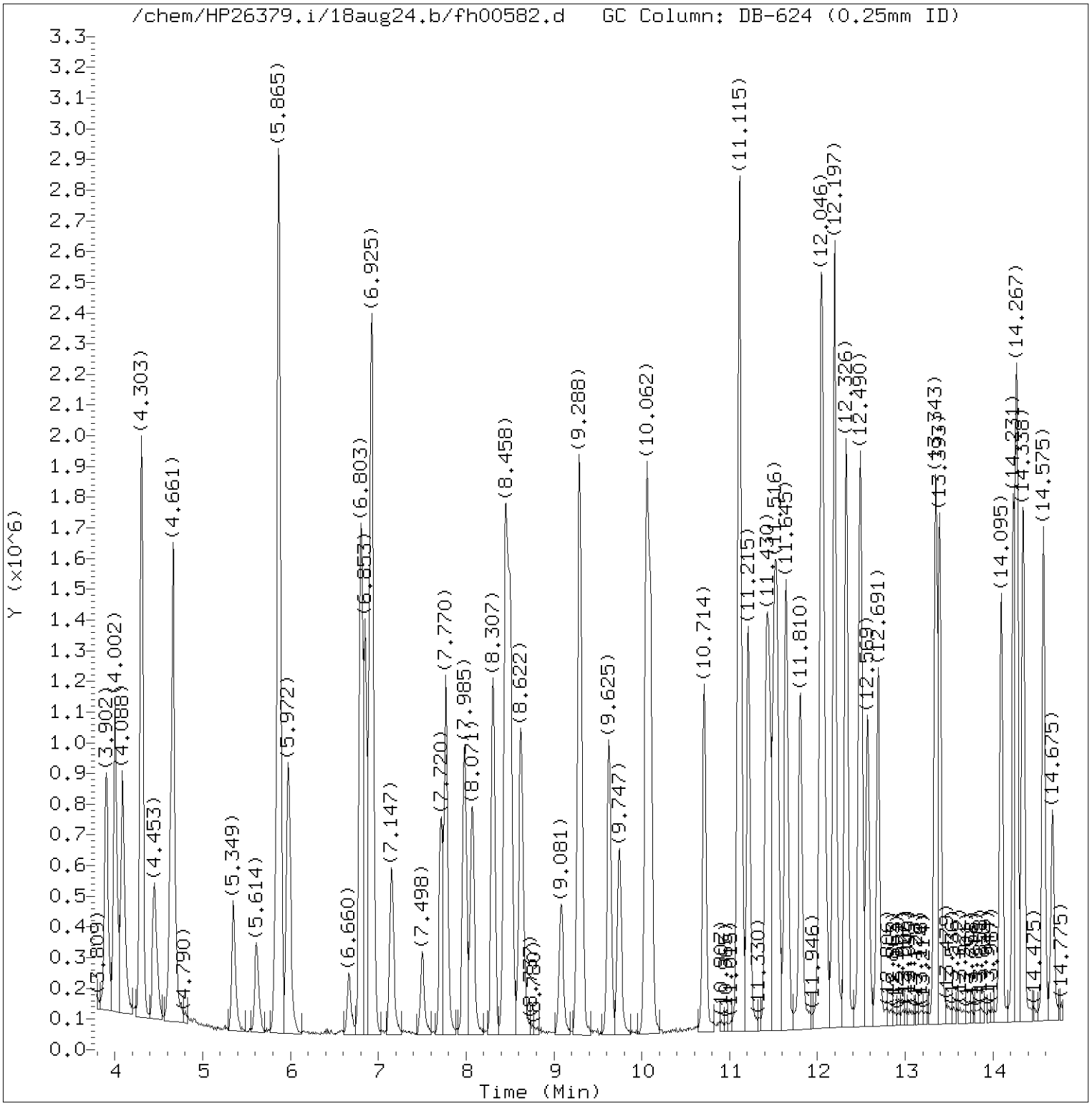
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

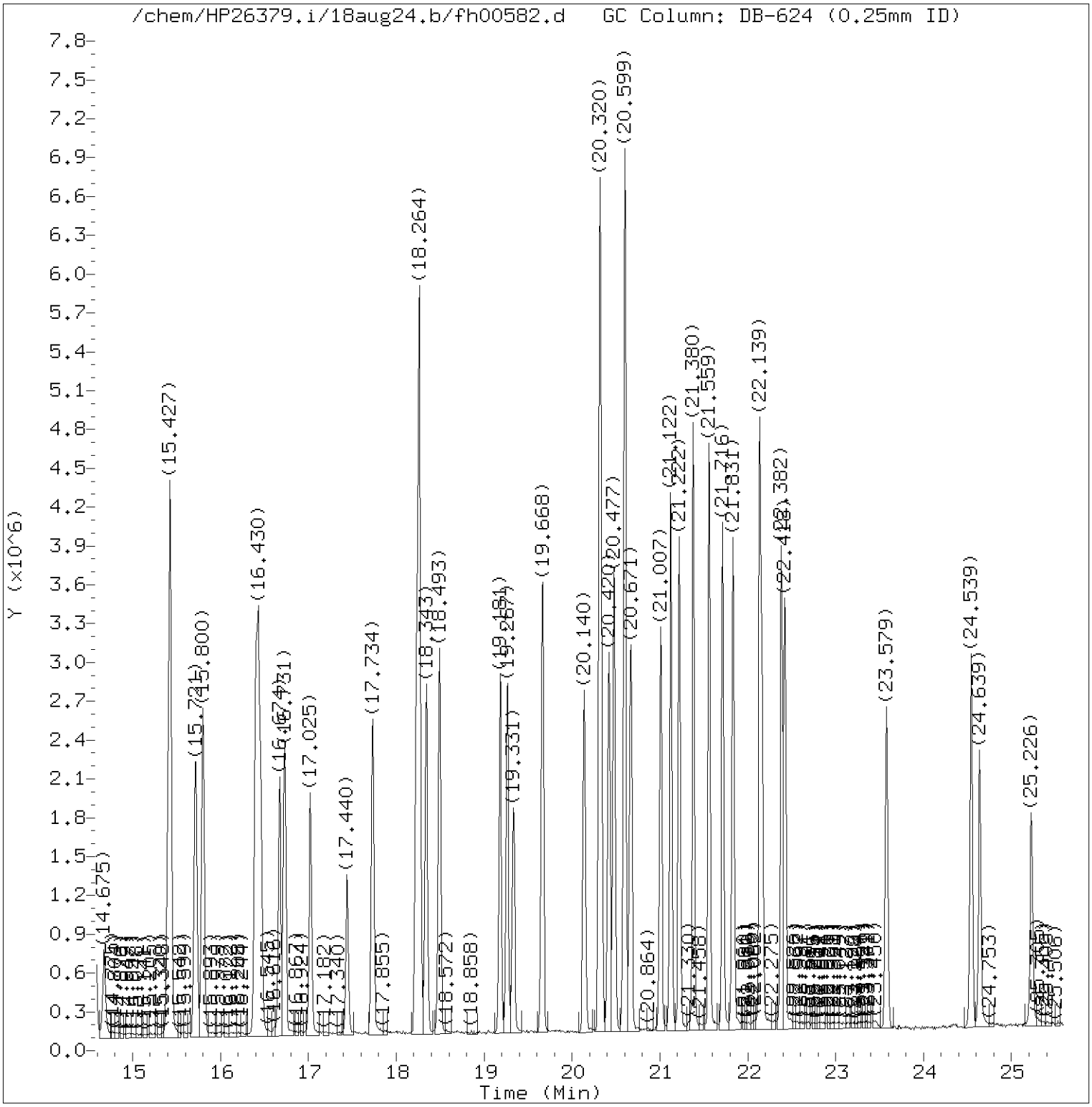
Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00582.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 21:34 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all1
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:01 jeb07445

Sample Name: LCSDF30 Lab Sample ID: LCSDF30

Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00582.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 21:34 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all1
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:01 jeb07445

Sample Name: LCSDF30 Lab Sample ID: LCSDF30

Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00582.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 21:34 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all1
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:01 jeb07445

Sample Name: LCSDF30 Lab Sample ID: LCSDF30

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	716905	10.235
2) Dichlorodifluoromethane	(1)	4.002	85	1549118	11.359
3) Chlorodifluoromethane	(1)	4.088	51	1837426	11.097
4) Freon 114	(1)	4.303	85	1564635	10.735
5) Chloromethane	(1)	4.453	50	955910	10.811
6) Vinyl Chloride	(1)	4.640	62	786167	11.338
7) 1,3-Butadiene	(1)	4.661	54	706903	10.468
8) Bromomethane	(1)	5.349	94	492374	11.740
9) Chloroethane	(1)	5.614	64	444834	11.555
10) Bromoethene	(1)	5.836	106	465151	11.297
11) Pentane	(1)	5.865	43	1525584	10.308
12) Trichlorofluoromethane	(1)	5.872	101	1382383	10.325
13) Dichlorofluoromethane	(1)	5.979	67	1583807	11.700
14) Ethanol	(1)	6.660	45	283398	9.490
15) Freon123a	(1)	6.803	67	1539112	11.592
16) 1,1-Dichloroethene	(1)	6.853	61	1378559	11.095
17) Freon 113	(1)	6.910	103	769639	9.687
18) Carbon Disulfide	(1)	6.932	76	1627750	10.926
19) Methyl Iodide	(1)	7.154	142	1040783	10.626
20) Acrolein	(1)	7.498	56	362694	11.173
21) Isopropanol	(1)	7.713	45	1402327	11.058
22) 3-Chloropropene	(1)	7.770	41	1389151	13.894
23) Methylene Chloride	(1)	7.978	84	543512	11.915
24) Acetone	(1)	8.064	43	1484370	11.360
25) trans-1,2-Dichloroethene	(1)	8.300	61	1274138	10.960
26) Hexane	(1)	8.450	56	965077	10.248
27) Methyl t-Butyl Ether	(1)	8.501	73	1512615	10.455
28) tert-Butyl Alcohol	(1)	8.622	59	1827368	11.481
29) Acetonitrile	(1)	9.088	41	809085	10.763
30) Di-Isopropyl Ether	(1)	9.296	45	2949234M	10.418
31) 1,1-Dichloroethane	(1)	9.625	63	1636052	10.723
32) Acrylonitrile	(1)	9.740	53	815209	10.855
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	2543431	10.259
34) Vinyl Acetate	(1)	10.105	43	2828831	12.559
35) cis-1,2-Dichloroethene	(1)	10.714	61	1194515	10.800
36) 1,2-Dichloroethene (total)	(1)		61	2468653	21.760
37)*Bromochloromethane	(1)	11.108	130	408346	10.000
38) Cyclohexane	(1)	11.122	56	1451159	10.332

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

Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00582.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 21:34 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all1
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:01 jeb07445

Sample Name: LCSDF30 Lab Sample ID: LCSDF30

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	1257913	10.545
40) Ethyl Acetate	(1)	11.416	43	2073602	10.355
41) Methyl Acrylate	(1)	11.452	55	1697282	10.813
42) Carbon Tetrachloride	(1)	11.509	117	1053606	10.343
43) Tetrahydrofuran	(1)	11.545	42	1047117	10.991
44) 1,1,1-Trichloroethane	(1)	11.645	97	1165875	9.930
45) 2-Butanone	(1)	11.810	43	2001594	10.792
46) Isooctane	(2)	12.053	57	4349315	10.678
47) Heptane	(2)	12.197	71	622468	10.616
48) Benzene	(2)	12.326	78	1881639	10.377
49) Tert-Amyl Methyl Ether	(2)	12.490	73	1456176	10.451
50) 1,2-Dichloroethane	(2)	12.691	62	1299045	10.991
51) Trichloroethene	(2)	13.350	130	643874	10.293
52)*1,4-Difluorobenzene	(2)	13.393	114	1403532	10.000
53) Dibromomethane	(2)	14.095	174	656137	10.838
54) Ethyl Acrylate	(2)	14.231	55	2051748	10.389
55) 1,2-Dichloropropane	(2)	14.267	63	1082331	10.347
56) Bromodichloromethane	(2)	14.346	83	1286651	10.445
57) Methyl Methacrylate	(2)	14.575	69	575891	9.874
58) 1,4-Dioxane	(2)	14.675	88	371080	9.846
59) cis-1,3-Dichloropropene	(2)	15.406	75	1031704	9.977
60) Octane	(3)	15.427	43	2272323	10.145
61) Toluene	(3)	15.800	91	1971144	9.630
62) 4-Methyl-2-Pentanone	(2)	16.401	43	2348129	9.970
63) Tetrachloroethene	(3)	16.430	166	969373	9.990
64) trans-1,3-Dichloropropene	(3)	16.459	75	931756	10.084
65) 1,3-Dichloropropene (total)	(3)		75	1963460	20.061
66) Ethyl Methacrylate	(3)	16.674	69	945856	9.256
67) 1,1,2-Trichloroethane	(3)	16.731	97	787079	9.667
68) Dibromochloromethane	(3)	17.025	127	810836	9.853
69) 1,2-Dibromoethane	(3)	17.440	107	1060990	9.426
70) 2-Hexanone	(3)	17.734	43	2083567	9.546
71)*Chlorobenzene-d5	(3)	18.228	117	1385609	10.000
72) Chlorobenzene	(3)	18.257	112	1581789	9.181
73) Ethylbenzene	(3)	18.271	91	2610202	9.472
74) 1,1,1,2-Tetrachloroethane	(3)	18.343	131	765096	9.357
75) m/p-Xylene	(3)	18.493	91	1827102	9.100
76) o-Xylene	(3)	19.181	91	1798620	9.191

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug24.b/fh00582.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 21:34 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all1
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:01 jeb07445

Sample Name: LCSDF30 Lab Sample ID: LCSDF30

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	3625722	18.291
78) Styrene	(3)	19.267	104	1407032	9.930
79) Bromoform	(3)	19.331	173	984042	9.633
80) Cumene	(3)	19.668	105	2494443	9.278
81) n-Propylbenzene	(3)	20.312	120	693916	8.870
82) Bromobenzene	(3)	20.327	156	879937	9.112
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	1734551	8.828
84) 4-Ethyltoluene	(3)	20.477	105	2495000	8.992
85) 2-Chlorotoluene	(3)	20.599	126	646692	8.983
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	2168098	9.022
87) 1,2,3-Trichloropropane	(3)	20.671	110	456612	8.608
88) Alpha Methyl Styrene	(3)	21.007	118	967332	8.943
89) tert-Butylbenzene	(3)	21.122	119	1936965	9.024
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	2091928	8.993
91) sec-Butylbenzene	(3)	21.380	105	3193889	8.908
92) p-Isopropyltoluene	(3)	21.559	119	2372439	8.715
93) 1,3-Dichlorobenzene	(3)	21.716	146	1463879	8.528
94) 1,4-Dichlorobenzene	(3)	21.831	146	1446614	8.549
95) n-Butylbenzene	(3)	22.139	92	1487737	8.492
96) Benzyl Chloride	(3)	22.160	126	339558	9.050
97) Hexachloroethane	(3)	22.382	117	708470	9.316
98) 1,2-Dichlorobenzene	(3)	22.425	146	1333756	8.363
99) 1,2-Dibromo-3-chloropropane	(3)	23.579	157	622306	7.969
100) Hexachlorobutadiene	(3)	24.546	225	715955	7.163
101) 1,2,4-Trichlorobenzene	(3)	24.639	180	776535	7.126
102) Naphthalene	(3)	25.226	128	1625176	7.614

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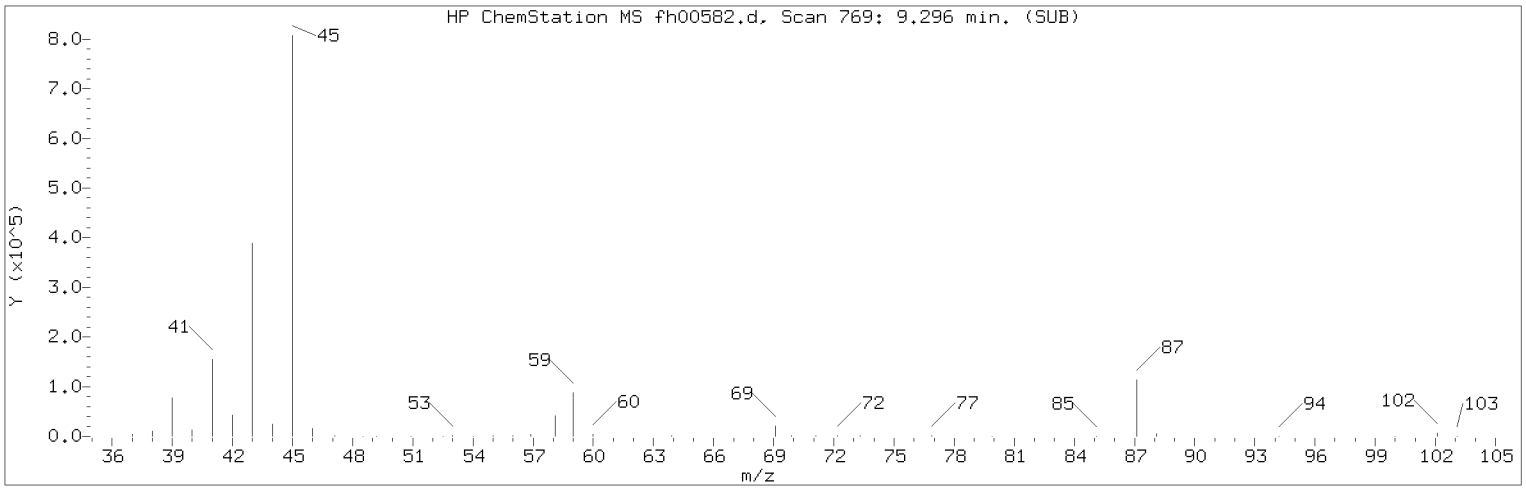
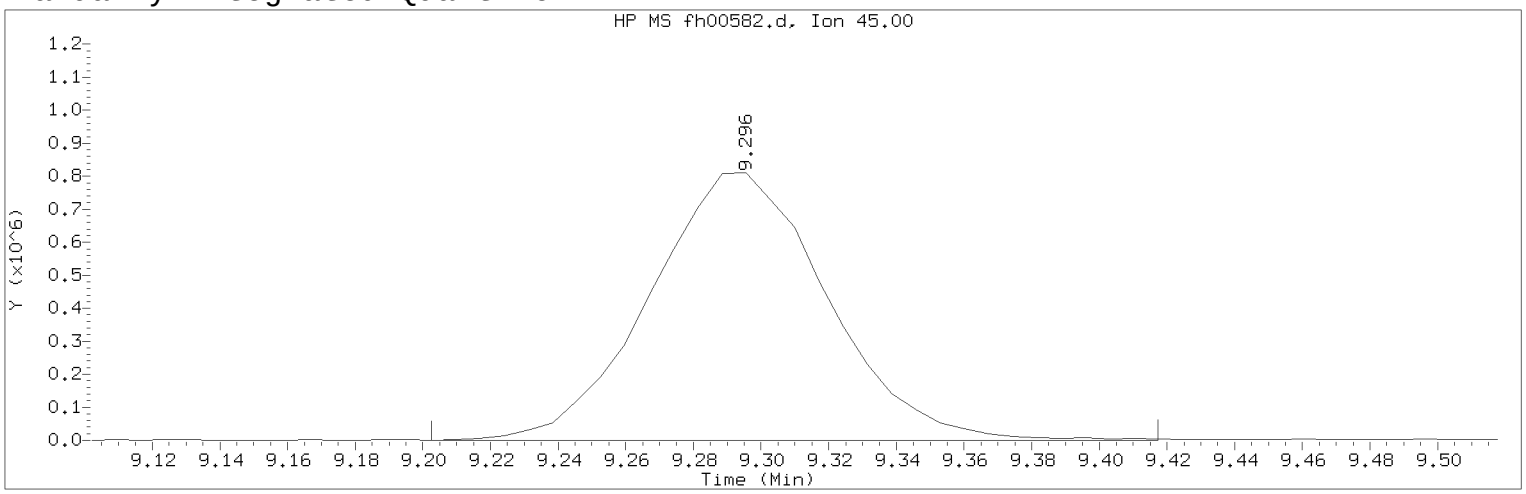
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug24.b/fh00582.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 21:34 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all1
Calibration date and time: 26-AUG-2018 17:00
Date, time and analyst ID of latest file update: 26-Aug-2018 17:01 jeb07445

Sample Name: LCSDF30 Lab Sample ID: LCSDF30

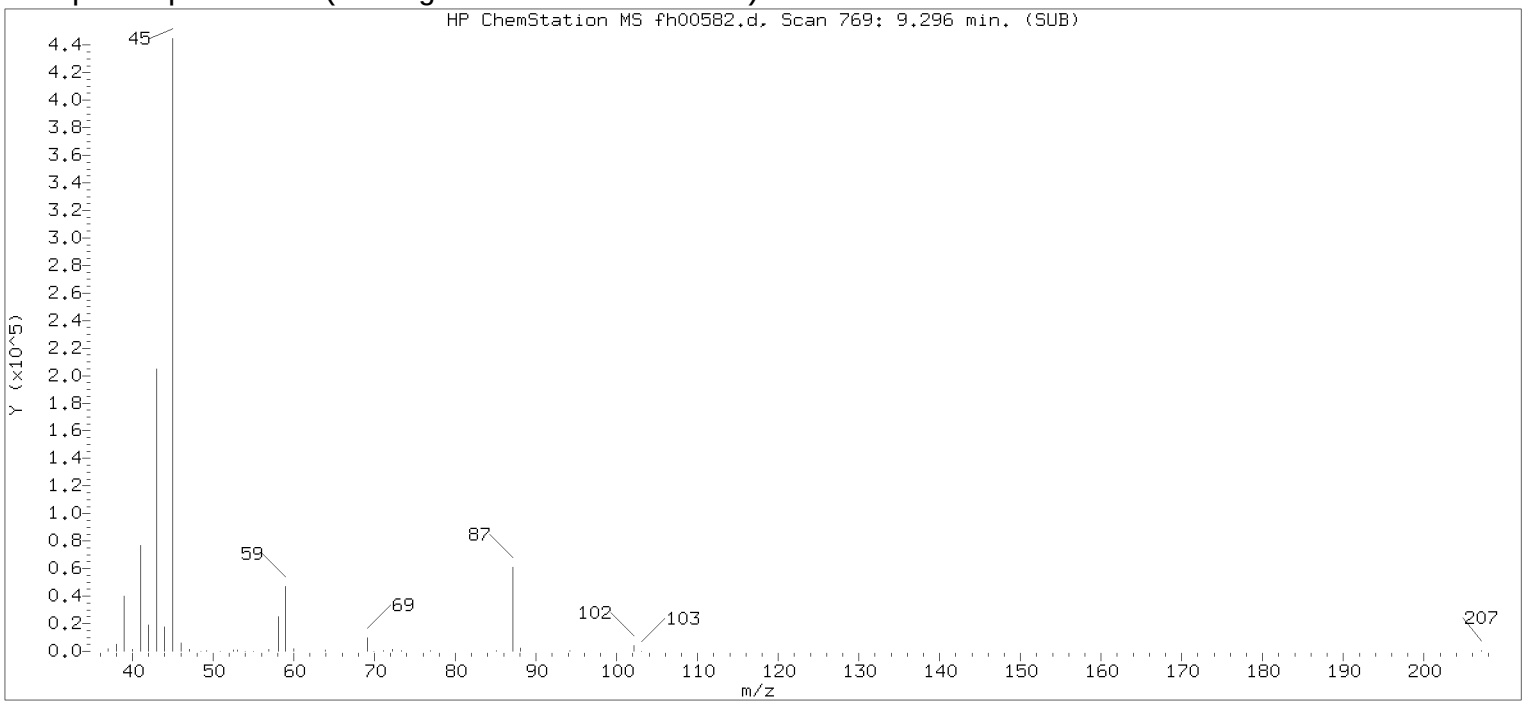
Compound Number : 30
Compound Name : Di-Isopropyl Ether
Scan Number : 769
Retention Time (minutes): 9.296
Quant Ion : 45.00
Area (flag) : 2949234M
Concentration (ppb(v)) : 10.4180
Integration start scan : 755 Integration stop scan: 785
Y at integration start : 356 Y at integration end: 356

Reason for manual integration: improper integration

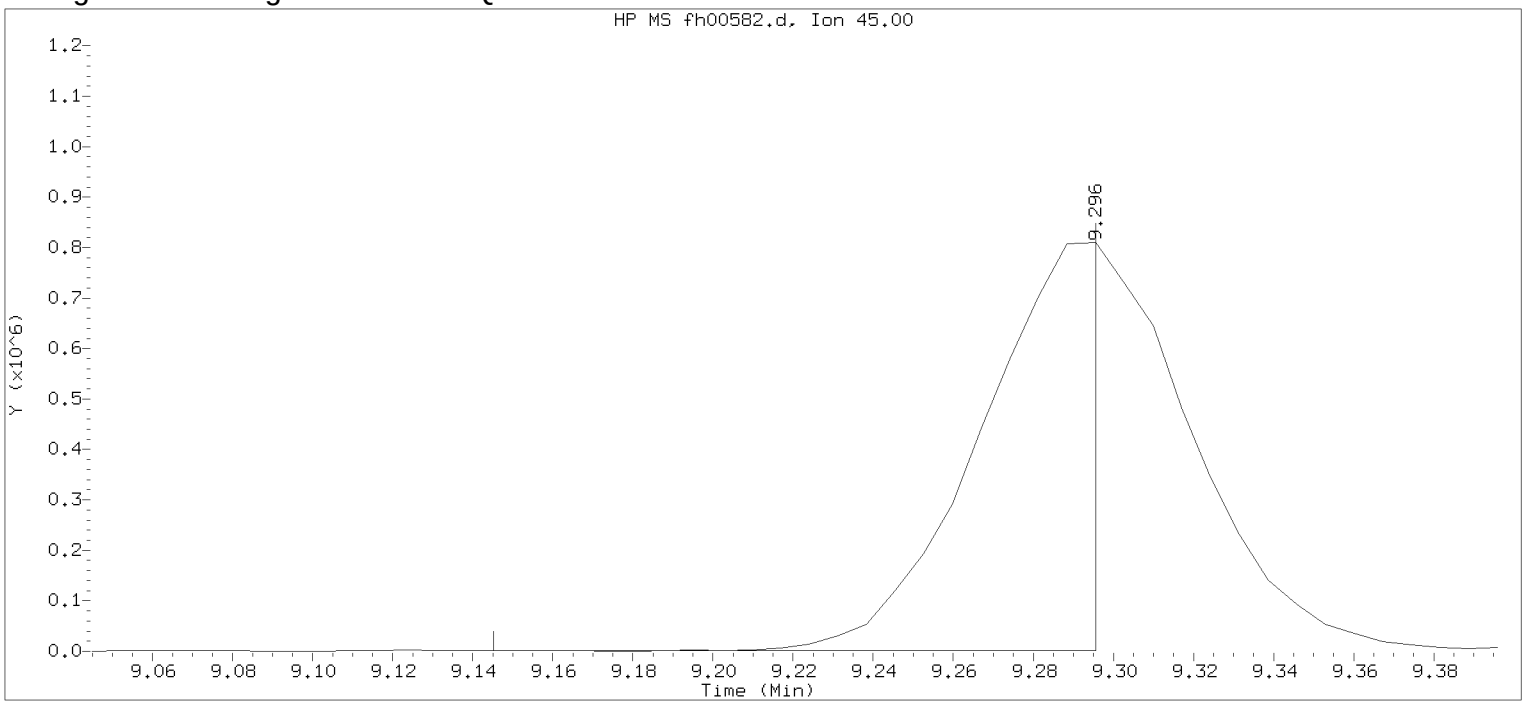
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Alexander D. Sechrist on 08/27/2018 at 13:50.
PARALLAX ID: ads07818

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug24.b/fh00582.d Instrument ID: HP26379.i
Injection date and time: 24-AUG-2018 21:34 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug24.b/to-15.m Sublist used: all
Calibration date and time: 24-AUG-2018 18:18
Date, time and analyst ID of latest file update: 24-Aug-2018 22:05 Unknown

Sample Name: LCSDF30 Lab Sample ID: LCSDF30

Compound Number : 30
Compound Name : Di-Isopropyl Ether
Scan Number : 769
Retention Time (minutes): 9.296
Quant Ion : 45.00
Area : 1566253
Concentration (ppb(v)) : 5.8552
Integration start scan : 747 Integration stop scan: 768
Y at integration start : 669 Y at integration end: 669

Digitally signed by Jacob E. Bailey on 08/26/2018 at 17:04.
Target 3.5 esignature user ID: jeb07445

Data File: /chem/HP26379.i/18aug27.b/fh00620.d

Date : 27-AUG-2018 12:20

Client ID: BFB

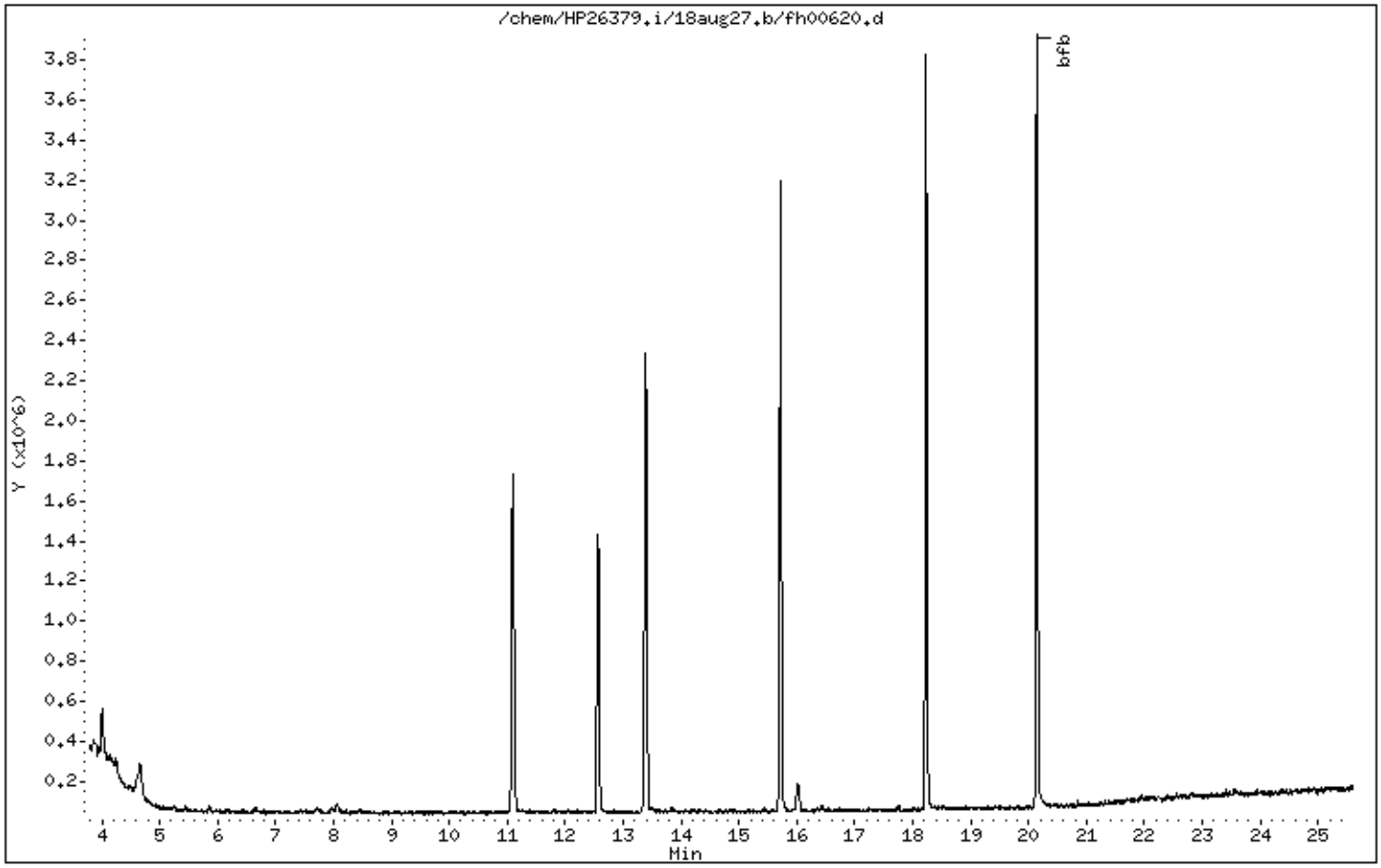
Instrument: HP26379.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25



Digitally signed by Jacob E. Bailey on 08/27/2018 at 15:27.
Target 3.5 esignature user ID: jeb07445

Data File: /chem/HP26379.i/18aug27.b/fh00620.d

Date : 27-AUG-2018 12:20

Client ID: BFB

Instrument: HP26379.i

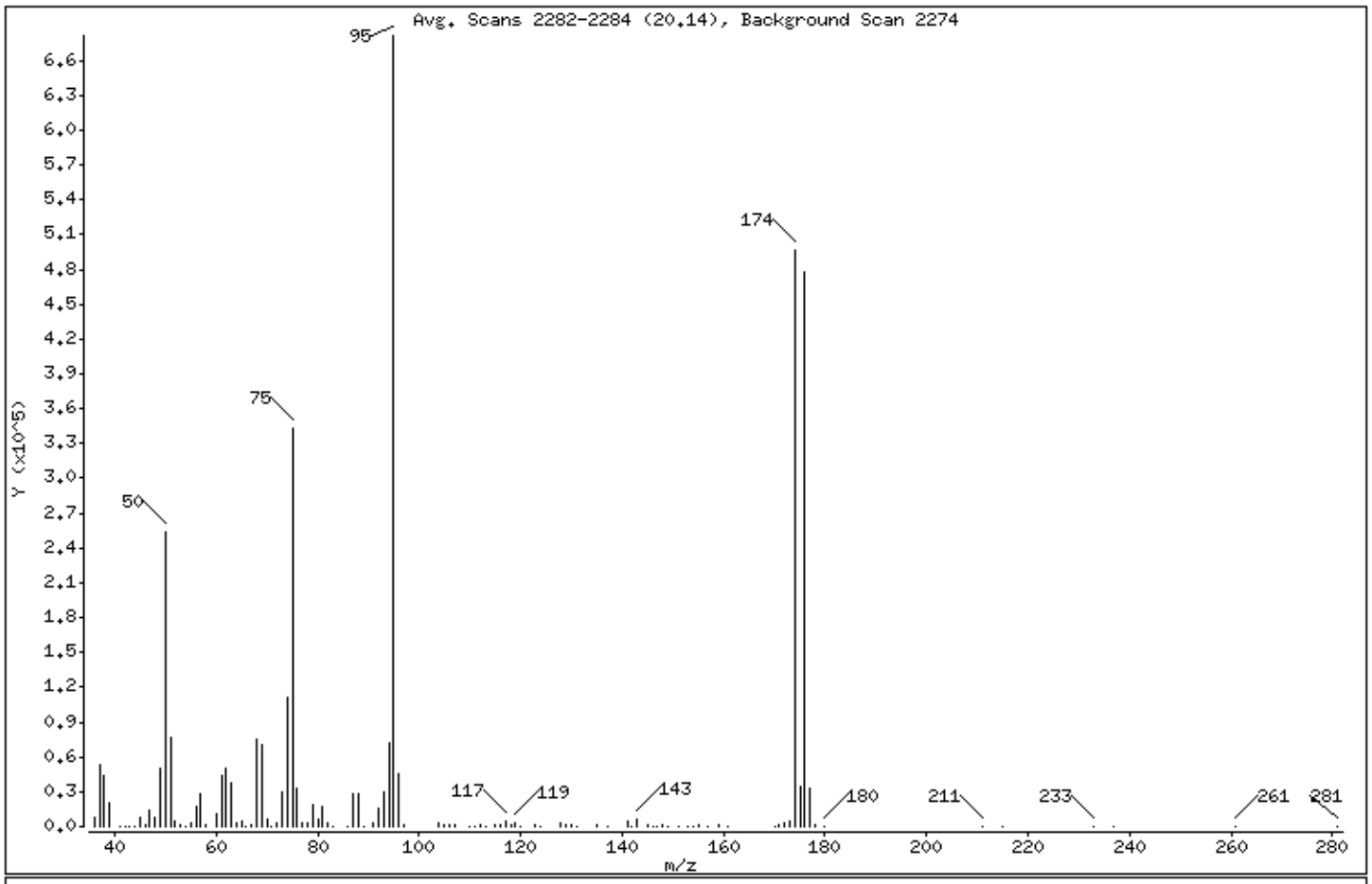
Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	37.35
75	30.00 - 66.00% of mass 95	50.23
96	5.00 - 9.00% of mass 95	6.68
173	Less than 2.00% of mass 174	0.58 (0.80)
174	50.00 - 120.00% of mass 95	72.93
175	4.00 - 9.00% of mass 174	5.07 (6.95)
176	93.00 - 101.00% of mass 174	70.03 (96.03)
177	5.00 - 9.00% of mass 176	4.79 (6.84)

Digitally signed by Jacob E. Bailey on 08/27/2018 at 15:27.
Target 3.5 esignature user ID: jeb07445

Date : 27-AUG-2018 12:20

Client ID: BFB Instrument: HP26379.i

Sample Info: 50NGBFB;;;BFB;0;;;

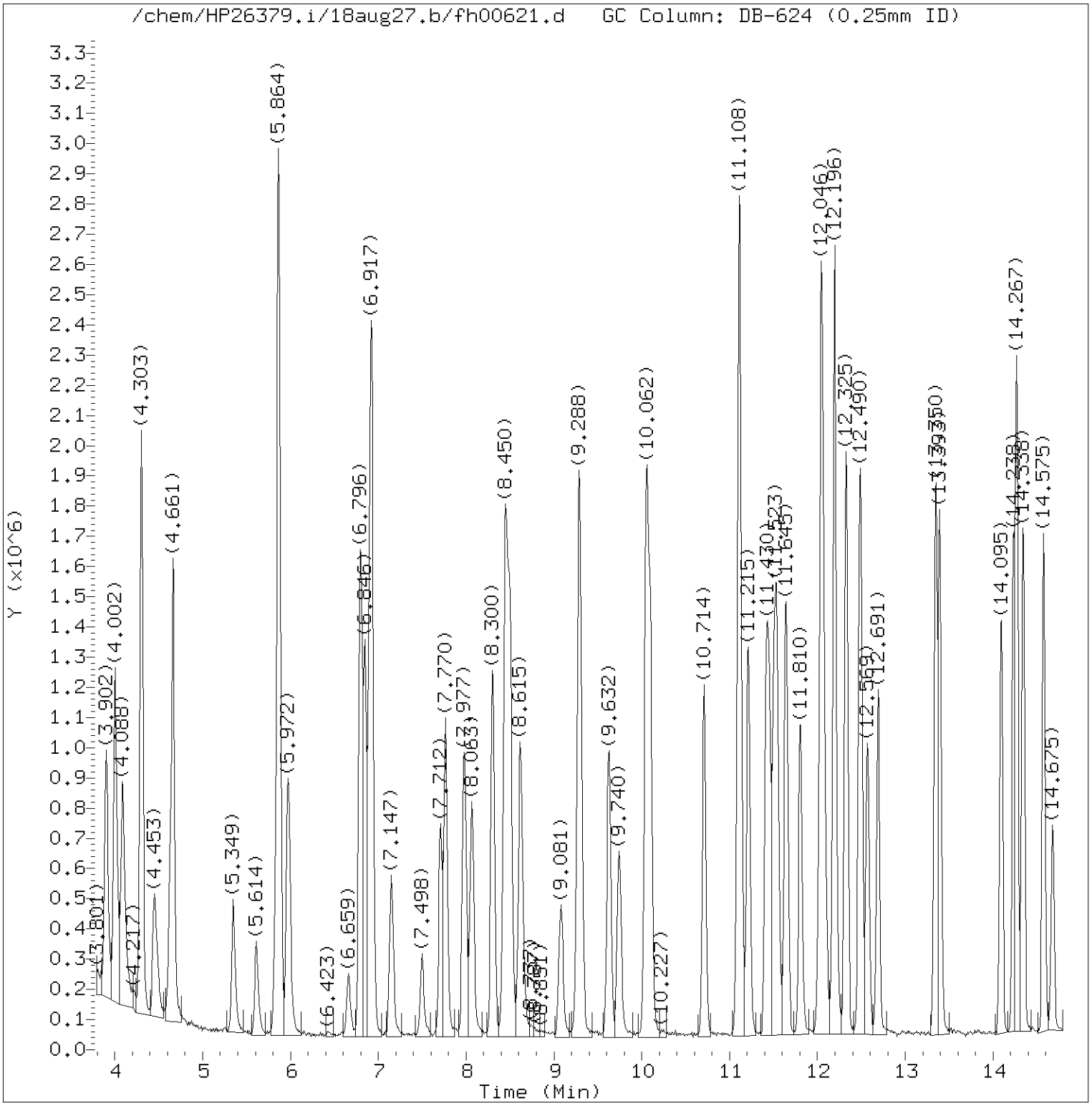
Operator: jeb07445

Column phase: DB-624 Column diameter: 0.25

Data File: fh00620.d
Spectrum: Avg. Scans 2282-2284 (20,14), Background Scan 2274
Location of Maximum: 95.00
Number of points: 110

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	7227	66.00	541	97.00	1857	147.00	682
37.00	53424	67.00	1483	104.00	3240	148.00	901
38.00	43216	68.00	74456	105.00	1222	149.00	310
39.00	20656	69.00	70840	106.00	2000	151.00	221
41.00	761	70.00	6175	107.00	898	153.00	560
42.00	248	71.00	174	110.00	126	154.00	233
43.00	778	72.00	2677	111.00	573	155.00	2032
44.00	173	73.00	29560	112.00	1051	157.00	549
45.00	8558	74.00	111528	113.00	523	159.00	944
46.00	1396	75.00	342208	115.00	858	161.00	176
47.00	14736	76.00	32336	116.00	1781	170.00	168
48.00	7110	77.00	3813	117.00	3994	171.00	791
49.00	50064	78.00	2684	118.00	1835	172.00	2638
50.00	254464	79.00	18784	119.00	2952	173.00	3961
51.00	76664	80.00	5512	120.00	317	174.00	496832
52.00	4292	81.00	17816	123.00	837	175.00	34536
53.00	835	82.00	3764	124.00	536	176.00	477120
54.00	135	83.00	386	128.00	2373	177.00	32648
55.00	3198	86.00	669	129.00	1011	178.00	904
56.00	17536	87.00	27552	130.00	1935	180.00	248
57.00	27768	88.00	28672	131.00	514	211.00	710
58.00	1251	89.00	567	135.00	1012	215.00	451
60.00	10358	91.00	2565	137.00	327	233.00	333
61.00	44536	92.00	16319	141.00	5075	237.00	153
62.00	49896	93.00	29968	142.00	522	261.00	134
63.00	38136	94.00	72048	143.00	5688	281.00	337
64.00	2625	95.00	681280	145.00	785		
65.00	4312	96.00	45536	146.00	619		

Digitally signed by Jacob E. Bailey on 08/27/2018 at 15:27.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

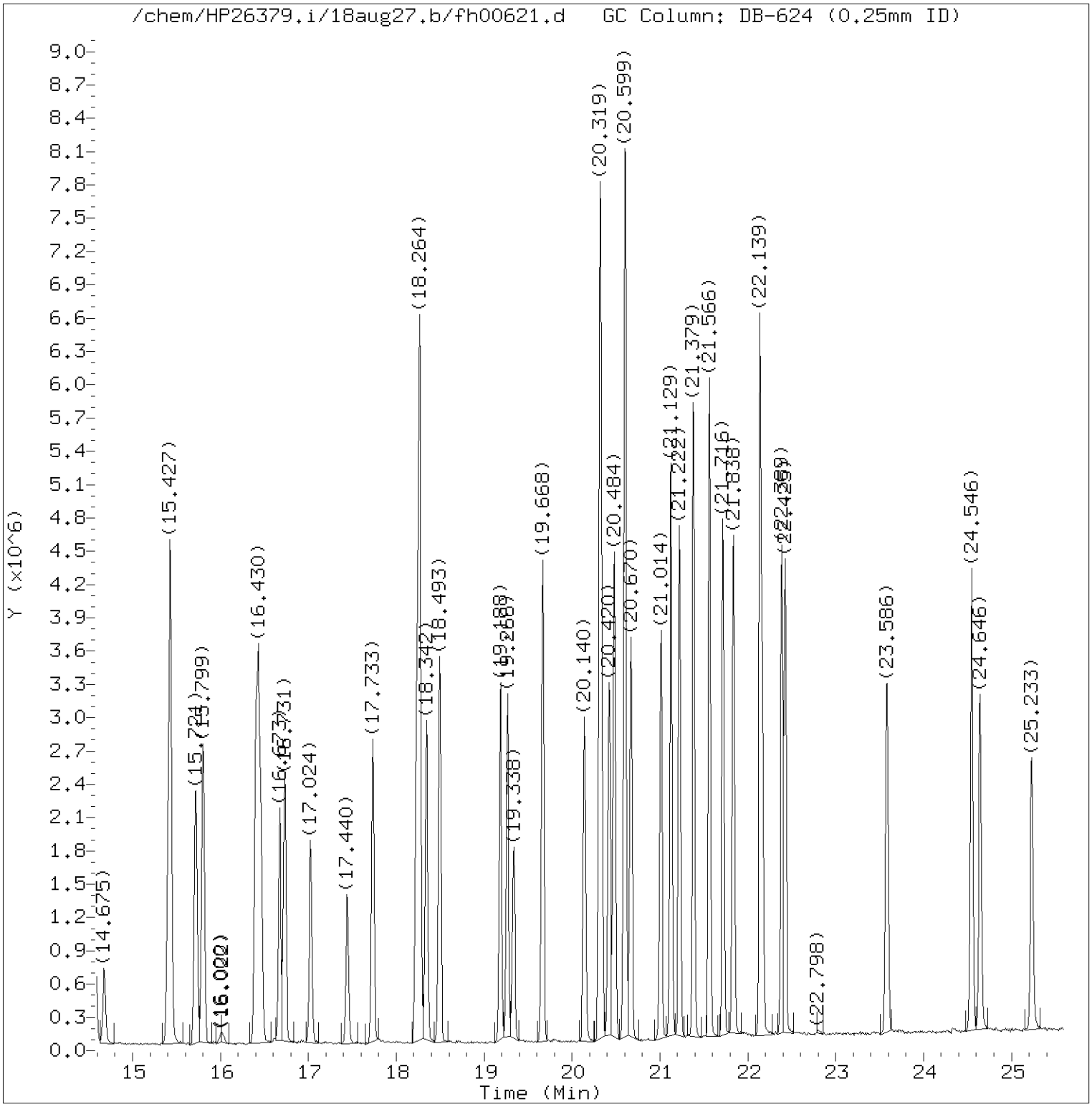
Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00621.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 13:07 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: all
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 13:38 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 08/27/2018 at 15:26.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00621.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 13:07 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: all
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 13:38 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 08/27/2018 at 15:26.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00621.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 13:07 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: all
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 13:38 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	737972	10.103
2) Dichlorodifluoromethane	(1)	4.002	85	1521757	10.700
3) Chlorodifluoromethane	(1)	4.095	51	1814985	10.512
4) Freon 114	(1)	4.303	85	1527220	10.048
5) Chloromethane	(1)	4.460	50	911275	9.883
6) Vinyl Chloride	(1)	4.632	62	747505	10.337
7) 1,3-Butadiene	(1)	4.668	54	727690	10.334
8) Bromomethane	(1)	5.349	94	502386	11.487
9) Chloroethane	(1)	5.614	64	437720	10.903
10) Bromoethene	(1)	5.829	106	462279	10.767
11) Pentane	(1)	5.864	43	1588901	10.295
12) Trichlorofluoromethane	(1)	5.872	101	1390025	9.956
13) Dichlorofluoromethane	(1)	5.972	67	1504165	10.655
14) Ethanol	(1)	6.659	45	292870	9.404
15) Freon123a	(1)	6.796	67	1491335	10.771
16) 1,1-Dichloroethene	(1)	6.853	61	1375118	10.612
17) Freon 113	(1)	6.910	103	777645	9.386
18) Carbon Disulfide	(1)	6.932	76	1691332	10.887
19) Methyl Iodide	(1)	7.147	142	974851	9.544
20) Acrolein	(1)	7.498	56	347881	10.276
21) Isopropanol	(1)	7.712	45	1352978	10.231
22) 3-Chloropropene	(1)	7.763	41	1261377	12.098
23) Methylene Chloride	(1)	7.985	84	568243	11.945
24) Acetone	(1)	8.063	43	1486774	10.912
25) trans-1,2-Dichloroethene	(1)	8.300	61	1296100	10.691
26) Hexane	(1)	8.450	56	979058	9.969
27) Methyl t-Butyl Ether	(1)	8.500	73	1511618	10.019
28) tert-Butyl Alcohol	(1)	8.615	59	1795993	10.820
29) Acetonitrile	(1)	9.081	41	832300	10.618
30) Di-Isopropyl Ether	(1)	9.295	45	2991873	10.135
31) 1,1-Dichloroethane	(1)	9.632	63	1652506	10.386
32) Acrylonitrile	(1)	9.740	53	844870	10.788
33) Ethyl Tert-Butyl Ether	(1)	10.055	59	2656912	10.277
34) Vinyl Acetate	(1)	10.098	43	2809987	11.963
35) cis-1,2-Dichloroethene	(1)	10.714	61	1210005	10.491
36) 1,2-Dichloroethene (total)	(1)		61	2506105	21.182
37)*Bromochloromethane	(1)	11.093	130	425833	10.000
38) Cyclohexane	(1)	11.122	56	1460586	9.972

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 08/27/2018 at 15:26.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00621.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 13:07 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: all
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 13:38 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	1329310	10.686
40) Ethyl Acetate	(1)	11.416	43	2192183	10.498
41) Methyl Acrylate	(1)	11.452	55	1739544	10.627
42) Carbon Tetrachloride	(1)	11.509	117	1018310	9.586
43) Tetrahydrofuran	(1)	11.545	42	1067720	10.747
44) 1,1,1-Trichloroethane	(1)	11.645	97	1208200	9.867
45) 2-Butanone	(1)	11.810	43	1986506	10.271
46) Isooctane	(2)	12.046	57	4595886	10.486
47) Heptane	(2)	12.204	71	658065	10.429
48) Benzene	(2)	12.325	78	1947925	9.983
49) Tert-Amyl Methyl Ether	(2)	12.483	73	1542900	10.290
50) 1,2-Dichloroethane	(2)	12.691	62	1298950	10.213
51) Trichloroethene	(2)	13.343	130	691583	10.274
52)*1,4-Difluorobenzene	(2)	13.393	114	1510324	10.000
53) Dibromomethane	(2)	14.095	174	647299	9.936
54) Ethyl Acrylate	(2)	14.231	55	2043060	9.613
55) 1,2-Dichloropropane	(2)	14.267	63	1094061	9.720
56) Bromodichloromethane	(2)	14.338	83	1300610	9.812
57) Methyl Methacrylate	(2)	14.582	69	621991	9.911
58) 1,4-Dioxane	(2)	14.682	88	422379	10.414
59) cis-1,3-Dichloropropene	(2)	15.406	75	1110499	9.980
60) Octane	(3)	15.427	43	2445088	10.271
61) Toluene	(3)	15.799	91	2140725	9.840
62) 4-Methyl-2-Pentanone	(2)	16.401	43	2425331	9.569
63) Tetrachloroethene	(3)	16.430	166	1057487	10.253
64) trans-1,3-Dichloropropene	(3)	16.458	75	986677	10.046
65) 1,3-Dichloropropene (total)	(3)		75	2097176	19.907
66) Ethyl Methacrylate	(3)	16.673	69	1056608	9.728
67) 1,1,2-Trichloroethane	(3)	16.731	97	826670	9.553
68) Dibromochloromethane	(3)	17.024	127	834320	9.538
69) 1,2-Dibromoethane	(3)	17.440	107	1173468	9.809
70) 2-Hexanone	(3)	17.733	43	2311870	9.965
71)*Chlorobenzene-d5	(3)	18.235	117	1472740	10.000
72) Chlorobenzene	(3)	18.256	112	1780955	9.726
73) Ethylbenzene	(3)	18.271	91	2952298	9.944
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	804767	9.260
75) m/p-Xylene	(3)	18.493	91	2182163	10.225
76) o-Xylene	(3)	19.188	91	2117220	10.179

* = Compound is an internal standard.

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on 08/27/2018 at 15:26.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00621.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 13:07 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: all
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 13:38 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	4299383	20.405
78) Styrene	(3)	19.266	104	1561724	10.369
79) Bromoform	(3)	19.331	173	997405	9.187
80) Cumene	(3)	19.668	105	2993918	10.446
81) n-Propylbenzene	(3)	20.319	120	882203	10.610
82) Bromobenzene	(3)	20.327	156	1026343	9.999
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	1983629	9.498
84) 4-Ethyltoluene	(3)	20.484	105	3146474	10.577
85) 2-Chlorotoluene	(3)	20.599	126	761123	9.947
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	2728455	10.677
87) 1,2,3-Trichloropropane	(3)	20.670	110	559660	9.927
88) Alpha Methyl Styrene	(3)	21.014	118	1159300	10.083
89) tert-Butylbenzene	(3)	21.129	119	2477149	10.857
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	2650096	10.737
91) sec-Butylbenzene	(3)	21.379	105	4128277	10.832
92) p-Isopropyltoluene	(3)	21.566	119	3164623	10.937
93) 1,3-Dichlorobenzene	(3)	21.716	146	1750675	9.595
94) 1,4-Dichlorobenzene	(3)	21.838	146	1765578	9.816
95) n-Butylbenzene	(3)	22.139	92	2064675	11.088
96) Benzyl Chloride	(3)	22.167	126	410705	10.299
97) Hexachloroethane	(3)	22.389	117	783079	9.688
98) 1,2-Dichlorobenzene	(3)	22.425	146	1637319	9.659
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	817277	9.846
100) Hexachlorobutadiene	(3)	24.546	225	1002329	9.434
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	1137635	9.823
102) Naphthalene	(3)	25.233	128	2415253	10.646

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on 08/27/2018 at 15:26.
Target 3.5 esignature user ID: jeb07445

Raw QC Data

Volatile Organics in Air by GC/MS

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

VBLKF32

Data file: /chem/HP26379.i/18aug27.b/fh00622.d Injection date and time: **27-AUG-2018 13:55**
Data file Sample Info. Line: VBLKF32;200;F1823930AA;VBLKF32;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 27-Aug-2018 14:25 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **all1**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
71) Chlorobenzene-d5	18.235(0.000)	2017	117	1449873 (-2)	10.00		883644 - 2061835
37) Bromochloromethane	11.100(-0.007)	1021	130	433951 (2)	10.00		255500 - 596166
52) 1,4-Difluorobenzene	13.393(0.000)	1341	114	1459839 (-3)	10.00		906195 - 2114453

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					0.13	1
3) Chlorodifluoromethane	(1)			Not Detected					0.15	1
4) Freon 114	(1)			Not Detected					0.12	1
5) Chloromethane	(1)			Not Detected					0.24	1
6) Vinyl Chloride	(1)			Not Detected					0.12	1
7) 1,3-Butadiene	(1)			Not Detected					0.17	1
8) Bromomethane	(1)			Not Detected					0.18	1
9) Chloroethane	(1)			Not Detected					0.19	1
90) 1,2,4-Trimethylbenzene	(3)			Not Detected					0.28	2
11) Pentane	(1)			Not Detected					0.13	1
12) Trichlorofluoromethane	(1)			Not Detected					0.15	1
13) Dichlorofluoromethane	(1)			Not Detected					0.11	1
87) 1,2,3-Trichloropropane	(3)			Not Detected					0.14	1
67) 1,1,2-Trichloroethane	(3)			Not Detected					0.12	1
16) 1,1-Dichloroethene	(1)			Not Detected					0.14	1
17) Freon 113	(1)			Not Detected					0.11	1
18) Carbon Disulfide	(1)			Not Detected					0.13	1
68) Dibromochloromethane	(3)			Not Detected					0.13	1
69) 1,2-Dibromoethane	(3)			Not Detected					0.13	1
70) 2-Hexanone	(3)			Not Detected					0.18	1
22) 3-Chloropropene	(1)			Not Detected					0.15	1
23) Methylene Chloride	(1)			Not Detected					0.25	2
24) Acetone	(1)			Not Detected					0.53	5
25) trans-1,2-Dichloroethene	(1)			Not Detected					0.086	1
26) Hexane	(1)			Not Detected					0.13	1
27) Methyl t-Butyl Ether	(1)			Not Detected					0.15	1
72) Chlorobenzene	(3)			Not Detected					0.13	1
73) Ethylbenzene	(3)			Not Detected					0.19	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.089	1
74) 1,1,1,2-Tetrachloroethane	(3)			Not Detected					0.15	1
75) m/p-Xylene	(3)			Not Detected					0.26	2
76) o-Xylene	(3)			Not Detected					0.19	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.12	1
86) 1,3,5-Trimethylbenzene	(3)			Not Detected					0.32	2
78) Styrene	(3)			Not Detected					0.2	1
39) Chloroform	(1)			Not Detected					0.092	1
79) Bromoform	(3)			Not Detected					0.17	1
80) Cumene	(3)			Not Detected					0.24	1
42) Carbon Tetrachloride	(1)			Not Detected					0.14	1
84) 4-Ethyltoluene	(3)			Not Detected					0.18	1
44) 1,1,1-Trichloroethane	(1)			Not Detected					0.12	1
45) 2-Butanone	(1)			Not Detected					0.21	1
46) Isooctane	(2)			Not Detected					0.13	1

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18aug27.b/fh00622.d Injection date and time: **27-AUG-2018 13:55**
Data file Sample Info. Line: VBLKF32;200;F1823930AA;VBLKF32;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 27-Aug-2018 14:25 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **all1**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
47) Heptane	(2)				Not Detected					0.23	1
48) Benzene	(2)				Not Detected					0.11	1
82) Bromobenzene	(3)				Not Detected					0.1	1
50) 1,2-Dichloroethane	(2)				Not Detected					0.08	1
51) Trichloroethene	(2)				Not Detected					0.18	1
83) 1,1,2,2-Tetrachloroethane	(3)				Not Detected					0.15	1
98) 1,2-Dichlorobenzene	(3)				Not Detected					0.2	1
53) Dibromomethane	(2)				Not Detected					0.14	1
97) Hexachloroethane	(3)				Not Detected					0.27	2
55) 1,2-Dichloropropane	(2)				Not Detected					0.13	1
56) Bromodichloromethane	(2)				Not Detected					0.12	1
94) 1,4-Dichlorobenzene	(3)				Not Detected					0.17	1
93) 1,3-Dichlorobenzene	(3)				Not Detected					0.19	1
59) cis-1,3-Dichloropropene	(2)				Not Detected					0.1	1
60) Octane	(3)				Not Detected					0.4	2
61) Toluene	(3)				Not Detected					0.12	1
62) 4-Methyl-2-Pentanone	(2)				Not Detected					0.15	1
63) Tetrachloroethene	(3)				Not Detected					0.25	2
64) trans-1,3-Dichloropropene	(3)				Not Detected					0.12	1
1) Propene	(1)				Not Detected					0.16	1
10) Bromoethene	(1)				Not Detected					0.18	1
14) Ethanol	(1)				Not Detected					0.69	5
15) Freon123a	(1)				Not Detected					0.2	1
20) Acrolein	(1)				Not Detected					0.62	5
19) Methyl Iodide	(1)				Not Detected					0.15	1
21) Isopropanol	(1)				Not Detected					0.24	1
29) Acetonitrile	(1)				Not Detected					0.83	5
28) tert-Butyl Alcohol	(1)				Not Detected					0.21	1
32) Acrylonitrile	(1)				Not Detected					0.13	1
34) Vinyl Acetate	(1)				Not Detected					0.16	1
30) Di-Isopropyl Ether	(1)				Not Detected					0.15	1
33) Ethyl Tert-Butyl Ether	(1)				Not Detected					0.15	1
36) 1,2-Dichloroethene (total)	(1)				Not Detected					0.2	1
40) Ethyl Acetate	(1)				Not Detected					0.25	2
41) Methyl Acrylate	(1)				Not Detected					0.14	1
43) Tetrahydrofuran	(1)				Not Detected					0.24	1
38) Cyclohexane	(1)				Not Detected					0.11	1
49) Tert-Amyl Methyl Ether	(2)				Not Detected					0.11	1
54) Ethyl Acrylate	(2)				Not Detected					0.16	1
58) 1,4-Dioxane	(2)				Not Detected					0.17	1
57) Methyl Methacrylate	(2)				Not Detected					0.15	1
65) 1,3-Dichloropropene (total)	(3)				Not Detected					0.23	1
66) Ethyl Methacrylate	(3)				Not Detected					0.19	1
77) Xylene (total)	(3)				Not Detected					0.44	2
81) n-Propylbenzene	(3)				Not Detected					0.21	1
85) 2-Chlorotoluene	(3)				Not Detected					0.22	1
88) Alpha Methyl Styrene	(3)				Not Detected					0.18	1
89) tert-Butylbenzene	(3)				Not Detected					0.76	5
91) sec-Butylbenzene	(3)				Not Detected					0.39	2
92) p-Isopropyltoluene	(3)				Not Detected					0.28	2
96) Benzyl Chloride	(3)				Not Detected					0.25	2
95) n-Butylbenzene	(3)				Not Detected					0.26	2
99) 1,2-Dibromo-3-chloropropane	(3)				Not Detected					0.28	2
101) 1,2,4-Trichlorobenzene	(3)				Not Detected					0.38	2

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Data file: /chem/HP26379.i/18aug27.b/fh00622.d Injection date and time: **27-AUG-2018 13:55**
Data file Sample Info. Line: VBLKF32;200;F1823930AA;VBLKF32;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 27-Aug-2018 14:25 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **all1**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.d**

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

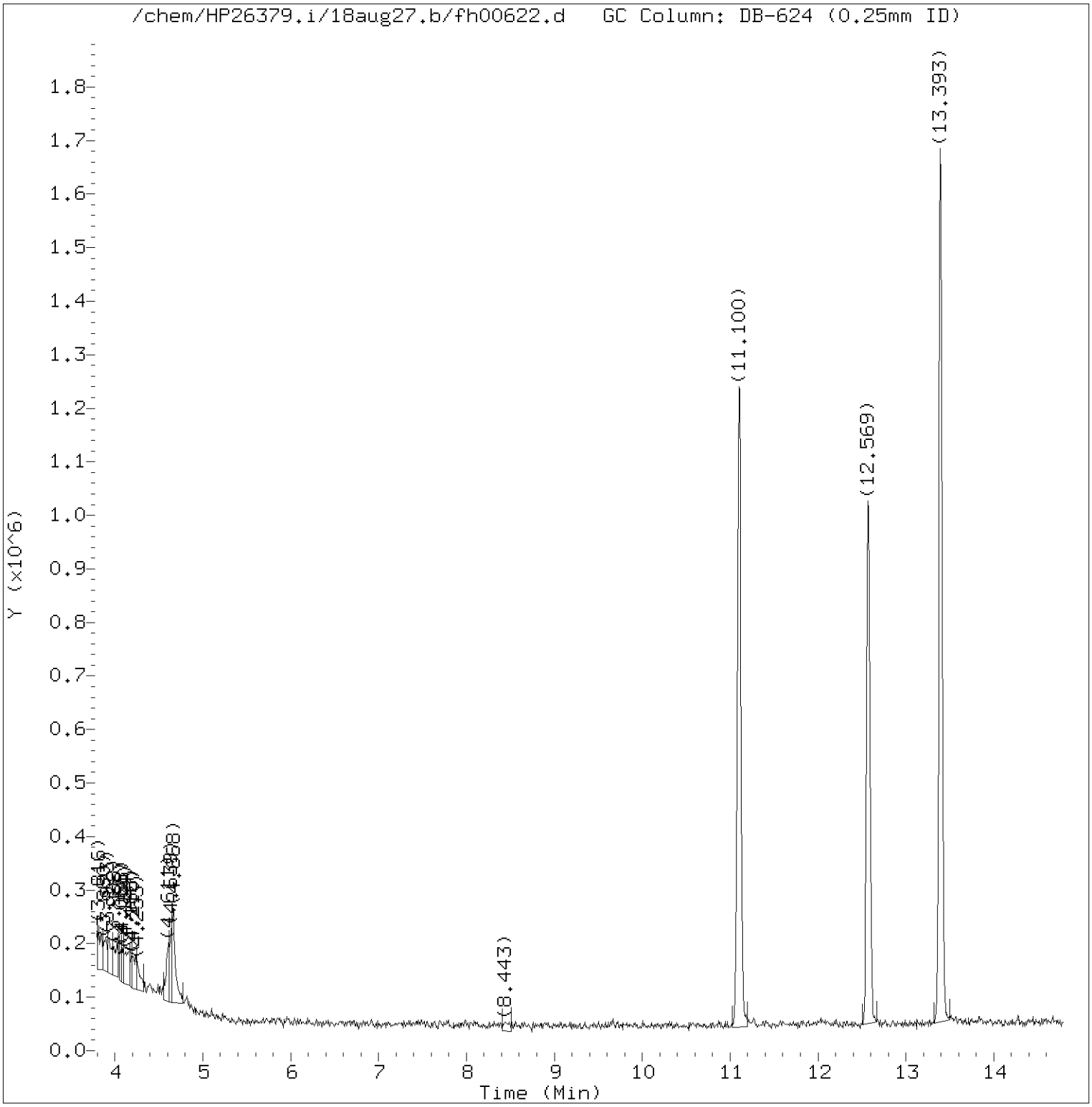
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
100) Hexachlorobutadiene	(3)				Not Detected					0.47	2
102) Naphthalene	(3)				Not Detected					0.5	2

Total number of targets = 99

Digitally signed by Jacob E. Bailey on 08/27/2018 at 15:26. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:20. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

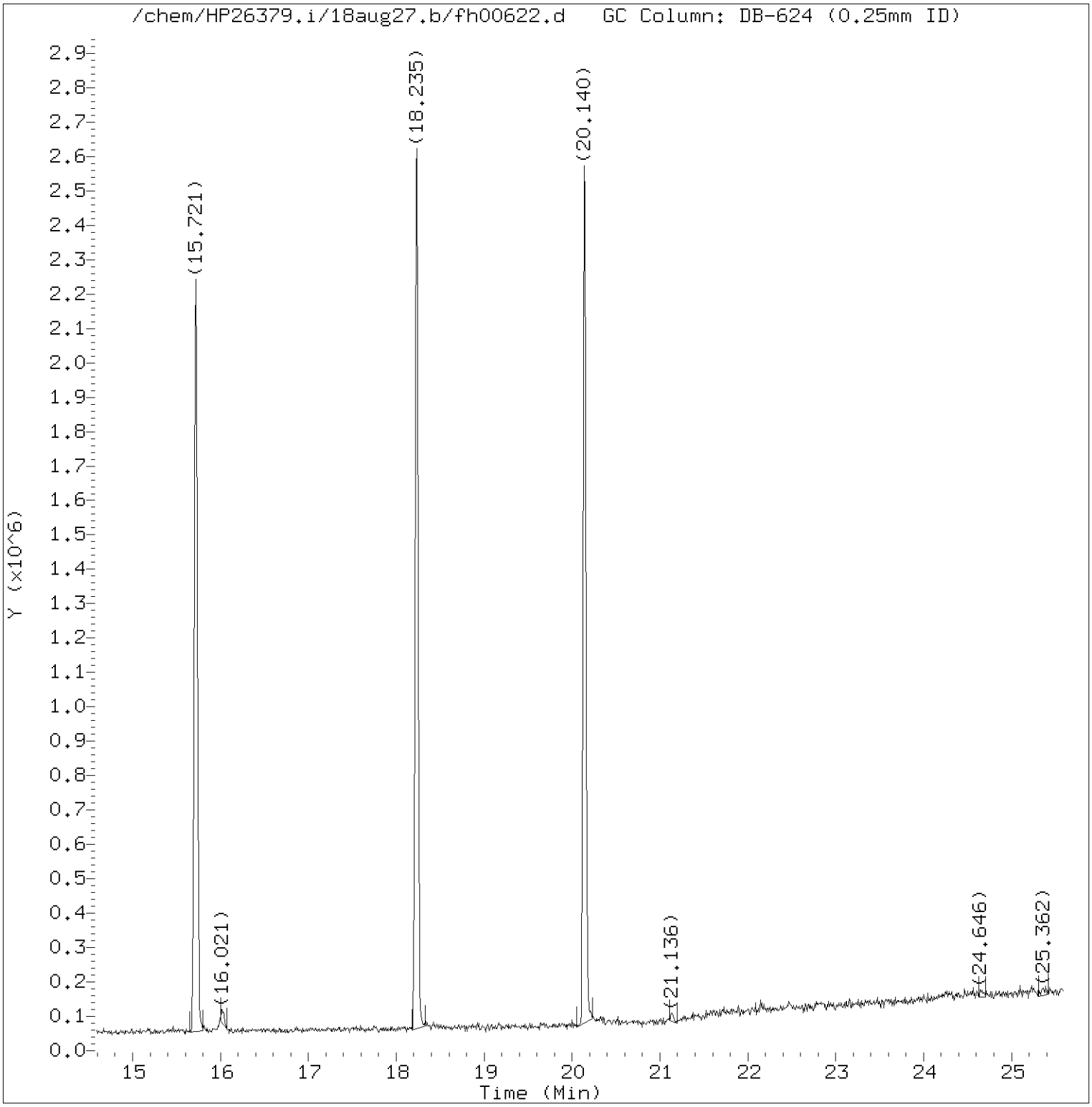
Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00622.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 13:55 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: all1
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 14:25 jeb07445

Sample Name: VBLKF32 Lab Sample ID: VBLKF32

Digitally signed by Jacob E. Bailey
on 08/27/2018 at 15:26.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00622.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 13:55 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: all1
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 14:25 jeb07445

Sample Name: VBLKF32 Lab Sample ID: VBLKF32

Digitally signed by Jacob E. Bailey
on 08/27/2018 at 15:26.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00622.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 13:55 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: all1
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 14:25 jeb07445

Sample Name: VBLKF32 Lab Sample ID: VBLKF32

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
37)*Bromochloromethane	(1)	11.100	130	433951	10.000
52)*1,4-Difluorobenzene	(2)	13.393	114	1459839	10.000
71)*Chlorobenzene-d5	(3)	18.235	117	1449873	10.000

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 08/27/2018 at 15:26.
Target 3.5 esignature user ID: jeb07445

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766349DUP
Canister ID:	1352	Lab File ID:	fh00631.d
Pressure Received:	12.2 psia	Date Collected:	08/18/2018
Final Pressure:	24.5 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	19:18
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	2.9	J
75-45-6	Chlorodifluoromethane	0.53	U
76-14-2	Freon 114	0.84	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.31	U
106-99-0	1,3-Butadiene	0.38	U
74-83-9	Bromomethane	0.70	U
75-00-3	Chloroethane	0.50	U
75-43-4	Dichlorofluoromethane	0.46	U
75-69-4	Trichlorofluoromethane	1.3	J
109-66-0	Pentane	3.6	
75-35-4	1,1-Dichloroethene	0.56	U
76-13-1	Freon 113	1.1	J
67-64-1	Acetone	23	
75-15-0	Carbon Disulfide	0.40	U
107-05-1	3-Chloropropene	0.47	U
75-09-2	Methylene Chloride	0.87	U
156-60-5	trans-1,2-Dichloroethene	0.34	U
1634-04-4	Methyl t-Butyl Ether	0.54	U
110-54-3	Hexane	2.1	J
75-34-3	1,1-Dichloroethane	0.36	U
156-59-2	cis-1,2-Dichloroethene	0.48	U
78-93-3	2-Butanone	3.2	
67-66-3	Chloroform	0.45	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766349DUP
Canister ID:	1352	Lab File ID:	fh00631.d
Pressure Received:	12.2 psia	Date Collected:	08/18/2018
Final Pressure:	24.5 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	19:18
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
71-55-6	1,1,1-Trichloroethane	0.65	U
56-23-5	Carbon Tetrachloride	0.88	U
71-43-2	Benzene	0.92	J
107-06-2	1,2-Dichloroethane	0.32	U
540-84-1	Isooctane	1.7	J
142-82-5	Heptane	2.0	J
79-01-6	Trichloroethene	0.97	U
78-87-5	1,2-Dichloropropane	0.60	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	0.80	U
10061-01-5	cis-1,3-Dichloropropene	0.45	U
108-10-1	4-Methyl-2-Pentanone	0.61	U
108-88-3	Toluene	5.1	
111-65-9	Octane	1.9	U
10061-02-6	trans-1,3-Dichloropropene	0.54	U
79-00-5	1,1,2-Trichloroethane	0.65	U
127-18-4	Tetrachloroethene	1.7	U
591-78-6	2-Hexanone	0.74	U
124-48-1	Dibromochloromethane	1.1	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	0.60	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	J
179601-23-1	m/p-Xylene	3.1	J

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	CANISTER	Lab Sample ID:	9766349DUP
Canister ID:	1352	Lab File ID:	fh00631.d
Pressure Received:	12.2 psia	Date Collected:	08/18/2018
Final Pressure:	24.5 psia	Date Received:	08/22/2018
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	400 cc	Analyzed Time:	19:18
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
95-47-6	o-Xylene	1.1	J
100-42-5	Styrene	0.85	U
75-25-2	Bromoform	1.8	U
98-82-8	Cumene	1.2	U
108-86-1	Bromobenzene	0.64	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	0.84	U
622-96-8	4-Ethyltoluene	0.88	U
108-67-8	1,3,5-Trimethylbenzene	1.6	U
95-63-6	1,2,4-Trimethylbenzene	1.4	U
541-73-1	1,3-Dichlorobenzene	1.1	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.2	U
67-72-1	Hexachloroethane	2.6	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

Lancaster Laboratories, Inc.

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18aug27.b/fh00631.d Injection date and time: **27-AUG-2018 19:18**
Data file Sample Info. Line: 9766349;400;F1823930AA;1352-;0;0;SAMPLE; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 28-Aug-2018 13:17 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 28-AUG-2018 12:56
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.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): 24.5 psia Canister Pressure before dilution (Ya): 12.2 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 400 cc

Analysis Comments:DUP

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.108	(-0.014)	1022	130	364648	(-14)	10.00		255500 - 596166
52) 1,4-Difluorobenzene	13.393	(0.000)	1341	114	1256828	(-17)	10.00		906195 - 2114453
71) Chlorobenzene-d5	18.228	(0.007)	2016	117	1233407	(-16)	10.00		883644 - 2061835

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)	4.009	(-0.000)	85	72276M	0.593	0.59		J	0.13	1
3) Chlorodifluoromethane	(1)				Not Detected					0.15	1
4) Freon 114	(1)				Not Detected					0.12	1
5) Chloromethane	(1)				Not Detected					0.24	1
6) Vinyl Chloride	(1)				Not Detected					0.12	1
7) 1,3-Butadiene	(1)				Not Detected					0.17	1
8) Bromomethane	(1)				Not Detected					0.18	1
9) Chloroethane	(1)				Not Detected					0.19	1
13) Dichlorofluoromethane	(1)				Not Detected					0.11	1
12) Trichlorofluoromethane	(1)	5.886	(-0.000)	101	28096	0.235	0.23		J	0.15	1
11) Pentane	(1)	5.857	(0.001)	43	163320	1.236	1.24			0.13	1
16) 1,1-Dichloroethene	(1)				Not Detected					0.14	1
17) Freon 113	(1)	6.910	(0.000)	103	9847	0.139	0.14		J	0.11	1
24) Acetone	(1)	8.071	(0.000)	43	1127650	9.665	9.66			0.53	5
18) Carbon Disulfide	(1)				Not Detected					0.13	1
22) 3-Chloropropene	(1)				Not Detected					0.15	1
23) Methylene Chloride	(1)				Not Detected					0.25	2
25) trans-1,2-Dichloroethene	(1)				Not Detected					0.086	1
27) Methyl t-Butyl Ether	(1)				Not Detected					0.15	1
26) Hexane	(1)	8.457	(0.000)	56	50119	0.596	0.60		J	0.13	1
31) 1,1-Dichloroethane	(1)				Not Detected					0.089	1
35) cis-1,2-Dichloroethene	(1)				Not Detected					0.12	1
45) 2-Butanone	(1)	11.810	(0.001)	43	179485	1.084	1.08			0.21	1
39) Chloroform	(1)				Not Detected					0.092	1
44) 1,1,1-Trichloroethane	(1)				Not Detected					0.12	1
42) Carbon Tetrachloride	(1)				Not Detected					0.14	1
48) Benzene	(2)	12.333	(-0.000)	78	46654	0.287	0.29		J	0.11	1
50) 1,2-Dichloroethane	(2)				Not Detected					0.08	1
46) Isooctane	(2)	12.053	(-0.000)	57	134427	0.369	0.37		J	0.13	1
47) Heptane	(2)	12.196	(0.000)	71	25494	0.486	0.49		J	0.23	1
51) Trichloroethene	(2)				Not Detected					0.18	1
55) 1,2-Dichloropropane	(2)				Not Detected					0.13	1
53) Dibromomethane	(2)				Not Detected					0.14	1
56) Bromodichloromethane	(2)				Not Detected					0.12	1
59) cis-1,3-Dichloropropene	(2)				Not Detected					0.1	1
62) 4-Methyl-2-Pentanone	(2)				Not Detected					0.15	1
61) Toluene	(3)	15.800	(-0.000)	91	246700	1.354	1.35			0.12	1
60) Octane	(3)				Not Detected					0.4	2
64) trans-1,3-Dichloropropene	(3)				Not Detected					0.12	1
67) 1,1,2-Trichloroethane	(3)				Not Detected					0.12	1
63) Tetrachloroethene	(3)				Not Detected					0.25	2
70) 2-Hexanone	(3)				Not Detected					0.18	1

M = Compound was manually integrated.

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

Data file: /chem/HP26379.i/18aug27.b/fh00631.d Injection date and time: **27-AUG-2018 19:18**
Data file Sample Info. Line: 9766349;400;F1823930AA;1352-;0;0;SAMPLE; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 28-Aug-2018 13:17 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 28-AUG-2018 12:56
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.d**

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

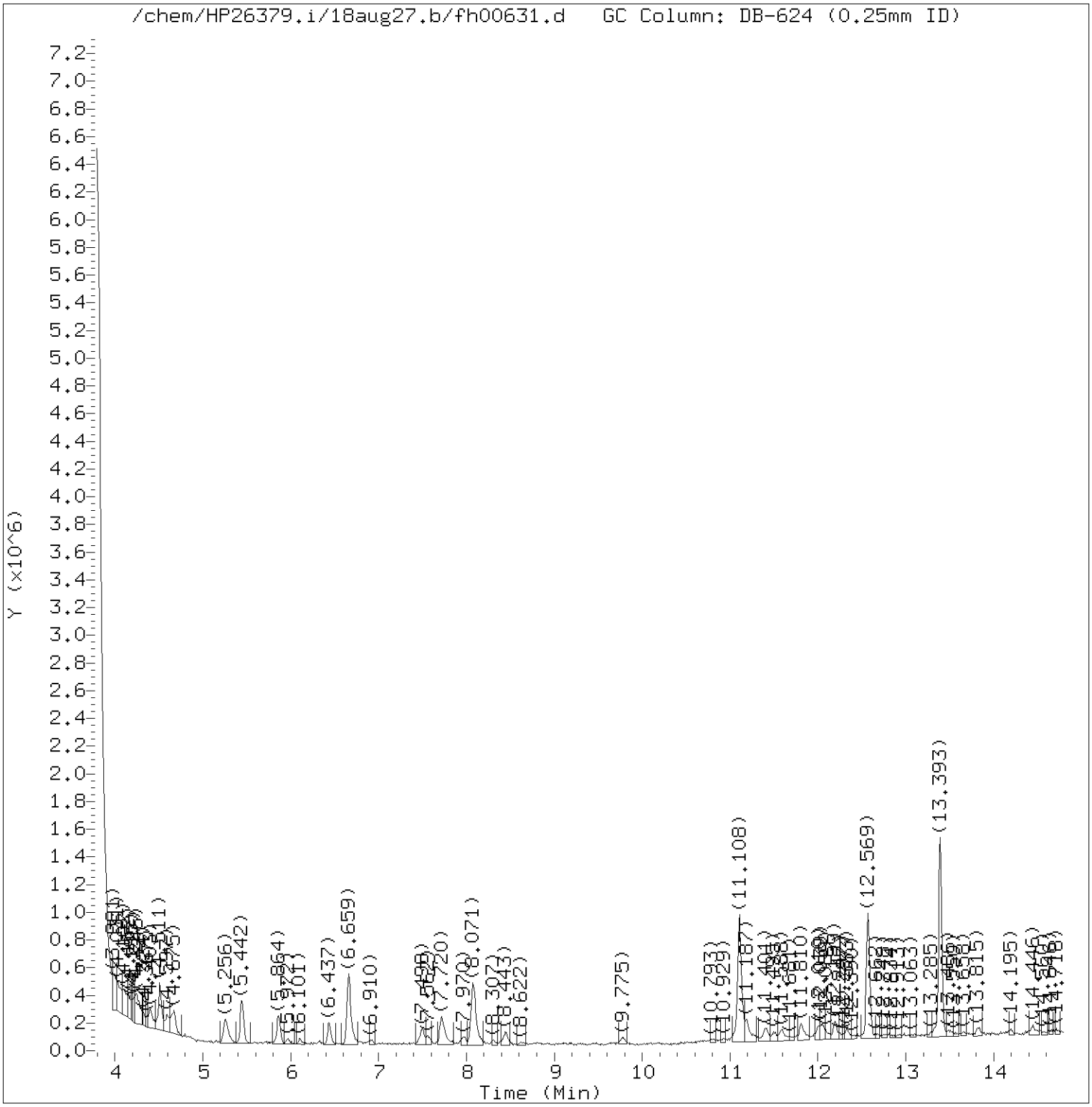
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 24.5 psia Canister Pressure before dilution (Ya): 12.2 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 400 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
68) Dibromochloromethane	(3)			Not Detected					0.13	1
69) 1,2-Dibromoethane	(3)			Not Detected					0.13	1
72) Chlorobenzene	(3)			Not Detected					0.13	1
74) 1,1,1,2-Tetrachloroethane	(3)			Not Detected					0.15	1
73) Ethylbenzene	(3)	18.264(-0.000)	91	58889	0.237	0.24		J	0.19	1
75) m/p-Xylene	(3)	18.493(-0.000)	91	129537	0.725	0.72		J	0.26	2
76) o-Xylene	(3)	19.188(-0.000)	91	43780	0.251	0.25		J	0.19	1
78) Styrene	(3)			Not Detected					0.2	1
79) Bromoform	(3)			Not Detected					0.17	1
80) Cumene	(3)			Not Detected					0.24	1
82) Bromobenzene	(3)			Not Detected					0.1	1
83) 1,1,2,2-Tetrachloroethane	(3)			Not Detected					0.15	1
87) 1,2,3-Trichloropropane	(3)			Not Detected					0.14	1
84) 4-Ethyltoluene	(3)			Not Detected					0.18	1
86) 1,3,5-Trimethylbenzene	(3)			Not Detected					0.32	2
90) 1,2,4-Trimethylbenzene	(3)			Not Detected					0.28	2
93) 1,3-Dichlorobenzene	(3)			Not Detected					0.19	1
94) 1,4-Dichlorobenzene	(3)			Not Detected					0.17	1
98) 1,2-Dichlorobenzene	(3)			Not Detected					0.2	1
97) Hexachloroethane	(3)			Not Detected					0.27	2

Total number of targets = 62

Digitally signed by Jacob E. Bailey on 08/28/2018 at 13:18. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:40. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

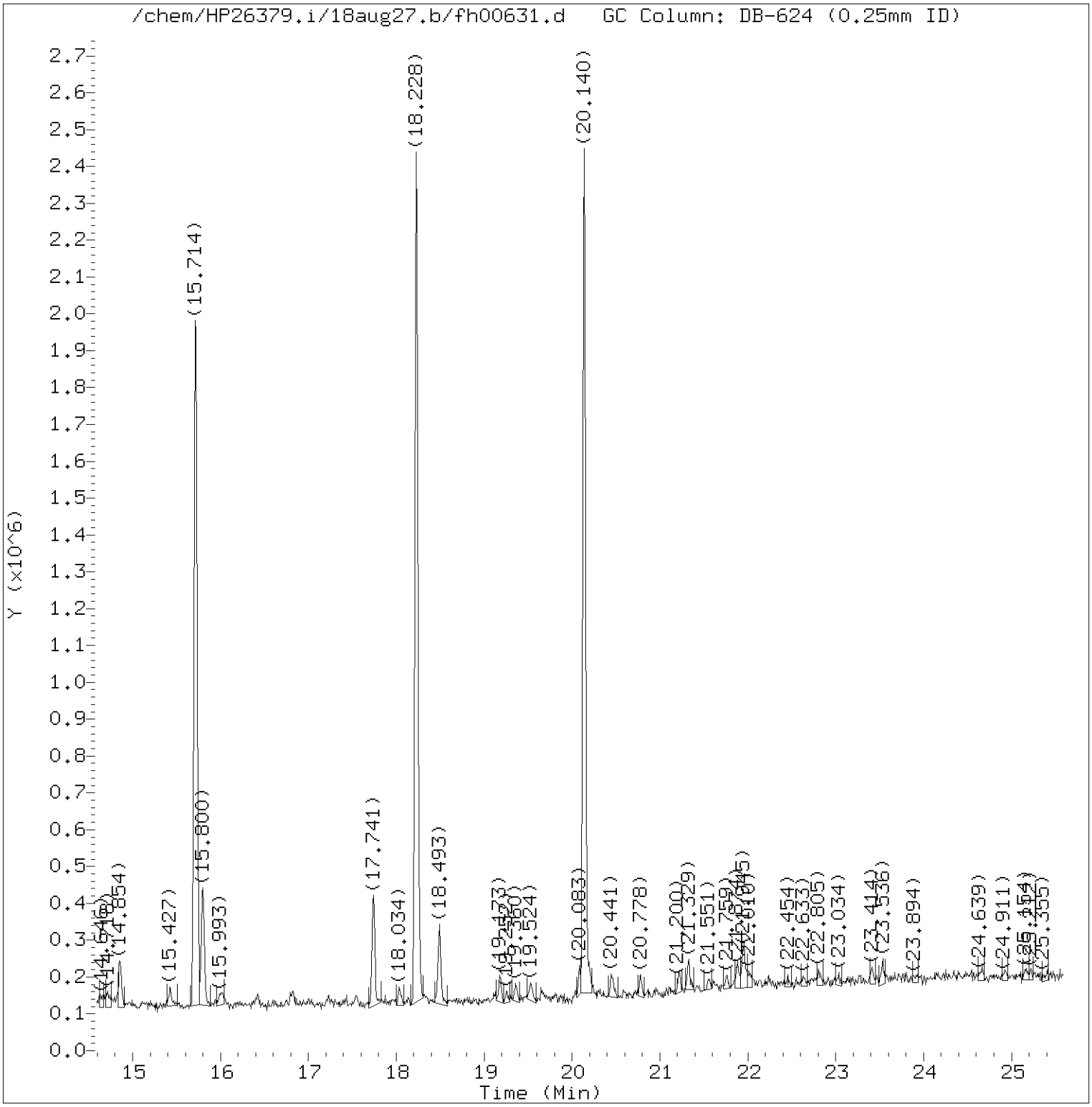
Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00631.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 19:18 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 28-AUG-2018 12:56
Date, time and analyst ID of latest file update: 28-Aug-2018 13:17 jeb07445

Sample Name: 1352- Lab Sample ID: 9766349

Digitally signed by Jacob E. Bailey
on 08/28/2018 at 13:18.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00631.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 19:18 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 28-AUG-2018 12:56
Date, time and analyst ID of latest file update: 28-Aug-2018 13:17 jeb07445

Sample Name: 1352- Lab Sample ID: 9766349

Digitally signed by Jacob E. Bailey
on 08/28/2018 at 13:18.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00631.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 19:18 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 28-AUG-2018 12:56
Date, time and analyst ID of latest file update: 28-Aug-2018 13:17 jeb07445

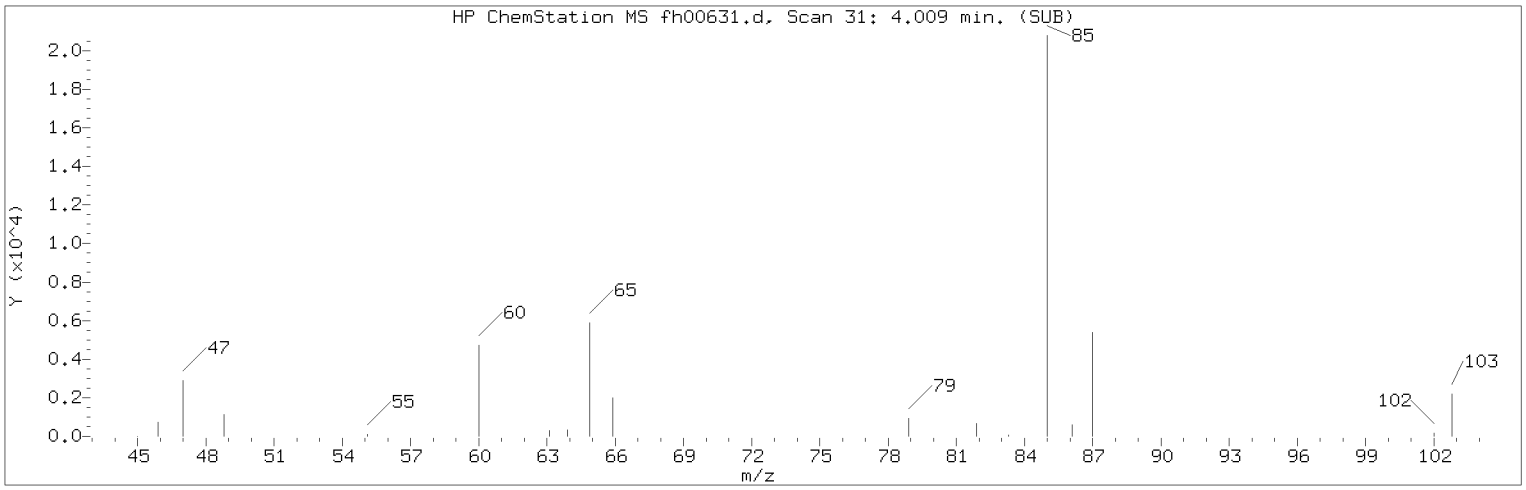
Sample Name: 1352- Lab Sample ID: 9766349

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
2) Dichlorodifluoromethane	(1)	4.009	85	72276M	0.593
11) Pentane	(1)	5.857	43	163320	1.236
12) Trichlorofluoromethane	(1)	5.886	101	28096	0.235
17) Freon 113	(1)	6.910	103	9847	0.139
24) Acetone	(1)	8.071	43	1127650	9.665
26) Hexane	(1)	8.457	56	50119	0.596
37)*Bromochloromethane	(1)	11.108	130	364648	10.000
45) 2-Butanone	(1)	11.810	43	179485	1.084
46) Isooctane	(2)	12.053	57	134427	0.369
47) Heptane	(2)	12.197	71	25494	0.486
48) Benzene	(2)	12.333	78	46654	0.287
52)*1,4-Difluorobenzene	(2)	13.393	114	1256828	10.000
61) Toluene	(3)	15.800	91	246700	1.354
71)*Chlorobenzene-d5	(3)	18.228	117	1233407	10.000
73) Ethylbenzene	(3)	18.264	91	58889	0.237
75) m/p-Xylene	(3)	18.493	91	129537	0.725
76) o-Xylene	(3)	19.188	91	43780	0.251

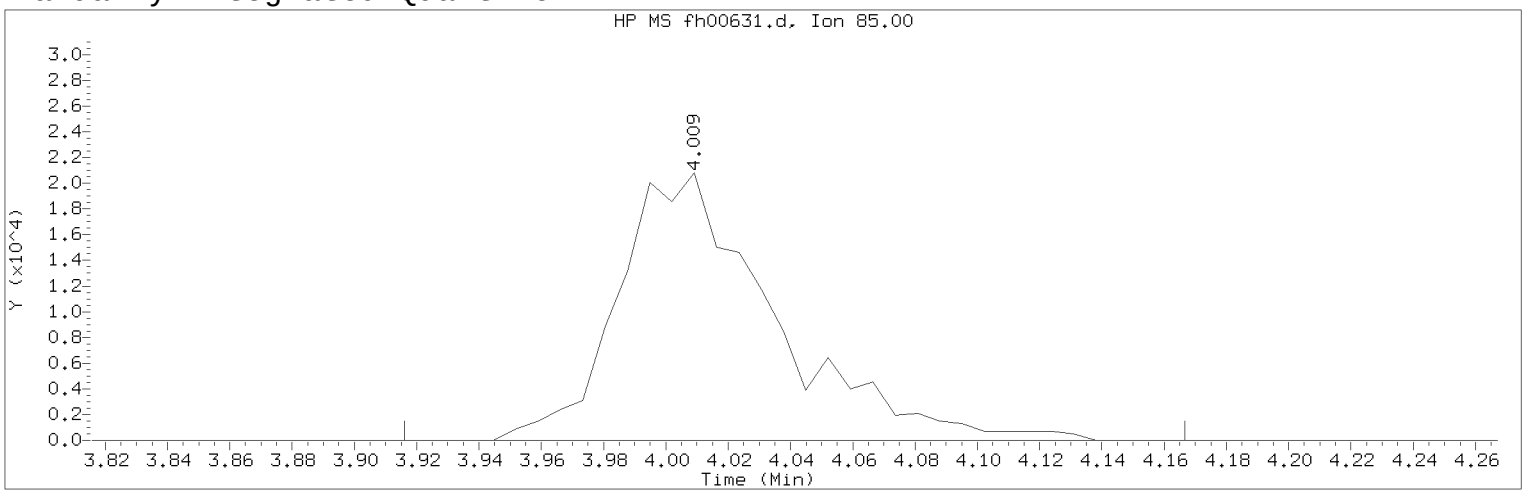
M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 08/28/2018 at 13:18.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug27.b/fh00631.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 19:18 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 28-AUG-2018 12:56
Date, time and analyst ID of latest file update: 28-Aug-2018 13:17 jeb07445

Sample Name: 1352- Lab Sample ID: 9766349

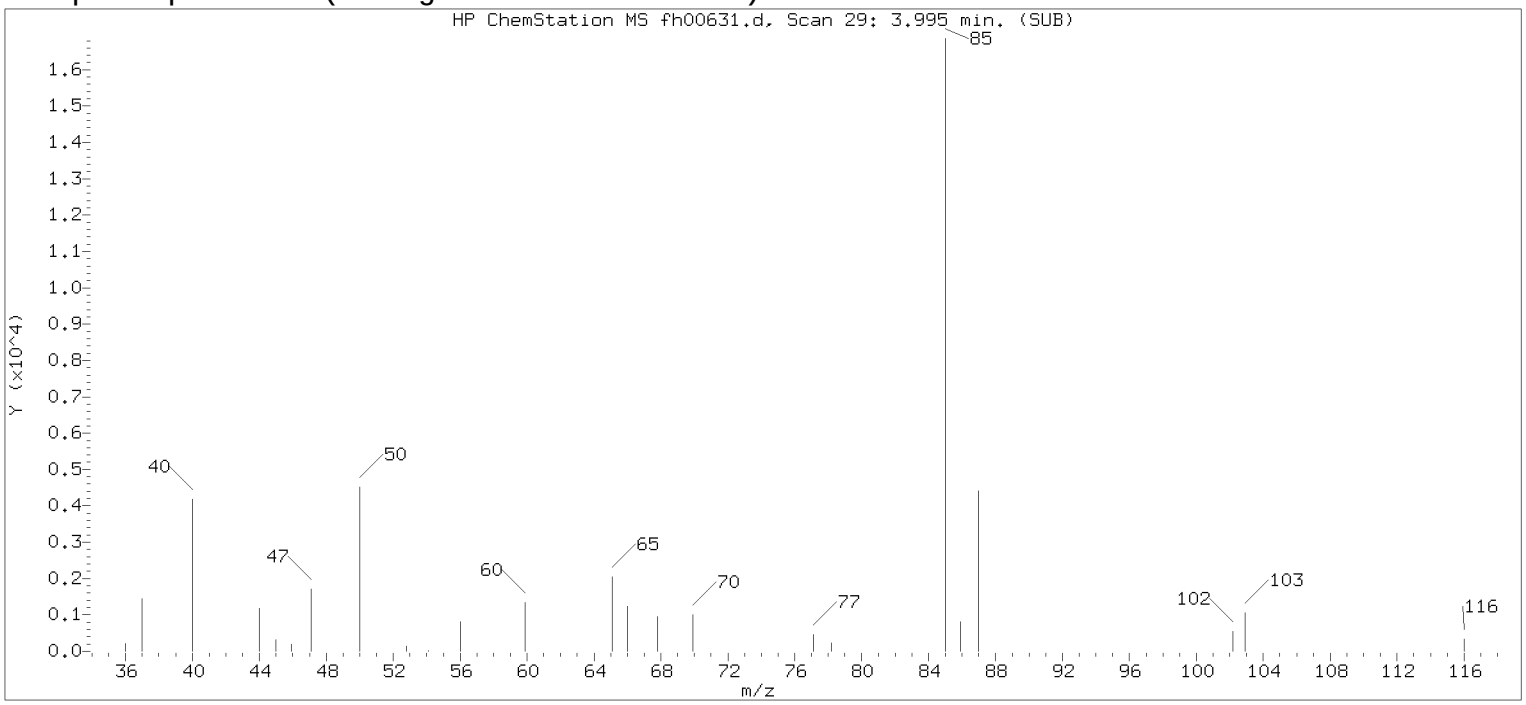
Compound Number : 2
Compound Name : Dichlorodifluoromethane
Scan Number : 31
Retention Time (minutes): 4.009
Quant Ion : 85.00
Area (flag) : 72276M
Concentration (ppb(v)) : 0.5935
Integration start scan : 17 Integration stop scan: 52
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

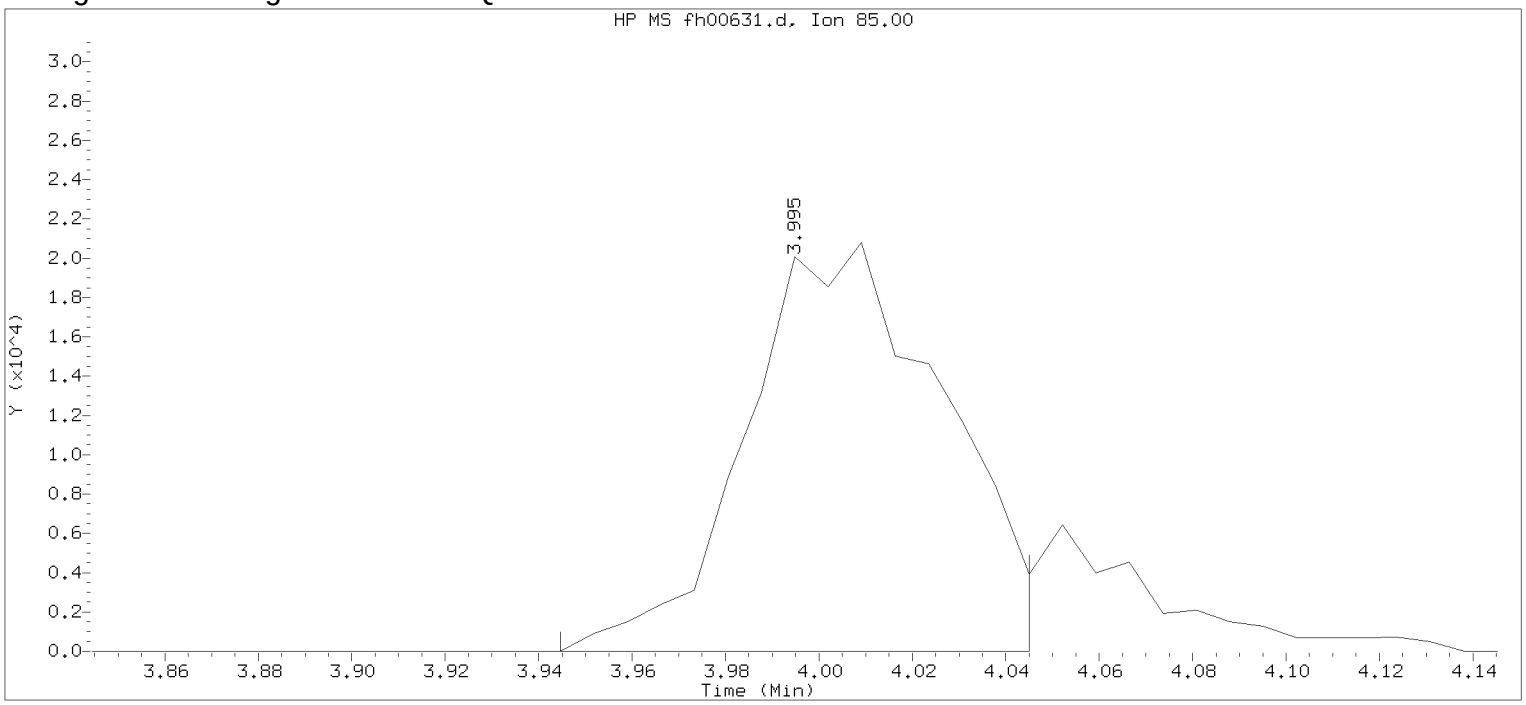
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/28/2018 at 13:18.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:40.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug27.b/fh00631.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 19:18 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: 292
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 19:48 Unknown

Sample Name: 1352- Lab Sample ID: 9766349

Compound Number : 2
Compound Name : Dichlorodifluoromethane
Scan Number : 29
Retention Time (minutes): 3.995
Quant Ion : 85.00
Area : 60653
Concentration (ppb(v)) : 0.4981
Integration start scan : 21 Integration stop scan: 35
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 08/28/2018 at 13:18.
Target 3.5 esignature user ID: jeb07445

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	N/A	Lab Sample ID:	LCSF32
Canister ID:	N/A	Lab File ID:	fh00623.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	200 cc	Analyzed Time:	14:41
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
100-41-4	Ethylbenzene	40	
100-42-5	Styrene	41	
10061-01-5	cis-1,3-Dichloropropene	44	
10061-02-6	trans-1,3-Dichloropropene	45	
106-46-7	1,4-Dichlorobenzene	49	
106-93-4	1,2-Dibromoethane	71	
106-99-0	1,3-Butadiene	23	
107-05-1	3-Chloropropene	42	
107-06-2	1,2-Dichloroethane	41	
108-10-1	4-Methyl-2-Pentanone	38	
108-67-8	1,3,5-Trimethylbenzene	44	
108-86-1	Bromobenzene	57	
108-88-3	Toluene	36	
108-90-7	Chlorobenzene	41	
109-66-0	Pentane	30	
110-54-3	Hexane	36	
111-65-9	Octane	47	
124-48-1	Dibromochloromethane	84	
127-18-4	Tetrachloroethene	64	
142-82-5	Heptane	42	
156-59-2	cis-1,2-Dichloroethene	42	
156-60-5	trans-1,2-Dichloroethene	43	
1634-04-4	Methyl t-Butyl Ether	37	
179601-23-1	m/p-Xylene	40	

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	N/A	Lab Sample ID:	LCSF32
Canister ID:	N/A	Lab File ID:	fh00623.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	200 cc	Analyzed Time:	14:41
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
540-84-1	Isooctane	49	
541-73-1	1,3-Dichlorobenzene	49	
56-23-5	Carbon Tetrachloride	65	
591-78-6	2-Hexanone	40	
622-96-8	4-Ethyltoluene	42	
630-20-6	1,1,1,2-Tetrachloroethane	62	
67-64-1	Acetone	26	
67-66-3	Chloroform	52	
67-72-1	Hexachloroethane	85	
71-43-2	Benzene	32	
71-55-6	1,1,1-Trichloroethane	54	
74-83-9	Bromomethane	45	
74-87-3	Chloromethane	21	
74-95-3	Dibromomethane	72	
75-00-3	Chloroethane	31	
75-01-4	Vinyl Chloride	30	
75-09-2	Methylene Chloride	41	
75-15-0	Carbon Disulfide	34	
75-25-2	Bromoform	98	
75-27-4	Bromodichloromethane	67	
75-34-3	1,1-Dichloroethane	42	
75-35-4	1,1-Dichloroethene	44	
75-43-4	Dichlorofluoromethane	49	
75-45-6	Chlorodifluoromethane	39	

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	N/A	Lab Sample ID:	LCSF32
Canister ID:	N/A	Lab File ID:	fh00623.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	200 cc	Analyzed Time:	14:41
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-69-4	Trichlorofluoromethane	57	
75-71-8	Dichlorodifluoromethane	55	
76-13-1	Freon 113	75	
76-14-2	Freon 114	75	
78-87-5	1,2-Dichloropropane	44	
78-93-3	2-Butanone	31	
79-00-5	1,1,2-Trichloroethane	51	
79-01-6	Trichloroethene	55	
79-34-5	1,1,2,2-Tetrachloroethane	58	
95-47-6	o-Xylene	39	
95-50-1	1,2-Dichlorobenzene	47	
95-63-6	1,2,4-Trimethylbenzene	43	
96-18-4	1,2,3-Trichloropropane	51	
98-82-8	Cumene	45	
115-07-1	Propene	17	
593-60-2	Bromoethene	49	
64-17-5	Ethanol	18	
107-02-8	Acrolein	26	
74-88-4	Methyl Iodide	58	
67-63-0	Isopropanol	25	
75-05-8	Acetonitrile	17	
75-65-0	tert-Butyl Alcohol	33	
107-13-1	Acrylonitrile	24	
108-05-4	Vinyl Acetate	42	

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	N/A	Lab Sample ID:	LCSF32
Canister ID:	N/A	Lab File ID:	fh00623.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	200 cc	Analyzed Time:	14:41
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
108-20-3	Di-Isopropyl Ether	43	
637-92-3	Ethyl Tert-Butyl Ether	44	
540-59-0	1,2-Dichloroethene (total)	85	
141-78-6	Ethyl Acetate	37	
96-33-3	Methyl Acrylate	38	
109-99-9	Tetrahydrofuran	33	
110-82-7	Cyclohexane	37	
994-05-8	Tert-Amyl Methyl Ether	43	
140-88-5	Ethyl Acrylate	41	
123-91-1	1,4-Dioxane	35	
80-62-6	Methyl Methacrylate	40	
542-75-6	1,3-Dichloropropene (total)	89	
97-63-2	Ethyl Methacrylate	43	
1330-20-7	Xylene (total)	79	
103-65-1	n-Propylbenzene	43	
95-49-8	2-Chlorotoluene	46	
98-83-9	Alpha Methyl Styrene	42	
98-06-6	tert-Butylbenzene	48	
135-98-8	sec-Butylbenzene	47	
99-87-6	p-Isopropyltoluene	46	
100-44-7	Benzyl Chloride	45	
104-51-8	n-Butylbenzene	46	
96-12-8	1,2-Dibromo-3-chloropropane	74	
120-82-1	1,2,4-Trichlorobenzene	49	

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	N/A	Lab Sample ID:	LCSF32
Canister ID:	N/A	Lab File ID:	fh00623.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	200 cc	Analyzed Time:	14:41
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
87-68-3	Hexachlorobutadiene	69	
91-20-3	Naphthalene	36	

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

LCSF32

Data file: /chem/HP26379.i/18aug27.b/fh00623.d Injection date and time: **27-AUG-2018 14:41**
Data file Sample Info. Line: LCSF32;200;F1823930AA;LCSF32;0;0;LCS; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 27-Aug-2018 15:26 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **all1**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
71) Chlorobenzene-d5	18.228(0.007)	2016	117	1428463 (-3)	10.00		883644 - 2061835
37) Bromochloromethane	11.101(-0.007)	1021	130	415819 (-2)	10.00		255500 - 596166
52) 1,4-Difluorobenzene	13.393(0.000)	1341	114	1487515 (-2)	10.00		906195 - 2114453

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)	4.002(0.000)	85	1544759	11.124	11.12			0.13	1
3) Chlorodifluoromethane	(1)	4.095(0.000)	51	1863662	11.053	11.05			0.15	1
4) Freon 114	(1)	4.303(0.000)	85	1592896	10.733	10.73			0.12	1
5) Chloromethane	(1)	4.453(0.000)	50	935739	10.393	10.39			0.24	1
6) Vinyl Chloride	(1)	4.640(-0.000)	62	815807	11.554	11.55			0.12	1
7) 1,3-Butadiene	(1)	4.668(0.000)	54	724610	10.538	10.54			0.17	1
8) Bromomethane	(1)	5.349(0.000)	94	493791	11.563	11.56			0.18	1
9) Chloroethane	(1)	5.607(0.000)	64	454661	11.598	11.60			0.19	1
90) 1,2,4-Trimethylbenzene	(3)	21.222(-0.000)	105	2116185	8.839	8.84			0.28	2
11) Pentane	(1)	5.864(0.000)	43	1538828	10.210	10.21			0.13	1
12) Trichlorofluoromethane	(1)	5.872(0.000)	101	1391134	10.204	10.20			0.15	1
13) Dichlorofluoromethane	(1)	5.979(-0.000)	67	1602011	11.621	11.62			0.11	1
87) 1,2,3-Trichloropropane	(3)	20.663(-0.000)	110	464377	8.492	8.49			0.14	1
67) 1,1,2-Trichloroethane	(3)	16.724(0.000)	97	784185	9.343	9.34			0.12	1
16) 1,1-Dichloroethene	(1)	6.853(0.000)	61	1395536	11.029	11.03			0.14	1
17) Freon 113	(1)	6.910(0.000)	103	787938	9.739	9.74			0.11	1
18) Carbon Disulfide	(1)	6.932(0.000)	76	1649384	10.873	10.87			0.13	1
68) Dibromochloromethane	(3)	17.024(-0.000)	127	835819	9.852	9.85			0.13	1
69) 1,2-Dibromoethane	(3)	17.440(-0.000)	107	1069768	9.219	9.22			0.13	1
70) 2-Hexanone	(3)	17.726(0.000)	43	2171481	9.650	9.65			0.18	1
22) 3-Chloropropene	(1)	7.763(0.000)	41	1353520	13.294	13.29			0.15	1
23) Methylene Chloride	(1)	7.978(0.001)	84	542154	11.671	11.67			0.25	2
24) Acetone	(1)	8.064(0.000)	43	1476432	11.097	11.10			0.53	5
25) trans-1,2-Dichloroethene	(1)	8.300(0.000)	61	1296395	10.951	10.95			0.086	1
26) Hexane	(1)	8.443(0.001)	56	978370	10.202	10.20			0.13	1
27) Methyl t-Butyl Ether	(1)	8.493(0.001)	73	1521035	10.324	10.32			0.15	1
72) Chlorobenzene	(3)	18.256(-0.000)	112	1598197	8.998	9.00			0.13	1
73) Ethylbenzene	(3)	18.264(-0.000)	91	2621059	9.102	9.10			0.19	1
31) 1,1-Dichloroethane	(1)	9.625(0.001)	63	1630014	10.491	10.49			0.089	1
74) 1,1,1,2-Tetrachloroethane	(3)	18.342(-0.000)	131	767197	9.102	9.10			0.15	1
75) m/p-Xylene	(3)	18.493(-0.000)	91	1890702	9.134	9.13			0.26	2
76) o-Xylene	(3)	19.180(-0.000)	91	1824170	9.042	9.04			0.19	1
35) cis-1,2-Dichloroethene	(1)	10.707(0.001)	61	1182407	10.498	10.50			0.12	1
86) 1,3,5-Trimethylbenzene	(3)	20.599(-0.000)	105	2202824	8.888	8.89			0.32	2
78) Styrene	(3)	19.259(-0.000)	104	1412055	9.666	9.67			0.2	1
39) Chloroform	(1)	11.208(0.001)	83	1293203	10.646	10.65			0.092	1
79) Bromoform	(3)	19.331(-0.000)	173	998680	9.483	9.48			0.17	1
80) Cumene	(3)	19.660(-0.000)	105	2533104	9.112	9.11			0.24	1
42) Carbon Tetrachloride	(1)	11.502(0.001)	117	1074383	10.357	10.36			0.14	1
84) 4-Ethyltoluene	(3)	20.477(-0.000)	105	2477763	8.587	8.59			0.18	1
44) 1,1,1-Trichloroethane	(1)	11.638(0.001)	97	1191728	9.967	9.97			0.12	1
45) 2-Butanone	(1)	11.803(0.001)	43	1998179	10.580	10.58			0.21	1
46) Isooctane	(2)	12.046(-0.000)	57	4500337	10.425	10.43			0.13	1

Digitally signed by Jacob E. Bailey on 08/27/2018 at 15:26. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18aug27.b/fh00623.d Injection date and time: **27-AUG-2018 14:41**
Data file Sample Info. Line: LCSF32;200;F1823930AA;LCSF32;0;0;LCS; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 27-Aug-2018 15:26 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **all1**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
47) Heptane	(2)	12.196(0.000)	71	633630	10.196	10.20			0.23	1
48) Benzene	(2)	12.326(-0.000)	78	1926392	10.024	10.02			0.11	1
82) Bromobenzene	(3)	20.327(-0.000)	156	876519	8.804	8.80			0.1	1
50) 1,2-Dichloroethane	(2)	12.691(-0.000)	62	1277363	10.197	10.20			0.08	1
51) Trichloroethene	(2)	13.343(-0.000)	130	676207	10.199	10.20			0.18	1
83) 1,1,2,2-Tetrachloroethane	(3)	20.420(-0.000)	83	1716527	8.474	8.47			0.15	1
98) 1,2-Dichlorobenzene	(3)	22.425(-0.000)	146	1293765	7.869	7.87			0.2	1
53) Dibromomethane	(2)	14.088(0.000)	174	647094	10.085	10.08			0.14	1
97) Hexachloroethane	(3)	22.382(-0.000)	117	687527	8.769	8.77			0.27	2
55) 1,2-Dichloropropane	(2)	14.267(0.000)	63	1066684	9.622	9.62			0.13	1
56) Bromodichloromethane	(2)	14.338(0.000)	83	1298840	9.949	9.95			0.12	1
94) 1,4-Dichlorobenzene	(3)	21.831(-0.000)	146	1407909	8.070	8.07			0.17	1
93) 1,3-Dichlorobenzene	(3)	21.716(-0.000)	146	1431750	8.091	8.09			0.19	1
59) cis-1,3-Dichloropropene	(2)	15.398(0.000)	75	1061106	9.682	9.68			0.1	1
60) Octane	(3)	15.427(-0.000)	43	2316203	10.031	10.03			0.4	2
61) Toluene	(3)	15.800(-0.000)	91	1994859	9.454	9.45			0.12	1
62) 4-Methyl-2-Pentanone	(2)	16.394(0.000)	43	2339890	9.374	9.37			0.15	1
63) Tetrachloroethene	(3)	16.430(-0.000)	166	937993	9.376	9.38			0.25	2
64) trans-1,3-Dichloropropene	(3)	16.459(-0.000)	75	952947	10.003	10.00			0.12	1
1) Propene	(1)	3.902(0.000)	41	724781	10.161	10.16			0.16	1
10) Bromoethene	(1)	5.829(0.000)	106	465673	11.107	11.11			0.18	1
14) Ethanol	(1)	6.667(-0.000)	45	285121	9.376	9.38			0.69	5
15) Freon123a	(1)	6.796(0.000)	67	1536723	11.366	11.37			0.2	1
20) Acrolein	(1)	7.498(0.000)	56	379827	11.490	11.49			0.62	5
19) Methyl Iodide	(1)	7.147(0.000)	142	1003910	10.065	10.06			0.15	1
21) Isopropanol	(1)	7.705(0.001)	45	1338422	10.365	10.36			0.24	1
29) Acetonitrile	(1)	9.081(0.000)	41	793196	10.362	10.36			0.83	5
28) tert-Butyl Alcohol	(1)	8.615(0.000)	59	1789247	11.039	11.04			0.21	1
32) Acrylonitrile	(1)	9.740(0.000)	53	830535	10.860	10.86			0.13	1
34) Vinyl Acetate	(1)	10.098(0.000)	43	2760916	12.037	12.04			0.16	1
30) Di-Isopropyl Ether	(1)	9.281(0.001)	45	2993652	10.385	10.38			0.15	1
33) Ethyl Tert-Butyl Ether	(1)	10.055(0.000)	59	2667391	10.566	10.57			0.15	1
36) 1,2-Dichloroethene (total)	(1)		61	2478802	21.450	21.45			0.2	1
40) Ethyl Acetate	(1)	11.416(0.000)	43	2066749	10.136	10.14			0.25	2
41) Methyl Acrylate	(1)	11.452(0.000)	55	1742825	10.904	10.90			0.14	1
43) Tetrahydrofuran	(1)	11.538(0.001)	42	1091623	11.252	11.25			0.24	1
38) Cyclohexane	(1)	11.115(0.001)	56	1526003	10.670	10.67			0.11	1
49) Tert-Amyl Methyl Ether	(2)	12.483(-0.000)	73	1509502	10.222	10.22			0.11	1
54) Ethyl Acrylate	(2)	14.224(0.000)	55	2092096	9.995	9.99			0.16	1
58) 1,4-Dioxane	(2)	14.675(0.000)	88	386010	9.663	9.66			0.17	1
57) Methyl Methacrylate	(2)	14.568(0.001)	69	596397	9.648	9.65			0.15	1
65) 1,3-Dichloropropene (total)	(3)		75	2014053	19.686	19.69			0.23	1
66) Ethyl Methacrylate	(3)	16.666(0.000)	69	981286	9.315	9.31			0.19	1
77) Xylene (total)	(3)		91	3714872	18.176	18.18			0.44	2
81) n-Propylbenzene	(3)	20.312(-0.000)	120	701133	8.694	8.69			0.21	1
85) 2-Chlorotoluene	(3)	20.599(-0.000)	126	652415	8.790	8.79			0.22	1
88) Alpha Methyl Styrene	(3)	21.007(-0.000)	118	970828	8.706	8.71			0.18	1
89) tert-Butylbenzene	(3)	21.122(-0.000)	119	1941601	8.774	8.77			0.76	5
91) sec-Butylbenzene	(3)	21.380(-0.000)	105	3164035	8.560	8.56			0.39	2
92) p-Isopropyltoluene	(3)	21.559(-0.000)	119	2345677	8.358	8.36			0.28	2
96) Benzyl Chloride	(3)	22.160(-0.000)	126	339088	8.766	8.77			0.25	2
95) n-Butylbenzene	(3)	22.139(-0.000)	92	1504017	8.327	8.33			0.26	2
99) 1,2-Dibromo-3-chloropropane	(3)	23.586(-0.000)	157	617997	7.676	7.68			0.28	2
101) 1,2,4-Trichlorobenzene	(3)	24.646(-0.000)	180	739293	6.581	6.58			0.38	2

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18aug27.b/fh00623.d Injection date and time: **27-AUG-2018 14:41**
Data file Sample Info. Line: LCSF32;200;F1823930AA;LCSF32;0;0;LCS; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 27-Aug-2018 15:26 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **all1**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
100) Hexachlorobutadiene	(3)	24.546(-0.000)	225	661992	6.424	6.42			0.47	2
102) Naphthalene	(3)	25.226(-0.000)	128	1503972	6.835	6.84			0.5	2

Total number of targets = 99

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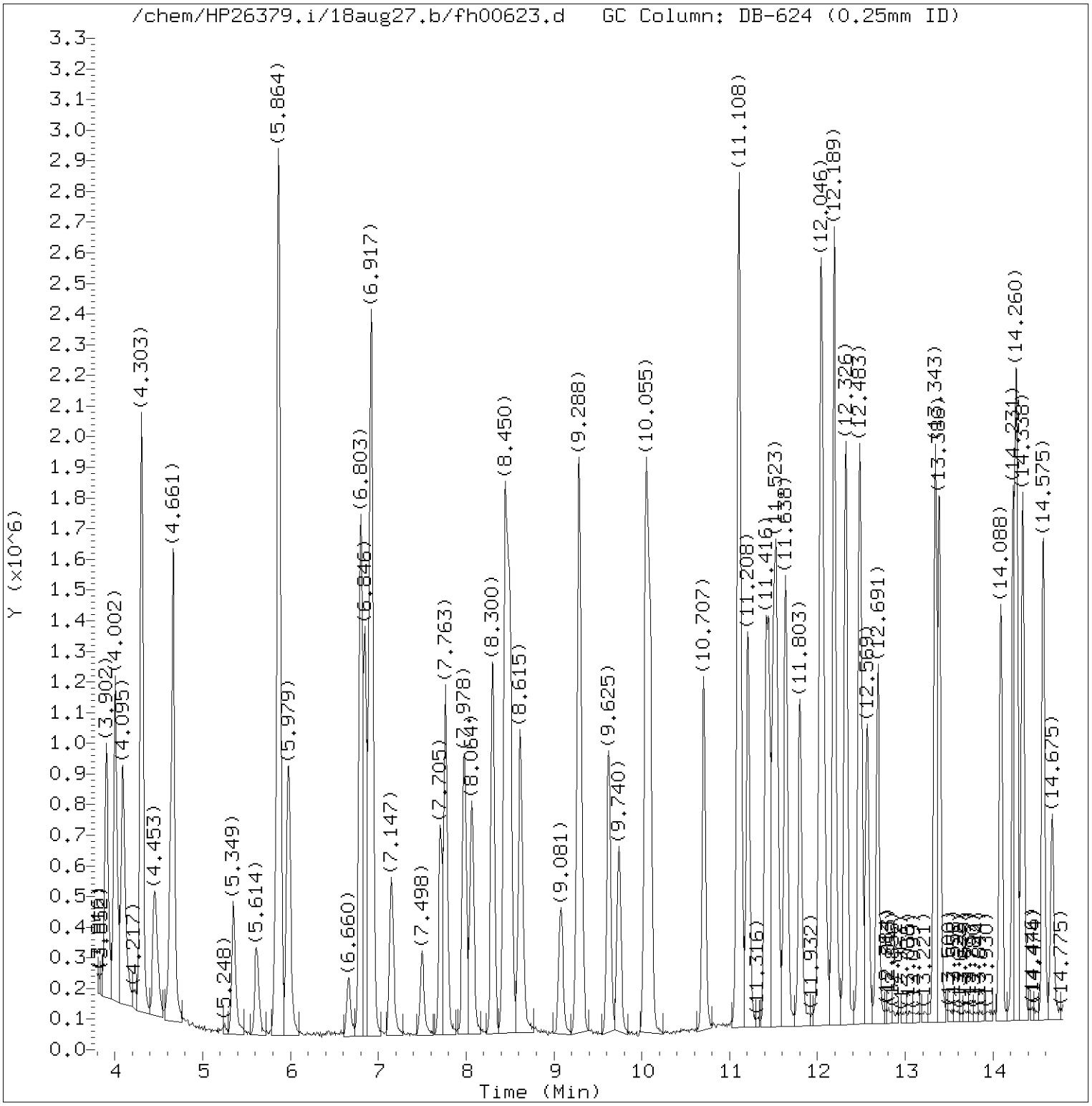
Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:20. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

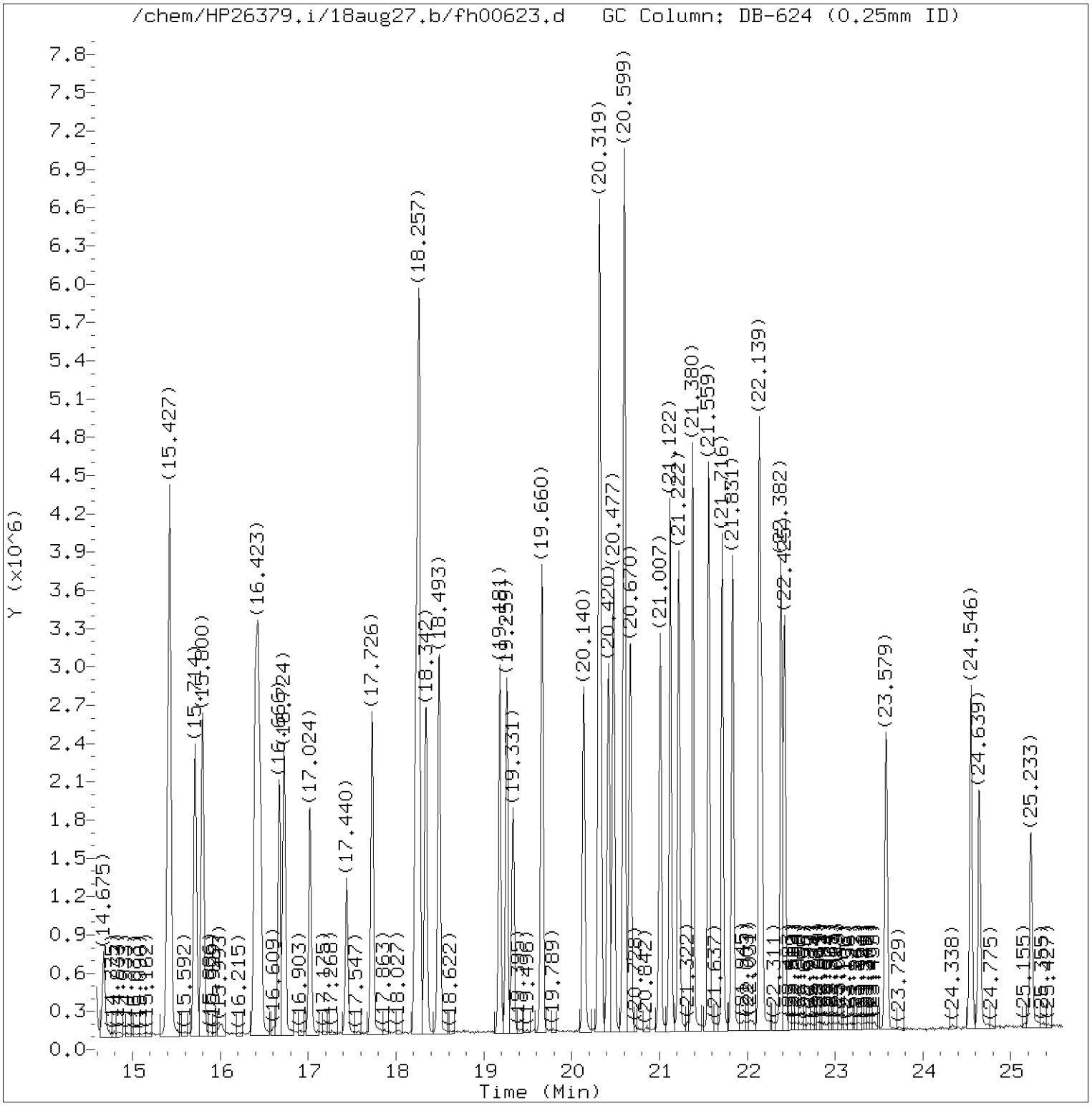
Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00623.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 14:41 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: all1
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 15:26 jeb07445

Sample Name: LCSF32 Lab Sample ID: LCSF32

Digitally signed by Jacob E. Bailey
on 08/27/2018 at 15:26.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00623.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 14:41 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: all1
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 15:26 jeb07445

Sample Name: LCSF32 Lab Sample ID: LCSF32

Digitally signed by Jacob E. Bailey
on 08/27/2018 at 15:26.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00623.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 14:41 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: all1
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 15:26 jeb07445

Sample Name: LCSF32 Lab Sample ID: LCSF32

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	724781	10.161
2) Dichlorodifluoromethane	(1)	4.002	85	1544759	11.124
3) Chlorodifluoromethane	(1)	4.095	51	1863662	11.053
4) Freon 114	(1)	4.303	85	1592896	10.733
5) Chloromethane	(1)	4.453	50	935739	10.393
6) Vinyl Chloride	(1)	4.640	62	815807	11.554
7) 1,3-Butadiene	(1)	4.668	54	724610	10.538
8) Bromomethane	(1)	5.349	94	493791	11.563
9) Chloroethane	(1)	5.607	64	454661	11.598
10) Bromoethene	(1)	5.829	106	465673	11.107
11) Pentane	(1)	5.864	43	1538828	10.210
12) Trichlorofluoromethane	(1)	5.872	101	1391134	10.204
13) Dichlorofluoromethane	(1)	5.979	67	1602011	11.621
14) Ethanol	(1)	6.667	45	285121	9.376
15) Freon123a	(1)	6.796	67	1536723	11.366
16) 1,1-Dichloroethene	(1)	6.853	61	1395536	11.029
17) Freon 113	(1)	6.910	103	787938	9.739
18) Carbon Disulfide	(1)	6.932	76	1649384	10.873
19) Methyl Iodide	(1)	7.147	142	1003910	10.065
20) Acrolein	(1)	7.498	56	379827	11.490
21) Isopropanol	(1)	7.705	45	1338422	10.365
22) 3-Chloropropene	(1)	7.763	41	1353520	13.294
23) Methylene Chloride	(1)	7.978	84	542154	11.671
24) Acetone	(1)	8.064	43	1476432	11.097
25) trans-1,2-Dichloroethene	(1)	8.300	61	1296395	10.951
26) Hexane	(1)	8.443	56	978370	10.202
27) Methyl t-Butyl Ether	(1)	8.493	73	1521035	10.324
28) tert-Butyl Alcohol	(1)	8.615	59	1789247	11.039
29) Acetonitrile	(1)	9.081	41	793196	10.362
30) Di-Isopropyl Ether	(1)	9.281	45	2993652	10.385
31) 1,1-Dichloroethane	(1)	9.625	63	1630014	10.491
32) Acrylonitrile	(1)	9.740	53	830535	10.860
33) Ethyl Tert-Butyl Ether	(1)	10.055	59	2667391	10.566
34) Vinyl Acetate	(1)	10.098	43	2760916	12.037
35) cis-1,2-Dichloroethene	(1)	10.707	61	1182407	10.498
36) 1,2-Dichloroethene (total)	(1)		61	2478802	21.450
37)*Bromochloromethane	(1)	11.101	130	415819	10.000
38) Cyclohexane	(1)	11.115	56	1526003	10.670

* = Compound is an internal standard.

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on 08/27/2018 at 15:26.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00623.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 14:41 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: all1
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 15:26 jeb07445

Sample Name: LCSF32 Lab Sample ID: LCSF32

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.208	83	1293203	10.646
40) Ethyl Acetate	(1)	11.416	43	2066749	10.136
41) Methyl Acrylate	(1)	11.452	55	1742825	10.904
42) Carbon Tetrachloride	(1)	11.502	117	1074383	10.357
43) Tetrahydrofuran	(1)	11.538	42	1091623	11.252
44) 1,1,1-Trichloroethane	(1)	11.638	97	1191728	9.967
45) 2-Butanone	(1)	11.803	43	1998179	10.580
46) Isooctane	(2)	12.046	57	4500337	10.425
47) Heptane	(2)	12.197	71	633630	10.196
48) Benzene	(2)	12.326	78	1926392	10.024
49) Tert-Amyl Methyl Ether	(2)	12.483	73	1509502	10.222
50) 1,2-Dichloroethane	(2)	12.691	62	1277363	10.197
51) Trichloroethene	(2)	13.343	130	676207	10.199
52)*1,4-Difluorobenzene	(2)	13.393	114	1487515	10.000
53) Dibromomethane	(2)	14.088	174	647094	10.085
54) Ethyl Acrylate	(2)	14.224	55	2092096	9.995
55) 1,2-Dichloropropane	(2)	14.267	63	1066684	9.622
56) Bromodichloromethane	(2)	14.338	83	1298840	9.949
57) Methyl Methacrylate	(2)	14.568	69	596397	9.648
58) 1,4-Dioxane	(2)	14.675	88	386010	9.663
59) cis-1,3-Dichloropropene	(2)	15.398	75	1061106	9.682
60) Octane	(3)	15.427	43	2316203	10.031
61) Toluene	(3)	15.800	91	1994859	9.454
62) 4-Methyl-2-Pentanone	(2)	16.394	43	2339890	9.374
63) Tetrachloroethene	(3)	16.430	166	937993	9.376
64) trans-1,3-Dichloropropene	(3)	16.459	75	952947	10.003
66) Ethyl Methacrylate	(3)	16.666	69	981286	9.315
65) 1,3-Dichloropropene (total)	(3)		75	2014053	19.686
67) 1,1,2-Trichloroethane	(3)	16.724	97	784185	9.343
68) Dibromochloromethane	(3)	17.024	127	835819	9.852
69) 1,2-Dibromoethane	(3)	17.440	107	1069768	9.219
70) 2-Hexanone	(3)	17.726	43	2171481	9.650
71)*Chlorobenzene-d5	(3)	18.228	117	1428463	10.000
72) Chlorobenzene	(3)	18.257	112	1598197	8.998
73) Ethylbenzene	(3)	18.264	91	2621059	9.102
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	767197	9.102
75) m/p-Xylene	(3)	18.493	91	1890702	9.134
76) o-Xylene	(3)	19.181	91	1824170	9.042

* = Compound is an internal standard.

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on 08/27/2018 at 15:26.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00623.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 14:41 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: all1
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 15:26 jeb07445

Sample Name: LCSF32 Lab Sample ID: LCSF32

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	3714872	18.176
78) Styrene	(3)	19.259	104	1412055	9.666
79) Bromoform	(3)	19.331	173	998680	9.483
80) Cumene	(3)	19.660	105	2533104	9.112
81) n-Propylbenzene	(3)	20.312	120	701133	8.694
82) Bromobenzene	(3)	20.327	156	876519	8.804
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	1716527	8.474
84) 4-Ethyltoluene	(3)	20.477	105	2477763	8.587
85) 2-Chlorotoluene	(3)	20.599	126	652415	8.790
86) 1,3,5-Trimethylbenzene	(3)	20.599	105	2202824	8.888
87) 1,2,3-Trichloropropane	(3)	20.663	110	464377	8.492
88) Alpha Methyl Styrene	(3)	21.007	118	970828	8.706
89) tert-Butylbenzene	(3)	21.122	119	1941601	8.774
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	2116185	8.839
91) sec-Butylbenzene	(3)	21.380	105	3164035	8.560
92) p-Isopropyltoluene	(3)	21.559	119	2345677	8.358
93) 1,3-Dichlorobenzene	(3)	21.716	146	1431750	8.091
94) 1,4-Dichlorobenzene	(3)	21.831	146	1407909	8.070
95) n-Butylbenzene	(3)	22.139	92	1504017	8.327
96) Benzyl Chloride	(3)	22.160	126	339088	8.766
97) Hexachloroethane	(3)	22.382	117	687527	8.769
98) 1,2-Dichlorobenzene	(3)	22.425	146	1293765	7.869
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	617997	7.676
100) Hexachlorobutadiene	(3)	24.546	225	661992	6.424
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	739293	6.581
102) Naphthalene	(3)	25.226	128	1503972	6.835

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on 08/27/2018 at 15:26.
Target 3.5 esignature user ID: jeb07445

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	N/A	Lab Sample ID:	LCSDF32
Canister ID:	N/A	Lab File ID:	fh00624.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	200 cc	Analyzed Time:	15:11
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
100-41-4	Ethylbenzene	39	
100-42-5	Styrene	39	
10061-01-5	cis-1,3-Dichloropropene	44	
10061-02-6	trans-1,3-Dichloropropene	43	
106-46-7	1,4-Dichlorobenzene	47	
106-93-4	1,2-Dibromoethane	69	
106-99-0	1,3-Butadiene	23	
107-05-1	3-Chloropropene	43	
107-06-2	1,2-Dichloroethane	42	
108-10-1	4-Methyl-2-Pentanone	38	
108-67-8	1,3,5-Trimethylbenzene	44	
108-86-1	Bromobenzene	56	
108-88-3	Toluene	35	
108-90-7	Chlorobenzene	41	
109-66-0	Pentane	31	
110-54-3	Hexane	37	
111-65-9	Octane	45	
124-48-1	Dibromochloromethane	77	
127-18-4	Tetrachloroethene	63	
142-82-5	Heptane	43	
156-59-2	cis-1,2-Dichloroethene	43	
156-60-5	trans-1,2-Dichloroethene	44	
1634-04-4	Methyl t-Butyl Ether	38	
179601-23-1	m/p-Xylene	40	

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	N/A	Lab Sample ID:	LCSDF32
Canister ID:	N/A	Lab File ID:	fh00624.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	200 cc	Analyzed Time:	15:11
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
540-84-1	Isooctane	49	
541-73-1	1,3-Dichlorobenzene	48	
56-23-5	Carbon Tetrachloride	65	
591-78-6	2-Hexanone	37	
622-96-8	4-Ethyltoluene	43	
630-20-6	1,1,1,2-Tetrachloroethane	59	
67-64-1	Acetone	27	
67-66-3	Chloroform	53	
67-72-1	Hexachloroethane	76	
71-43-2	Benzene	33	
71-55-6	1,1,1-Trichloroethane	55	
74-83-9	Bromomethane	46	
74-87-3	Chloromethane	22	
74-95-3	Dibromomethane	70	
75-00-3	Chloroethane	30	
75-01-4	Vinyl Chloride	29	
75-09-2	Methylene Chloride	42	
75-15-0	Carbon Disulfide	34	
75-25-2	Bromoform	85	
75-27-4	Bromodichloromethane	65	
75-34-3	1,1-Dichloroethane	43	
75-35-4	1,1-Dichloroethene	45	
75-43-4	Dichlorofluoromethane	48	
75-45-6	Chlorodifluoromethane	38	

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	N/A	Lab Sample ID:	LCSDF32
Canister ID:	N/A	Lab File ID:	fh00624.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	200 cc	Analyzed Time:	15:11
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-69-4	Trichlorofluoromethane	57	
75-71-8	Dichlorodifluoromethane	54	
76-13-1	Freon 113	74	
76-14-2	Freon 114	76	
78-87-5	1,2-Dichloropropane	45	
78-93-3	2-Butanone	31	
79-00-5	1,1,2-Trichloroethane	49	
79-01-6	Trichloroethene	55	
79-34-5	1,1,2,2-Tetrachloroethane	57	
95-47-6	o-Xylene	39	
95-50-1	1,2-Dichlorobenzene	47	
95-63-6	1,2,4-Trimethylbenzene	44	
96-18-4	1,2,3-Trichloropropane	49	
98-82-8	Cumene	44	
115-07-1	Propene	18	
593-60-2	Bromoethene	50	
64-17-5	Ethanol	18	
107-02-8	Acrolein	26	
74-88-4	Methyl Iodide	60	
67-63-0	Isopropanol	28	
75-05-8	Acetonitrile	18	
75-65-0	tert-Butyl Alcohol	33	
107-13-1	Acrylonitrile	24	
108-05-4	Vinyl Acetate	44	

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J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	N/A	Lab Sample ID:	LCSDF32
Canister ID:	N/A	Lab File ID:	fh00624.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	200 cc	Analyzed Time:	15:11
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
108-20-3	Di-Isopropyl Ether	45	
637-92-3	Ethyl Tert-Butyl Ether	45	
540-59-0	1,2-Dichloroethene (total)	87	
141-78-6	Ethyl Acetate	37	
96-33-3	Methyl Acrylate	38	
109-99-9	Tetrahydrofuran	33	
110-82-7	Cyclohexane	37	
994-05-8	Tert-Amyl Methyl Ether	43	
140-88-5	Ethyl Acrylate	39	
123-91-1	1,4-Dioxane	36	
80-62-6	Methyl Methacrylate	40	
542-75-6	1,3-Dichloropropene (total)	87	
97-63-2	Ethyl Methacrylate	42	
1330-20-7	Xylene (total)	79	
103-65-1	n-Propylbenzene	42	
95-49-8	2-Chlorotoluene	47	
98-83-9	Alpha Methyl Styrene	40	
98-06-6	tert-Butylbenzene	49	
135-98-8	sec-Butylbenzene	49	
99-87-6	p-Isopropyltoluene	48	
100-44-7	Benzyl Chloride	42	
104-51-8	n-Butylbenzene	45	
96-12-8	1,2-Dibromo-3-chloropropane	70	
120-82-1	1,2,4-Trichlorobenzene	53	

Abbreviations:
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E = The compound exceeded the calibration limit.
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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE01

Sample Media:	N/A	Lab Sample ID:	LCSDF32
Canister ID:	N/A	Lab File ID:	fh00624.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	08/27/2018
Injection Volume:	200 cc	Analyzed Time:	15:11
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
87-68-3	Hexachlorobutadiene	71	
91-20-3	Naphthalene	39	

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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

LCSDF32

Data file: /chem/HP26379.i/18aug27.b/fh00624.d Injection date and time: **27-AUG-2018 15:11**
Data file Sample Info. Line: LCSDF32;200;F1823930AA;LCSDF32;0;0;LCSD; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 27-Aug-2018 15:43 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **all1**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
71) Chlorobenzene-d5	18.235(0.000)	2017	117	1500741 (2)	10.00		883644 - 2061835
37) Bromochloromethane	11.108(-0.014)	1022	130	410394 (-4)	10.00		255500 - 596166
52) 1,4-Difluorobenzene	13.400(-0.007)	1342	114	1474427 (-2)	10.00		906195 - 2114453

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)	4.009(-0.000)	85	1492954	10.893	10.89			0.13	1
3) Chlorodifluoromethane	(1)	4.095(0.000)	51	1803335	10.837	10.84			0.15	1
4) Freon 114	(1)	4.310(-0.000)	85	1586464	10.831	10.83			0.12	1
5) Chloromethane	(1)	4.453(0.001)	50	941110	10.591	10.59			0.24	1
6) Vinyl Chloride	(1)	4.640(-0.000)	62	782470	11.228	11.23			0.12	1
7) 1,3-Butadiene	(1)	4.668(0.000)	54	707186	10.420	10.42			0.17	1
8) Bromomethane	(1)	5.356(-0.000)	94	495284	11.751	11.75			0.18	1
9) Chloroethane	(1)	5.621(0.000)	64	441997	11.424	11.42			0.19	1
90) 1,2,4-Trimethylbenzene	(3)	21.222(0.000)	105	2243518	8.920	8.92			0.28	2
11) Pentane	(1)	5.872(0.000)	43	1546062	10.394	10.39			0.13	1
12) Trichlorofluoromethane	(1)	5.879(0.000)	101	1373628	10.209	10.21			0.15	1
13) Dichlorofluoromethane	(1)	5.979(0.000)	67	1561078	11.474	11.47			0.11	1
87) 1,2,3-Trichloropropane	(3)	20.678(-0.000)	110	469381	8.170	8.17			0.14	1
67) 1,1,2-Trichloroethane	(3)	16.738(-0.000)	97	789472	8.953	8.95			0.12	1
16) 1,1-Dichloroethene	(1)	6.853(0.000)	61	1411382	11.302	11.30			0.14	1
17) Freon 113	(1)	6.917(0.000)	103	767938	9.618	9.62			0.11	1
18) Carbon Disulfide	(1)	6.939(0.000)	76	1625569	10.857	10.86			0.13	1
68) Dibromochloromethane	(3)	17.032(-0.000)	127	801980	8.997	9.00			0.13	1
69) 1,2-Dibromoethane	(3)	17.447(-0.000)	107	1090454	8.945	8.94			0.13	1
70) 2-Hexanone	(3)	17.734(-0.000)	43	2150179	9.096	9.10			0.18	1
22) 3-Chloropropene	(1)	7.777(-0.000)	41	1368349	13.618	13.62			0.15	1
23) Methylene Chloride	(1)	7.985(0.000)	84	553294	12.068	12.07			0.25	2
24) Acetone	(1)	8.078(-0.000)	43	1498692	11.413	11.41			0.53	5
25) trans-1,2-Dichloroethene	(1)	8.314(-0.000)	61	1295083	11.085	11.08			0.086	1
26) Hexane	(1)	8.457(0.000)	56	980958	10.365	10.36			0.13	1
27) Methyl t-Butyl Ether	(1)	8.508(0.000)	73	1526484	10.498	10.50			0.15	1
72) Chlorobenzene	(3)	18.264(-0.000)	112	1648703	8.836	8.84			0.13	1
73) Ethylbenzene	(3)	18.271(0.000)	91	2736403	9.044	9.04			0.19	1
31) 1,1-Dichloroethane	(1)	9.632(0.001)	63	1619604	10.562	10.56			0.089	1
74) 1,1,1,2-Tetrachloroethane	(3)	18.350(-0.000)	131	757679	8.556	8.56			0.15	1
75) m/p-Xylene	(3)	18.493(0.000)	91	1993967	9.169	9.17			0.26	2
76) o-Xylene	(3)	19.188(0.000)	91	1918196	9.050	9.05			0.19	1
35) cis-1,2-Dichloroethene	(1)	10.721(0.000)	61	1207016	10.858	10.86			0.12	1
86) 1,3,5-Trimethylbenzene	(3)	20.606(0.000)	105	2342454	8.996	9.00			0.32	2
78) Styrene	(3)	19.266(-0.000)	104	1410963	9.193	9.19			0.2	1
39) Chloroform	(1)	11.222(0.000)	83	1291348	10.771	10.77			0.092	1
79) Bromoform	(3)	19.338(-0.000)	173	914159	8.263	8.26			0.17	1
80) Cumene	(3)	19.668(0.000)	105	2642385	9.047	9.05			0.24	1
42) Carbon Tetrachloride	(1)	11.509(0.001)	117	1060632	10.360	10.36			0.14	1
84) 4-Ethyltoluene	(3)	20.484(-0.000)	105	2680567	8.843	8.84			0.18	1
44) 1,1,1-Trichloroethane	(1)	11.652(0.000)	97	1198790	10.159	10.16			0.12	1
45) 2-Butanone	(1)	11.810(0.001)	43	1972991	10.585	10.59			0.21	1
46) Isooctane	(2)	12.053(-0.000)	57	4520039	10.564	10.56			0.13	1

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Data file: /chem/HP26379.i/18aug27.b/fh00624.d Injection date and time: **27-AUG-2018 15:11**
Data file Sample Info. Line: LCSDF32;200;F1823930AA;LCSDF32;0;0;LCSD; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 27-Aug-2018 15:43 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **all1**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
47) Heptane	(2)	12.204(0.000)	71	641991	10.422	10.42			0.23	1
48) Benzene	(2)	12.333(-0.000)	78	1939414	10.181	10.18			0.11	1
82) Bromobenzene	(3)	20.334(-0.000)	156	920046	8.797	8.80			0.1	1
50) 1,2-Dichloroethane	(2)	12.698(-0.000)	62	1287799	10.372	10.37			0.08	1
51) Trichloroethene	(2)	13.350(-0.000)	130	671683	10.221	10.22			0.18	1
83) 1,1,2,2-Tetrachloroethane	(3)	20.427(-0.000)	83	1764343	8.291	8.29			0.15	1
98) 1,2-Dichlorobenzene	(3)	22.425(-0.000)	146	1361420	7.882	7.88			0.2	1
53) Dibromomethane	(2)	14.102(0.000)	174	621795	9.777	9.78			0.14	1
97) Hexachloroethane	(3)	22.390(-0.000)	117	649759	7.888	7.89			0.27	2
55) 1,2-Dichloropropane	(2)	14.274(0.000)	63	1064900	9.691	9.69			0.13	1
56) Bromodichloromethane	(2)	14.345(0.000)	83	1249356	9.655	9.65			0.12	1
94) 1,4-Dichlorobenzene	(3)	21.838(0.000)	146	1429852	7.801	7.80			0.17	1
93) 1,3-Dichlorobenzene	(3)	21.716(0.000)	146	1479569	7.958	7.96			0.19	1
59) cis-1,3-Dichloropropene	(2)	15.406(0.000)	75	1062774	9.783	9.78			0.1	1
60) Octane	(3)	15.434(-0.000)	43	2359302	9.726	9.73			0.4	2
61) Toluene	(3)	15.807(-0.000)	91	2052357	9.258	9.26			0.12	1
62) 4-Methyl-2-Pentanone	(2)	16.401(0.000)	43	2281198	9.220	9.22			0.15	1
63) Tetrachloroethene	(3)	16.437(-0.000)	166	971403	9.243	9.24			0.25	2
64) trans-1,3-Dichloropropene	(3)	16.466(-0.000)	75	941486	9.407	9.41			0.12	1
1) Propene	(1)	3.909(-0.000)	41	728333	10.346	10.35			0.16	1
10) Bromoethene	(1)	5.829(0.000)	106	469455	11.345	11.35			0.18	1
14) Ethanol	(1)	6.667(0.000)	45	285735	9.520	9.52			0.69	5
15) Freon123a	(1)	6.810(-0.000)	67	1512586	11.336	11.34			0.2	1
20) Acrolein	(1)	7.505(0.000)	56	366431	11.231	11.23			0.62	5
19) Methyl Iodide	(1)	7.161(-0.000)	142	1024072	10.403	10.40			0.15	1
21) Isopropanol	(1)	7.720(0.000)	45	1428812	11.211	11.21			0.24	1
29) Acetonitrile	(1)	9.088(0.000)	41	791482	10.477	10.48			0.83	5
28) tert-Butyl Alcohol	(1)	8.629(-0.000)	59	1766526	11.043	11.04			0.21	1
32) Acrylonitrile	(1)	9.747(0.000)	53	847644	11.231	11.23			0.13	1
34) Vinyl Acetate	(1)	10.112(-0.000)	43	2834884	12.523	12.52			0.16	1
30) Di-Isopropyl Ether	(1)	9.296(0.001)	45	3050596M	10.722	10.72			0.15	1
33) Ethyl Tert-Butyl Ether	(1)	10.062(0.000)	59	2672610	10.726	10.73			0.15	1
36) 1,2-Dichloroethene (total)	(1)		61	2502099	21.943	21.94			0.2	1
40) Ethyl Acetate	(1)	11.423(0.000)	43	2086451	10.367	10.37			0.25	2
41) Methyl Acrylate	(1)	11.459(0.000)	55	1718920	10.896	10.90			0.14	1
43) Tetrahydrofuran	(1)	11.552(0.000)	42	1076025	11.238	11.24			0.24	1
38) Cyclohexane	(1)	11.122(0.001)	56	1527641	10.822	10.82			0.11	1
49) Tert-Amyl Methyl Ether	(2)	12.490(-0.000)	73	1513922	10.343	10.34			0.11	1
54) Ethyl Acrylate	(2)	14.238(0.000)	55	2000897	9.644	9.64			0.16	1
58) 1,4-Dioxane	(2)	14.682(0.000)	88	400740	10.121	10.12			0.17	1
57) Methyl Methacrylate	(2)	14.575(0.001)	69	591675	9.657	9.66			0.15	1
65) 1,3-Dichloropropene (total)	(3)		75	2004260	19.191	19.19			0.23	1
66) Ethyl Methacrylate	(3)	16.673(-0.000)	69	986508	8.913	8.91			0.19	1
77) Xylene (total)	(3)		91	3912163	18.219	18.22			0.44	2
81) n-Propylbenzene	(3)	20.319(-0.000)	120	725330	8.561	8.56			0.21	1
85) 2-Chlorotoluene	(3)	20.599(0.000)	126	702564	9.010	9.01			0.22	1
88) Alpha Methyl Styrene	(3)	21.014(-0.000)	118	971323	8.291	8.29			0.18	1
89) tert-Butylbenzene	(3)	21.129(0.000)	119	2063936	8.877	8.88			0.76	5
91) sec-Butylbenzene	(3)	21.387(-0.000)	105	3445518	8.872	8.87			0.39	2
92) p-Isopropyltoluene	(3)	21.566(-0.000)	119	2562456	8.691	8.69			0.28	2
96) Benzyl Chloride	(3)	22.167(0.000)	126	329422	8.106	8.11			0.25	2
95) n-Butylbenzene	(3)	22.139(0.000)	92	1571094	8.280	8.28			0.26	2
99) 1,2-Dibromo-3-chloropropane	(3)	23.586(0.000)	157	610330	7.216	7.22			0.28	2
101) 1,2,4-Trichlorobenzene	(3)	24.646(0.000)	180	844935	7.159	7.16			0.38	2

M = Compound was manually integrated.

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Data file: /chem/HP26379.i/18aug27.b/fh00624.d Injection date and time: **27-AUG-2018 15:11**
Data file Sample Info. Line: LCSDF32;200;F1823930AA;LCSDF32;0;0;LCSD; Instrument ID: **HP26379.i** Batch: **F1823930AA**
Date, time and analyst ID of latest file update: 27-Aug-2018 15:43 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug27.b/fh00622.d**

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: **all1**
Calibration date and time (Last Method Edit): 27-AUG-2018 13:38
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug27.b/fh00621.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
100) Hexachlorobutadiene	(3)	24.546(0.000)	225	725690	6.703	6.70			0.47	2
102) Naphthalene	(3)	25.233(0.000)	128	1718769	7.435	7.43			0.5	2

Total number of targets = 99

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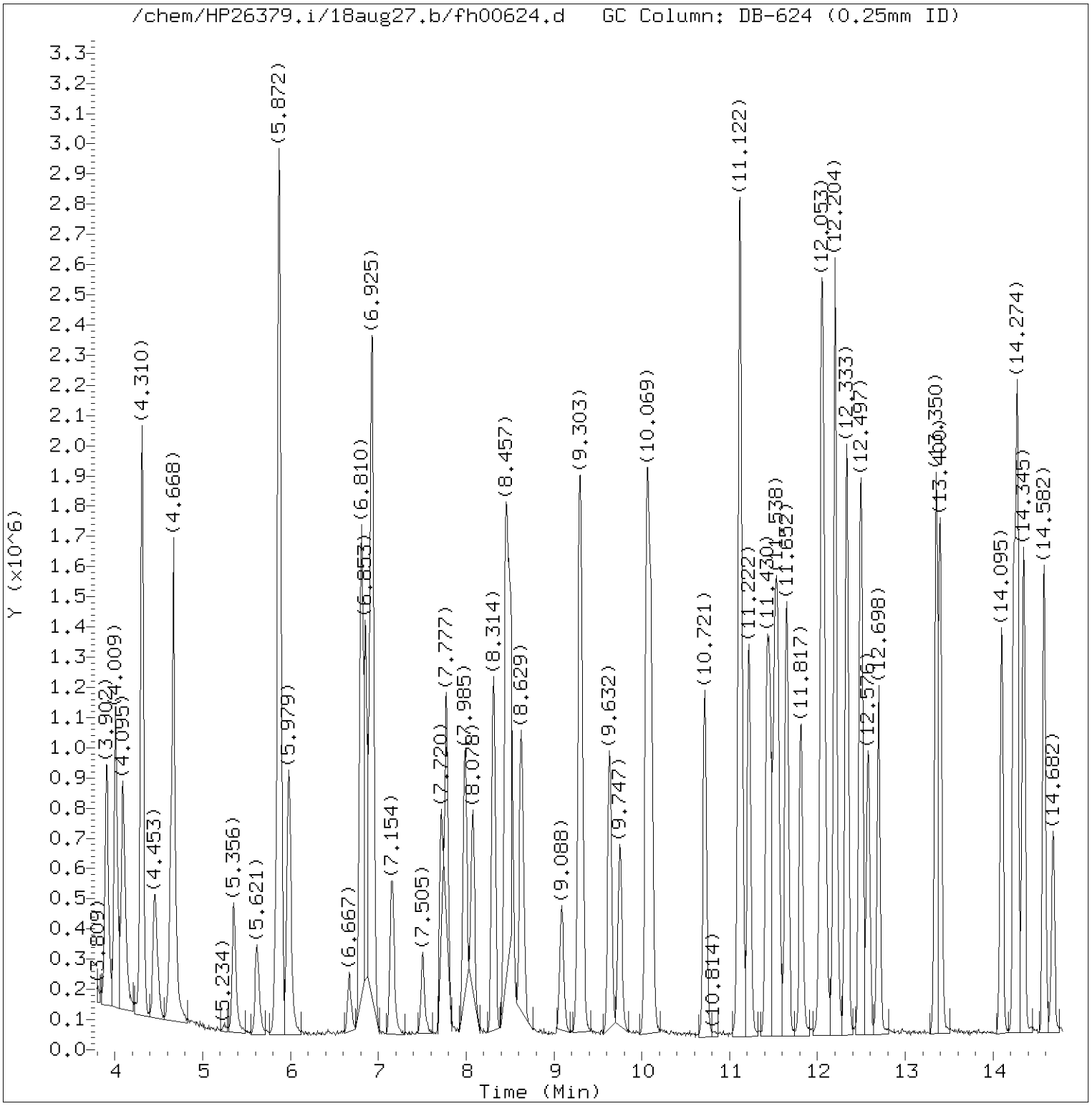
Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:20. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

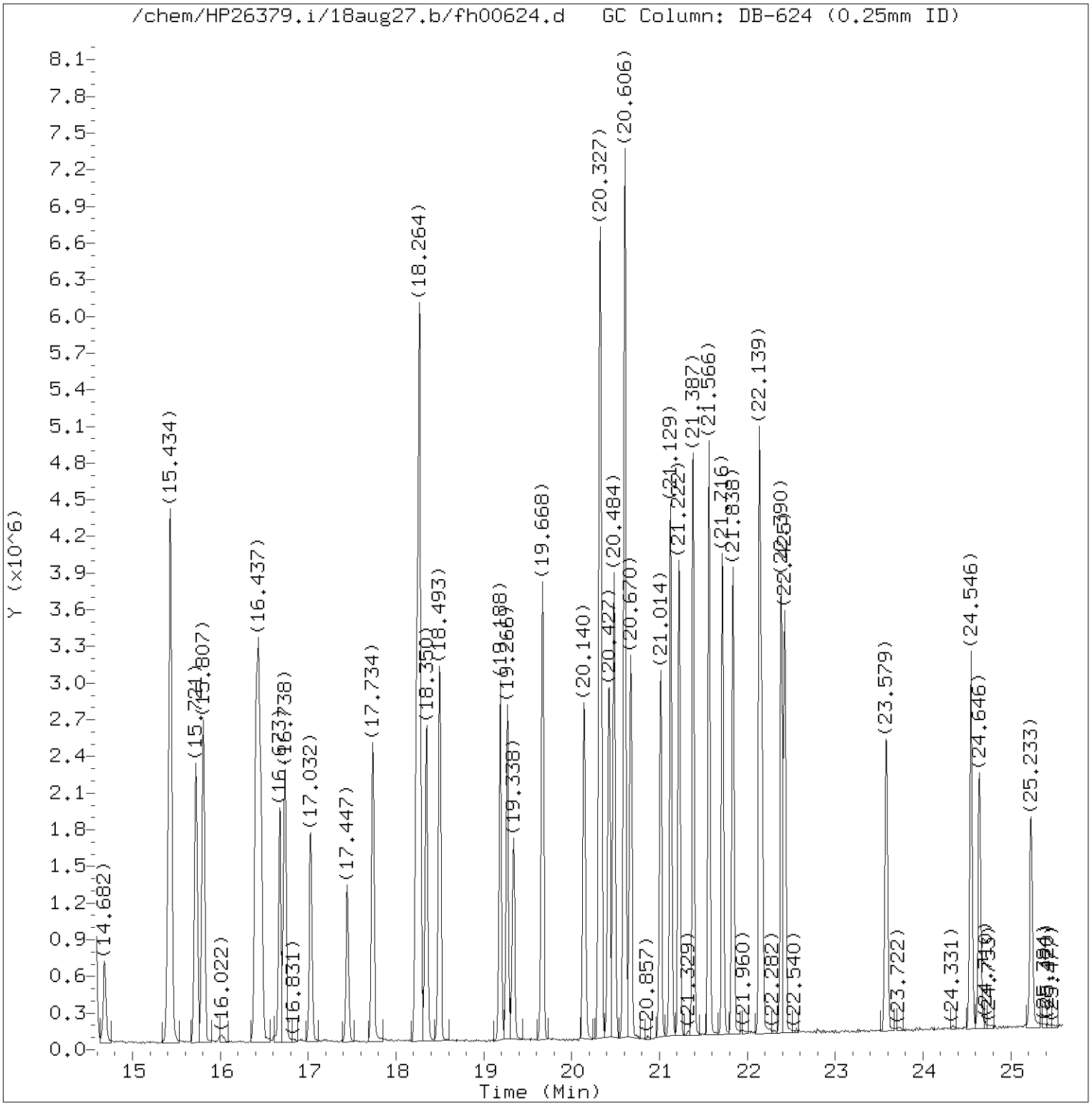
Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00624.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 15:11 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: all1
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 15:43 jeb07445

Sample Name: LCSDF32 Lab Sample ID: LCSDF32

Digitally signed by Jacob E. Bailey
on 08/27/2018 at 15:43.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00624.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 15:11 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: all1
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 15:43 jeb07445

Sample Name: LCSDF32 Lab Sample ID: LCSDF32

Digitally signed by Jacob E. Bailey
on 08/27/2018 at 15:43.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00624.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 15:11 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: all1
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 15:43 jeb07445

Sample Name: LCSDF32 Lab Sample ID: LCSDF32

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.909	41	728333	10.346
2) Dichlorodifluoromethane	(1)	4.009	85	1492954	10.893
3) Chlorodifluoromethane	(1)	4.095	51	1803335	10.837
4) Freon 114	(1)	4.310	85	1586464	10.831
5) Chloromethane	(1)	4.453	50	941110	10.591
6) Vinyl Chloride	(1)	4.640	62	782470	11.228
7) 1,3-Butadiene	(1)	4.668	54	707186	10.420
8) Bromomethane	(1)	5.356	94	495284	11.751
9) Chloroethane	(1)	5.621	64	441997	11.424
10) Bromoethene	(1)	5.829	106	469455	11.345
11) Pentane	(1)	5.872	43	1546062	10.394
12) Trichlorofluoromethane	(1)	5.879	101	1373628	10.209
13) Dichlorofluoromethane	(1)	5.979	67	1561078	11.474
14) Ethanol	(1)	6.667	45	285735	9.520
15) Freon123a	(1)	6.810	67	1512586	11.336
16) 1,1-Dichloroethene	(1)	6.853	61	1411382	11.302
17) Freon 113	(1)	6.917	103	767938	9.618
18) Carbon Disulfide	(1)	6.939	76	1625569	10.857
19) Methyl Iodide	(1)	7.161	142	1024072	10.403
20) Acrolein	(1)	7.505	56	366431	11.231
21) Isopropanol	(1)	7.720	45	1428812	11.211
22) 3-Chloropropene	(1)	7.777	41	1368349	13.618
23) Methylene Chloride	(1)	7.985	84	553294	12.068
24) Acetone	(1)	8.078	43	1498692	11.413
25) trans-1,2-Dichloroethene	(1)	8.314	61	1295083	11.085
26) Hexane	(1)	8.457	56	980958	10.365
27) Methyl t-Butyl Ether	(1)	8.508	73	1526484	10.498
28) tert-Butyl Alcohol	(1)	8.629	59	1766526	11.043
29) Acetonitrile	(1)	9.088	41	791482	10.477
30) Di-Isopropyl Ether	(1)	9.296	45	3050596M	10.722
31) 1,1-Dichloroethane	(1)	9.632	63	1619604	10.562
32) Acrylonitrile	(1)	9.747	53	847644	11.231
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	2672610	10.726
34) Vinyl Acetate	(1)	10.112	43	2834884	12.523
35) cis-1,2-Dichloroethene	(1)	10.721	61	1207016	10.858
36) 1,2-Dichloroethene (total)	(1)		61	2502099	21.943
37)*Bromochloromethane	(1)	11.108	130	410394	10.000
38) Cyclohexane	(1)	11.122	56	1527641	10.822

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

Digitally signed by Jacob E. Bailey
on 08/27/2018 at 15:43.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00624.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 15:11 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: all1
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 15:43 jeb07445

Sample Name: LCSDF32 Lab Sample ID: LCSDF32

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.222	83	1291348	10.771
40) Ethyl Acetate	(1)	11.423	43	2086451	10.367
41) Methyl Acrylate	(1)	11.459	55	1718920	10.896
42) Carbon Tetrachloride	(1)	11.509	117	1060632	10.360
43) Tetrahydrofuran	(1)	11.552	42	1076025	11.238
44) 1,1,1-Trichloroethane	(1)	11.652	97	1198790	10.159
45) 2-Butanone	(1)	11.810	43	1972991	10.585
46) Isooctane	(2)	12.053	57	4520039	10.564
47) Heptane	(2)	12.204	71	641991	10.422
48) Benzene	(2)	12.333	78	1939414	10.181
49) Tert-Amyl Methyl Ether	(2)	12.490	73	1513922	10.343
50) 1,2-Dichloroethane	(2)	12.698	62	1287799	10.372
51) Trichloroethene	(2)	13.350	130	671683	10.221
52)*1,4-Difluorobenzene	(2)	13.400	114	1474427	10.000
53) Dibromomethane	(2)	14.102	174	621795	9.777
54) Ethyl Acrylate	(2)	14.238	55	2000897	9.644
55) 1,2-Dichloropropane	(2)	14.274	63	1064900	9.691
56) Bromodichloromethane	(2)	14.345	83	1249356	9.655
57) Methyl Methacrylate	(2)	14.575	69	591675	9.657
58) 1,4-Dioxane	(2)	14.682	88	400740	10.121
59) cis-1,3-Dichloropropene	(2)	15.406	75	1062774	9.783
60) Octane	(3)	15.434	43	2359302	9.726
61) Toluene	(3)	15.807	91	2052357	9.258
62) 4-Methyl-2-Pentanone	(2)	16.401	43	2281198	9.220
63) Tetrachloroethene	(3)	16.437	166	971403	9.243
64) trans-1,3-Dichloropropene	(3)	16.466	75	941486	9.407
65) 1,3-Dichloropropene (total)	(3)		75	2004260	19.191
66) Ethyl Methacrylate	(3)	16.673	69	986508	8.913
67) 1,1,2-Trichloroethane	(3)	16.738	97	789472	8.953
68) Dibromochloromethane	(3)	17.032	127	801980	8.997
69) 1,2-Dibromoethane	(3)	17.447	107	1090454	8.945
70) 2-Hexanone	(3)	17.734	43	2150179	9.096
71)*Chlorobenzene-d5	(3)	18.235	117	1500741	10.000
72) Chlorobenzene	(3)	18.264	112	1648703	8.836
73) Ethylbenzene	(3)	18.271	91	2736403	9.044
74) 1,1,1,2-Tetrachloroethane	(3)	18.350	131	757679	8.556
75) m/p-Xylene	(3)	18.493	91	1993967	9.169
76) o-Xylene	(3)	19.188	91	1918196	9.050

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 08/27/2018 at 15:43.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug27.b/fh00624.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 15:11 Analyst ID: jeb07445

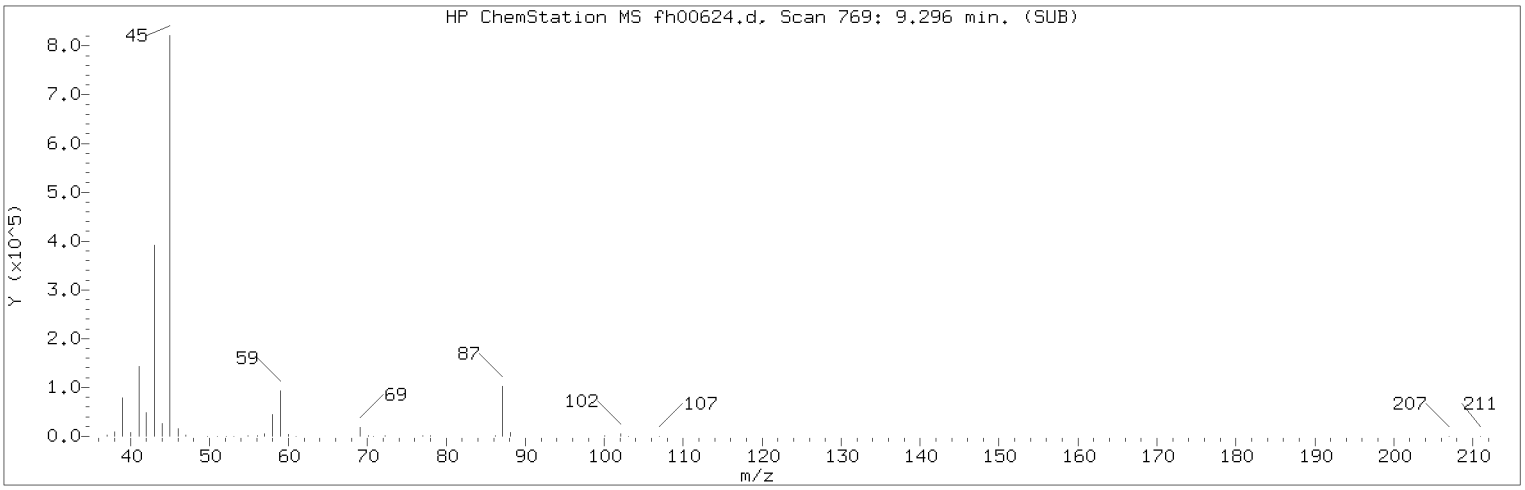
Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: all1
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 15:43 jeb07445

Sample Name: LCSDF32 Lab Sample ID: LCSDF32

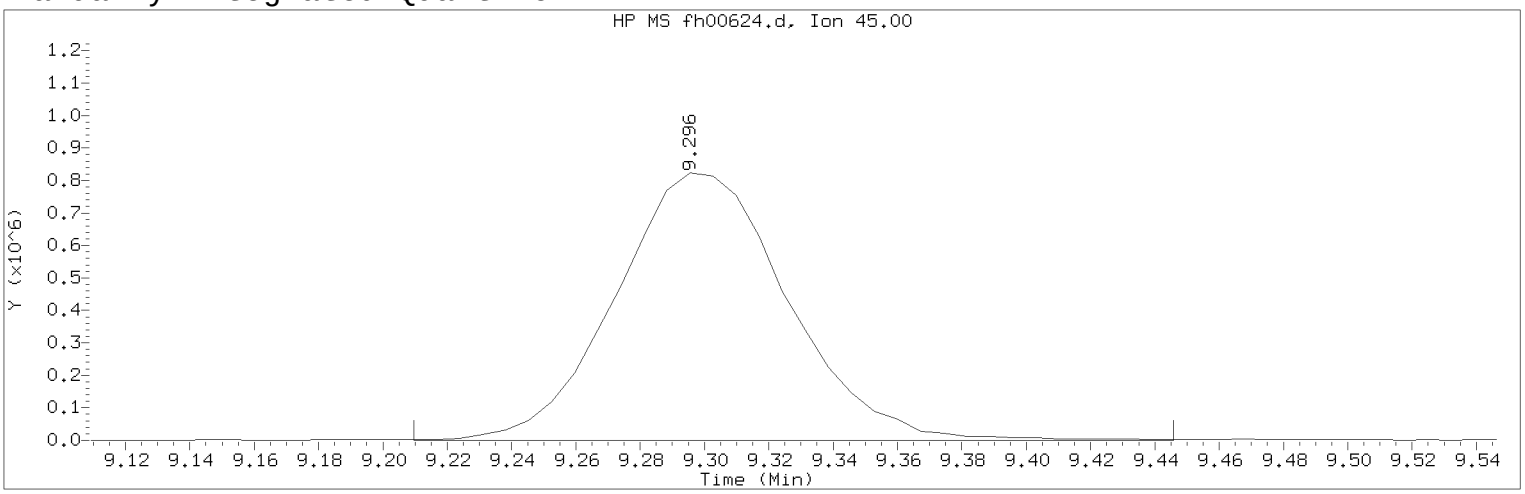
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	3912163	18.219
78) Styrene	(3)	19.266	104	1410963	9.193
79) Bromoform	(3)	19.338	173	914159	8.263
80) Cumene	(3)	19.668	105	2642385	9.047
81) n-Propylbenzene	(3)	20.319	120	725330	8.561
82) Bromobenzene	(3)	20.334	156	920046	8.797
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	1764343	8.291
84) 4-Ethyltoluene	(3)	20.484	105	2680567	8.843
85) 2-Chlorotoluene	(3)	20.599	126	702564	9.010
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	2342454	8.996
87) 1,2,3-Trichloropropane	(3)	20.678	110	469381	8.170
88) Alpha Methyl Styrene	(3)	21.014	118	971323	8.291
89) tert-Butylbenzene	(3)	21.129	119	2063936	8.877
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	2243518	8.920
91) sec-Butylbenzene	(3)	21.387	105	3445518	8.872
92) p-Isopropyltoluene	(3)	21.566	119	2562456	8.691
93) 1,3-Dichlorobenzene	(3)	21.716	146	1479569	7.958
94) 1,4-Dichlorobenzene	(3)	21.838	146	1429852	7.801
95) n-Butylbenzene	(3)	22.139	92	1571094	8.280
96) Benzyl Chloride	(3)	22.167	126	329422	8.106
97) Hexachloroethane	(3)	22.390	117	649759	7.888
98) 1,2-Dichlorobenzene	(3)	22.425	146	1361420	7.882
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	610330	7.216
100) Hexachlorobutadiene	(3)	24.546	225	725690	6.703
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	844935	7.159
102) Naphthalene	(3)	25.233	128	1718769	7.435

Digitally signed by Jacob E. Bailey
on 08/27/2018 at 15:43.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug27.b/fh00624.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 15:11 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: all1
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 15:43 jeb07445

Sample Name: LCSDF32 Lab Sample ID: LCSDF32

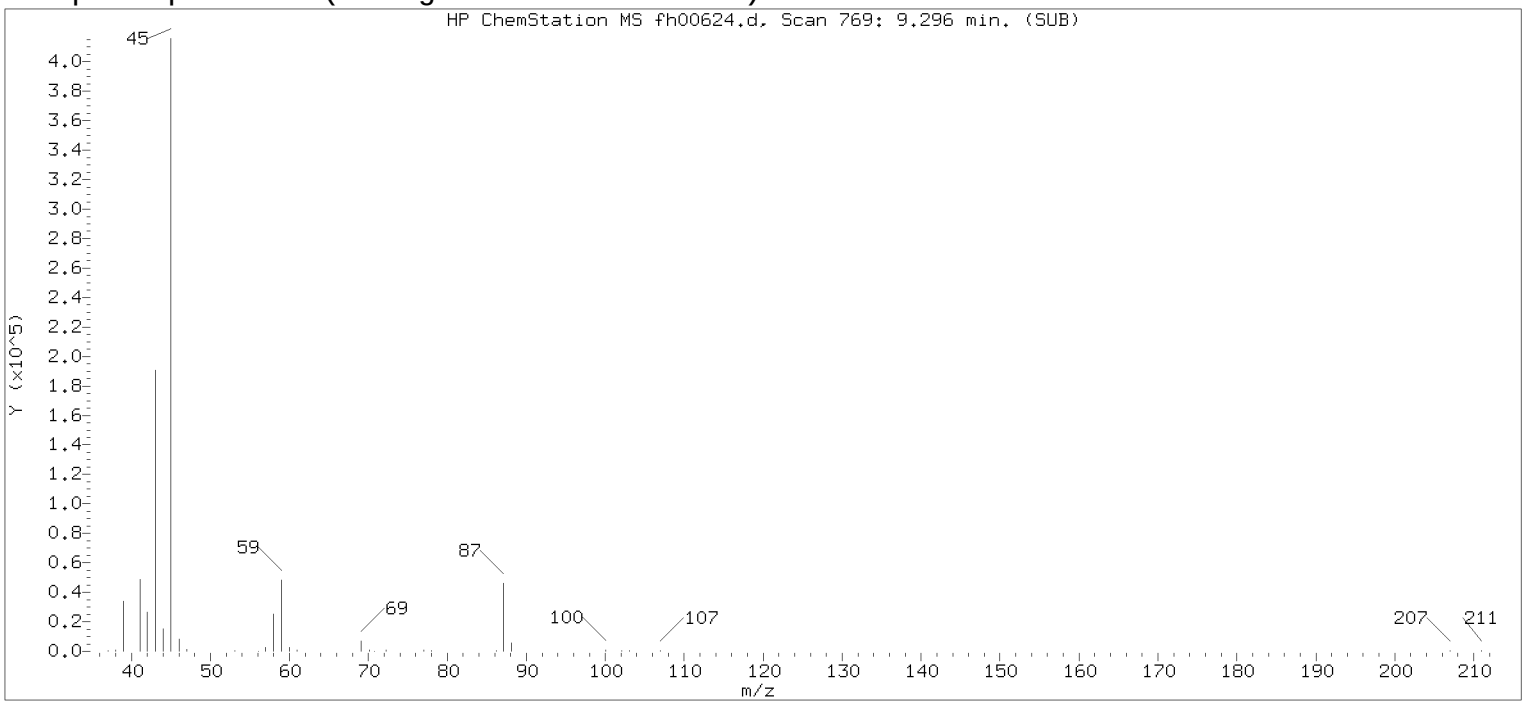
Compound Number : 30
Compound Name : Di-Isopropyl Ether
Scan Number : 769
Retention Time (minutes): 9.296
Quant Ion : 45.00
Area (flag) : 3050596M
Concentration (ppb(v)) : 10.7223
Integration start scan : 756 Integration stop scan: 789
Y at integration start : 391 Y at integration end: 391

Reason for manual integration: improper integration

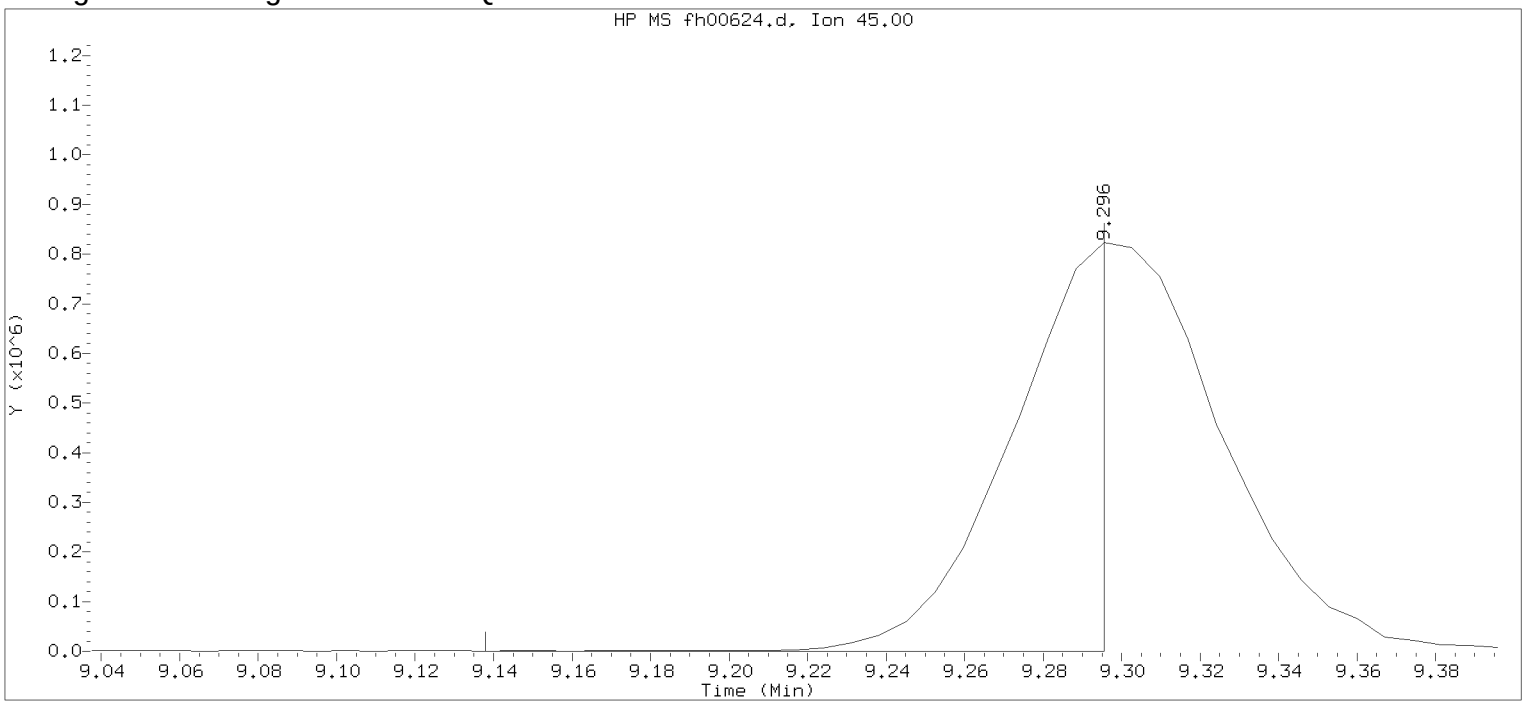
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/27/2018 at 15:43.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/29/2018 at 11:20.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug27.b/fh00624.d Instrument ID: HP26379.i
Injection date and time: 27-AUG-2018 15:11 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug27.b/to-15.m Sublist used: all
Calibration date and time: 27-AUG-2018 13:38
Date, time and analyst ID of latest file update: 27-Aug-2018 15:42 Unknown

Sample Name: LCSDF32 Lab Sample ID: LCSDF32

Compound Number : 30
Compound Name : Di-Isopropyl Ether
Scan Number : 769
Retention Time (minutes): 9.296
Quant Ion : 45.00
Area : 1320829
Concentration (ppb(v)) : 4.6425
Integration start scan : 746 Integration stop scan: 768
Y at integration start : 430 Y at integration end: 430

Digitally signed by Jacob E. Bailey on 08/27/2018 at 15:43.
Target 3.5 esignature user ID: jeb07445

Canister Dilution Calc/Pressure Gauge Readings

Volatile Organics in Air by GC/MS

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Summa Sample Prep Worksheet

Sample	Can_ID	Initial Pressure	Units	Final Pressure (PSIG)	Dilution Factor	SDG
9766344	504	-6.6	"Hg	8.2	2	GLE01
9766345	509	-3.0	"Hg	11.8	2	GLE01
9766346	518	-5.0	"Hg	9.8	2	GLE01
9766347	525	-2.0	"Hg	12.7	2	GLE01
9766348	820	-0.2	"Hg	14.5	2	GLE01
9766349	1352	-5.0	"Hg	9.8	2	GLE01
9766350	851	-1.0	"Hg	13.7	2	GLE01
9766351	894	-9.8	"Hg	5.1	2	GLE01
9766352	1157	-3.0	"Hg	11.8	2	GLE01
9766353	1178	-3.2	"Hg	11.6	2	GLE01
9766354	1506	-6.0	"Hg	8.8	2	GLE01

Clean Canister Certification Data

Volatile Organics in Air by GC/MS

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Cleaning Data Summary
SDG# GLE01

Sample #	Can ID	Certified File	Instrument #
9766344	504	ff00283	HP26379
9766345	509	ef00189	HP22820
9766346	518	ff00304	HP26379
9766347	525	ff00305	HP26379
9766348	820	ef00079	HP22820
9766349	1352	ef00080	HP22820
9766350	851	ef00240	HP22820
9766351	894	ef00226	HP22820
9766352	1157	ef00241	HP22820
9766353	1178	ef00242	HP22820
9766354	1506	ff00201	HP26379

Lancaster Laboratories
Volatiles in Air
Runlog for Agilent GC/MS System HP22820 **HP #05**

Data Directory Path is - D:\data\18jun04\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
jeb07445	EF00030.D	50NGBFB	06/04/2018	09:51		
jeb07445	EF00031.D	VSTD010	06/04/2018	10:38		
jeb07445	EF00032.D	VSTD005	06/04/2018	11:06		
jeb07445	EF00033.D	VSTD002	06/04/2018	11:31		
jeb07445	EF00034.D	VSTD001	06/04/2018	11:56		
jeb07445	EF00035.D	VSTD0.50	06/04/2018	12:19		
jeb07445	EF00036.D	VSTD025	06/04/2018	12:47		
jeb07445	EF00037.D	VSTD070	06/04/2018	13:24		
jeb07445	EF00038.D	VBLKE01	06/04/2018	13:44	E1815530AA	
jeb07445	EF00039.D	VBLKE01	06/04/2018	14:21	E1815530AA	
jeb07445	EF00040.D	LCSE01	06/04/2018	15:05	E1815530AA	
jeb07445	EF00041.D	LCSDE01	06/04/2018	15:39	E1815530AA	
jeb07445	EF00042.D	mdlv0.5	06/04/2018	16:13	E1815530AA	
jeb07445	EF00043.D	mdlv0.2	06/04/2018	16:40	E1815530AA	
jeb07445	EF00044.D	LCSDE01	06/04/2018	17:24	E1815530AA	
jeb07445	EF00045.D	fc1	06/04/2018	18:29	E1815530AA	
jeb07445	EF00046.D	fc2	06/04/2018	19:03	E1815530AA	
jeb07445	EF00047.D	9639644	06/04/2018	20:07	E1815530AA	
jeb07445	EF00048.D	9639644DL	06/04/2018	20:32	E1815530AA	
jeb07445	EF00049.D	9639645	06/04/2018	21:16	E1815530AA	
jeb07445	EF00050.D	9639645DL	06/04/2018	21:41	E1815530AA	
jeb07445	EF00051.D	9639648	06/04/2018	22:24	E1815530AA	
jeb07445	EF00052.D	9639648DL	06/04/2018	22:49	E1815530AA	
jeb07445	EF00053.D	9639649	06/04/2018	23:33	E1815530AA	
jeb07445	EF00054.D	9639649DL	06/04/2018	23:58	E1815530AA	
jeb07445	EF00055.D	9639696	06/05/2018	00:52	E1815530AA	
jeb07445	EF00056.D	9639696	06/05/2018	01:46	E1815530AA	
jeb07445	EF00057.D	VBLKE01	06/05/2018	02:20	E1815530AA	
jeb07445	EF00058.D	cc911	06/05/2018	02:53	E1815530AA	
jeb07445	EF00059.D	cc856	06/05/2018	03:27	E1815530AA	
jeb07445	EF00060.D	9639696DL	06/05/2018	08:22	E1815530AA	

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

SDG No.:

Lab File ID: ef00030.d

BFB Injection Date: 06/04/2018

Instrument ID: 22820

BFB Injection Time: 09:51

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0% - 40.0% of mass 95	15.05
75	30.0% - 66.0% of mass 95	44.91
95	Base peak, 100% relative abundance	100.00
96	5.0% - 9.0% of mass 95	6.89
173	< 2.0% of mass 174	0.50 (0.57)
174	> 50.0% of mass 95	87.65
175	4.0% - 9.0% of mass 174	6.41 (7.31)
176	93.0% - 101.0% of mass 174	84.73 (96.67)
177	5.0% - 9.0% of mass 176	5.80 (6.84)

THIS CHECK APPLIES TO THE FOLLOWING:

LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD010	ef00031.d	06/04/2018	10:38
VSTD005	ef00032.d	06/04/2018	11:06
VSTD002	ef00033.d	06/04/2018	11:31
VSTD001	ef00034.d	06/04/2018	11:56
VSTD025	ef00036.d	06/04/2018	12:47
VSTD070	ef00037.d	06/04/2018	13:24
VBLKE01	ef00039.d	06/04/2018	14:21
LCSE01	ef00040.d	06/04/2018	15:05
mdlv0.5	ef00042.d	06/04/2018	16:13
mdlv0.2	ef00043.d	06/04/2018	16:40
LCSDE01	ef00044.d	06/04/2018	17:24
9639644	ef00047.d	06/04/2018	20:07
9639645	ef00049.d	06/04/2018	21:16
9639648	ef00051.d	06/04/2018	22:24
9639648DL	ef00052.d	06/04/2018	22:49
9639649	ef00053.d	06/04/2018	23:33
9639649DL	ef00054.d	06/04/2018	23:58
9639696	ef00055.d	06/05/2018	00:52
9639696	ef00056.d	06/05/2018	01:46
cc856	ef00059.d	06/05/2018	03:27
9639696DL	ef00060.d	06/05/2018	08:22

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FORM 06
VOLATILE ORGANICS IN AIR
INITIAL CALIBRATION DATA

SDG No.:

Instrument ID: 22820 Calibration Start Date: 06/04/2018 Calibration End Date: 06/04/2018

Calibration Start Time: 10:38 Calibration End Time: 13:24

LAB FILE IDs:
RRF 1 = ef00034.d RRF 2 = ef00033.d RRF 5 = ef00032.d RRF 10 = ef00031.d RRF 25 = ef00036.d
RRF 70 = ef00037.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
Propene	0.656	0.604	0.632	0.628	0.588	0.612	0.620	4	AVG
Dichlorodifluoromethane	2.254	2.311	2.412	2.518	2.424	2.501	2.403	4	AVG
Chlorodifluoromethane	1.233	1.225	1.299	1.315	1.268	1.301	1.274	3	AVG
Freon 114	2.398	2.376	2.505	2.563	2.461	2.452	2.459	3	AVG
Chloromethane	0.768	0.711	0.734	0.738	0.706	0.705	0.727	3	AVG
Vinyl Chloride	0.823	0.872	0.926	0.936	0.889	0.907	0.892	5	AVG
1,3-Butadiene	0.616	0.642	0.658	0.685	0.635	0.649	0.647	4	AVG
Bromomethane	0.758	0.858	0.967	1.023	0.929	0.970	0.918	10	AVG
Chloroethane	0.475	0.508	0.516	0.534	0.489	0.504	0.504	4	AVG
Bromoethene	0.926	0.960	0.993	1.001	0.969	1.001	0.975	3	AVG
Dichlorofluoromethane	1.870	1.843	1.999	2.049	1.928	1.981	1.945	4	AVG
Trichlorofluoromethane	2.519	2.450	2.598	2.632	2.519	2.565	2.547	3	AVG
Pentane	1.405	1.344	1.396	1.425	1.303	1.333	1.368	3	AVG
Ethanol	0.268	0.273	0.302	0.318	0.294	0.311	0.294	7	AVG
Freon123a	1.730	1.669	1.718	1.741	1.635	1.652	1.691	3	AVG
Acrolein	0.357	0.311	0.363	0.360	0.342	0.358	0.348	6	AVG
1,1-Dichloroethene	1.316	1.376	1.471	1.485	1.404	1.433	1.414	4	AVG
Freon 113	1.470	1.424	1.426	1.451	1.384	1.402	1.426	2	AVG
Acetone	1.126	1.182	1.211	1.226	1.147	1.161	1.176	3	AVG
Methyl Iodide	2.847	2.880	2.814	2.541	2.713	2.614	2.735	5	AVG
Carbon Disulfide	2.520	2.579	2.741	2.800	2.613	2.637	2.648	4	AVG
Isopropanol	1.181	1.162	1.182	1.260	1.194	1.294	1.212	4	AVG
Acetonitrile	0.840	0.616	0.602	0.465	0.453	0.449	0.571	27	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: 22820 Calibration Start Date: 06/04/2018 Calibration End Date: 06/04/2018

Calibration Start Time: 10:38 Calibration End Time: 13:24

LAB FILE IDs:
RRF 1 = ef00034.d RRF 2 = ef00033.d RRF 5 = ef00032.d RRF 10 = ef00031.d RRF 25 = ef00036.d
RRF 70 = ef00037.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
3-Chloropropene	0.419	0.400	0.431	0.436	0.392	0.413	0.415	4	AVG
Methylene Chloride	0.787	0.798	0.824	0.839	0.785	0.799	0.805	3	AVG
tert-Butyl Alcohol	1.568	1.578	1.673	1.681	1.608	1.725	1.639	4	AVG
Acrylonitrile	0.642	0.692	0.758	0.767	0.717	0.723	0.717	6	AVG
trans-1,2-Dichloroethene	1.165	1.263	1.359	1.348	1.261	1.278	1.279	5	AVG
Methyl t-Butyl Ether	2.846	2.680	2.819	2.846	2.582	2.601	2.729	5	AVG
Hexane	1.437	1.432	1.411	1.469	1.328	1.351	1.405	4	AVG
1,1-Dichloroethane	1.629	1.639	1.716	1.736	1.621	1.657	1.666	3	AVG
Vinyl Acetate	0.238	0.234	0.246	0.250	0.235	0.259	0.244	4	AVG
Di-Isopropyl Ether	2.784	2.739	2.881	2.904	2.680	2.666	2.776	4	AVG
Ethyl Tert-Butyl Ether	2.590	2.658	2.724	2.742	2.570	2.608	2.649	3	AVG
cis-1,2-Dichloroethene	1.158	1.200	1.272	1.307	1.225	1.246	1.235	4	AVG
2-Butanone	0.532	0.499	0.522	0.539	0.485	0.506	0.514	4	AVG
Ethyl Acetate	0.305	0.242	0.248	0.252	0.234	0.241	0.254	10	AVG
Methyl Acrylate	1.625	1.497	1.558	1.625	1.498	1.546	1.558	4	AVG
Tetrahydrofuran	0.894	0.919	0.935	0.943	0.881	0.890	0.910	3	AVG
Chloroform	2.051	2.040	2.155	2.193	2.028	2.076	2.090	3	AVG
1,1,1-Trichloroethane	2.149	2.061	2.170	2.165	2.060	2.100	2.117	2	AVG
Cyclohexane	1.491	1.478	1.494	1.507	1.394	1.375	1.456	4	AVG
Carbon Tetrachloride	2.054	2.014	2.094	2.102	2.054	2.154	2.079	2	AVG
Benzene	0.900	0.860	0.873	0.877	0.821	0.829	0.860	3	AVG
1,2-Dichloroethane	0.359	0.342	0.354	0.354	0.341	0.347	0.350	2	AVG
Isooctane	1.176	1.157	1.226	1.233	1.182	1.168	1.190	3	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: 22820 Calibration Start Date: 06/04/2018 Calibration End Date: 06/04/2018

Calibration Start Time: 10:38 Calibration End Time: 13:24

LAB FILE IDs:
RRF 1 = ef00034.d RRF 2 = ef00033.d RRF 5 = ef00032.d RRF 10 = ef00031.d RRF 25 = ef00036.d
RRF 70 = ef00037.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
Tert-Amyl Methyl Ether	0.721	0.710	0.740	0.731	0.696	0.705	0.717	2	AVG
Heptane	0.429	0.413	0.410	0.410	0.391	0.388	0.407	4	AVG
Trichloroethene	0.446	0.403	0.436	0.429	0.418	0.432	0.427	3	AVG
Ethyl Acrylate	0.553	0.523	0.550	0.555	0.530	0.555	0.544	3	AVG
1,2-Dichloropropane	0.330	0.300	0.301	0.300	0.286	0.289	0.301	5	AVG
Dibromomethane	0.423	0.389	0.418	0.418	0.408	0.425	0.413	3	AVG
1,4-Dioxane	0.230	0.211	0.223	0.219	0.212	0.217	0.219	3	AVG
Methyl Methacrylate	0.311	0.299	0.299	0.305	0.290	0.303	0.301	2	AVG
Bromodichloromethane	0.614	0.570	0.598	0.588	0.574	0.592	0.589	3	AVG
cis-1,3-Dichloropropene	0.522	0.508	0.529	0.530	0.504	0.525	0.520	2	AVG
4-Methyl-2-Pentanone	0.602	0.556	0.574	0.581	0.544	0.540	0.566	4	AVG
Toluene	1.229	1.196	1.209	1.187	1.086	1.017	1.154	7	AVG
Octane	0.667	0.633	0.631	0.600	0.553	0.516	0.600	9	AVG
trans-1,3-Dichloropropene	0.454	0.445	0.461	0.475	0.445	0.449	0.455	3	AVG
Ethyl Methacrylate	0.505	0.497	0.534	0.533	0.514	0.515	0.516	3	AVG
1,1,2-Trichloroethane	0.462	0.413	0.410	0.411	0.383	0.367	0.408	8	AVG
Tetrachloroethene	0.681	0.656	0.669	0.643	0.621	0.604	0.646	5	AVG
2-Hexanone	0.606	0.584	0.603	0.598	0.546	0.525	0.577	6	AVG
Dibromochloromethane	0.526	0.501	0.514	0.517	0.507	0.520	0.514	2	AVG
1,2-Dibromoethane	0.658	0.637	0.654	0.651	0.610	0.597	0.634	4	AVG
Chlorobenzene	1.076	1.002	1.015	0.998	0.941	0.893	0.987	6	AVG
1,1,1,2-Tetrachloroethane	0.473	0.467	0.493	0.492	0.471	0.487	0.481	2	AVG
Ethylbenzene	1.691	1.606	1.655	1.619	1.415	1.273	1.543	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: 22820 Calibration Start Date: 06/04/2018 Calibration End Date: 06/04/2018

Calibration Start Time: 10:38 Calibration End Time: 13:24

LAB FILE IDs:
RRF 1 = ef00034.d RRF 2 = ef00033.d RRF 5 = ef00032.d RRF 10 = ef00031.d RRF 25 = ef00036.d
RRF 70 = ef00037.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
m/p-Xylene	1.366	1.332	1.357	1.322	1.107	1.032	1.253	12	AVG
o-Xylene	1.370	1.294	1.325	1.292	1.110	1.038	1.238	11	AVG
Styrene	0.968	0.930	1.001	0.982	0.896	0.852	0.938	6	AVG
Bromoform	0.635	0.624	0.657	0.678	0.670	0.705	0.661	4	AVG
Cumene	1.854	1.780	1.822	1.772	1.600	****	1.766	6	AVG
Bromobenzene	0.661	0.635	0.657	0.639	0.604	0.568	0.627	6	AVG
1,1,2,2-Tetrachloroethane	0.960	0.888	0.907	0.895	0.808	0.752	0.868	9	AVG
1,2,3-Trichloropropane	0.304	0.291	0.291	0.283	0.253	0.242	0.277	9	AVG
n-Propylbenzene	0.552	0.525	0.528	0.520	0.472	0.448	0.507	8	AVG
2-Chlorotoluene	0.502	0.459	0.478	0.465	0.431	****	0.467	6	AVG
4-Ethyltoluene	1.827	1.757	1.854	1.809	1.590	1.410	1.708	10	AVG
1,3,5-Trimethylbenzene	1.599	1.485	1.537	1.460	1.285	1.162	1.421	12	AVG
Alpha Methyl Styrene	0.764	0.728	0.768	0.779	0.689	****	0.745	5	AVG
tert-Butylbenzene	1.676	1.608	1.518	1.378	1.232	****	1.483	12	AVG
1,2,4-Trimethylbenzene	1.543	1.466	1.510	1.463	1.281	1.156	1.403	11	AVG
sec-Butylbenzene	2.283	2.151	2.225	2.126	1.831	****	2.123	8	AVG
1,3-Dichlorobenzene	1.145	1.078	1.094	1.065	0.957	0.917	1.043	8	AVG
1,4-Dichlorobenzene	1.173	1.108	1.124	1.097	0.969	0.905	1.063	10	AVG
p-Isopropyltoluene	1.909	1.822	1.888	1.857	1.609	****	1.817	7	AVG
Benzyl Chloride	0.887	0.890	1.018	1.076	0.936	****	0.961	9	AVG
1,2-Dichlorobenzene	1.132	1.029	1.047	1.013	0.889	0.845	0.992	11	AVG
n-Butylbenzene	1.695	1.651	1.698	1.674	1.445	****	1.633	7	AVG
Hexachloroethane	0.361	0.362	0.396	0.400	0.410	****	0.386	6	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.

SDG No.:

Instrument ID: 22820 Calibration Start Date: 06/04/2018 Calibration End Date: 06/04/2018

Calibration Start Time: 10:38 Calibration End Time: 13:24

LAB FILE IDs:
RRF 1 = ef00034.d RRF 2 = ef00033.d RRF 5 = ef00032.d RRF 10 = ef00031.d RRF 25 = ef00036.d
RRF 70 = ef00037.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
1,2-Dibromo-3-chloropropane	0.515	0.511	0.556	0.558	0.464	0.475	0.513	8	AVG
1,2,4-Trichlorobenzene	0.927	0.904	0.912	0.888	0.740	0.732	0.851	11	AVG
Hexachlorobutadiene	0.802	0.737	0.750	0.726	0.622	****	0.727	9	AVG
Naphthalene	2.001	1.946	1.992	1.938	1.526	****	1.881	11	AVG

Average % RSD: 6

* 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.

Internal Standard
Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP22820.i/18jun04.b/ef00031.d VSTD010
/chem/HP22820.i/18jun04.b/ef00032.d VSTD005
/chem/HP22820.i/18jun04.b/ef00033.d VSTD002
/chem/HP22820.i/18jun04.b/ef00034.d VSTD001
/chem/HP22820.i/18jun04.b/ef00036.d VSTD025
/chem/HP22820.i/18jun04.b/ef00037.d VSTD070

Area Summary

	File ID:								
Internal Standard Name	ef00031.d	ef00032.d	ef00033.d	ef00034.d	ef00036.d	ef00037.d	Avg. Area	%RSD	In Spec
Bromochloromethane	343847	344184	346670	337271	325792	310785	334758	4	Yes
1,4-Difluorobenzene	1313938	1298937	1309255	1262174	1197569	1134459	1252722	6	Yes
Chlorobenzene-d5	1253254	1232550	1253482	1219205	1139855	1122091	1203406	5	Yes

%RSD of internal standard area is flagged out of spec if greater than 30.

RT Summary

	File ID:						
Internal Standard Name	ef00031.d	ef00032.d	ef00033.d	ef00034.d	ef00036.d	ef00037.d	Avg. RT
Bromochloromethane	5.467	5.467	5.467	5.467	5.467	5.467	5.467
1,4-Difluorobenzene	6.291	6.291	6.291	6.291	6.291	6.291	6.291
Chlorobenzene-d5	8.497	8.497	8.497	8.497	8.497	8.497	8.497

Comments:_____

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Report generated on 06/04/2018 at 14:26

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 LCS File ID: ef00040.d LCSD File ID: ef00044.d

Batch: E1815530AA LCS Injected: 06/04/2018 LCSD Injected: 06/04/2018

Method: EPA TO-15 LCS Client ID: LCSE01 LCSD Client ID: LCSDE01

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	10.00	9.58	9.76	96	98	78-126	2	25	YES
Dichlorodifluoromethane	10.00	10.36	10.48	104	105	74-133	1	25	YES
Chlorodifluoromethane	10.00	10.67	10.97	107	110	70-138	3	25	YES
Freon 114	10.00	10.33	10.34	103	103	66-126	0	25	YES
Chloromethane	10.00	10.22	10.61	102	106	65-140	4	25	YES
Vinyl Chloride	10.00	10.34	10.40	103	104	75-130	1	25	YES
1,3-Butadiene	10.00	9.71	9.79	97	98	72-122	1	25	YES
Bromomethane	10.00	10.54	10.40	105	104	71-133	1	25	YES
Chloroethane	10.00	9.81	10.22	98	102	76-129	4	25	YES
Bromoethene	10.00	10.34	10.32	103	103	77-123	0	25	YES
Dichlorofluoromethane	10.00	10.58	10.76	106	108	75-137	2	25	YES
Trichlorofluoromethane	10.00	10.38	10.46	104	105	73-132	1	25	YES
Pentane	10.00	11.40	11.54	114	115	69-125	1	25	YES
Ethanol	10.00	9.63	9.54	96	95	56-149	1	25	YES
Acrolein	10.00	9.76	10.13	98	101	54-132	4	25	YES
1,1-Dichloroethene	10.00	10.40	10.57	104	106	70-129	2	25	YES
Freon 113	10.00	10.04	9.98	100	100	66-119	1	25	YES
Acetone	10.00	10.17	10.51	102	105	71-136	3	25	YES
Methyl Iodide	10.00	9.94	10.03	99	100	72-127	1	25	YES
Carbon Disulfide	10.00	9.81	9.92	98	99	72-128	1	25	YES
Isopropanol	10.00	10.21	9.87	102	99	69-160	3	25	YES
Acetonitrile	10.00	8.97	9.21	90	92	56-136	3	25	YES
3-Chloropropene	10.00	11.99	11.69	120	117	67-141	2	25	YES
Methylene Chloride	10.00	11.11	11.17	111	112	69-128	1	25	YES
tert-Butyl Alcohol	10.00	10.76	10.55	108	106	71-154	2	25	YES
Acrylonitrile	10.00	10.16	10.18	102	102	68-135	0	25	YES
trans-1,2-Dichloroethene	10.00	10.13	10.31	101	103	77-128	2	25	YES
Methyl t-Butyl Ether	10.00	10.34	10.51	103	105	71-119	2	25	YES
Hexane	10.00	11.61	11.77	116	118	70-118	1	25	YES
1,1-Dichloroethane	10.00	10.15	10.27	101	103	74-129	1	25	YES
Vinyl Acetate	10.00	11.05	10.56	111	106	75-161	5	25	YES
Di-Isopropyl Ether	10.00	9.69	10.02	97	100	71-122	3	25	YES
Ethyl Tert-Butyl Ether	10.00	9.02	9.39	90	94	68-121	4	25	YES
cis-1,2-Dichloroethene	10.00	9.97	10.11	100	101	76-126	1	25	YES
2-Butanone	10.00	9.80	9.68	98	97	75-126	1	25	YES
Ethyl Acetate	10.00	8.70	9.28	87	93	73-124	6	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 LCS File ID: ef00040.d LCSD File ID: ef00044.d

Batch: E1815530AA LCS Injected: 06/04/2018 LCSD Injected: 06/04/2018

Method: EPA TO-15 LCS Client ID: LCSE01 LCSD Client ID: LCSDE01

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	10.00	9.59	9.83	96	98	75-125	2	25	YES
Tetrahydrofuran	10.00	9.91	9.96	99	100	67-127	0	25	YES
Chloroform	10.00	10.10	10.27	101	103	75-127	2	25	YES
1,1,1-Trichloroethane	10.00	10.12	10.03	101	100	74-122	1	25	YES
Cyclohexane	10.00	9.70	9.77	97	98	70-118	1	25	YES
Carbon Tetrachloride	10.00	10.40	10.30	104	103	72-127	1	25	YES
Benzene	10.00	11.78	12.13	118	121	76-123	3	25	YES
1,2-Dichloroethane	10.00	10.37	10.81	104	108	72-138	4	25	YES
Isooctane	10.00	9.77	10.12	98	101	74-127	4	25	YES
Tert-Amyl Methyl Ether	10.00	8.96	9.42	90	94	78-124	5	25	YES
Heptane	10.00	9.66	10.02	97	100	74-122	4	25	YES
Trichloroethene	10.00	10.31	10.29	103	103	76-118	0	25	YES
Ethyl Acrylate	10.00	9.76	9.87	98	99	71-126	1	25	YES
1,2-Dichloropropane	10.00	9.68	9.86	97	99	75-127	2	25	YES
Dibromomethane	10.00	10.28	10.31	103	103	76-124	0	25	YES
1,4-Dioxane	10.00	9.73	9.75	97	97	76-124	0	25	YES
Methyl Methacrylate	10.00	9.33	9.43	93	94	73-117	1	25	YES
Bromodichloromethane	10.00	9.97	10.27	100	103	75-134	3	25	YES
cis-1,3-Dichloropropene	10.00	9.61	9.67	96	97	51-120	1	25	YES
4-Methyl-2-Pentanone	10.00	9.60	9.97	96	100	79-131	4	25	YES
Toluene	10.00	11.54	11.85	115	119	78-119	3	25	YES
Octane	10.00	10.59	11.24	106	112	73-122	6	25	YES
trans-1,3-Dichloropropene	10.00	9.68	9.61	97	96	76-131	1	25	YES
Ethyl Methacrylate	10.00	9.75	9.64	98	96	69-137	1	25	YES
1,1,2-Trichloroethane	10.00	9.66	9.89	97	99	76-127	2	25	YES
Tetrachloroethene	10.00	10.00	9.92	100	99	68-123	1	25	YES
2-Hexanone	10.00	9.21	9.60	92	96	74-134	4	25	YES
Dibromochloromethane	10.00	10.12	10.15	101	102	74-131	0	25	YES
1,2-Dibromoethane	10.00	9.84	9.95	98	99	73-121	1	25	YES
Chlorobenzene	10.00	9.65	9.63	96	96	76-117	0	25	YES
1,1,1,2-Tetrachloroethane	10.00	10.07	10.22	101	102	73-137	1	25	YES
Ethylbenzene	10.00	11.08	11.26	111	113	77-117	2	25	YES
m/p-Xylene	10.00	12.62	12.62	126*	126*	78-119	0	25	NO
o-Xylene	10.00	11.17	11.41	112	114	78-121	2	25	YES
Xylene (total)	20.00	23.79	24.02	119	120	79-120	1	25	YES
Styrene	10.00	9.96	10.02	100	100	77-143	1	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 LCS File ID: ef00040.d LCSD File ID: ef00044.d

Batch: E1815530AA LCS Injected: 06/04/2018 LCSD Injected: 06/04/2018

Method: EPA TO-15 LCS Client ID: LCSE01 LCSD Client ID: LCSDE01

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	10.29	10.22	103	102	58-144	1	25	YES
Cumene	10.00	9.35	9.31	94	93	80-133	1	25	YES
Bromobenzene	10.00	9.73	9.62	97	96	74-118	1	25	YES
1,1,2,2-Tetrachloroethane	10.00	9.37	9.71	94	97	72-133	4	25	YES
1,2,3-Trichloropropane	10.00	9.91	9.79	99	98	71-127	1	25	YES
n-Propylbenzene	10.00	9.33	9.16	93	92	73-120	2	25	YES
2-Chlorotoluene	10.00	9.45	9.49	94	95	74-123	0	25	YES
4-Ethyltoluene	10.00	9.67	9.54	97	95	73-130	1	25	YES
1,3,5-Trimethylbenzene	10.00	9.35	9.52	93	95	72-130	2	25	YES
Alpha Methyl Styrene	10.00	8.95	9.02	89	90	71-138	1	25	YES
tert-Butylbenzene	10.00	8.41	8.71	84	87	78-138	3	25	YES
1,2,4-Trimethylbenzene	10.00	9.42	9.47	94	95	70-138	1	25	YES
sec-Butylbenzene	10.00	8.87	8.92	89	89	79-139	1	25	YES
1,3-Dichlorobenzene	10.00	9.38	9.52	94	95	75-129	1	25	YES
1,4-Dichlorobenzene	10.00	9.36	9.34	94	93	74-123	0	25	YES
p-Isopropyltoluene	10.00	8.96	8.94	90	89	75-145	0	25	YES
Benzyl Chloride	10.00	9.03	8.47	90	85	49-163	6	25	YES
1,2-Dichlorobenzene	10.00	9.15	9.10	91	91	71-126	1	25	YES
n-Butylbenzene	10.00	8.58	8.71	86	87	72-143	1	25	YES
Hexachloroethane	10.00	9.95	9.84	100	98	59-135	1	25	YES
1,2-Dibromo-3-chloropropane	10.00	8.69	8.43	87	84	52-156	3	25	YES
1,2,4-Trichlorobenzene	10.00	7.65	7.55	76	76	45-156	1	25	YES
Hexachlorobutadiene	10.00	7.76	7.59	78	76	49-154	2	25	YES
Naphthalene	10.00	7.06	6.90	71	69	39-152	2	25	YES

COMMENTS:

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Data File: /chem/HP22820.i/18jun04.b/ef00030.d

Date : 04-JUN-2018 09:51

Client ID: 50NGBFB

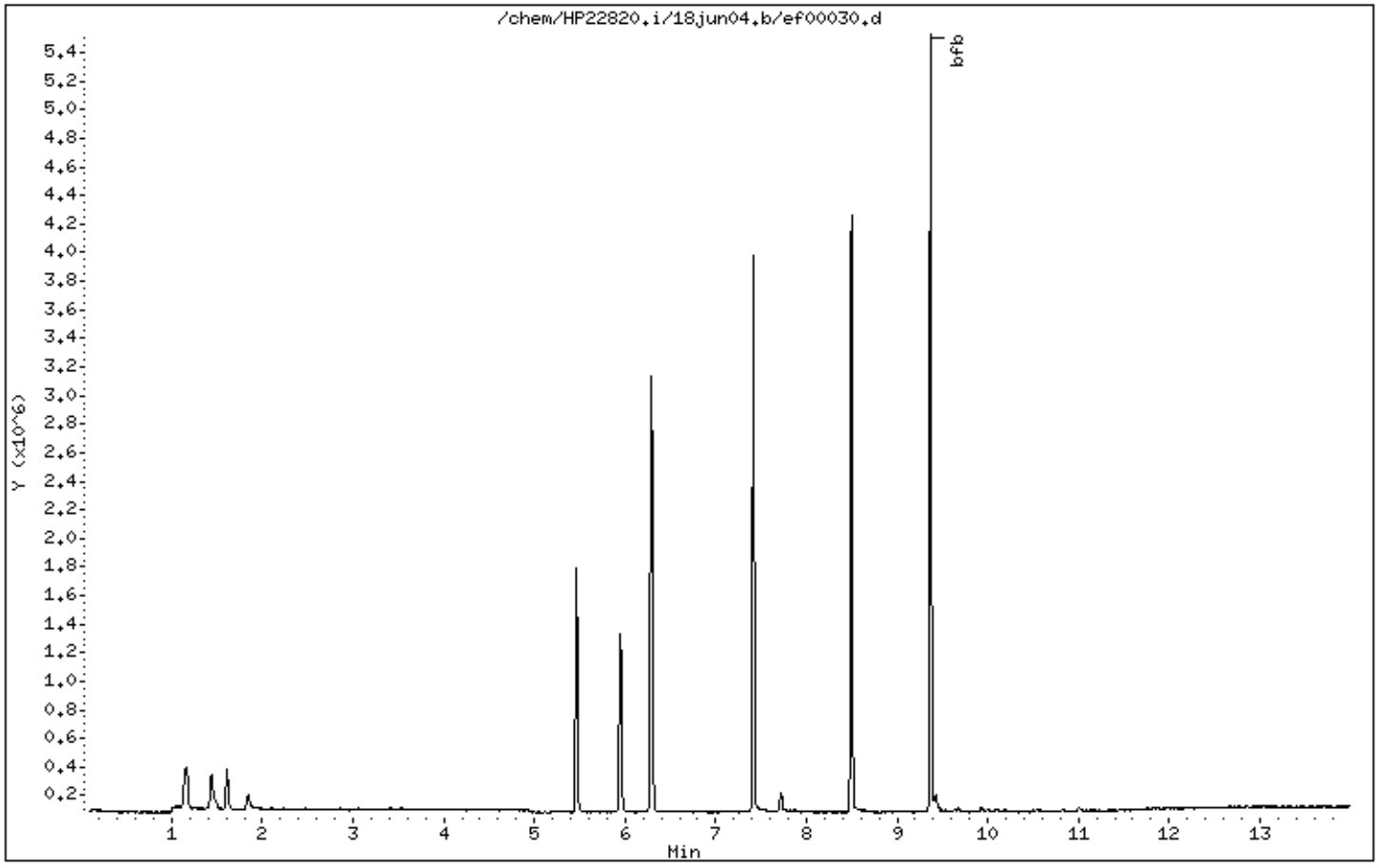
Instrument: HP22820.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25



Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:08.
Target 3.5 esignature user ID: jeb07445

Data File: /chem/HP22820.i/18jun04.b/ef00030.d

Date : 04-JUN-2018 09:51

Client ID: 50NGBFB

Instrument: HP22820.i

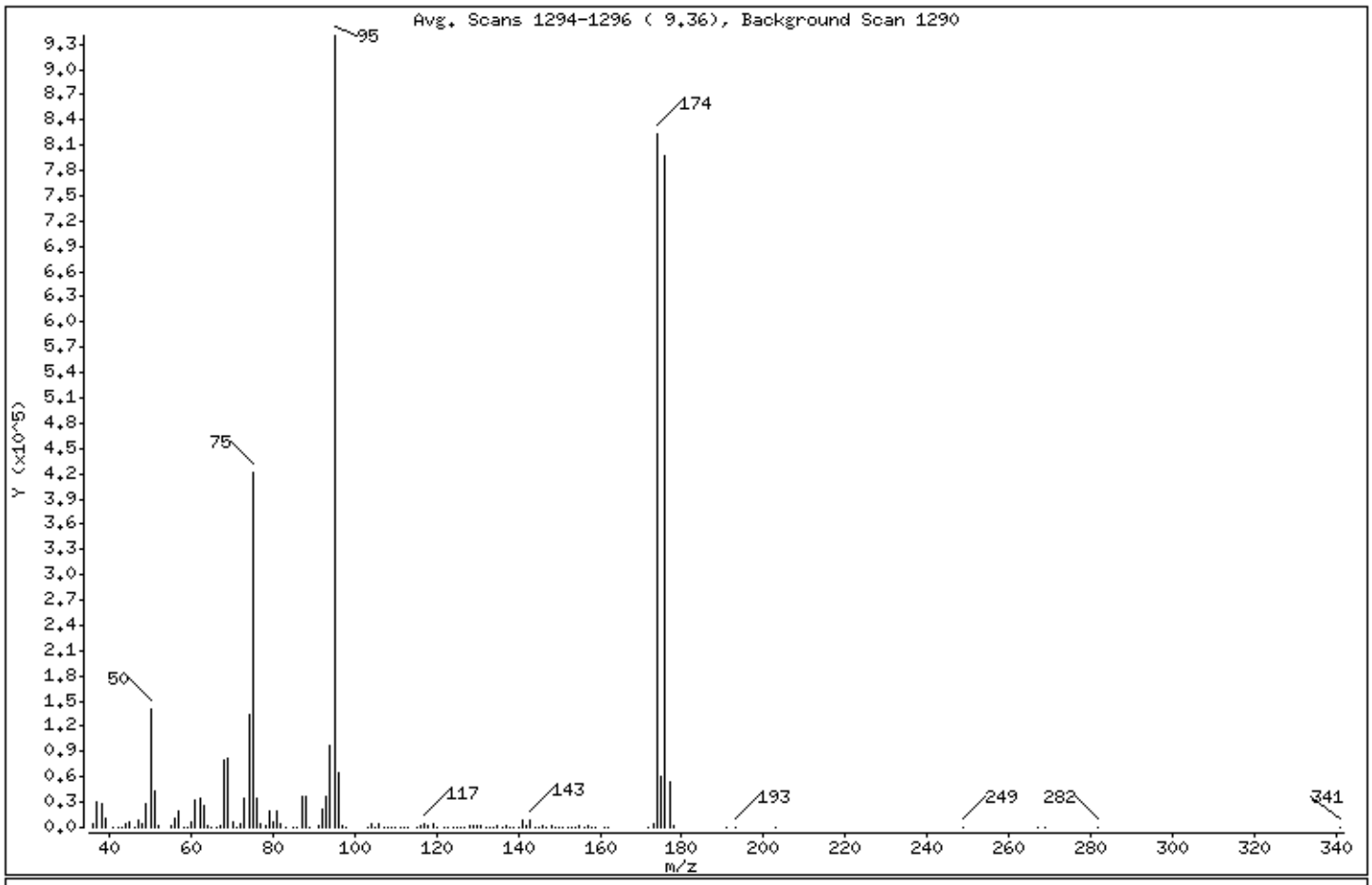
Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	15.05
75	30.00 - 66.00% of mass 95	44.91
96	5.00 - 9.00% of mass 95	6.89
173	Less than 2.00% of mass 174	0.50 (0.57)
174	50.00 - 120.00% of mass 95	87.65
175	4.00 - 9.00% of mass 174	6.41 (7.31)
176	93.00 - 101.00% of mass 174	84.73 (96.67)
177	5.00 - 9.00% of mass 176	5.80 (6.84)

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:08.
Target 3.5 esignature user ID: jeb07445

Date : 04-JUN-2018 09:51

Client ID: 50NGBFB Instrument: HP22820.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624 Column diameter: 0.25

Data File: ef00030.d
Spectrum: Avg. Scans 1294-1296 (9.36), Background Scan 1290
Location of Maximum: 95.00
Number of points: 130

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4704	72.00	3630	111.00	611	146.00	1185
37.00	29752	73.00	34592	112.00	439	147.00	658
38.00	27488	74.00	134976	113.00	536	148.00	1712
39.00	11202	75.00	422208	115.00	900	149.00	823
41.00	249	76.00	35032	116.00	2885	150.00	713
42.00	195	77.00	4133	117.00	4172	151.00	95
43.00	833	78.00	3039	118.00	2903	152.00	412
44.00	3552	79.00	20016	119.00	4005	153.00	760
45.00	5930	80.00	5499	120.00	324	154.00	529
46.00	266	81.00	20512	122.00	276	155.00	2594
47.00	8337	82.00	4059	123.00	298	156.00	351
48.00	3674	83.00	287	124.00	548	157.00	1741
49.00	28504	85.00	14	125.00	441	158.00	164
50.00	141440	86.00	931	126.00	228	159.00	948
51.00	43648	87.00	36568	127.00	328	161.00	856
52.00	1562	88.00	35904	128.00	2851	162.00	55
55.00	1668	89.00	7	129.00	1442	172.00	396
56.00	10220	91.00	2592	130.00	3165	173.00	4727
57.00	20200	92.00	22000	131.00	1439	174.00	823936
58.00	972	93.00	36152	132.00	264	175.00	60224
59.00	66	94.00	98264	133.00	1	176.00	796480
60.00	6557	95.00	940032	134.00	345	177.00	54512
61.00	33144	96.00	64768	135.00	1400	178.00	1591
62.00	34096	97.00	1837	136.00	304	191.00	77
63.00	26144	98.00	277	137.00	1337	193.00	183
64.00	2412	103.00	285	138.00	166	203.00	53
65.00	197	104.00	3554	139.00	268	249.00	65
66.00	82	105.00	747	140.00	639	267.00	51
67.00	1758	106.00	3590	141.00	7904	269.00	74
68.00	80904	107.00	876	142.00	1099	282.00	80
69.00	82968	108.00	223	143.00	8308	341.00	100
70.00	6064	109.00	50	144.00	663		
71.00	80	110.00	345	145.00	787		

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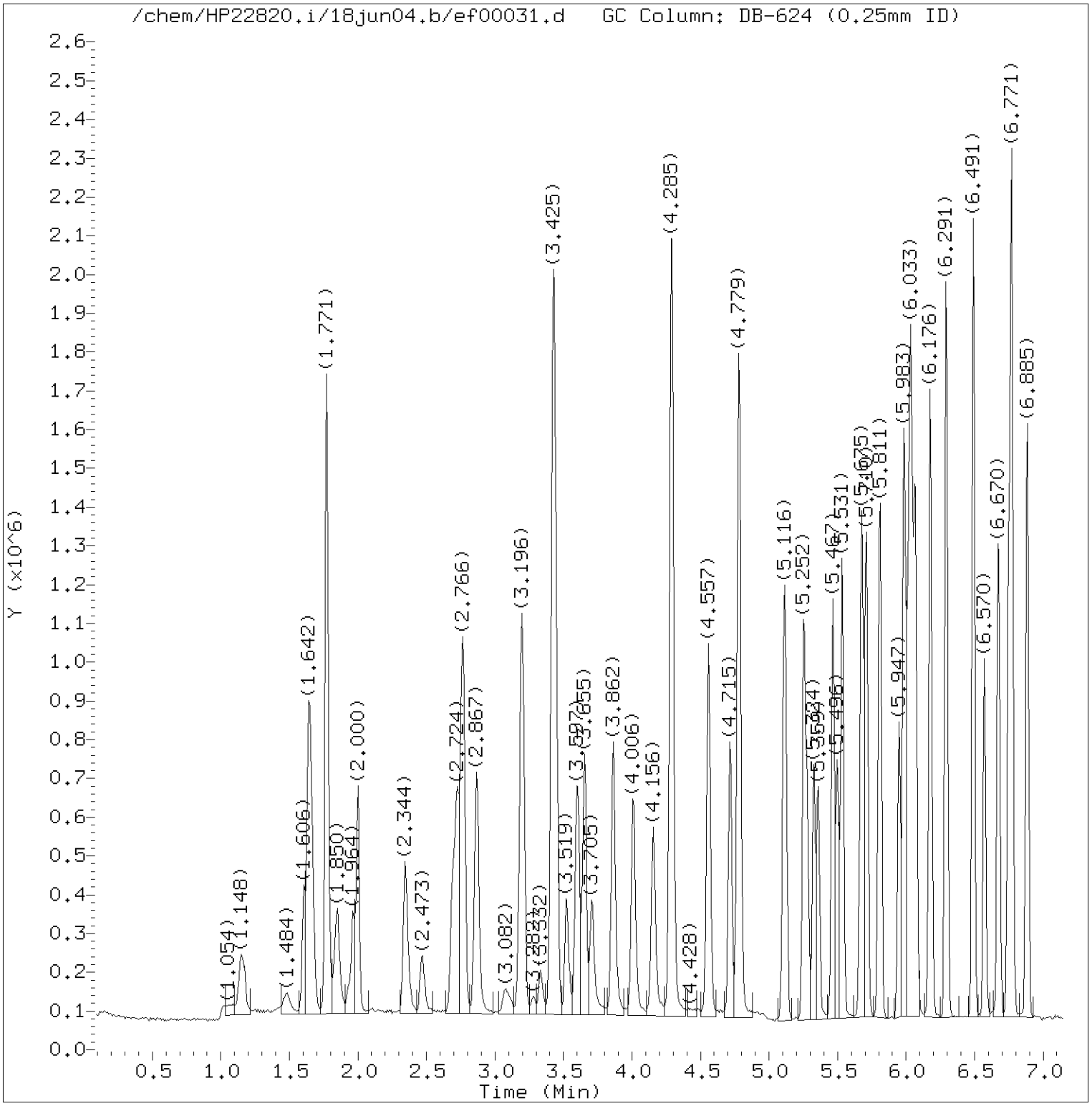
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

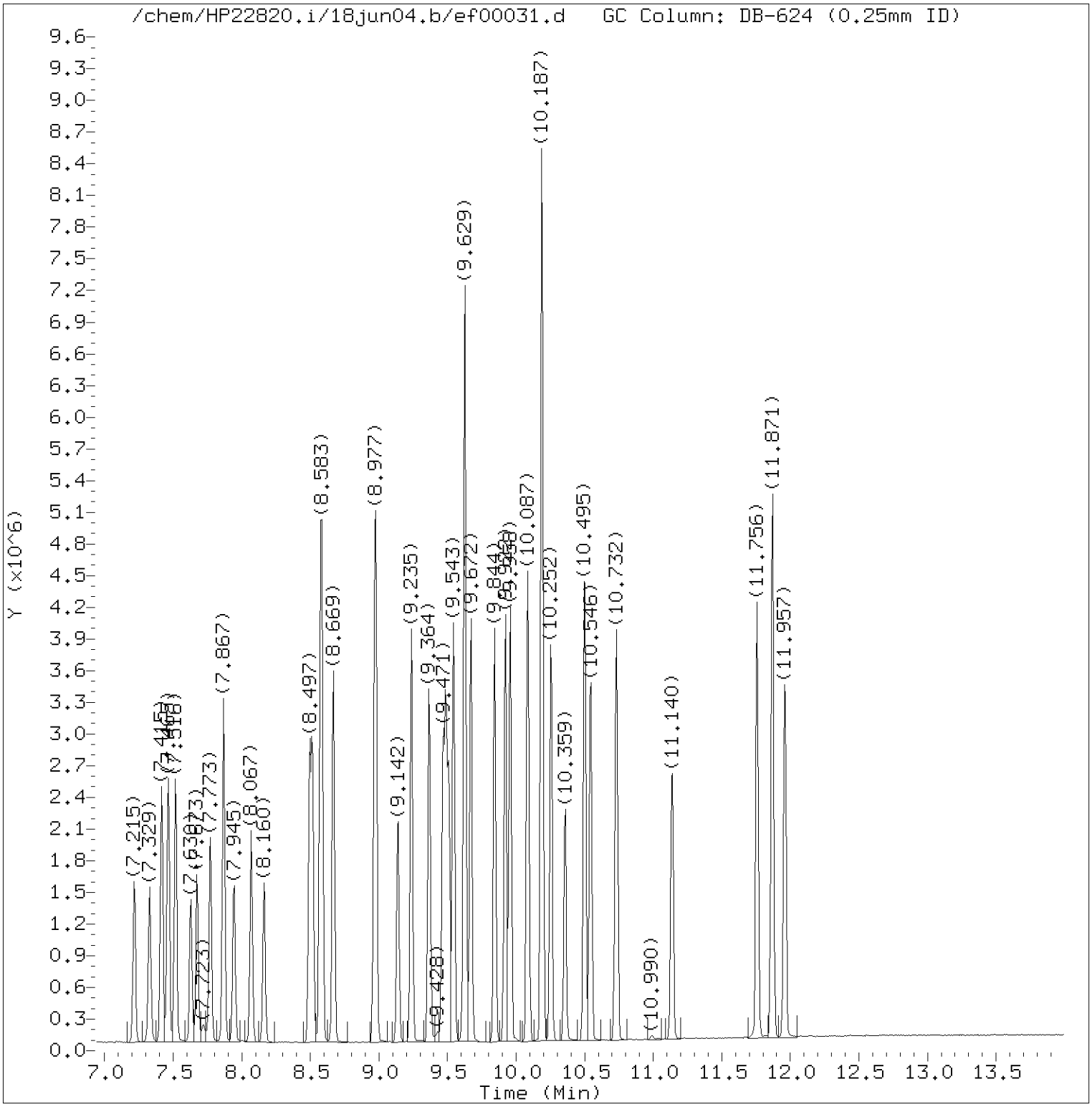
Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00031.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 10:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:25 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:25.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00031.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 10:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:25 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:25.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00031.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 10:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:25 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.606	41	215975	10.130
2) Dichlorodifluoromethane	(1)	1.642	85	865728	10.476
3) Chlorodifluoromethane	(1)	1.663	51	452151	10.326
4) Freon 114	(1)	1.771	85	881391	10.423
5) Chloromethane	(1)	1.850	50	253681	10.149
6) Vinyl Chloride	(1)	1.964	62	321870	10.492
7) 1,3-Butadiene	(1)	2.000	54	235404	10.575
8) Bromomethane	(1)	2.344	94	351796	11.150
9) Chloroethane	(1)	2.473	64	183645	10.591
10) Bromoethene	(1)	2.688	106	344068	10.265
11) Dichlorofluoromethane	(1)	2.724	67	704579	10.536
12) Trichlorofluoromethane	(1)	2.766	101	905168	10.334
13) Pentane	(1)	2.867	43	490139	10.421
14) Ethanol	(1)	3.074	45	109210	10.796
15) Freon123a	(1)	3.196	67	664342	11.427
16) Acrolein	(1)	3.332	56	123901	10.343
17) 1,1-Dichloroethene	(1)	3.418	61	510555	10.500
18) Freon 113	(1)	3.433	103	498755	10.171
19) Acetone	(1)	3.519	43	421468	10.427
20) Methyl Iodide	(1)	3.597	142	873734	9.292
21) Carbon Disulfide	(1)	3.655	76	962668	10.571
22) Isopropanol	(1)	3.705	45	433292	10.395
24) 3-Chloropropene	(1)	3.862	76	166223	11.650
23) Acetonitrile	(1)	3.870	40	160021	8.154
25) Methylene Chloride	(1)	4.006	84	320347	11.569
26) tert-Butyl Alcohol	(1)	4.156	59	641541	11.385
28) trans-1,2-Dichloroethene	(1)	4.285	61	463605	10.542
27) Acrylonitrile	(1)	4.292	53	263779	10.706
29) Methyl t-Butyl Ether	(1)	4.292	73	978492	10.427
30) Hexane	(1)	4.557	57	504943	10.456
31) 1,1-Dichloroethane	(1)	4.715	63	596943	10.418
32) Vinyl Acetate	(1)	4.779	86	96264	11.490
33) Di-Isopropyl Ether	(1)	4.779	45	998532	10.462
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	942903	10.353
35) cis-1,2-Dichloroethene	(1)	5.252	61	449414	10.586
37) 2-Butanone	(1)	5.281	72	185255	10.484
38) Ethyl Acetate	(1)	5.331	70	86513	9.922
39) Methyl Acrylate	(1)	5.359	55	558755	10.430

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on 06/04/2018 at 16:25.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00031.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 10:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:25 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	343847	10.000
41) Tetrahydrofuran	(1)	5.496	42	324312	10.363
42) Chloroform	(1)	5.531	83	754120	10.491
43) 1,1,1-Trichloroethane	(1)	5.675	97	744521	10.226
44) Cyclohexane	(1)	5.710	56	518100	10.346
45) Carbon Tetrachloride	(1)	5.811	117	722893	10.113
46) Benzene	(2)	5.983	78	1152038	10.195
47) 1,2-Dichloroethane	(2)	6.011	62	465607	10.137
48) Isooctane	(2)	6.033	57	1620697	10.362
49) Tert-Amyl Methyl Ether	(2)	6.069	73	960507	10.191
50) Heptane	(2)	6.176	43	538936	10.082
51)*1,4-Difluorobenzene	(2)	6.291	114	1313938	10.000
52) Trichloroethene	(2)	6.491	130	563400	10.036
53) Ethyl Acrylate	(2)	6.570	55	729110	10.195
36) 1,2-Dichloroethene (total)	(1)		61	913019	21.128
54) 1,2-Dichloropropane	(2)	6.670	63	393621	9.951
57) Methyl Methacrylate	(2)	6.749	69	400495	10.125
56) 1,4-Dioxane	(2)	6.771	88	287771	10.018
55) Dibromomethane	(2)	6.771	174	549410	10.113
58) Bromodichloromethane	(2)	6.885	83	773231	9.985
59) cis-1,3-Dichloropropene	(2)	7.215	75	696111	10.196
60) 4-Methyl-2-Pentanone	(2)	7.329	43	762830	10.259
61) Toluene	(3)	7.465	91	1487198	10.286
62) Octane	(3)	7.516	43	751888	9.998
63) trans-1,3-Dichloropropene	(3)	7.630	75	595446	10.445
65) Ethyl Methacrylate	(3)	7.673	69	668218	10.329
66) 1,1,2-Trichloroethane	(3)	7.773	97	515284	10.087
67) Tetrachloroethene	(3)	7.867	166	806397	9.967
68) 2-Hexanone	(3)	7.945	43	749701	10.364
69) Dibromochloromethane	(3)	8.067	127	647764	10.053
70) 1,2-Dibromoethane	(3)	8.160	107	815611	10.260
71)*Chlorobenzene-d5	(3)	8.497	117	1253254	10.000
72) Chlorobenzene	(3)	8.518	112	1250766	10.107
73) 1,1,1,2-Tetrachloroethane	(3)	8.576	131	616660	10.238
74) Ethylbenzene	(3)	8.583	91	2028398	10.489
75) m/p-Xylene	(3)	8.669	91	1657385	10.557
76) o-Xylene	(3)	8.970	91	1619652	10.437
78) Styrene	(3)	8.977	104	1230976	10.470

* = Compound is an internal standard.

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on 06/04/2018 at 16:25.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00031.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 10:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:25 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	849956	10.253
80) Cumene	(3)	9.235	105	2220462	10.035
82) 1,1,2,2-Tetrachloroethane	(3)	9.464	83	1121635	10.306
81) Bromobenzene	(3)	9.493	156	801244	10.190
83) 1,2,3-Trichloropropane	(3)	9.507	110	355010	10.212
84) n-Propylbenzene	(3)	9.543	120	651835	10.249
85) 2-Chlorotoluene	(3)	9.621	126	583126	9.961
86) 4-Ethyltoluene	(3)	9.629	105	2266796M	10.591
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	1829351M	10.270
88) Alpha Methyl Styrene	(3)	9.844	118	975879	10.445
89) tert-Butylbenzene	(3)	9.922	119	1726472M	9.292
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	1833102	10.424
91) sec-Butylbenzene	(3)	10.087	105	2664807	10.014
92) 1,3-Dichlorobenzene	(3)	10.187	146	1334571	10.212
94) p-Isopropyltoluene	(3)	10.187	119	2327195	10.220
93) 1,4-Dichlorobenzene	(3)	10.252	146	1374971	10.323
95) Benzyl Chloride	(3)	10.359	91	1348173	11.190
97) n-Butylbenzene	(3)	10.495	91	2098552	10.256
96) 1,2-Dichlorobenzene	(3)	10.546	146	1270141	10.212
98) Hexachloroethane	(3)	10.732	117	501047	10.364
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	698740	10.867
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	1112590	10.437
101) Hexachlorobutadiene	(3)	11.871	225	909631	9.978
102) Naphthalene	(3)	11.957	128	2429359	10.307
64) 1,3-Dichloropropene (total)	(3)		75	1291557	20.704
77) Xylene (total)	(3)		91	3277037	20.995

M = Compound was manually integrated.

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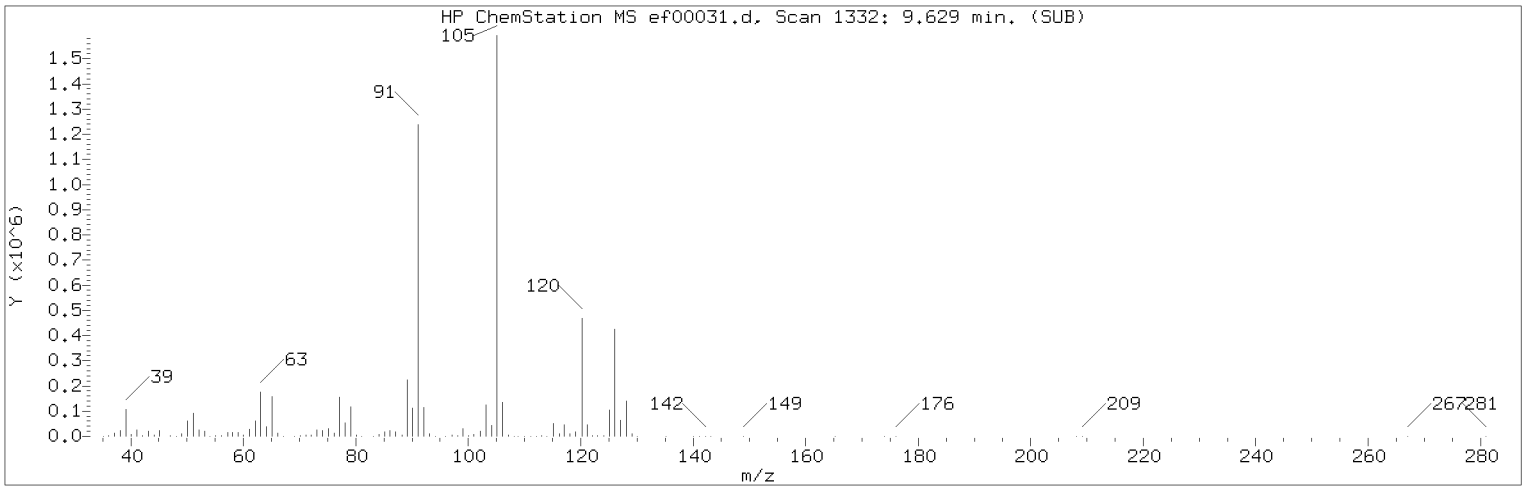
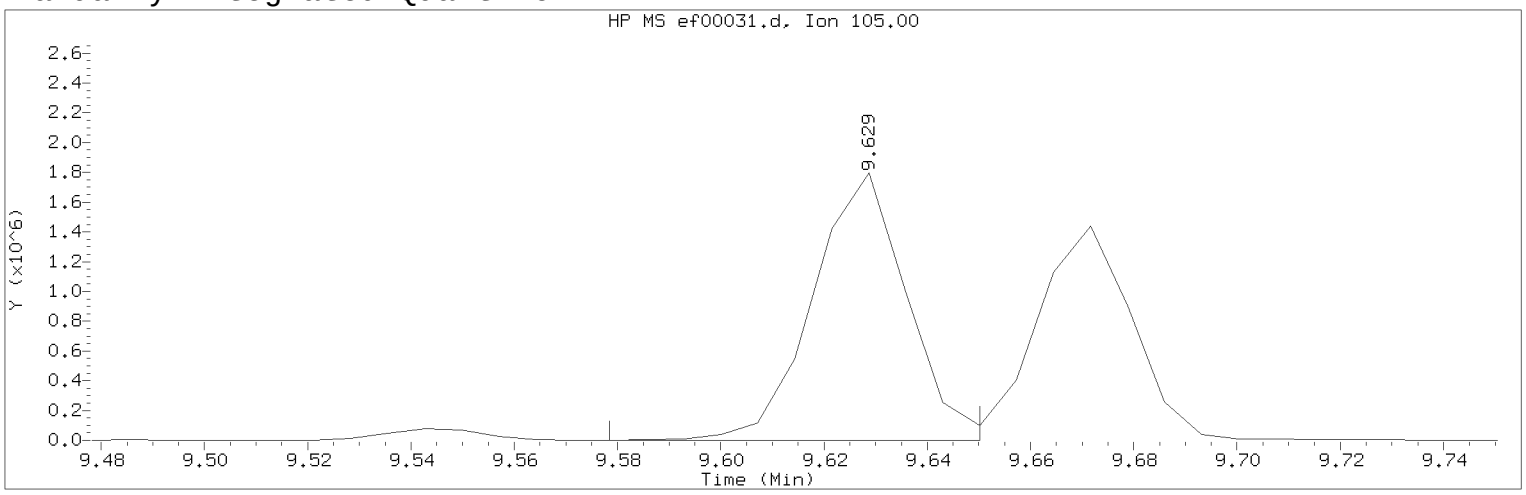
on 06/04/2018 at 16:25.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00031.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 10:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:25 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

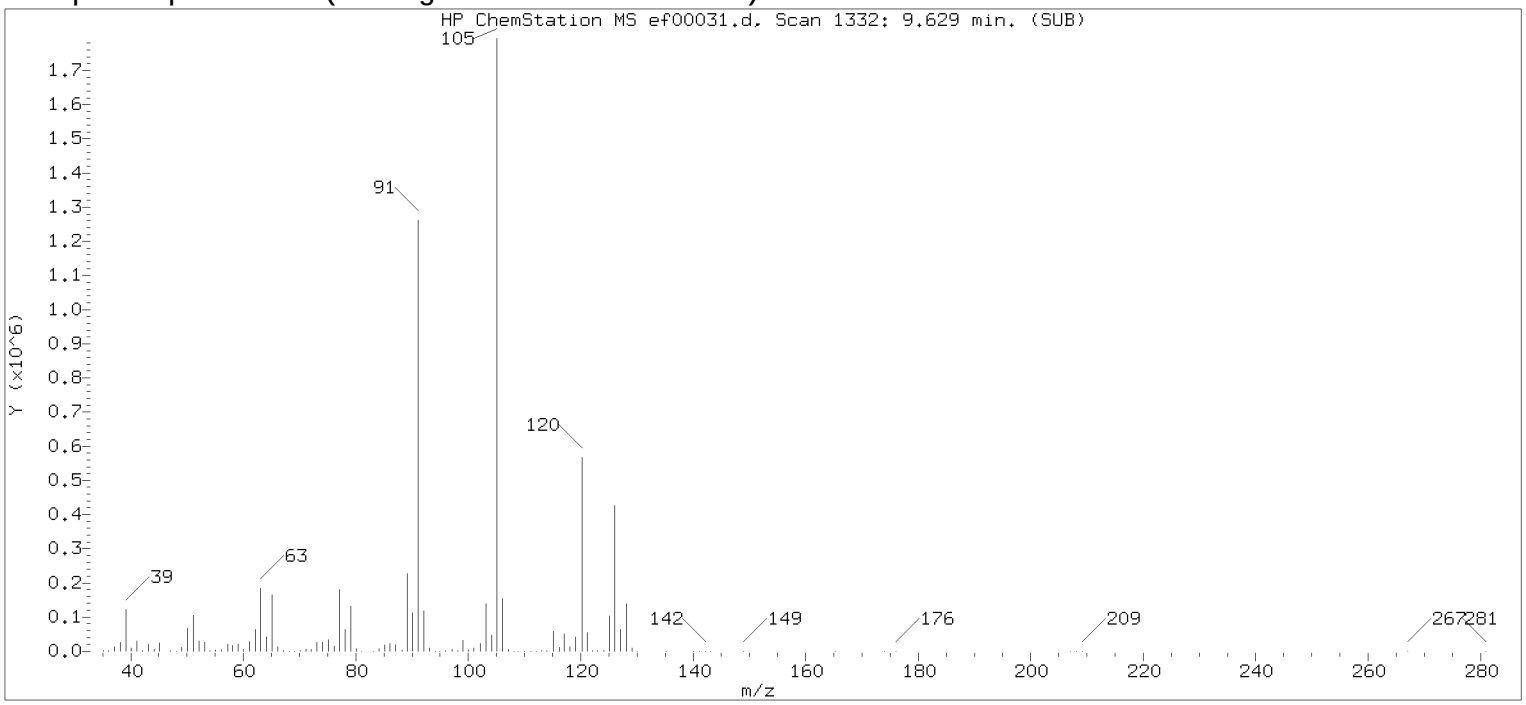
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 2266796M
Concentration (ppb(v)) : 10.5914
Integration start scan : 1324 Integration stop scan: 1334
Y at integration start : 544 Y at integration end: 544

Reason for manual integration: improper integration

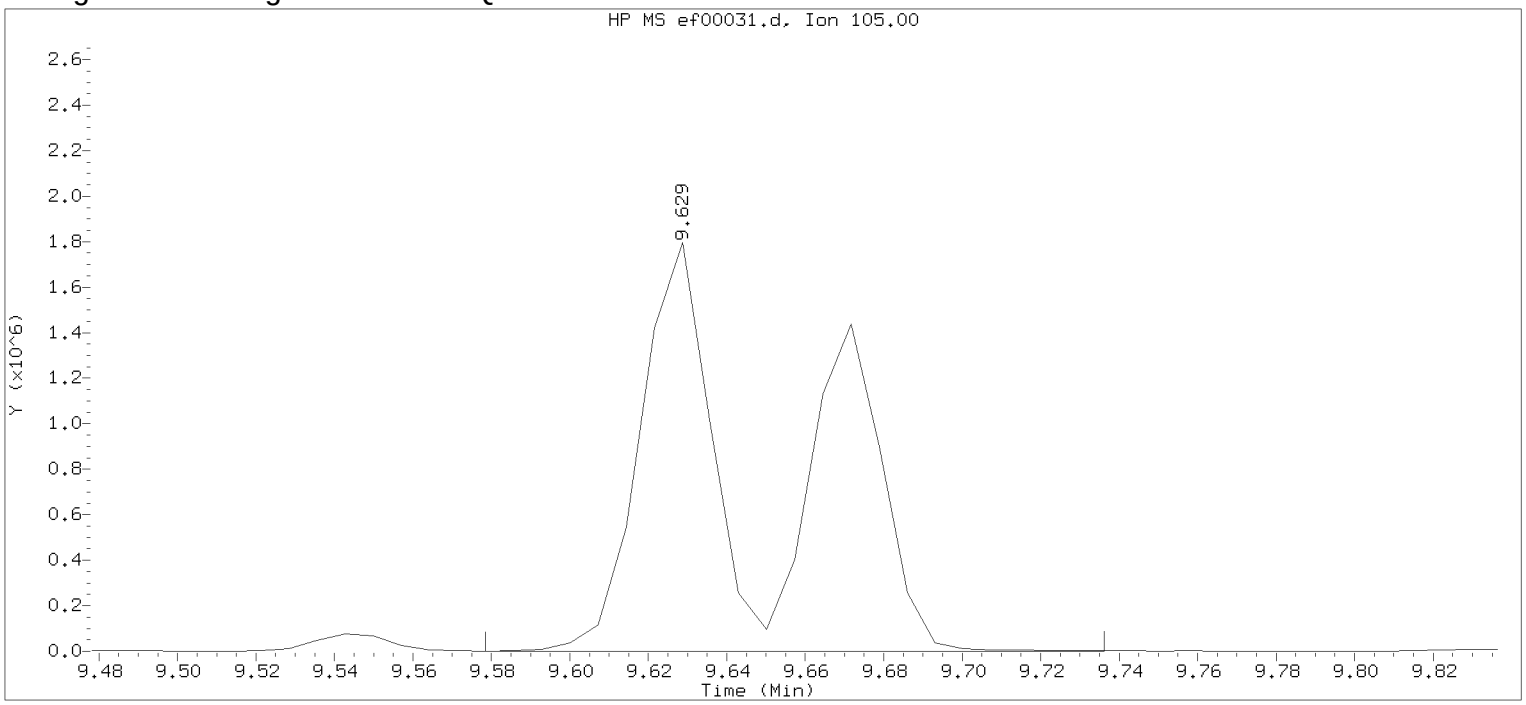
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:25.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00031.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 10:38 Analyst ID: jeb07445

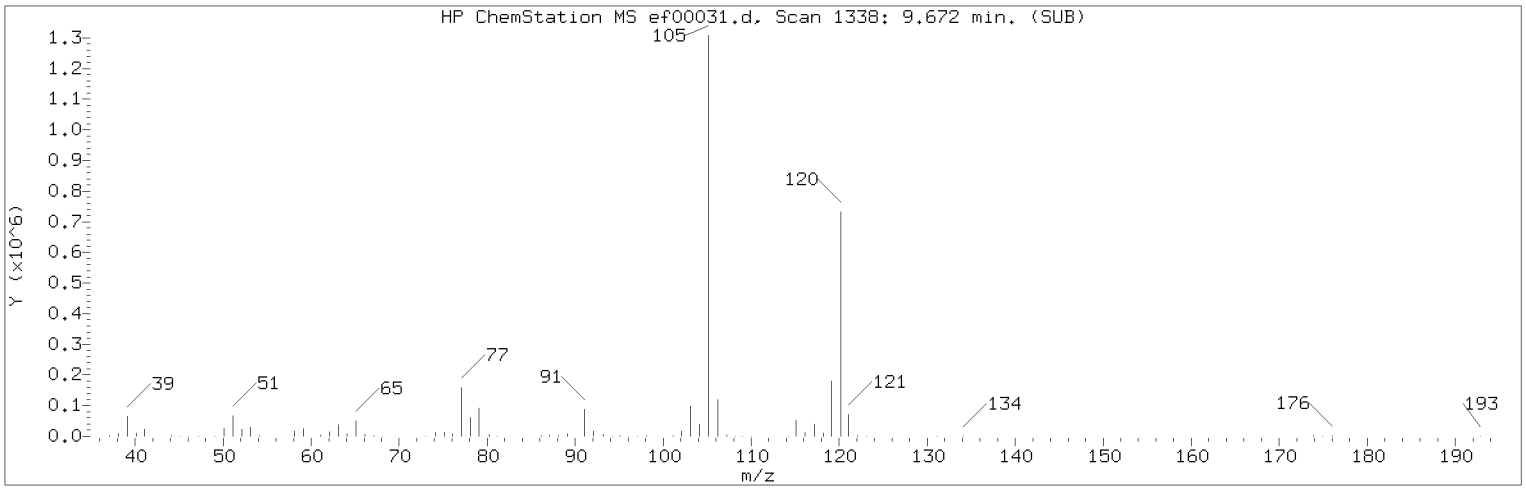
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 10:57 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

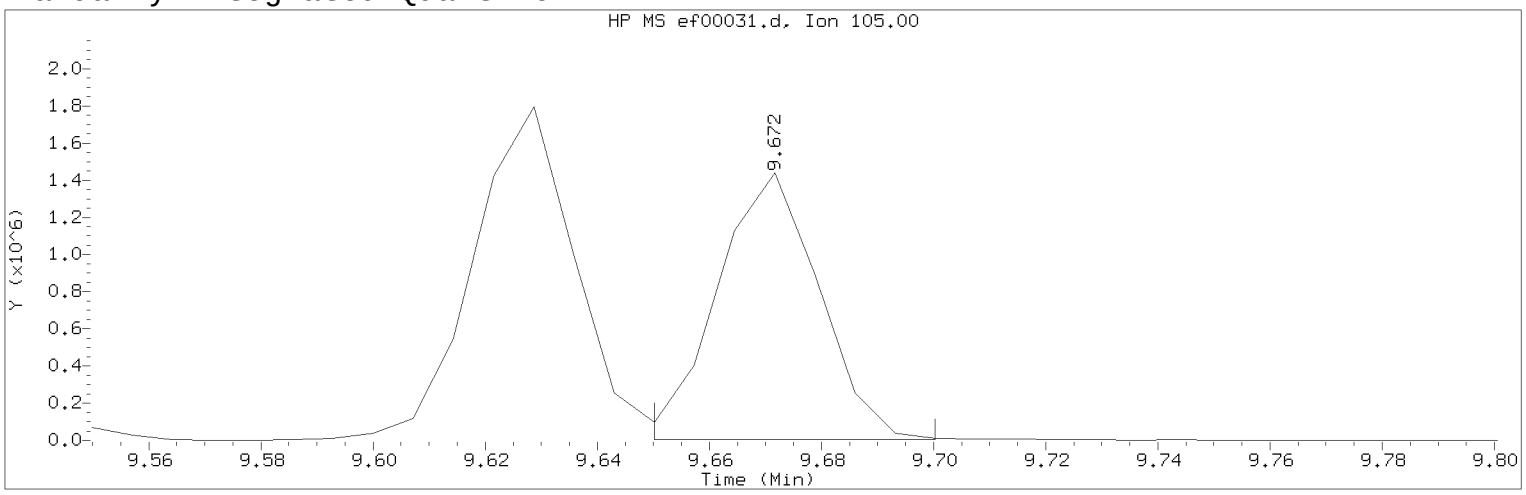
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 4067917
Concentration (ppb(v)) : 19.7260
Integration start scan : 1324 Integration stop scan: 1346
Y at integration start : 544 Y at integration end: 544

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:25.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00031.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 10:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:25 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

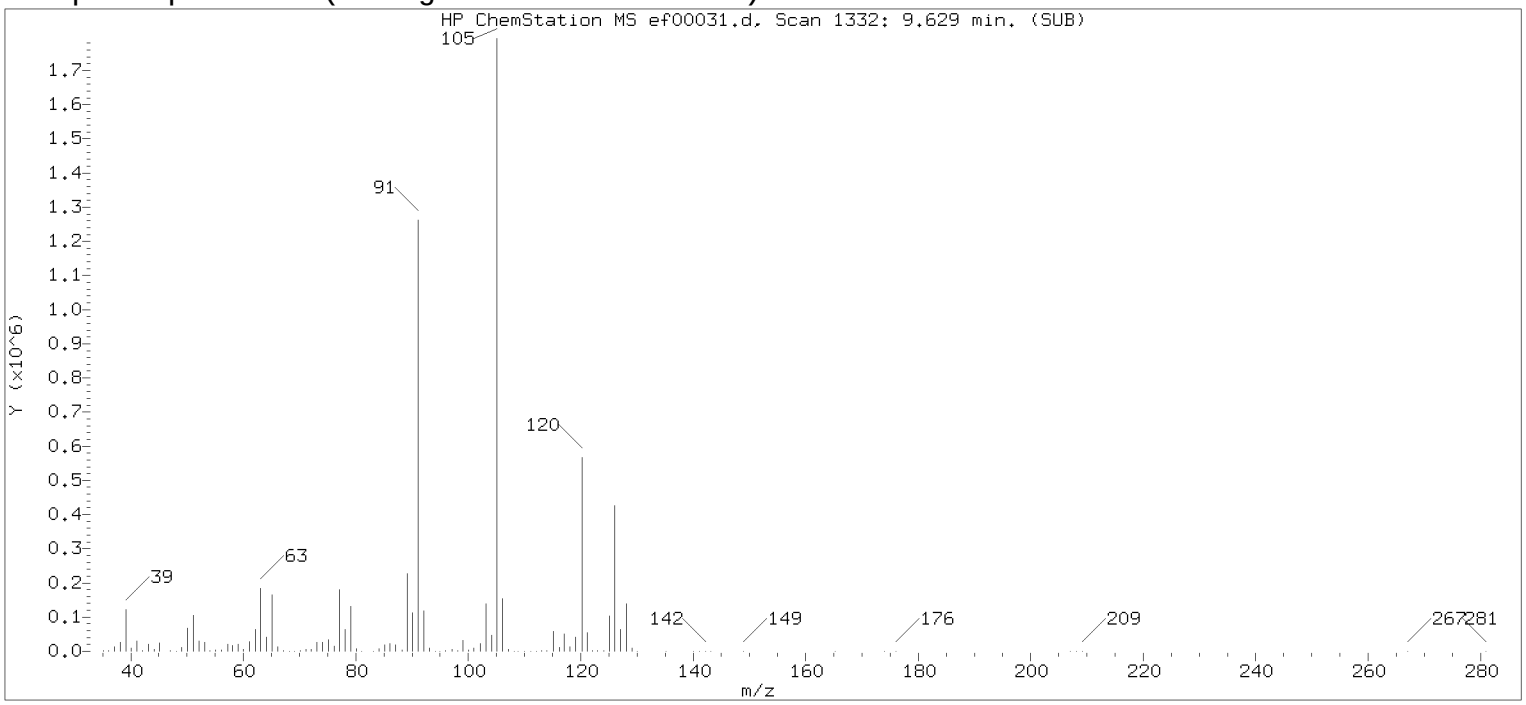
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 1829351M
Concentration (ppb(v)) : 10.2702
Integration start scan : 1334 Integration stop scan: 1341
Y at integration start : 2292 Y at integration end: 2292

Reason for manual integration: improper integration

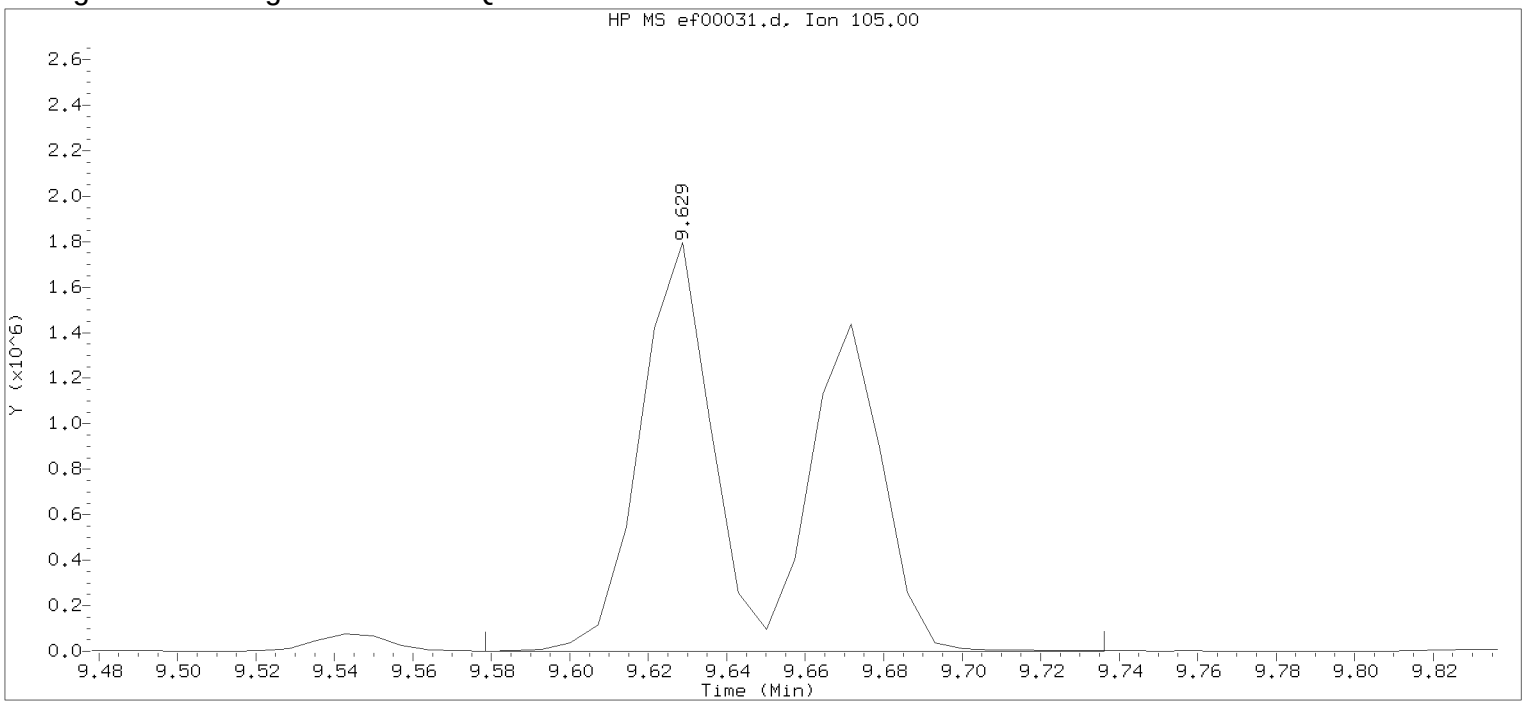
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:25.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00031.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 10:38 Analyst ID: jeb07445

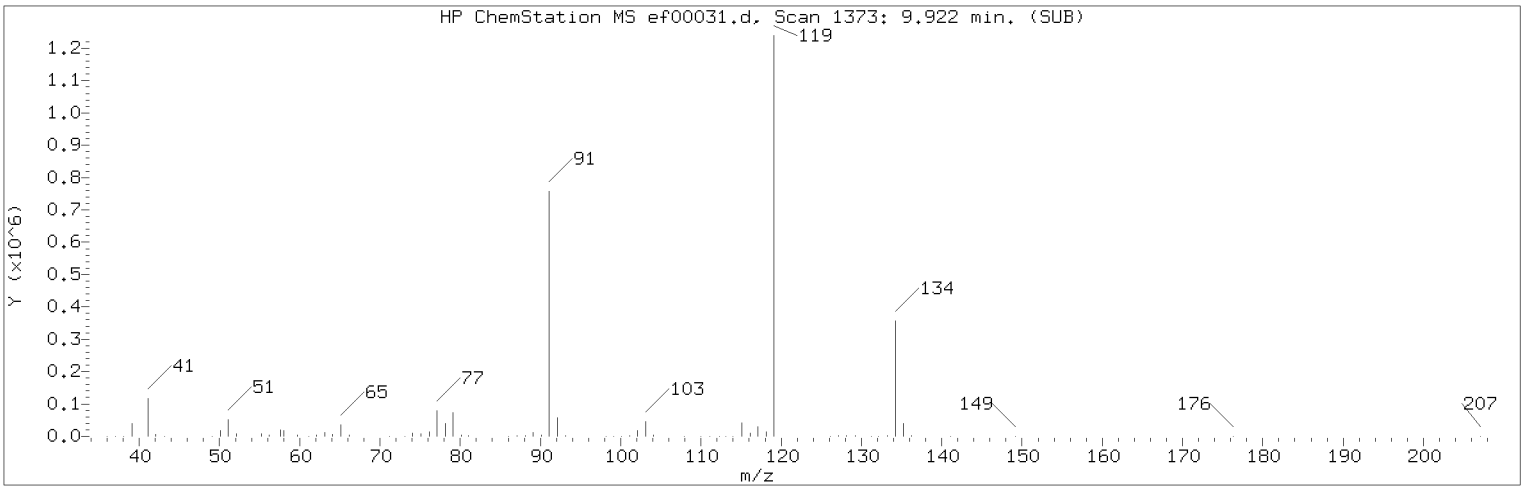
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 10:57 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

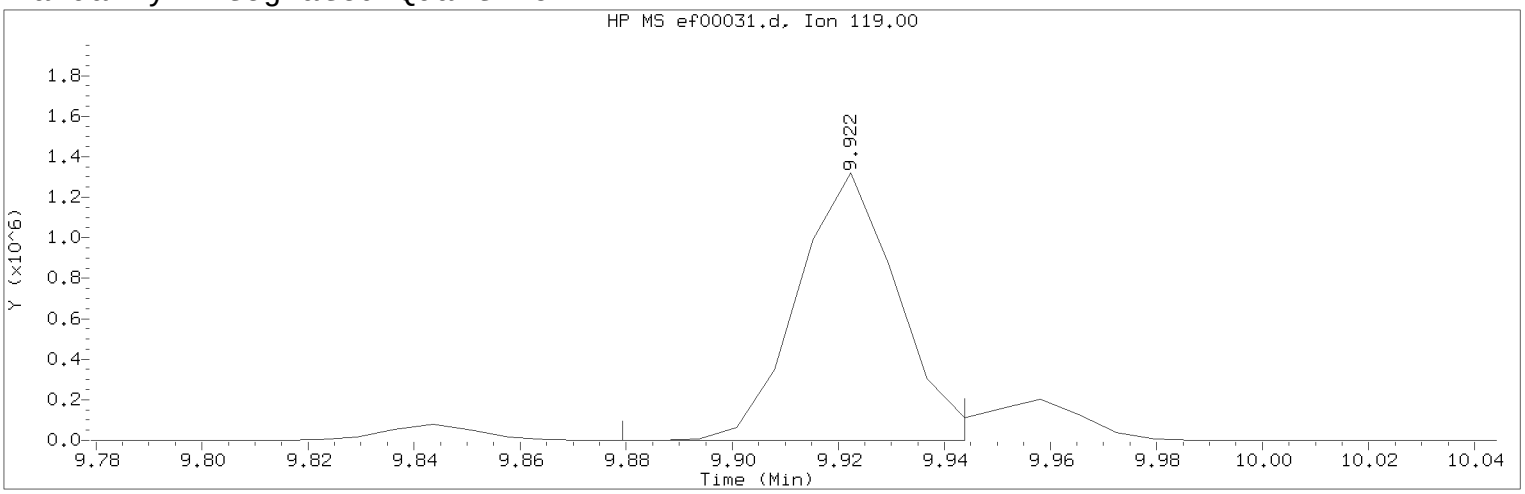
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 4065014
Concentration (ppb(v)) : 23.7426
Integration start scan : 1324 Integration stop scan: 1346
Y at integration start : 851 Y at integration end: 851

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:25.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00031.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 10:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:25 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

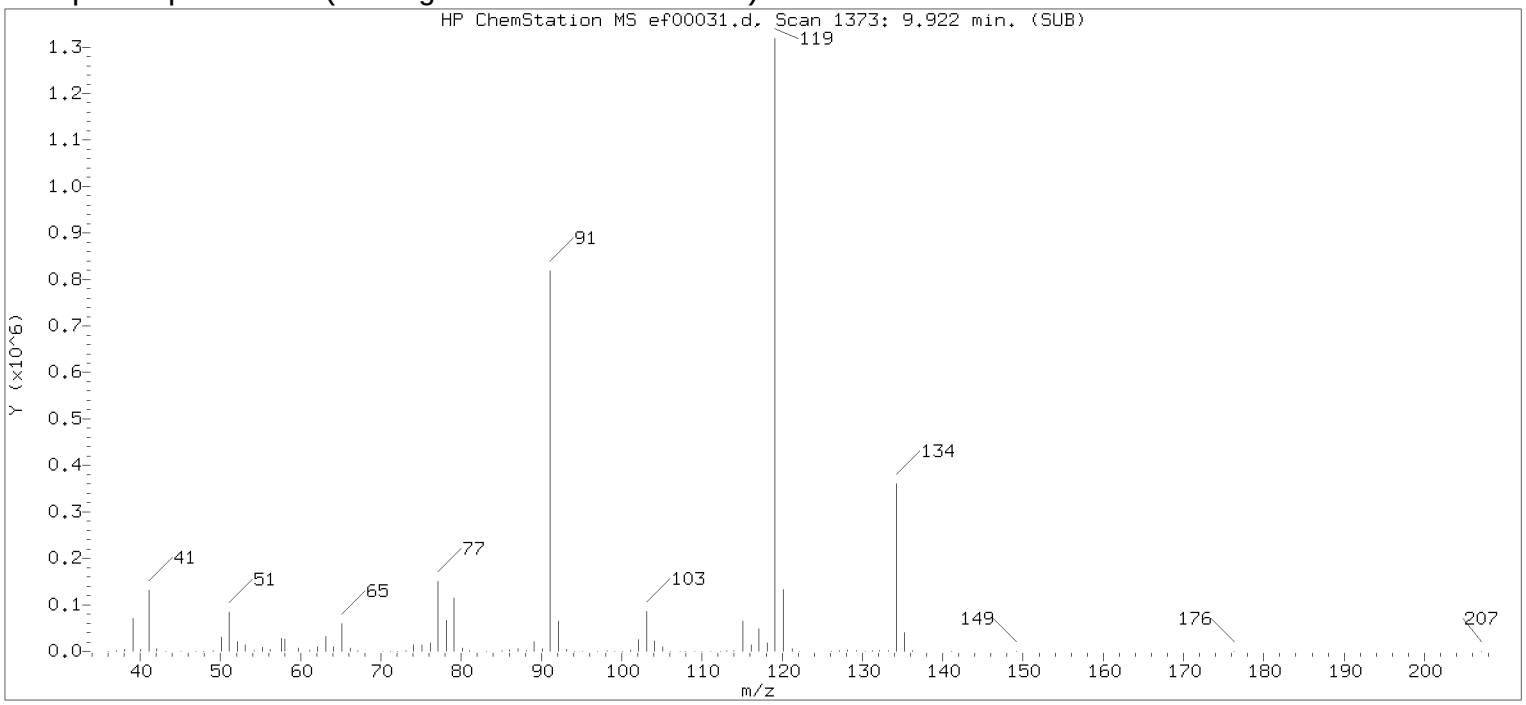
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 1726472M
Concentration (ppb(v)) : 9.2917
Integration start scan : 1366 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

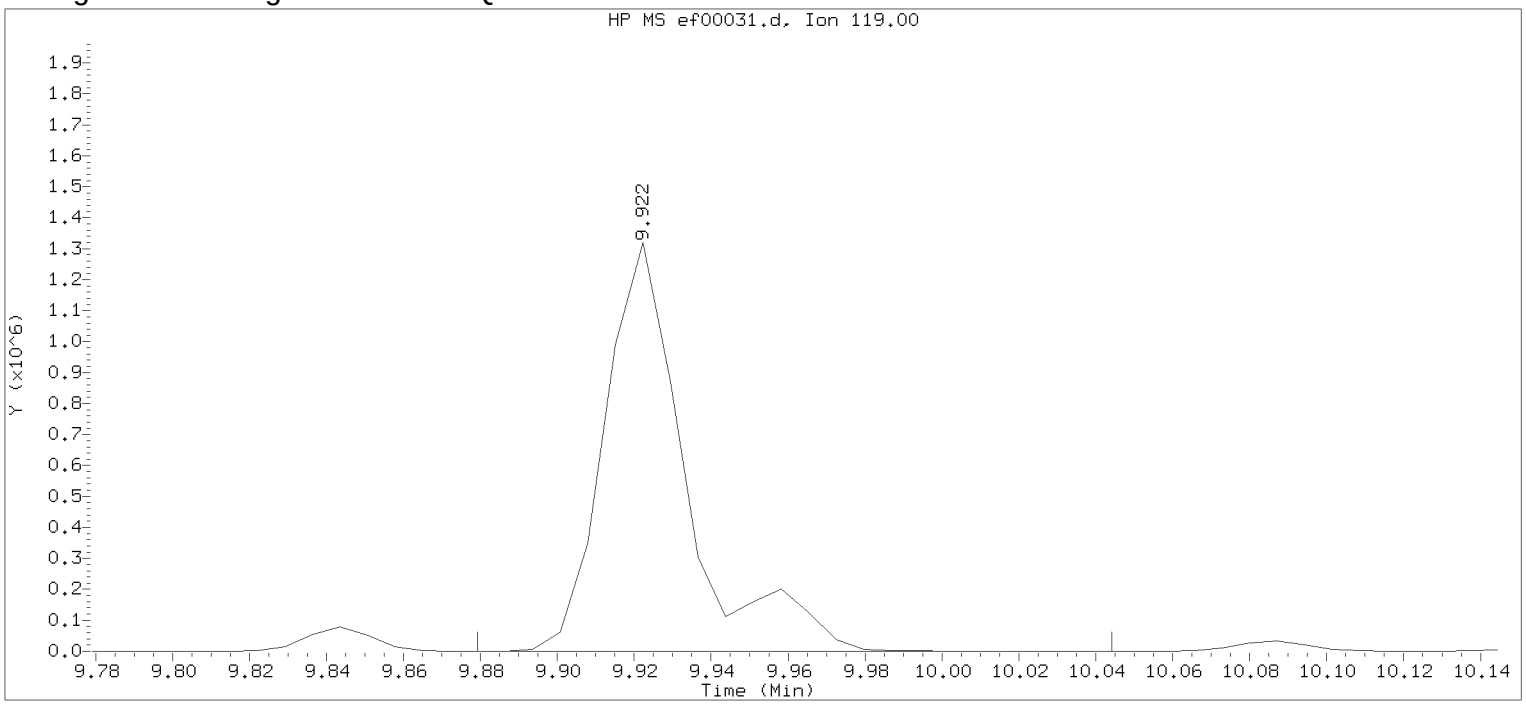
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:25.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



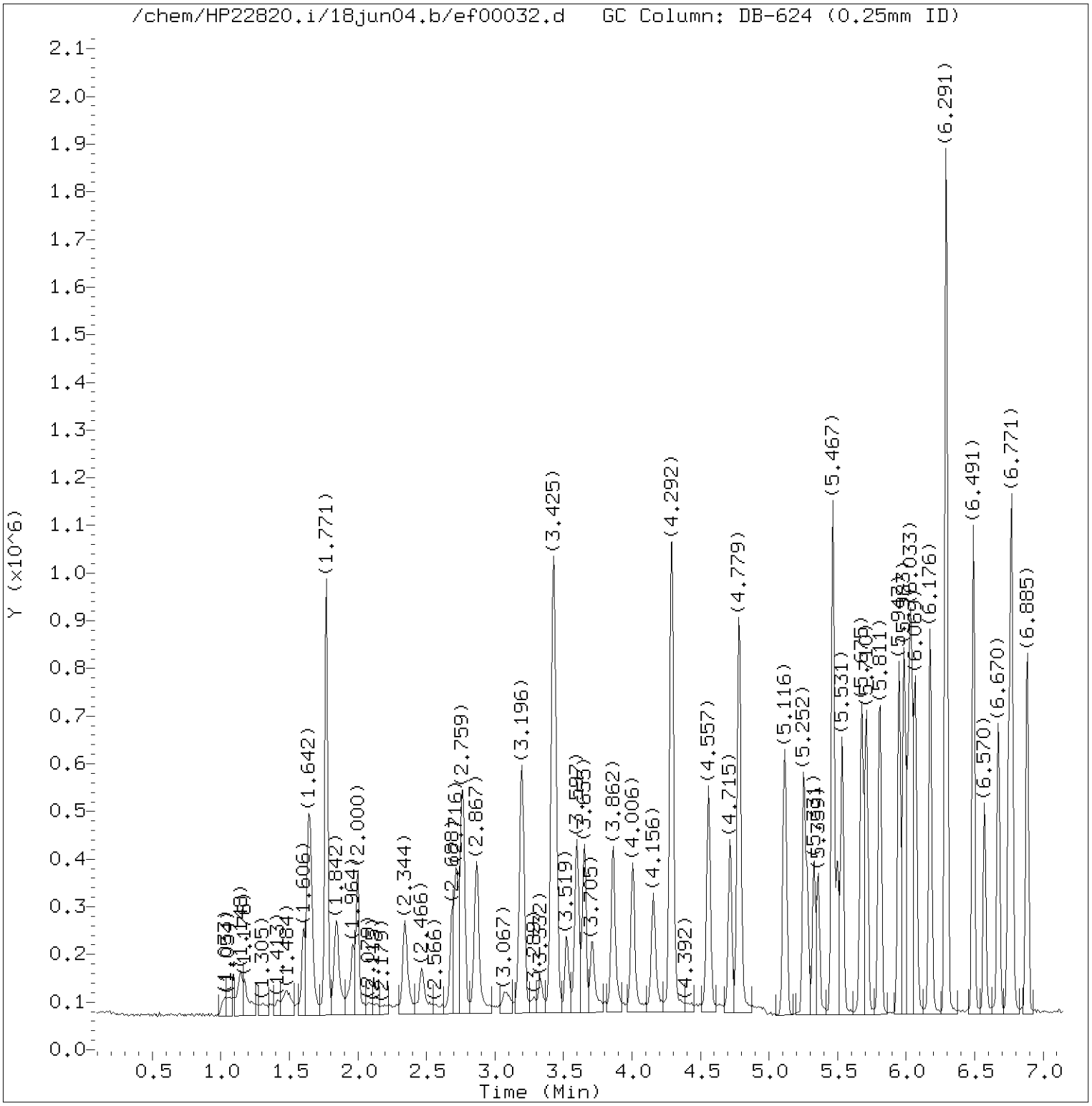
Data File: /chem/HP22820.i/18jun04.b/ef00031.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 10:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 10:57 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 1957915
Concentration (ppb(v)) : 12.4227
Integration start scan : 1366 Integration stop scan: 1389
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:25.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

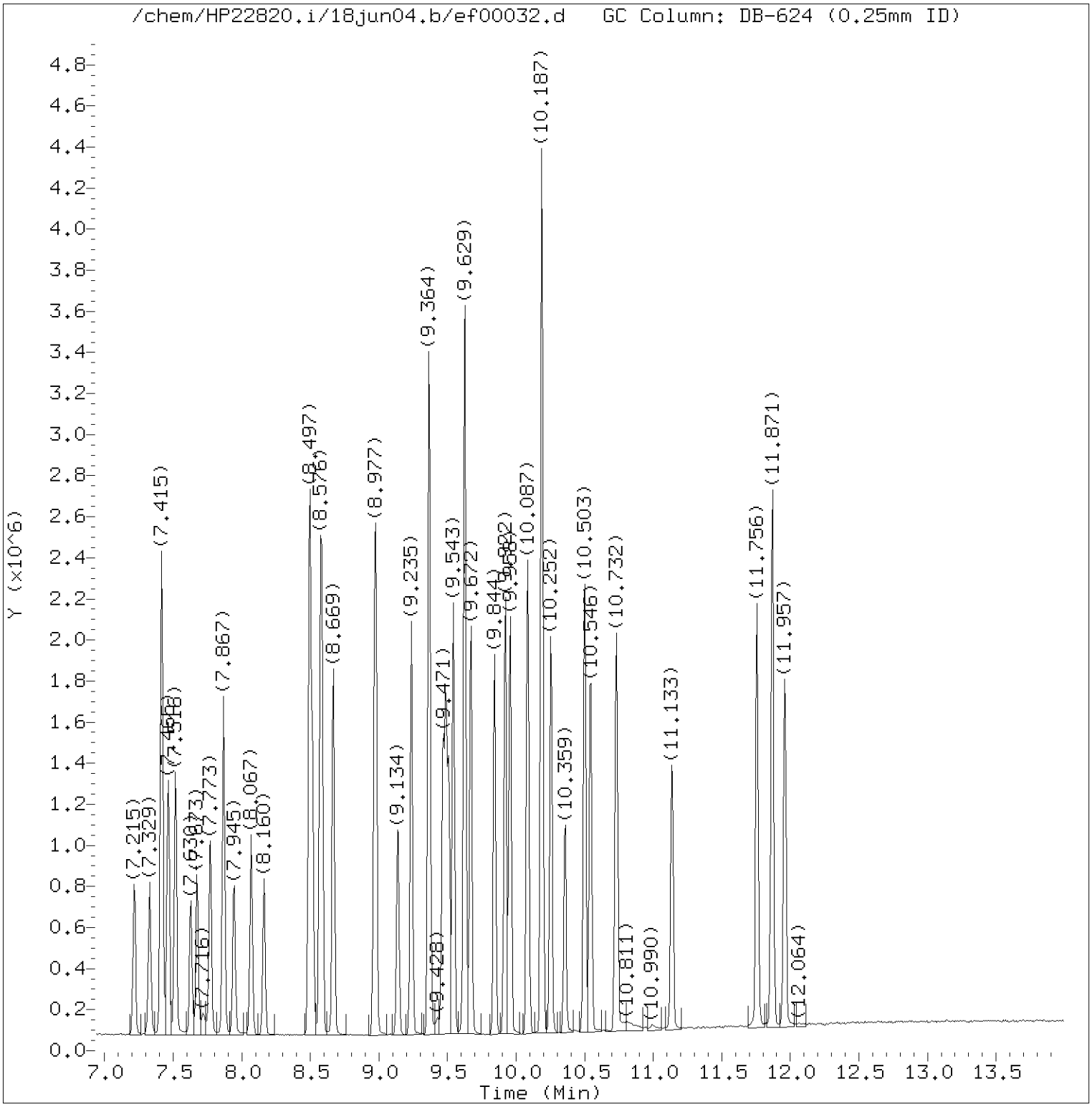
Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00032.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 14:32 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00032.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 14:32 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00032.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 14:32 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.606	41	108758	5.096
2) Dichlorodifluoromethane	(1)	1.642	85	415142	5.019
3) Chlorodifluoromethane	(1)	1.663	51	223520	5.099
4) Freon 114	(1)	1.771	85	431036	5.092
5) Chloromethane	(1)	1.842	50	126285	5.047
6) Vinyl Chloride	(1)	1.964	62	159438	5.192
7) 1,3-Butadiene	(1)	2.000	54	113241	5.082
8) Bromomethane	(1)	2.344	94	166498	5.272
9) Chloroethane	(1)	2.466	64	88775	5.115
10) Bromoethene	(1)	2.688	106	170819	5.091
11) Dichlorofluoromethane	(1)	2.723	67	343943	5.138
12) Trichlorofluoromethane	(1)	2.766	101	447116	5.100
13) Pentane	(1)	2.867	43	240283	5.104
14) Ethanol	(1)	3.074	45	51924	5.128
15) Freon123a	(1)	3.196	67	328238	5.640
16) Acrolein	(1)	3.332	56	62418	5.206
17) 1,1-Dichloroethene	(1)	3.418	61	253133	5.201
18) Freon 113	(1)	3.433	103	245379	4.999
19) Acetone	(1)	3.519	43	208395	5.150
20) Methyl Iodide	(1)	3.597	142	484186	5.144
21) Carbon Disulfide	(1)	3.655	76	471736	5.175
22) Isopropanol	(1)	3.705	45	203421M	4.875
24) 3-Chloropropene	(1)	3.862	76	82258	5.759
23) Acetonitrile	(1)	3.870	40	103536	5.271
25) Methylene Chloride	(1)	4.006	84	157435	5.680
26) tert-Butyl Alcohol	(1)	4.156	59	319573	5.666
28) trans-1,2-Dichloroethene	(1)	4.285	61	233787	5.311
27) Acrylonitrile	(1)	4.292	53	130418	5.288
29) Methyl t-Butyl Ether	(1)	4.292	73	485198	5.165
30) Hexane	(1)	4.557	57	242750	5.022
31) 1,1-Dichloroethane	(1)	4.715	63	295301	5.149
32) Vinyl Acetate	(1)	4.779	86	47447	5.658
33) Di-Isopropyl Ether	(1)	4.779	45	495855	5.190
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	468859	5.143
35) cis-1,2-Dichloroethene	(1)	5.252	61	218818	5.149
37) 2-Butanone	(1)	5.281	72	89866	5.081
38) Ethyl Acetate	(1)	5.331	70	42744	4.897
39) Methyl Acrylate	(1)	5.359	55	268117	5.000

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00032.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 14:32 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	344184	10.000
41) Tetrahydrofuran	(1)	5.503	42	160837	5.134
42) Chloroform	(1)	5.531	83	370843	5.154
43) 1,1,1-Trichloroethane	(1)	5.675	97	373359	5.123
44) Cyclohexane	(1)	5.710	56	257091	5.129
45) Carbon Tetrachloride	(1)	5.811	117	360415	5.037
46) Benzene	(2)	5.983	78	566761	5.073
47) 1,2-Dichloroethane	(2)	6.011	62	229994	5.065
48) Isooctane	(2)	6.033	57	796449	5.151
49) Tert-Amyl Methyl Ether	(2)	6.069	73	480581	5.158
50) Heptane	(2)	6.176	43	266076	5.035
51)*1,4-Difluorobenzene	(2)	6.291	114	1298937	10.000
52) Trichloroethene	(2)	6.491	130	282976	5.099
53) Ethyl Acrylate	(2)	6.570	55	357016	5.050
36) 1,2-Dichloroethene (total)	(1)		61	452605	10.460
54) 1,2-Dichloropropane	(2)	6.670	63	195633	5.003
57) Methyl Methacrylate	(2)	6.749	69	194176	4.966
55) Dibromomethane	(2)	6.771	174	271190	5.049
56) 1,4-Dioxane	(2)	6.778	88	144698	5.095
58) Bromodichloromethane	(2)	6.885	83	388079	5.069
59) cis-1,3-Dichloropropene	(2)	7.215	75	343677	5.092
60) 4-Methyl-2-Pentanone	(2)	7.329	43	372685	5.070
61) Toluene	(3)	7.465	91	745018	5.239
62) Octane	(3)	7.516	43	388829	5.257
63) trans-1,3-Dichloropropene	(3)	7.630	75	284059	5.067
65) Ethyl Methacrylate	(3)	7.673	69	328825	5.168
66) 1,1,2-Trichloroethane	(3)	7.773	97	252671	5.029
67) Tetrachloroethene	(3)	7.867	166	412344	5.182
68) 2-Hexanone	(3)	7.945	43	371877	5.227
69) Dibromochloromethane	(3)	8.067	127	316790	4.999
70) 1,2-Dibromoethane	(3)	8.160	107	402745	5.151
71)*Chlorobenzene-d5	(3)	8.497	117	1232550	10.000
72) Chlorobenzene	(3)	8.518	112	625513	5.139
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	304050	5.133
74) Ethylbenzene	(3)	8.583	91	1019716	5.362
75) m/p-Xylene	(3)	8.669	91	836116	5.415
76) o-Xylene	(3)	8.970	91	816452	5.350
78) Styrene	(3)	8.977	104	616897	5.335

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00032.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 14:32 jeb07445

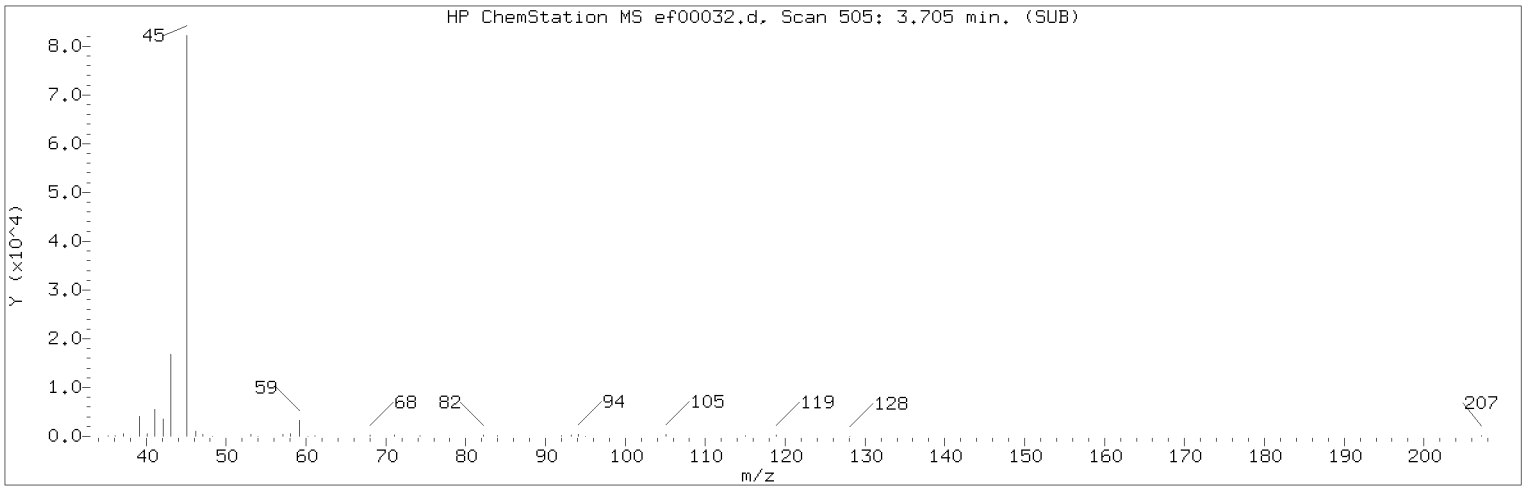
Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	405107	4.969
80) Cumene	(3)	9.235	105	1122887	5.160
82) 1,1,2,2-Tetrachloroethane	(3)	9.464	83	558887	5.222
81) Bromobenzene	(3)	9.493	156	404724	5.234
83) 1,2,3-Trichloropropane	(3)	9.507	110	179164	5.240
84) n-Propylbenzene	(3)	9.543	120	325182	5.199
85) 2-Chlorotoluene	(3)	9.621	126	294312	5.112
86) 4-Ethyltoluene	(3)	9.629	105	1142380M	5.427
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	947426M	5.408
88) Alpha Methyl Styrene	(3)	9.844	118	473377	5.152
89) tert-Butylbenzene	(3)	9.922	119	935792M	5.121
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	930307	5.379
91) sec-Butylbenzene	(3)	10.087	105	1371324	5.240
92) 1,3-Dichlorobenzene	(3)	10.187	146	674490	5.248
94) p-Isopropyltoluene	(3)	10.187	119	1163383	5.195
93) 1,4-Dichlorobenzene	(3)	10.252	146	692838	5.289
95) Benzyl Chloride	(3)	10.359	91	627502	5.296
97) n-Butylbenzene	(3)	10.503	91	1046513	5.200
96) 1,2-Dichlorobenzene	(3)	10.546	146	645467	5.277
98) Hexachloroethane	(3)	10.732	117	243859	5.129
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	342479	5.416
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	562323	5.364
101) Hexachlorobutadiene	(3)	11.871	225	461978	5.153
102) Naphthalene	(3)	11.957	128	1227703	5.296
64) 1,3-Dichloropropene (total)	(3)		75	627736	10.232
77) Xylene (total)	(3)		91	1652568	10.765

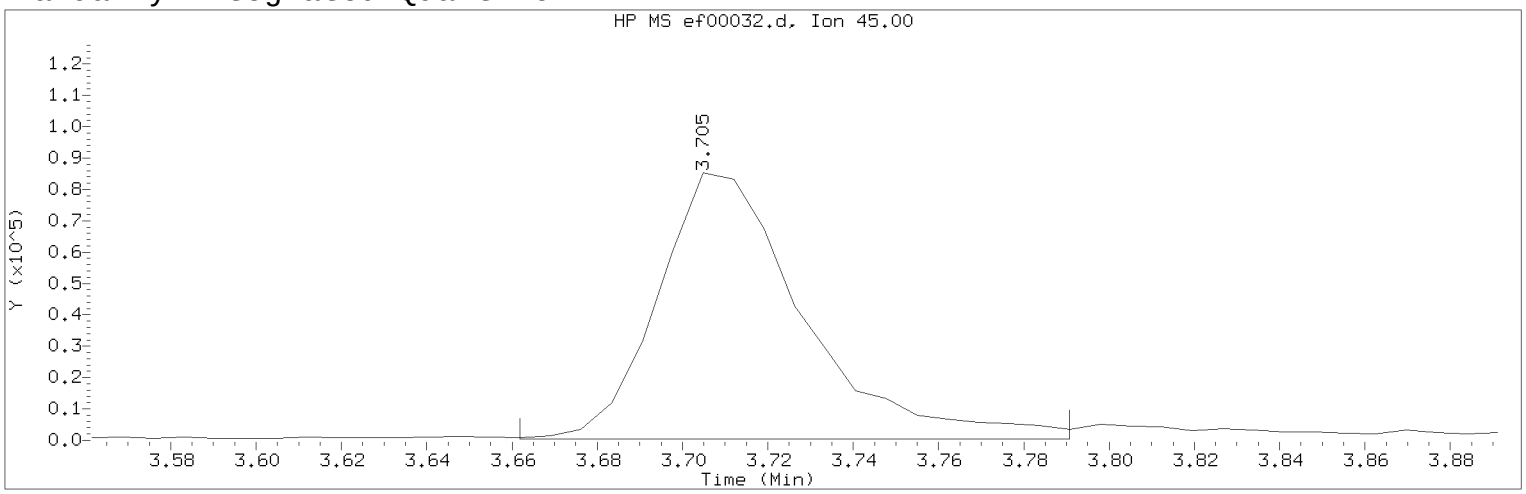
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00032.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 14:32 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

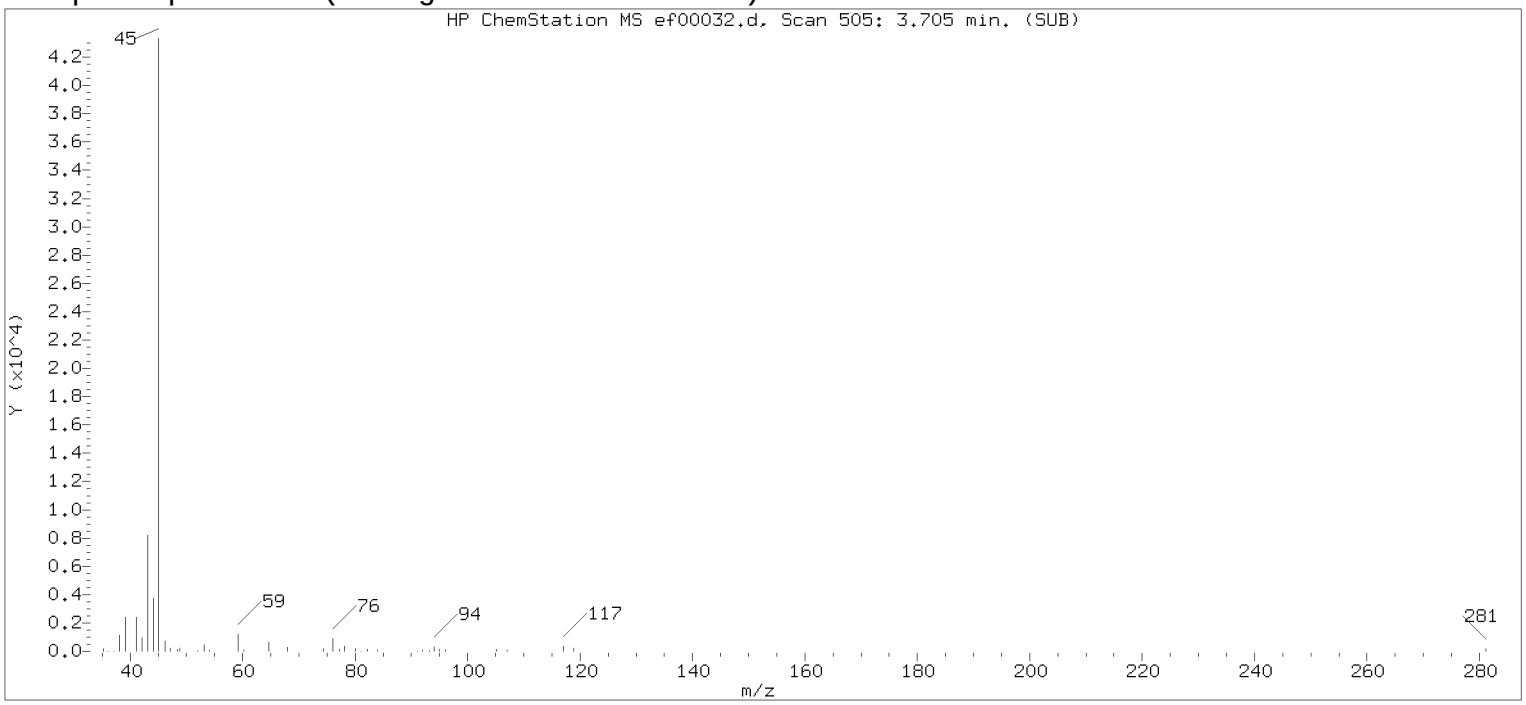
Compound Number : 22
Compound Name : Isopropanol
Scan Number : 505
Retention Time (minutes): 3.705
Quant Ion : 45.00
Area (flag) : 203421M
Concentration (ppb(v)) : 4.8753
Integration start scan : 498 Integration stop scan: 516
Y at integration start : 365 Y at integration end: 365

Reason for manual integration: improper integration

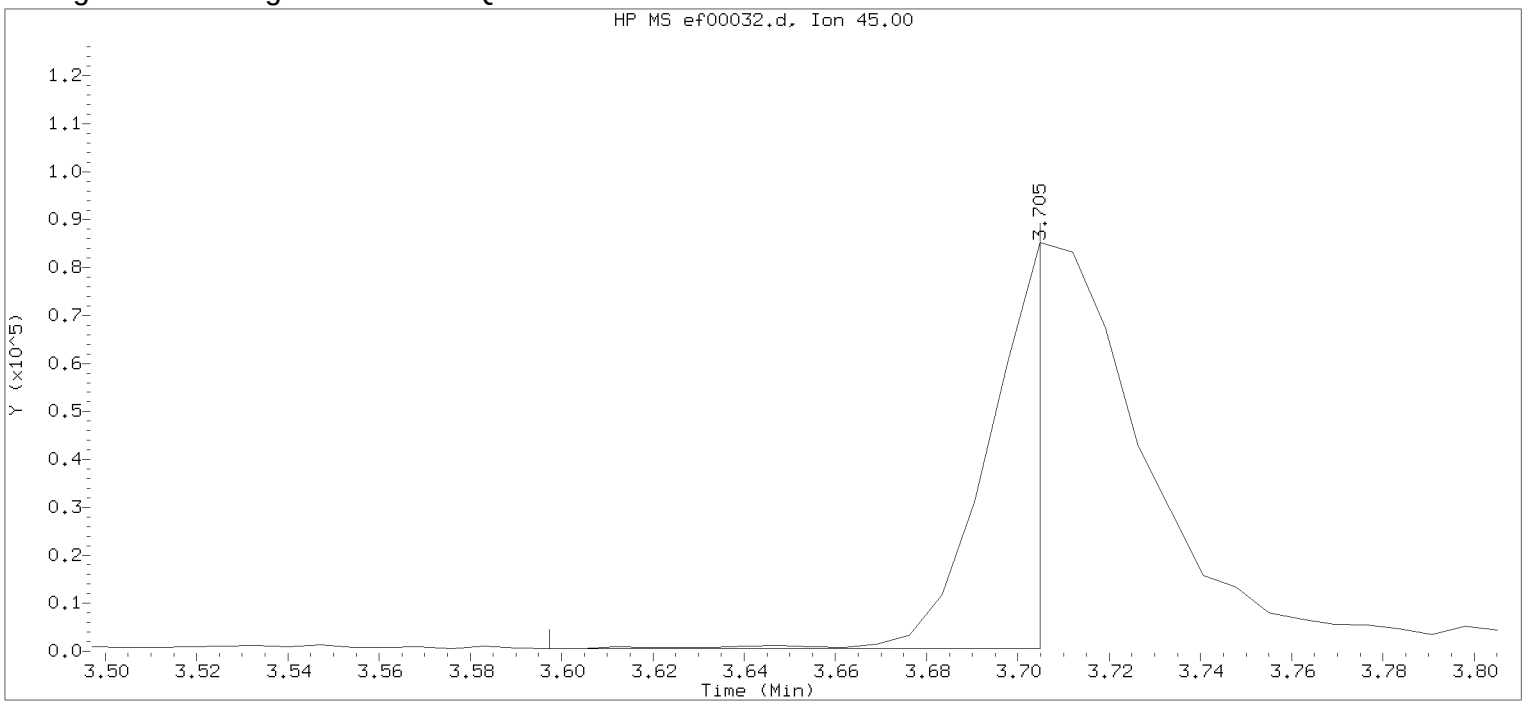
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00032.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:06 Analyst ID: jeb07445

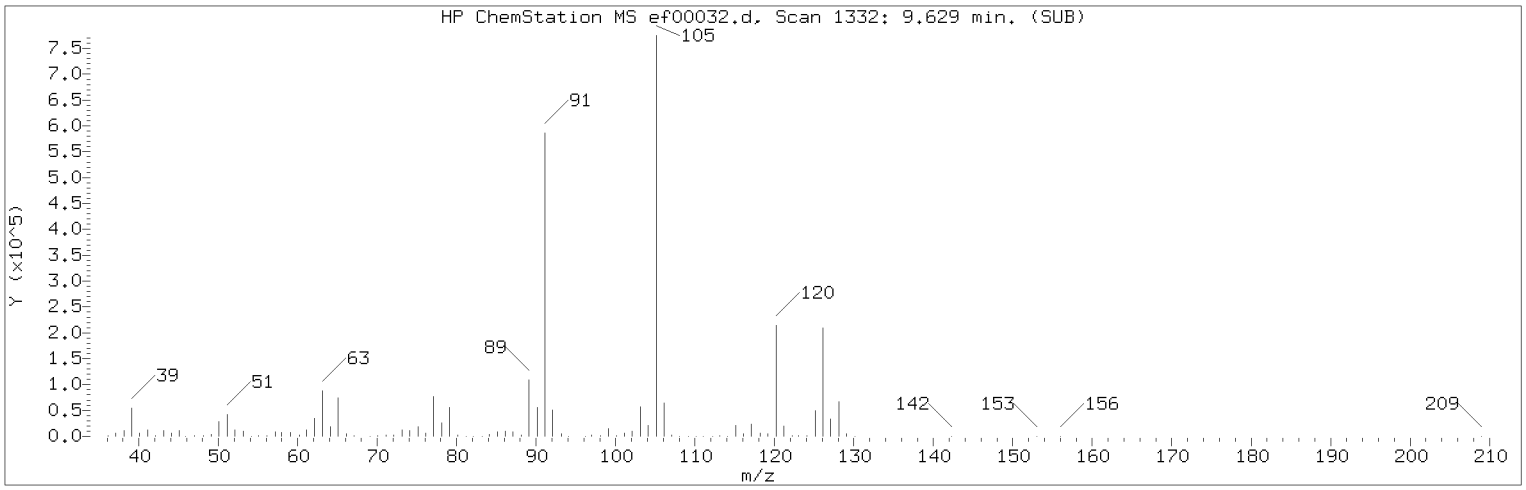
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 11:24 Unknown

Sample Name: VSTD005 Lab Sample ID: VSTD005

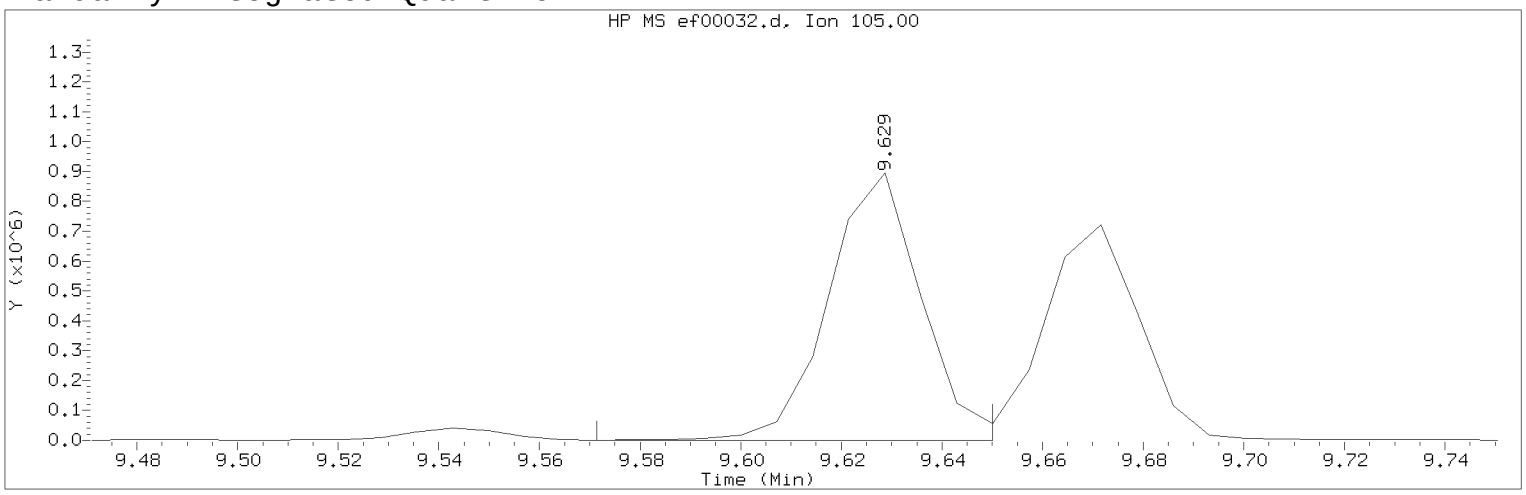
Compound Number : 22
Compound Name : Isopropanol
Scan Number : 505
Retention Time (minutes): 3.705
Quant Ion : 45.00
Area : 64847
Concentration (ppb(v)) : 1.5562
Integration start scan : 489 Integration stop scan: 504
Y at integration start : 545 Y at integration end: 545

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00032.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 14:32 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

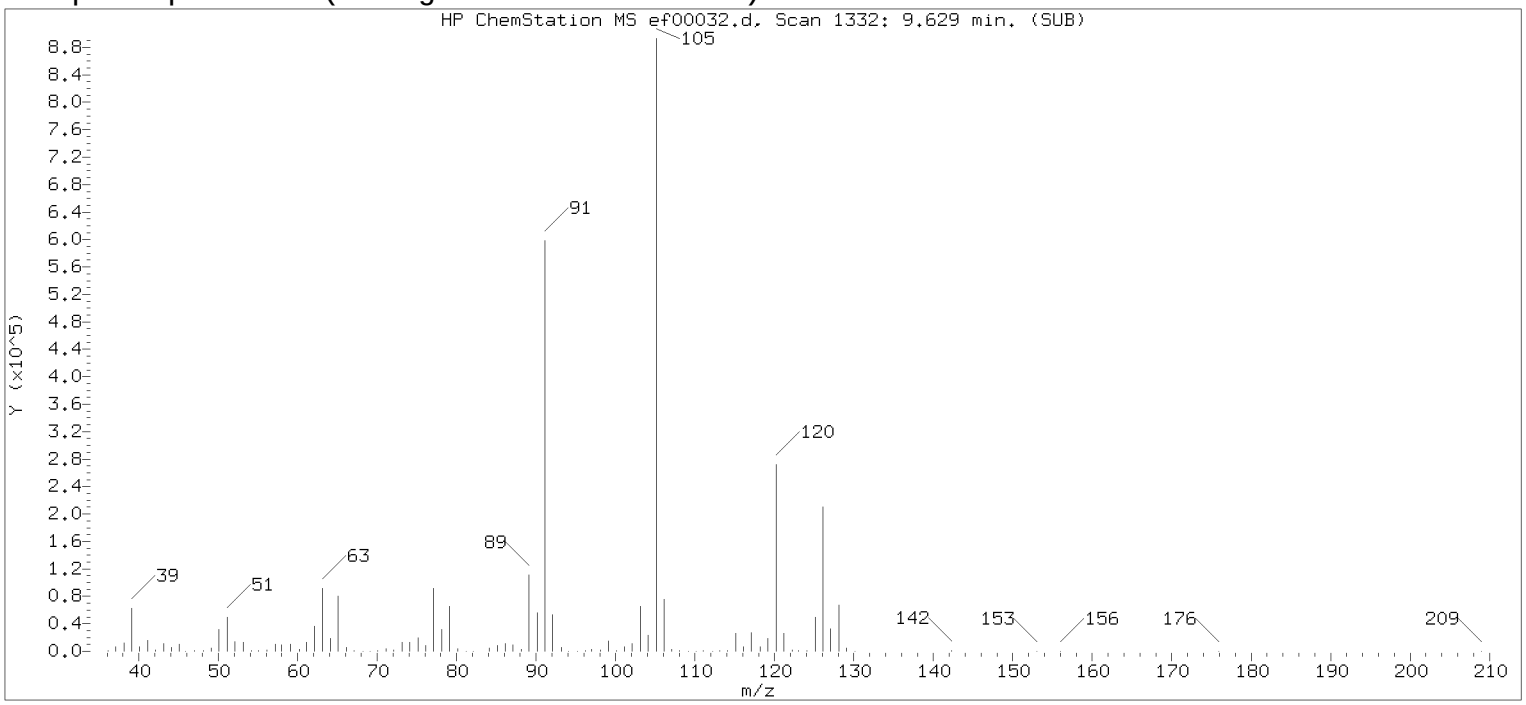
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 1142380M
Concentration (ppb(v)) : 5.4273
Integration start scan : 1323 Integration stop scan: 1334
Y at integration start : 748 Y at integration end: 748

Reason for manual integration: improper integration

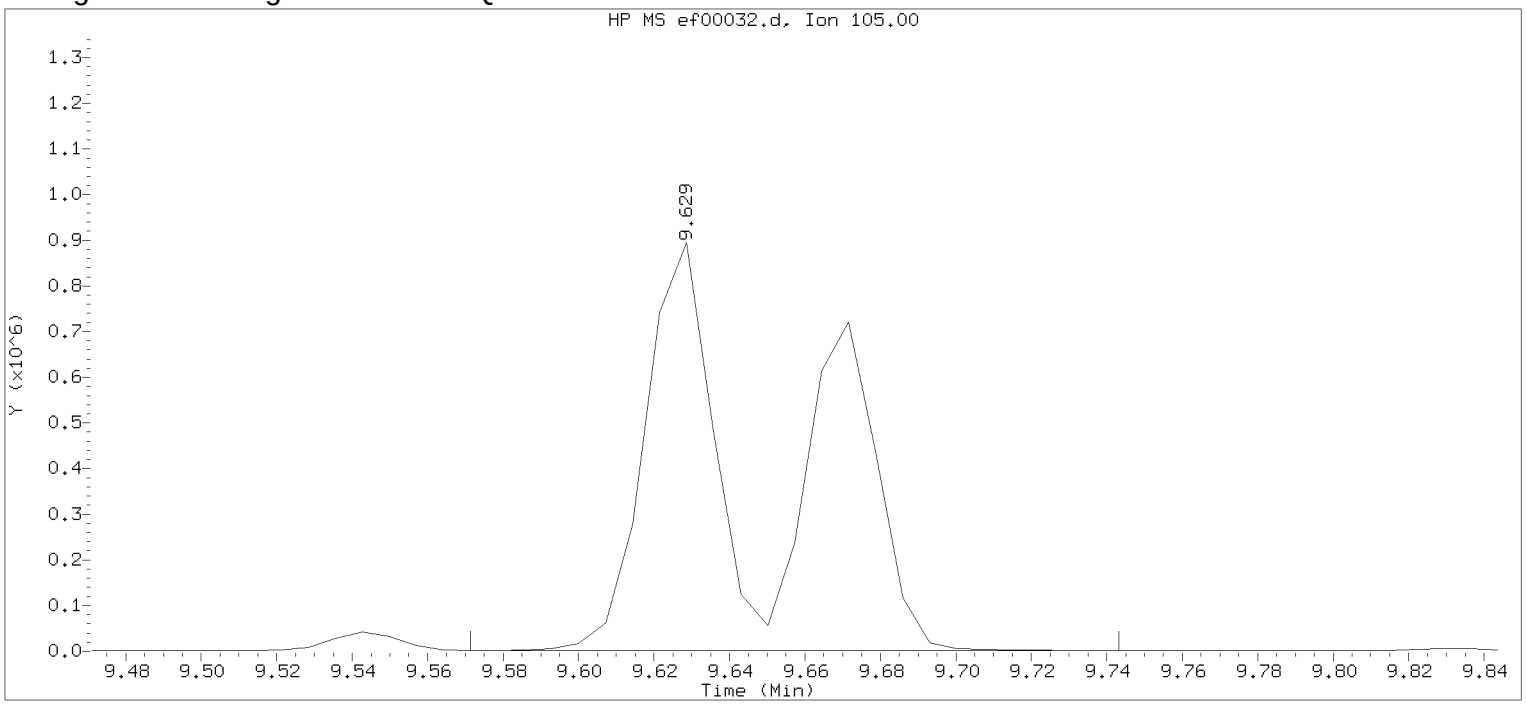
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00032.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:06 Analyst ID: jeb07445

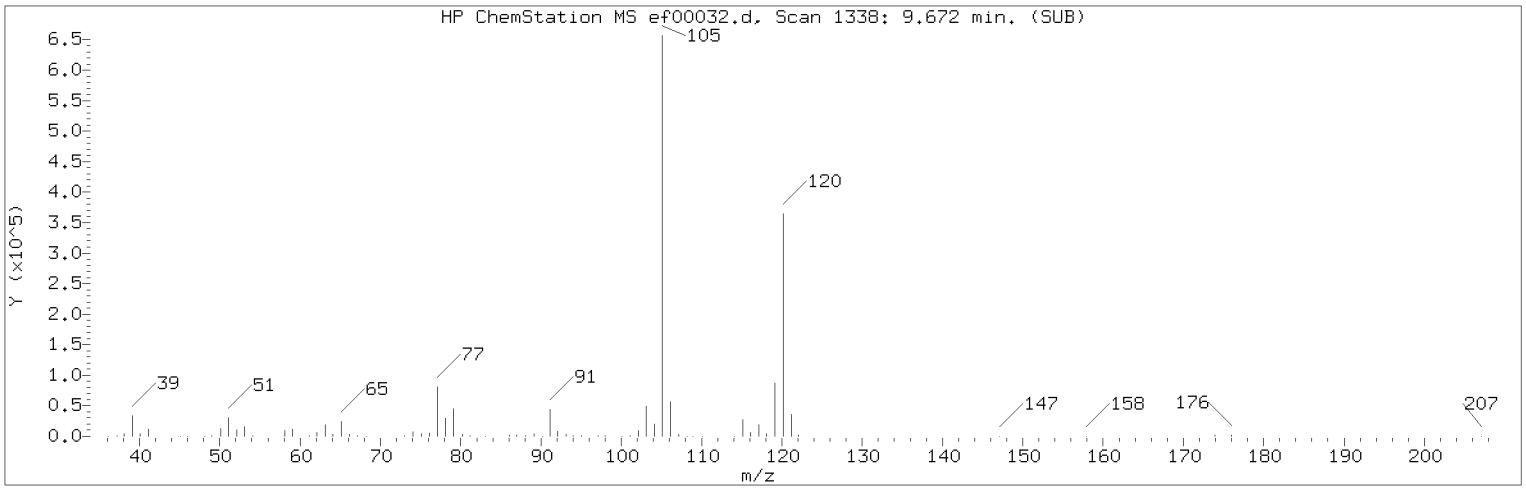
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 11:24 Unknown

Sample Name: VSTD005 Lab Sample ID: VSTD005

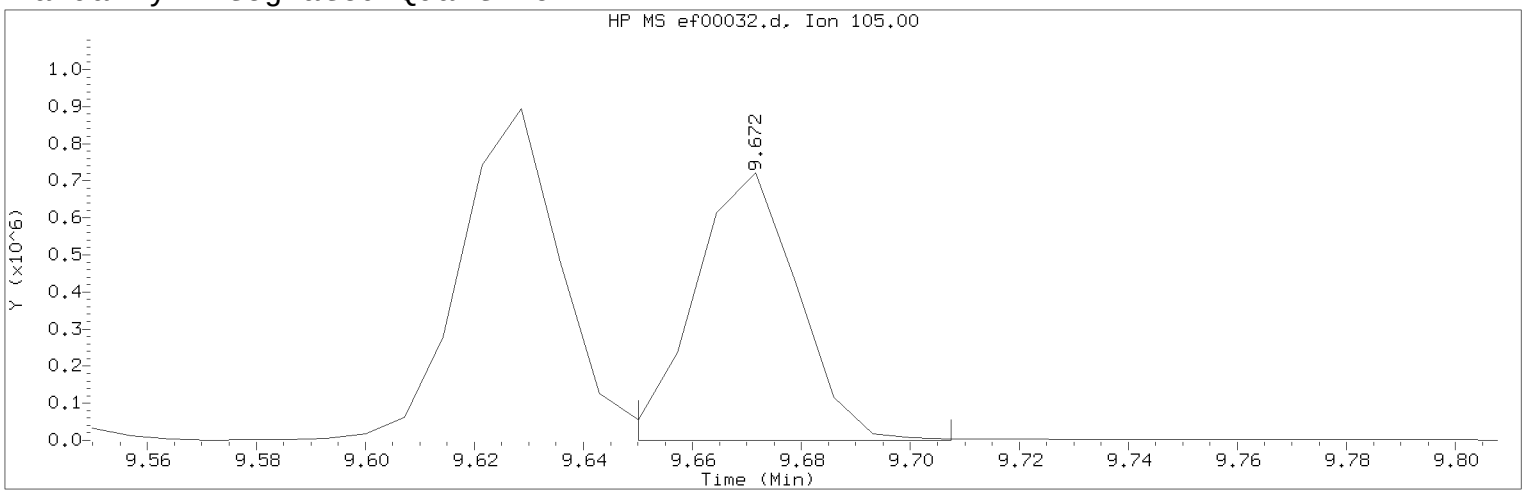
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 2066211
Concentration (ppb(v)) : 10.1877
Integration start scan : 1323 Integration stop scan: 1347
Y at integration start : 748 Y at integration end: 748

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00032.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 14:32 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

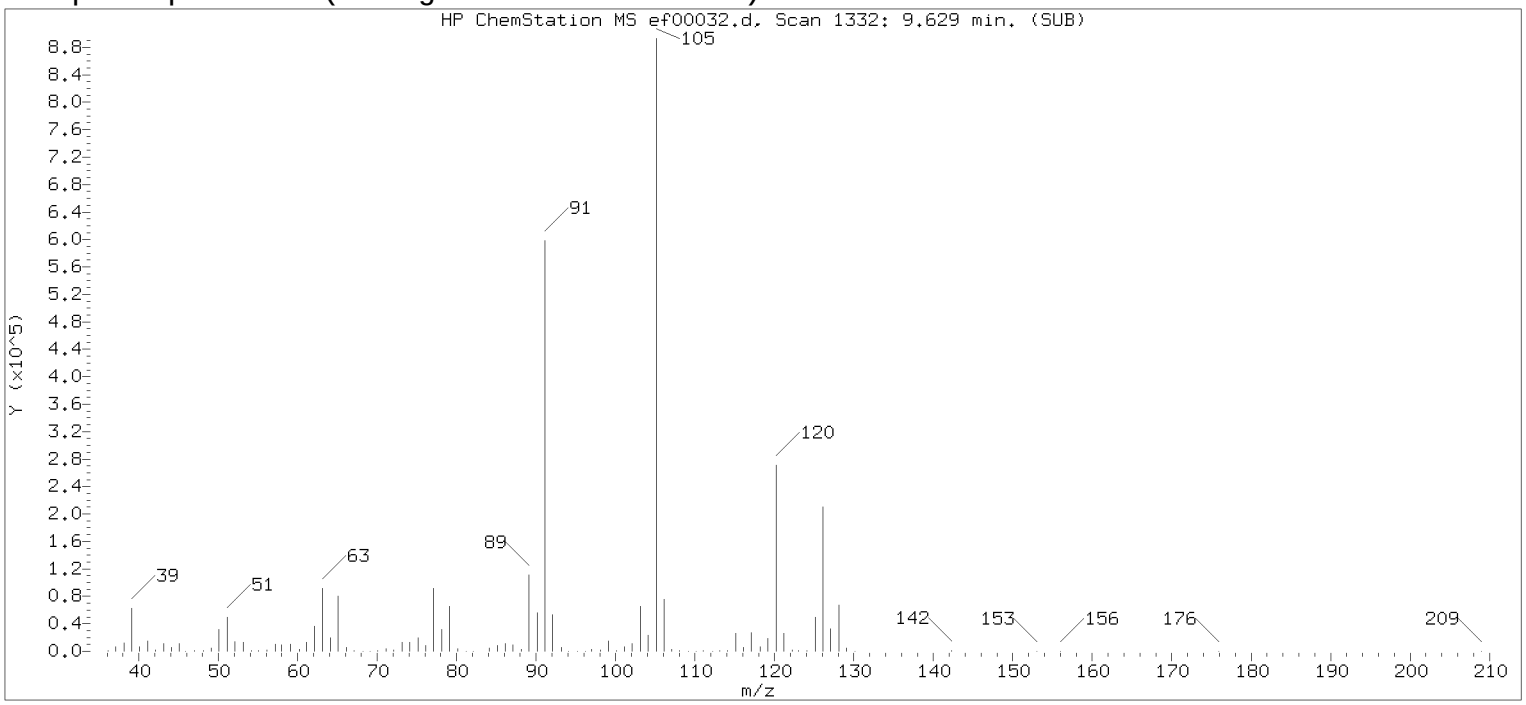
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 947426M
Concentration (ppb(v)) : 5.4083
Integration start scan : 1334 Integration stop scan: 1342
Y at integration start : 91 Y at integration end: 91

Reason for manual integration: improper integration

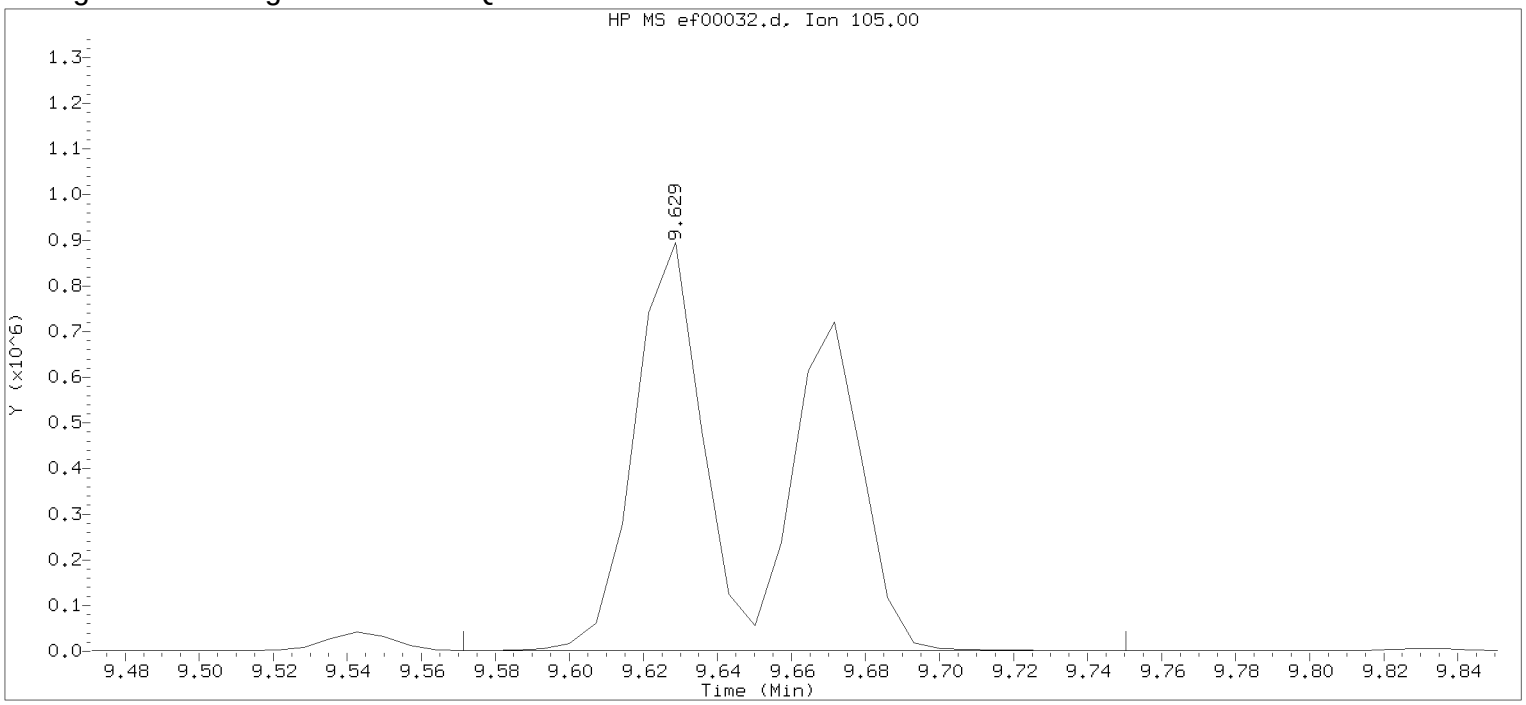
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00032.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:06 Analyst ID: jeb07445

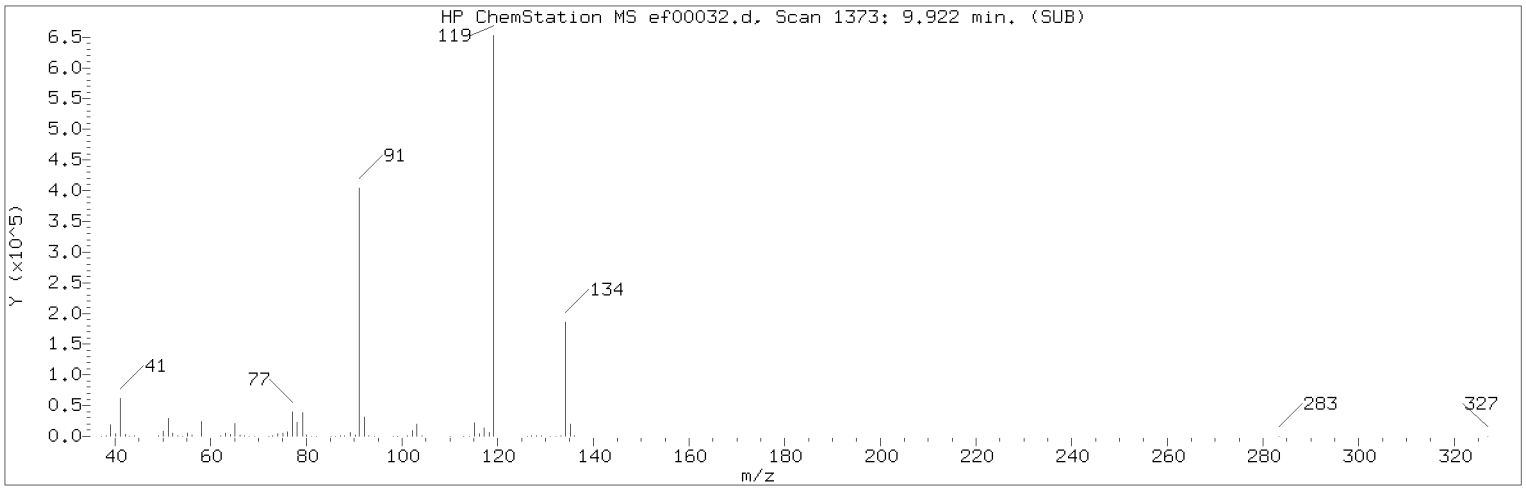
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 11:24 Unknown

Sample Name: VSTD005 Lab Sample ID: VSTD005

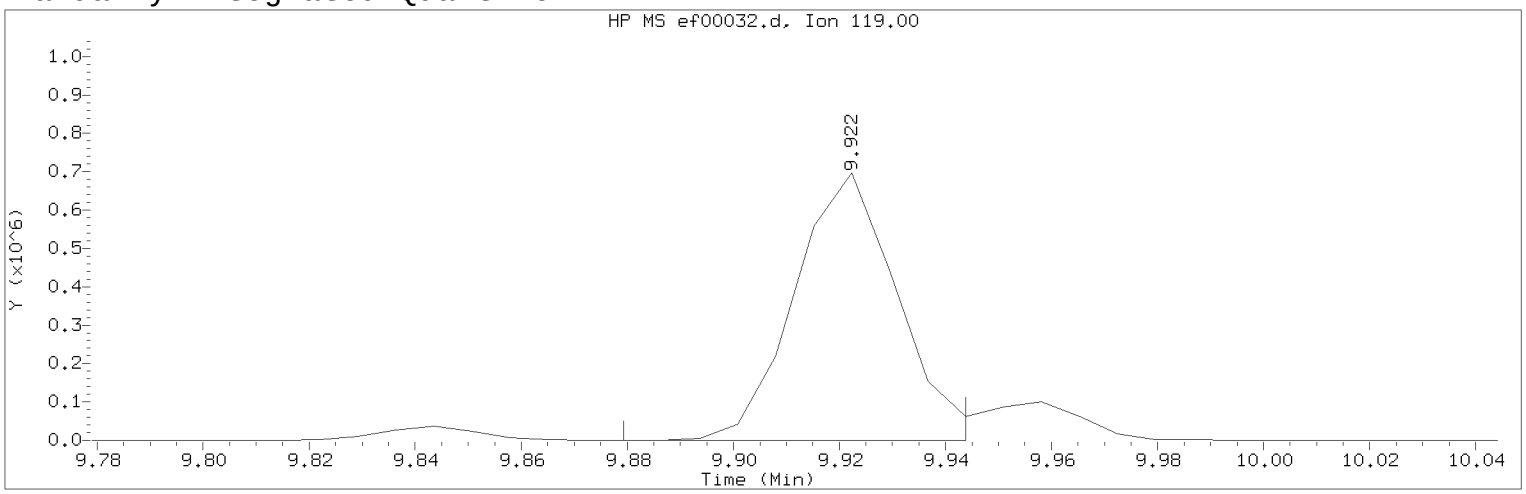
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 2065382
Concentration (ppb(v)) : 12.2659
Integration start scan : 1323 Integration stop scan: 1348
Y at integration start : 852 Y at integration end: 852

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00032.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 14:32 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

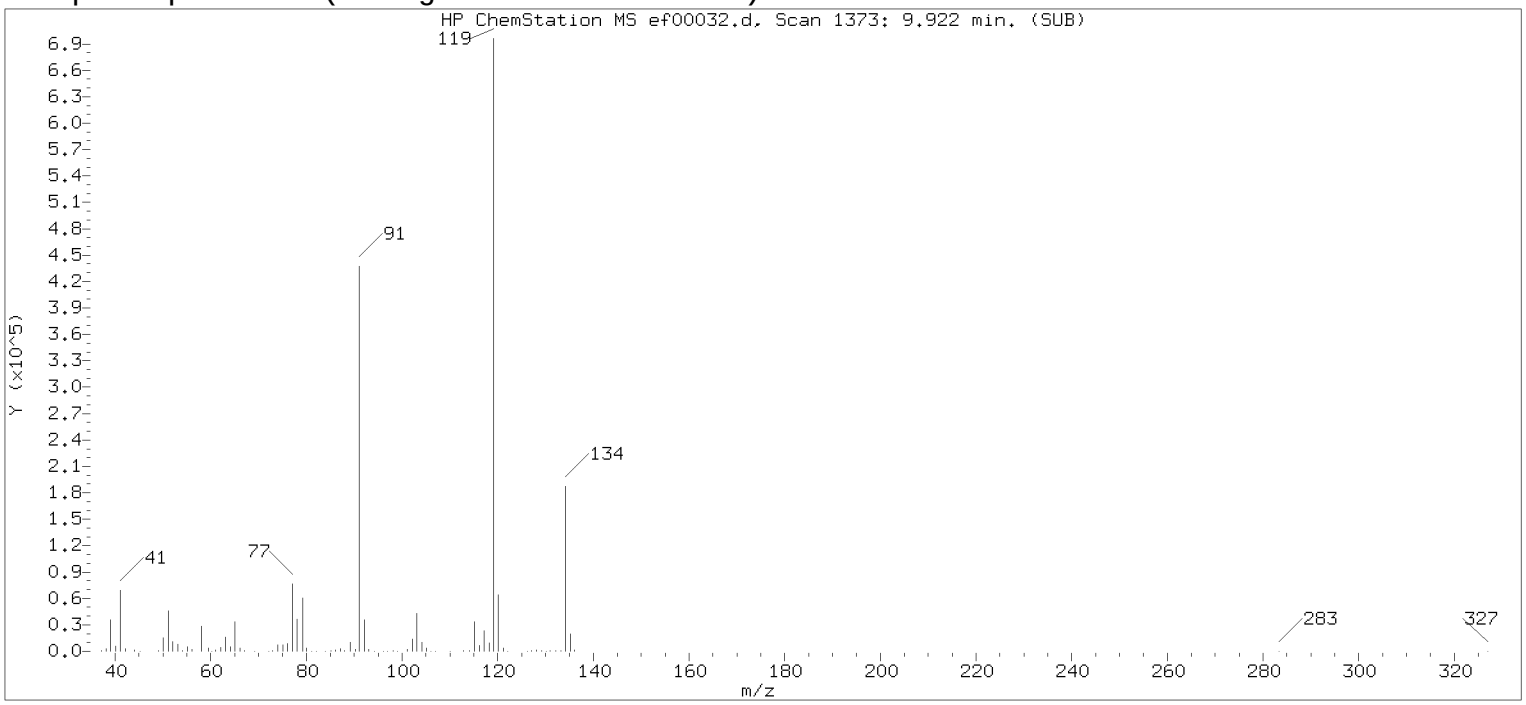
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 935792M
Concentration (ppb(v)) : 5.1209
Integration start scan : 1366 Integration stop scan: 1375
Y at integration start : 177 Y at integration end: 177

Reason for manual integration: improper integration

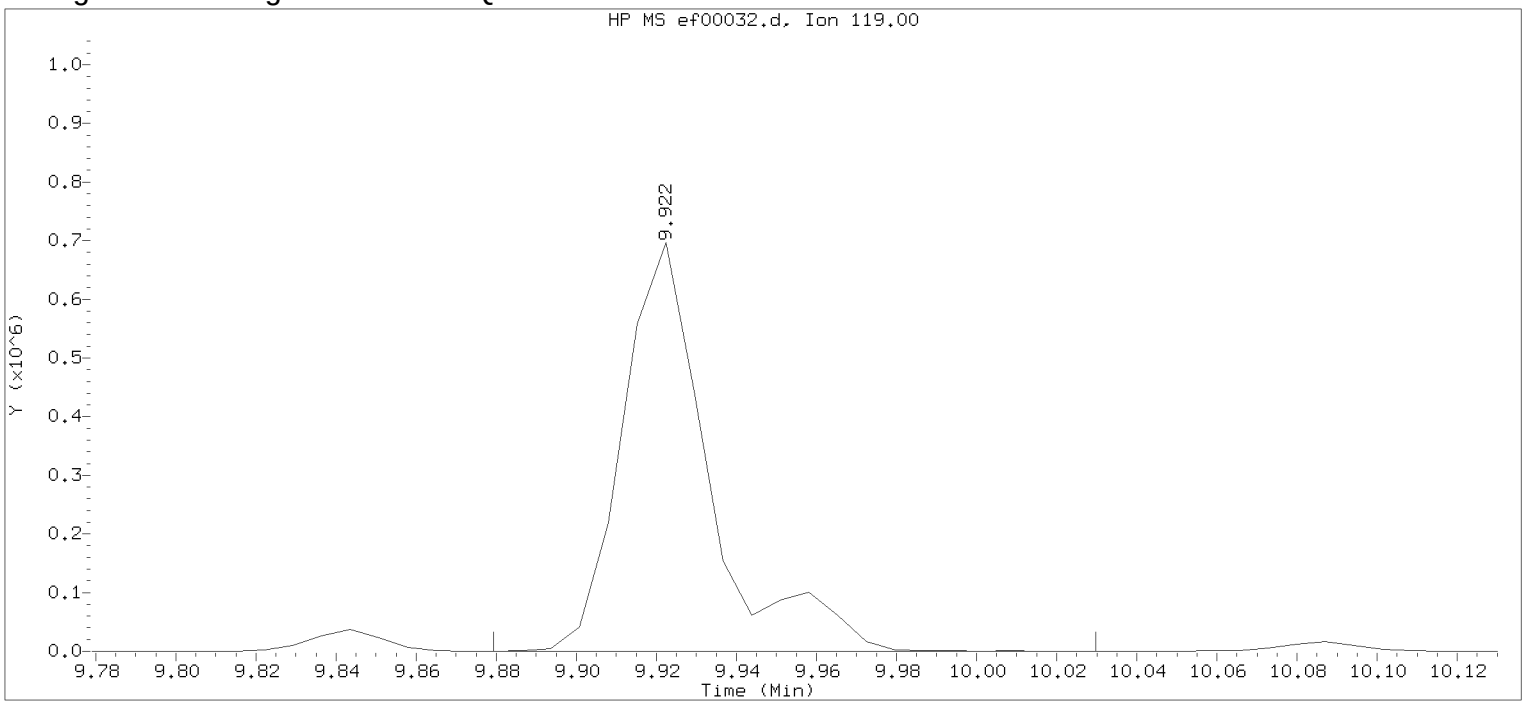
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



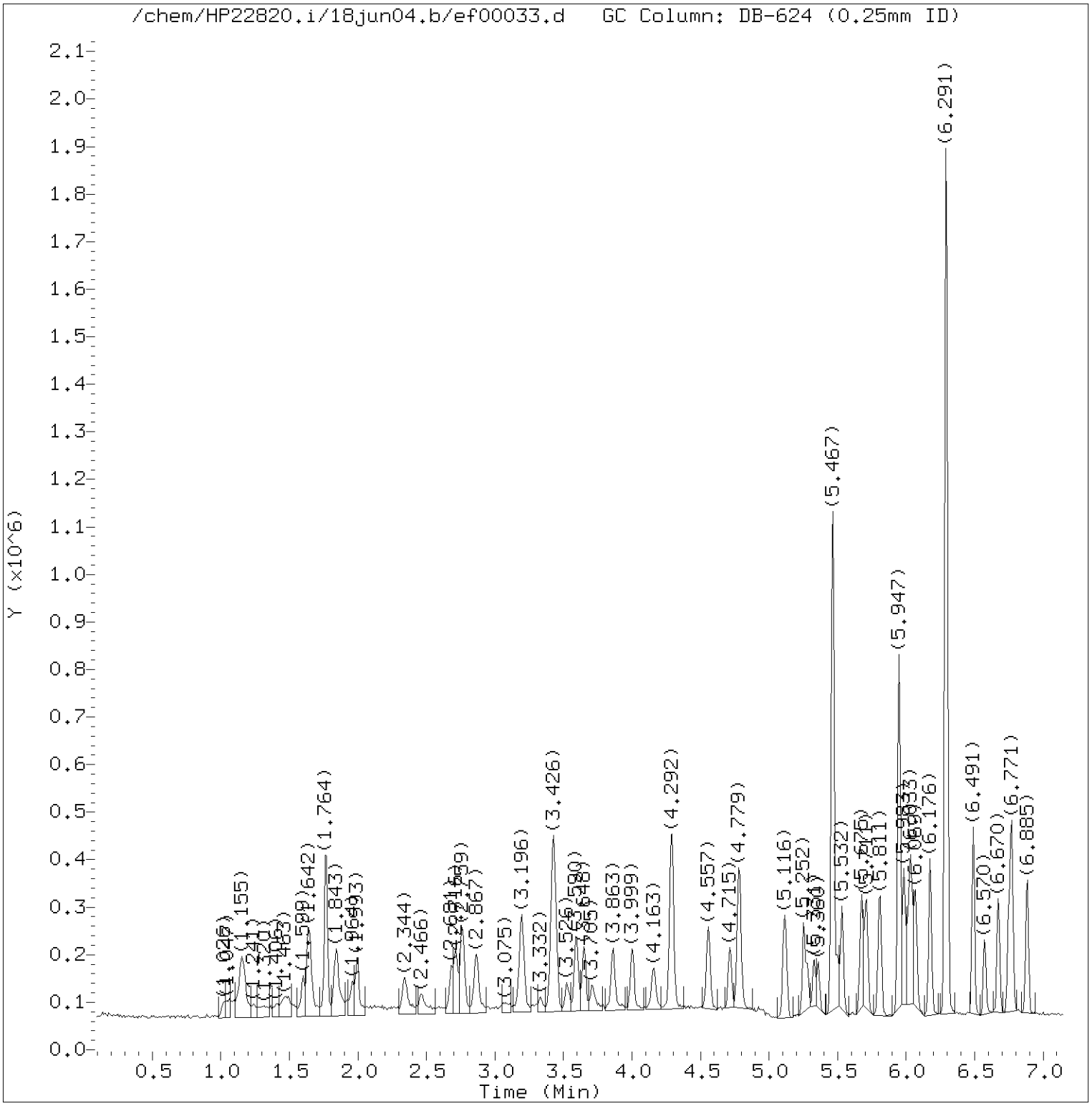
Data File: /chem/HP22820.i/18jun04.b/ef00032.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 11:24 Unknown

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 1051796
Concentration (ppb(v)) : 6.7856
Integration start scan : 1366 Integration stop scan: 1387
Y at integration start : 177 Y at integration end: 177

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

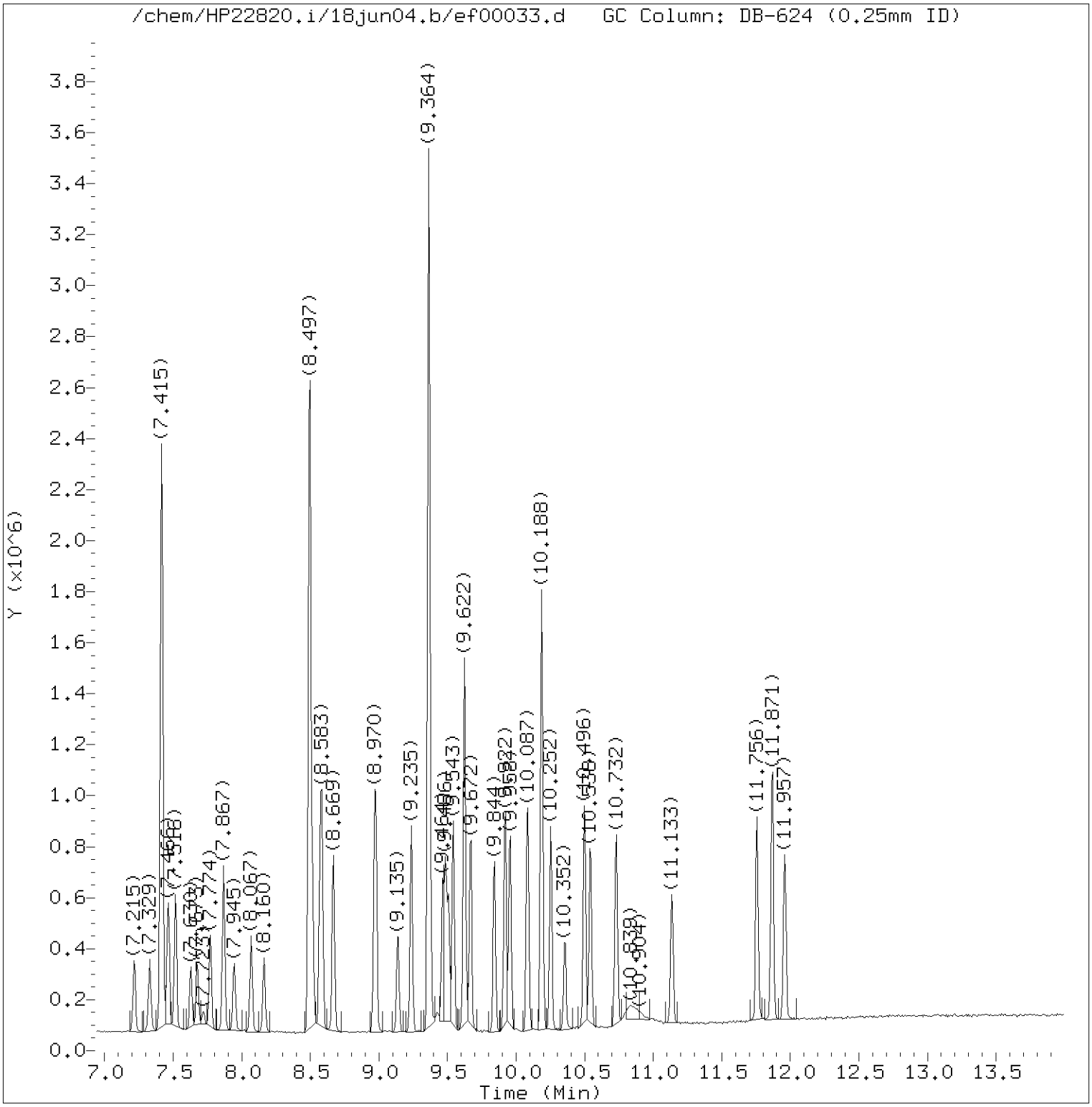
Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.599	41	41886	1.949
2) Dichlorodifluoromethane	(1)	1.635	85	160241	1.923
3) Chlorodifluoromethane	(1)	1.649	51	84937	1.924
4) Freon 114	(1)	1.764	85	164758	1.933
5) Chloromethane	(1)	1.835	50	49331	1.958
6) Vinyl Chloride	(1)	1.964	62	60428	1.954
7) 1,3-Butadiene	(1)	1.993	54	44505	1.983
8) Bromomethane	(1)	2.337	94	59491	1.870
9) Chloroethane	(1)	2.466	64	35223	2.015
10) Bromoethene	(1)	2.681	106	66527	1.969
11) Dichlorofluoromethane	(1)	2.716	67	127765	1.895
12) Trichlorofluoromethane	(1)	2.759	101	169900	1.924
13) Pentane	(1)	2.867	43	93159	1.965
14) Ethanol	(1)	3.067	45	18920M	1.855
15) Freon123a	(1)	3.189	67	128444	2.191
16) Acrolein	(1)	3.332	56	21571	1.786
17) 1,1-Dichloroethene	(1)	3.418	61	95417	1.946
18) Freon 113	(1)	3.433	103	98698	1.996
19) Acetone	(1)	3.526	43	81968	2.011
20) Methyl Iodide	(1)	3.590	142	199708	2.107
21) Carbon Disulfide	(1)	3.648	76	178831	1.948
22) Isopropanol	(1)	3.712	45	80556	2.155
24) 3-Chloropropene	(1)	3.863	76	30769	2.139
23) Acetonitrile	(1)	3.870	40	42704M	2.158
25) Methylene Chloride	(1)	3.999	84	61378	2.199
26) tert-Butyl Alcohol	(1)	4.156	59	121435	2.137
28) trans-1,2-Dichloroethene	(1)	4.285	61	87554	1.975
27) Acrylonitrile	(1)	4.292	53	48001	1.932
29) Methyl t-Butyl Ether	(1)	4.292	73	185845	1.964
30) Hexane	(1)	4.557	57	99280	2.039
31) 1,1-Dichloroethane	(1)	4.715	63	113645	1.967
32) Vinyl Acetate	(1)	4.779	86	18177	2.152
33) Di-Isopropyl Ether	(1)	4.779	45	189905	1.974
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	184268	2.007
35) cis-1,2-Dichloroethene	(1)	5.252	61	83220	1.944
37) 2-Butanone	(1)	5.281	72	34585	1.941
38) Ethyl Acetate	(1)	5.324	70	16751	1.906
39) Methyl Acrylate	(1)	5.360	55	103762	1.921

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	346670	10.000
41) Tetrahydrofuran	(1)	5.496	42	63731	2.020
42) Chloroform	(1)	5.532	83	141439	1.952
43) 1,1,1-Trichloroethane	(1)	5.675	97	142891	1.947
44) Cyclohexane	(1)	5.711	56	102471	2.030
45) Carbon Tetrachloride	(1)	5.811	117	139639	1.938
46) Benzene	(2)	5.983	78	225301	2.001
47) 1,2-Dichloroethane	(2)	6.011	62	89515	1.956
48) Isooctane	(2)	6.033	57	302934	1.944
49) Tert-Amyl Methyl Ether	(2)	6.069	73	186036	1.981
50) Heptane	(2)	6.176	43	108204	2.031
51)*1,4-Difluorobenzene	(2)	6.291	114	1309255	10.000
52) Trichloroethene	(2)	6.491	130	105529	1.887
53) Ethyl Acrylate	(2)	6.570	55	137073	1.924
36) 1,2-Dichloroethene (total)	(1)		61	170774	3.919
54) 1,2-Dichloropropane	(2)	6.678	63	78564	1.993
57) Methyl Methacrylate	(2)	6.749	69	78248	1.985
55) Dibromomethane	(2)	6.771	174	101925	1.883
56) 1,4-Dioxane	(2)	6.778	88	55328	1.933
58) Bromodichloromethane	(2)	6.885	83	149306	1.935
59) cis-1,3-Dichloropropene	(2)	7.215	75	132897	1.954
60) 4-Methyl-2-Pentanone	(2)	7.329	43	145589	1.965
61) Toluene	(3)	7.466	91	299712	2.073
62) Octane	(3)	7.516	43	158772	2.111
63) trans-1,3-Dichloropropene	(3)	7.630	75	111439	1.955
65) Ethyl Methacrylate	(3)	7.673	69	124549	1.925
66) 1,1,2-Trichloroethane	(3)	7.774	97	103449	2.025
67) Tetrachloroethene	(3)	7.867	166	164399	2.032
68) 2-Hexanone	(3)	7.945	43	146492	2.025
69) Dibromochloromethane	(3)	8.067	127	125509	1.947
70) 1,2-Dibromoethane	(3)	8.160	107	159581	2.007
71)*Chlorobenzene-d5	(3)	8.497	117	1253482	10.000
72) Chlorobenzene	(3)	8.519	112	251093	2.029
73) 1,1,1,2-Tetrachloroethane	(3)	8.576	131	117193	1.945
74) Ethylbenzene	(3)	8.583	91	402740	2.082
75) m/p-Xylene	(3)	8.669	91	333875	2.126
76) o-Xylene	(3)	8.970	91	324372	2.090
78) Styrene	(3)	8.977	104	233244	1.983

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

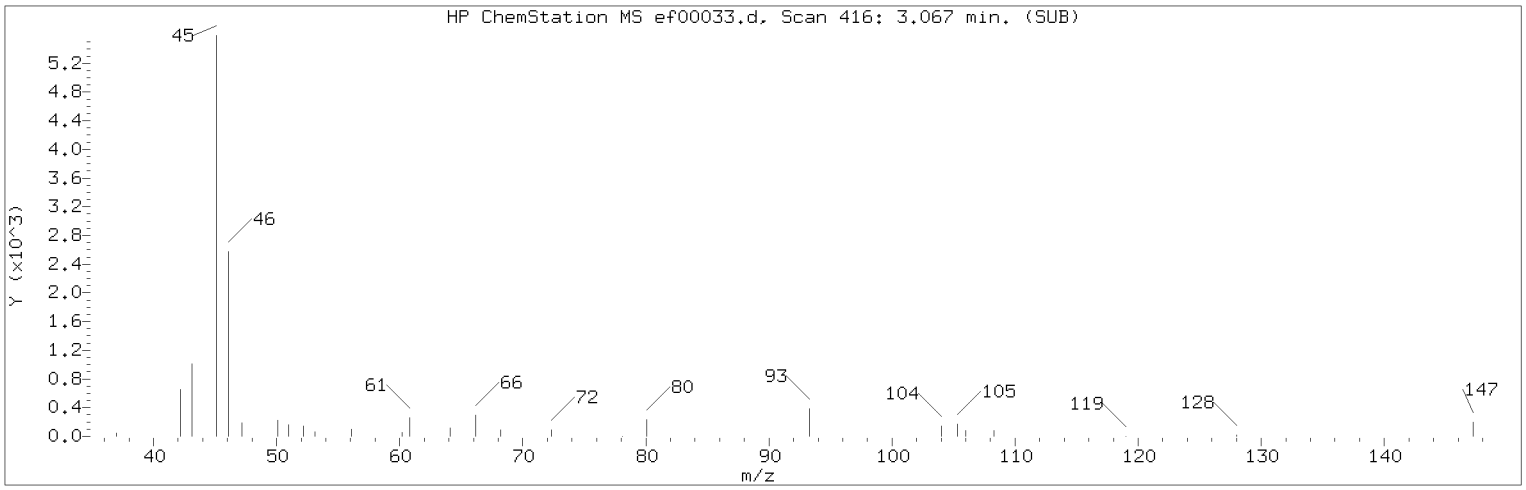
Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	156322	1.885
80) Cumene	(3)	9.235	105	446282	2.016
82) 1,1,2,2-Tetrachloroethane	(3)	9.464	83	222638	2.045
81) Bromobenzene	(3)	9.486	156	159294	2.026
83) 1,2,3-Trichloropropane	(3)	9.507	110	73054	2.101
84) n-Propylbenzene	(3)	9.543	120	131599	2.069
86) 4-Ethyltoluene	(3)	9.622	105	440581M	2.121
85) 2-Chlorotoluene	(3)	9.622	126	115157	1.967
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	372385M	2.090
88) Alpha Methyl Styrene	(3)	9.844	118	182404	1.952
89) tert-Butylbenzene	(3)	9.922	119	403168M	2.131
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	367628	2.090
91) sec-Butylbenzene	(3)	10.087	105	539292	2.026
92) 1,3-Dichlorobenzene	(3)	10.188	146	270335	2.068
94) p-Isopropyltoluene	(3)	10.188	119	456839	2.006
93) 1,4-Dichlorobenzene	(3)	10.252	146	277868	2.086
95) Benzyl Chloride	(3)	10.352	91	223005	1.851
97) n-Butylbenzene	(3)	10.496	91	413882	2.022
96) 1,2-Dichlorobenzene	(3)	10.546	146	257868	2.073
98) Hexachloroethane	(3)	10.732	117	90852	1.879
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	128111	1.992
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	226607	2.125
101) Hexachlorobutadiene	(3)	11.871	225	184736	2.026
102) Naphthalene	(3)	11.957	128	487871	2.069
64) 1,3-Dichloropropene (total)	(3)		75	244336	3.916
77) Xylene (total)	(3)		91	658247	4.216

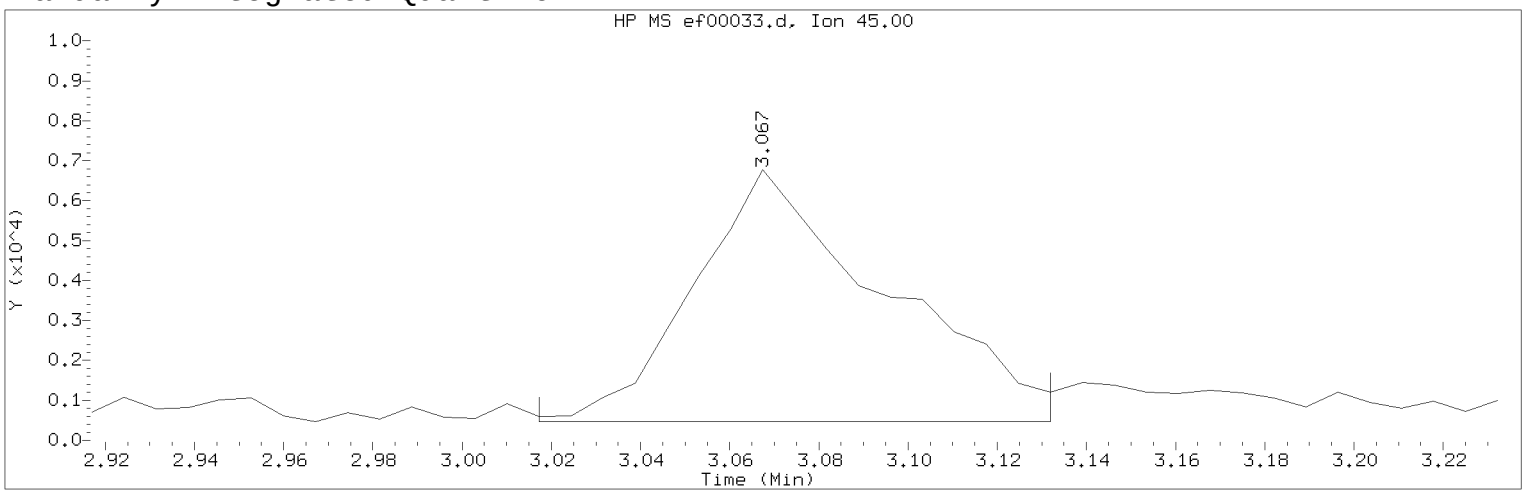
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

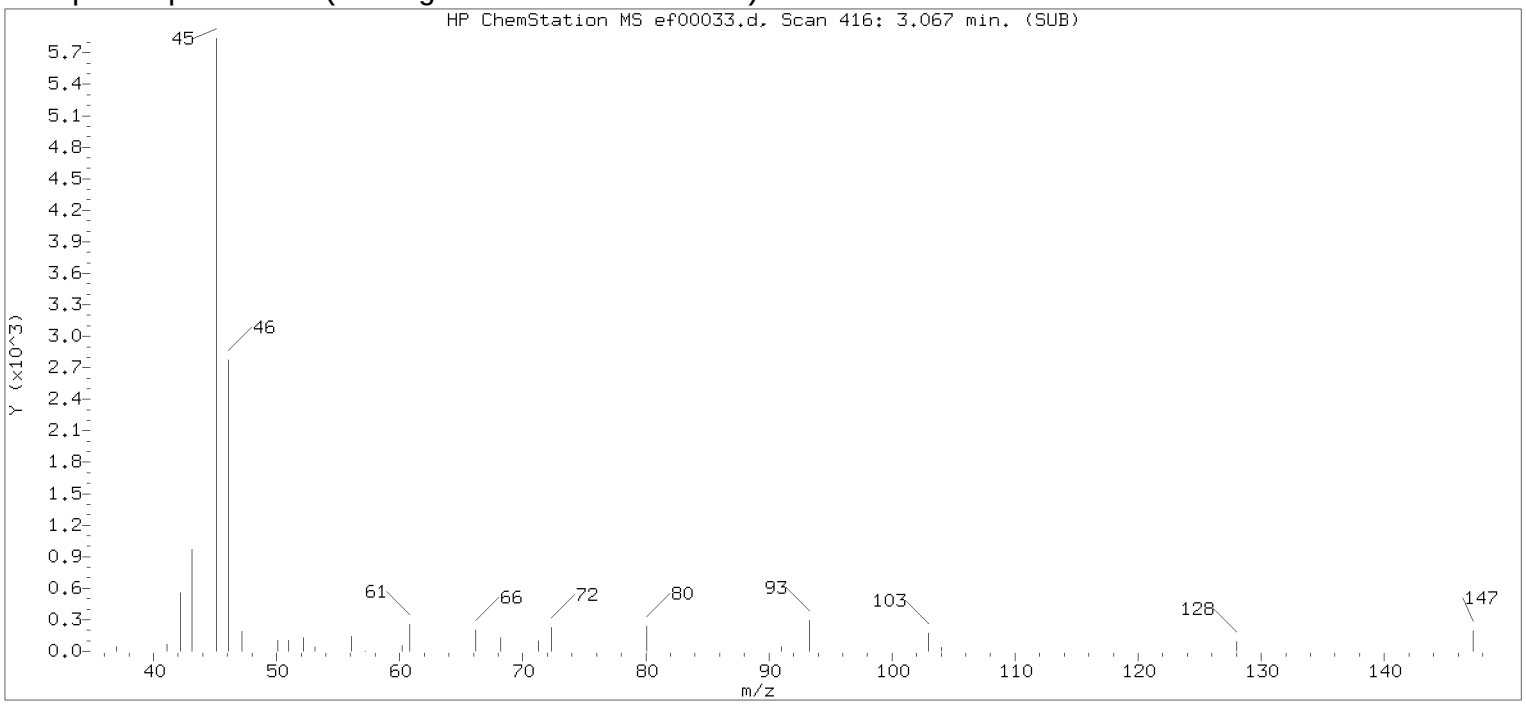
Compound Number : 14
Compound Name : Ethanol
Scan Number : 416
Retention Time (minutes): 3.067
Quant Ion : 45.00
Area (flag) : 18920M
Concentration (ppb(v)) : 1.8551
Integration start scan : 408 Integration stop scan: 424
Y at integration start : 469 Y at integration end: 469

Reason for manual integration: improper integration

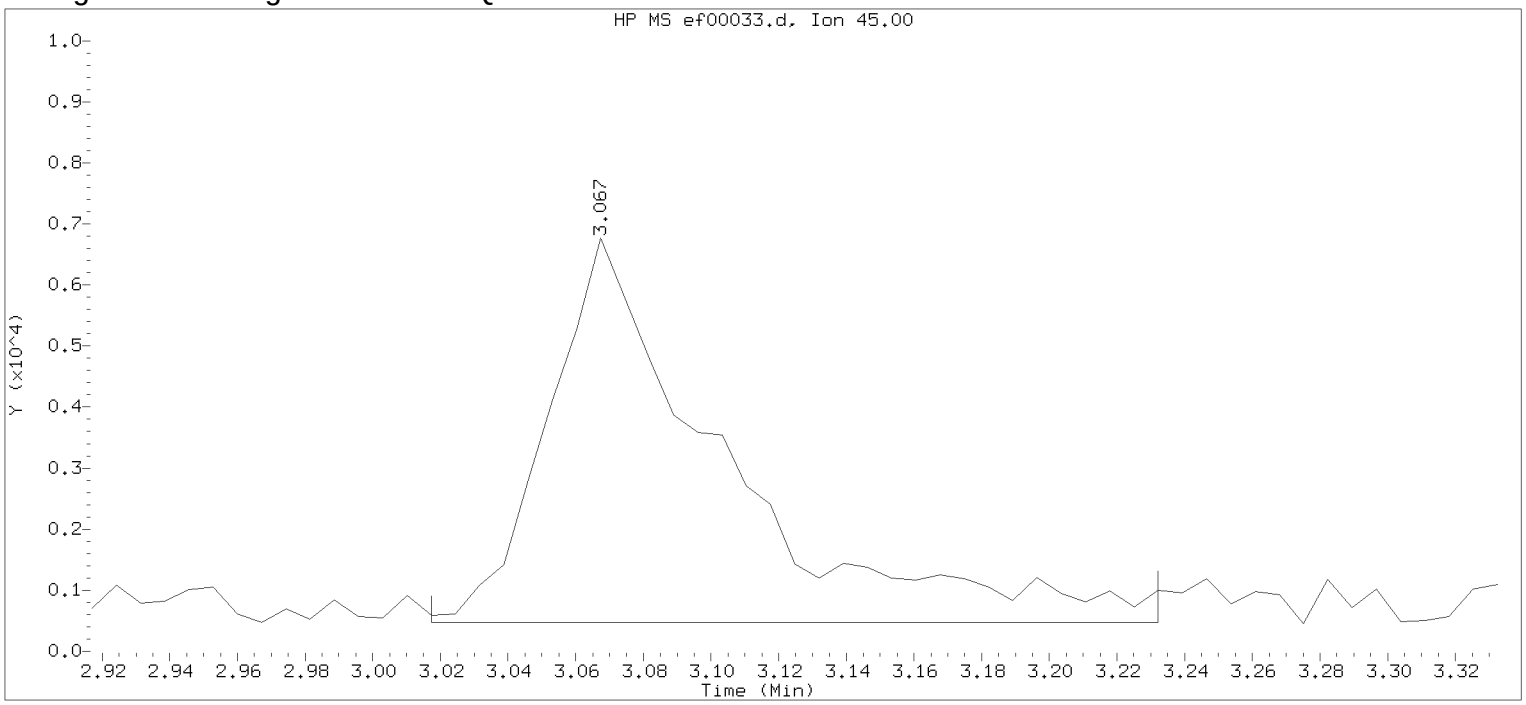
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

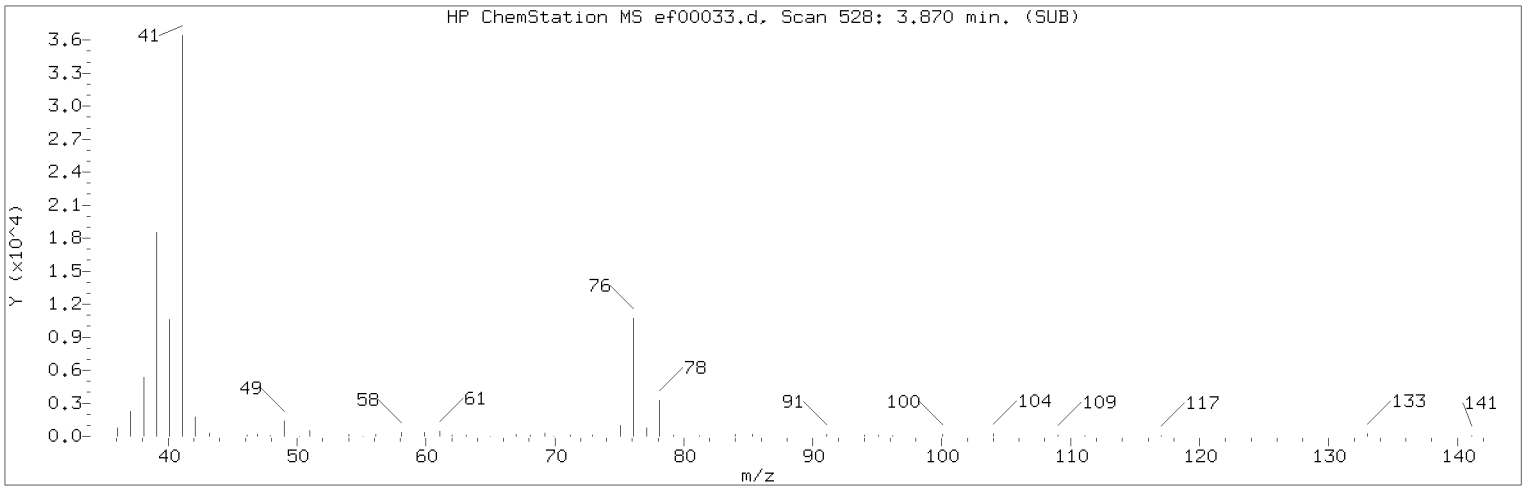
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 11:50 Unknown

Sample Name: VSTD002 Lab Sample ID: VSTD002

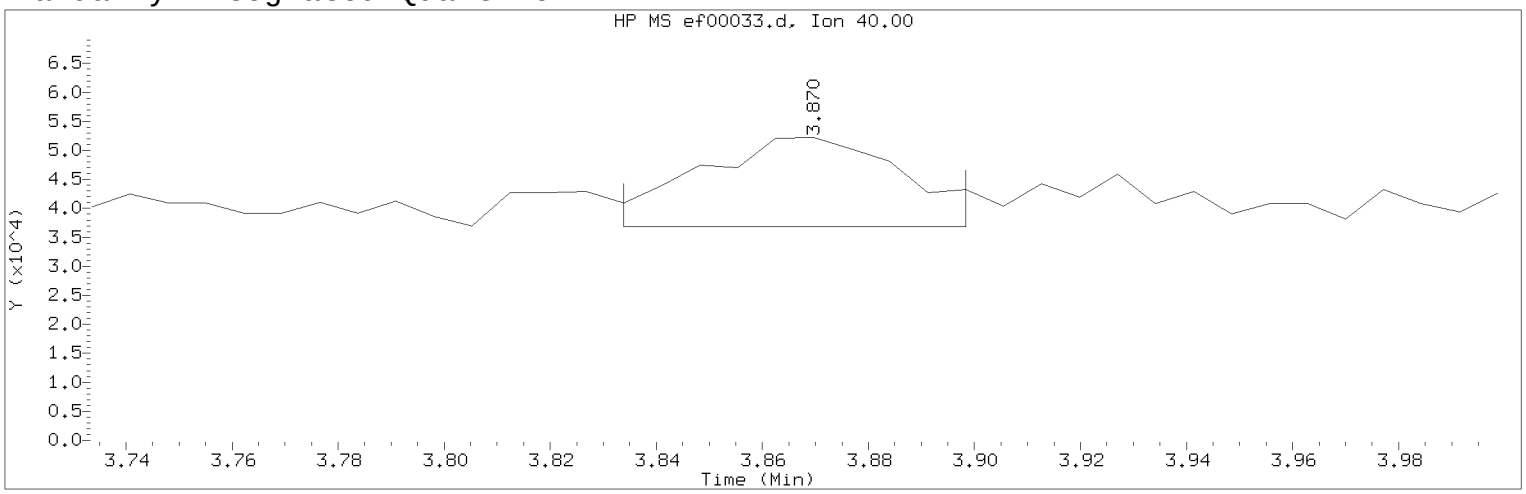
Compound Number : 14
Compound Name : Ethanol
Scan Number : 416
Retention Time (minutes): 3.067
Quant Ion : 45.00
Area : 22480
Concentration (ppb(v)) : 2.0634
Integration start scan : 408 Integration stop scan: 438
Y at integration start : 469 Y at integration end: 469

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

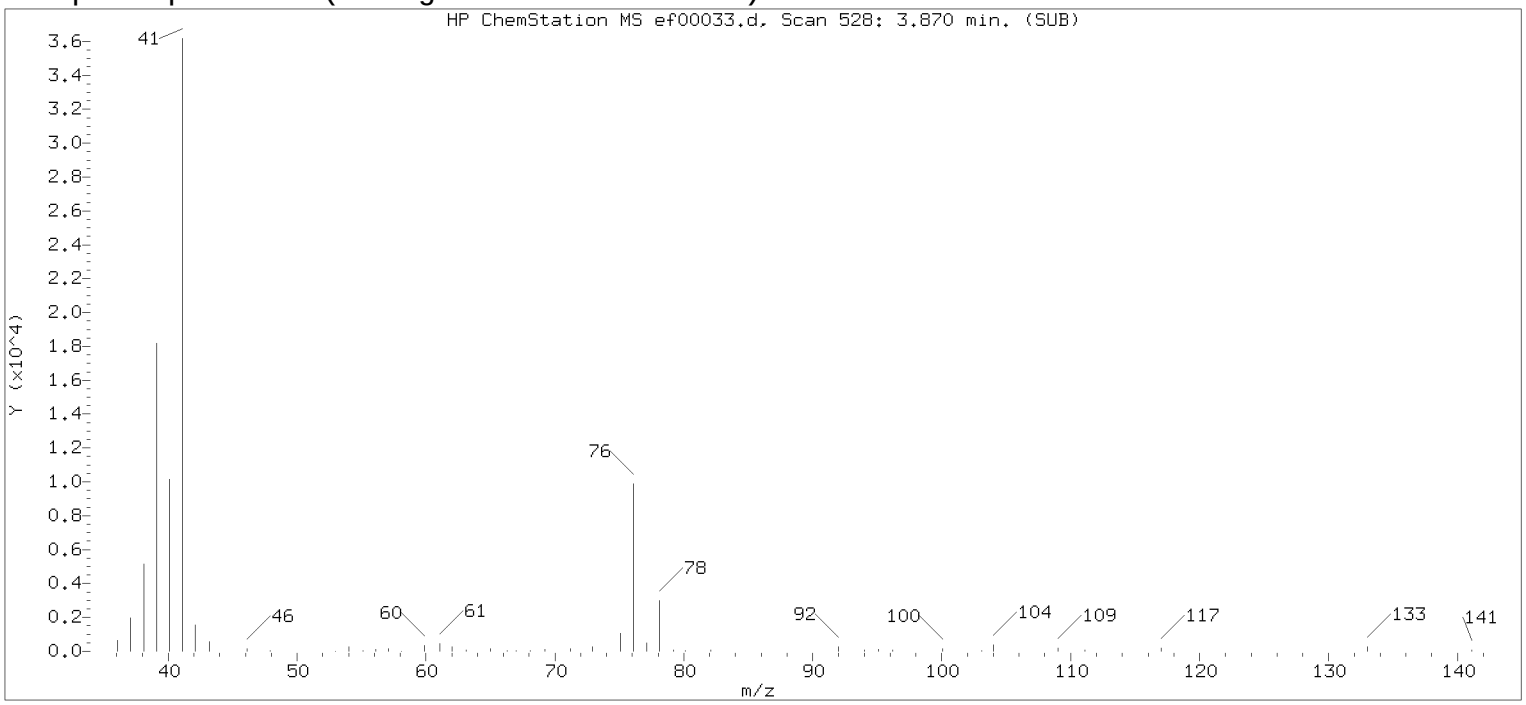
Compound Number : 23
Compound Name : Acetonitrile
Scan Number : 528
Retention Time (minutes): 3.870
Quant Ion : 40.00
Area (flag) : 42704M
Concentration (ppb(v)) : 2.1584
Integration start scan : 522 Integration stop scan: 531
Y at integration start : 36871 Y at integration end: 36871

Reason for manual integration: improper integration

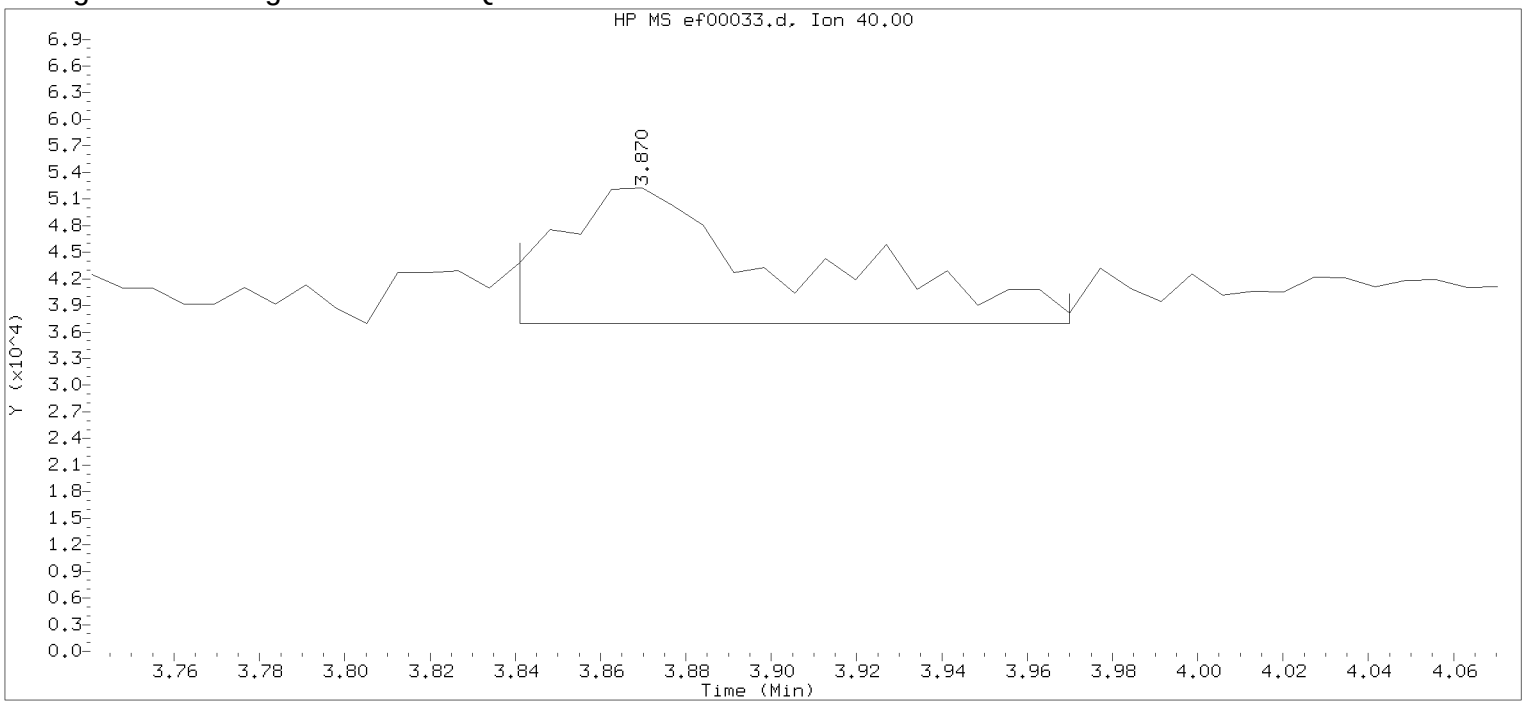
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

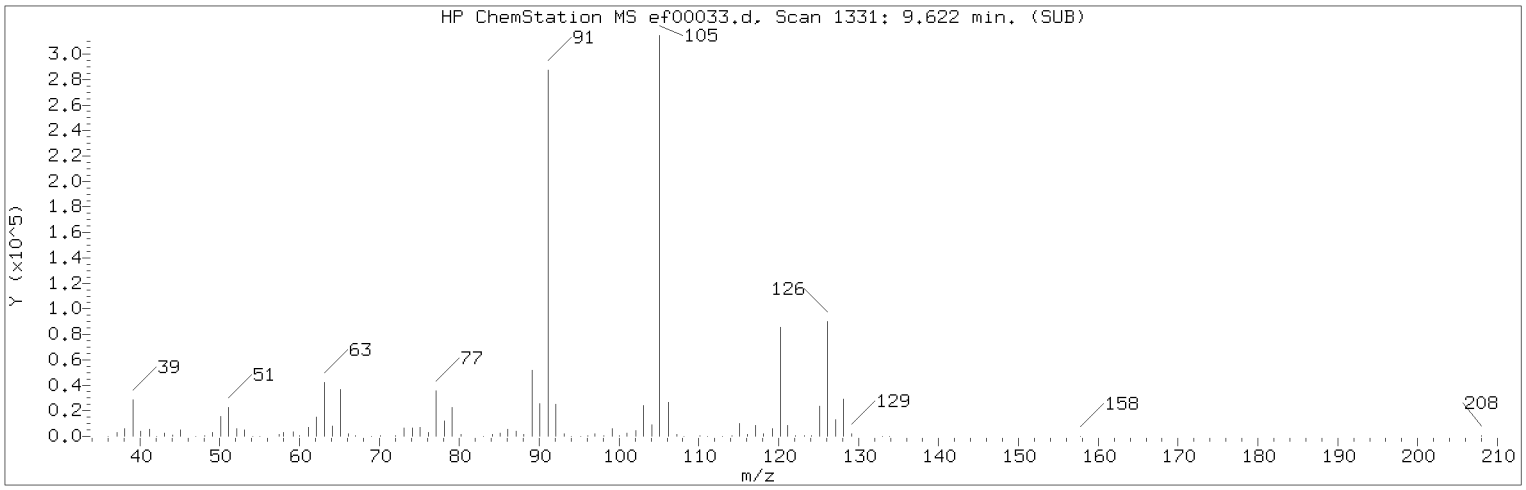
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 11:50 Unknown

Sample Name: VSTD002 Lab Sample ID: VSTD002

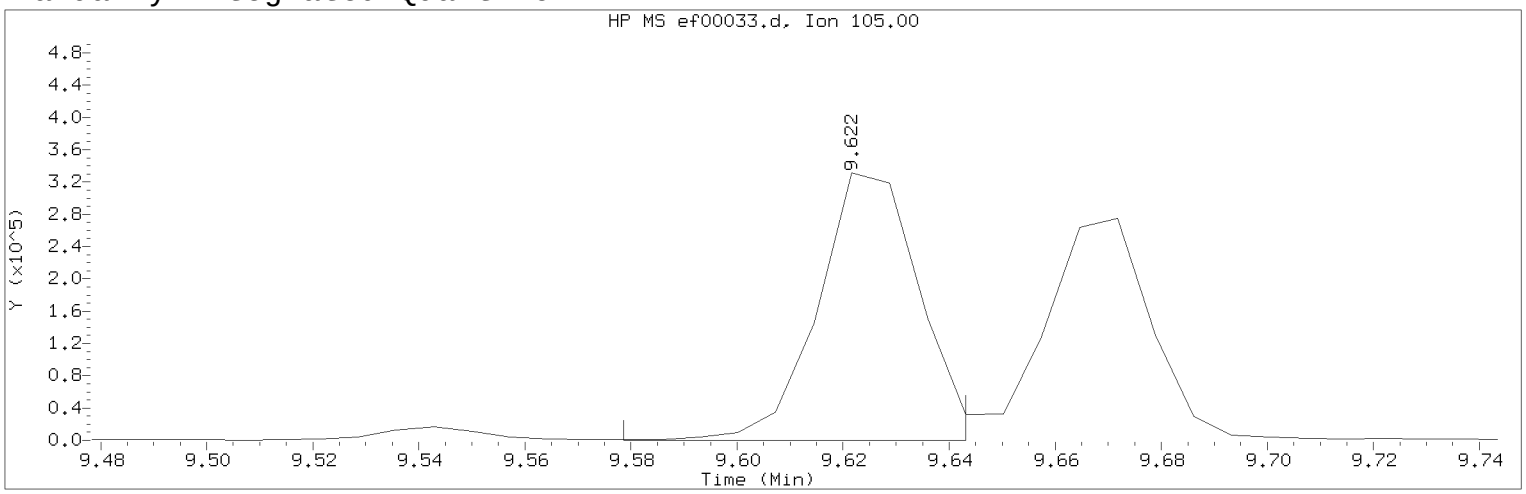
Compound Number : 23
Compound Name : Acetonitrile
Scan Number : 528
Retention Time (minutes): 3.870
Quant Ion : 40.00
Area : 58117
Concentration (ppb(v)) : 2.2376
Integration start scan : 523 Integration stop scan: 541
Y at integration start : 36992 Y at integration end: 36992

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

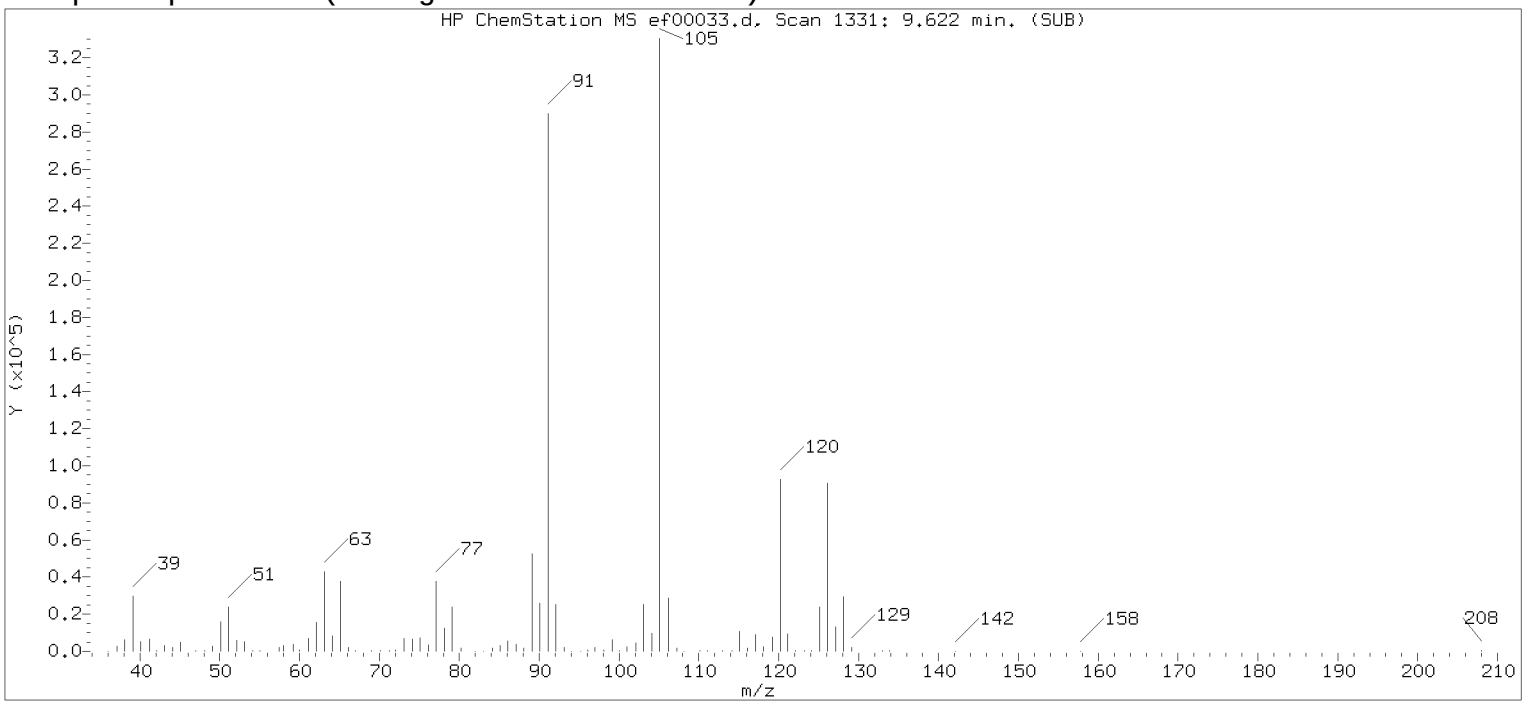
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1331
Retention Time (minutes): 9.622
Quant Ion : 105.00
Area (flag) : 440581M
Concentration (ppb(v)) : 2.1215
Integration start scan : 1324 Integration stop scan: 1333
Y at integration start : 246 Y at integration end: 246

Reason for manual integration: improper integration

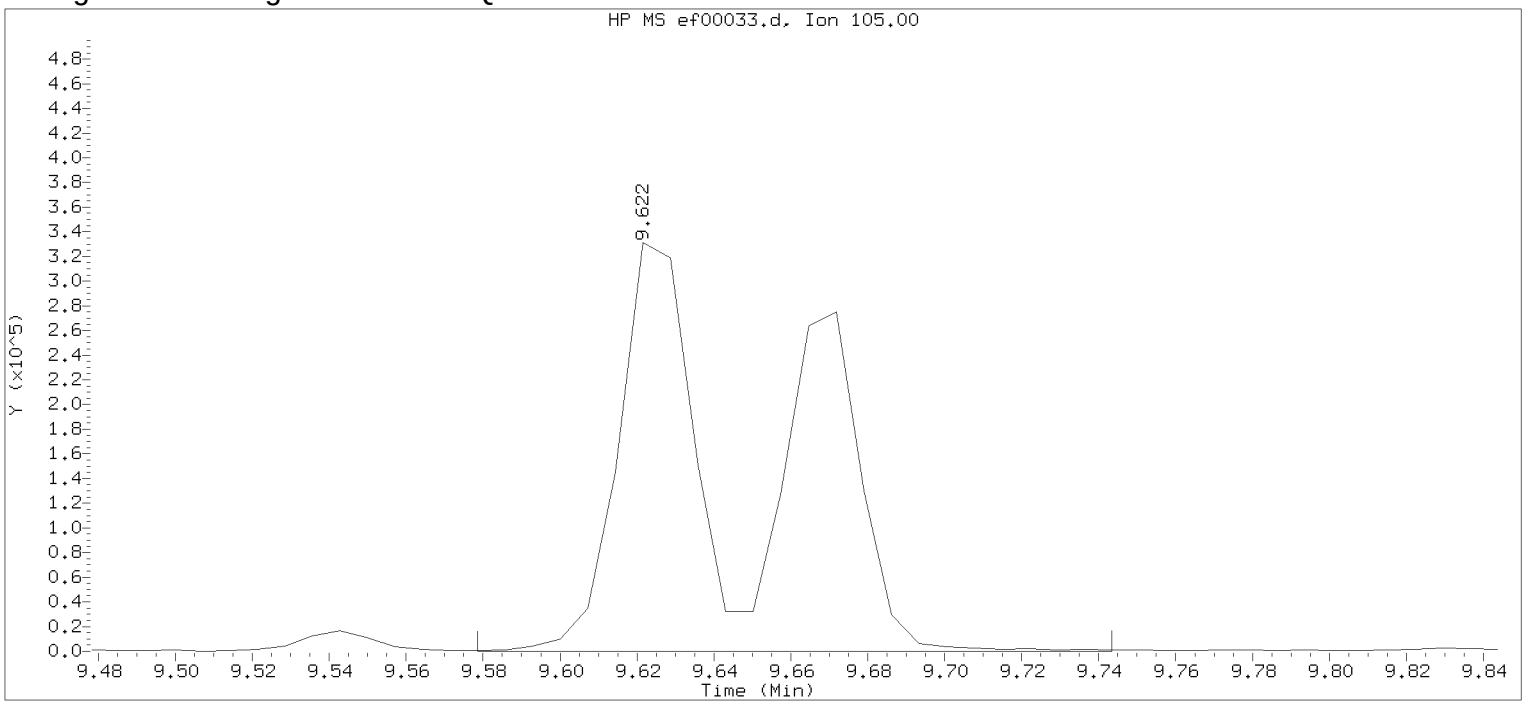
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

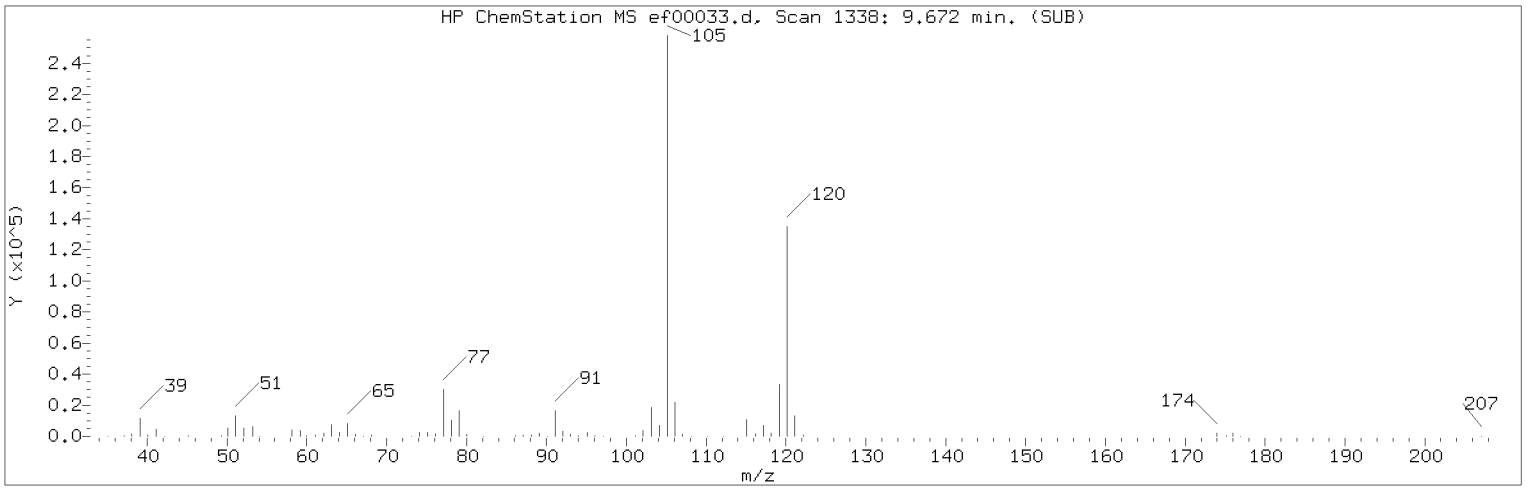
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 11:50 Unknown

Sample Name: VSTD002 Lab Sample ID: VSTD002

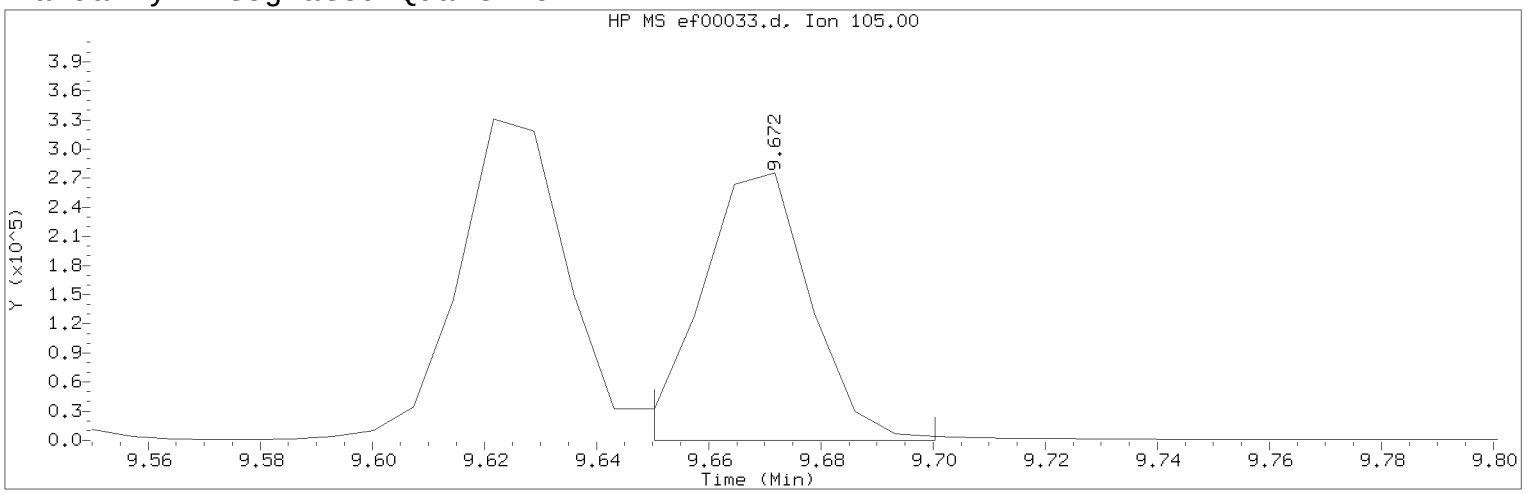
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1331
Retention Time (minutes): 9.622
Quant Ion : 105.00
Area : 816436
Concentration (ppb(v)) : 3.9583
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 246 Y at integration end: 246

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

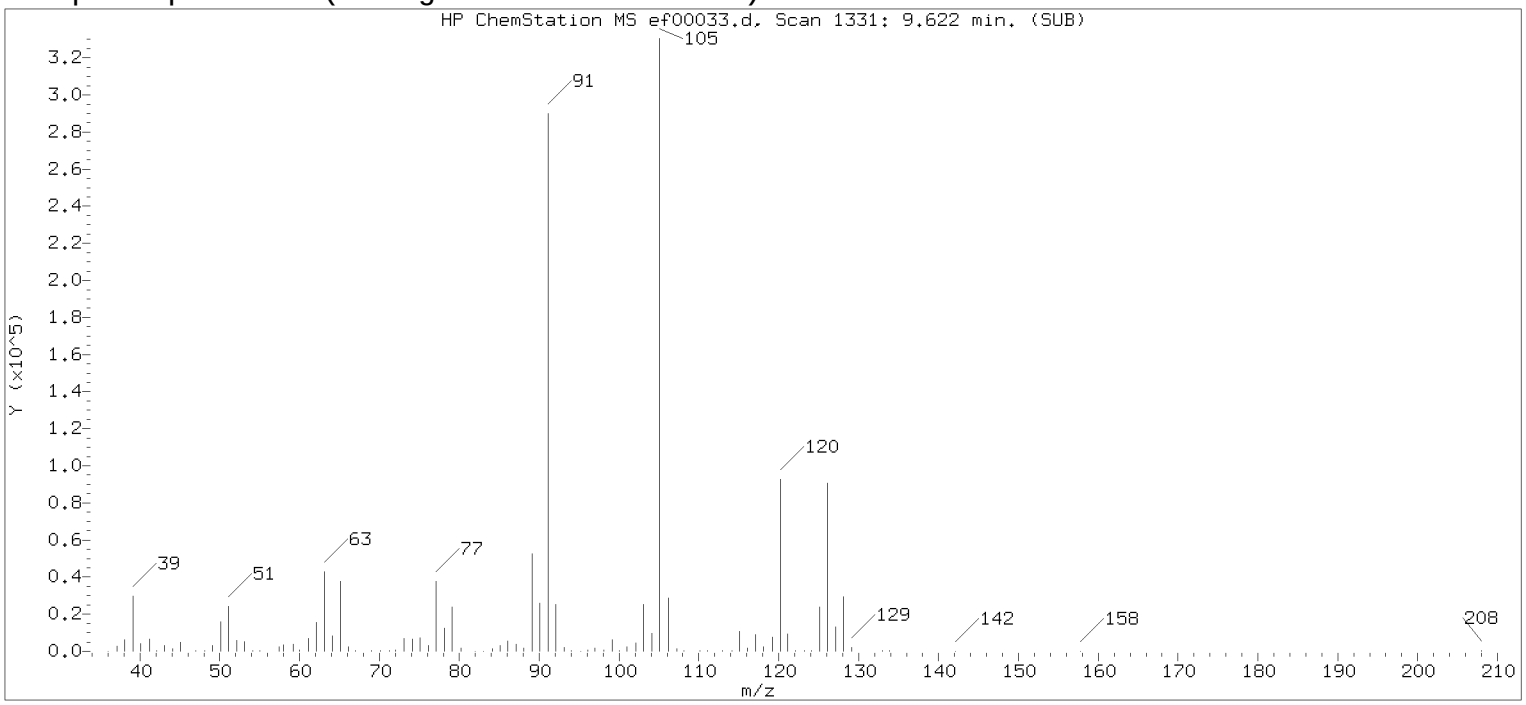
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 372385M
Concentration (ppb(v)) : 2.0902
Integration start scan : 1334 Integration stop scan: 1341
Y at integration start : 256 Y at integration end: 256

Reason for manual integration: improper integration

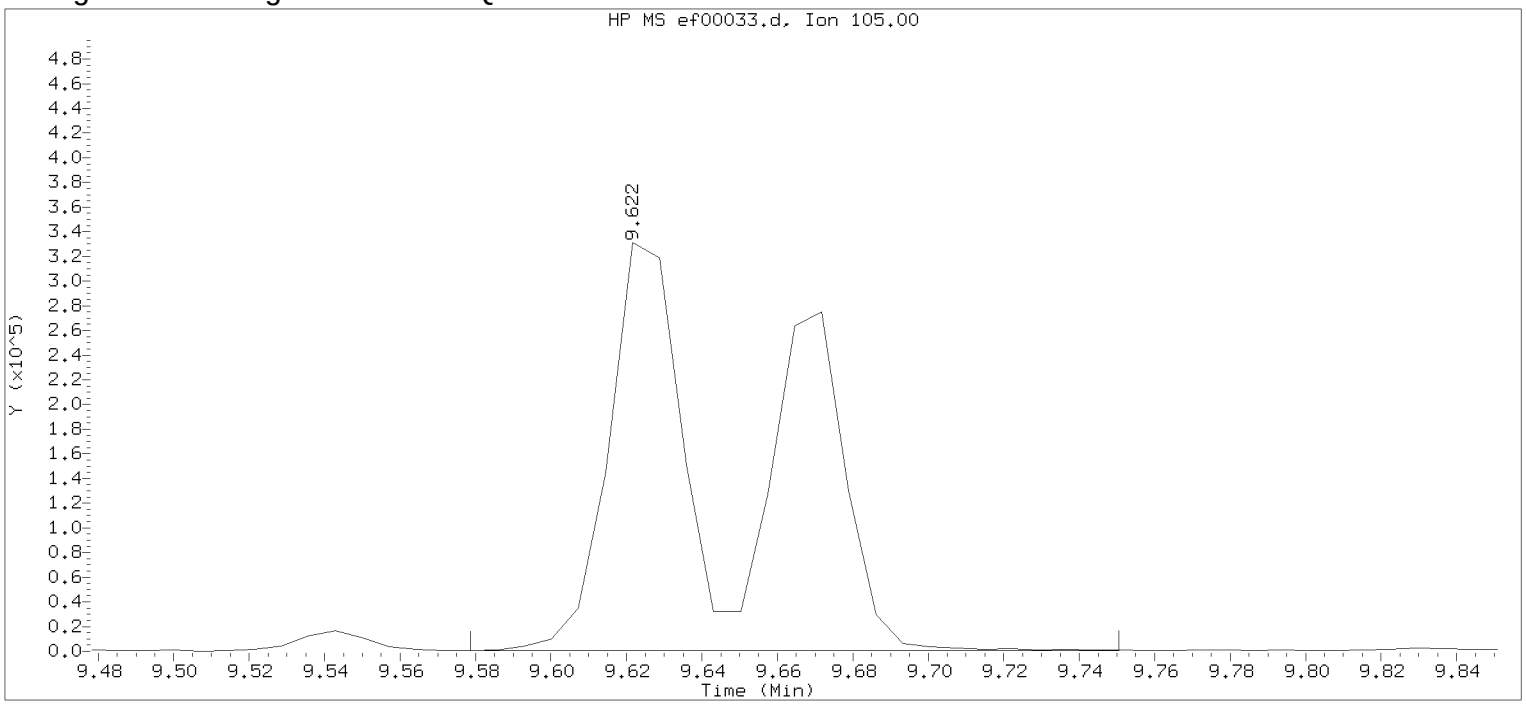
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

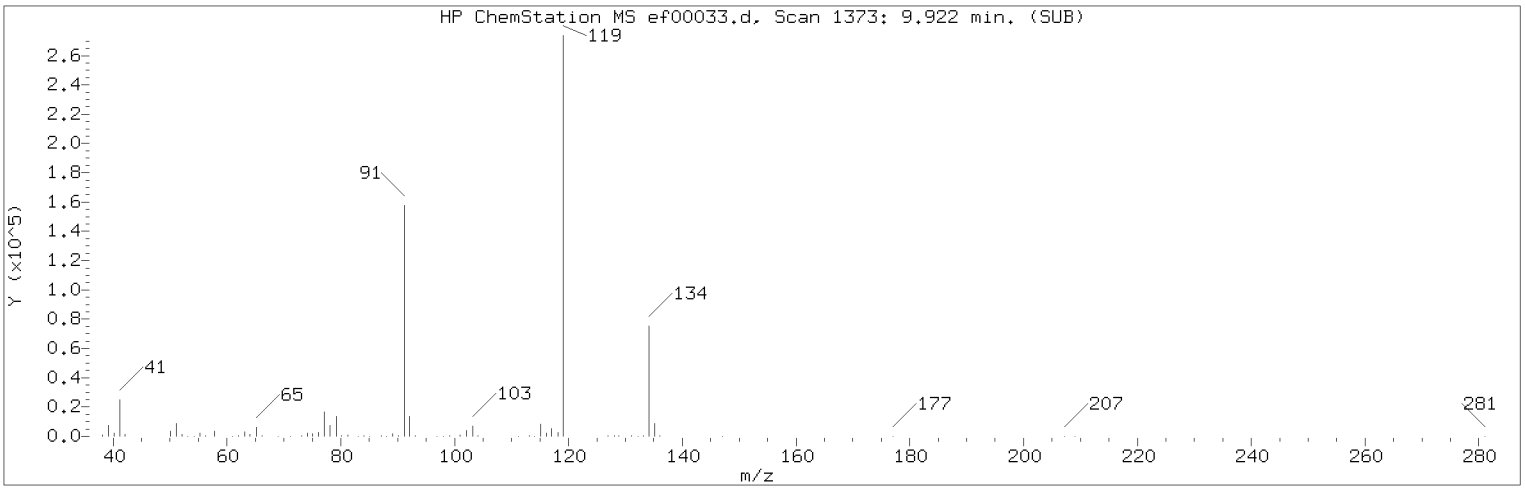
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 11:50 Unknown

Sample Name: VSTD002 Lab Sample ID: VSTD002

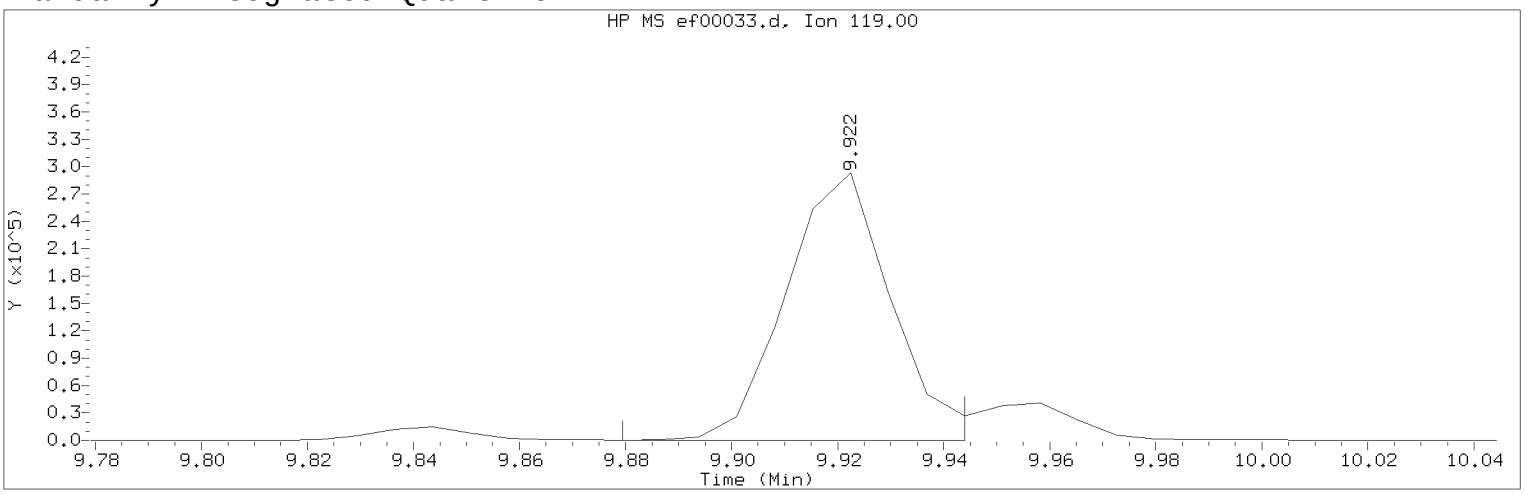
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1331
Retention Time (minutes): 9.622
Quant Ion : 105.00
Area : 814294
Concentration (ppb(v)) : 4.7552
Integration start scan : 1324 Integration stop scan: 1348
Y at integration start : 482 Y at integration end: 482

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

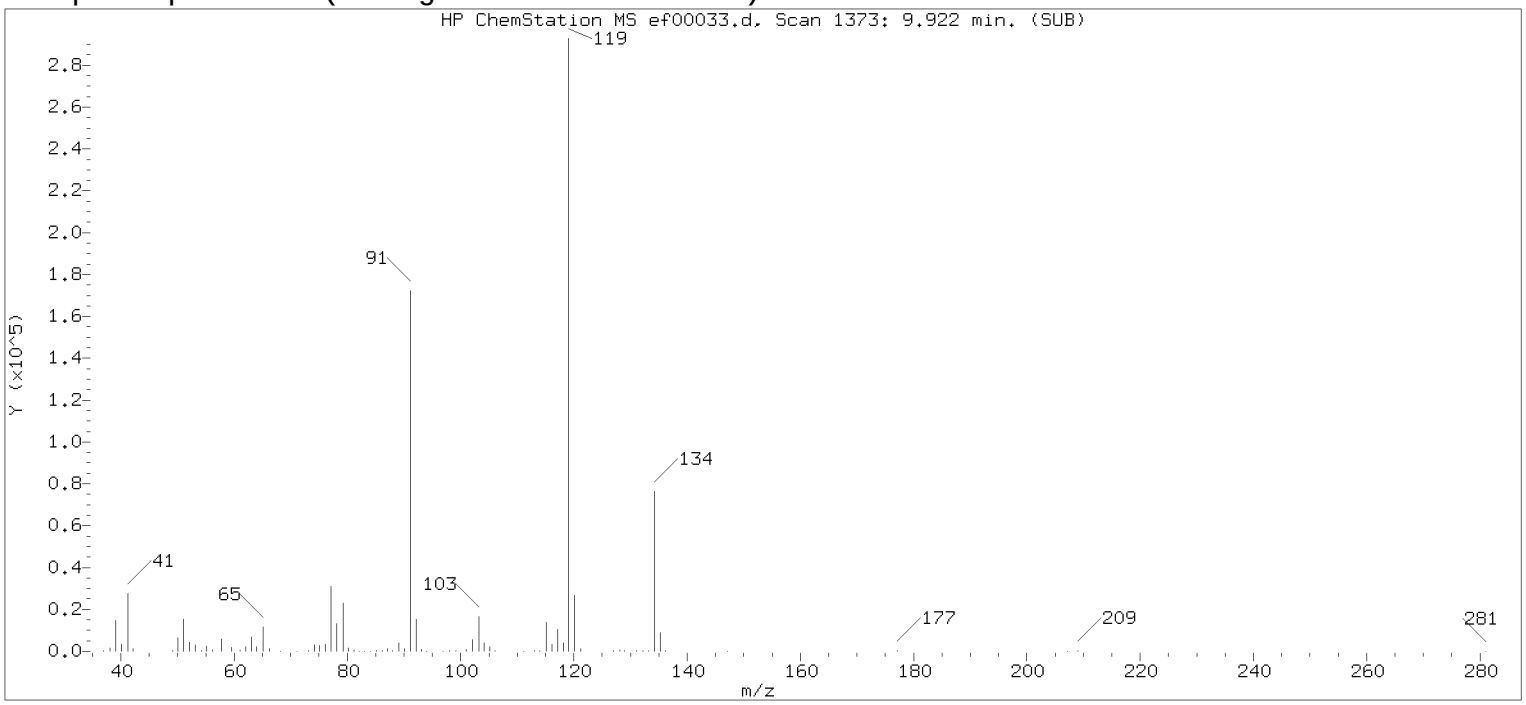
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 403168M
Concentration (ppb(v)) : 2.1314
Integration start scan : 1366 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

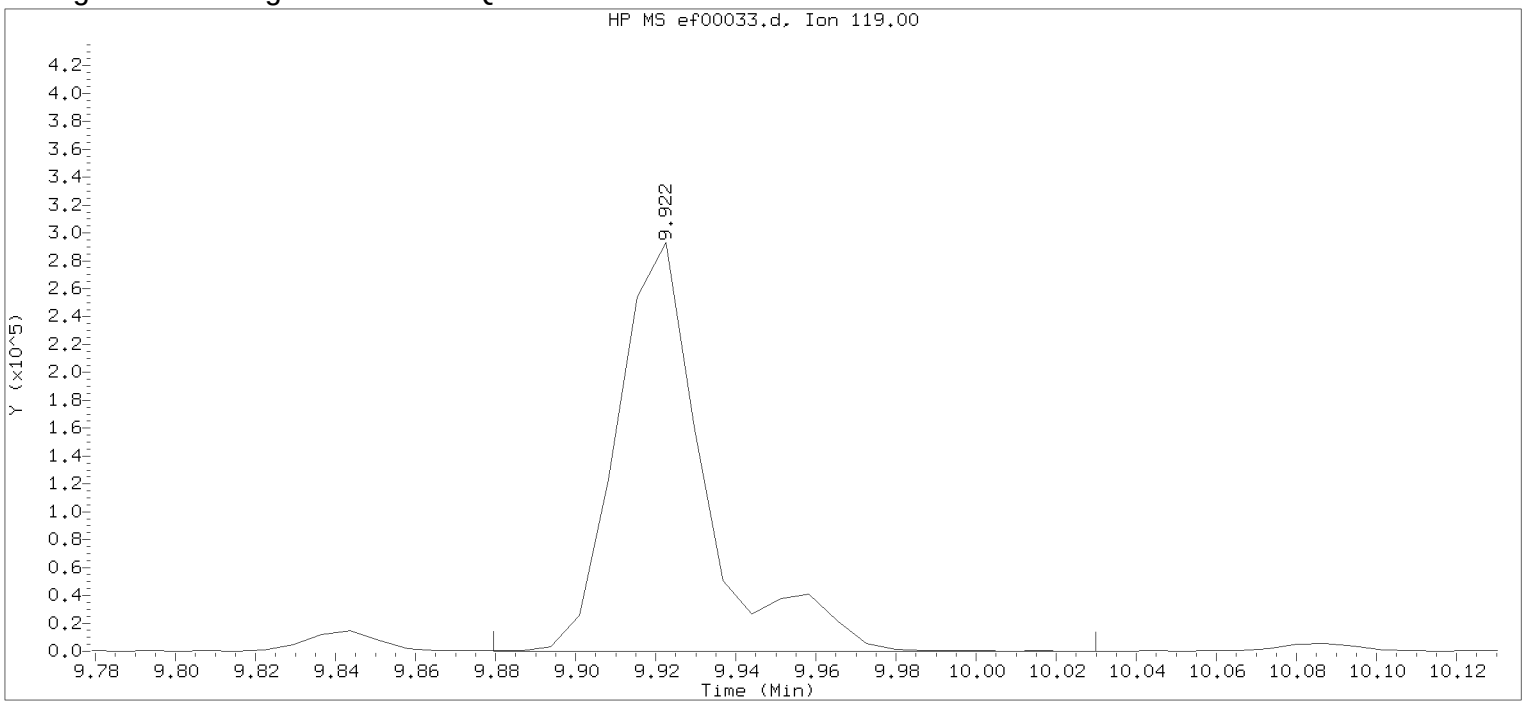
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



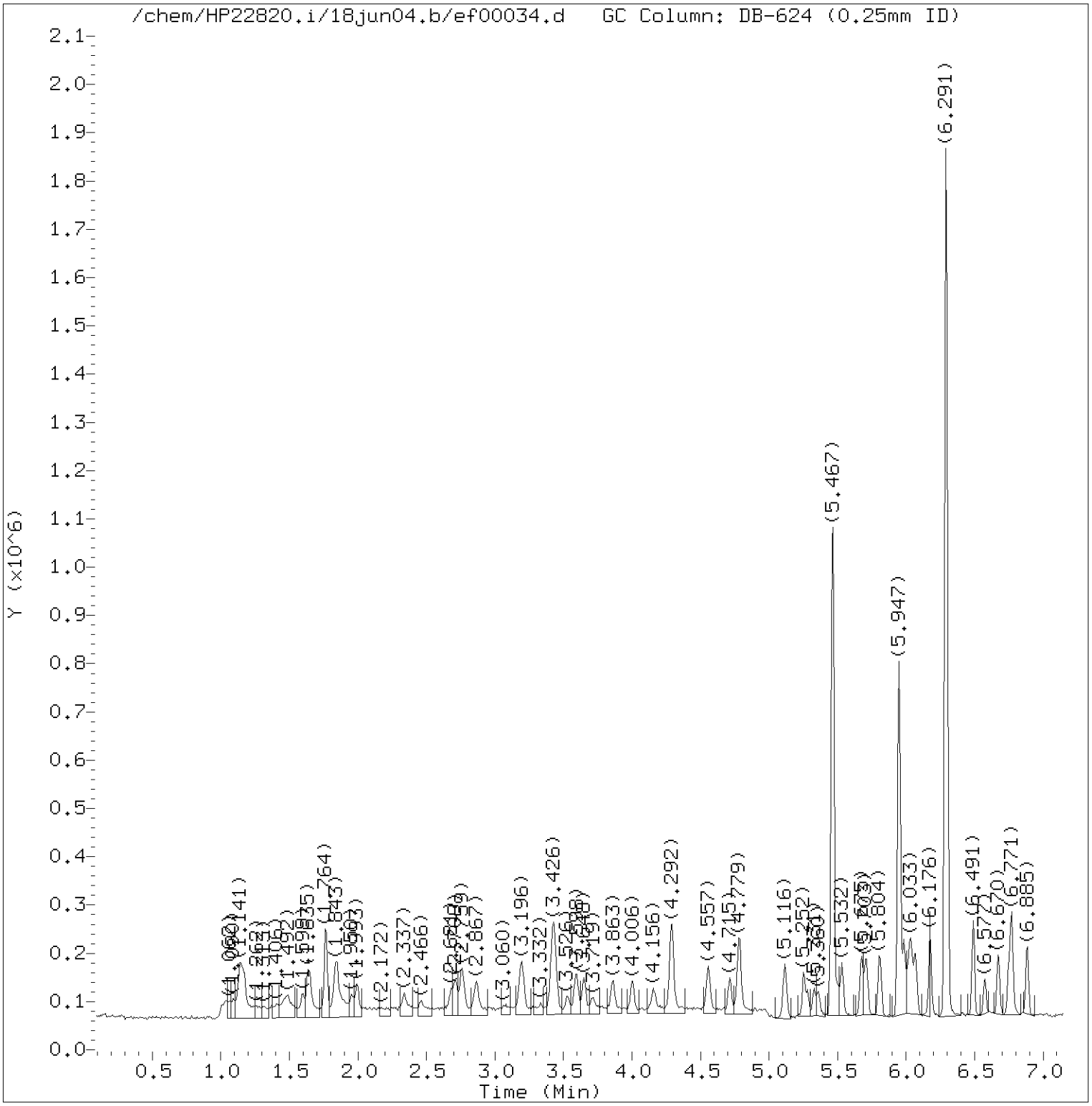
Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 11:50 Unknown

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 450449
Concentration (ppb(v)) : 2.8575
Integration start scan : 1366 Integration stop scan: 1387
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

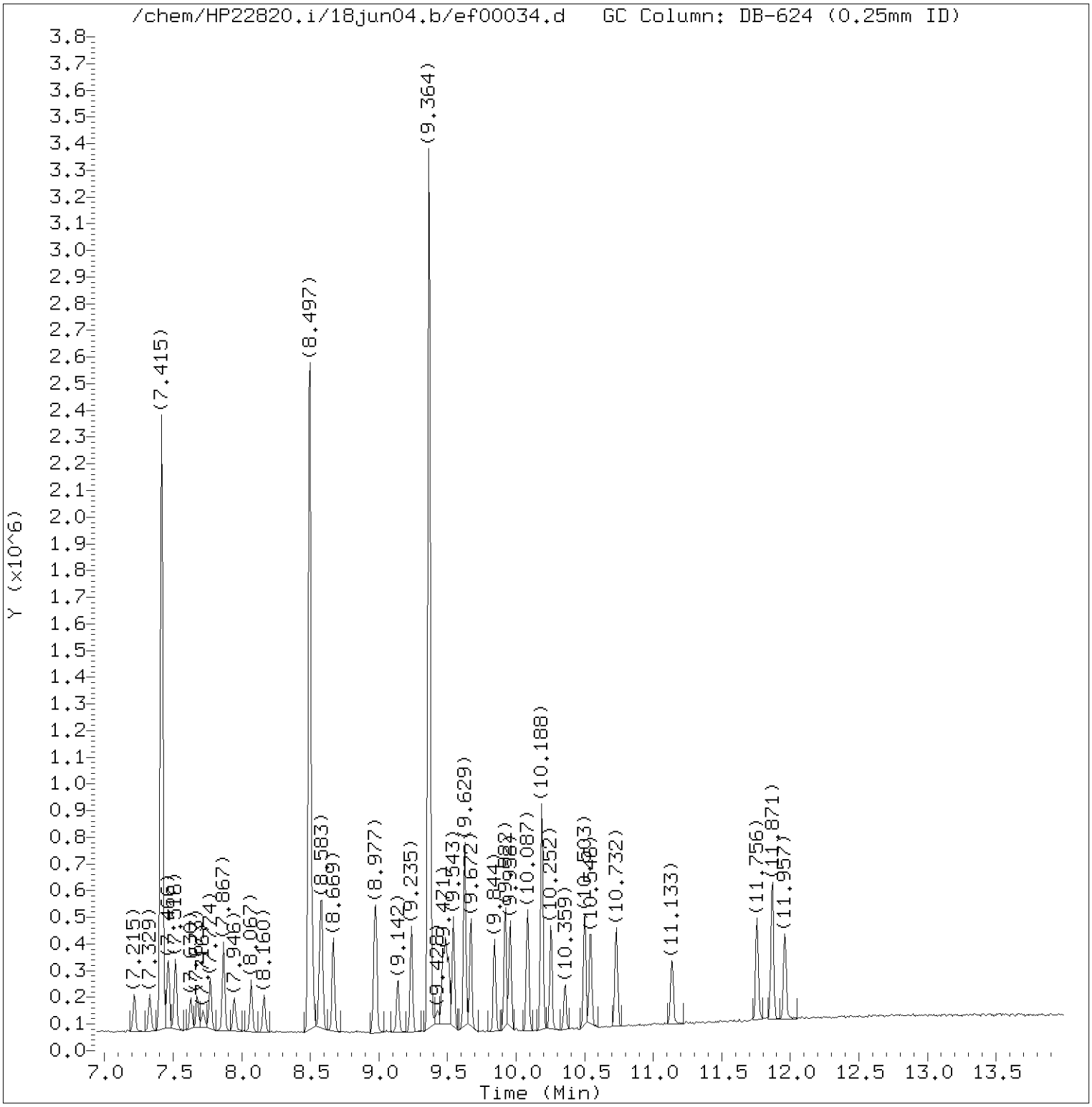
Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.599	41	22136	1.059
2) Dichlorodifluoromethane	(1)	1.635	85	76015	0.938
3) Chlorodifluoromethane	(1)	1.649	51	41574	0.968
4) Freon 114	(1)	1.764	85	80871	0.975
5) Chloromethane	(1)	1.835	50	25888	1.056
6) Vinyl Chloride	(1)	1.964	62	27763	0.923
7) 1,3-Butadiene	(1)	2.000	54	20766	0.951
8) Bromomethane	(1)	2.344	94	25558	0.826
9) Chloroethane	(1)	2.466	64	16026	0.942
10) Bromoethene	(1)	2.674	106	31230	0.950
11) Dichlorofluoromethane	(1)	2.716	67	63068	0.961
12) Trichlorofluoromethane	(1)	2.759	101	84964	0.989
13) Pentane	(1)	2.867	43	47387	1.027
14) Ethanol	(1)	3.067	45	9047M	0.912
15) Freon123a	(1)	3.189	67	64753	1.136
16) Acrolein	(1)	3.340	56	12026	1.024
17) 1,1-Dichloroethene	(1)	3.418	61	44391	0.931
18) Freon 113	(1)	3.433	103	49595	1.031
19) Acetone	(1)	3.533	43	37991	0.958
20) Methyl Iodide	(1)	3.590	142	96006	1.041
21) Carbon Disulfide	(1)	3.648	76	84991	0.952
22) Isopropanol	(1)	3.712	45	39825	1.095
23) Acetonitrile	(1)	3.863	40	28327M	1.472
24) 3-Chloropropene	(1)	3.863	76	15691	1.121
25) Methylene Chloride	(1)	3.999	84	29449	1.084
26) tert-Butyl Alcohol	(1)	4.156	59	58699	1.062
28) trans-1,2-Dichloroethene	(1)	4.285	61	39296	0.911
27) Acrylonitrile	(1)	4.292	53	21662	0.896
29) Methyl t-Butyl Ether	(1)	4.292	73	95991	1.043
30) Hexane	(1)	4.557	57	48474	1.023
31) 1,1-Dichloroethane	(1)	4.715	63	54933	0.977
32) Vinyl Acetate	(1)	4.779	86	9005	1.096
33) Di-Isopropyl Ether	(1)	4.779	45	93903	1.003
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	87348	0.978
35) cis-1,2-Dichloroethene	(1)	5.252	61	39044	0.938
37) 2-Butanone	(1)	5.281	72	17953	1.036
38) Ethyl Acetate	(1)	5.324	70	10290	1.203
39) Methyl Acrylate	(1)	5.360	55	54791	1.043

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	337271	10.000
41) Tetrahydrofuran	(1)	5.503	42	30142	0.982
42) Chloroform	(1)	5.532	83	69171	0.981
43) 1,1,1-Trichloroethane	(1)	5.675	97	72488	1.015
44) Cyclohexane	(1)	5.711	56	50276	1.024
45) Carbon Tetrachloride	(1)	5.804	117	69262	0.988
46) Benzene	(2)	5.983	78	113560	1.046
47) 1,2-Dichloroethane	(2)	6.011	62	45374	1.028
48) Isooctane	(2)	6.033	57	148400	0.988
49) Tert-Amyl Methyl Ether	(2)	6.069	73	91056	1.006
50) Heptane	(2)	6.176	43	54122	1.054
51)*1,4-Difluorobenzene	(2)	6.291	114	1262174	10.000
52) Trichloroethene	(2)	6.491	130	56255	1.043
53) Ethyl Acrylate	(2)	6.577	55	69811	1.016
36) 1,2-Dichloroethene (total)	(1)		61	78340	1.849
54) 1,2-Dichloropropane	(2)	6.678	63	41703	1.098
57) Methyl Methacrylate	(2)	6.749	69	39225	1.032
55) Dibromomethane	(2)	6.771	174	53423	1.024
56) 1,4-Dioxane	(2)	6.778	88	29040	1.052
58) Bromodichloromethane	(2)	6.885	83	77508	1.042
59) cis-1,3-Dichloropropene	(2)	7.215	75	65837	1.004
60) 4-Methyl-2-Pentanone	(2)	7.329	43	75941	1.063
61) Toluene	(3)	7.466	91	149791	1.065
62) Octane	(3)	7.516	43	81311	1.111
63) trans-1,3-Dichloropropene	(3)	7.630	75	55353	0.998
65) Ethyl Methacrylate	(3)	7.673	69	61542	0.978
66) 1,1,2-Trichloroethane	(3)	7.774	97	56357	1.134
67) Tetrachloroethene	(3)	7.867	166	82995	1.054
68) 2-Hexanone	(3)	7.946	43	73923	1.050
69) Dibromochloromethane	(3)	8.067	127	64161	1.024
70) 1,2-Dibromoethane	(3)	8.160	107	80176	1.037
71)*Chlorobenzene-d5	(3)	8.497	117	1219205	10.000
72) Chlorobenzene	(3)	8.511	112	131204	1.090
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	57725	0.985
74) Ethylbenzene	(3)	8.583	91	206120	1.096
75) m/p-Xylene	(3)	8.669	91	166572	1.091
76) o-Xylene	(3)	8.970	91	167068	1.107
78) Styrene	(3)	8.977	104	118037	1.032

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

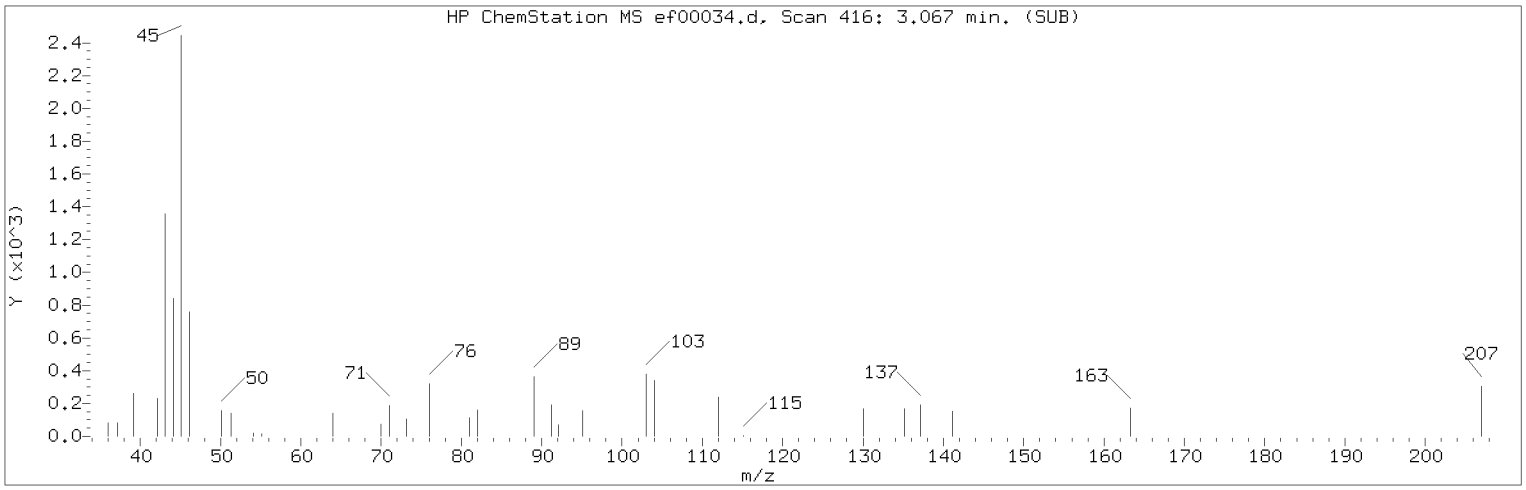
Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	77433	0.960
80) Cumene	(3)	9.235	105	226067	1.050
82) 1,1,2,2-Tetrachloroethane	(3)	9.464	83	117071	1.106
81) Bromobenzene	(3)	9.486	156	80551	1.053
83) 1,2,3-Trichloropropane	(3)	9.507	110	37096	1.097
84) n-Propylbenzene	(3)	9.543	120	67333	1.088
85) 2-Chlorotoluene	(3)	9.622	126	61262	1.076
86) 4-Ethyltoluene	(3)	9.629	105	222701M	1.102
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	194970M	1.125
88) Alpha Methyl Styrene	(3)	9.844	118	93203	1.025
89) tert-Butylbenzene	(3)	9.922	119	204398M	1.111
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	188165	1.100
91) sec-Butylbenzene	(3)	10.087	105	278310	1.075
92) 1,3-Dichlorobenzene	(3)	10.188	146	139599	1.098
94) p-Isopropyltoluene	(3)	10.188	119	232769	1.051
93) 1,4-Dichlorobenzene	(3)	10.252	146	143029	1.104
95) Benzyl Chloride	(3)	10.359	91	108121	0.922
97) n-Butylbenzene	(3)	10.503	91	206651	1.038
96) 1,2-Dichlorobenzene	(3)	10.546	146	137957	1.140
98) Hexachloroethane	(3)	10.732	117	43998	0.935
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	62817	1.004
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	113079	1.090
101) Hexachlorobutadiene	(3)	11.871	225	97805	1.103
102) Naphthalene	(3)	11.957	128	243925	1.064
64) 1,3-Dichloropropene (total)	(3)		75	121190	1.997
77) Xylene (total)	(3)		91	333640	2.197

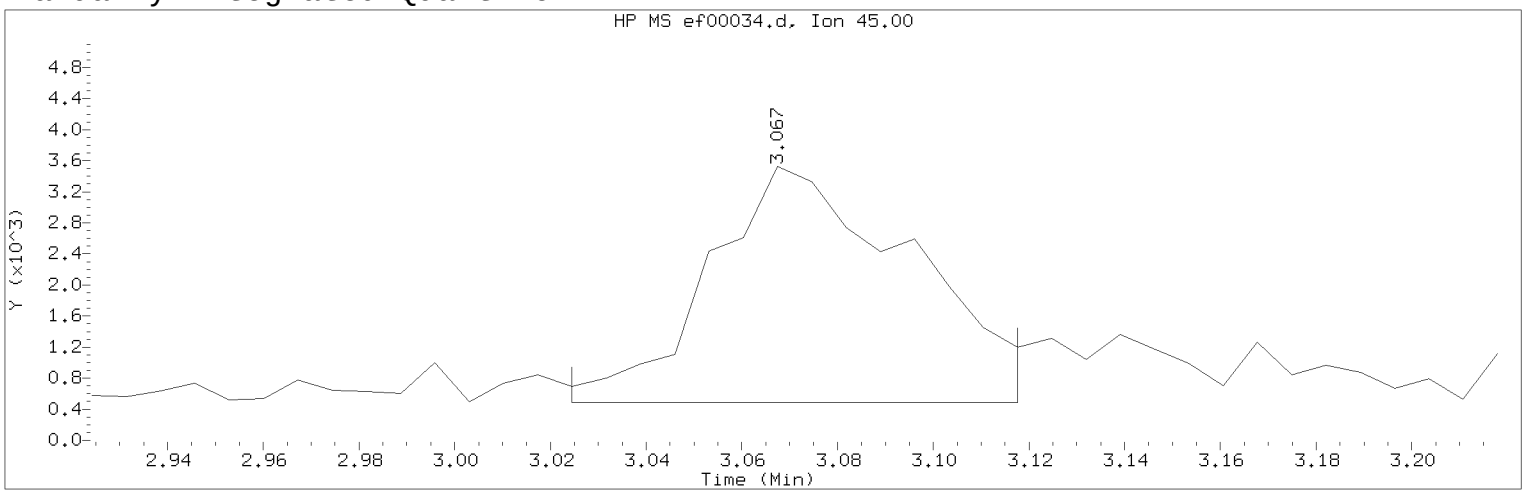
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

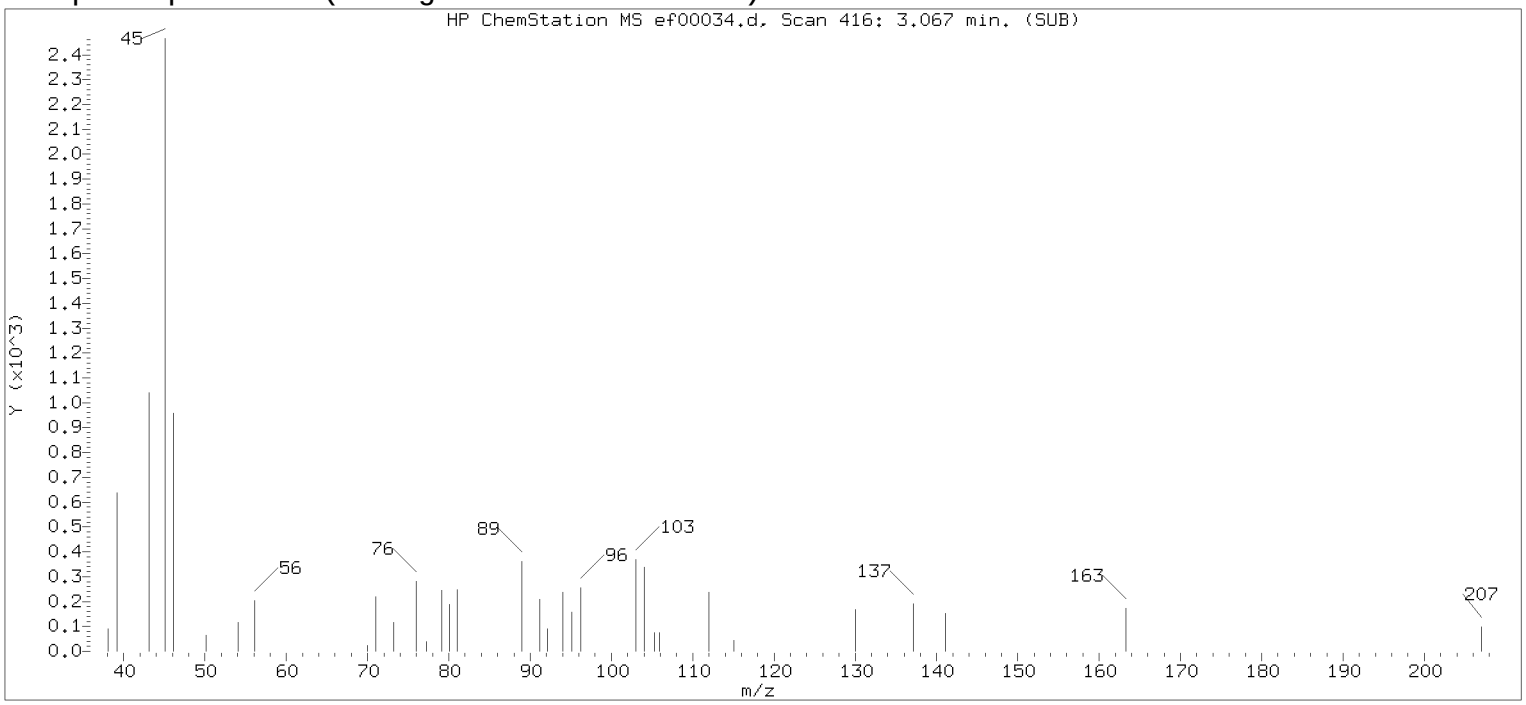
Compound Number : 14
Compound Name : Ethanol
Scan Number : 416
Retention Time (minutes): 3.067
Quant Ion : 45.00
Area (flag) : 9047M
Concentration (ppb(v)) : 0.9118
Integration start scan : 409 Integration stop scan: 422
Y at integration start : 488 Y at integration end: 488

Reason for manual integration: improper integration

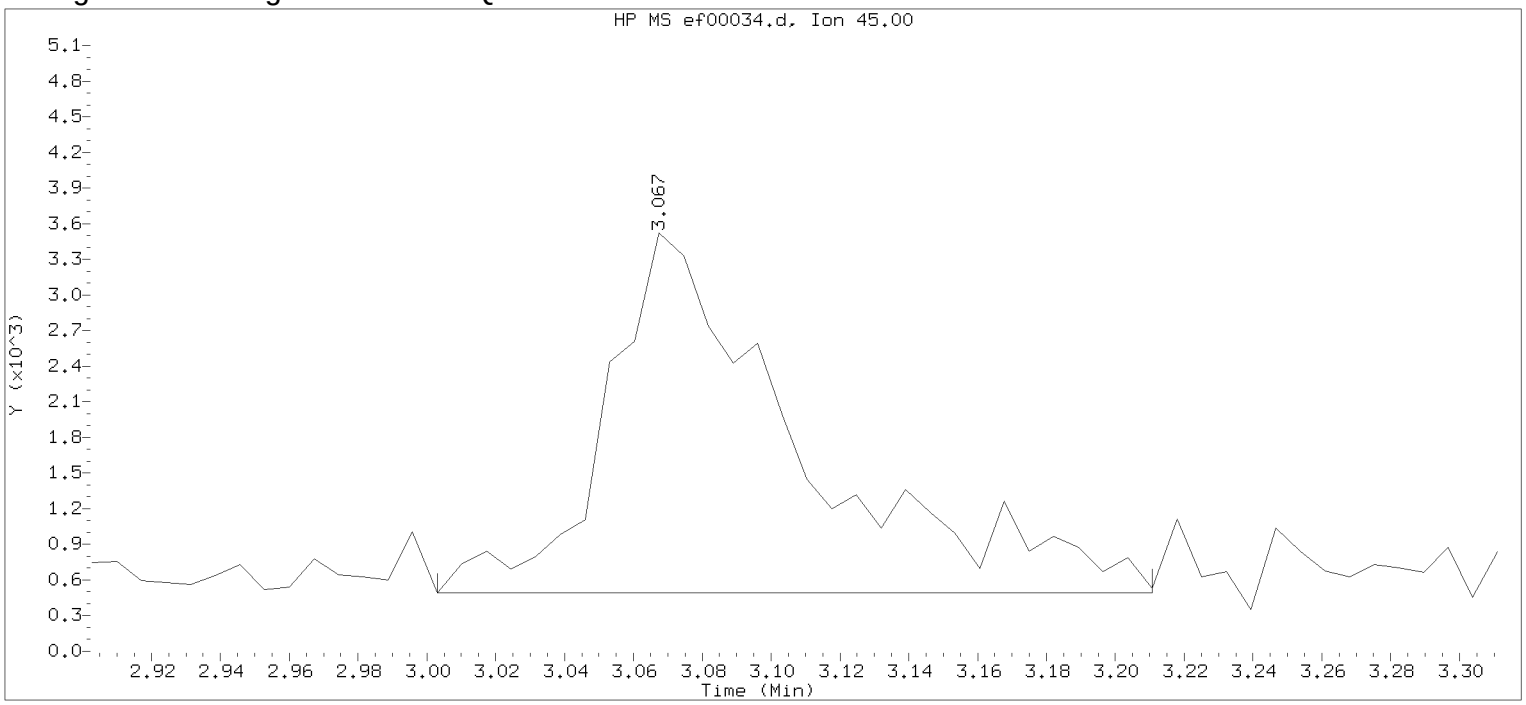
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

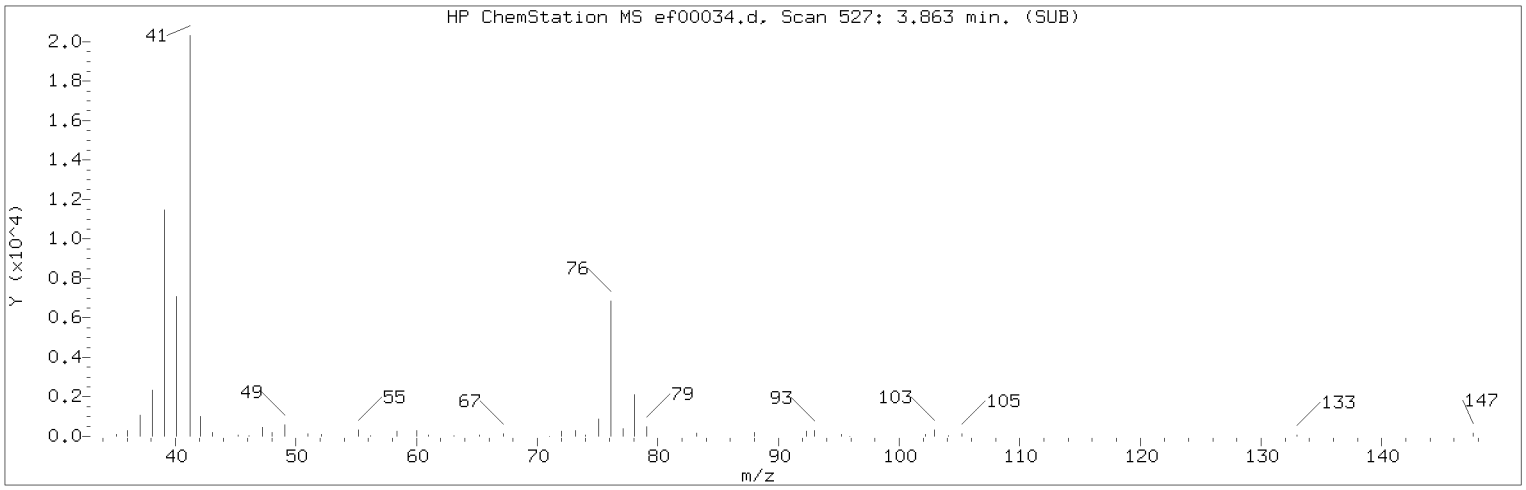
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 12:14 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

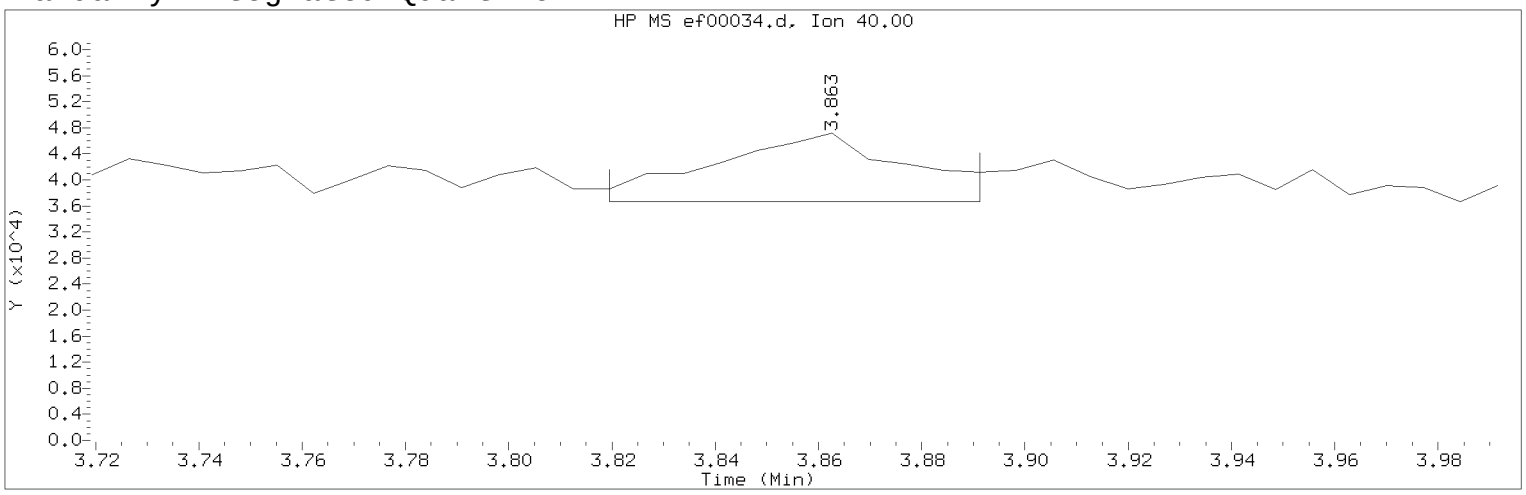
Compound Number : 14
Compound Name : Ethanol
Scan Number : 416
Retention Time (minutes): 3.067
Quant Ion : 45.00
Area : 11871
Concentration (ppb(v)) : 1.1201
Integration start scan : 406 Integration stop scan: 435
Y at integration start : 494 Y at integration end: 494

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

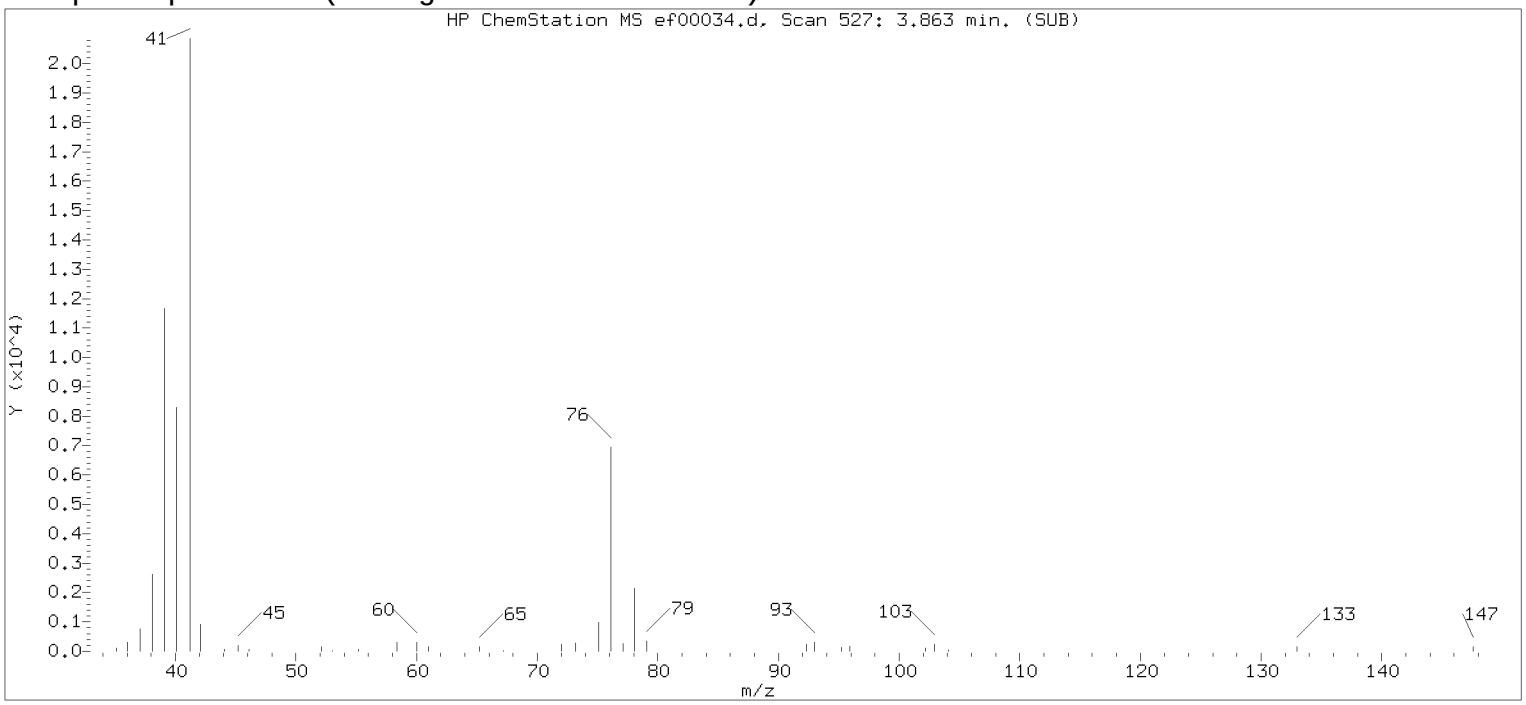
Compound Number : 23
Compound Name : Acetonitrile
Scan Number : 527
Retention Time (minutes): 3.863
Quant Ion : 40.00
Area (flag) : 28327M
Concentration (ppb(v)) : 1.4716
Integration start scan : 520 Integration stop scan: 530
Y at integration start : 36640 Y at integration end: 36640

Reason for manual integration: improper integration

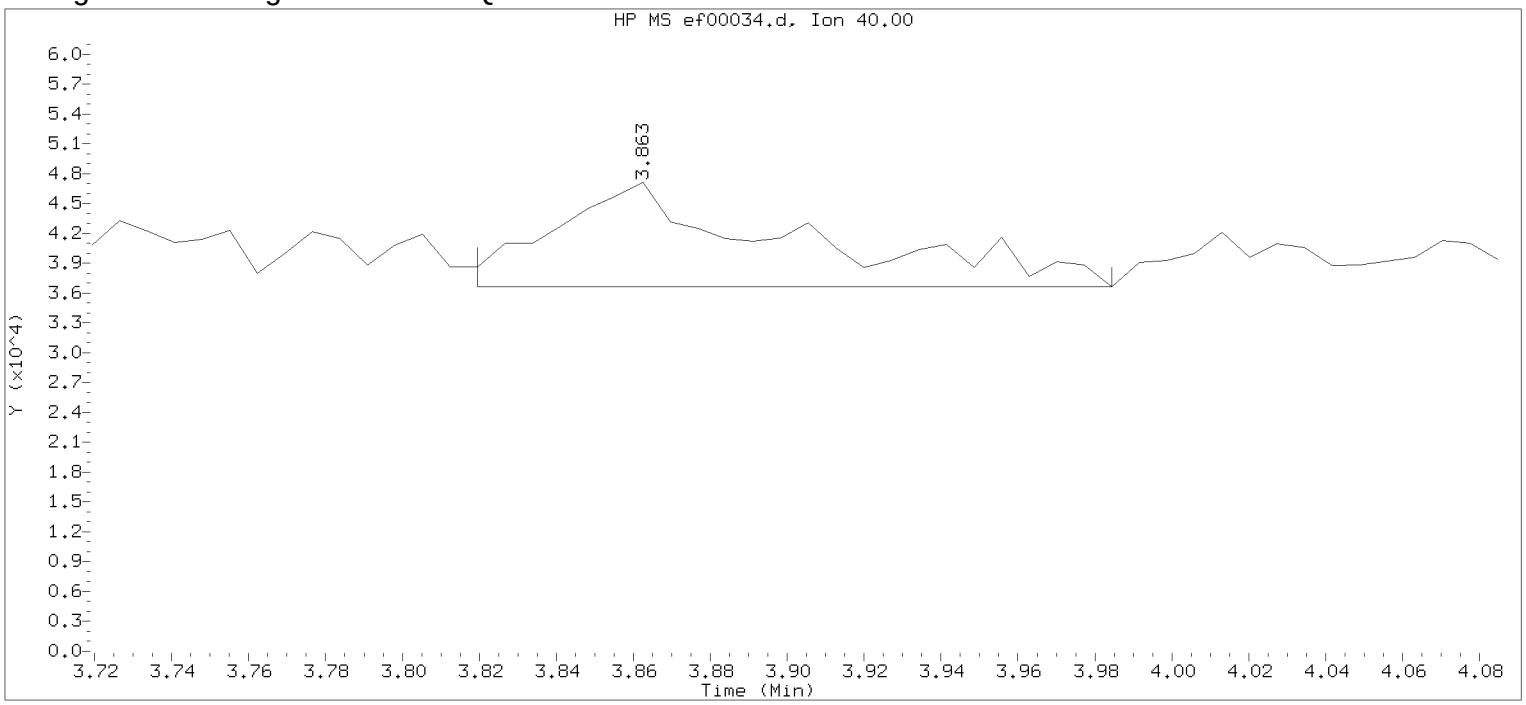
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

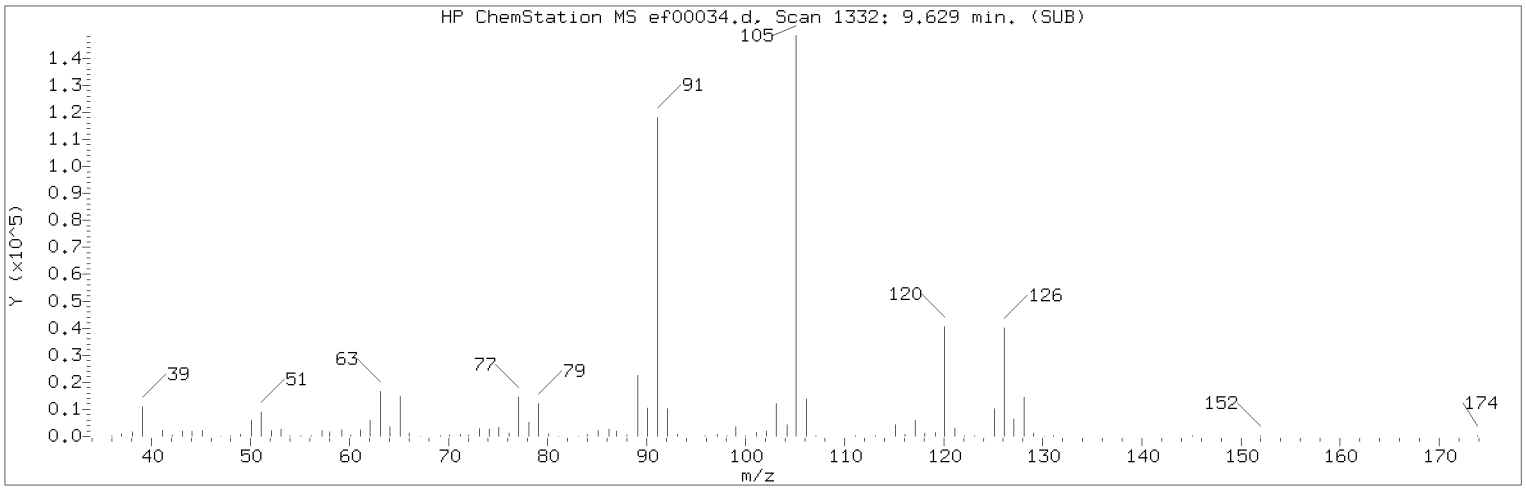
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 12:14 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

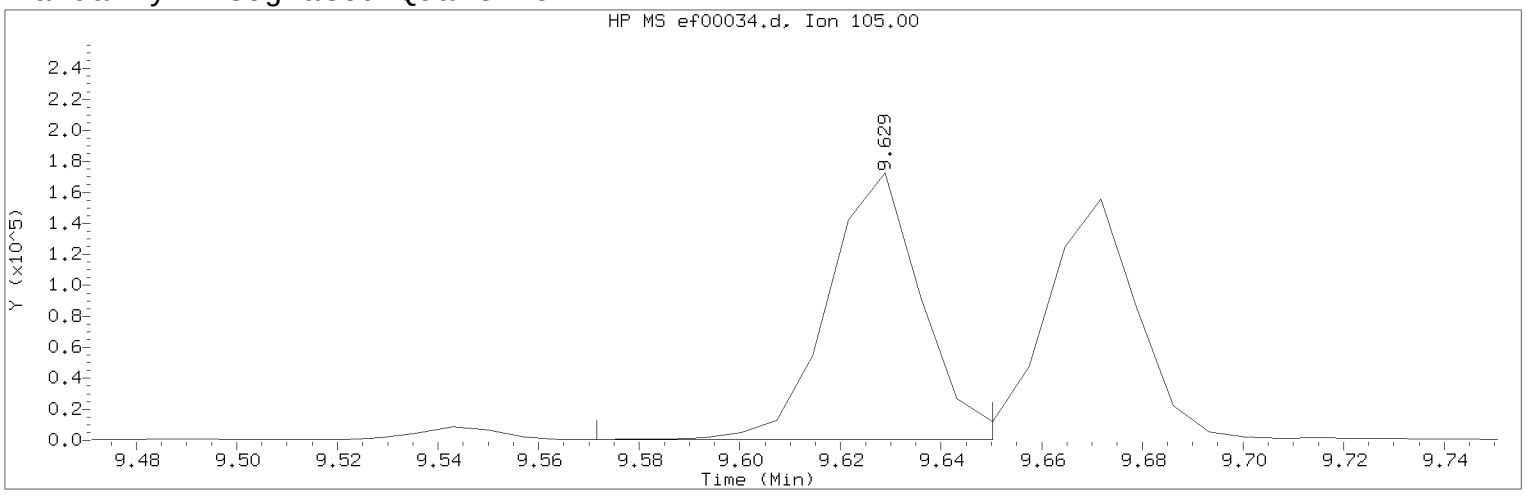
Compound Number : 23
Compound Name : Acetonitrile
Scan Number : 527
Retention Time (minutes): 3.863
Quant Ion : 40.00
Area : 45242
Concentration (ppb(v)) : 1.7905
Integration start scan : 520 Integration stop scan: 543
Y at integration start : 36640 Y at integration end: 36640

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

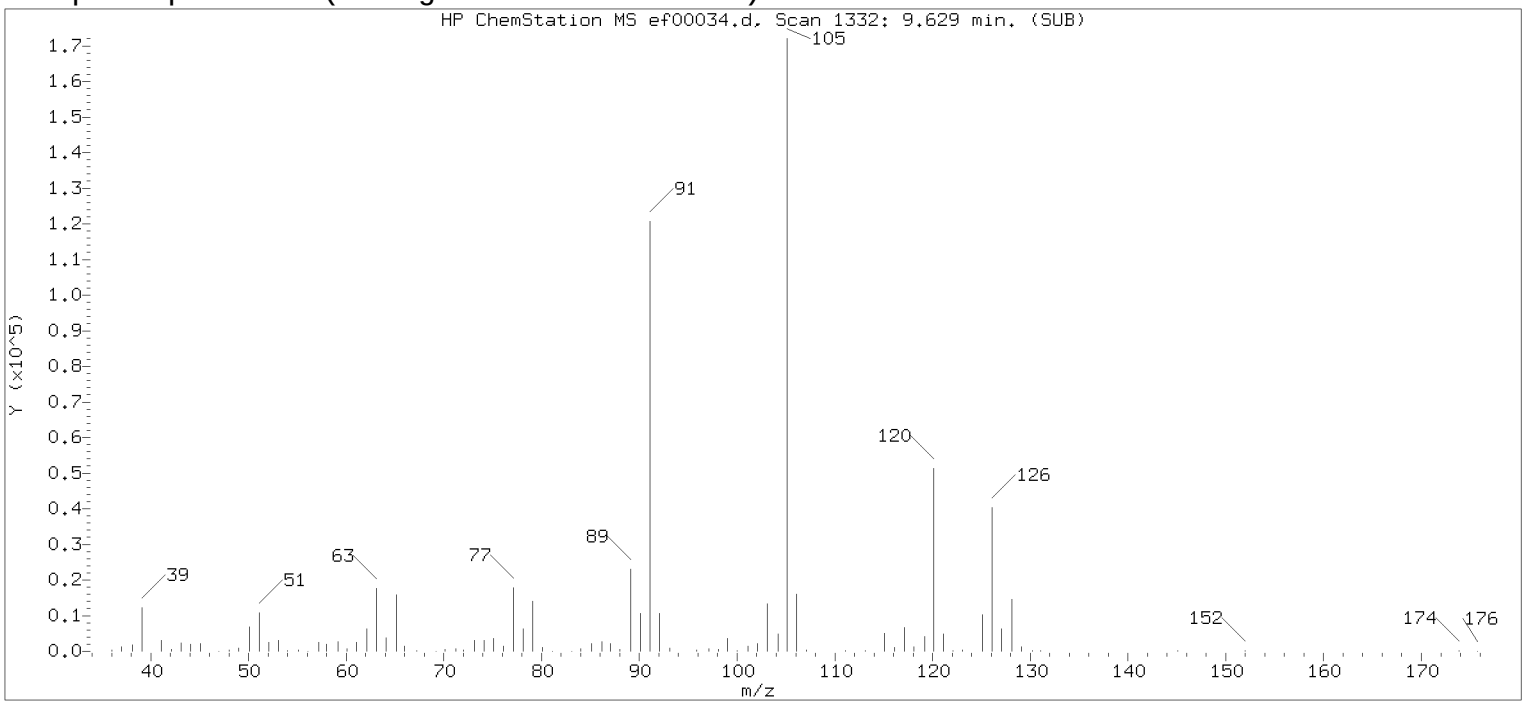
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 222701M
Concentration (ppb(v)) : 1.1025
Integration start scan : 1323 Integration stop scan: 1334
Y at integration start : 270 Y at integration end: 270

Reason for manual integration: improper integration

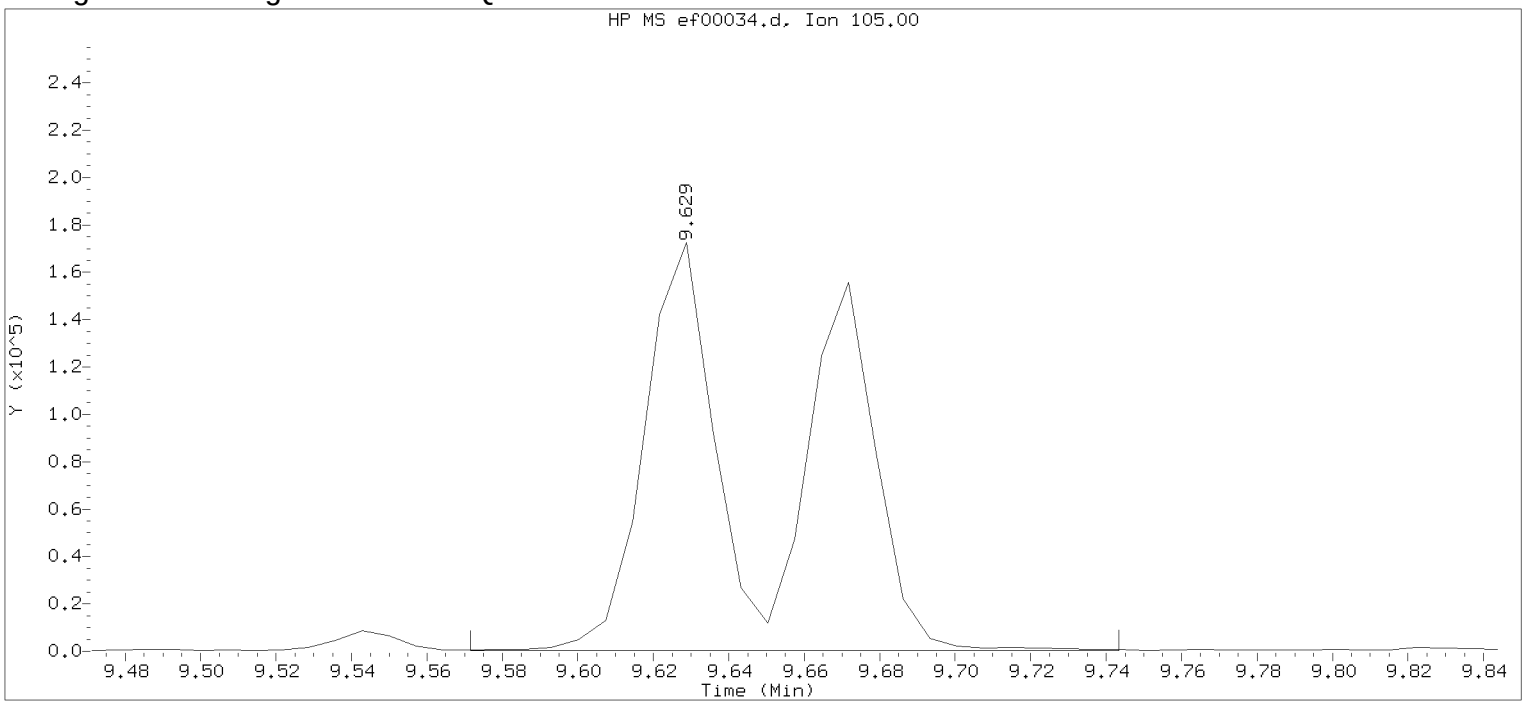
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

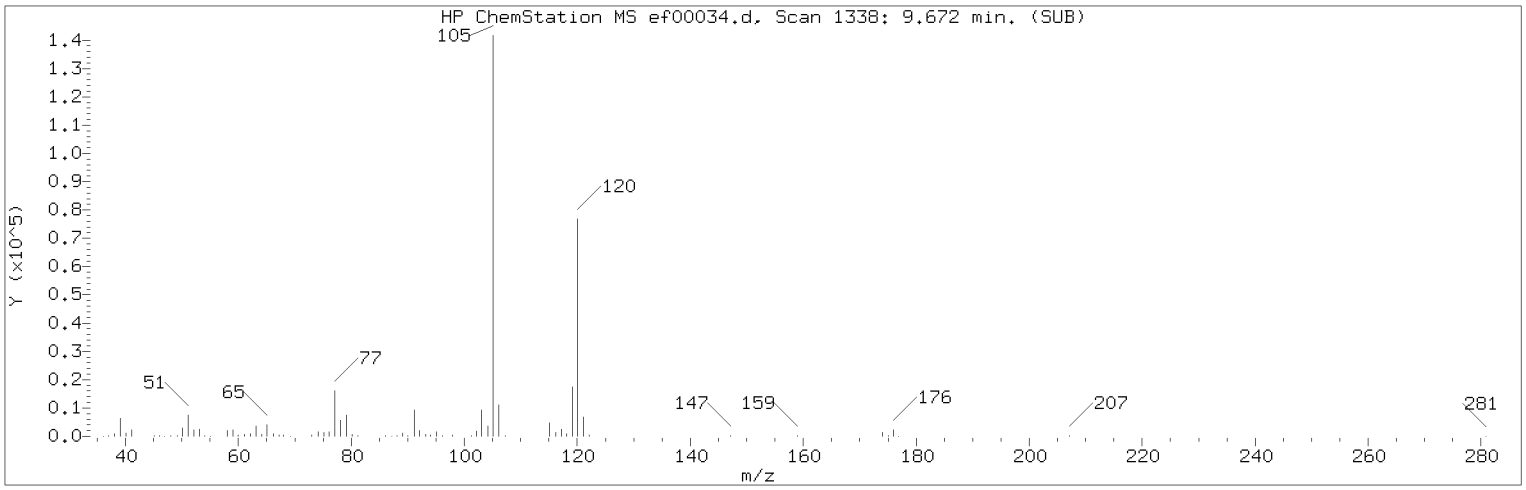
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 12:14 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

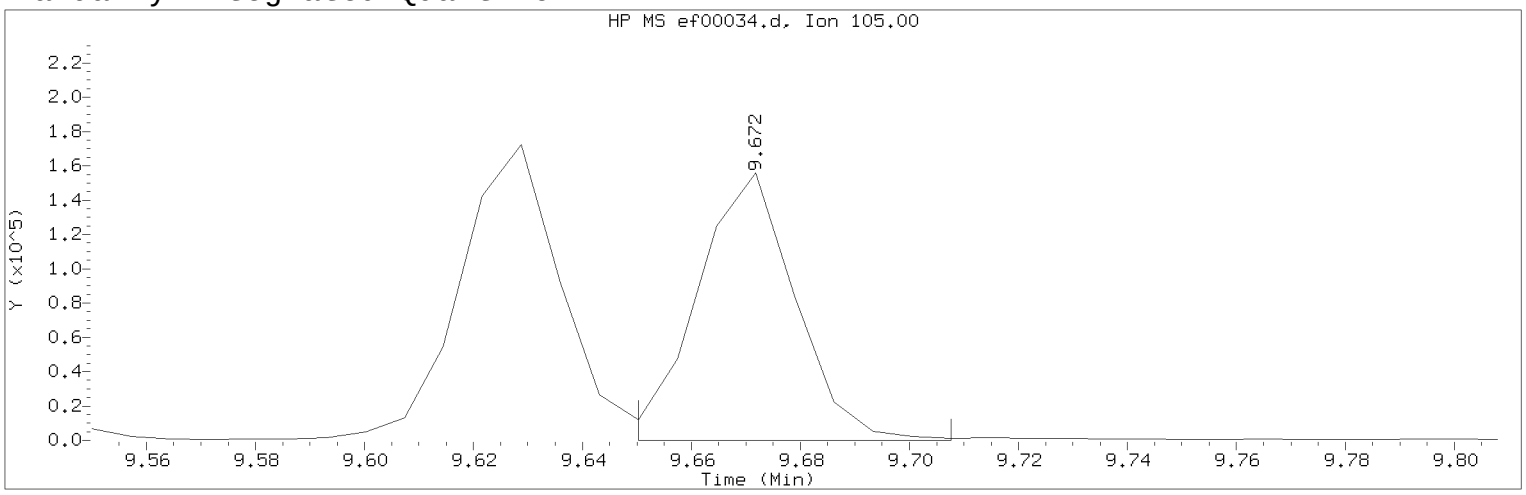
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 413903
Concentration (ppb(v)) : 2.0631
Integration start scan : 1323 Integration stop scan: 1347
Y at integration start : 270 Y at integration end: 270

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

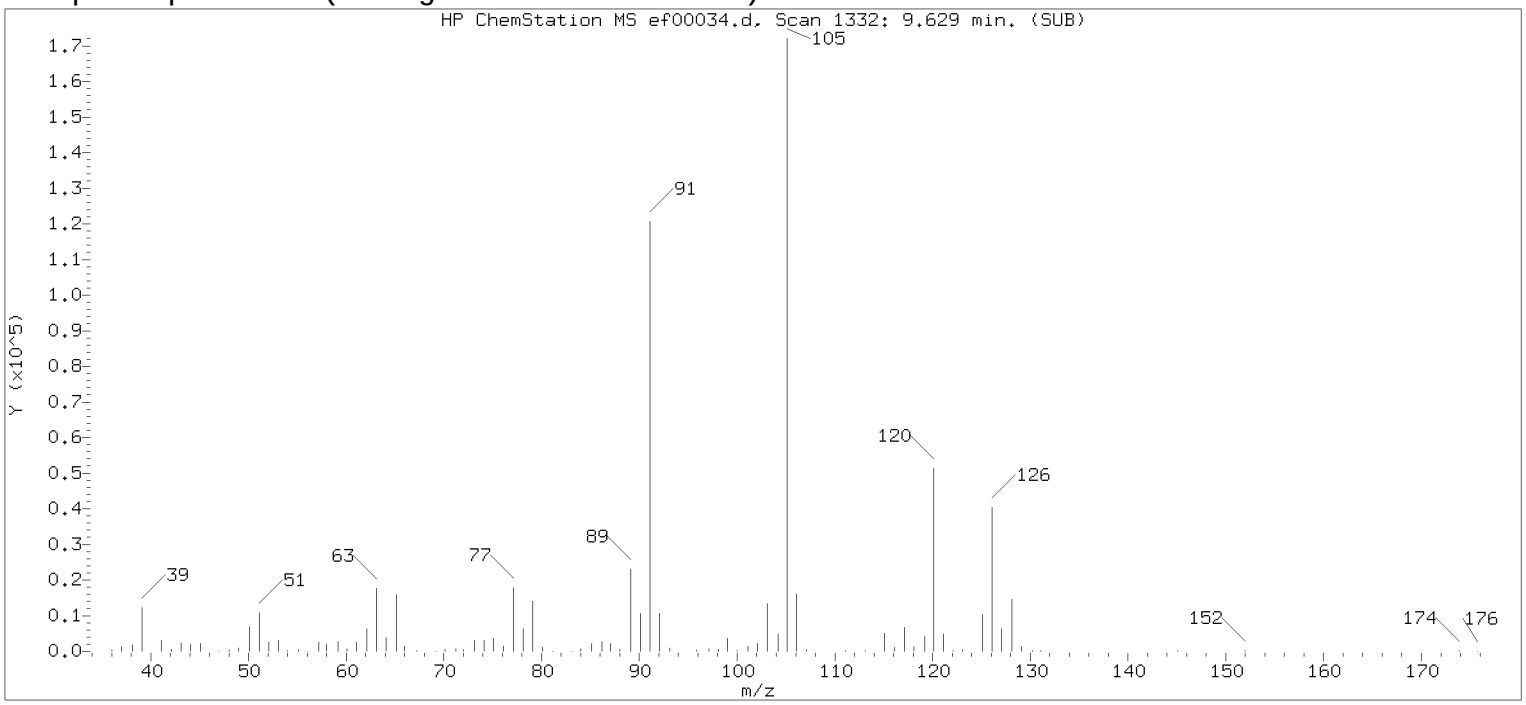
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 194970M
Concentration (ppb(v)) : 1.1252
Integration start scan : 1334 Integration stop scan: 1342
Y at integration start : 148 Y at integration end: 148

Reason for manual integration: improper integration

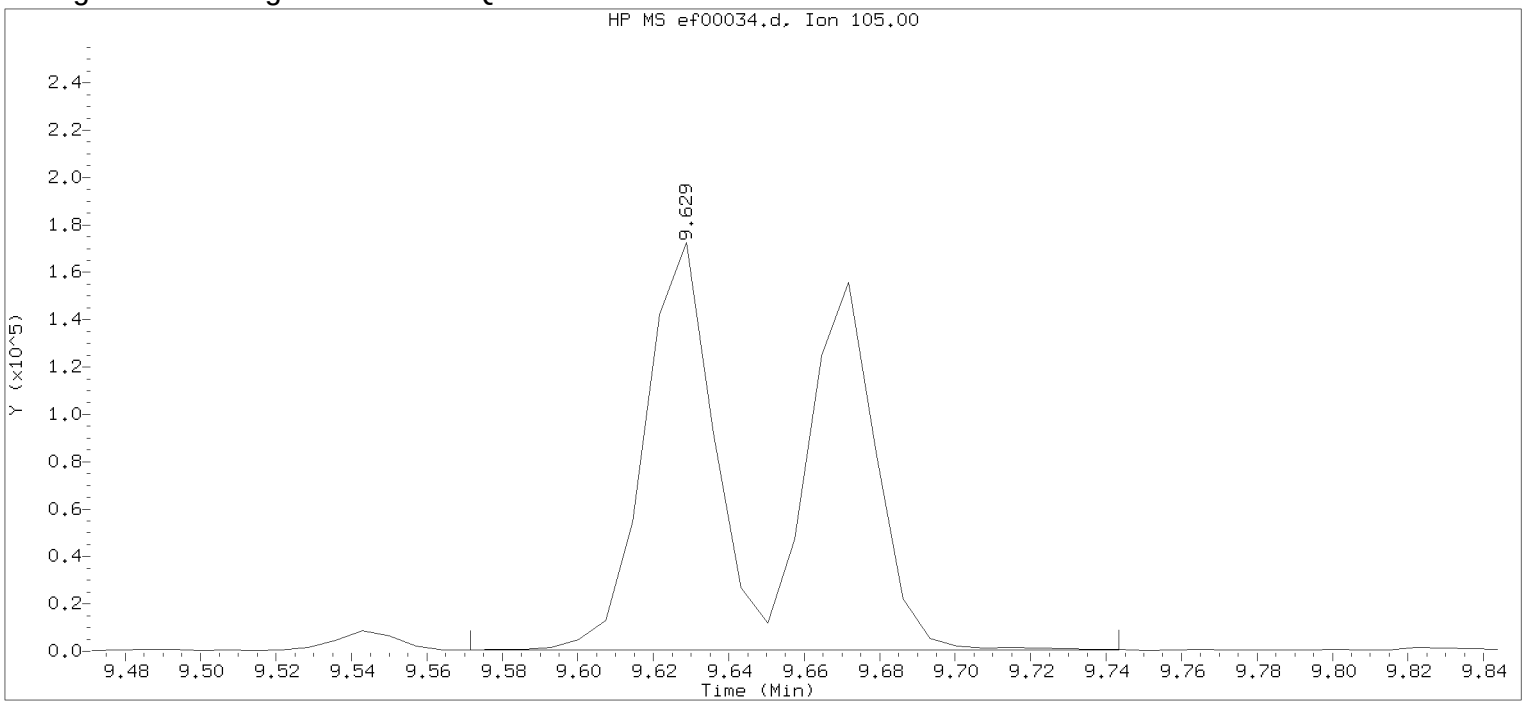
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

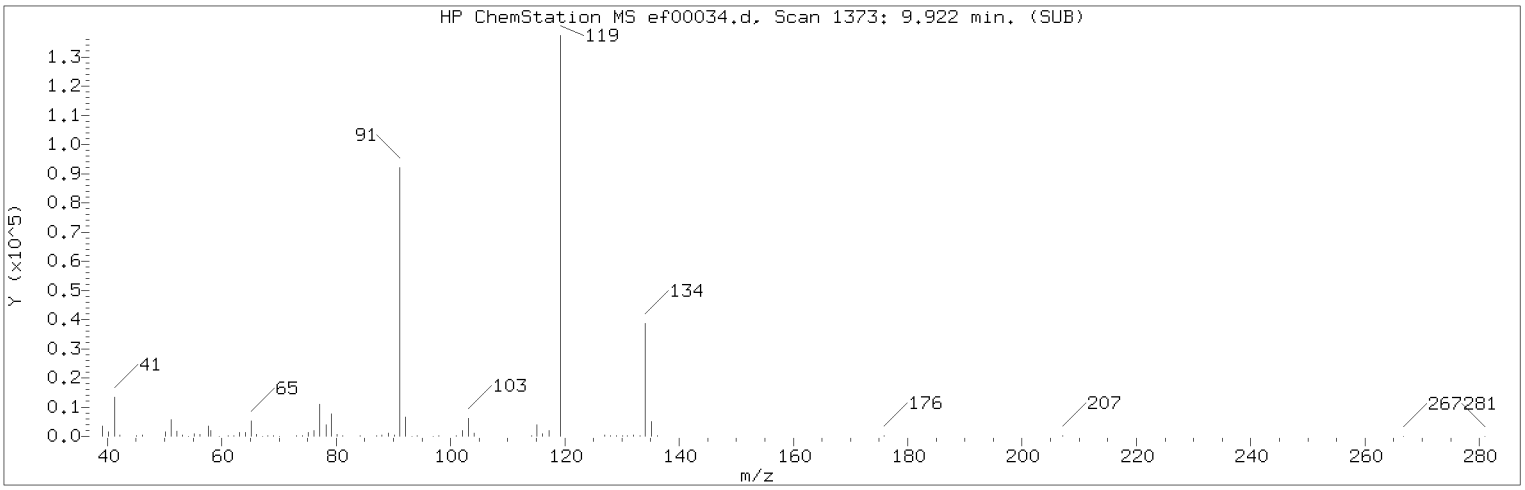
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 12:14 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

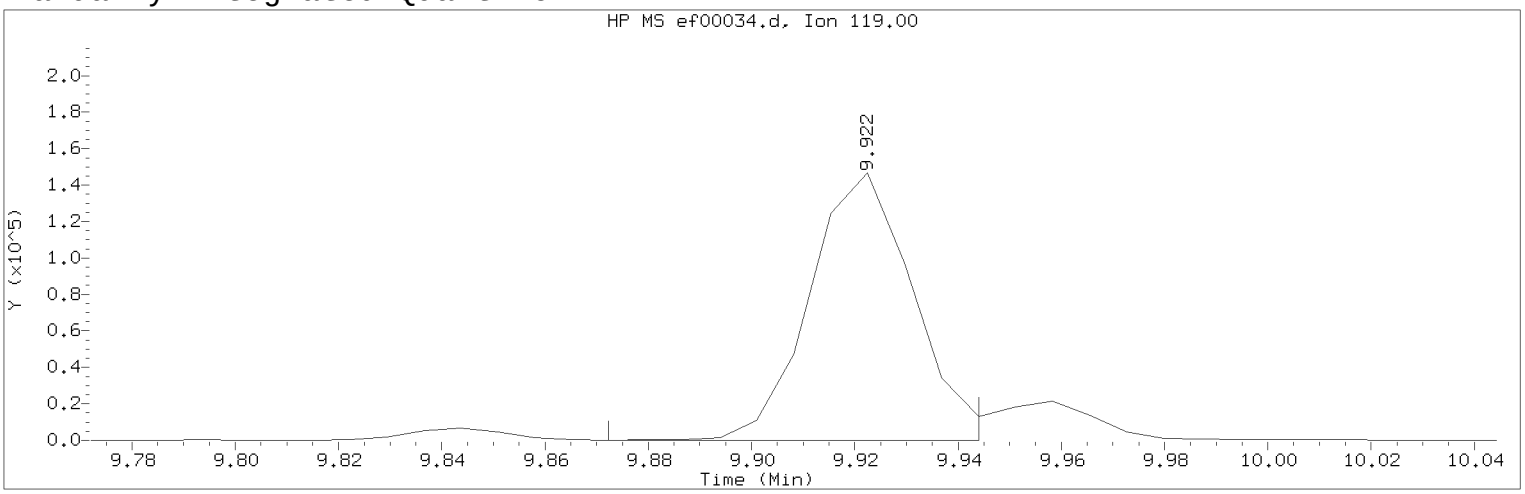
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 412110
Concentration (ppb(v)) : 2.4742
Integration start scan : 1323 Integration stop scan: 1347
Y at integration start : 446 Y at integration end: 446

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

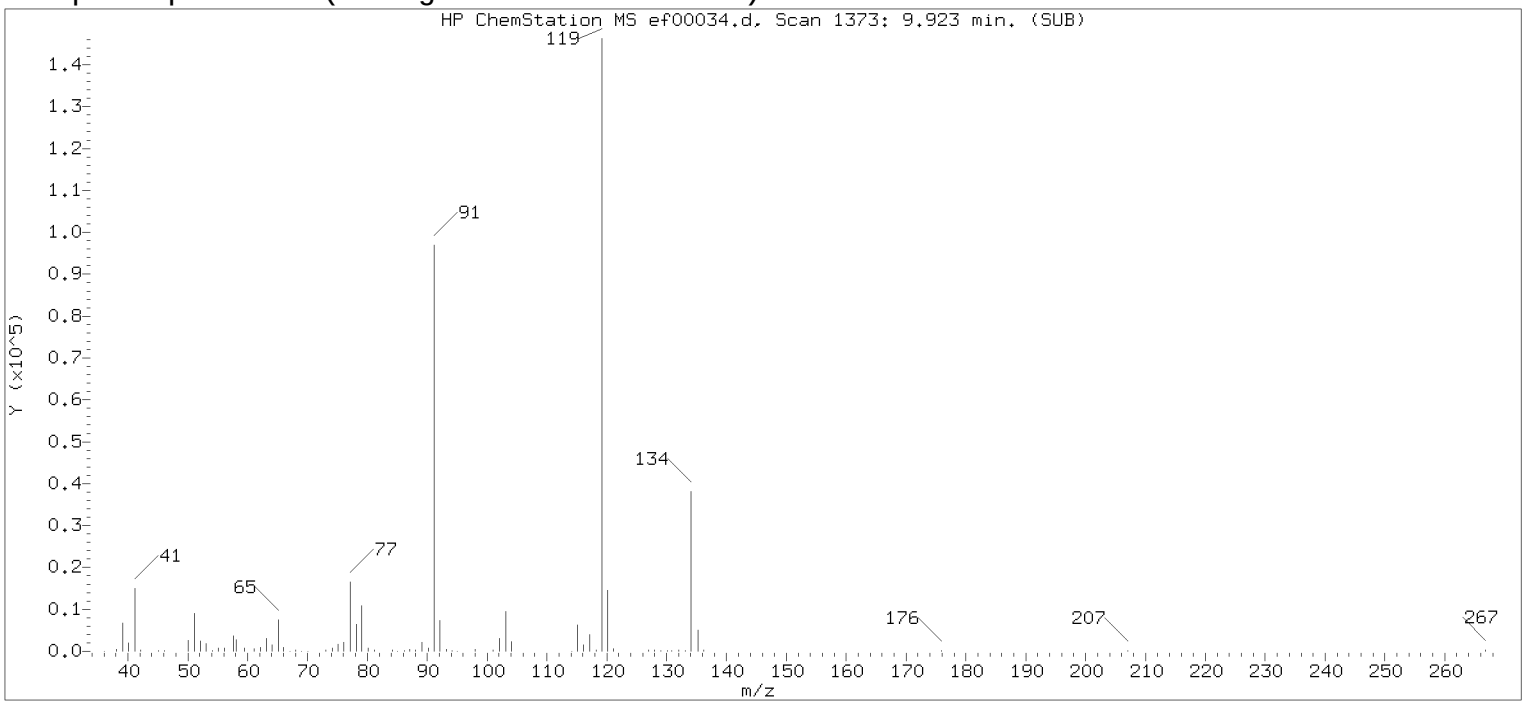
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 204398M
Concentration (ppb(v)) : 1.1109
Integration start scan : 1365 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

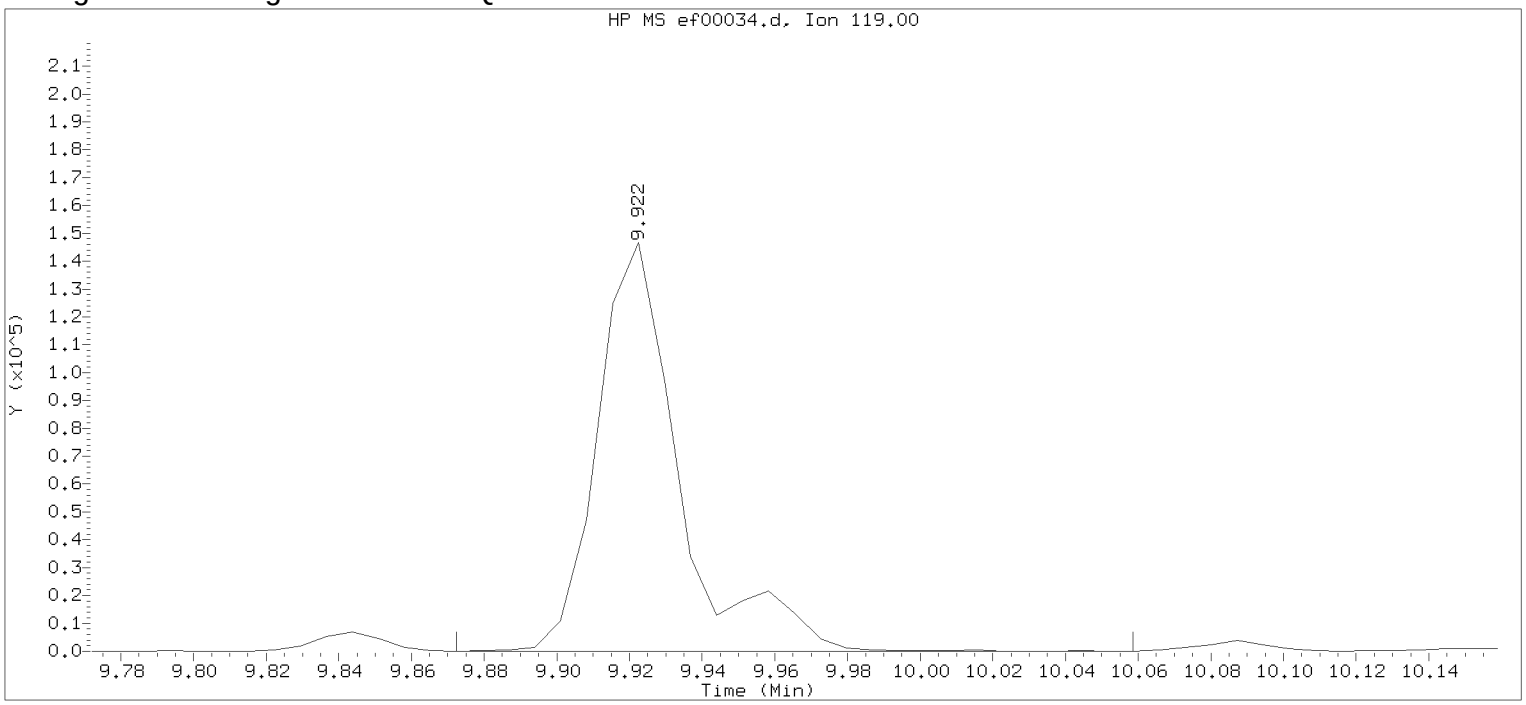
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



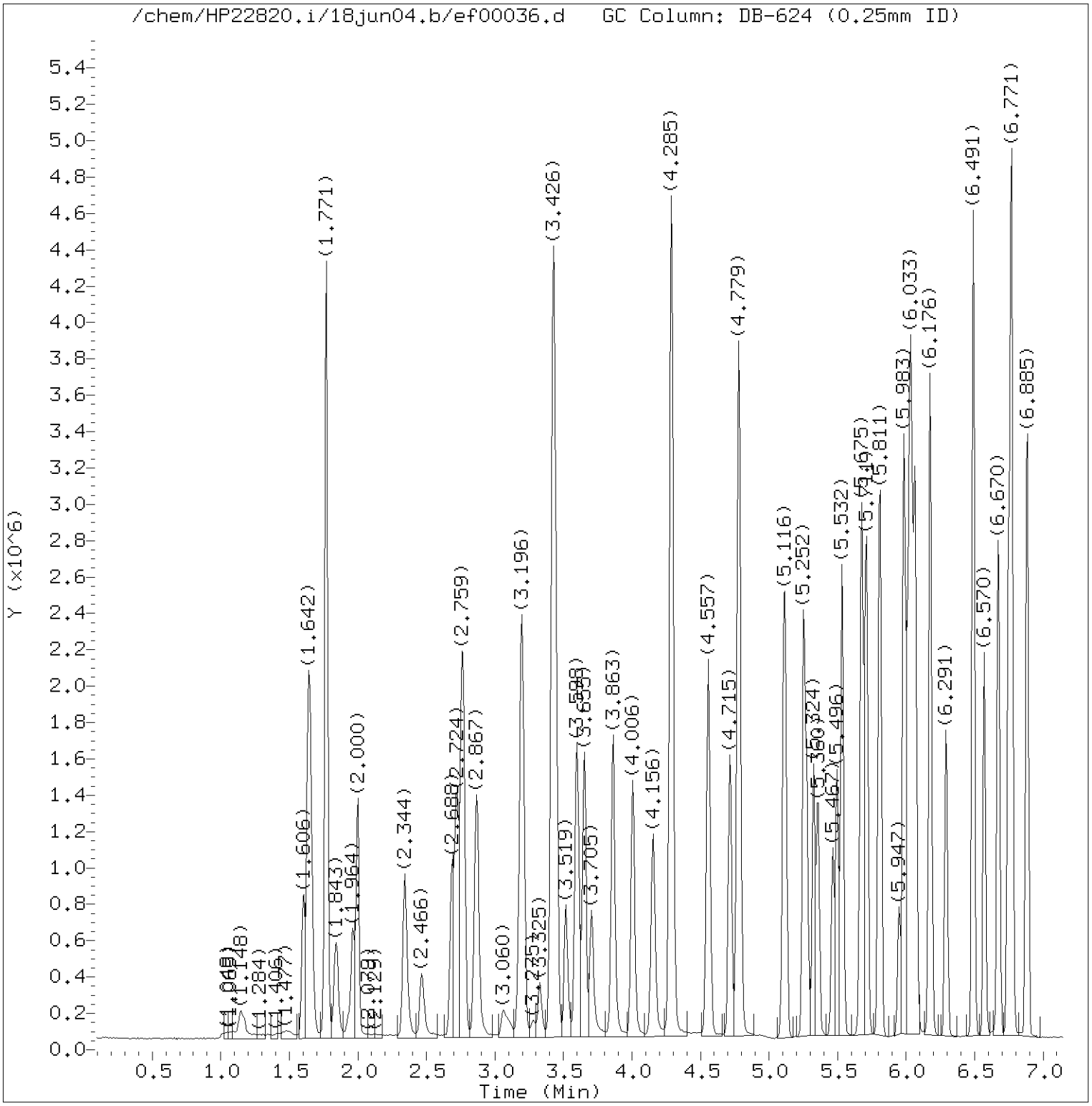
Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 12:14 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 230716
Concentration (ppb(v)) : 1.5047
Integration start scan : 1365 Integration stop scan: 1391
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

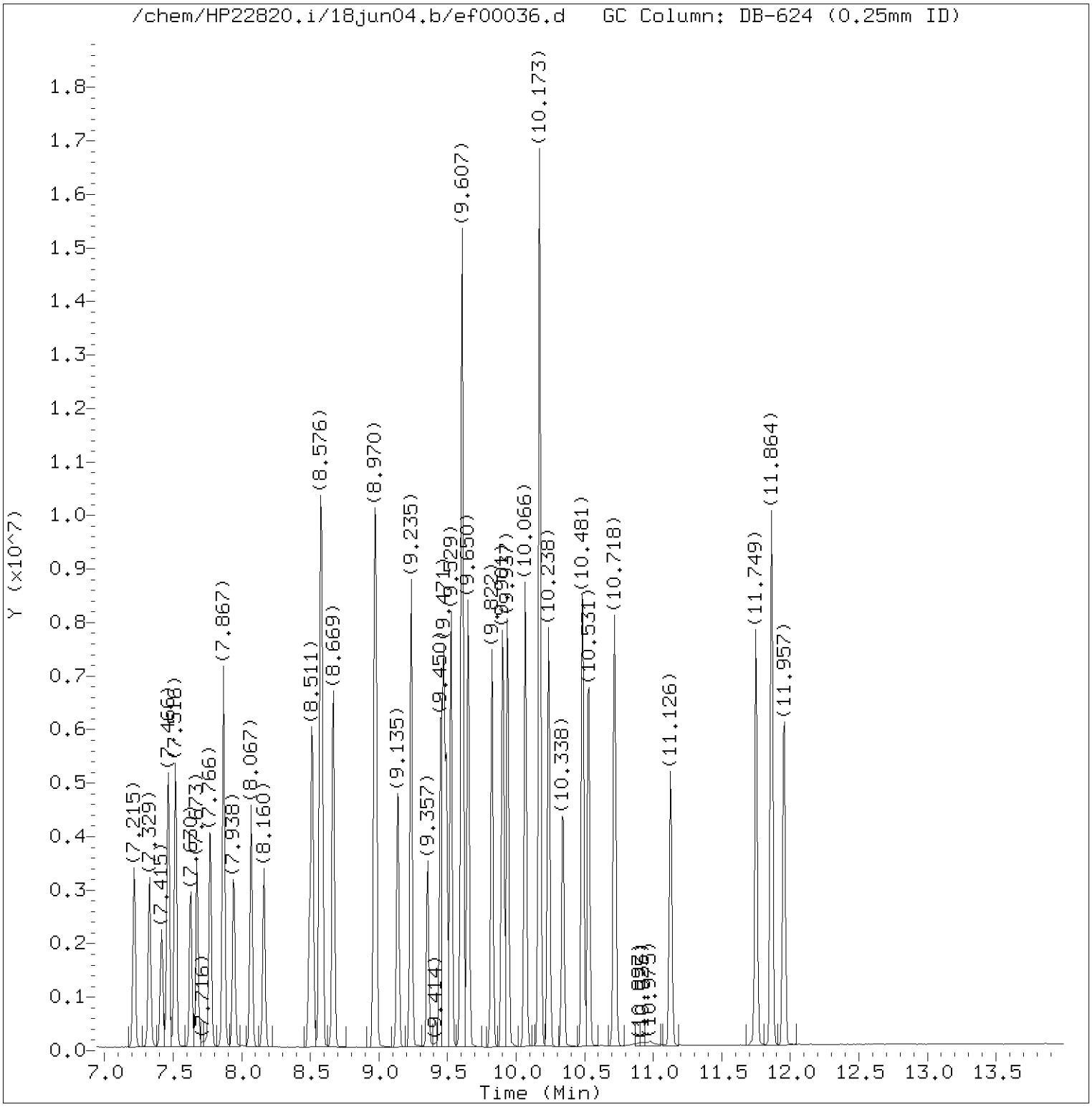
Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00036.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 12:47 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00036.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 12:47 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00036.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 12:47 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.606	41	479026	23.714
2) Dichlorodifluoromethane	(1)	1.642	85	1974302	25.215
3) Chlorodifluoromethane	(1)	1.656	51	1033023	24.898
4) Freon 114	(1)	1.771	85	2004377	25.018
5) Chloromethane	(1)	1.843	50	575116	24.284
6) Vinyl Chloride	(1)	1.964	62	723667	24.896
7) 1,3-Butadiene	(1)	2.000	54	517009	24.513
8) Bromomethane	(1)	2.344	94	756367	25.302
9) Chloroethane	(1)	2.466	64	398211	24.238
10) Bromoethene	(1)	2.688	106	789433	24.858
11) Dichlorofluoromethane	(1)	2.724	67	1570180	24.780
12) Trichlorofluoromethane	(1)	2.767	101	2051270	24.717
13) Pentane	(1)	2.867	43	1061611	23.823
14) Ethanol	(1)	3.060	45	239187	24.955
15) Freon123a	(1)	3.196	67	1478321	26.837
16) Acrolein	(1)	3.325	56	278586	24.545
17) 1,1-Dichloroethene	(1)	3.418	61	1143129	24.812
18) Freon 113	(1)	3.433	103	1127590	24.269
19) Acetone	(1)	3.519	43	934144	24.390
20) Methyl Iodide	(1)	3.598	142	2209634	24.801
21) Carbon Disulfide	(1)	3.655	76	2128248	24.666
22) Isopropanol	(1)	3.705	45	972733	27.695
23) Acetonitrile	(1)	3.863	40	368744	19.832
24) 3-Chloropropene	(1)	3.863	76	354178	26.198
25) Methylene Chloride	(1)	4.006	84	709516	27.043
26) tert-Butyl Alcohol	(1)	4.156	59	1454157	27.236
28) trans-1,2-Dichloroethene	(1)	4.285	61	1026691	24.640
29) Methyl t-Butyl Ether	(1)	4.285	73	2103346	23.656
27) Acrylonitrile	(1)	4.292	53	584091	25.020
30) Hexane	(1)	4.557	57	1081713	23.640
31) 1,1-Dichloroethane	(1)	4.715	63	1320619	24.324
32) Vinyl Acetate	(1)	4.779	86	213953	26.952
33) Di-Isopropyl Ether	(1)	4.779	45	2182420	24.133
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	2093610	24.261
35) cis-1,2-Dichloroethene	(1)	5.252	61	998048	24.812
37) 2-Butanone	(1)	5.274	72	395359	23.614
38) Ethyl Acetate	(1)	5.324	70	190616	23.073
39) Methyl Acrylate	(1)	5.360	55	1220405	24.042

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00036.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 12:47 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	325792	10.000
41) Tetrahydrofuran	(1)	5.496	42	717170	24.187
42) Chloroform	(1)	5.532	83	1651798	24.254
43) 1,1,1-Trichloroethane	(1)	5.675	97	1677864	24.322
44) Cyclohexane	(1)	5.711	56	1135212	23.925
45) Carbon Tetrachloride	(1)	5.811	117	1673228	24.706
46) Benzene	(2)	5.983	78	2459076	23.876
47) 1,2-Dichloroethane	(2)	6.011	62	1020773	24.384
48) Isooctane	(2)	6.033	57	3539824	24.831
49) Tert-Amyl Methyl Ether	(2)	6.069	73	2083162	24.249
50) Heptane	(2)	6.176	43	1169463	24.004
51)*1,4-Difluorobenzene	(2)	6.291	114	1197569	10.000
52) Trichloroethene	(2)	6.491	130	1251662	24.463
53) Ethyl Acrylate	(2)	6.570	55	1586584	24.340
36) 1,2-Dichloroethene (total)	(1)		61	2024739	49.452
54) 1,2-Dichloropropane	(2)	6.670	63	855050	23.716
57) Methyl Methacrylate	(2)	6.749	69	868008	24.076
56) 1,4-Dioxane	(2)	6.771	88	634112	24.220
55) Dibromomethane	(2)	6.771	174	1220553	24.649
58) Bromodichloromethane	(2)	6.885	83	1718291	24.346
59) cis-1,3-Dichloropropene	(2)	7.215	75	1509280	24.255
60) 4-Methyl-2-Pentanone	(2)	7.329	43	1627745	24.018
61) Toluene	(3)	7.466	91	3093568	23.525
62) Octane	(3)	7.516	43	1576173	23.044
63) trans-1,3-Dichloropropene	(3)	7.630	75	1269186	24.479
65) Ethyl Methacrylate	(3)	7.673	69	1464308	24.887
66) 1,1,2-Trichloroethane	(3)	7.774	97	1091166	23.485
67) Tetrachloroethene	(3)	7.867	166	1768895	24.038
68) 2-Hexanone	(3)	7.938	43	1555188	23.639
69) Dibromochloromethane	(3)	8.067	127	1446187	24.677
70) 1,2-Dibromoethane	(3)	8.160	107	1739680	24.061
71)*Chlorobenzene-d5	(3)	8.497	117	1139855	10.000
72) Chlorobenzene	(3)	8.511	112	2682878	23.836
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	1341890	24.494
74) Ethylbenzene	(3)	8.583	91	4031276	22.920
75) m/p-Xylene	(3)	8.669	91	3154872	22.095
76) o-Xylene	(3)	8.970	91	3163063	22.410
78) Styrene	(3)	8.977	104	2552311	23.867

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00036.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 12:47 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	1909732	25.328
80) Cumene	(3)	9.235	105	4559589	22.655
82) 1,1,2,2-Tetrachloroethane	(3)	9.450	83	2303020	23.267
81) Bromobenzene	(3)	9.471	156	1720941	24.065
83) 1,2,3-Trichloropropane	(3)	9.493	110	719880	22.767
84) n-Propylbenzene	(3)	9.529	120	1345547	23.261
86) 4-Ethyltoluene	(3)	9.607	105	4531807A	23.281
85) 2-Chlorotoluene	(3)	9.607	126	1227820	23.060
87) 1,3,5-Trimethylbenzene	(3)	9.650	105	3660625	22.596
88) Alpha Methyl Styrene	(3)	9.822	118	1962272	23.092
89) tert-Butylbenzene	(3)	9.901	119	3511653M	20.779
90) 1,2,4-Trimethylbenzene	(3)	9.937	105	3649863	22.821
91) sec-Butylbenzene	(3)	10.066	105	5217754	21.559
92) 1,3-Dichlorobenzene	(3)	10.173	146	2727292	22.946
94) p-Isopropyltoluene	(3)	10.173	119	4584222	22.134
93) 1,4-Dichlorobenzene	(3)	10.238	146	2759926	22.782
95) Benzyl Chloride	(3)	10.338	91	2668176	24.350
97) n-Butylbenzene	(3)	10.481	91	4118569	22.130
96) 1,2-Dichlorobenzene	(3)	10.531	146	2532566	22.388
98) Hexachloroethane	(3)	10.718	117	1168501	26.574
99) 1,2-Dibromo-3-chloropropane	(3)	11.126	157	1322367	22.613
100) 1,2,4-Trichlorobenzene	(3)	11.749	180	2108468	21.748
101) Hexachlorobutadiene	(3)	11.864	225	1773518	21.391
102) Naphthalene	(3)	11.957	128	4349917	20.291
64) 1,3-Dichloropropene (total)	(3)		75	2778466	48.970
77) Xylene (total)	(3)		91	6317935	44.504

M = Compound was manually integrated.
A = User selected an alternate hit.

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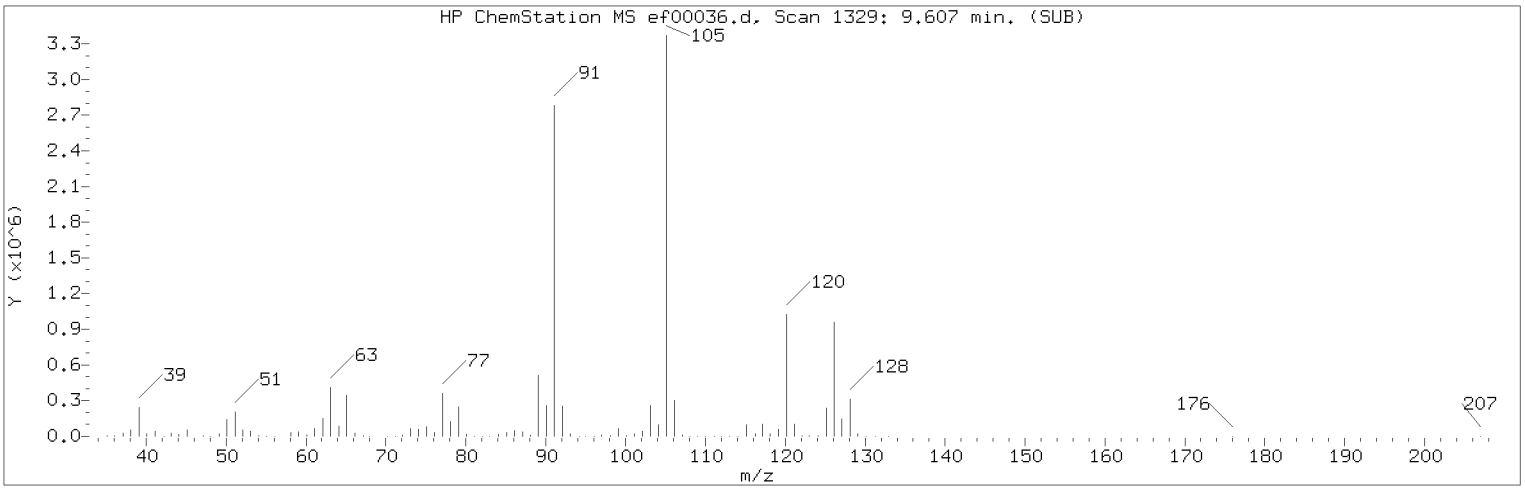
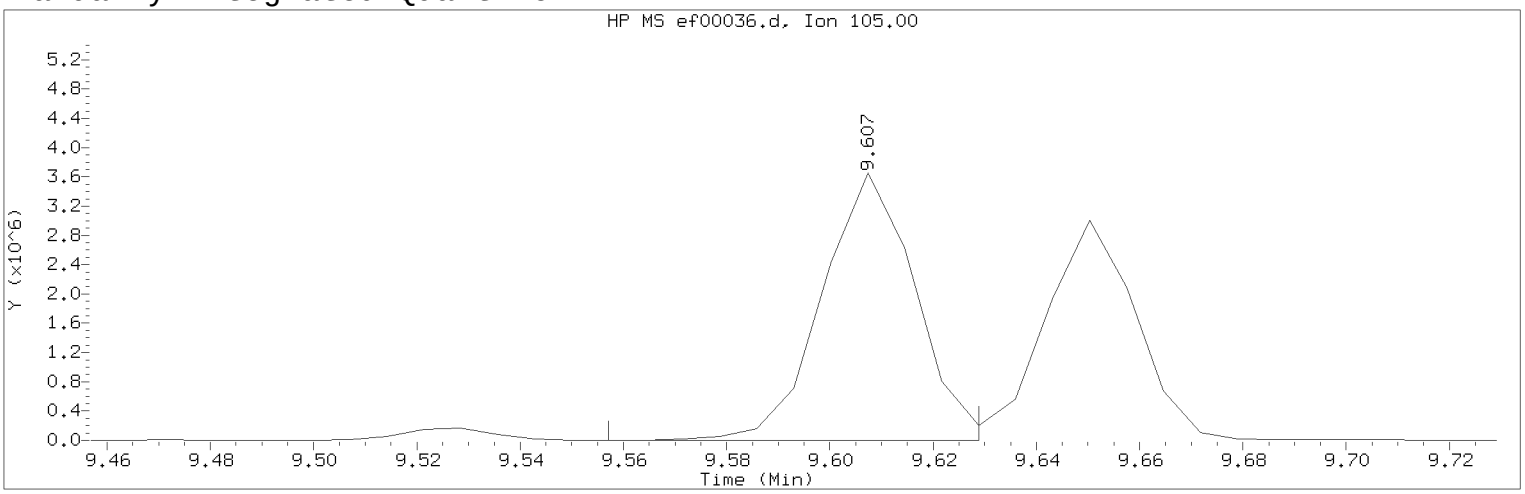
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00036.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 12:47 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

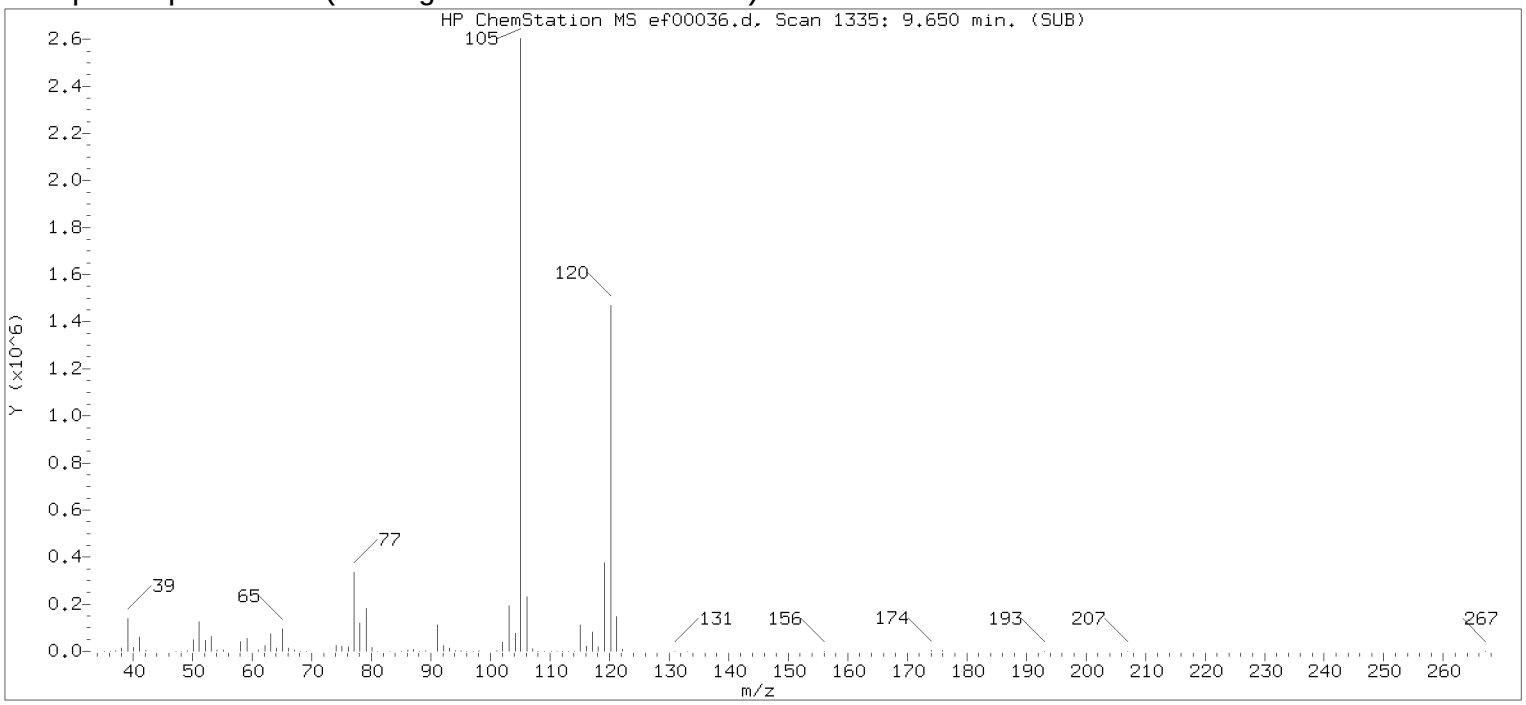
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1329
Retention Time (minutes): 9.607
Quant Ion : 105.00
Area (flag) : 4531807A
Concentration (ppb(v)) : 23.2811
Integration start scan : 1321 Integration stop scan: 1331
Y at integration start : 886 Y at integration end: 886

Reason for manual integration: improper integration

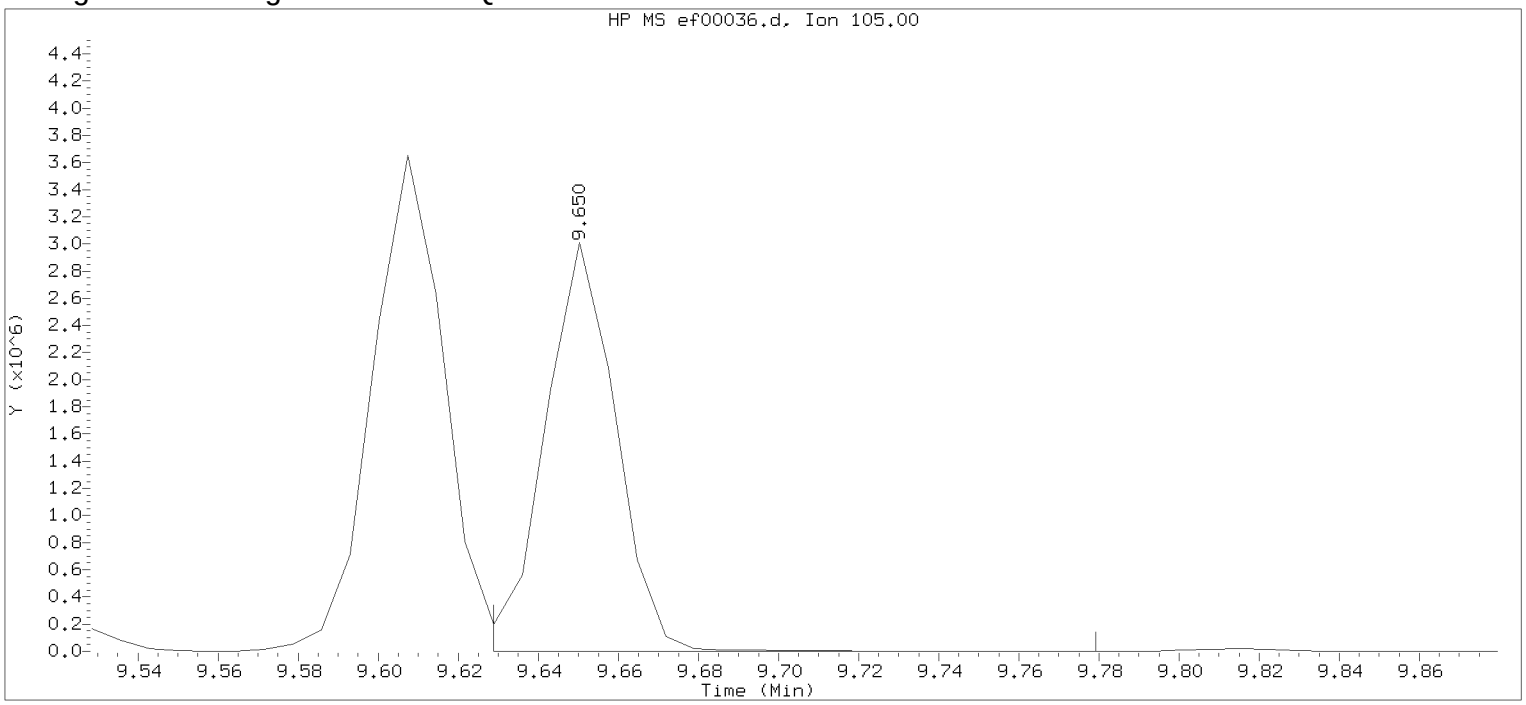
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00036.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 12:47 Analyst ID: jeb07445

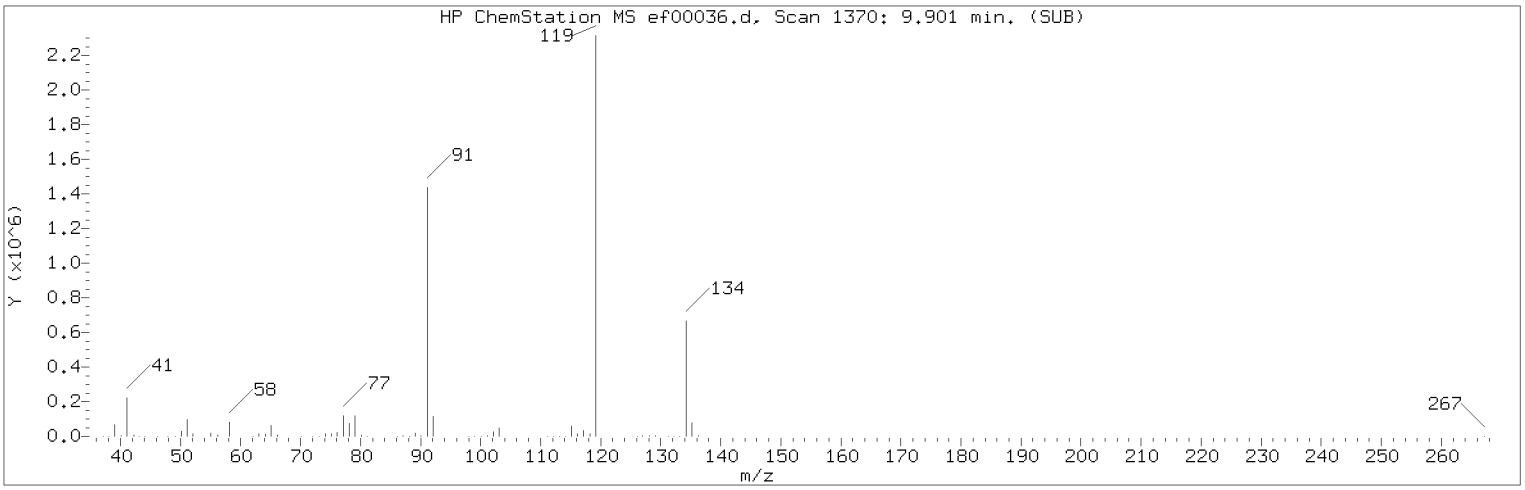
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 13:05 Unknown

Sample Name: VSTD025 Lab Sample ID: VSTD025

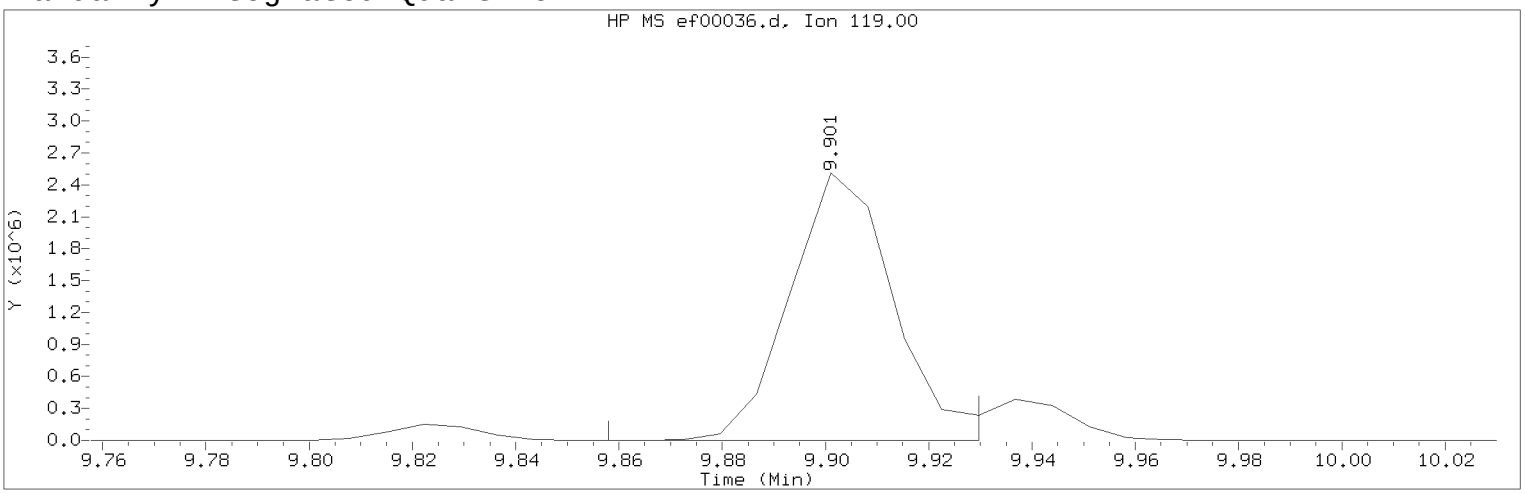
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1335
Retention Time (minutes): 9.650
Quant Ion : 105.00
Area : 3660996
Concentration (ppb(v)) : 19.5189
Integration start scan : 1331 Integration stop scan: 1352
Y at integration start : 886 Y at integration end: 886

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00036.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 12:47 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

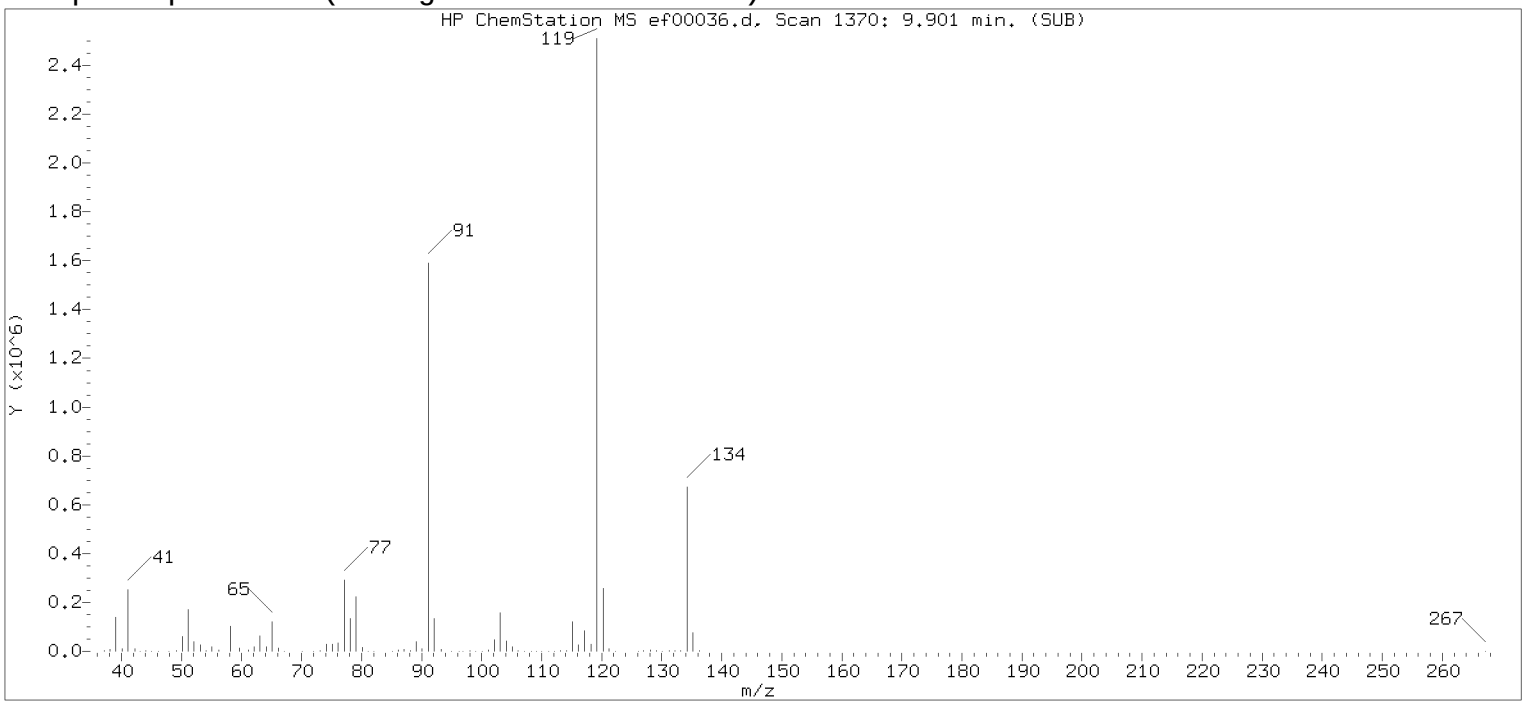
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1370
Retention Time (minutes): 9.901
Quant Ion : 119.00
Area (flag) : 3511653M
Concentration (ppb(v)) : 20.7795
Integration start scan : 1363 Integration stop scan: 1373
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

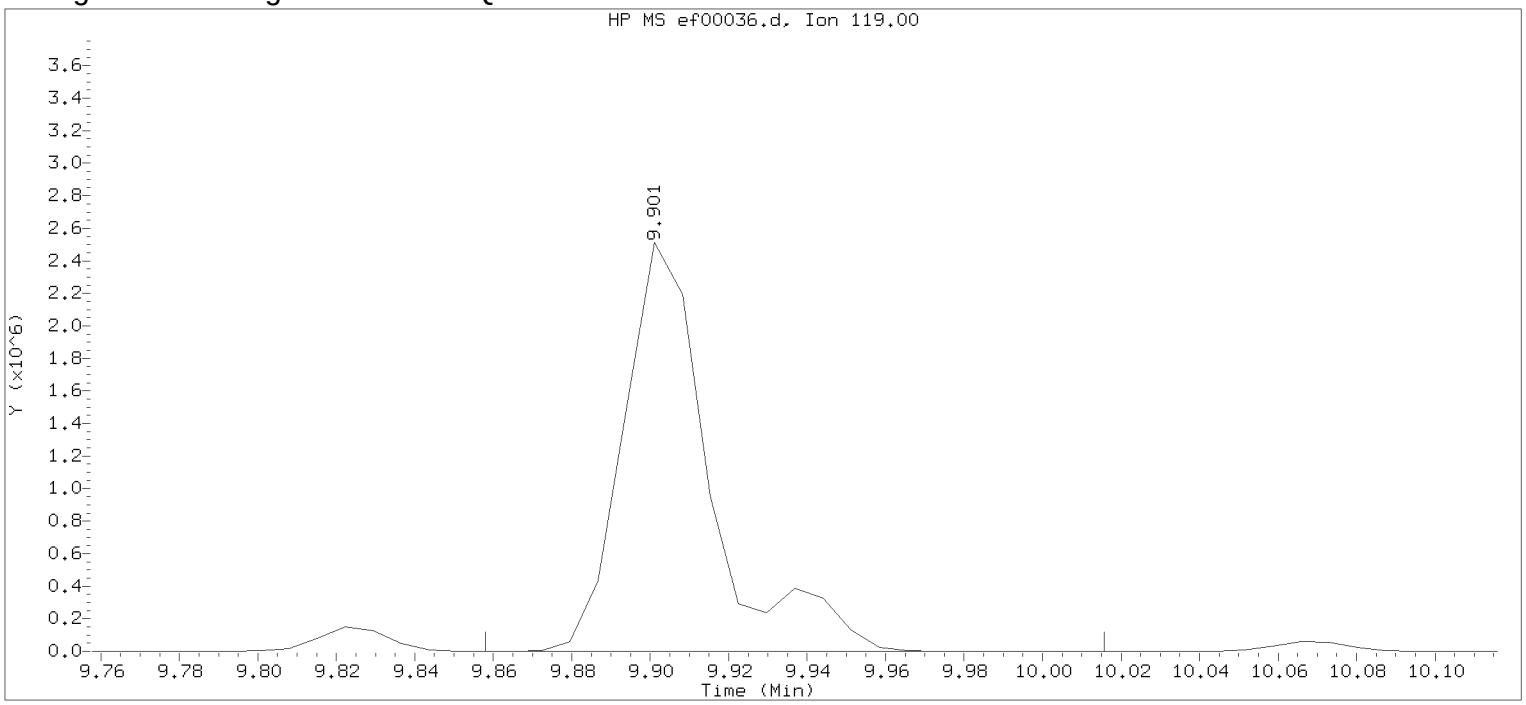
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00036.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 12:47 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 13:05 Unknown

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1370
Retention Time (minutes): 9.901
Quant Ion : 119.00
Area : 3888648
Concentration (ppb(v)) : 27.1274
Integration start scan : 1363 Integration stop scan: 1385
Y at integration start : 0 Y at integration end: 0

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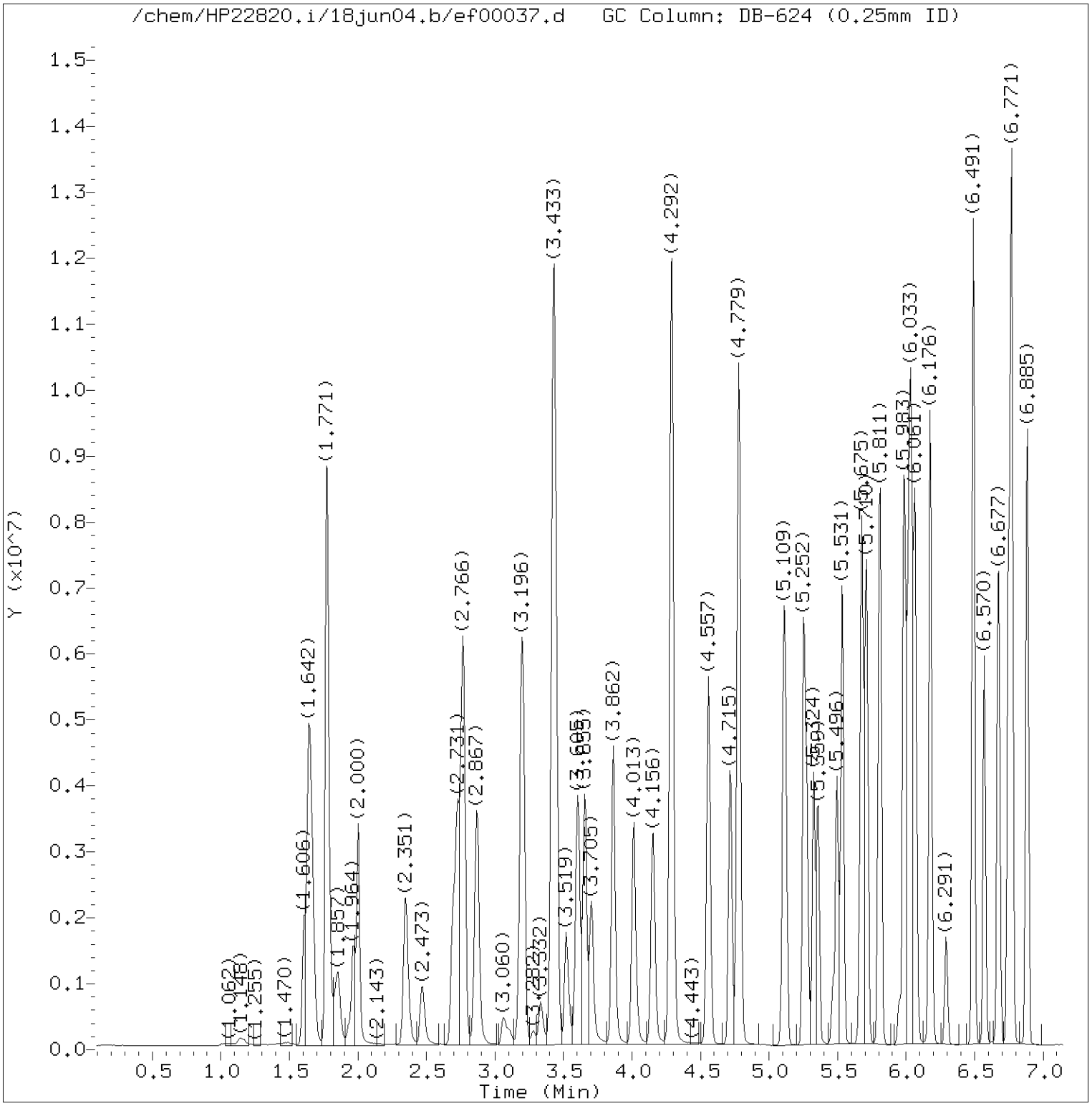
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

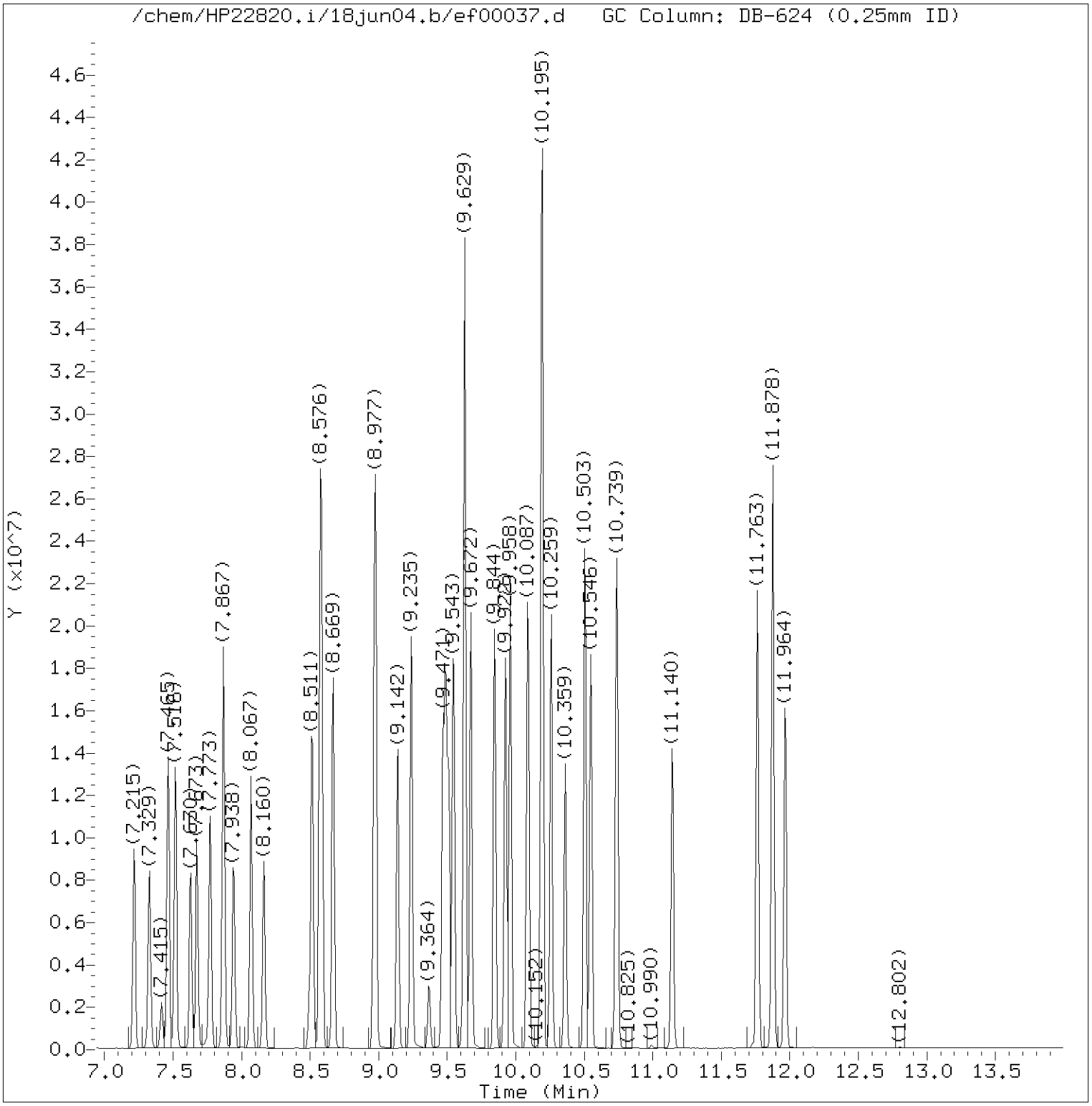
Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00037.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 13:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00037.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 13:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00037.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 13:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.606	41	1330384	69.040
2) Dichlorodifluoromethane	(1)	1.642	85	5441147	72.847
3) Chlorodifluoromethane	(1)	1.663	51	2830908	71.525
4) Freon 114	(1)	1.771	85	5334625	69.799
5) Chloromethane	(1)	1.857	50	1533326	67.870
6) Vinyl Chloride	(1)	1.964	62	1974139	71.196
7) 1,3-Butadiene	(1)	2.000	54	1412530	70.206
8) Bromomethane	(1)	2.351	94	2111002	74.027
9) Chloroethane	(1)	2.473	64	1095814	69.919
10) Bromoethene	(1)	2.695	106	2177316	71.870
11) Dichlorofluoromethane	(1)	2.731	67	4310406	71.311
12) Trichlorofluoromethane	(1)	2.766	101	5581061	70.496
13) Pentane	(1)	2.867	43	2900353	68.228
14) Ethanol	(1)	3.060	45	676713	74.012
15) Freon123a	(1)	3.196	67	3989147	75.916
16) Acrolein	(1)	3.332	56	777758	71.834
17) 1,1-Dichloroethene	(1)	3.425	61	3118019	70.945
18) Freon 113	(1)	3.433	103	3049728	68.810
19) Acetone	(1)	3.519	43	2526503	69.151
20) Methyl Iodide	(1)	3.605	142	5685953	66.902
21) Carbon Disulfide	(1)	3.655	76	5737169	69.704
22) Isopropanol	(1)	3.705	45	2816177	84.053
23) Acetonitrile	(1)	3.862	40	976286	55.042
24) 3-Chloropropene	(1)	3.862	76	997182	77.323
25) Methylene Chloride	(1)	4.013	84	1930346	77.128
26) tert-Butyl Alcohol	(1)	4.156	59	4165028	81.776
28) trans-1,2-Dichloroethene	(1)	4.285	61	2781217	69.972
29) Methyl t-Butyl Ether	(1)	4.285	73	5658880	66.716
27) Acrylonitrile	(1)	4.292	53	1572028	70.592
30) Hexane	(1)	4.557	57	2938628	67.322
31) 1,1-Dichloroethane	(1)	4.715	63	3605741	69.621
32) Vinyl Acetate	(1)	4.779	86	630690	83.284
33) Di-Isopropyl Ether	(1)	4.779	45	5800932	67.244
34) Ethyl Tert-Butyl Ether	(1)	5.109	59	5673879	68.924
35) cis-1,2-Dichloroethene	(1)	5.252	61	2711027	70.652
37) 2-Butanone	(1)	5.281	72	1100714	68.917
38) Ethyl Acetate	(1)	5.324	70	523773	66.462
39) Methyl Acrylate	(1)	5.359	55	3363233	69.456

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on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00037.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 13:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	310785	10.000
41) Tetrahydrofuran	(1)	5.496	42	1935243	68.418
42) Chloroform	(1)	5.531	83	4515532	69.504
43) 1,1,1-Trichloroethane	(1)	5.675	97	4568384	69.420
44) Cyclohexane	(1)	5.710	56	2992269	66.108
45) Carbon Tetrachloride	(1)	5.811	117	4686253	72.536
46) Benzene	(2)	5.983	78	6585627	67.498
47) 1,2-Dichloroethane	(2)	6.011	62	2752625	69.411
48) Isooctane	(2)	6.033	57	9272439	68.661
49) Tert-Amyl Methyl Ether	(2)	6.061	73	5601317	68.830
50) Heptane	(2)	6.176	43	3084780	66.839
51)*1,4-Difluorobenzene	(2)	6.291	114	1134459	10.000
52) Trichloroethene	(2)	6.491	130	3432582	70.819
53) Ethyl Acrylate	(2)	6.570	55	4404561	71.331
36) 1,2-Dichloroethene (total)	(1)		61	5492244	140.624
54) 1,2-Dichloropropane	(2)	6.677	63	2298858	67.310
57) Methyl Methacrylate	(2)	6.749	69	2405998	70.449
56) 1,4-Dioxane	(2)	6.771	88	1721138	69.397
55) Dibromomethane	(2)	6.771	174	3375291	71.955
58) Bromodichloromethane	(2)	6.885	83	4700117	70.299
59) cis-1,3-Dichloropropene	(2)	7.215	75	4172255	70.780
60) 4-Methyl-2-Pentanone	(2)	7.329	43	4286615	66.768
61) Toluene	(3)	7.465	91	7986127	61.692
62) Octane	(3)	7.516	43	4053633	60.204
63) trans-1,3-Dichloropropene	(3)	7.630	75	3528199	69.127
65) Ethyl Methacrylate	(3)	7.673	69	4044381	69.826
66) 1,1,2-Trichloroethane	(3)	7.773	97	2880669	62.981
67) Tetrachloroethene	(3)	7.867	166	4741656	65.457
68) 2-Hexanone	(3)	7.938	43	4124033	63.677
69) Dibromochloromethane	(3)	8.067	127	4080697	70.734
70) 1,2-Dibromoethane	(3)	8.160	107	4689021	65.879
71)*Chlorobenzene-d5	(3)	8.497	117	1122091	10.000
72) Chlorobenzene	(3)	8.518	112	7010547	63.271
73) 1,1,1,2-Tetrachloroethane	(3)	8.576	131	3821332	70.857
74) Ethylbenzene	(3)	8.583	91	10000475	57.759
75) m/p-Xylene	(3)	8.669	91	8103024	57.648
76) o-Xylene	(3)	8.970	91	8154885	58.692
78) Styrene	(3)	8.977	104	6688928	63.540

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00037.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 13:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

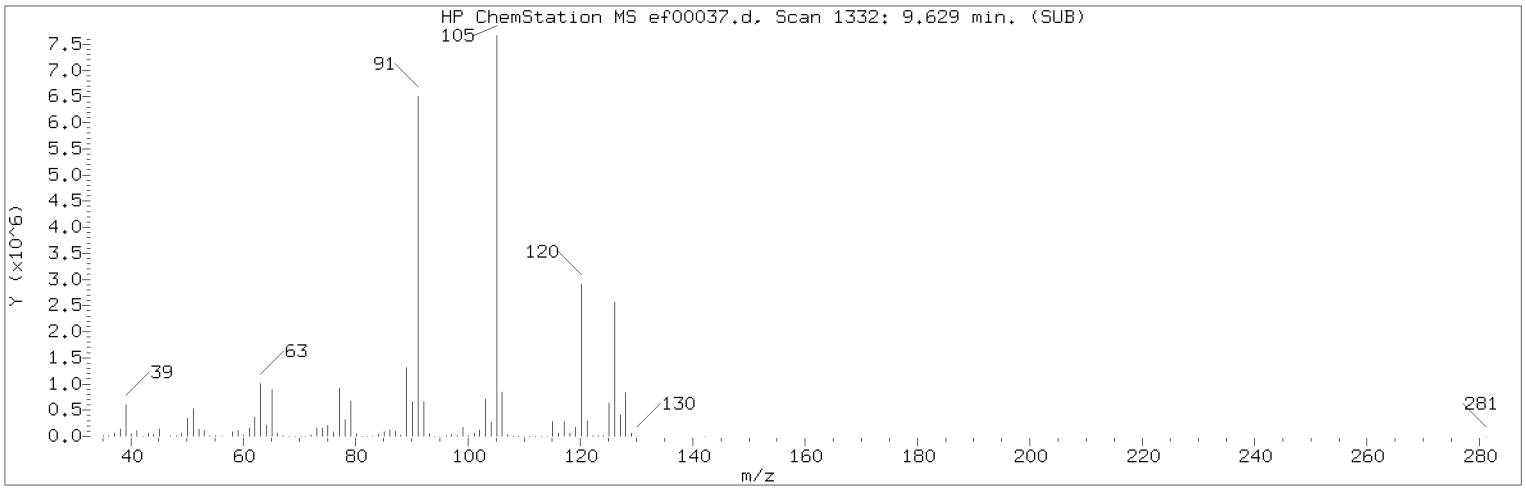
Sample Name: VSTD070 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	5533749	74.554
80) Cumene	(3)	9.235	105	10868348	54.857
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	5906090	60.613
81) Bromobenzene	(3)	9.493	156	4463649	63.405
83) 1,2,3-Trichloropropane	(3)	9.514	110	1901705	61.096
84) n-Propylbenzene	(3)	9.550	120	3516866	61.760
86) 4-Ethyltoluene	(3)	9.629	105	11071989M	57.780
85) 2-Chlorotoluene	(3)	9.629	126	3268116	62.352
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	9123214M	57.206
88) Alpha Methyl Styrene	(3)	9.844	118	5321412	63.615
89) tert-Butylbenzene	(3)	9.922	119	8560199M	51.455
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	9079478	57.668
91) sec-Butylbenzene	(3)	10.087	105	12346394	51.821
92) 1,3-Dichlorobenzene	(3)	10.195	146	7201070	61.544
94) p-Isopropyltoluene	(3)	10.195	119	11248408	55.172
93) 1,4-Dichlorobenzene	(3)	10.259	146	7111539	59.633
95) Benzyl Chloride	(3)	10.359	91	7722859	71.594
97) n-Butylbenzene	(3)	10.503	91	10165550	55.486
96) 1,2-Dichlorobenzene	(3)	10.546	146	6635216	59.585
98) Hexachloroethane	(3)	10.739	117	3685391	85.140
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	3728186	64.762
100) 1,2,4-Trichlorobenzene	(3)	11.763	180	5747986	60.226
101) Hexachlorobutadiene	(3)	11.878	225	4901373	60.052
102) Naphthalene	(3)	11.964	128	10964534	51.955
64) 1,3-Dichloropropene (total)	(3)		75	7700454	137.868
77) Xylene (total)	(3)		91	16257909	116.334

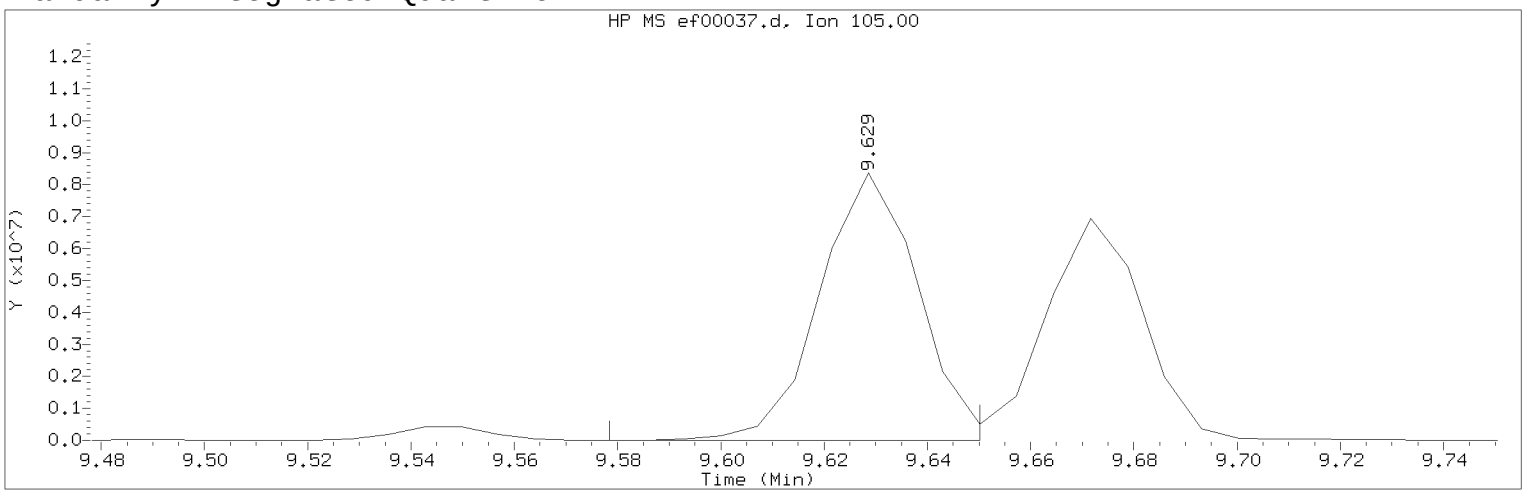
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00037.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 13:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

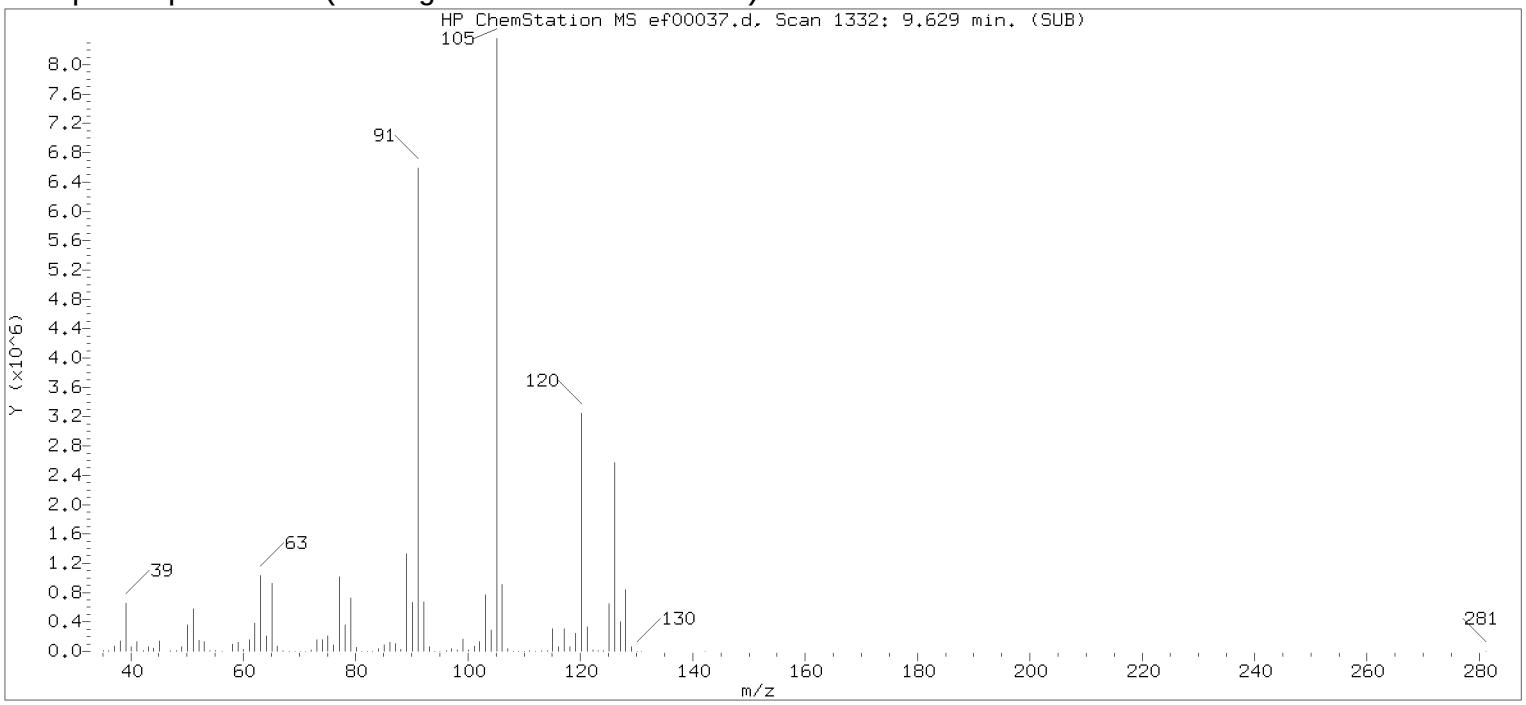
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 11071989M
Concentration (ppb(v)) : 57.7802
Integration start scan : 1324 Integration stop scan: 1334
Y at integration start : 1057 Y at integration end: 1057

Reason for manual integration: improper integration

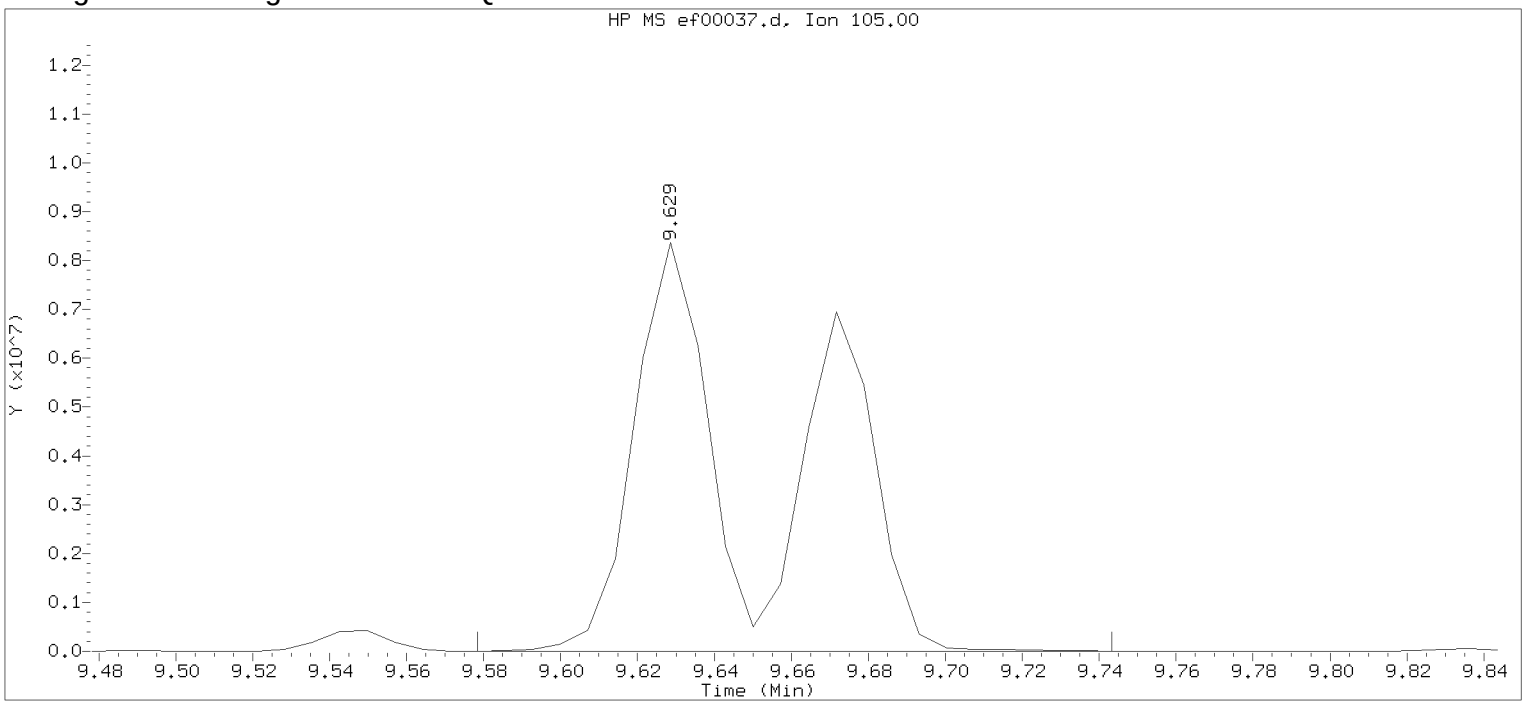
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00037.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 13:24 Analyst ID: jeb07445

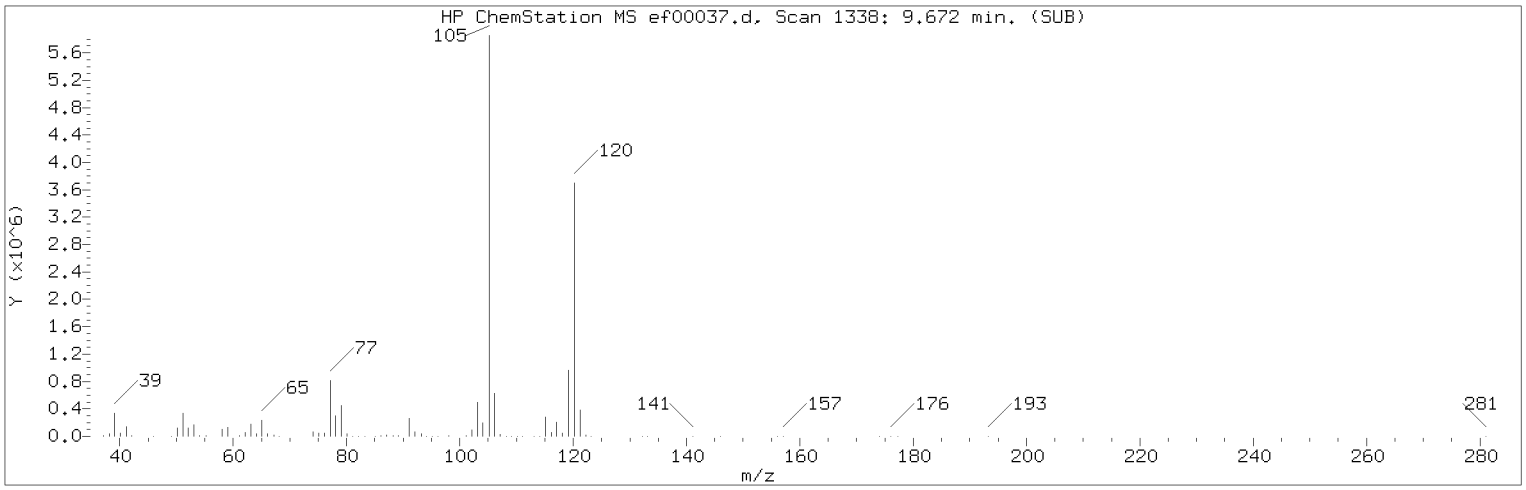
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 13:43 Unknown

Sample Name: VSTD070 Lab Sample ID: VSTD070

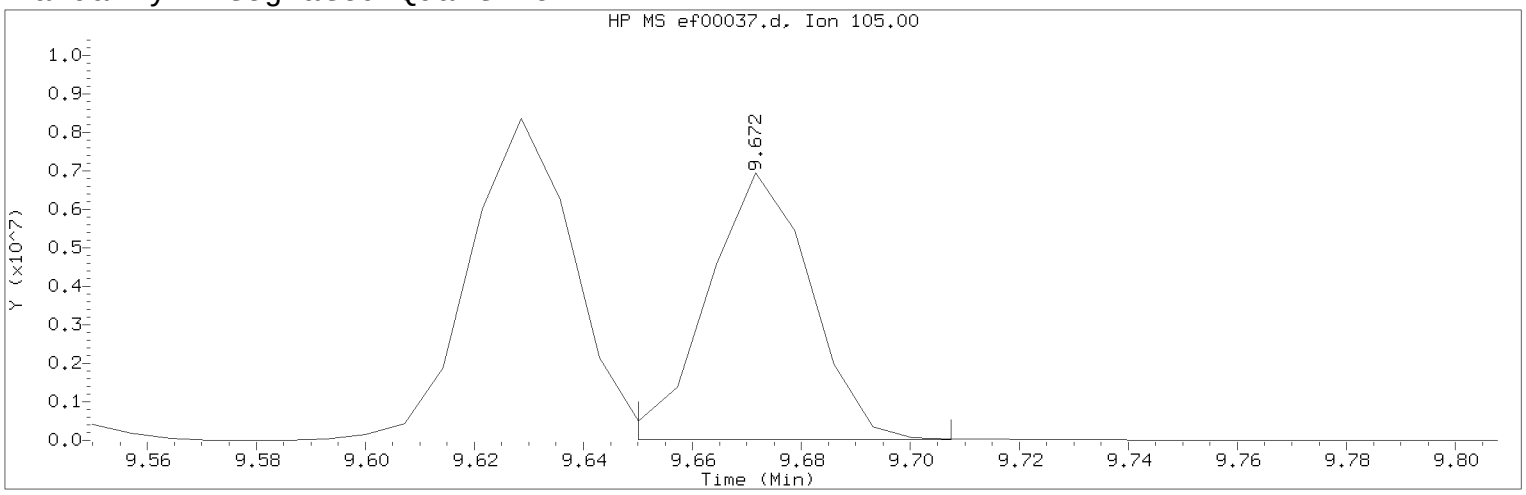
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 20042845
Concentration (ppb(v)) : 108.5520
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 1057 Y at integration end: 1057

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00037.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 13:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

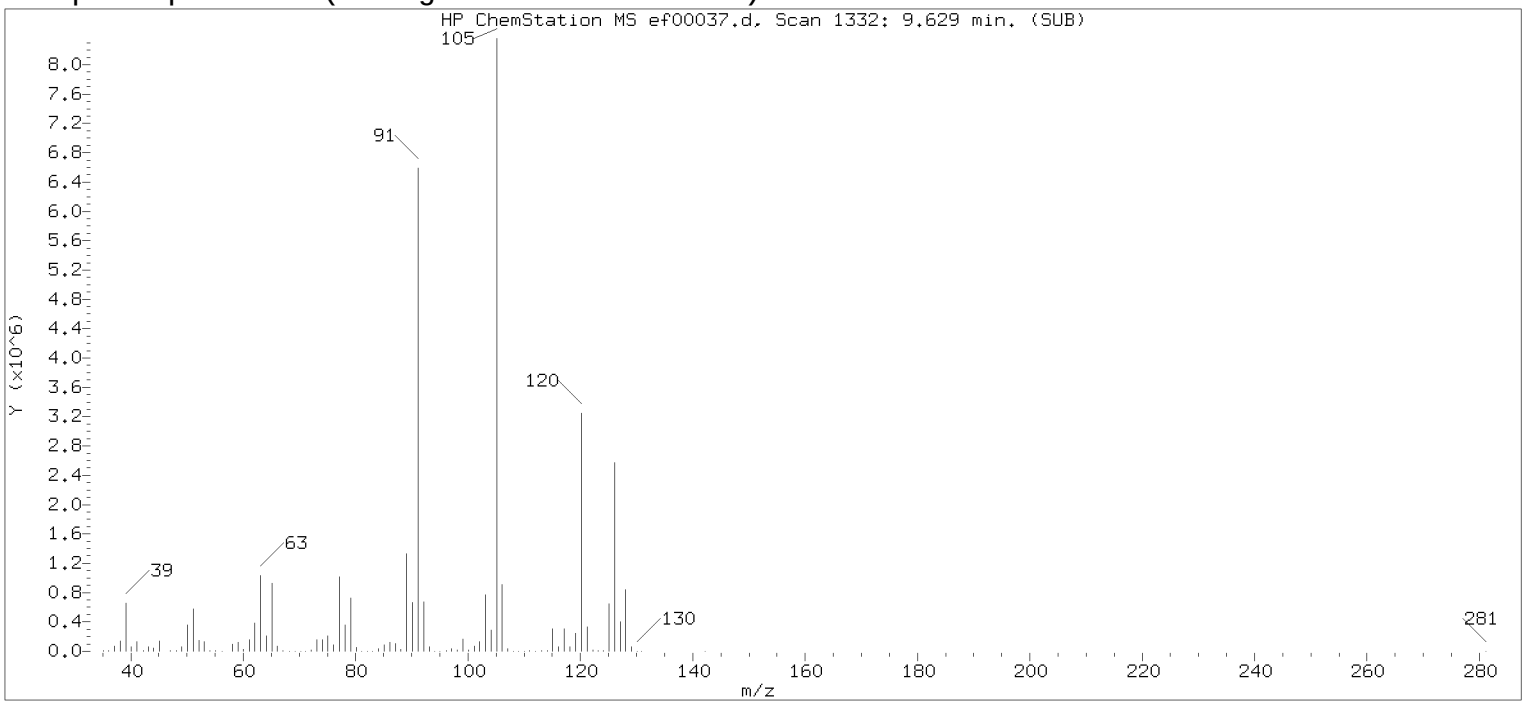
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 9123214M
Concentration (ppb(v)) : 57.2058
Integration start scan : 1334 Integration stop scan: 1342
Y at integration start : 8957 Y at integration end: 8957

Reason for manual integration: improper integration

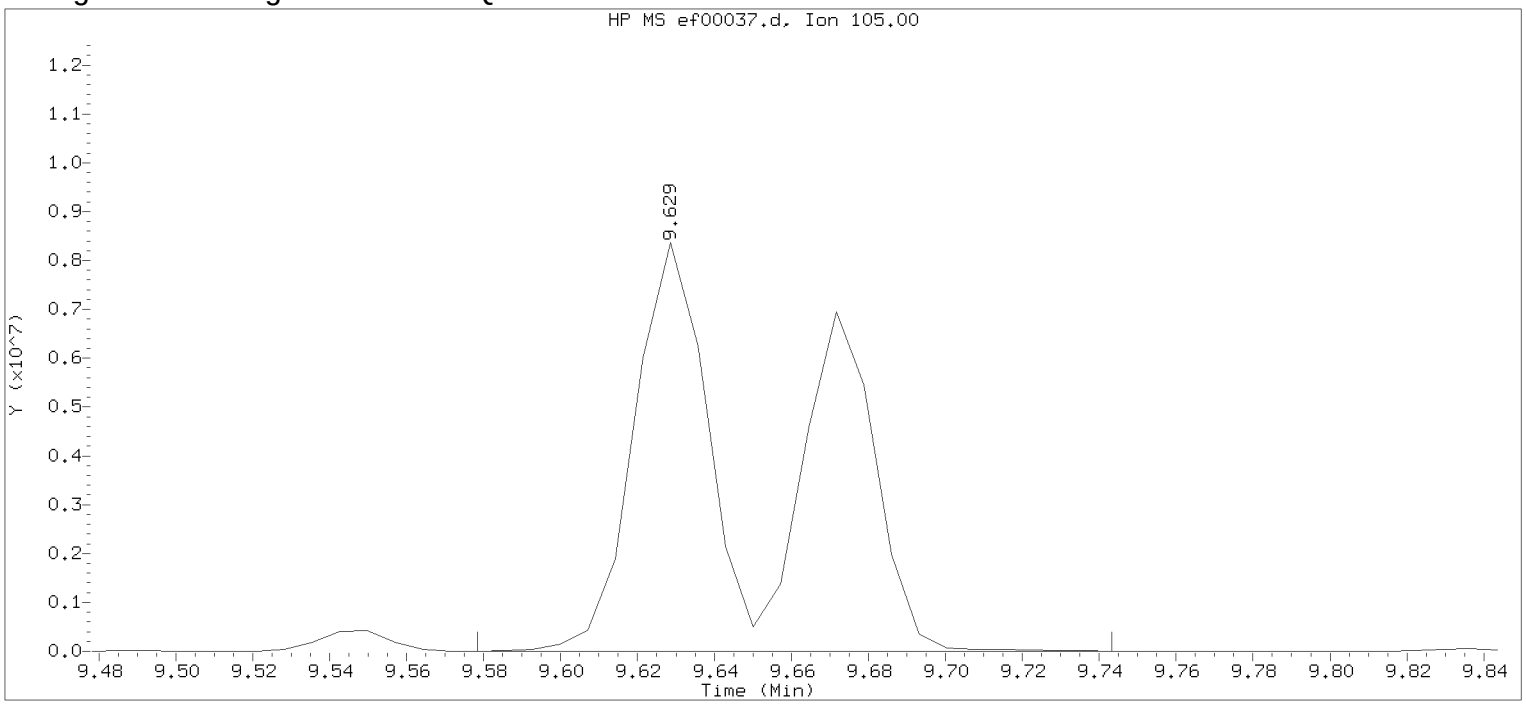
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00037.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 13:24 Analyst ID: jeb07445

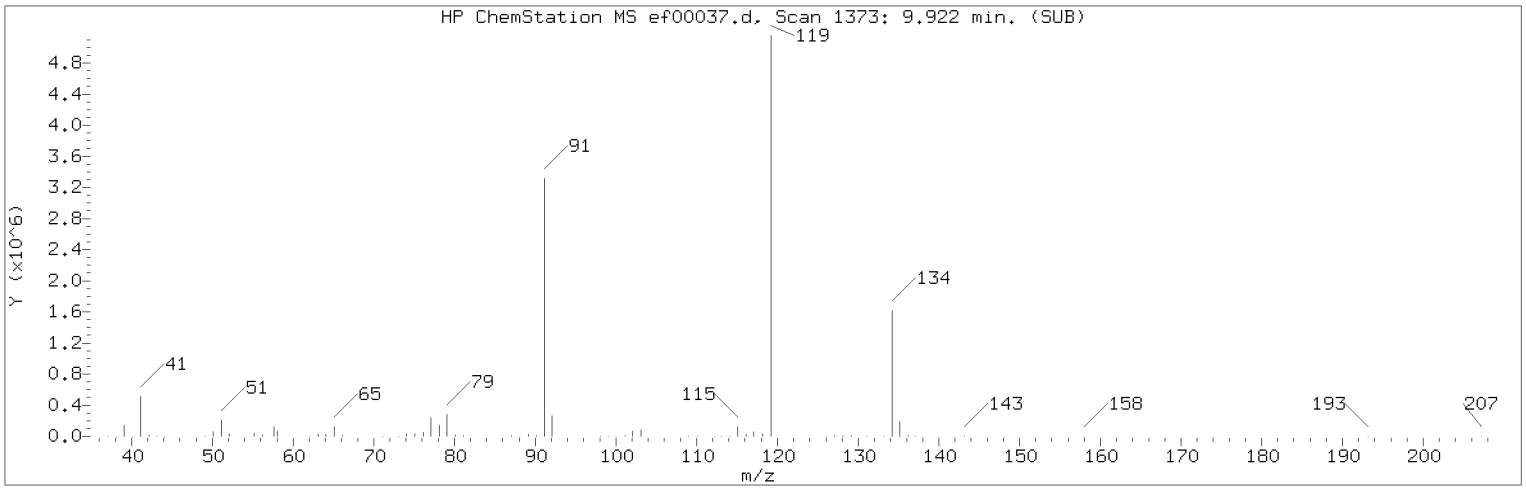
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 13:43 Unknown

Sample Name: VSTD070 Lab Sample ID: VSTD070

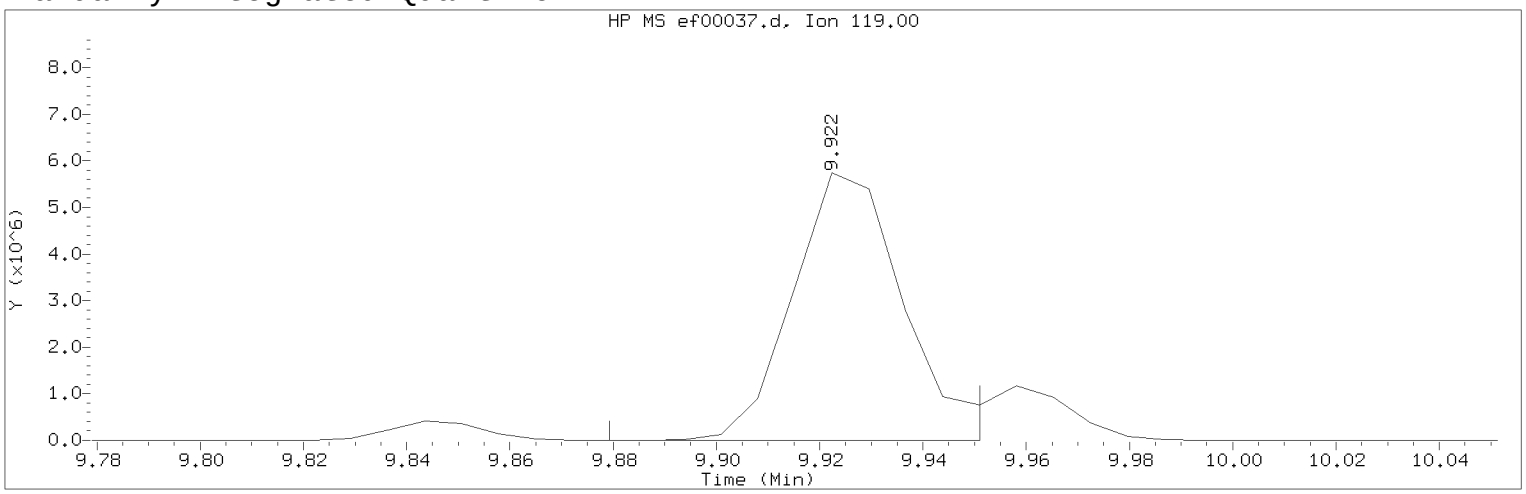
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 20032489
Concentration (ppb(v)) : 130.6809
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 2217 Y at integration end: 2217

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00037.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 13:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

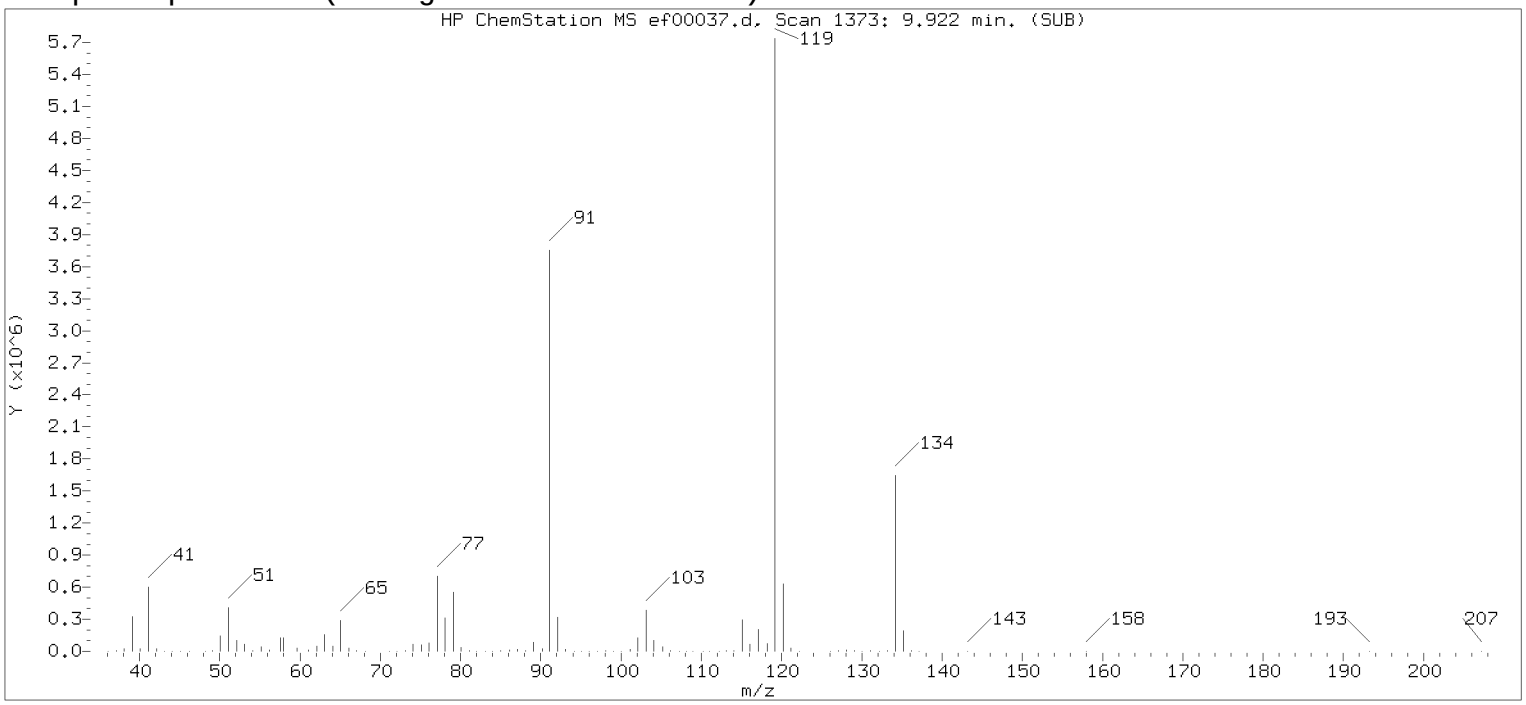
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 8560199M
Concentration (ppb(v)) : 51.4551
Integration start scan : 1366 Integration stop scan: 1376
Y at integration start : 492 Y at integration end: 492

Reason for manual integration: improper integration

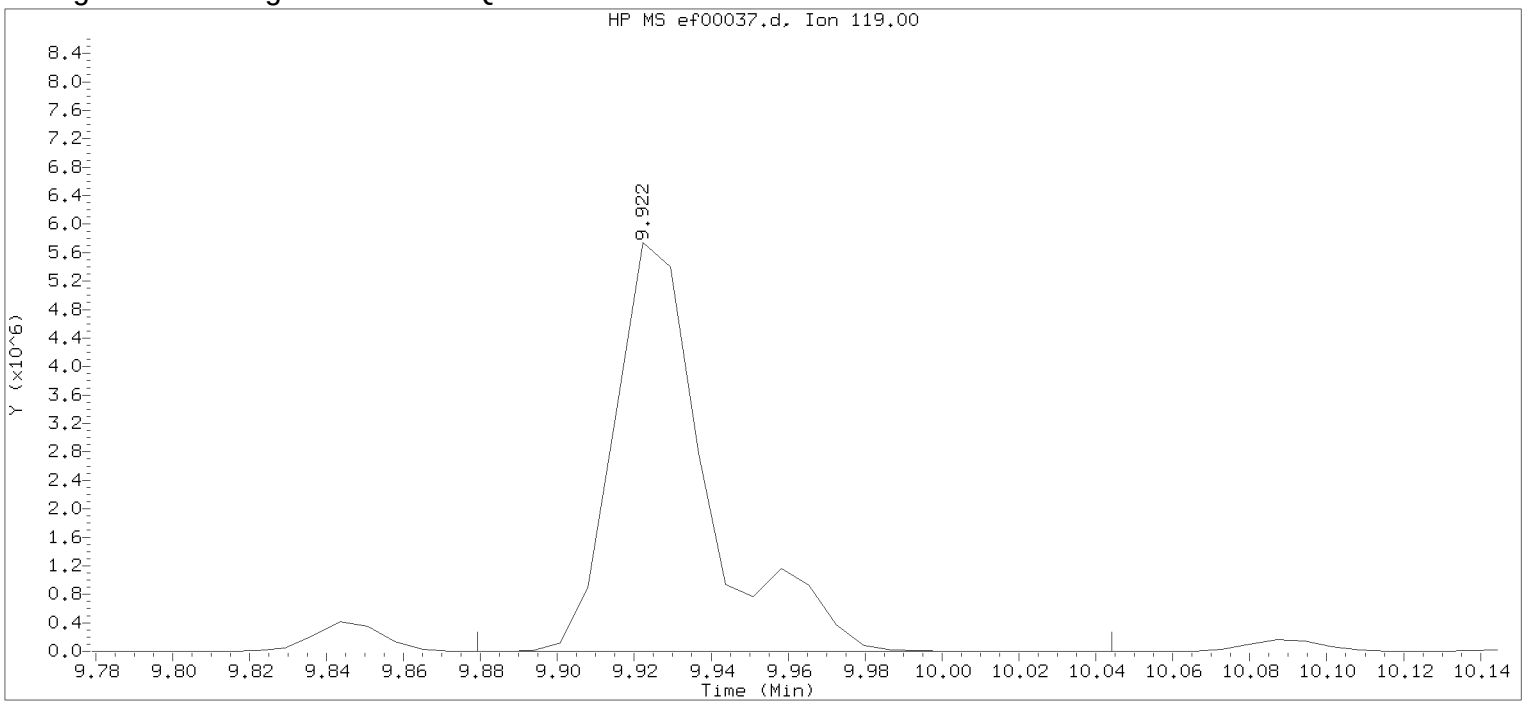
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



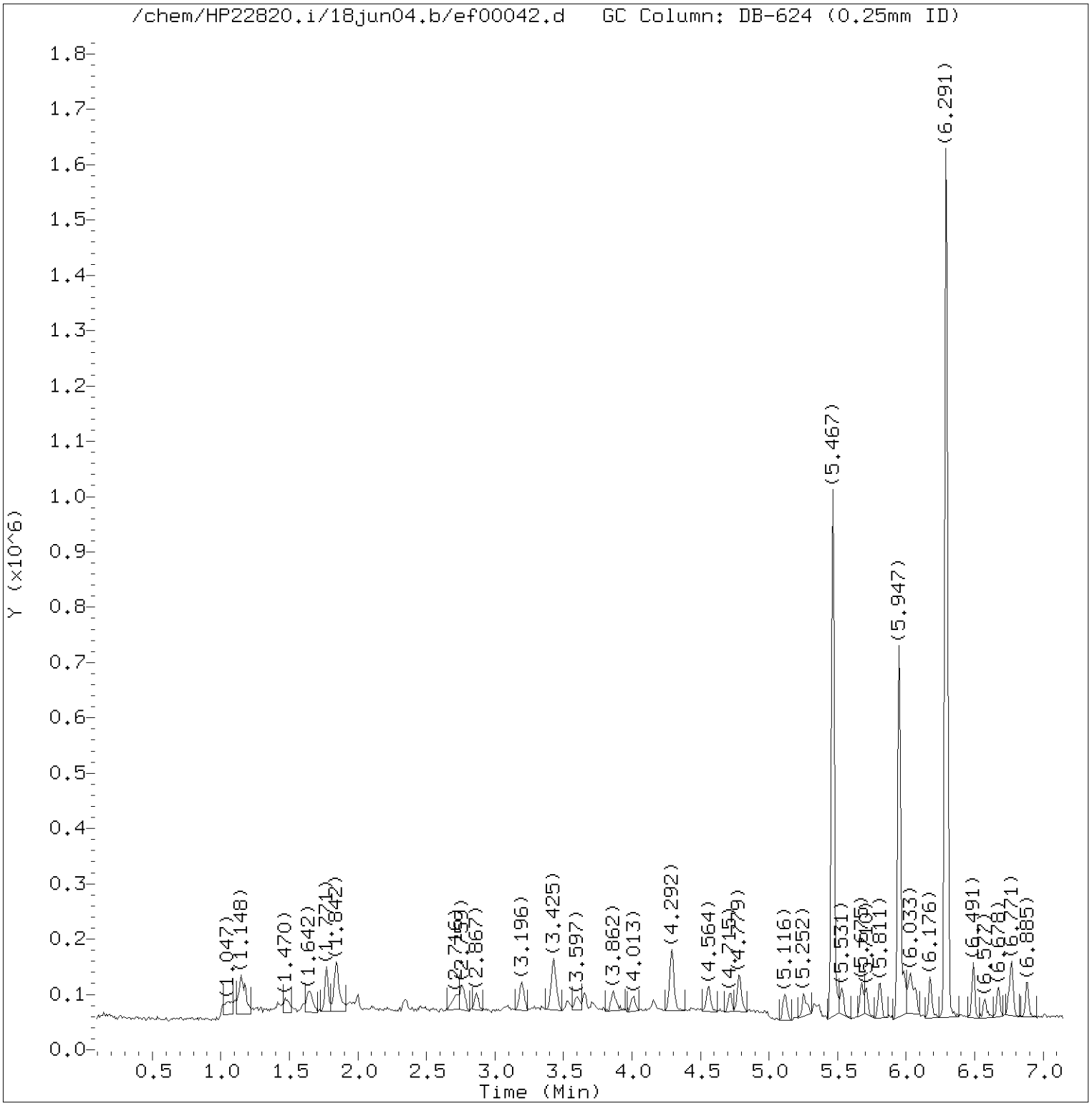
Data File: /chem/HP22820.i/18jun04.b/ef00037.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 13:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 13:43 Unknown

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 9663606
Concentration (ppb(v)) : 68.4811
Integration start scan : 1366 Integration stop scan: 1389
Y at integration start : 492 Y at integration end: 492

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

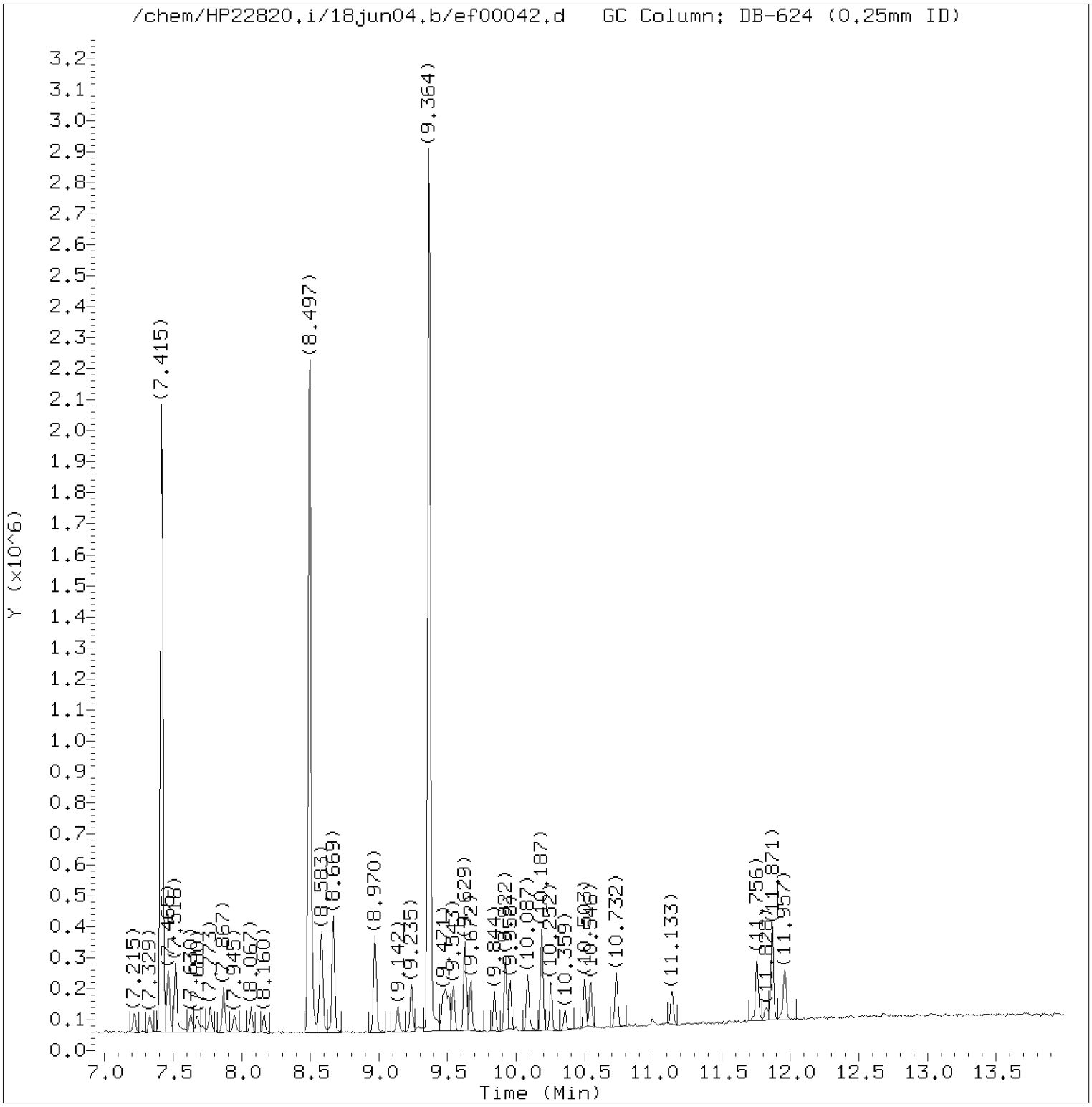
Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00042.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:45 jbs01304

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

Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00042.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:45 jbs01304

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

Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00042.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:45 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.599	41	10491	0.552
2) Dichlorodifluoromethane	(1)	1.642	85	38571	0.523
3) Chlorodifluoromethane	(1)	1.663	51	20699	0.530
4) Freon 114	(1)	1.771	85	40716	0.540
5) Chloromethane	(1)	1.850	50	13255	0.595
6) Vinyl Chloride	(1)	1.964	62	14098	0.515
7) 1,3-Butadiene	(1)	2.000	54	10838	0.546
8) Bromomethane	(1)	2.344	94	17568	0.624
9) Chloroethane	(1)	2.466	64	9353	0.605
10) Bromoethene	(1)	2.681	106	14122	0.473
11) Dichlorofluoromethane	(1)	2.731	67	33493	0.562
12) Trichlorofluoromethane	(1)	2.766	101	41790	0.535
13) Pentane	(1)	2.860	43	23025	0.549
14) Ethanol	(1)	3.082	45	12908	1.431
15) Freon123a	(1)	3.196	67	33779	0.652
16) Acrolein	(1)	3.340	56	7099	0.665
17) 1,1-Dichloroethene	(1)	3.418	61	24443	0.564
18) Freon 113	(1)	3.433	103	24813	0.567
19) Acetone	(1)	3.533	43	29319	0.813
20) Methyl Iodide	(1)	3.605	142	40247	0.480
21) Carbon Disulfide	(1)	3.655	76	43854	0.540
22) Isopropanol	(1)	3.712	45	23094	0.621
24) 3-Chloropropene	(1)	3.862	76	8494	0.668
23) Acetonitrile	(1)	3.891	40	18136M	1.036
25) Methylene Chloride	(1)	4.006	84	15637	0.633
26) tert-Butyl Alcohol	(1)	4.156	59	25914	0.516
28) trans-1,2-Dichloroethene	(1)	4.285	61	21872	0.558
29) Methyl t-Butyl Ether	(1)	4.292	73	64019	0.765
27) Acrylonitrile	(1)	4.299	53	15933	0.725
30) Hexane	(1)	4.557	57	23895	0.555
31) 1,1-Dichloroethane	(1)	4.715	63	28566	0.559
32) Vinyl Acetate	(1)	4.786	86	3663	0.490
33) Di-Isopropyl Ether	(1)	4.786	45	40750	0.479
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	33452	0.412
35) cis-1,2-Dichloroethene	(1)	5.252	61	20366	0.538
37) 2-Butanone	(1)	5.281	72	8999	0.571
38) Ethyl Acetate	(1)	5.331	70	5637	0.725
39) Methyl Acrylate	(1)	5.359	55	24382	0.510

M = Compound was manually integrated.

Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00042.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:45 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	306598	10.000
41) Tetrahydrofuran	(1)	5.503	42	16038	0.575
42) Chloroform	(1)	5.531	83	34195	0.534
43) 1,1,1-Trichloroethane	(1)	5.675	97	33062	0.509
44) Cyclohexane	(1)	5.710	56	24610	0.551
45) Carbon Tetrachloride	(1)	5.804	117	31833	0.499
46) Benzene	(2)	5.983	78	59138	0.617
47) 1,2-Dichloroethane	(2)	6.011	62	22160	0.569
48) Isooctane	(2)	6.033	57	73455	0.554
49) Tert-Amyl Methyl Ether	(2)	6.076	73	35782	0.448
50) Heptane	(2)	6.176	43	26194	0.578
51)*1,4-Difluorobenzene	(2)	6.291	114	1114233	10.000
52) Trichloroethene	(2)	6.491	130	26748	0.562
53) Ethyl Acrylate	(2)	6.577	55	31243	0.515
36) 1,2-Dichloroethene (total)	(1)		61	42238	1.096
54) 1,2-Dichloropropane	(2)	6.670	63	18068	0.539
57) Methyl Methacrylate	(2)	6.749	69	18907	0.564
55) Dibromomethane	(2)	6.771	174	24716	0.536
56) 1,4-Dioxane	(2)	6.778	88	13812	0.567
58) Bromodichloromethane	(2)	6.885	83	34562	0.526
59) cis-1,3-Dichloropropene	(2)	7.215	75	26220	0.453
60) 4-Methyl-2-Pentanone	(2)	7.329	43	28706	0.455
61) Toluene	(3)	7.465	91	108328	0.878
62) Octane	(3)	7.516	43	65392	1.018
63) trans-1,3-Dichloropropene	(3)	7.630	75	22444	0.461
65) Ethyl Methacrylate	(3)	7.680	69	26590	0.481
66) 1,1,2-Trichloroethane	(3)	7.773	97	22488	0.516
67) Tetrachloroethene	(3)	7.867	166	34871	0.505
68) 2-Hexanone	(3)	7.945	43	30652	0.496
69) Dibromochloromethane	(3)	8.067	127	25711	0.467
70) 1,2-Dibromoethane	(3)	8.160	107	32297	0.476
71)*Chlorobenzene-d5	(3)	8.497	117	1070009	10.000
72) Chlorobenzene	(3)	8.518	112	51375	0.486
73) 1,1,1,2-Tetrachloroethane	(3)	8.576	131	23945	0.466
74) Ethylbenzene	(3)	8.583	91	149283	0.904
75) m/p-Xylene	(3)	8.669	91	179032	1.336
76) o-Xylene	(3)	8.970	91	129687	0.979
78) Styrene	(3)	8.977	104	44109	0.439

* = Compound is an internal standard.

Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00042.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:45 jbs01304

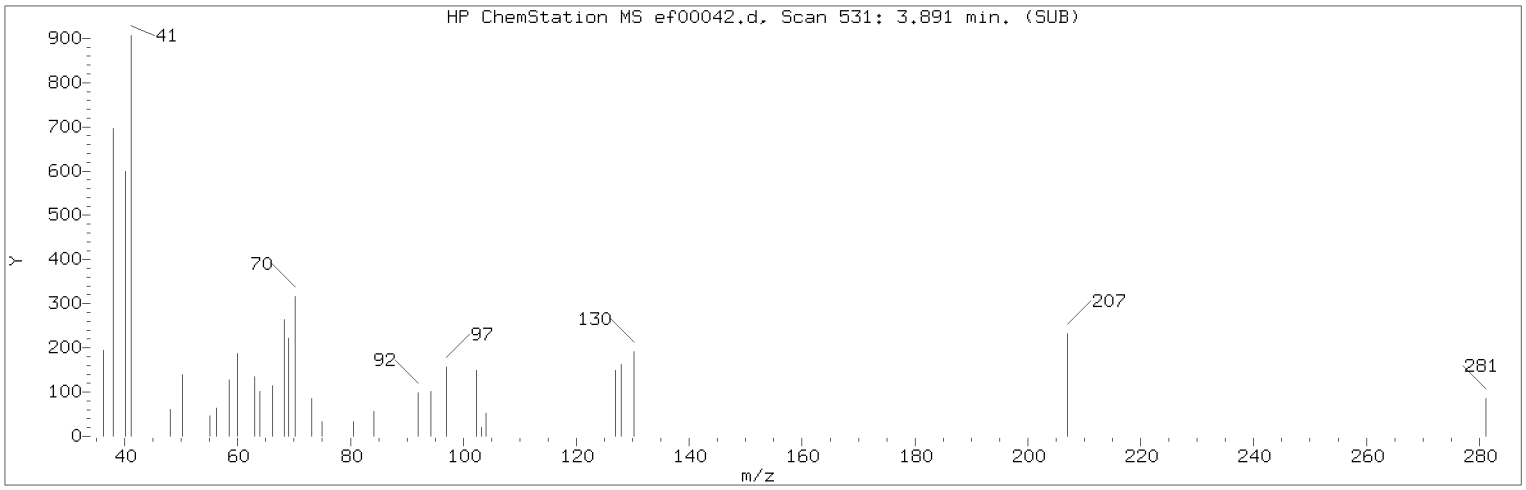
Sample Name: mdlv0.5 Lab Sample ID: mdlv0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	32861	0.464
80) Cumene	(3)	9.235	105	91306	0.483
83) 1,2,3-Trichloropropane	(3)	9.421	110	15630	0.527
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	46344	0.499
81) Bromobenzene	(3)	9.485	156	32612	0.486
84) n-Propylbenzene	(3)	9.543	120	23955	0.441
85) 2-Chlorotoluene	(3)	9.622	126	22801	0.456
86) 4-Ethyltoluene	(3)	9.629	105	78748M	0.431
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	73013M	0.480
88) Alpha Methyl Styrene	(3)	9.844	118	31626	0.396
89) tert-Butylbenzene	(3)	9.922	119	105356M	0.664
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	70979	0.473
91) sec-Butylbenzene	(3)	10.087	105	109854	0.484
92) 1,3-Dichlorobenzene	(3)	10.187	146	54793	0.491
94) p-Isopropyltoluene	(3)	10.187	119	87867	0.452
93) 1,4-Dichlorobenzene	(3)	10.252	146	57790	0.508
95) Benzyl Chloride	(3)	10.359	91	42118	0.409
97) n-Butylbenzene	(3)	10.503	91	80037	0.458
96) 1,2-Dichlorobenzene	(3)	10.546	146	54650	0.515
98) Hexachloroethane	(3)	10.732	117	21692	0.526
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	28265	0.515
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	61931	0.680
101) Hexachlorobutadiene	(3)	11.871	225	54684	0.703
102) Naphthalene	(3)	11.964	128	142592	0.709
64) 1,3-Dichloropropene (total)	(3)		75	48664	0.914
77) Xylene (total)	(3)		91	308719	2.315

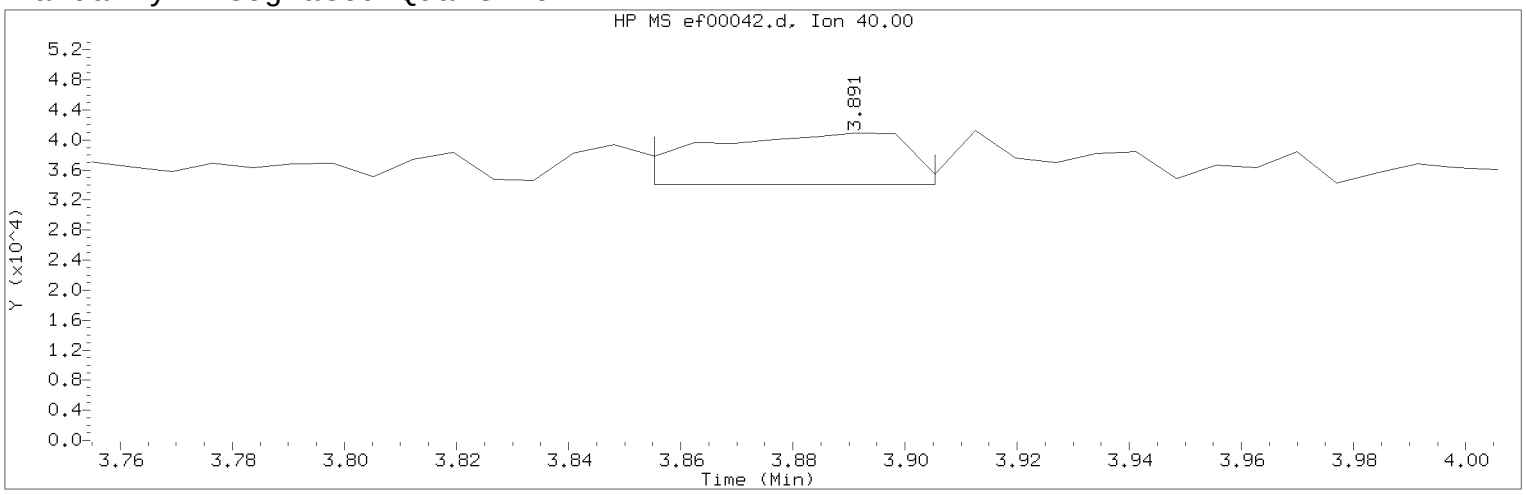
M = Compound was manually integrated.

Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00042.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:45 jbs01304

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

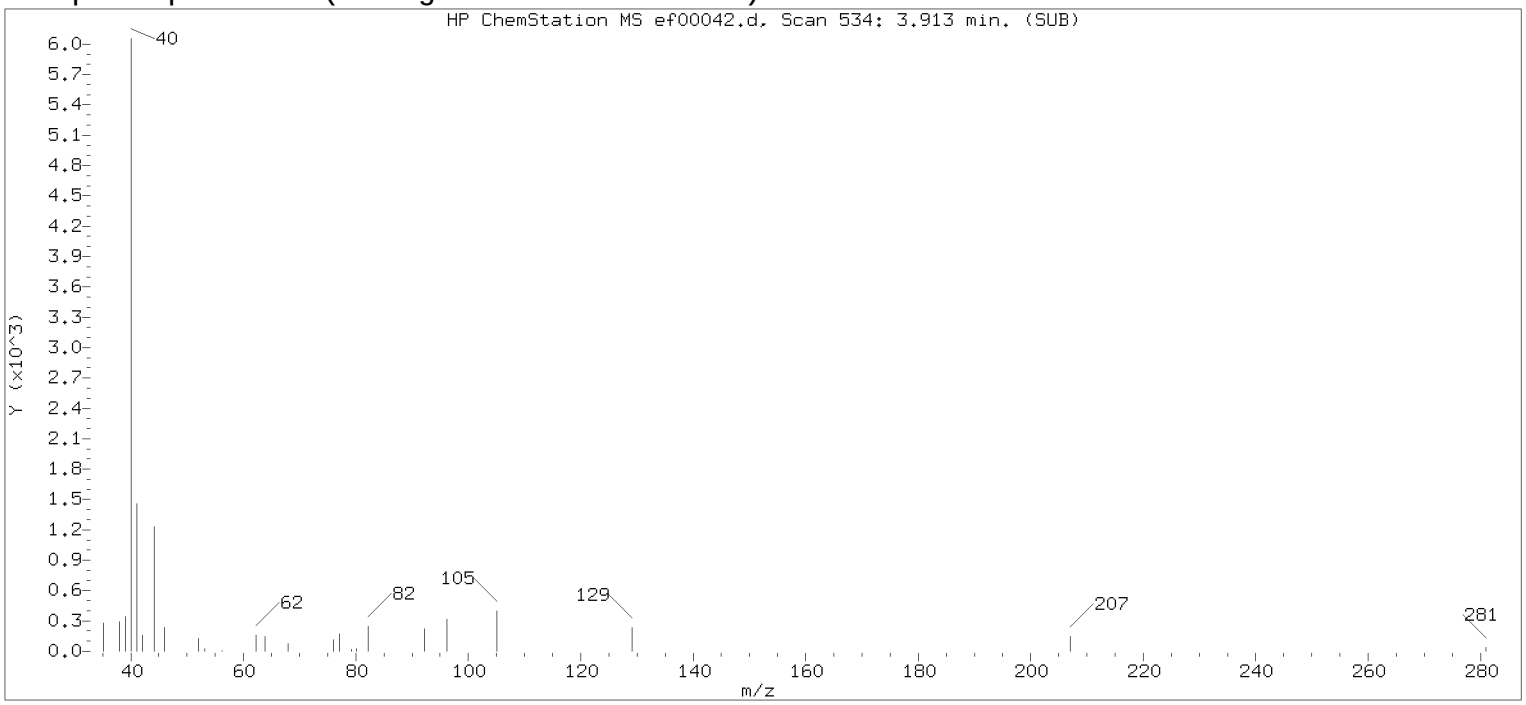
Compound Number : 23
Compound Name : Acetonitrile
Scan Number : 531
Retention Time (minutes): 3.891
Quant Ion : 40.00
Area (flag) : 18136M
Concentration (ppb(v)) : 1.0365
Integration start scan : 525 Integration stop scan: 532
Y at integration start : 34068 Y at integration end: 34068

Reason for manual integration: improper integration

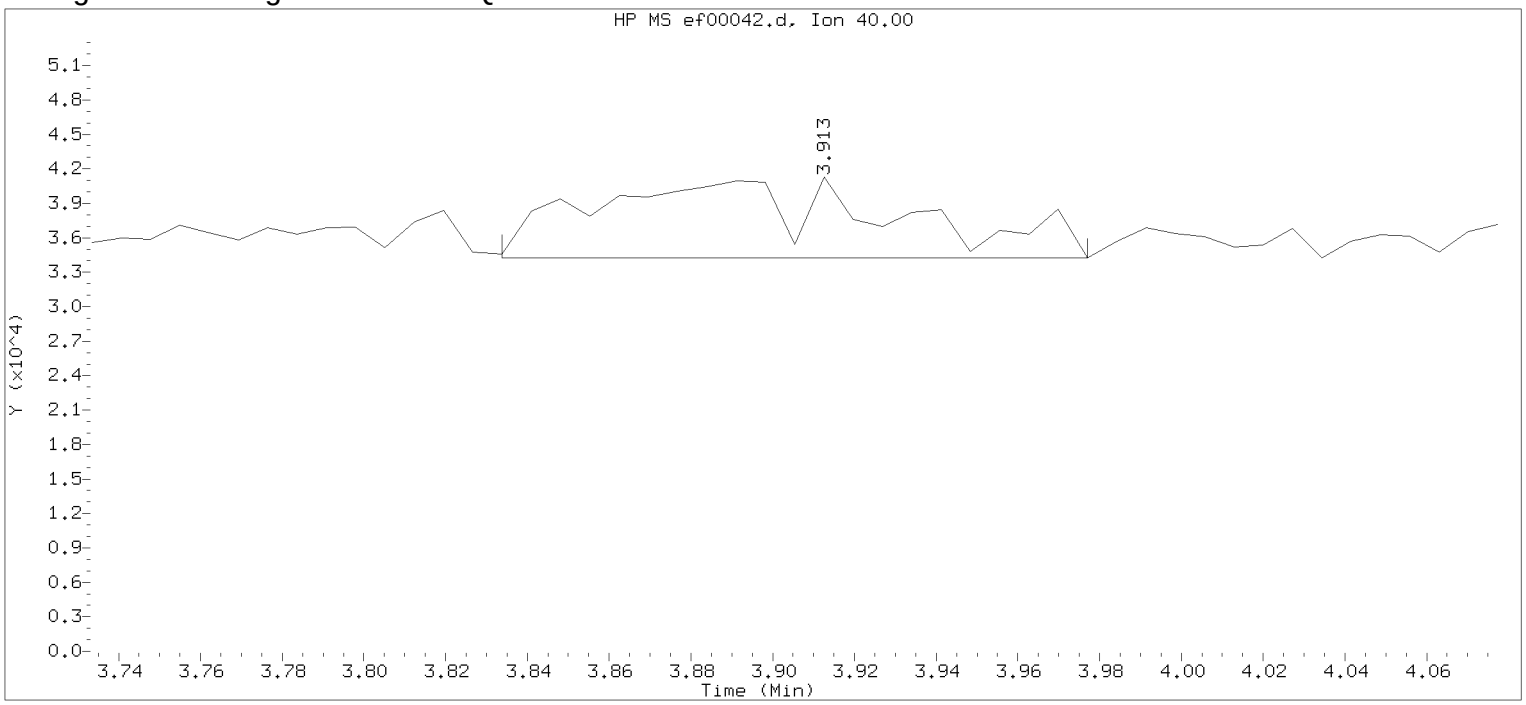
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:47.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00042.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:31 Unknown

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

Compound Number : 23
Compound Name : Acetonitrile
Scan Number : 534
Retention Time (minutes): 3.913
Quant Ion : 40.00
Area : 34525
Concentration (ppb(v)) : 1.9731
Integration start scan : 522 Integration stop scan: 542
Y at integration start : 34264 Y at integration end: 34264

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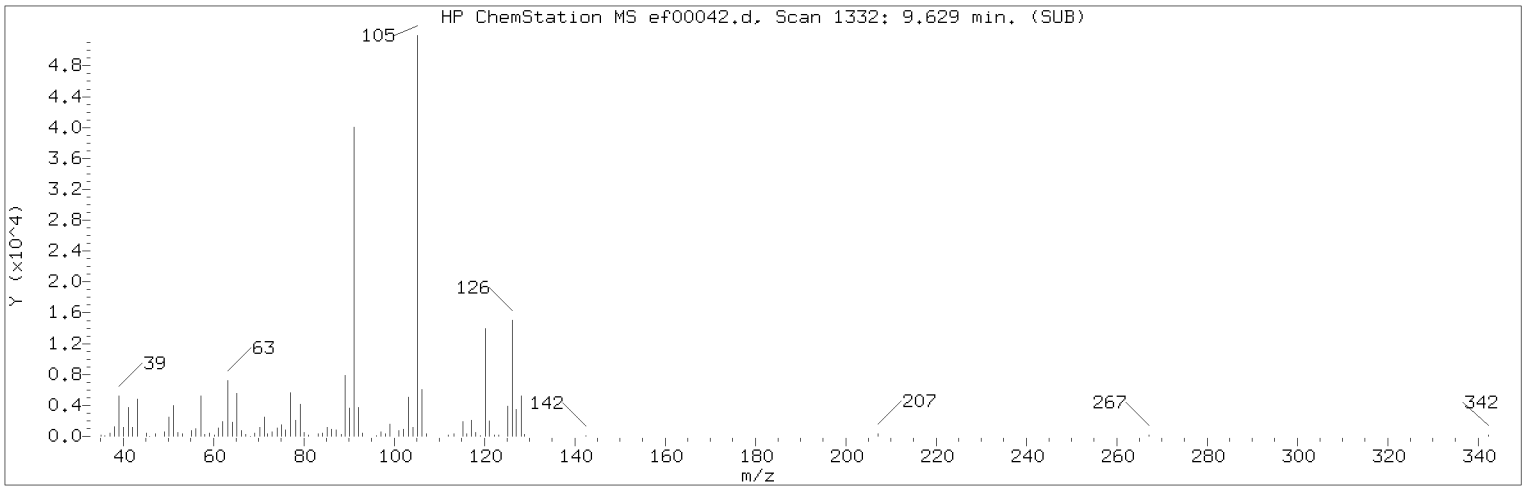
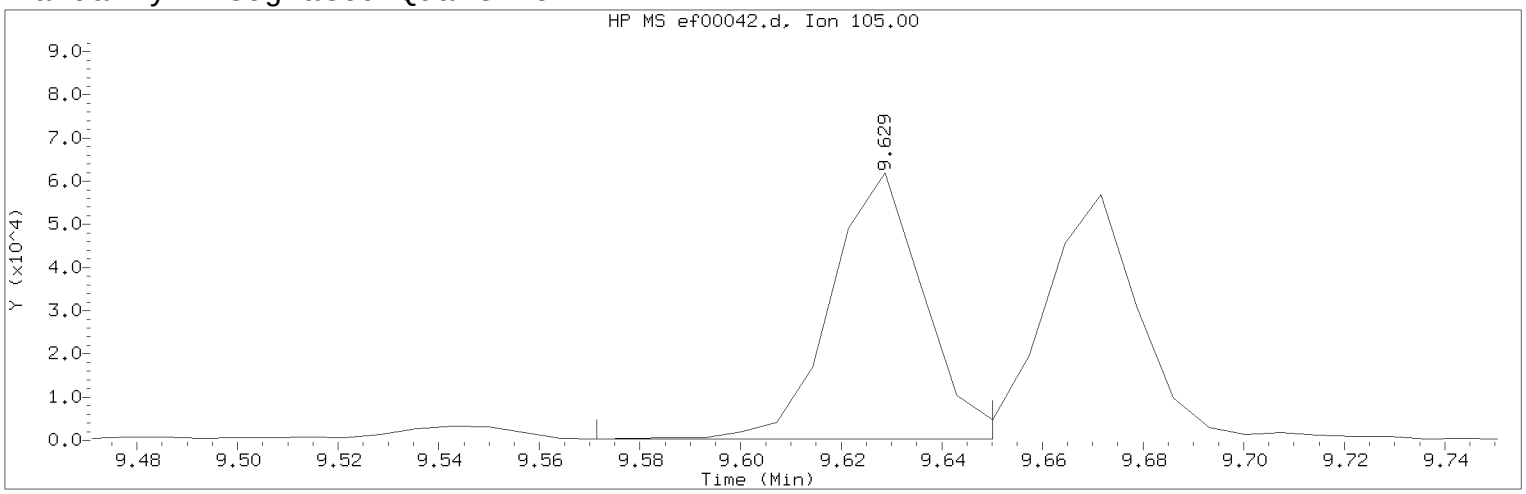
Target 3.5 esignature user ID: jbs1 page 1304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00042.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:45 jbs01304

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

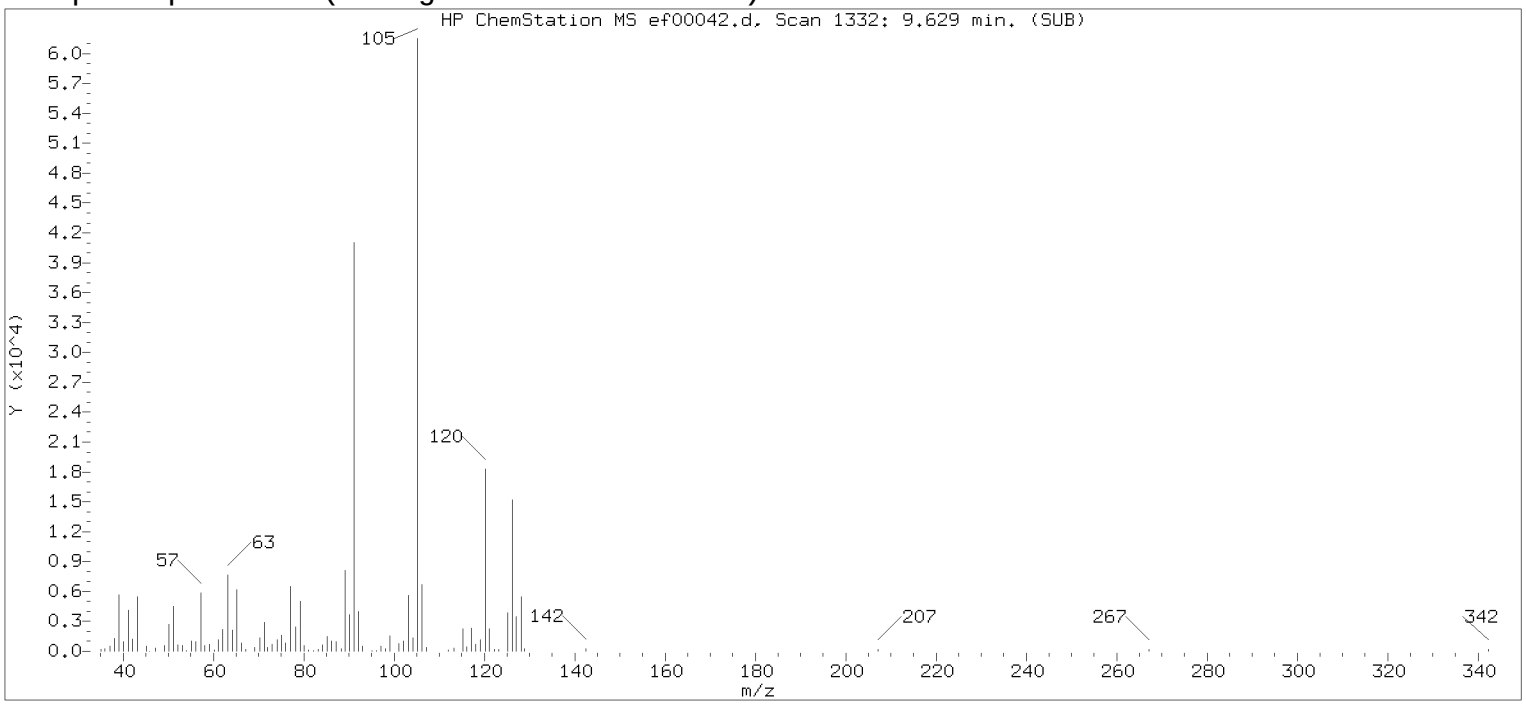
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 78748M
Concentration (ppb(v)) : 0.4310
Integration start scan : 1323 Integration stop scan: 1334
Y at integration start : 337 Y at integration end: 337

Reason for manual integration: improper integration

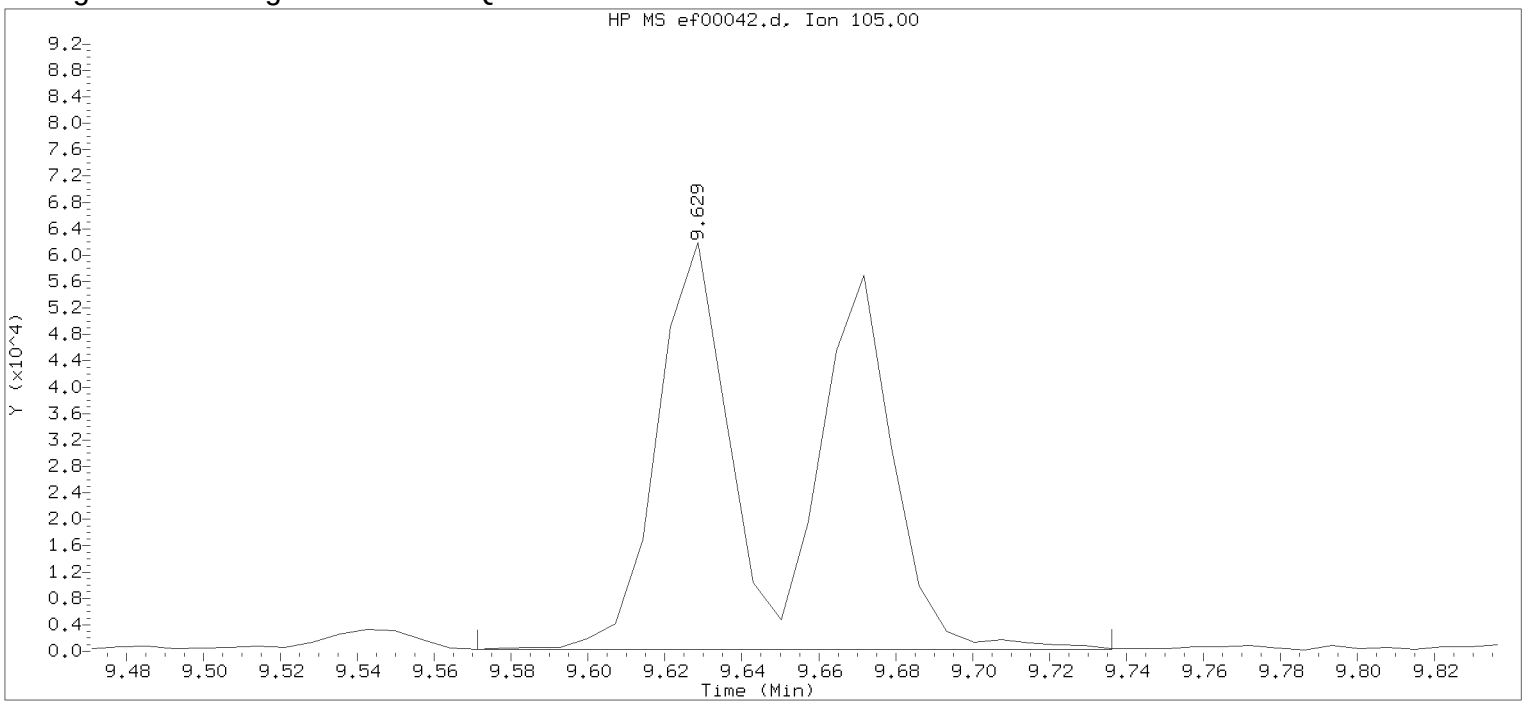
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:47.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00042.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:31 Unknown

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

Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 151108
Concentration (ppb(v)) : 0.8270
Integration start scan : 1323 Integration stop scan: 1346
Y at integration start : 337 Y at integration end: 337

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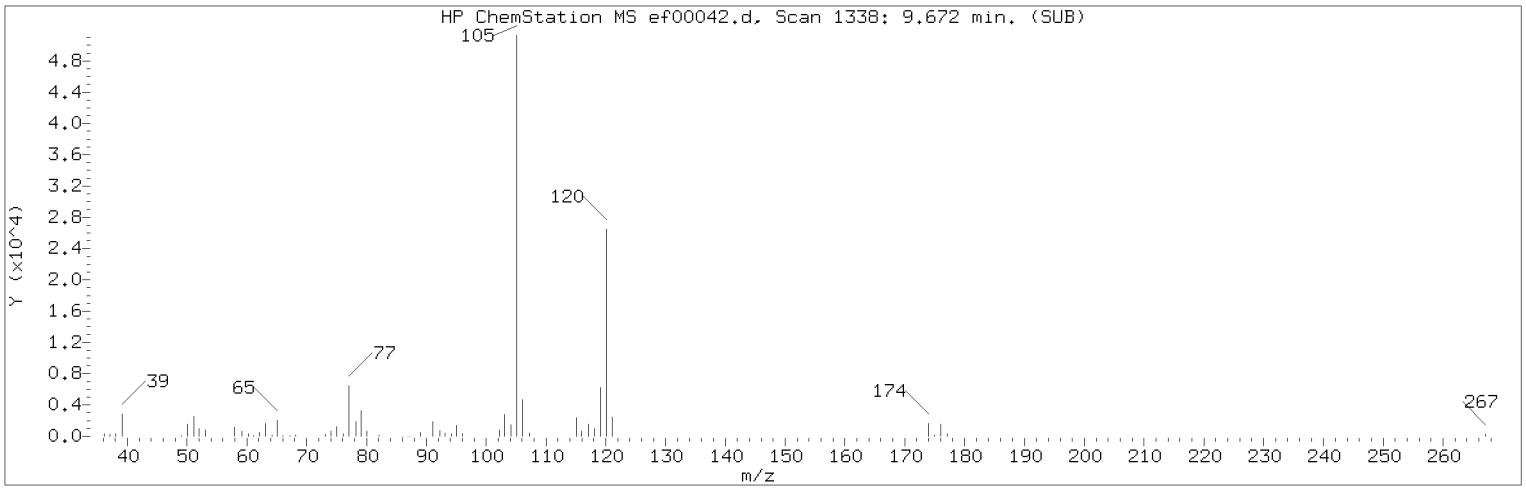
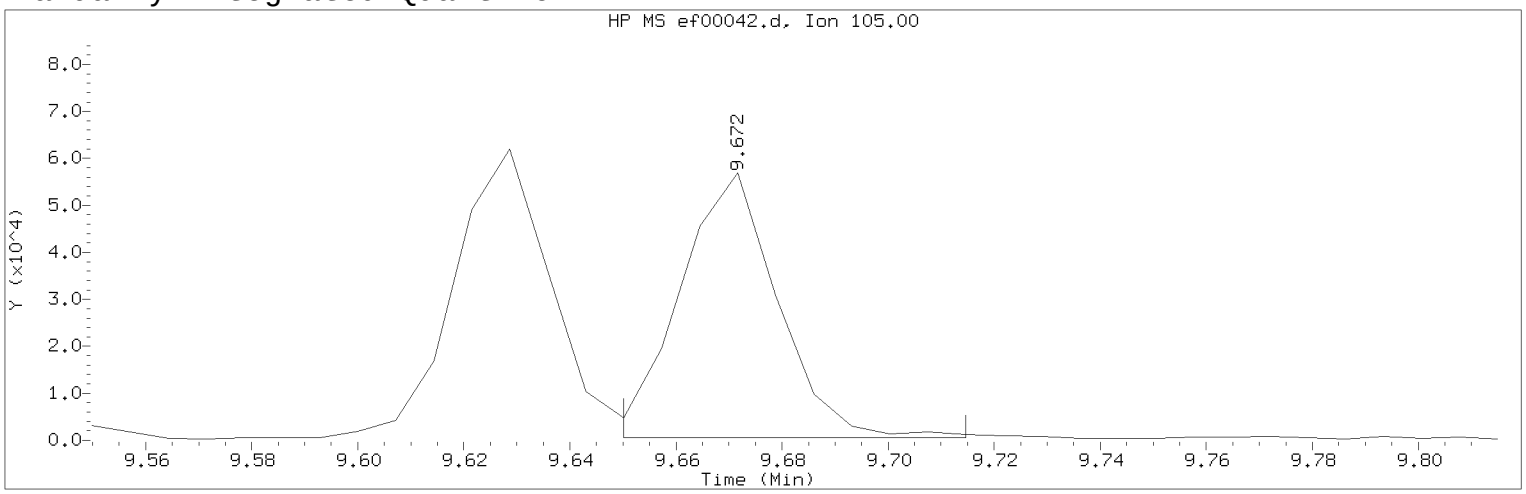
Target 3.5 esignature user ID: jbs0304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00042.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:45 jbs01304

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

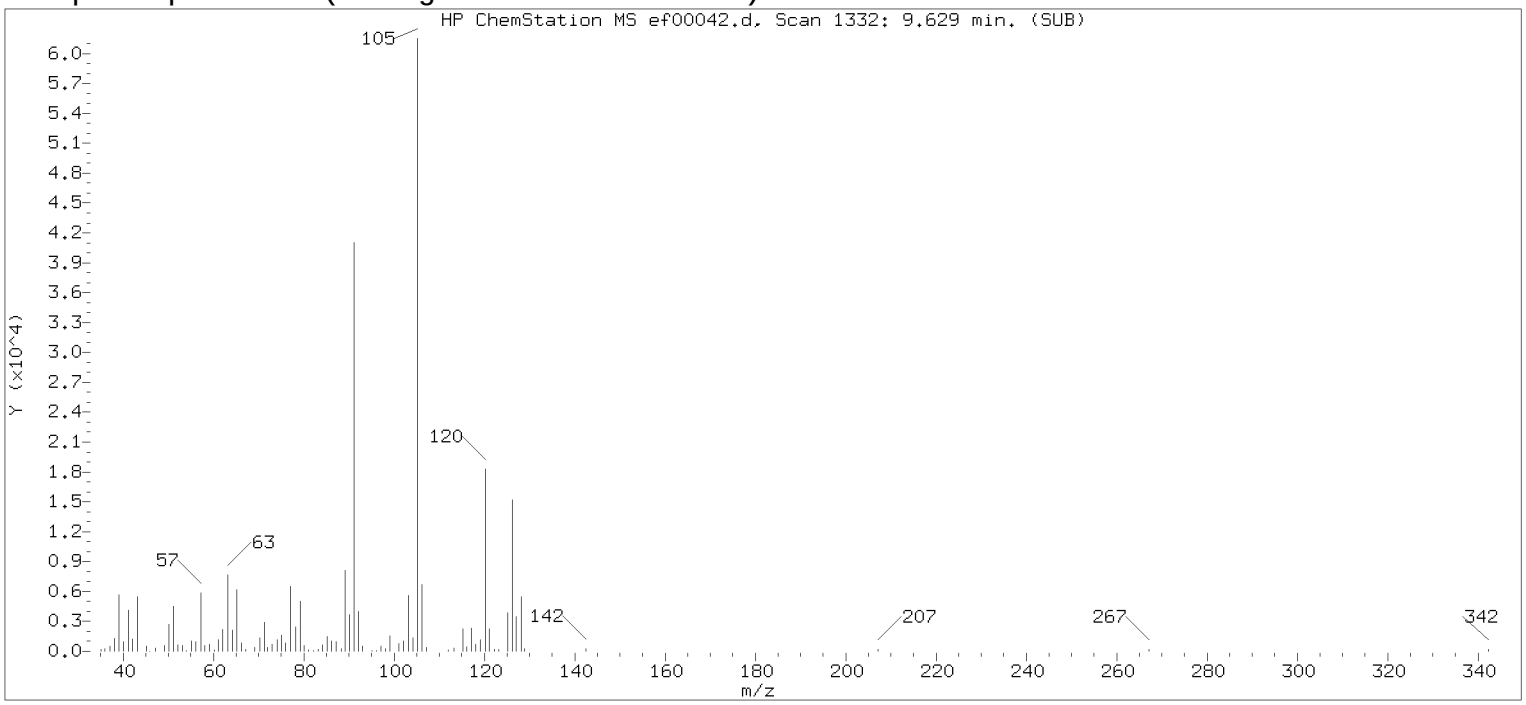
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 73013M
Concentration (ppb(v)) : 0.4801
Integration start scan : 1334 Integration stop scan: 1343
Y at integration start : 511 Y at integration end: 511

Reason for manual integration: improper integration

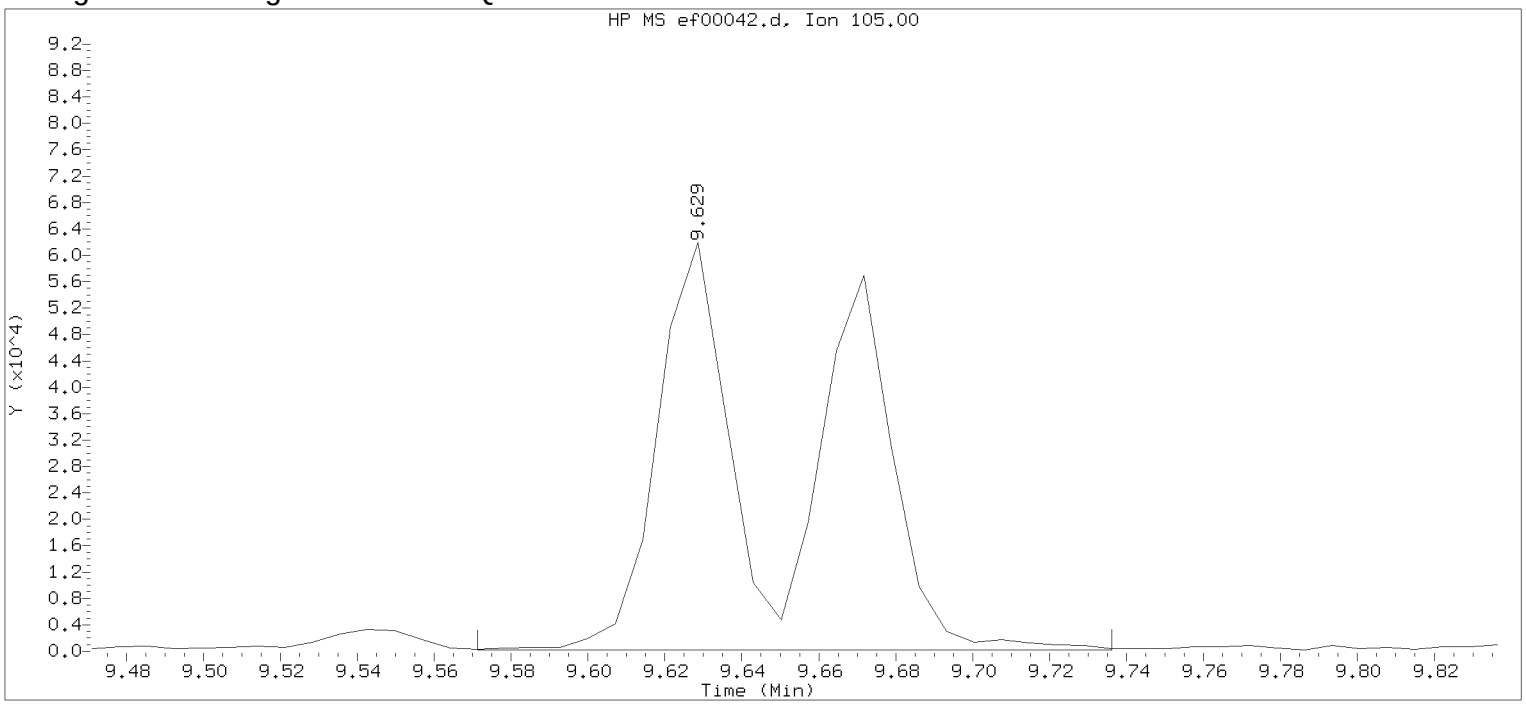
Analyst responsible for change: Digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:47.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00042.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:31 Unknown

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

Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 152127
Concentration (ppb(v)) : 1.0003
Integration start scan : 1323 Integration stop scan: 1346
Y at integration start : 233 Y at integration end: 233

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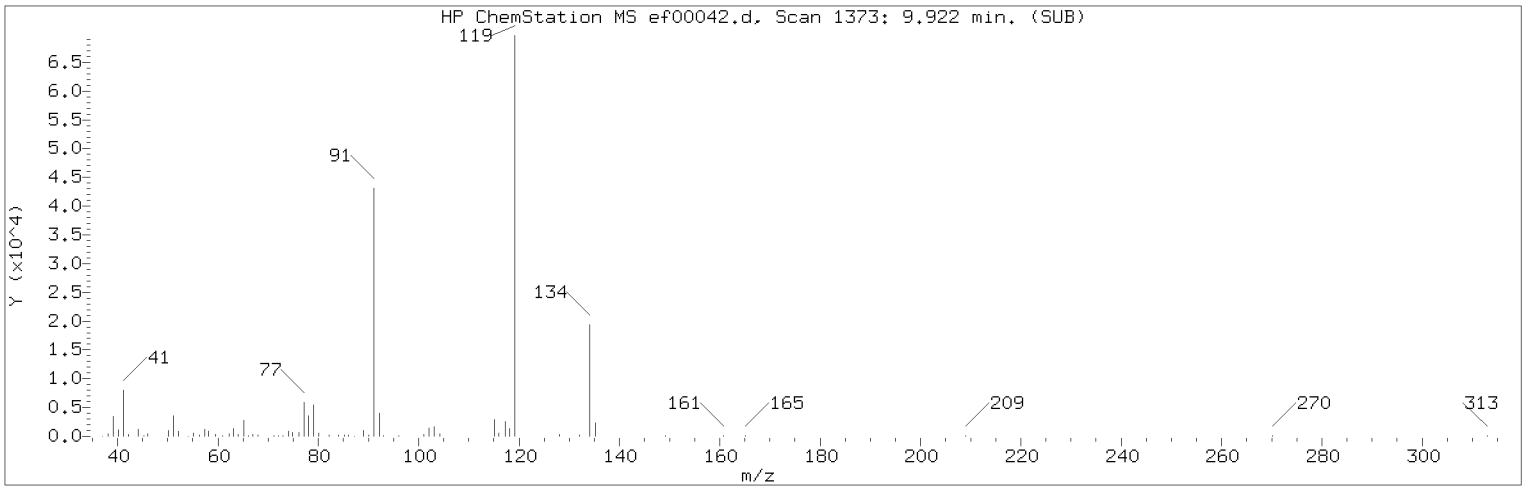
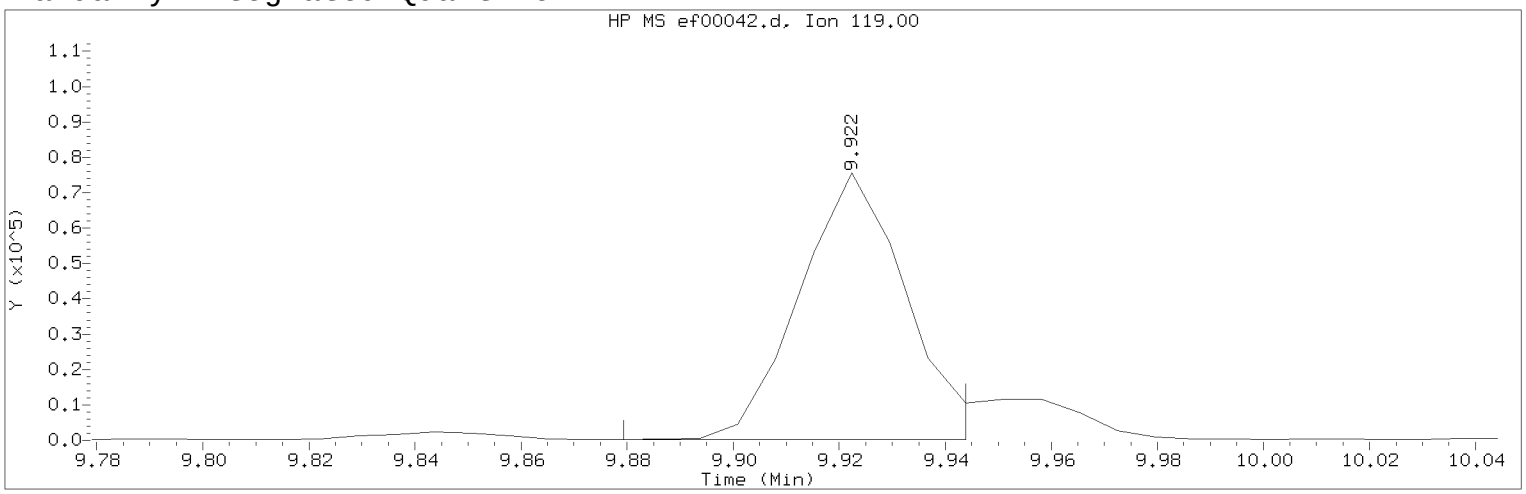
Target 3.5 esignature user ID: jbs0304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00042.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:45 jbs01304

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

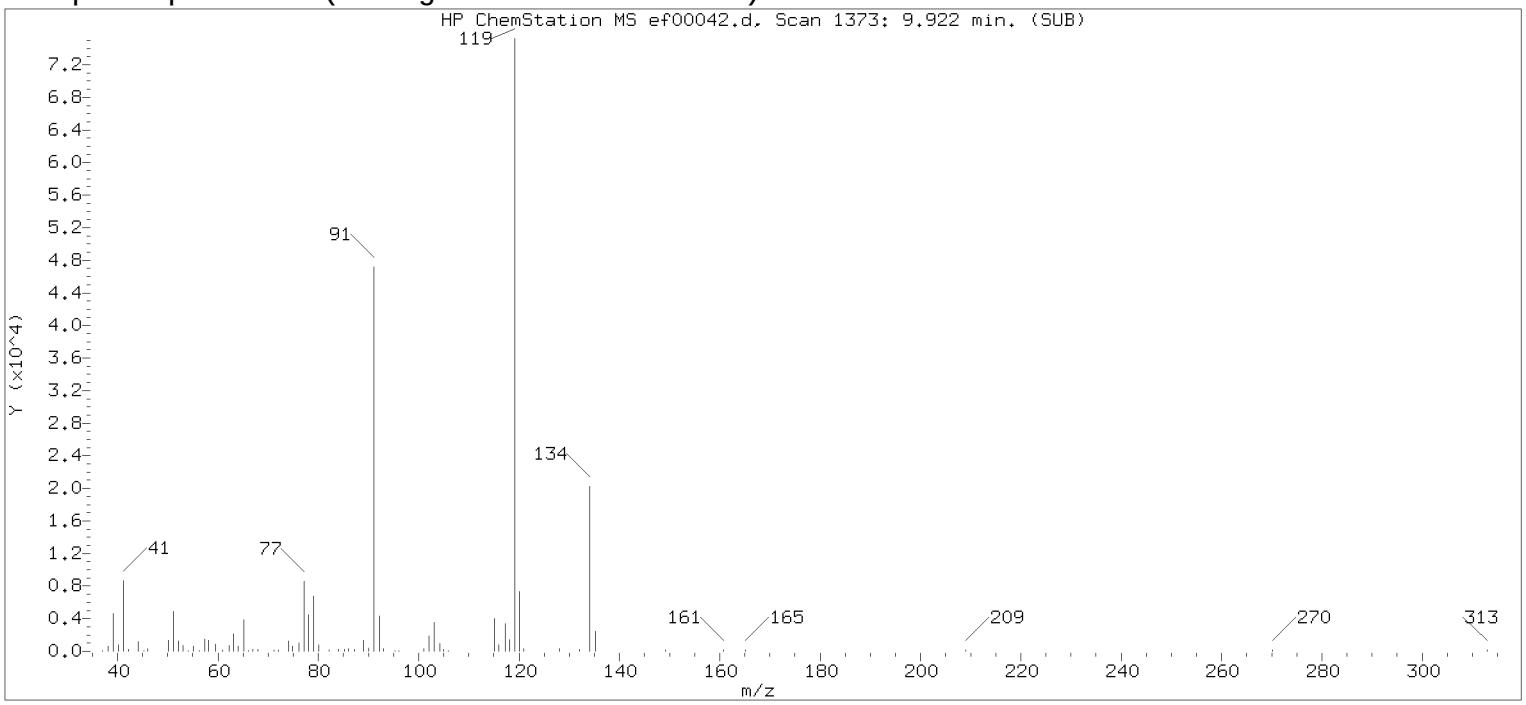
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 105356M
Concentration (ppb(v)) : 0.6641
Integration start scan : 1366 Integration stop scan: 1375
Y at integration start : 184 Y at integration end: 184

Reason for manual integration: improper integration

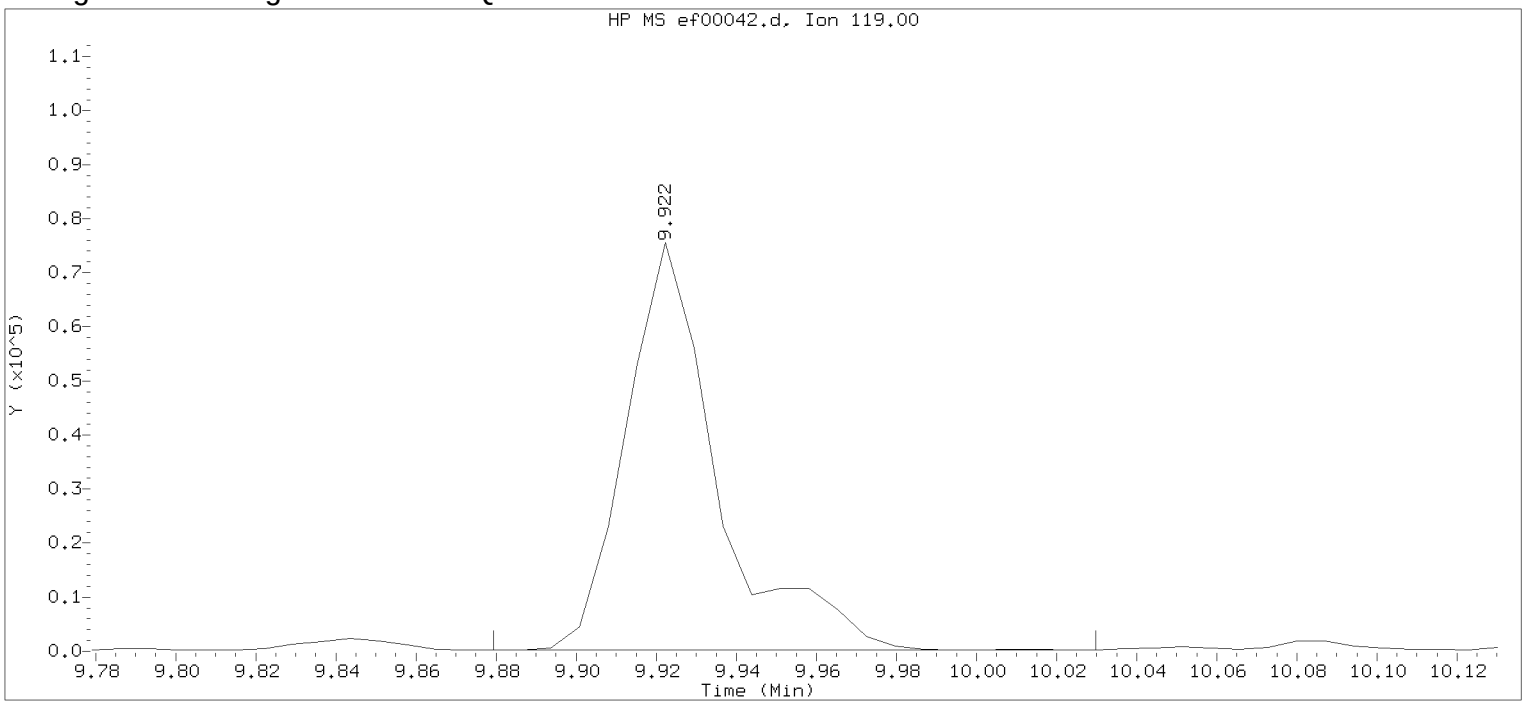
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:47.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



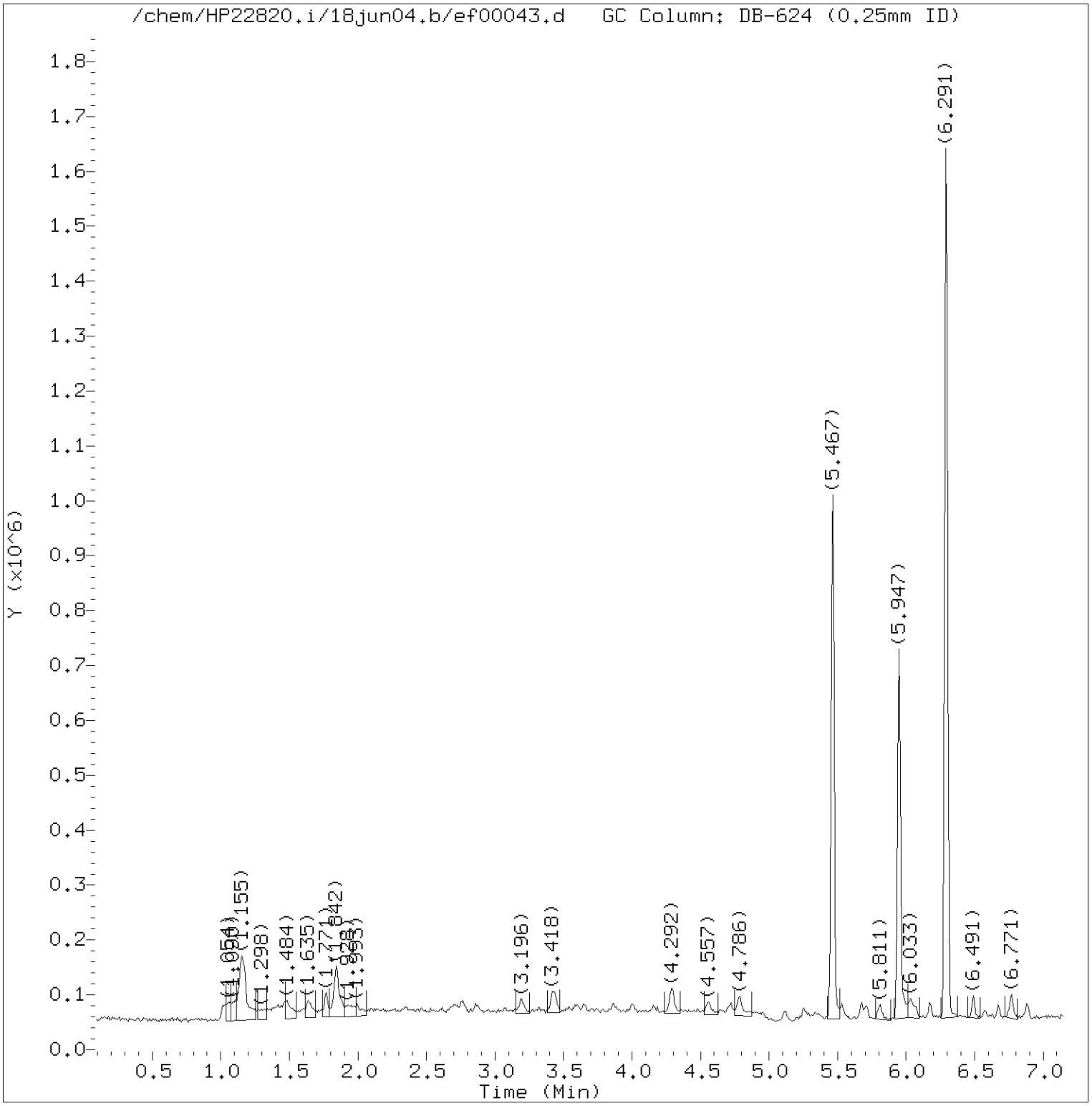
Data File: /chem/HP22820.i/18jun04.b/ef00042.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:31 Unknown

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

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 120171
Concentration (ppb(v)) : 0.7575
Integration start scan : 1366 Integration stop scan: 1387
Y at integration start : 184 Y at integration end: 184

Digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs0304



Total Ion Chromatogram (TIC)

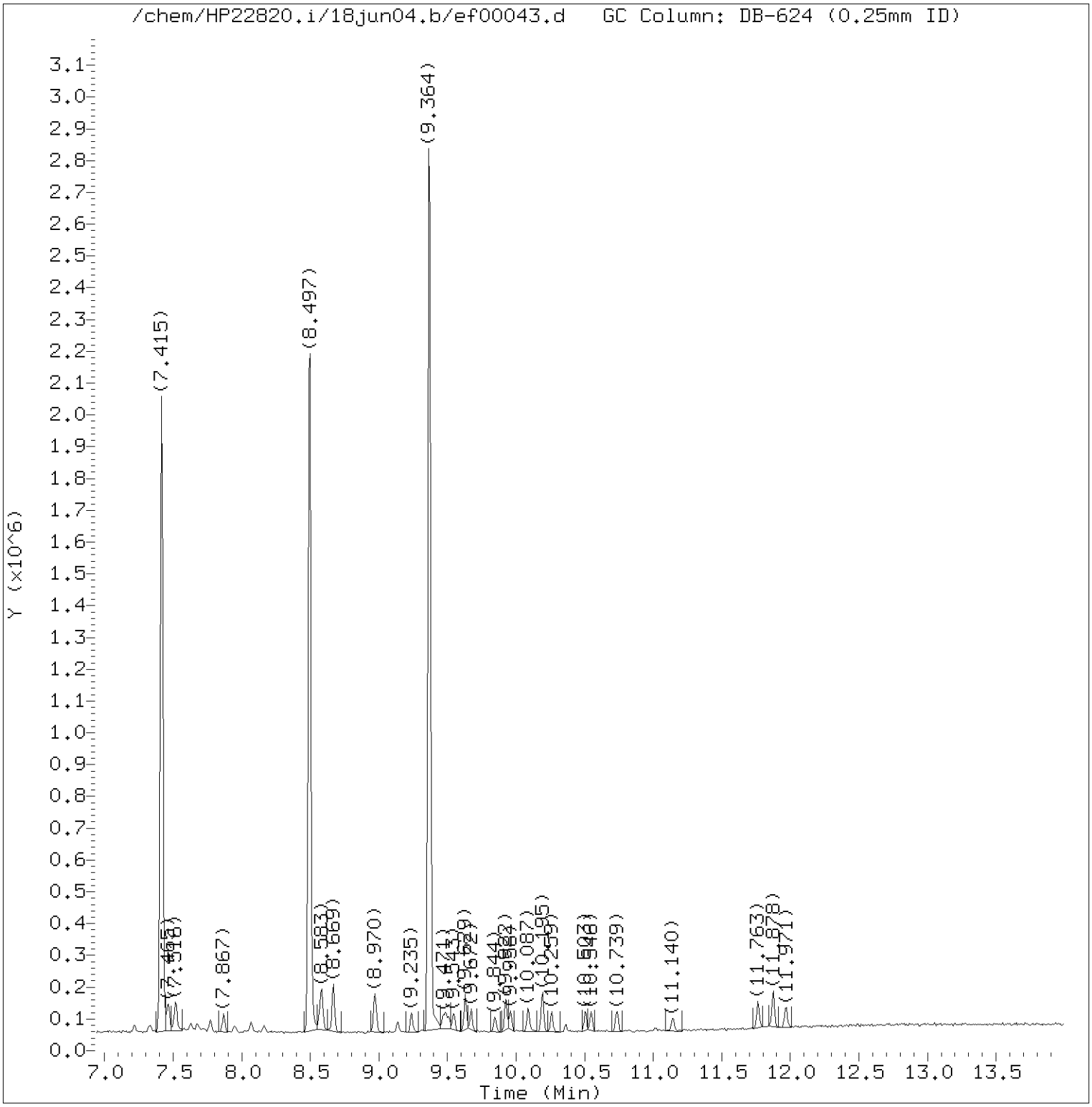
Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00043.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:40 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:46 jbs01304

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

Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00043.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:40 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:46 jbs01304

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

Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00043.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:40 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:46 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.606	41	5486	0.290
2) Dichlorodifluoromethane	(1)	1.635	85	15689	0.214
3) Chlorodifluoromethane	(1)	1.656	51	9408	0.242
4) Freon 114	(1)	1.771	85	14917	0.199
5) Chloromethane	(1)	1.835	50	6514	0.293
6) Vinyl Chloride	(1)	1.964	62	6058	0.222
7) 1,3-Butadiene	(1)	1.993	54	5598	0.283
8) Bromomethane	(1)	2.351	94	6615	0.236
9) Chloroethane	(1)	2.458	64	3636M	0.236
10) Bromoethene	(1)	2.680	106	6253	0.210
11) Dichlorofluoromethane	(1)	2.716	67	14034	0.236
12) Trichlorofluoromethane	(1)	2.766	101	16985	0.218
13) Pentane	(1)	2.860	43	10298	0.247
14) Ethanol	(1)	3.060	45	6262	0.697
15) Freon123a	(1)	3.189	67	15047	0.291
16) Acrolein	(1)	3.311	56	3058	0.287
17) 1,1-Dichloroethene	(1)	3.418	61	9522	0.220
18) Freon 113	(1)	3.440	103	10694	0.246
19) Acetone	(1)	3.533	43	15150	0.422
20) Methyl Iodide	(1)	3.597	142	19556	0.234
21) Carbon Disulfide	(1)	3.648	76	16686	0.206
22) Isopropanol	(1)	3.719	45	8816	0.238
24) 3-Chloropropene	(1)	3.862	76	4524	0.357
23) Acetonitrile	(1)	3.884	40	15140	0.869
25) Methylene Chloride	(1)	4.006	84	6112	0.248
26) tert-Butyl Alcohol	(1)	4.163	59	10322	0.206
28) trans-1,2-Dichloroethene	(1)	4.285	61	8499	0.218
29) Methyl t-Butyl Ether	(1)	4.292	73	24282	0.291
27) Acrylonitrile	(1)	4.299	53	6856	0.313
30) Hexane	(1)	4.557	57	10796	0.252
31) 1,1-Dichloroethane	(1)	4.722	63	12549	0.247
32) Vinyl Acetate	(1)	4.786	86	1676	0.225
33) Di-Isopropyl Ether	(1)	4.786	45	17585	0.207
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	13907	0.172
37) 2-Butanone	(1)	5.130	72	4393	0.280
35) cis-1,2-Dichloroethene	(1)	5.252	61	8750	0.232
38) Ethyl Acetate	(1)	5.331	70	2958	0.382
39) Methyl Acrylate	(1)	5.367	55	11153	0.234

M = Compound was manually integrated.

Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00043.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:40 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:46 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	305420	10.000
41) Tetrahydrofuran	(1)	5.503	42	7602	0.273
42) Chloroform	(1)	5.531	83	14792	0.232
43) 1,1,1-Trichloroethane	(1)	5.675	97	13752	0.213
44) Cyclohexane	(1)	5.703	56	12453	0.280
45) Carbon Tetrachloride	(1)	5.811	117	13155	0.207
46) Benzene	(2)	5.983	78	24402	0.256
47) 1,2-Dichloroethane	(2)	6.011	62	9443	0.244
48) Isooctane	(2)	6.033	57	29107	0.221
49) Tert-Amyl Methyl Ether	(2)	6.069	73	15654	0.197
50) Heptane	(2)	6.176	43	11126	0.247
51)*1,4-Difluorobenzene	(2)	6.291	114	1106698	10.000
52) Trichloroethene	(2)	6.491	130	10545	0.223
53) Ethyl Acrylate	(2)	6.577	55	13165	0.219
36) 1,2-Dichloroethene (total)	(1)		61	17249	0.450
54) 1,2-Dichloropropane	(2)	6.670	63	6681	0.201
57) Methyl Methacrylate	(2)	6.749	69	6757	0.203
55) Dibromomethane	(2)	6.771	174	10318	0.225
56) 1,4-Dioxane	(2)	6.785	88	6133	0.253
58) Bromodichloromethane	(2)	6.885	83	13652	0.209
59) cis-1,3-Dichloropropene	(2)	7.215	75	11336	0.197
60) 4-Methyl-2-Pentanone	(2)	7.329	43	12972	0.207
61) Toluene	(3)	7.465	91	41455	0.335
62) Octane	(3)	7.516	43	26611	0.414
63) trans-1,3-Dichloropropene	(3)	7.630	75	9641	0.198
65) Ethyl Methacrylate	(3)	7.673	69	10412	0.188
66) 1,1,2-Trichloroethane	(3)	7.773	97	9334	0.214
67) Tetrachloroethene	(3)	7.867	166	13951	0.202
68) 2-Hexanone	(3)	7.945	43	12970	0.210
69) Dibromochloromethane	(3)	8.067	127	10116	0.184
70) 1,2-Dibromoethane	(3)	8.160	107	13384	0.197
71)*Chlorobenzene-d5	(3)	8.497	117	1071520	10.000
72) Chlorobenzene	(3)	8.518	112	20154	0.190
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	9702	0.188
74) Ethylbenzene	(3)	8.583	91	58817	0.356
75) m/p-Xylene	(3)	8.669	91	75033	0.559
76) o-Xylene	(3)	8.970	91	50096	0.378
78) Styrene	(3)	8.984	104	17760	0.177

* = Compound is an internal standard.

Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00043.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:40 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:46 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.134	173	13184	0.186
80) Cumene	(3)	9.235	105	36620	0.194
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	18991	0.204
81) Bromobenzene	(3)	9.493	156	12535	0.186
83) 1,2,3-Trichloropropane	(3)	9.507	110	6110	0.206
84) n-Propylbenzene	(3)	9.550	120	9842	0.181
86) 4-Ethyltoluene	(3)	9.629	105	31285M	0.171
85) 2-Chlorotoluene	(3)	9.629	126	8954	0.179
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	30455M	0.200
88) Alpha Methyl Styrene	(3)	9.851	118	12973	0.162
89) tert-Butylbenzene	(3)	9.922	119	50135M	0.316
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	29225	0.194
91) sec-Butylbenzene	(3)	10.087	105	46769	0.206
92) 1,3-Dichlorobenzene	(3)	10.195	146	21508	0.192
94) p-Isopropyltoluene	(3)	10.195	119	33891	0.174
93) 1,4-Dichlorobenzene	(3)	10.259	146	23470	0.206
95) Benzyl Chloride	(3)	10.359	91	17042	0.165
97) n-Butylbenzene	(3)	10.503	91	32764	0.187
96) 1,2-Dichlorobenzene	(3)	10.546	146	22887	0.215
98) Hexachloroethane	(3)	10.739	117	7470	0.181
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	10084	0.183
100) 1,2,4-Trichlorobenzene	(3)	11.763	180	22694	0.249
101) Hexachlorobutadiene	(3)	11.878	225	20751	0.266
102) Naphthalene	(3)	11.971	128	51274	0.254
64) 1,3-Dichloropropene (total)	(3)		75	20977	0.395
77) Xylene (total)	(3)		91	125129	0.937

M = Compound was manually integrated.

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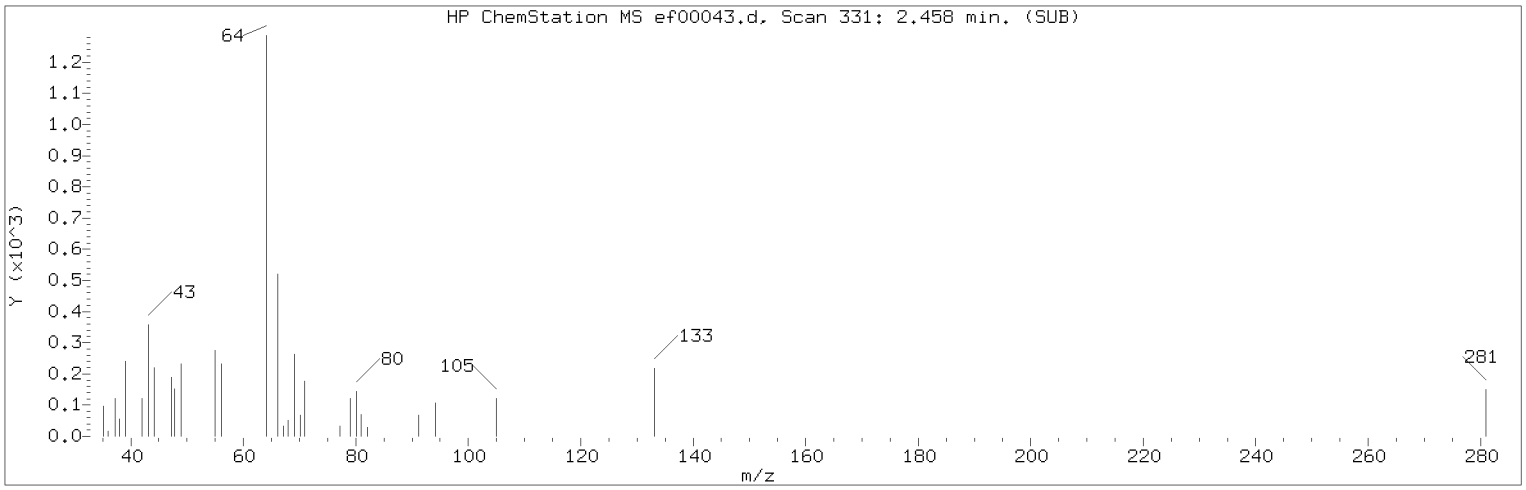
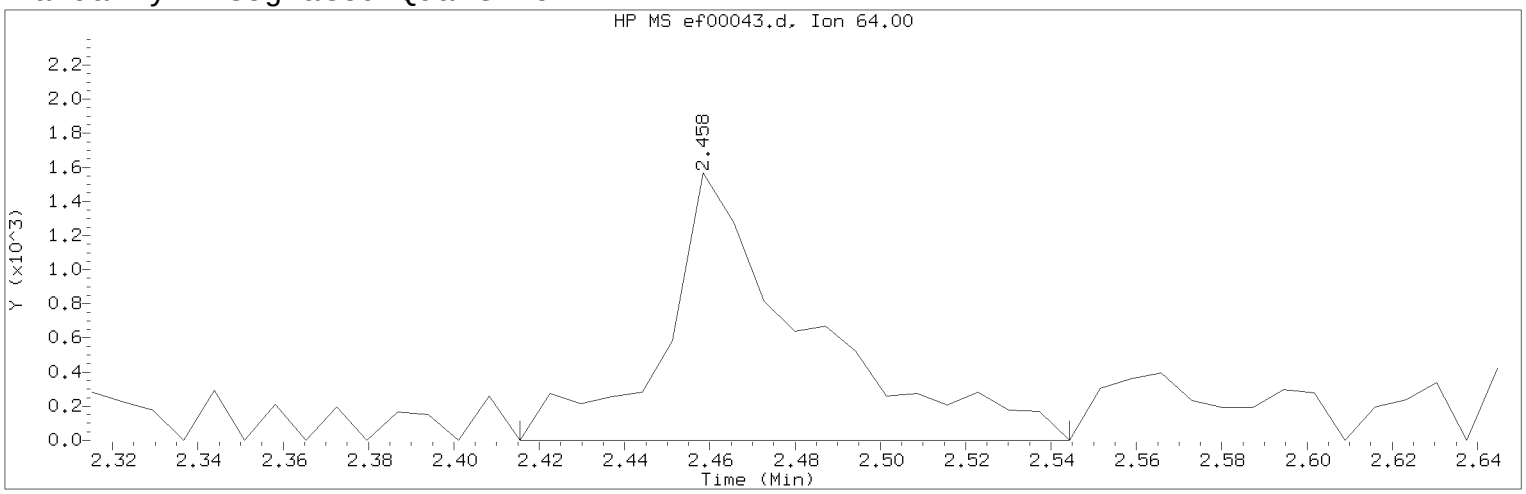
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00043.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:40 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:46 jbs01304

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

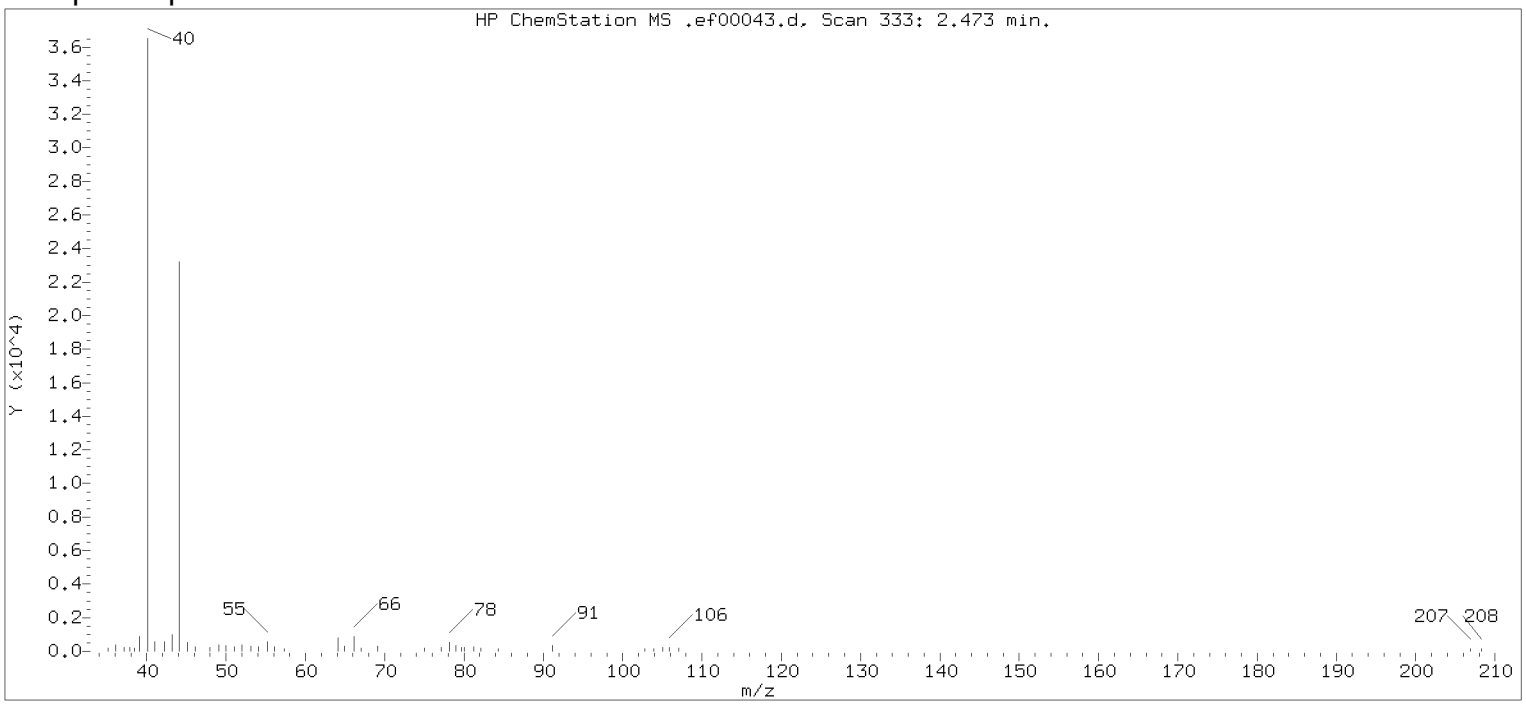
Compound Number : 9
Compound Name : Chloroethane
Scan Number : 331
Retention Time (minutes): 2.458
Quant Ion : 64.00
Area (flag) : 3636M
Concentration (ppb(v)) : 0.2361
Integration start scan : 324 Integration stop scan: 342
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

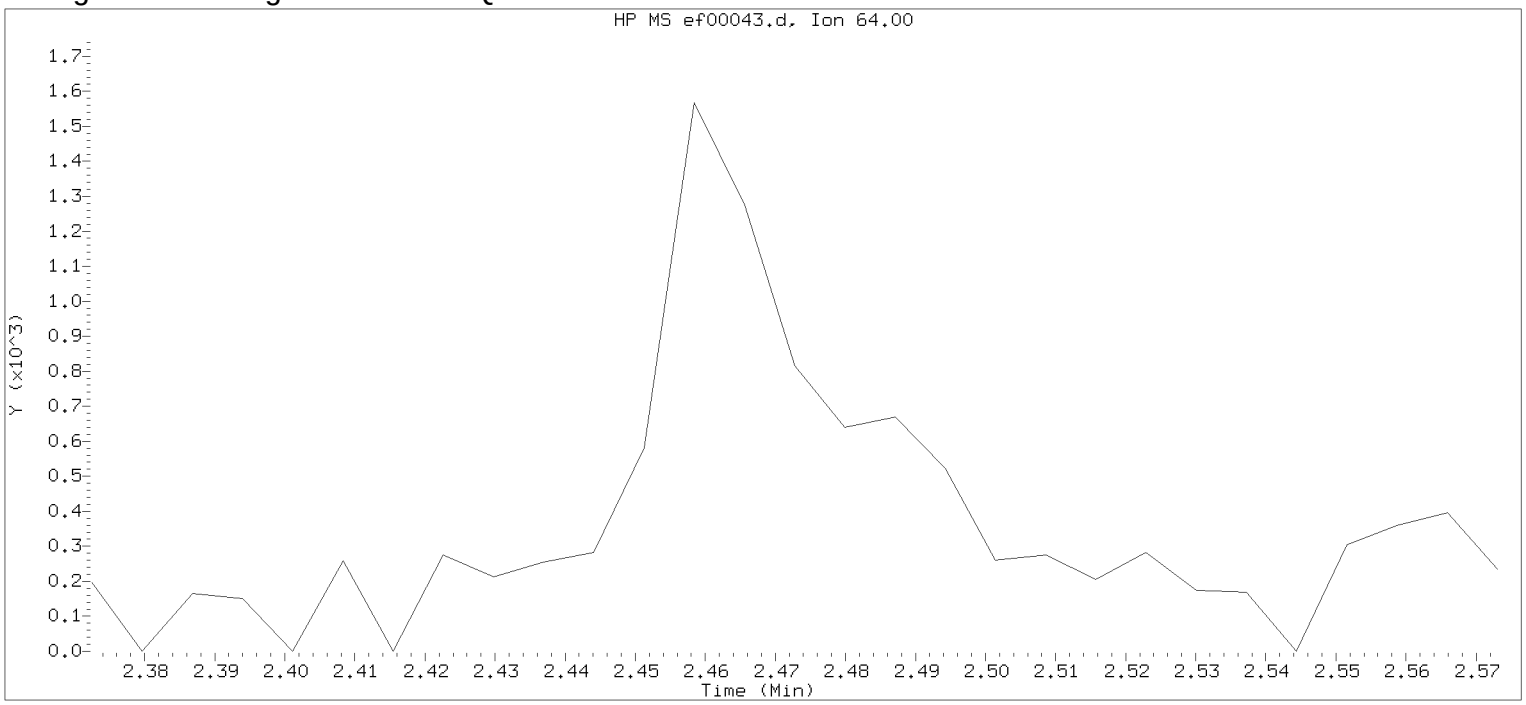
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:47.
PARALLAX ID: jbs01304

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00043.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:40 Analyst ID: jeb07445

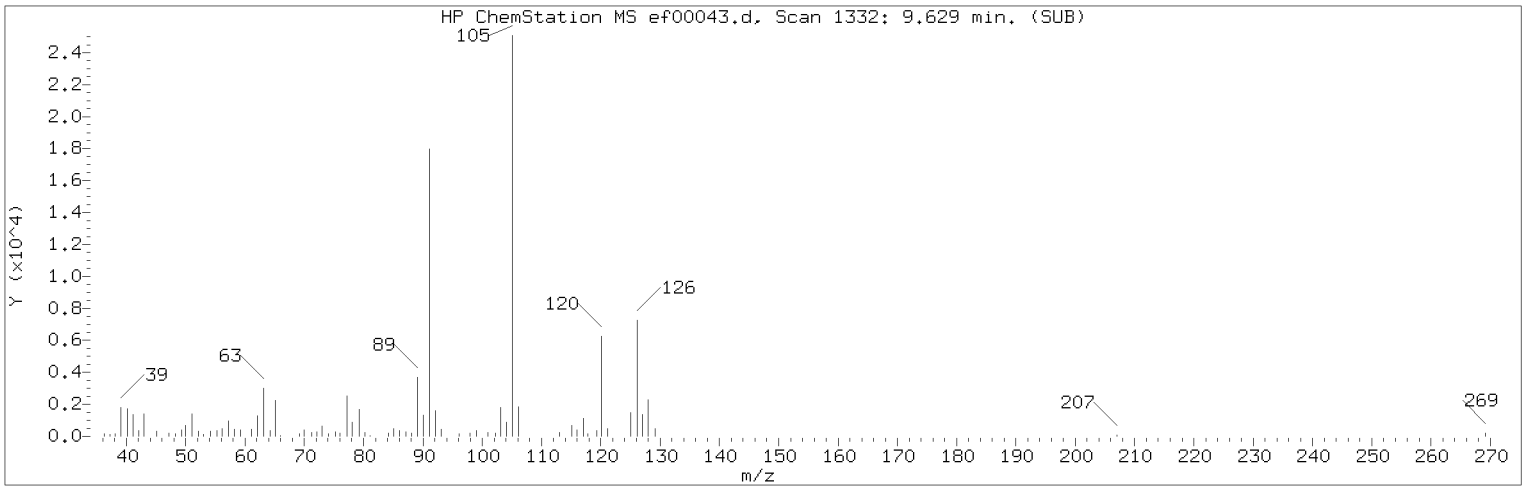
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:59 Unknown

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

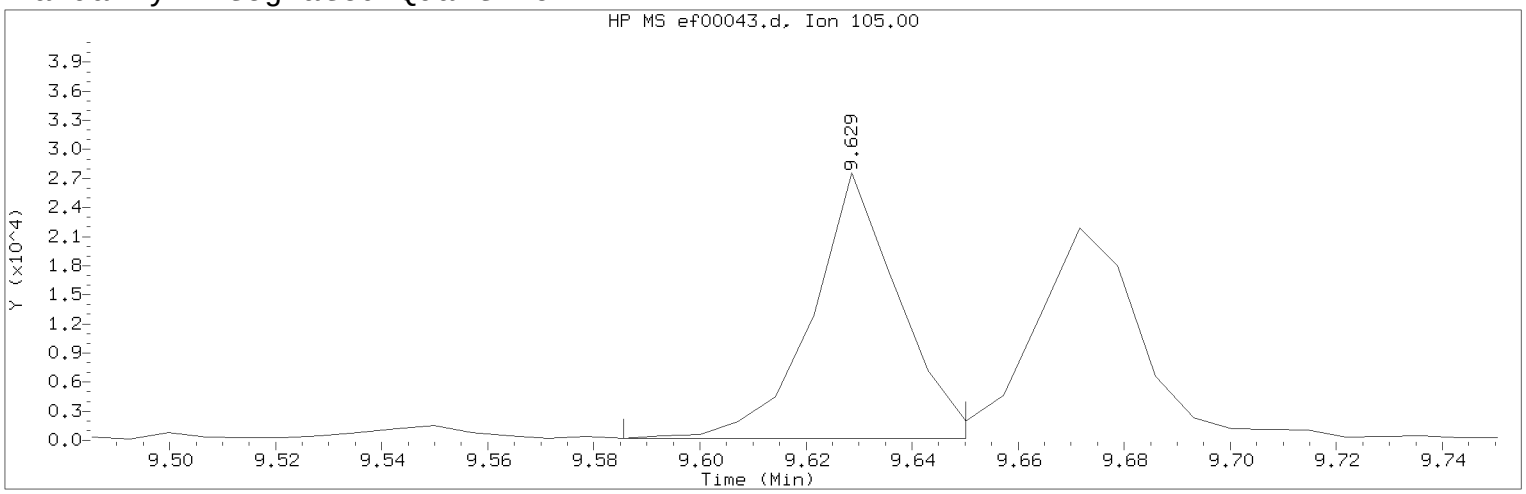
Compound Number : 9
Compound Name : Chloroethane
Expected RT (minutes) : 2.473
Quant Ion : 64.00

Digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00043.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:40 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:46 jbs01304

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

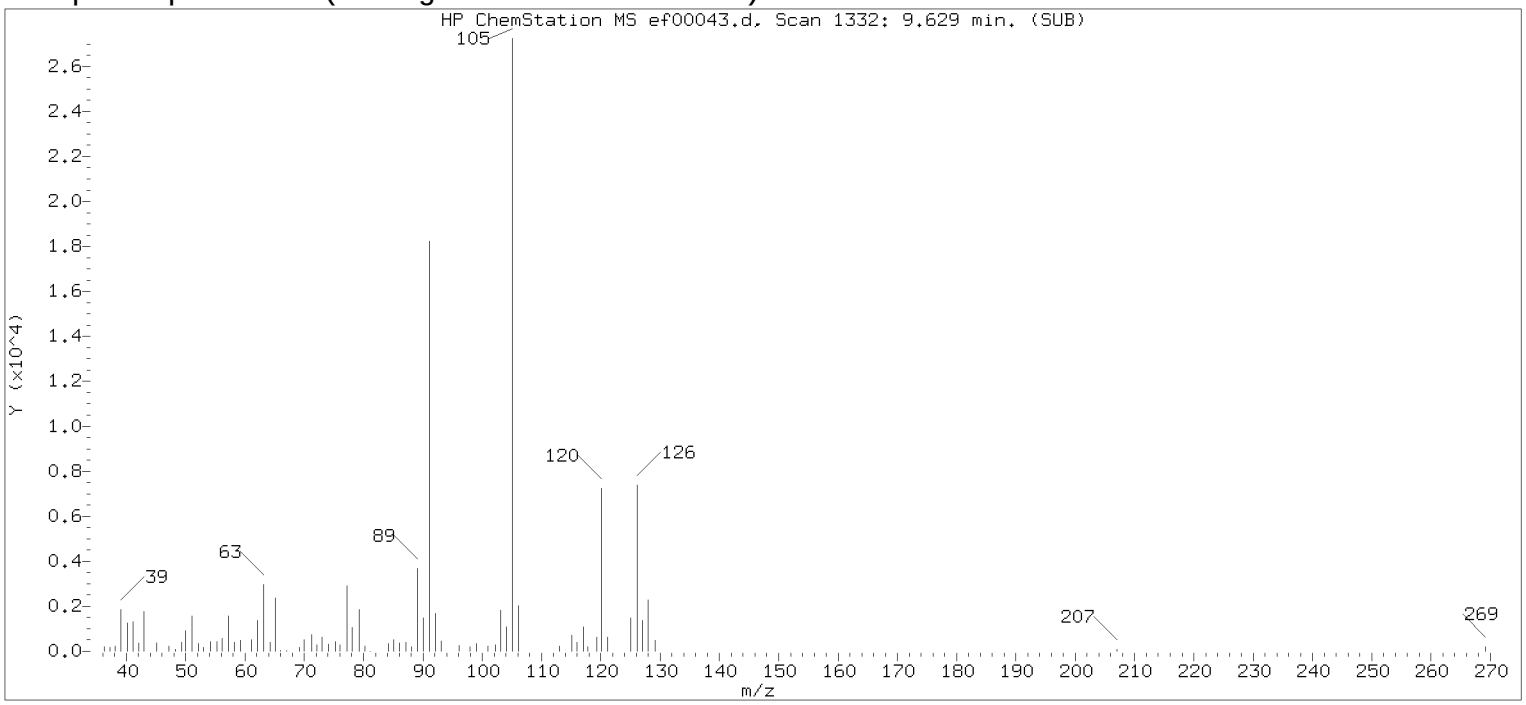
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 31285M
Concentration (ppb(v)) : 0.1710
Integration start scan : 1325 Integration stop scan: 1334
Y at integration start : 173 Y at integration end: 173

Reason for manual integration: improper integration

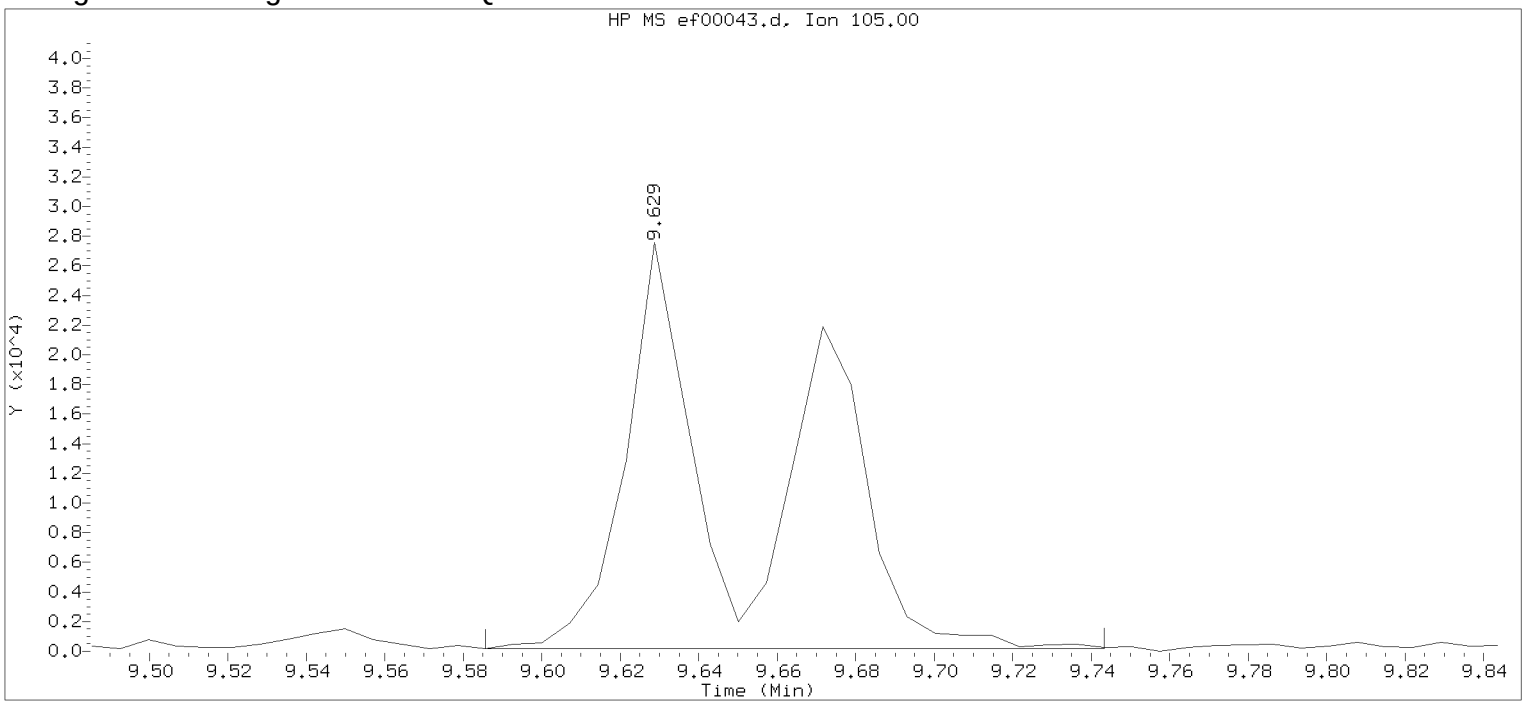
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:47.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00043.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:40 Analyst ID: jeb07445

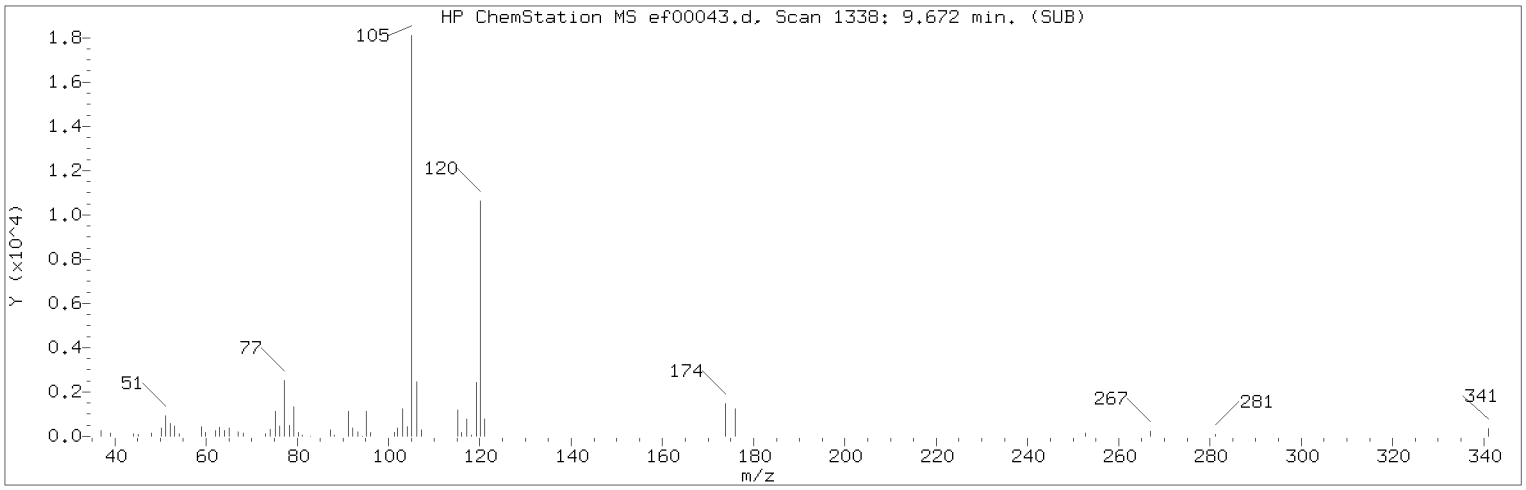
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:59 Unknown

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

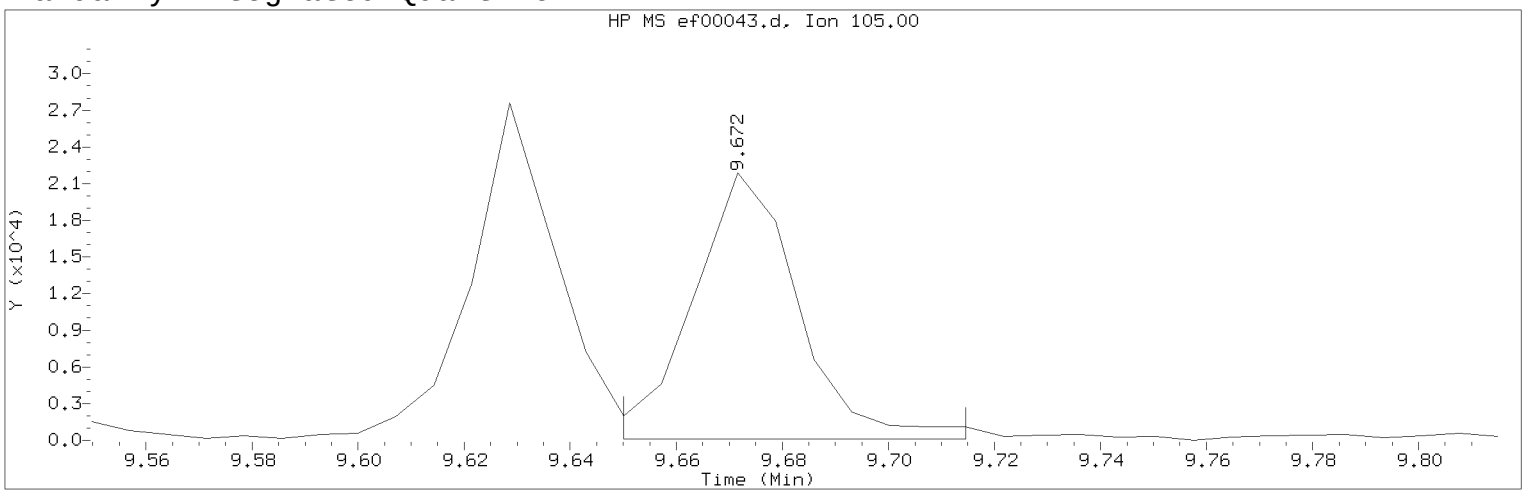
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 60994
Concentration (ppb(v)) : 0.3333
Integration start scan : 1325 Integration stop scan: 1347
Y at integration start : 173 Y at integration end: 173

Digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs1 password: 1324

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00043.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:40 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:46 jbs01304

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

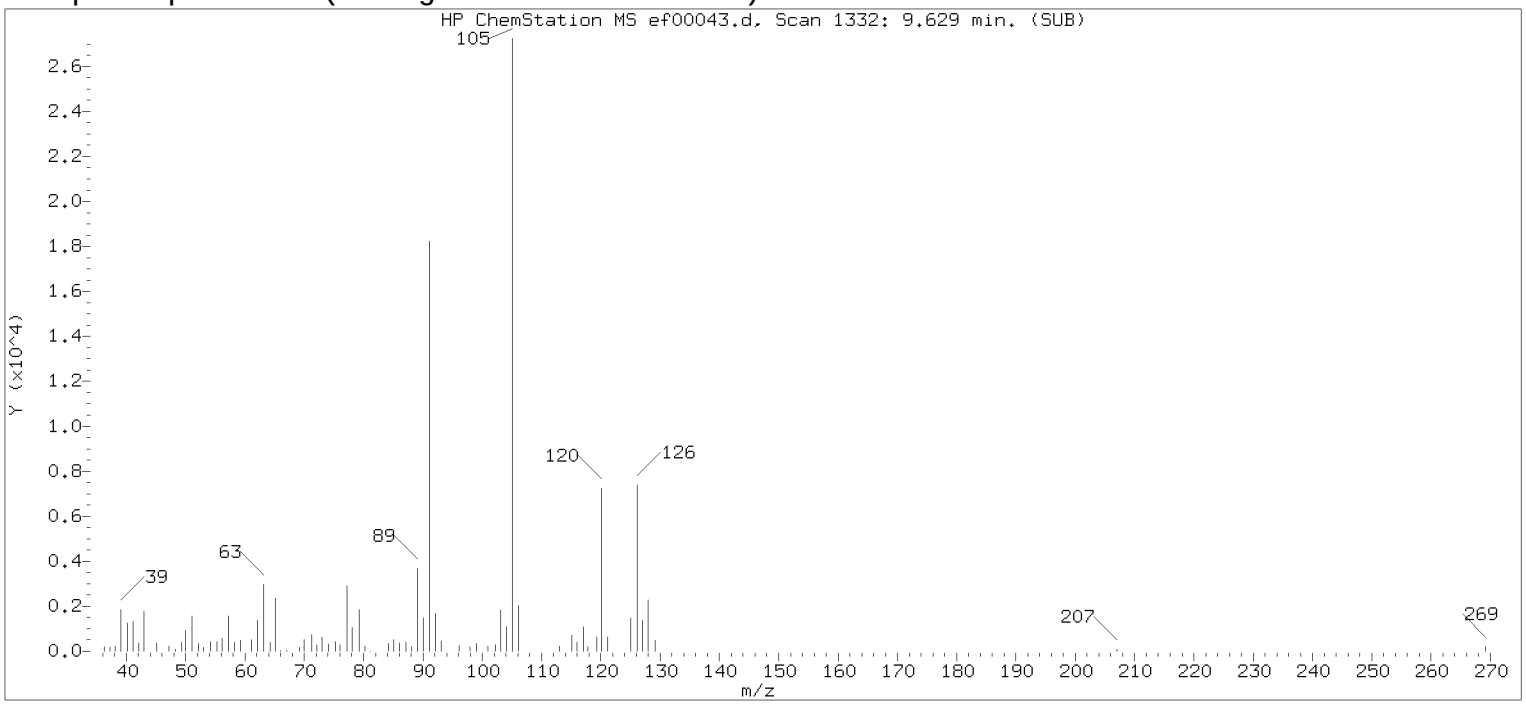
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 30455M
Concentration (ppb(v)) : 0.2000
Integration start scan : 1334 Integration stop scan: 1343
Y at integration start : 109 Y at integration end: 109

Reason for manual integration: improper integration

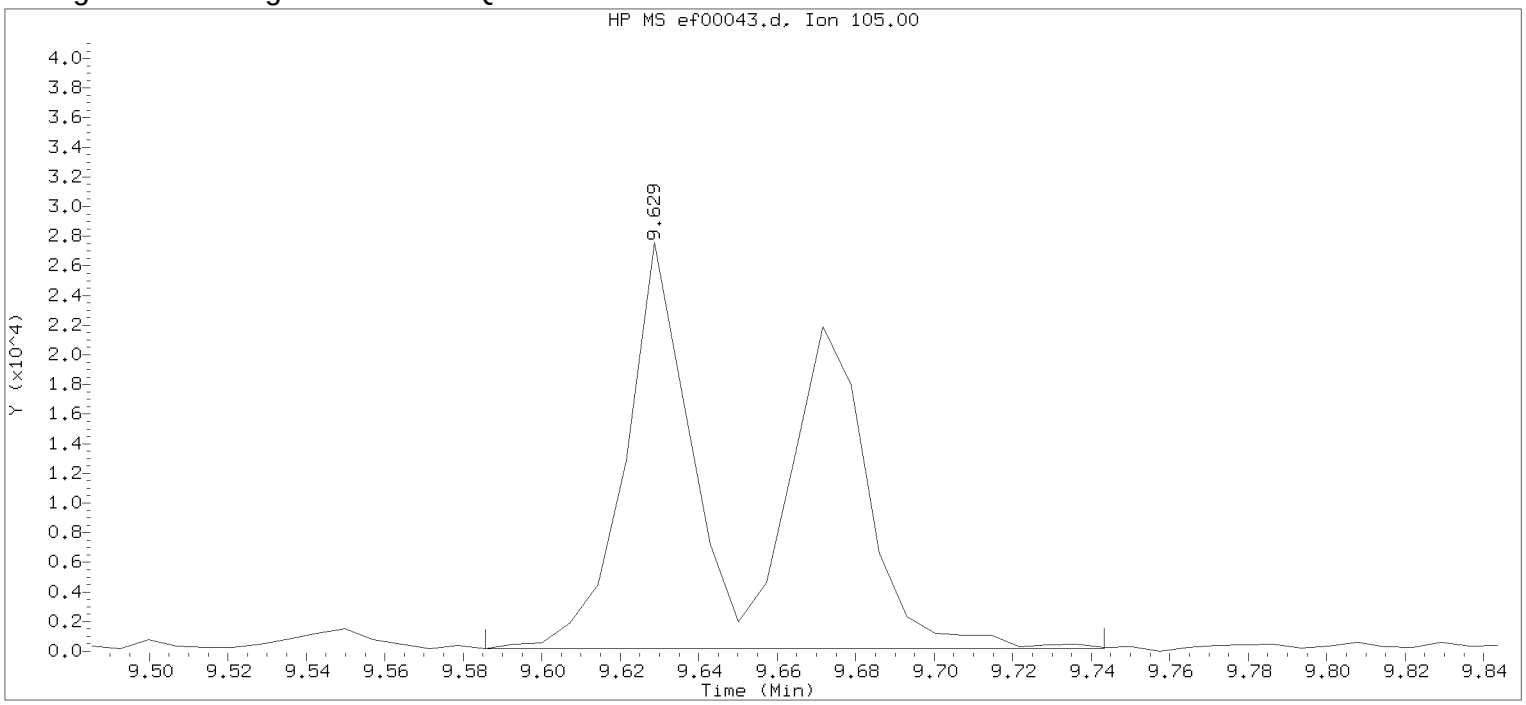
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:47.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00043.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:40 Analyst ID: jeb07445

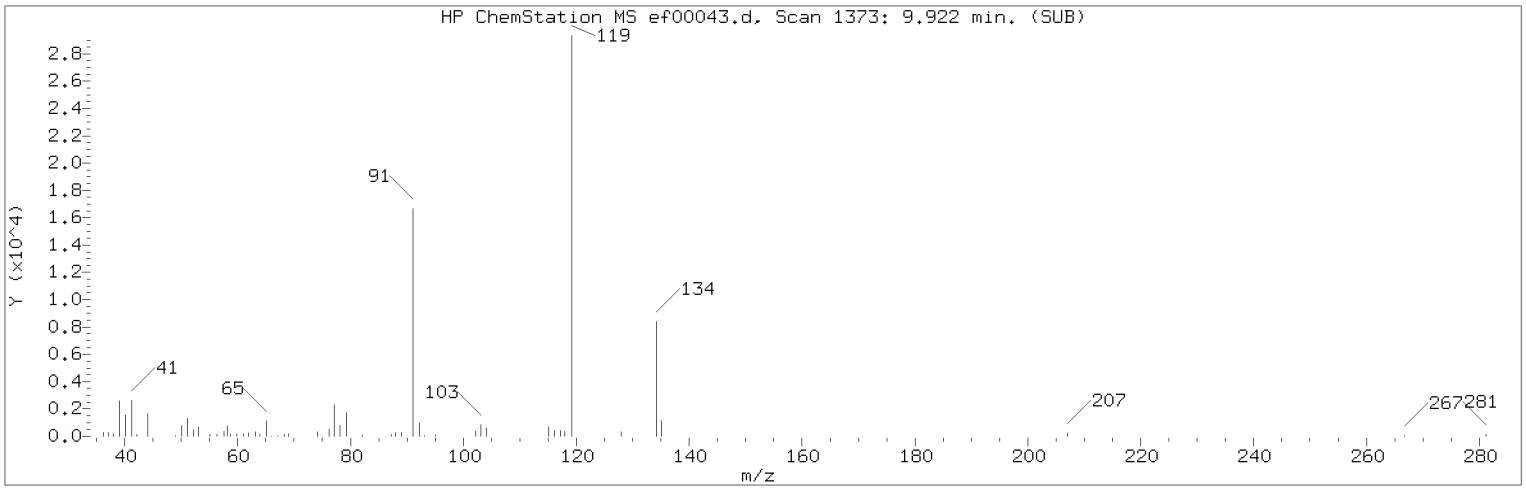
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:59 Unknown

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

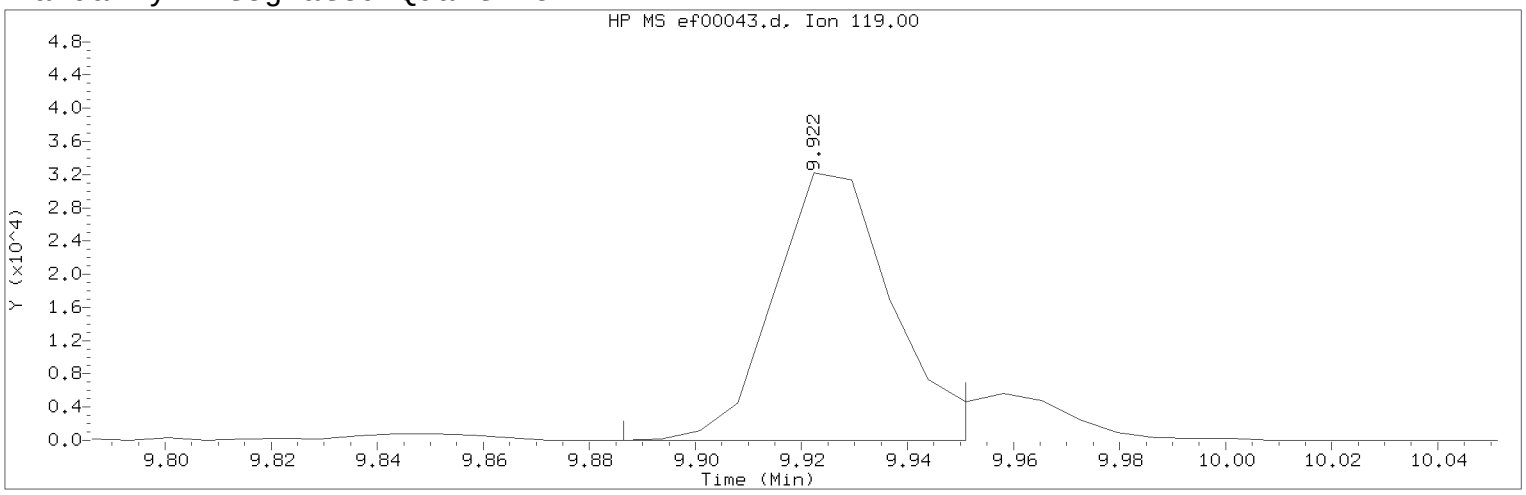
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 60994
Concentration (ppb(v)) : 0.4005
Integration start scan : 1325 Integration stop scan: 1347
Y at integration start : 173 Y at integration end: 173

Digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs0304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00043.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:40 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:46 jbs01304

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

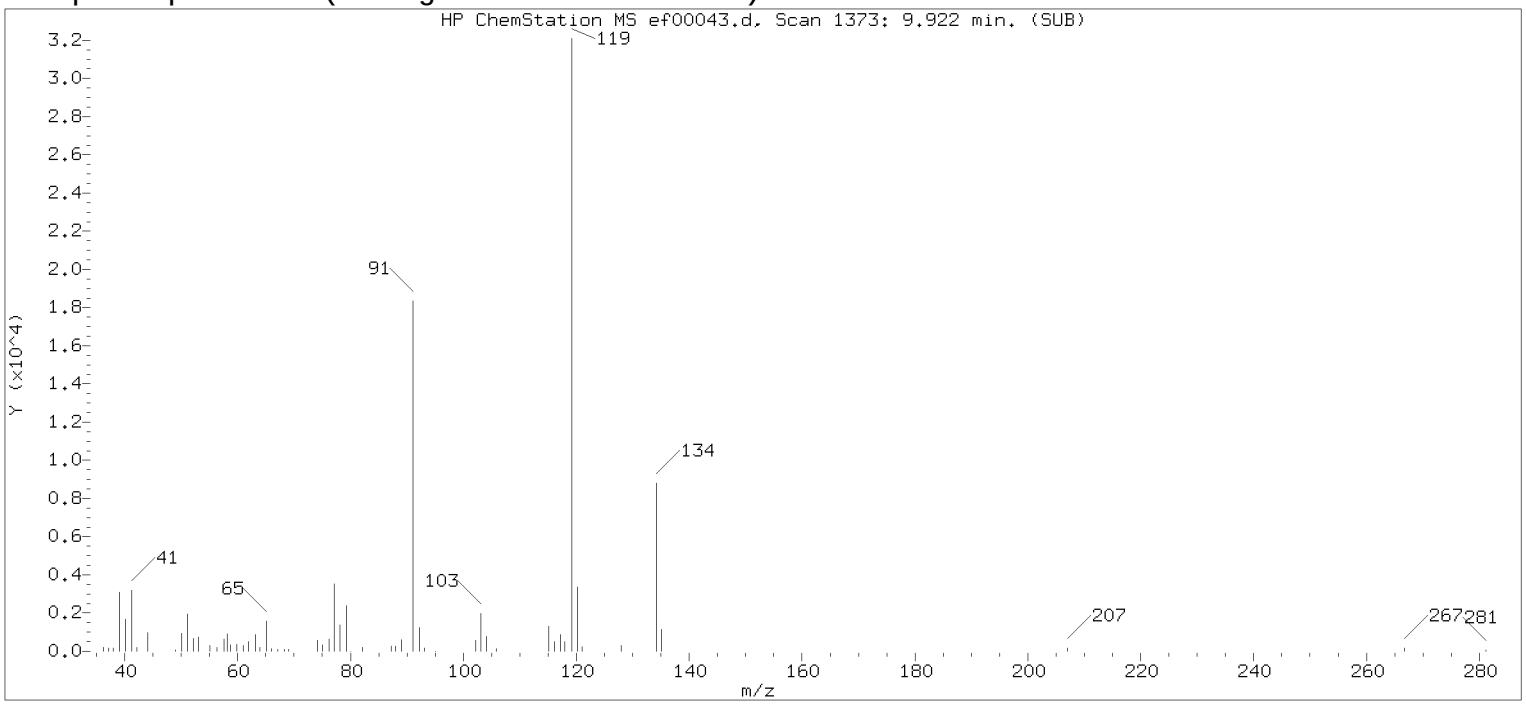
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 50135M
Concentration (ppb(v)) : 0.3156
Integration start scan : 1367 Integration stop scan: 1376
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

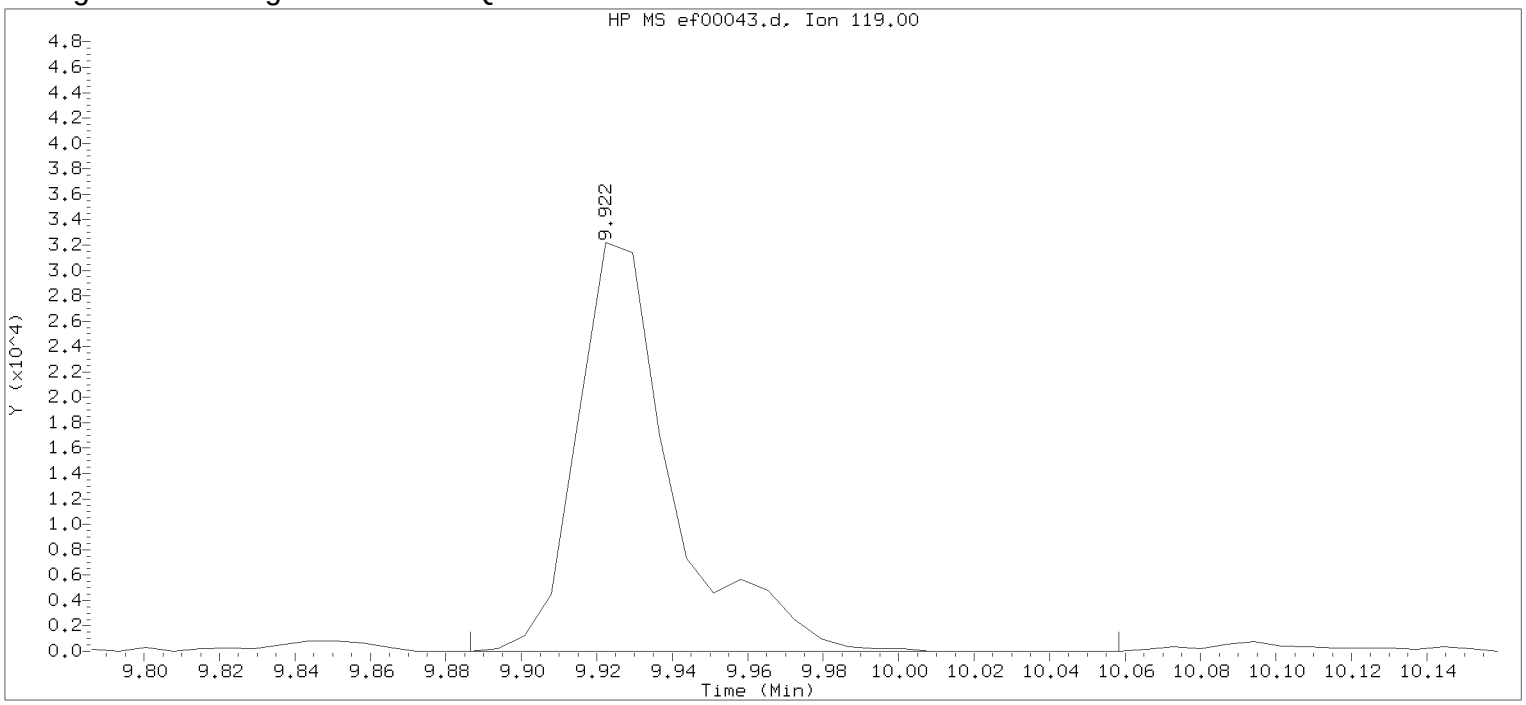
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:47.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



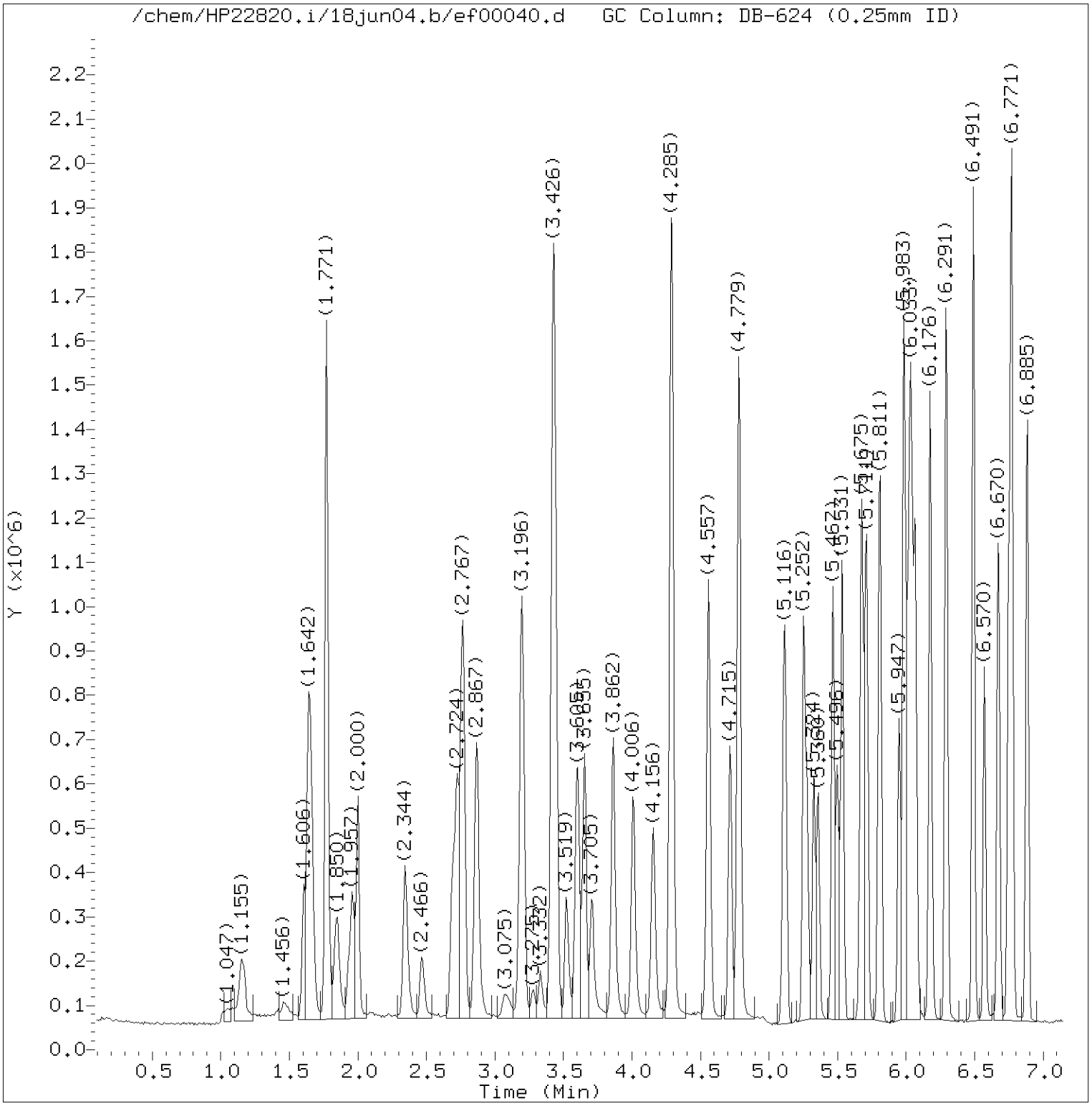
Data File: /chem/HP22820.i/18jun04.b/ef00043.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:40 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:59 Unknown

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

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 56415
Concentration (ppb(v)) : 0.3551
Integration start scan : 1367 Integration stop scan: 1391
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

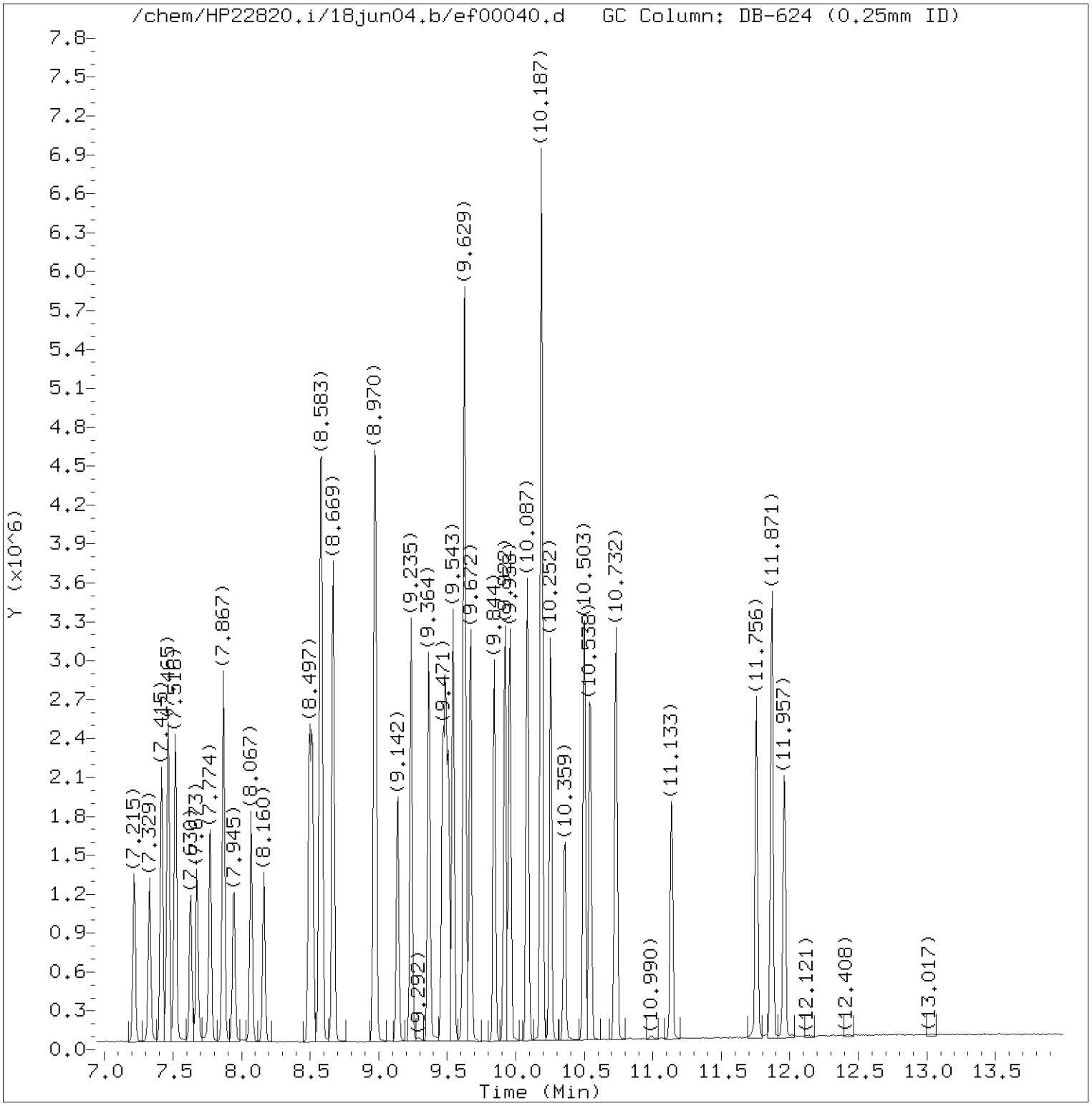
Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00040.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 15:05 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 16:04 jeb07445

Sample Name: LCSE01 Lab Sample ID: LCSE01

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00040.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 15:05 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 16:04 jeb07445

Sample Name: LCSE01 Lab Sample ID: LCSE01

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00040.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 15:05 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 16:04 jeb07445

Sample Name: LCSE01 Lab Sample ID: LCSE01

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.606	41	187073	9.578
2) Dichlorodifluoromethane	(1)	1.642	85	784649	10.364
3) Chlorodifluoromethane	(1)	1.663	51	428071	10.670
4) Freon 114	(1)	1.771	85	799907	10.325
5) Chloromethane	(1)	1.850	50	234120	10.224
6) Vinyl Chloride	(1)	1.964	62	290544	10.337
7) 1,3-Butadiene	(1)	2.000	54	197926	9.705
8) Bromomethane	(1)	2.344	94	304807	10.545
9) Chloroethane	(1)	2.466	64	155866	9.811
10) Bromoethene	(1)	2.688	106	317433	10.337
11) Dichlorofluoromethane	(1)	2.724	67	648119	10.578
12) Trichlorofluoromethane	(1)	2.767	101	832626	10.376
13) Pentane	(1)	2.867	43	491376	11.404
14) Ethanol	(1)	3.067	45	89295	9.635
15) Freon123a	(1)	3.196	67	603431	11.329
16) Acrolein	(1)	3.332	56	107163	9.765
17) 1,1-Dichloroethene	(1)	3.418	61	463379	10.402
18) Freon 113	(1)	3.433	103	451135	10.042
19) Acetone	(1)	3.519	43	376535	10.167
20) Methyl Iodide	(1)	3.605	142	856071	9.937
21) Carbon Disulfide	(1)	3.655	76	818465	9.810
22) Isopropanol	(1)	3.705	45	389852	10.208
24) 3-Chloropropene	(1)	3.862	76	156694	11.987
23) Acetonitrile	(1)	3.870	40	161288	8.971
25) Methylene Chloride	(1)	4.006	84	281886	11.111
26) tert-Butyl Alcohol	(1)	4.156	59	555402	10.758
28) trans-1,2-Dichloroethene	(1)	4.285	61	408093	10.129
27) Acrylonitrile	(1)	4.292	53	229270	10.157
29) Methyl t-Butyl Ether	(1)	4.292	73	888812	10.338
30) Hexane	(1)	4.557	57	513598	11.608
31) 1,1-Dichloroethane	(1)	4.715	63	532588	10.145
32) Vinyl Acetate	(1)	4.779	86	84837	11.052
33) Di-Isopropyl Ether	(1)	4.779	45	847406	9.691
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	752460	9.018
35) cis-1,2-Dichloroethene	(1)	5.252	61	387602	9.965
37) 2-Butanone	(1)	5.281	72	158729	9.805
38) Ethyl Acetate	(1)	5.331	70	69511	8.702
39) Methyl Acrylate	(1)	5.360	55	470498	9.586

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00040.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 15:05 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 16:04 jeb07445

Sample Name: LCSE01 Lab Sample ID: LCSE01

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	315023	10.000
41) Tetrahydrofuran	(1)	5.496	42	284231	9.913
42) Chloroform	(1)	5.531	83	665435	10.105
43) 1,1,1-Trichloroethane	(1)	5.675	97	675179	10.122
44) Cyclohexane	(1)	5.711	56	445231	9.704
45) Carbon Tetrachloride	(1)	5.811	117	680792	10.396
46) Benzene	(2)	5.983	78	1180166	11.779
47) 1,2-Dichloroethane	(2)	6.011	62	422211	10.367
48) Isooctane	(2)	6.033	57	1355179	9.772
49) Tert-Amyl Methyl Ether	(2)	6.069	73	748686	8.959
50) Heptane	(2)	6.176	43	457700	9.657
51)*1,4-Difluorobenzene	(2)	6.291	114	1165010	10.000
52) Trichloroethene	(2)	6.491	130	513276	10.312
53) Ethyl Acrylate	(2)	6.570	55	618918	9.760
36) 1,2-Dichloroethene (total)	(1)		61	795695	20.094
54) 1,2-Dichloropropane	(2)	6.670	63	339430	9.678
57) Methyl Methacrylate	(2)	6.749	69	327288	9.332
56) 1,4-Dioxane	(2)	6.771	88	247714	9.726
55) Dibromomethane	(2)	6.771	174	495149	10.279
58) Bromodichloromethane	(2)	6.885	83	684520	9.970
59) cis-1,3-Dichloropropene	(2)	7.215	75	581850	9.612
60) 4-Methyl-2-Pentanone	(2)	7.329	43	632839	9.599
61) Toluene	(3)	7.465	91	1467853	11.543
62) Octane	(3)	7.516	43	700143	10.586
63) trans-1,3-Dichloropropene	(3)	7.630	75	485506	9.684
65) Ethyl Methacrylate	(3)	7.673	69	554877	9.752
66) 1,1,2-Trichloroethane	(3)	7.774	97	433902	9.657
67) Tetrachloroethene	(3)	7.867	166	711723	10.002
68) 2-Hexanone	(3)	7.945	43	586071	9.212
69) Dibromochloromethane	(3)	8.067	127	573748	10.124
70) 1,2-Dibromoethane	(3)	8.160	107	688247	9.844
71)*Chlorobenzene-d5	(3)	8.497	117	1102247	10.000
72) Chlorobenzene	(3)	8.518	112	1050045	9.647
73) 1,1,1,2-Tetrachloroethane	(3)	8.576	131	533315	10.067
74) Ethylbenzene	(3)	8.583	91	1883812	11.076
75) m/p-Xylene	(3)	8.669	91	1741808	12.615
76) o-Xylene	(3)	8.970	91	1525127	11.174
78) Styrene	(3)	8.977	104	1030265	9.963

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00040.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 15:05 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 16:04 jeb07445

Sample Name: LCSE01 Lab Sample ID: LCSE01

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	749958	10.286
80) Cumene	(3)	9.235	105	1820516	9.354
82) 1,1,2,2-Tetrachloroethane	(3)	9.464	83	897162	9.373
81) Bromobenzene	(3)	9.485	156	672756	9.728
83) 1,2,3-Trichloropropane	(3)	9.507	110	302860	9.905
84) n-Propylbenzene	(3)	9.543	120	521912	9.330
85) 2-Chlorotoluene	(3)	9.622	126	486418	9.447
86) 4-Ethyltoluene	(3)	9.629	105	1820291M	9.670
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	1464573M	9.349
88) Alpha Methyl Styrene	(3)	9.844	118	735159	8.947
89) tert-Butylbenzene	(3)	9.922	119	1374803M	8.413
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	1456198	9.416
91) sec-Butylbenzene	(3)	10.087	105	2076481	8.872
92) 1,3-Dichlorobenzene	(3)	10.187	146	1078310	9.382
94) p-Isopropyltoluene	(3)	10.187	119	1794067	8.958
93) 1,4-Dichlorobenzene	(3)	10.252	146	1096756	9.362
95) Benzyl Chloride	(3)	10.359	91	956484	9.027
97) n-Butylbenzene	(3)	10.503	91	1544510	8.582
96) 1,2-Dichlorobenzene	(3)	10.546	146	1000462	9.146
98) Hexachloroethane	(3)	10.732	117	423196	9.953
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	491456	8.691
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	716846	7.646
101) Hexachlorobutadiene	(3)	11.871	225	622551	7.765
102) Naphthalene	(3)	11.957	128	1463694	7.061
64) 1,3-Dichloropropene (total)	(3)		75	1067356	19.296
77) Xylene (total)	(3)		91	3266935	23.789

M = Compound was manually integrated.

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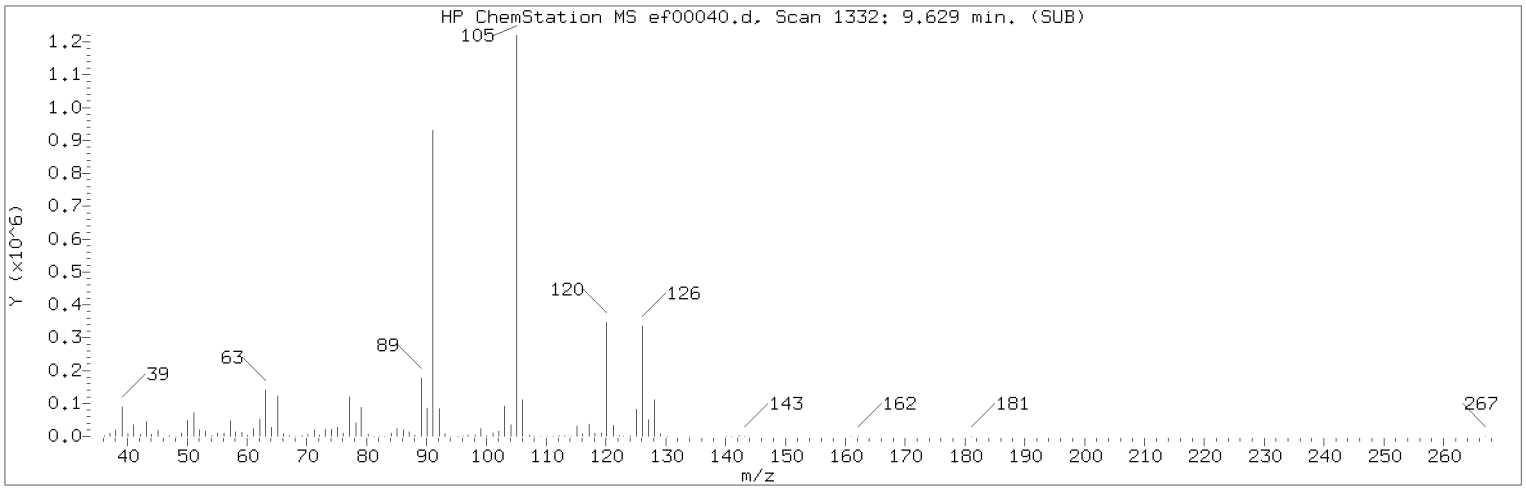
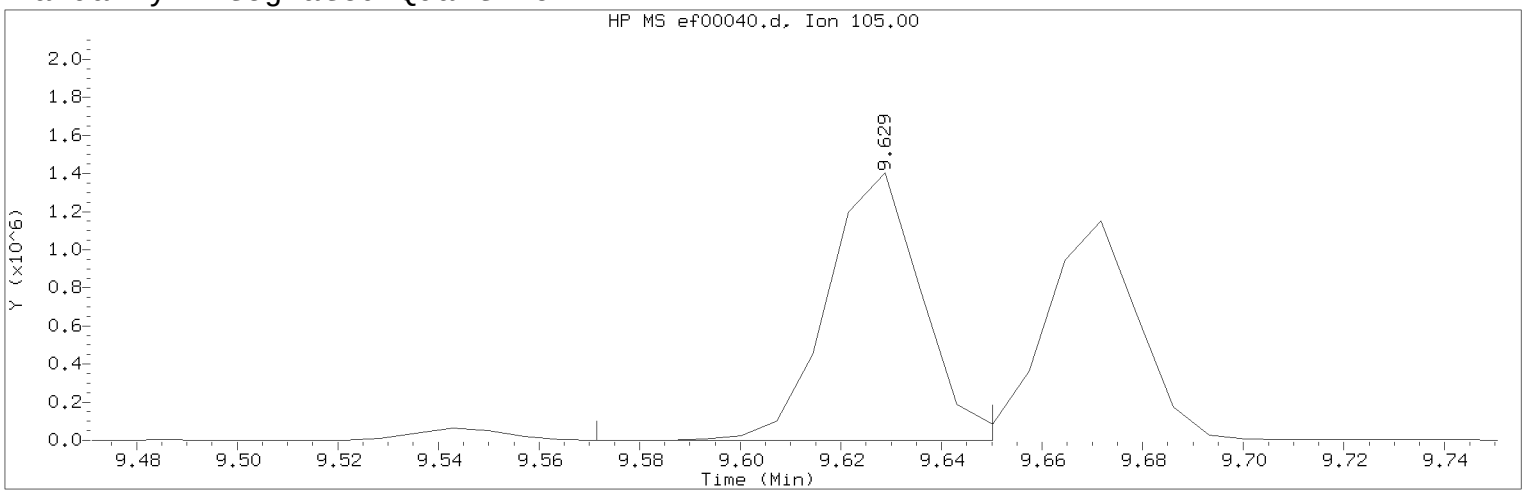
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00040.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 15:05 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 16:04 jeb07445

Sample Name: LCSE01 Lab Sample ID: LCSE01

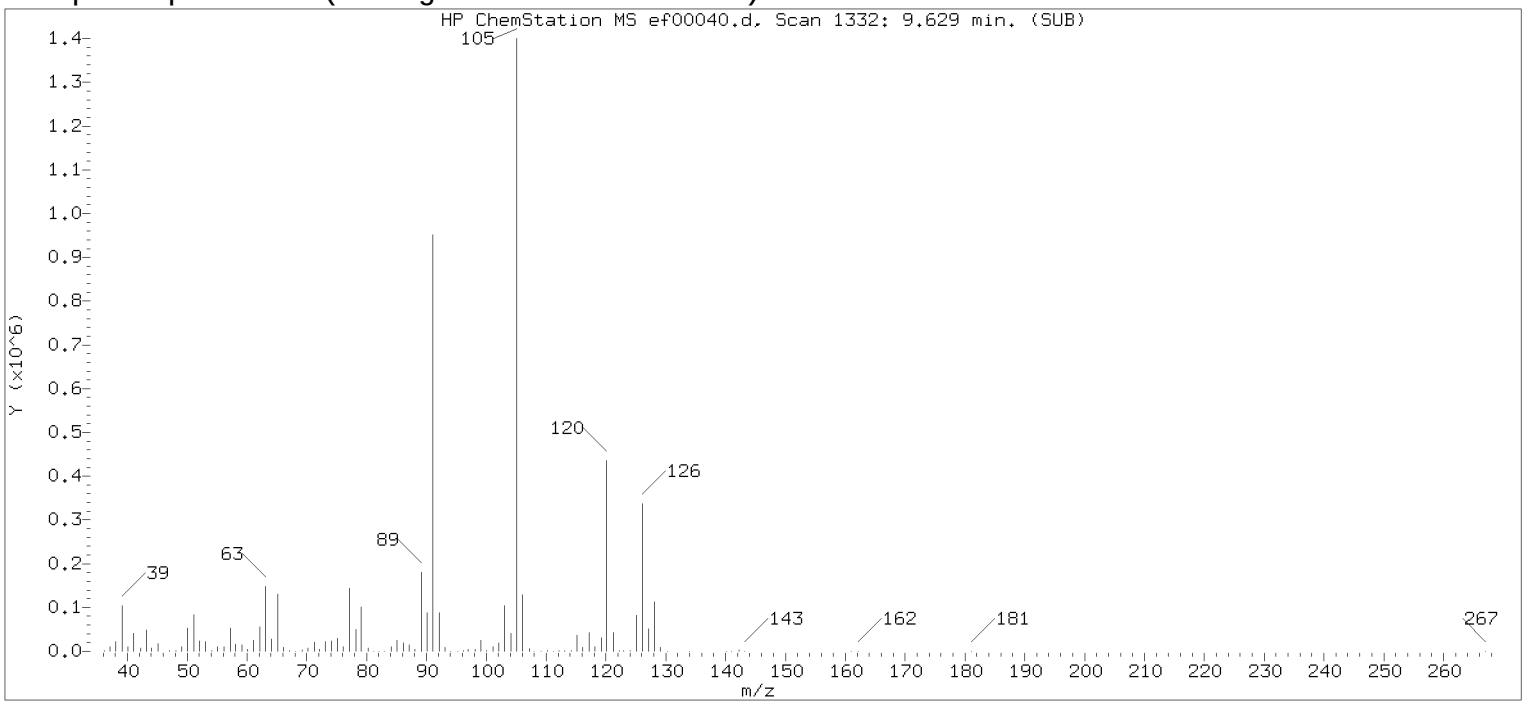
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 1820291M
Concentration (ppb(v)) : 9.6704
Integration start scan : 1323 Integration stop scan: 1334
Y at integration start : 497 Y at integration end: 497

Reason for manual integration: improper integration

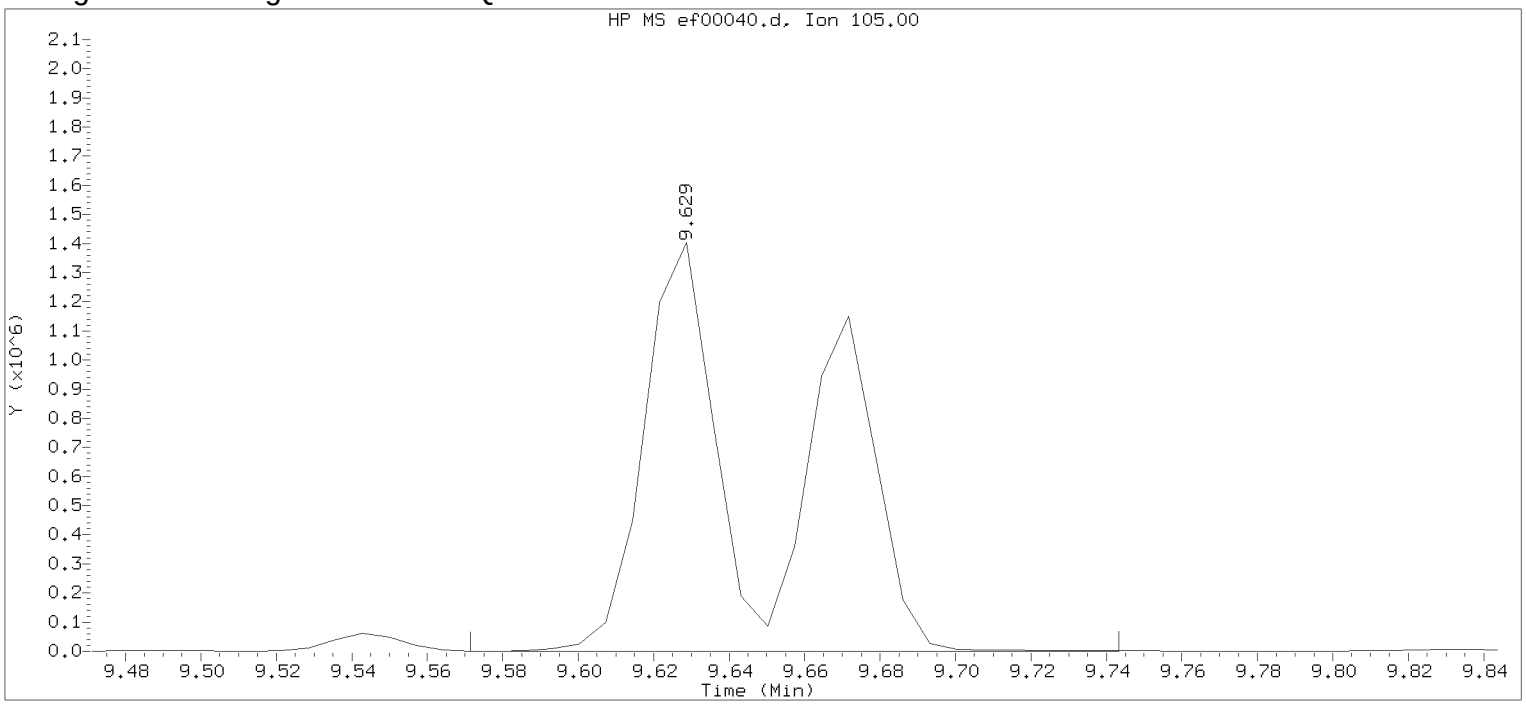
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00040.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 15:05 Analyst ID: jeb07445

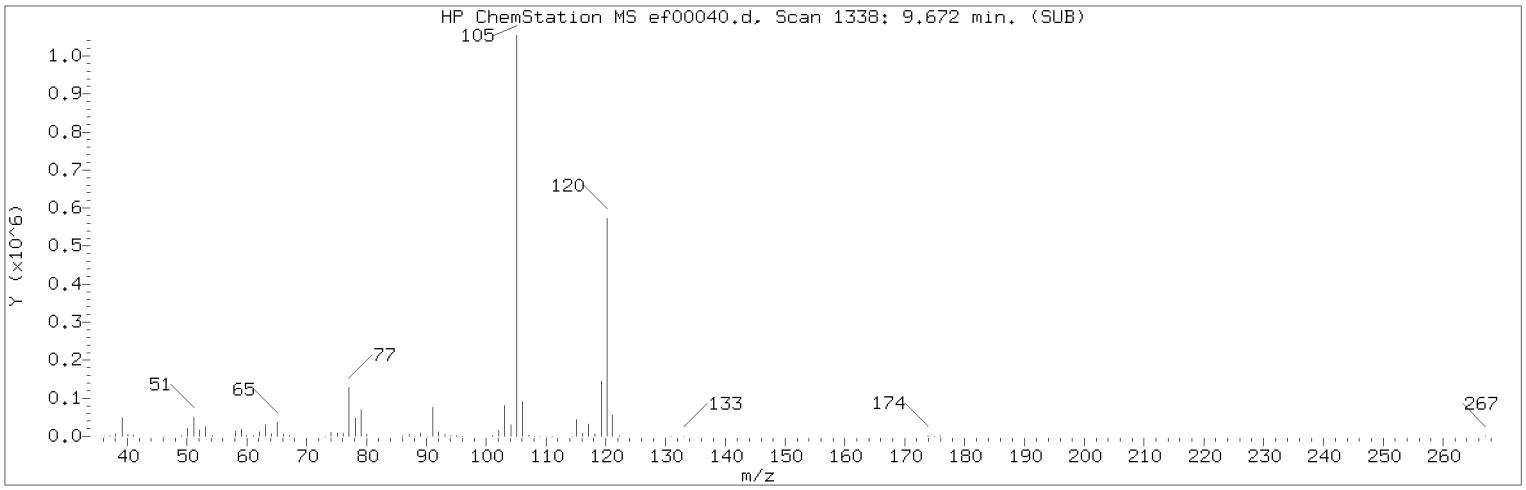
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 15:23 Unknown

Sample Name: LCSE01 Lab Sample ID: LCSE01

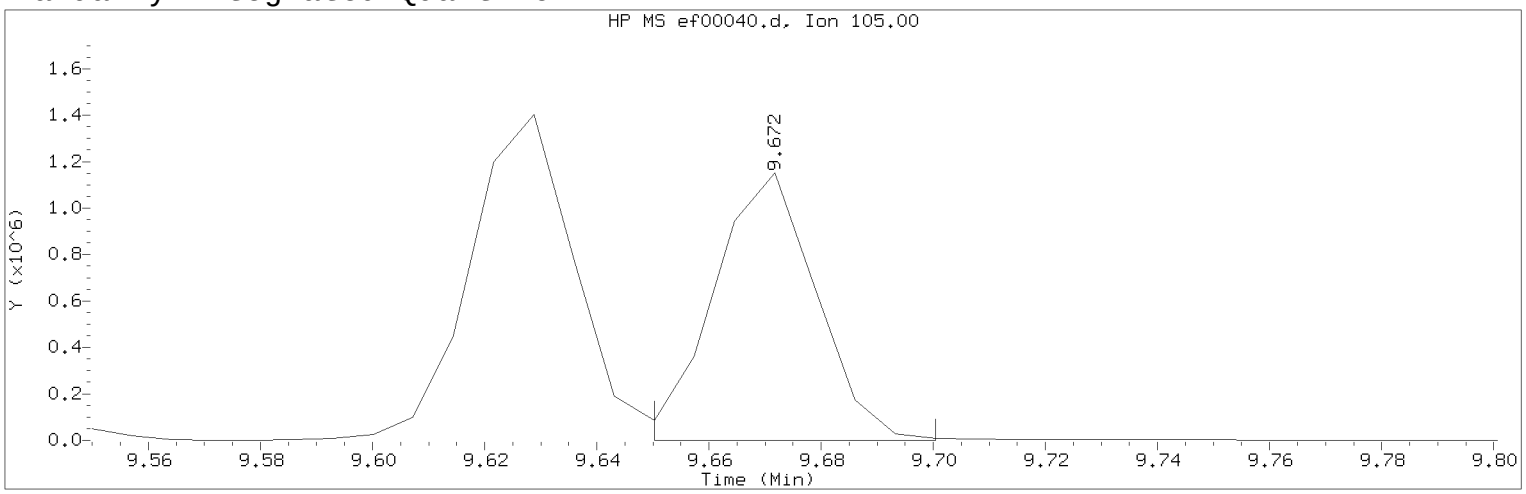
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 3255820
Concentration (ppb(v)) : 17.2967
Integration start scan : 1323 Integration stop scan: 1347
Y at integration start : 497 Y at integration end: 497

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00040.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 15:05 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 16:04 jeb07445

Sample Name: LCSE01 Lab Sample ID: LCSE01

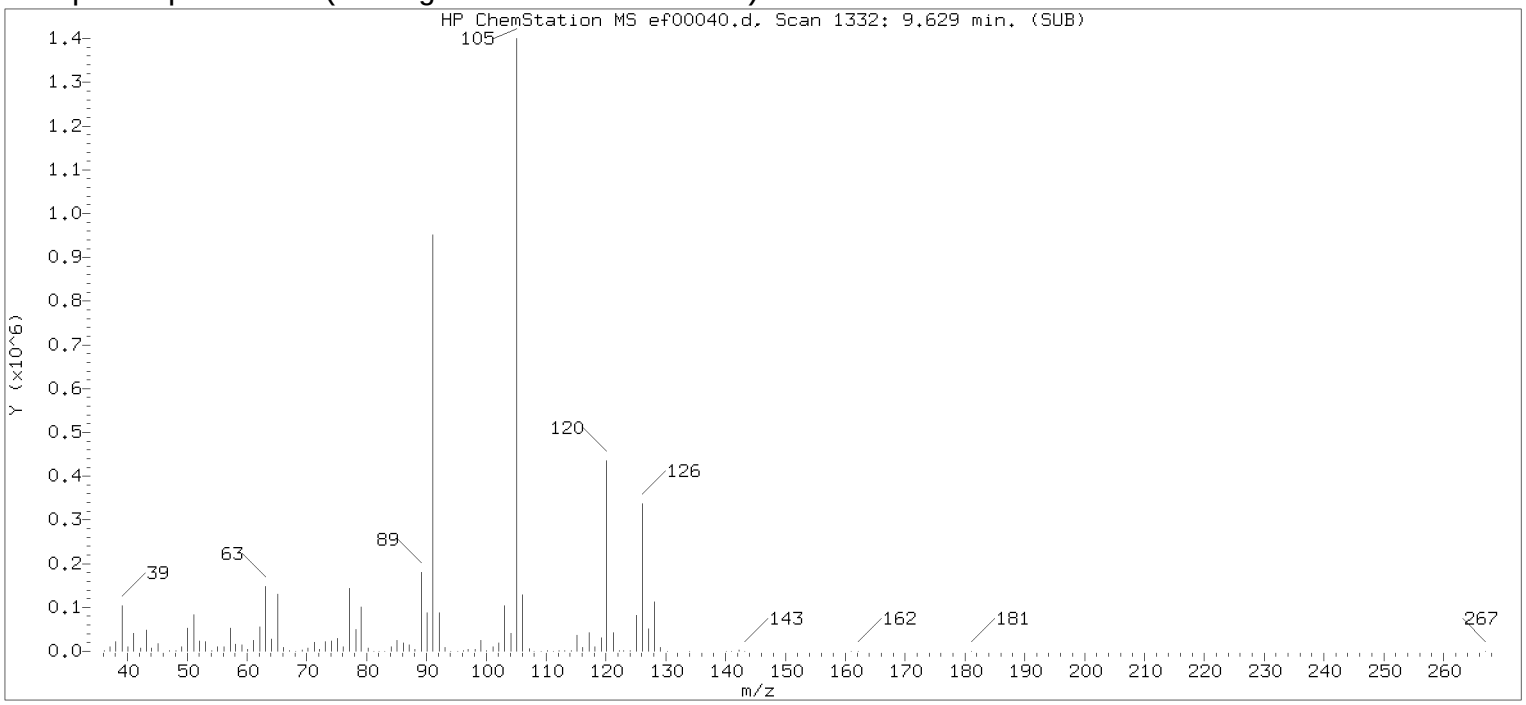
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 1464573M
Concentration (ppb(v)) : 9.3487
Integration start scan : 1334 Integration stop scan: 1341
Y at integration start : 878 Y at integration end: 878

Reason for manual integration: improper integration

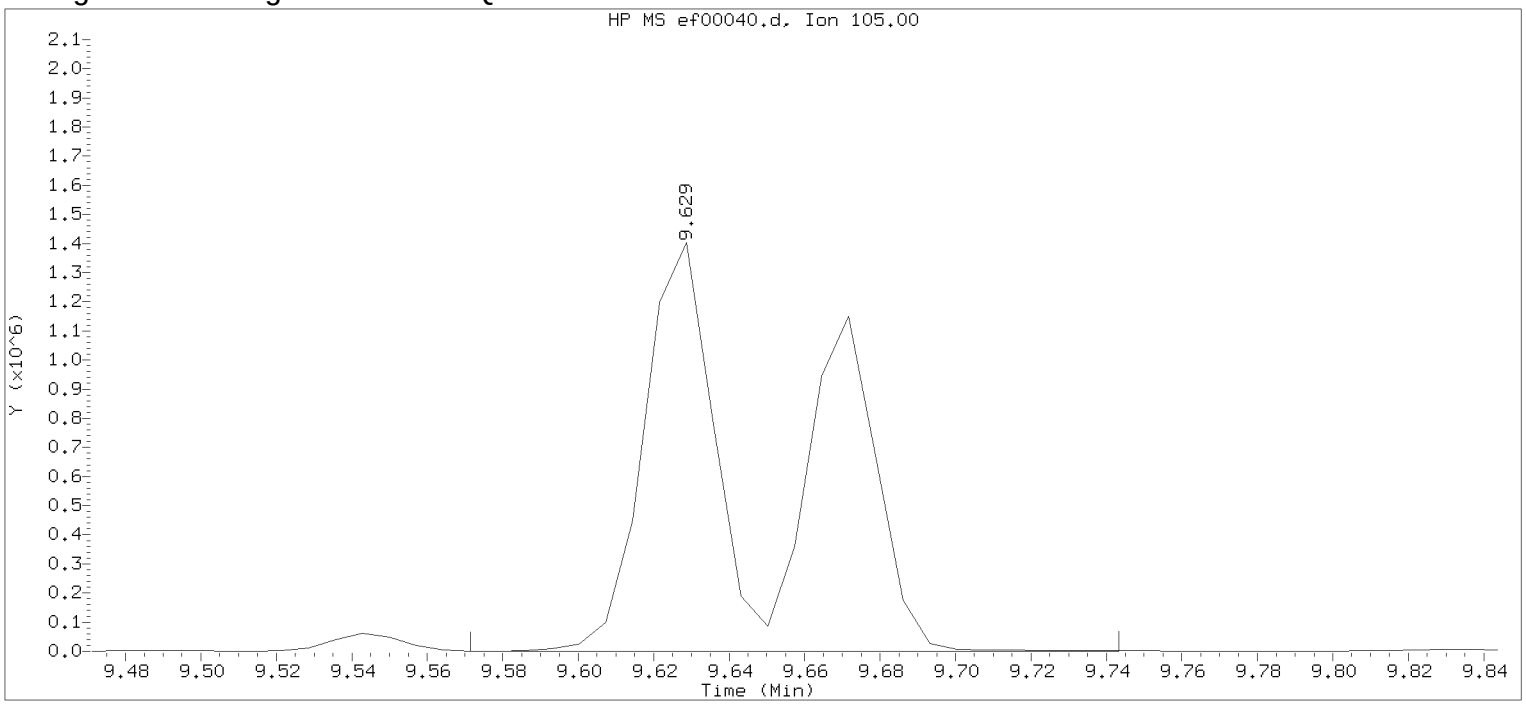
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00040.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 15:05 Analyst ID: jeb07445

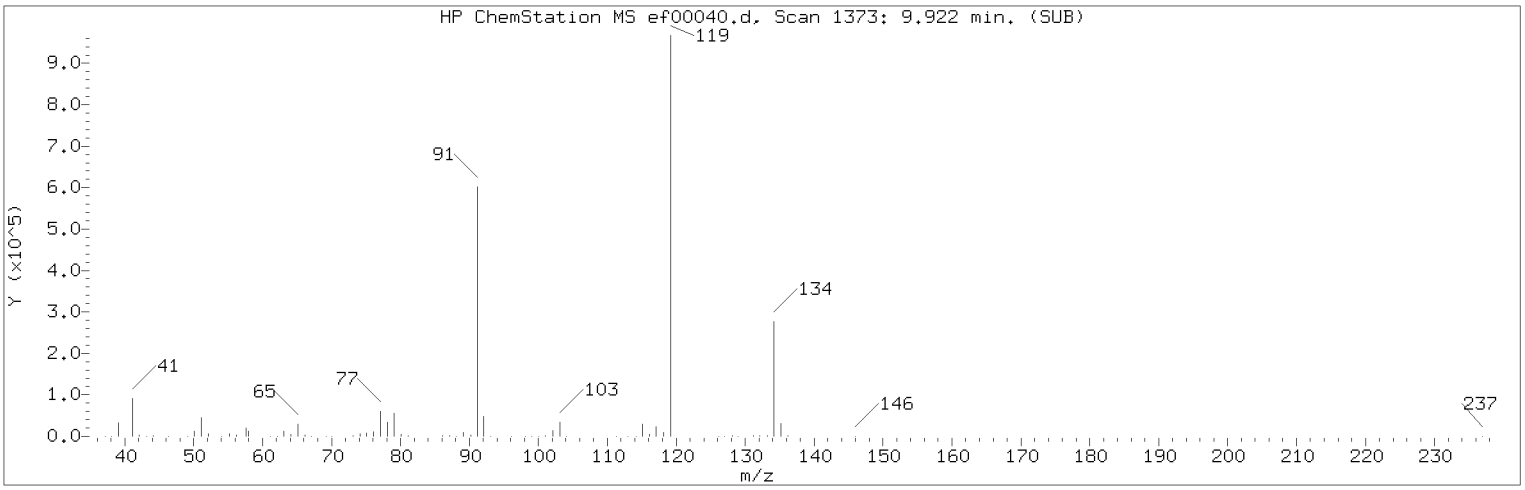
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 15:23 Unknown

Sample Name: LCSE01 Lab Sample ID: LCSE01

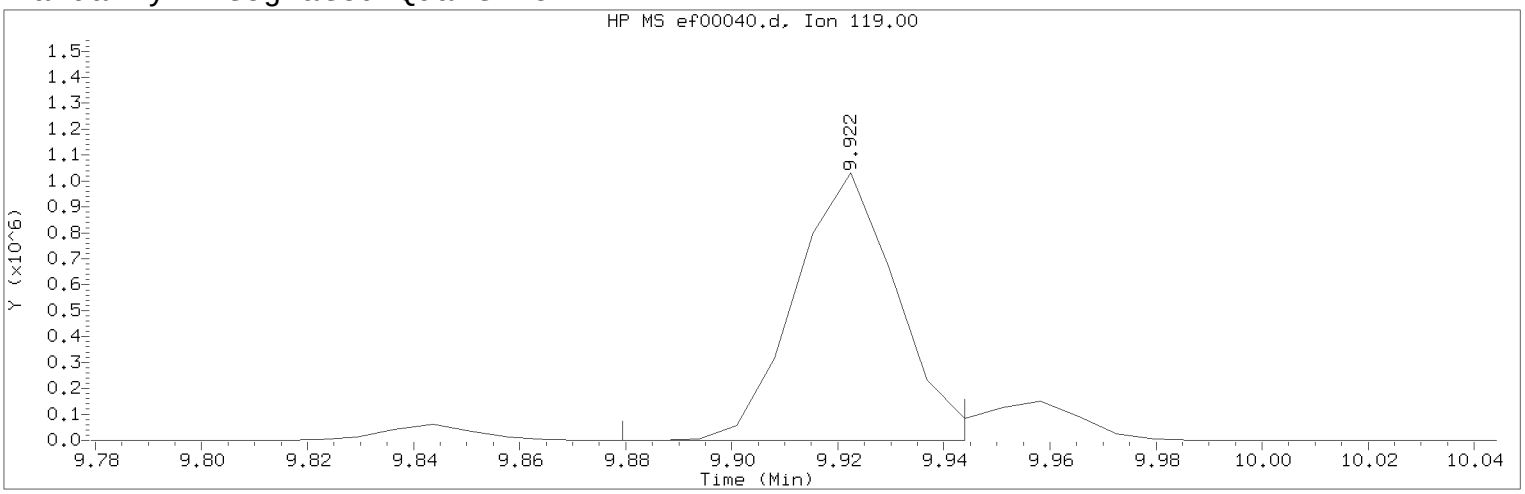
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 3252272
Concentration (ppb(v)) : 20.7600
Integration start scan : 1323 Integration stop scan: 1347
Y at integration start : 841 Y at integration end: 841

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00040.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 15:05 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 16:04 jeb07445

Sample Name: LCSE01 Lab Sample ID: LCSE01

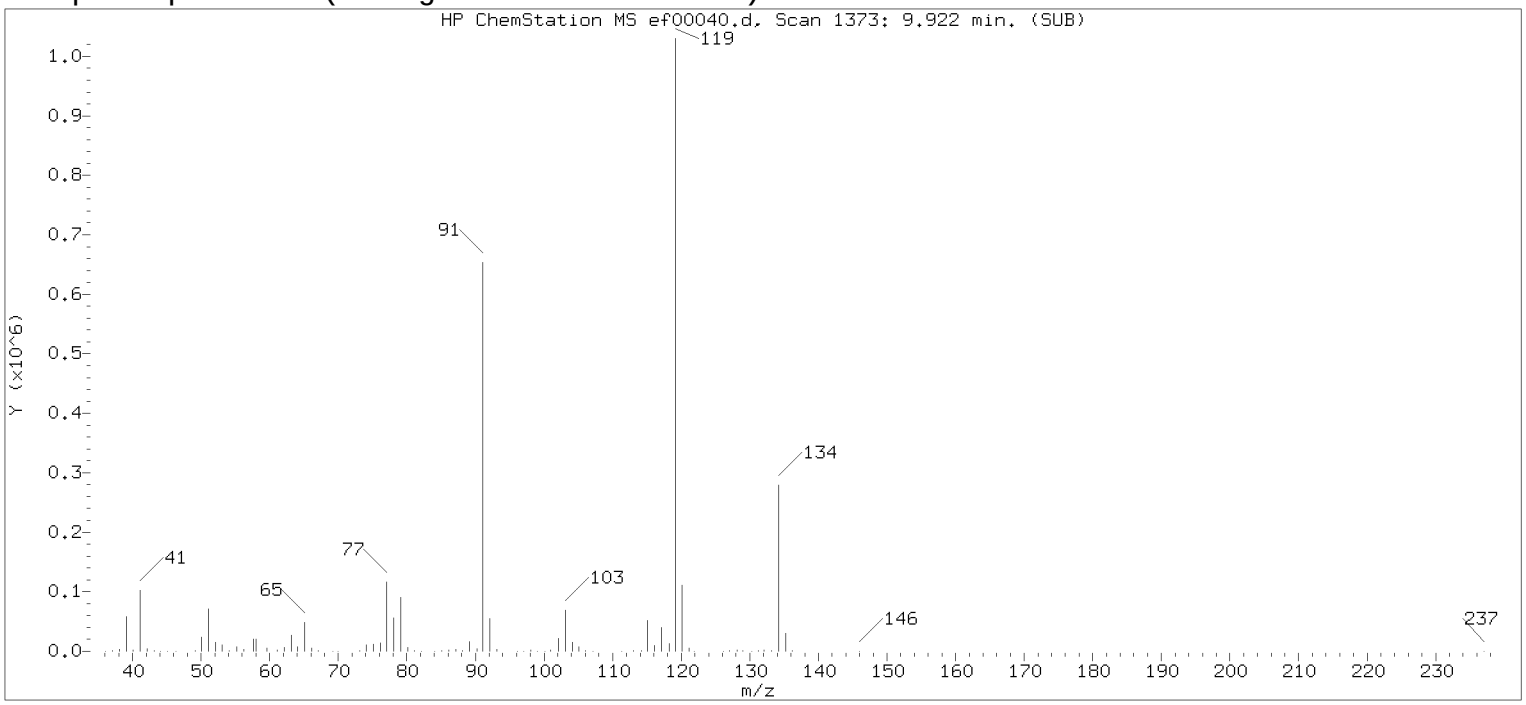
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 1374803M
Concentration (ppb(v)) : 8.4127
Integration start scan : 1366 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

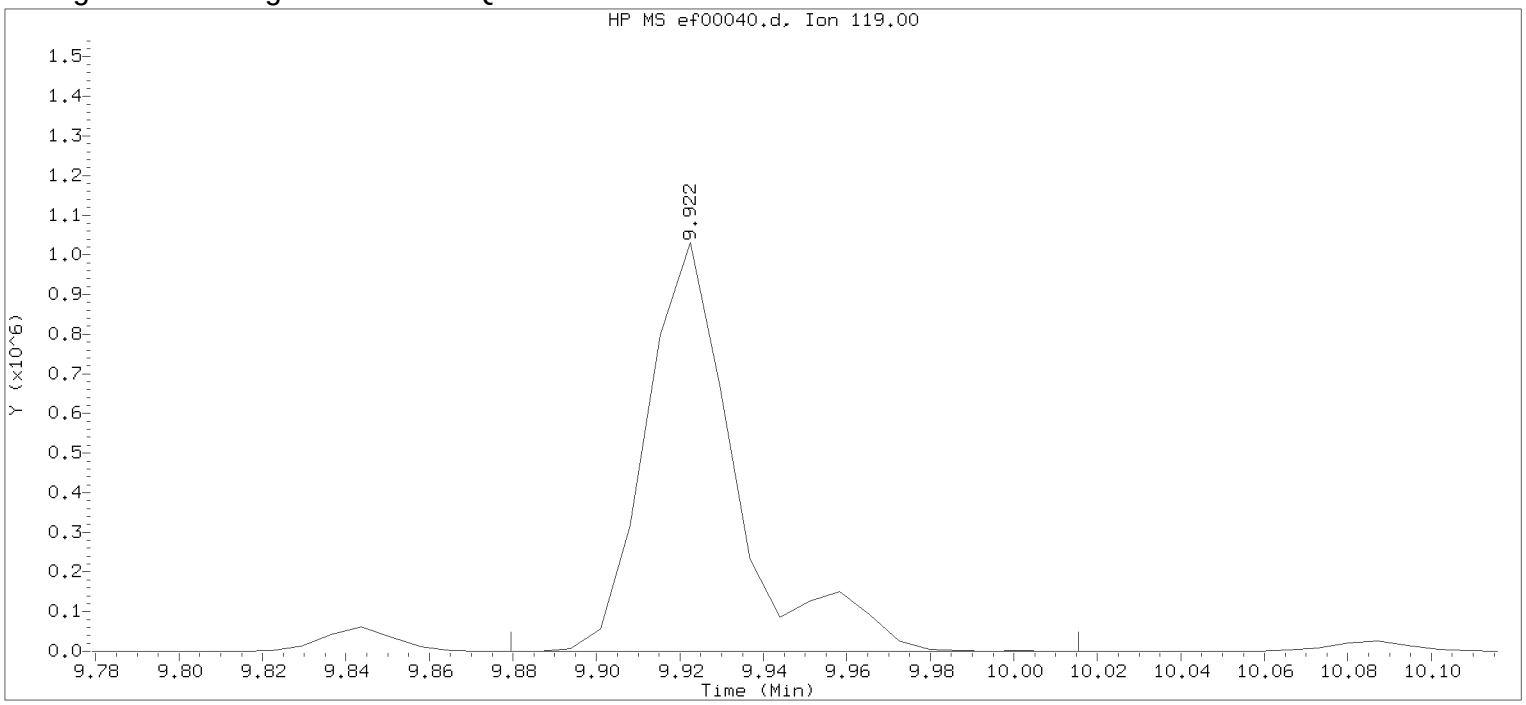
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



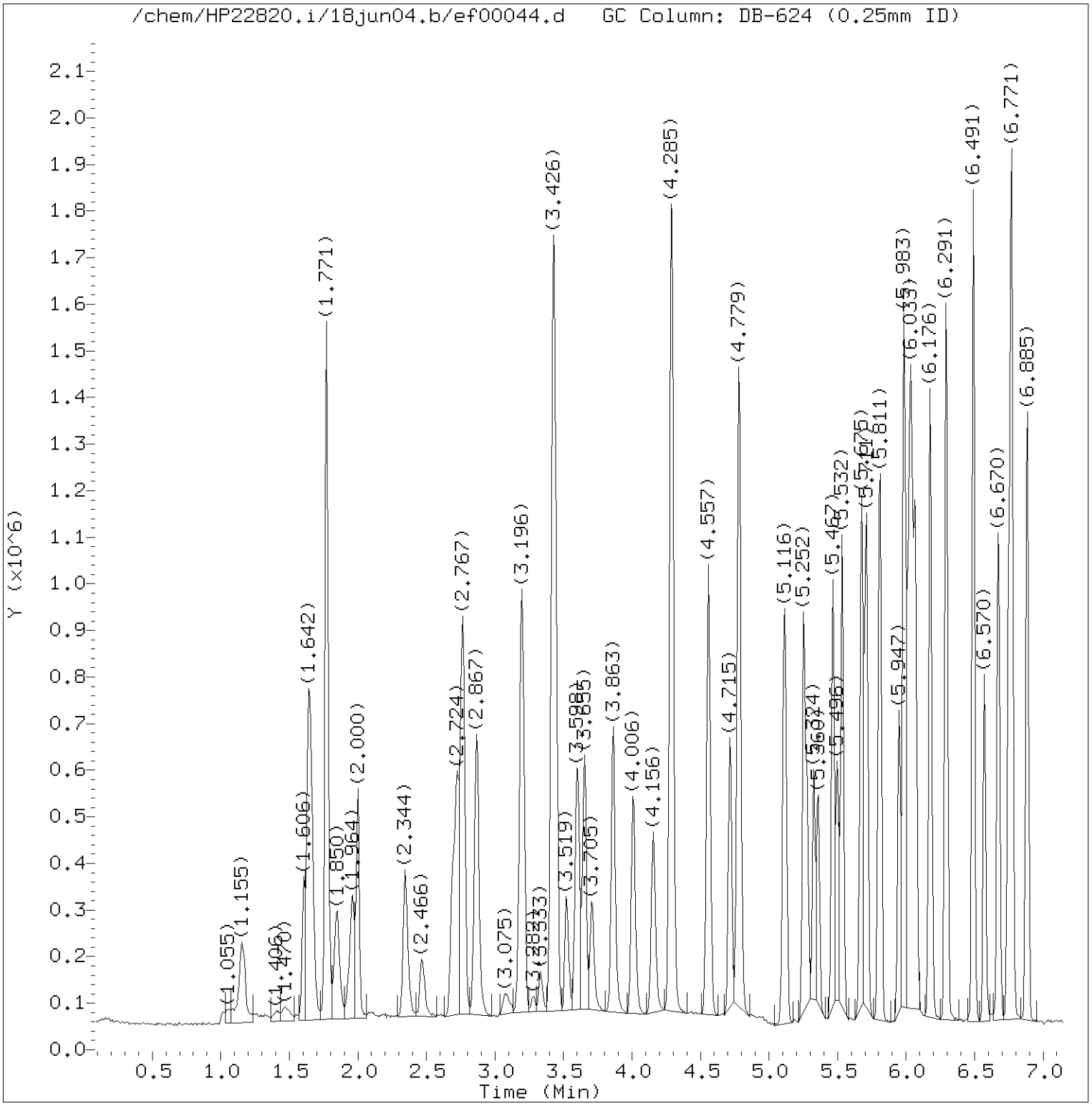
Data File: /chem/HP22820.i/18jun04.b/ef00040.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 15:05 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 15:23 Unknown

Sample Name: LCSE01 Lab Sample ID: LCSE01

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 1548637
Concentration (ppb(v)) : 9.4764
Integration start scan : 1366 Integration stop scan: 1385
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

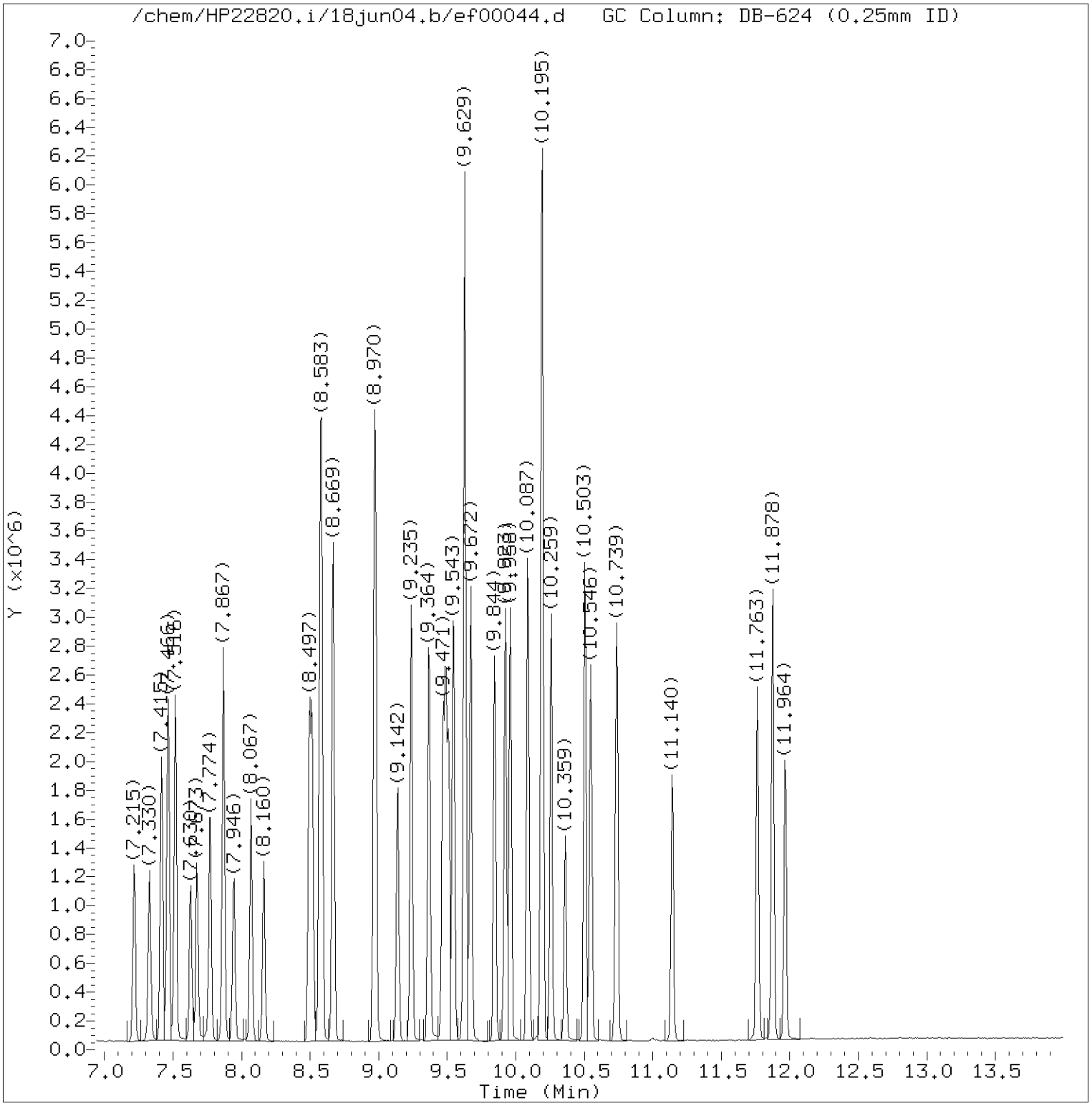
Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00044.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 17:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 17:56 jeb07445

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 17:57.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00044.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 17:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 17:56 jeb07445

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 17:57.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00044.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 17:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 17:56 jeb07445

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.606	41	180050	9.762
2) Dichlorodifluoromethane	(1)	1.642	85	749408	10.482
3) Chlorodifluoromethane	(1)	1.664	51	415735	10.974
4) Freon 114	(1)	1.771	85	756496	10.341
5) Chloromethane	(1)	1.850	50	229396	10.608
6) Vinyl Chloride	(1)	1.964	62	276038	10.400
7) 1,3-Butadiene	(1)	2.000	54	188606	9.793
8) Bromomethane	(1)	2.344	94	283993	10.404
9) Chloroethane	(1)	2.466	64	153243	10.215
10) Bromoethene	(1)	2.688	106	299305	10.321
11) Dichlorofluoromethane	(1)	2.724	67	622440	10.758
12) Trichlorofluoromethane	(1)	2.767	101	792806	10.462
13) Pentane	(1)	2.867	43	469407	11.536
14) Ethanol	(1)	3.075	45	83511	9.542
15) Freon123a	(1)	3.196	67	573918	11.410
16) Acrolein	(1)	3.333	56	105002	10.132
17) 1,1-Dichloroethene	(1)	3.418	61	444812	10.574
18) Freon 113	(1)	3.433	103	423552M	9.984
19) Acetone	(1)	3.519	43	367494	10.508
20) Methyl Iodide	(1)	3.605	142	815745	10.027
21) Carbon Disulfide	(1)	3.655	76	781341	9.917
22) Isopropanol	(1)	3.705	45	356027	9.872
24) 3-Chloropropene	(1)	3.863	76	144316	11.691
23) Acetonitrile	(1)	3.870	40	156313	9.207
25) Methylene Chloride	(1)	4.006	84	267674	11.173
26) tert-Butyl Alcohol	(1)	4.156	59	514551	10.555
28) trans-1,2-Dichloroethene	(1)	4.285	61	392231	10.309
27) Acrylonitrile	(1)	4.292	53	216925	10.177
29) Methyl t-Butyl Ether	(1)	4.292	73	853560	10.513
30) Hexane	(1)	4.557	57	491943	11.774
31) 1,1-Dichloroethane	(1)	4.715	63	509309	10.274
32) Vinyl Acetate	(1)	4.779	86	76555	10.561
33) Di-Isopropyl Ether	(1)	4.779	45	827532	10.022
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	739753	9.388
35) cis-1,2-Dichloroethene	(1)	5.252	61	371332	10.110
37) 2-Butanone	(1)	5.281	72	148000	9.681
38) Ethyl Acetate	(1)	5.324	70	70019	9.282
39) Methyl Acrylate	(1)	5.360	55	455490	9.827

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 17:57.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00044.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 17:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 17:56 jeb07445

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	297481	10.000
41) Tetrahydrofuran	(1)	5.496	42	269608	9.958
42) Chloroform	(1)	5.532	83	638742	10.271
43) 1,1,1-Trichloroethane	(1)	5.675	97	631507	10.025
44) Cyclohexane	(1)	5.711	56	423350	9.771
45) Carbon Tetrachloride	(1)	5.811	117	637175	10.304
46) Benzene	(2)	5.983	78	1125232	12.131
47) 1,2-Dichloroethane	(2)	6.011	62	407652	10.812
48) Isooctane	(2)	6.033	57	1299876	10.124
49) Tert-Amyl Methyl Ether	(2)	6.069	73	728829	9.420
50) Heptane	(2)	6.176	43	439835	10.024
51)*1,4-Difluorobenzene	(2)	6.291	114	1078550	10.000
52) Trichloroethene	(2)	6.491	130	474317	10.293
53) Ethyl Acrylate	(2)	6.570	55	579146	9.865
36) 1,2-Dichloroethene (total)	(1)		61	763563	20.419
54) 1,2-Dichloropropane	(2)	6.670	63	320098	9.858
57) Methyl Methacrylate	(2)	6.749	69	306303	9.434
56) 1,4-Dioxane	(2)	6.771	88	229889	9.750
55) Dibromomethane	(2)	6.771	174	459835	10.311
58) Bromodichloromethane	(2)	6.885	83	652588	10.267
59) cis-1,3-Dichloropropene	(2)	7.215	75	542166	9.674
60) 4-Methyl-2-Pentanone	(2)	7.330	43	608744	9.973
61) Toluene	(3)	7.466	91	1412877	11.851
62) Octane	(3)	7.516	43	696949	11.240
63) trans-1,3-Dichloropropene	(3)	7.630	75	451507	9.606
65) Ethyl Methacrylate	(3)	7.673	69	514125	9.639
66) 1,1,2-Trichloroethane	(3)	7.774	97	416432	9.886
67) Tetrachloroethene	(3)	7.867	166	661646	9.918
68) 2-Hexanone	(3)	7.946	43	572481	9.598
69) Dibromochloromethane	(3)	8.067	127	539509	10.155
70) 1,2-Dibromoethane	(3)	8.160	107	651891	9.945
71)*Chlorobenzene-d5	(3)	8.497	117	1033360	10.000
72) Chlorobenzene	(3)	8.511	112	982184	9.625
73) 1,1,1,2-Tetrachloroethane	(3)	8.576	131	507471	10.218
74) Ethylbenzene	(3)	8.583	91	1794971	11.257
75) m/p-Xylene	(3)	8.669	91	1633018	12.616
76) o-Xylene	(3)	8.970	91	1459662	11.407
78) Styrene	(3)	8.977	104	971810	10.024

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 17:57.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00044.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 17:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 17:56 jeb07445

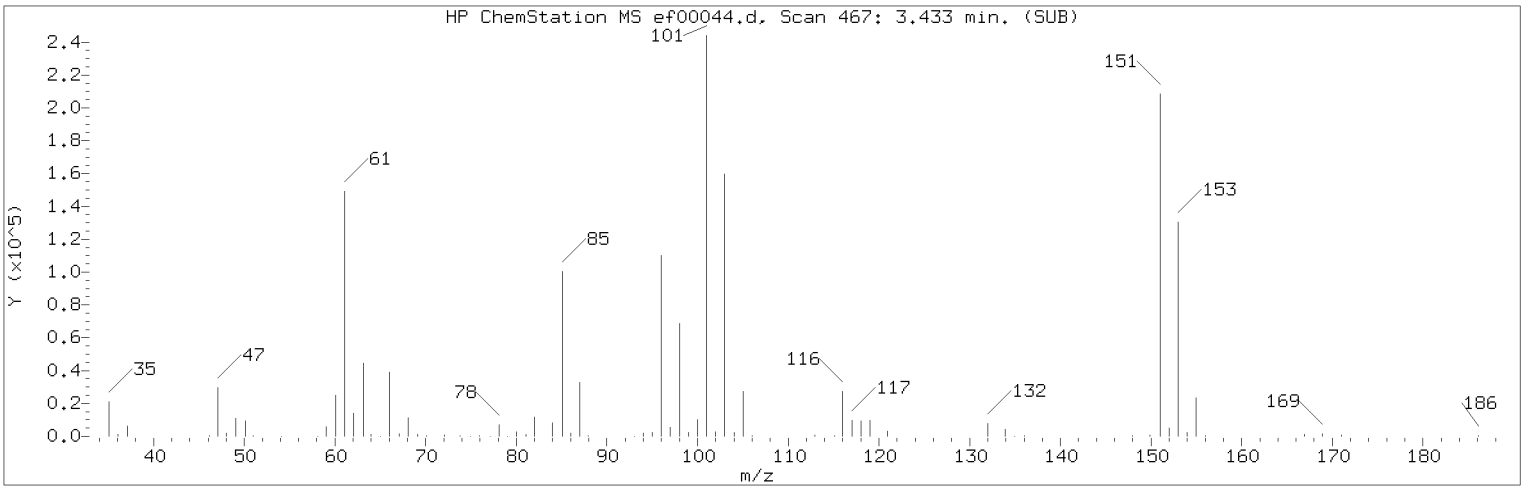
Sample Name: LCSDE01 Lab Sample ID: LCSDE01

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	698318	10.216
80) Cumene	(3)	9.235	105	1698063	9.307
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	871375	9.711
81) Bromobenzene	(3)	9.493	156	623840	9.622
83) 1,2,3-Trichloropropane	(3)	9.514	110	280520	9.786
84) n-Propylbenzene	(3)	9.550	120	480235	9.158
86) 4-Ethyltoluene	(3)	9.629	105	1683438M	9.540
85) 2-Chlorotoluene	(3)	9.629	126	458263	9.494
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	1398298M	9.521
88) Alpha Methyl Styrene	(3)	9.844	118	695121	9.023
89) tert-Butylbenzene	(3)	9.923	119	1334581M	8.711
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	1372568	9.466
91) sec-Butylbenzene	(3)	10.087	105	1957520	8.922
92) 1,3-Dichlorobenzene	(3)	10.195	146	1025324	9.515
94) p-Isopropyltoluene	(3)	10.195	119	1678586	8.940
93) 1,4-Dichlorobenzene	(3)	10.259	146	1025637	9.339
95) Benzyl Chloride	(3)	10.359	91	841491	8.471
97) n-Butylbenzene	(3)	10.503	91	1469519	8.710
96) 1,2-Dichlorobenzene	(3)	10.546	146	932731	9.095
98) Hexachloroethane	(3)	10.739	117	392411	9.844
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	447044	8.432
100) 1,2,4-Trichlorobenzene	(3)	11.763	180	663908	7.554
101) Hexachlorobutadiene	(3)	11.878	225	570579	7.591
102) Naphthalene	(3)	11.964	128	1340388	6.897
64) 1,3-Dichloropropene (total)	(3)		75	993673	19.280
77) Xylene (total)	(3)		91	3092680	24.023

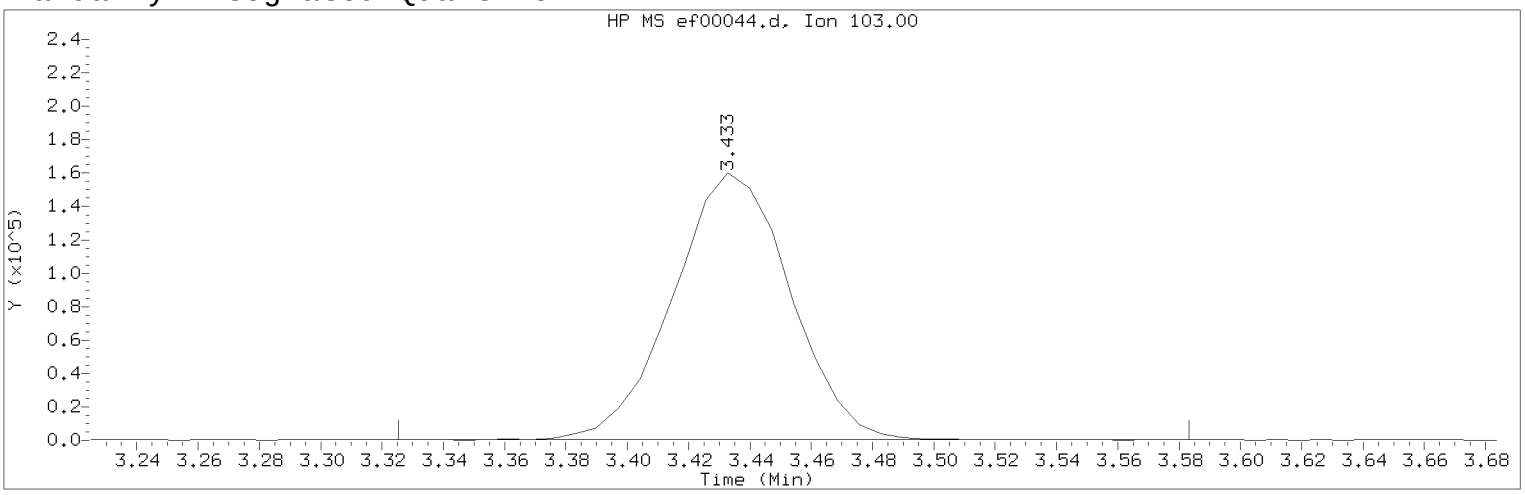
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 17:57.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00044.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 17:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 17:56 jeb07445

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

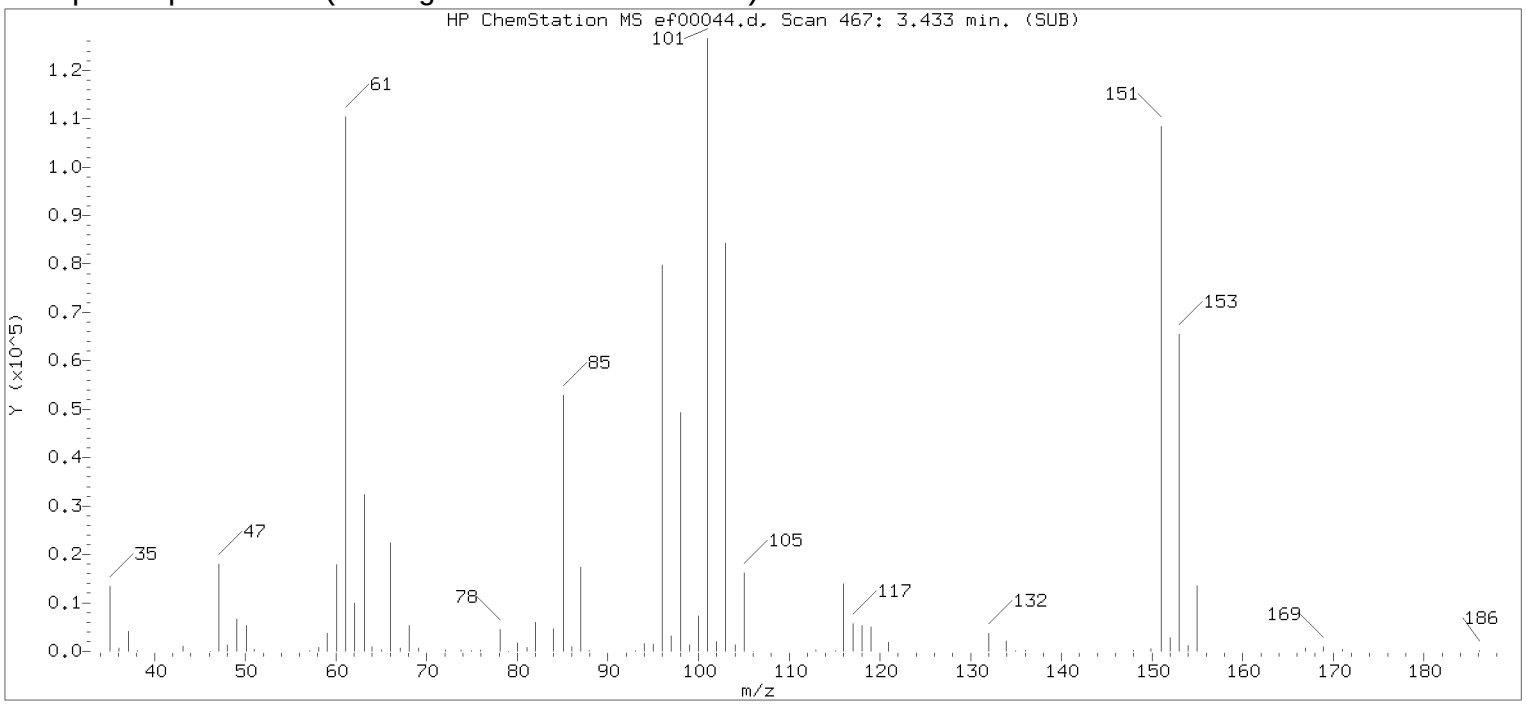
Compound Number : 18
Compound Name : Freon 113
Scan Number : 467
Retention Time (minutes): 3.433
Quant Ion : 103.00
Area (flag) : 423552M
Concentration (ppb(v)) : 9.9838
Integration start scan : 451 Integration stop scan: 487
Y at integration start : 486 Y at integration end: 259

Reason for manual integration: improper integration

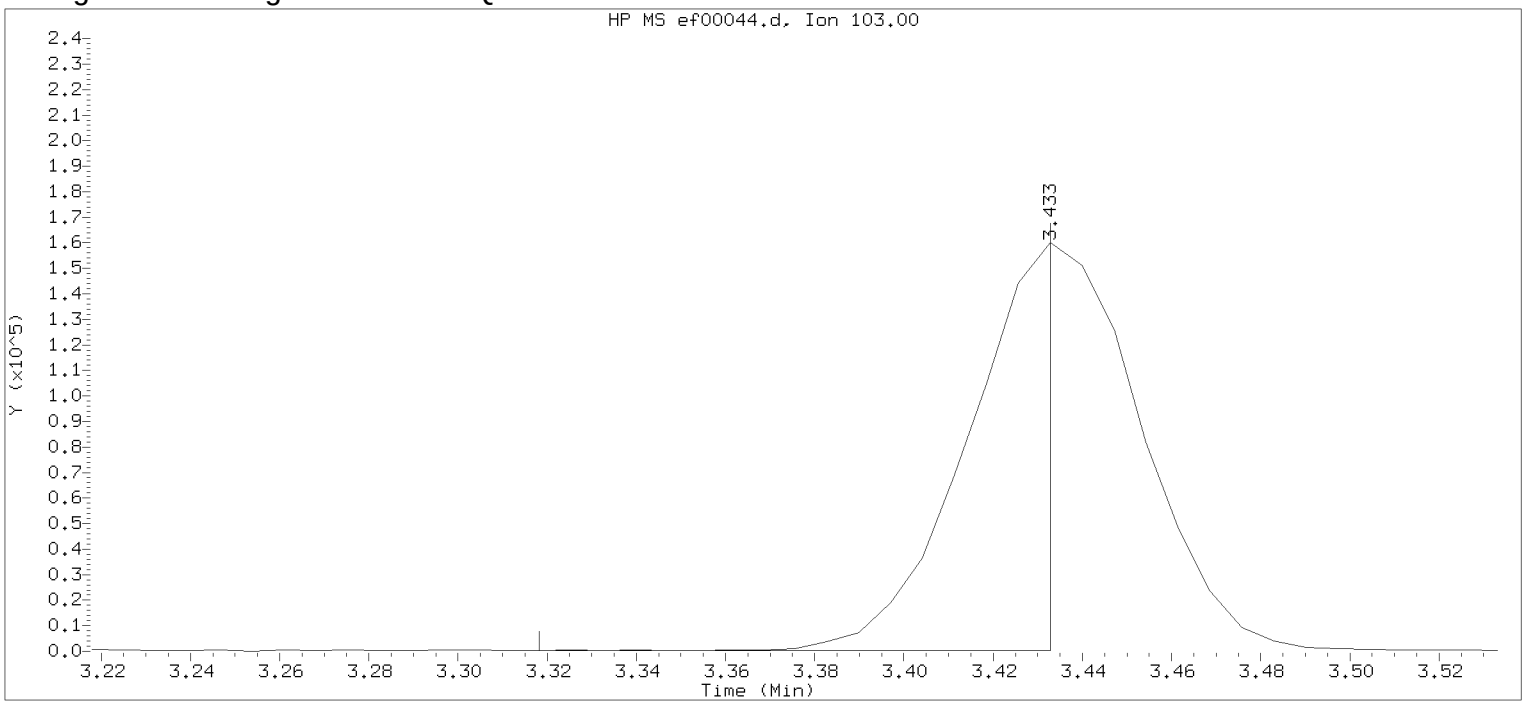
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 17:57.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00044.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 17:24 Analyst ID: jeb07445

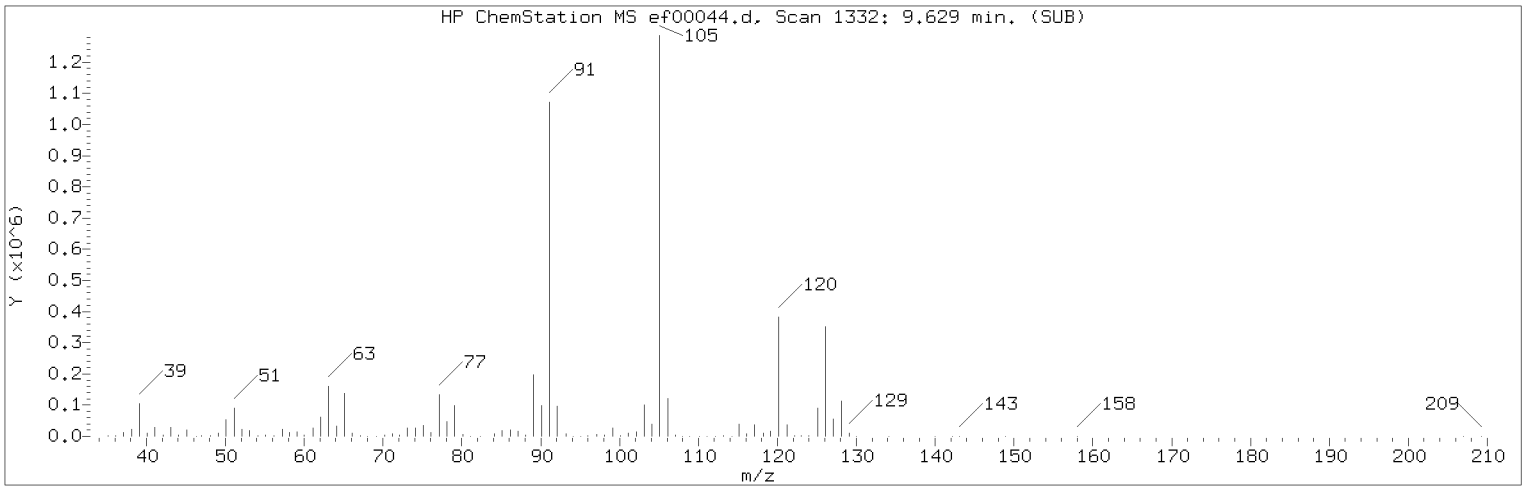
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 17:43 Unknown

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

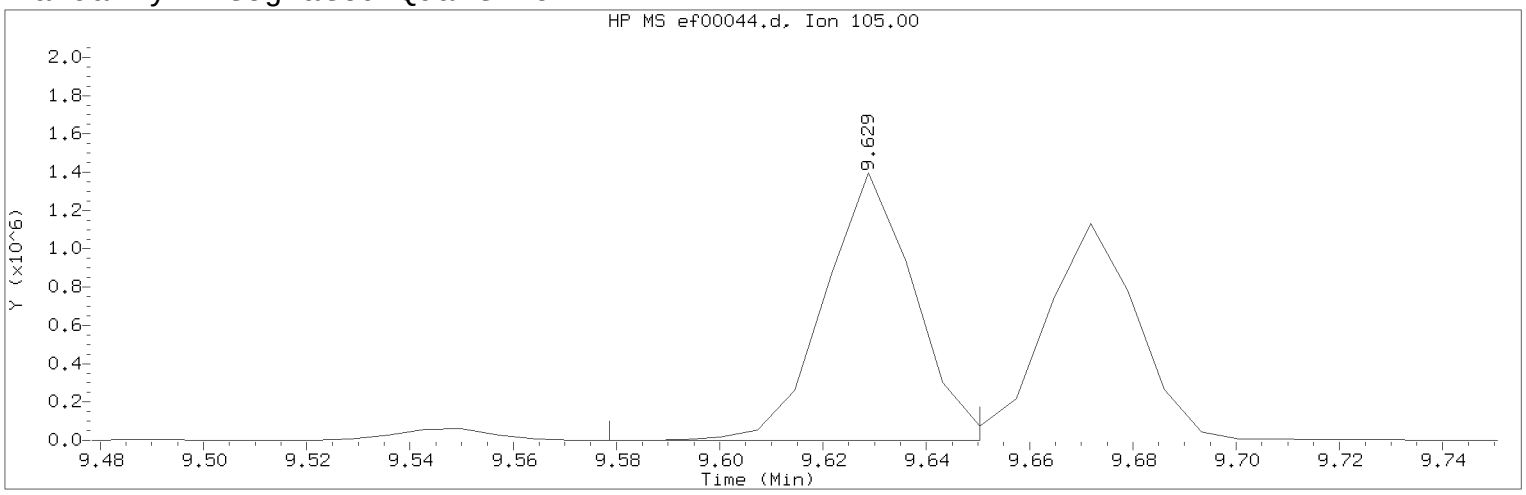
Compound Number : 18
Compound Name : Freon 113
Scan Number : 467
Retention Time (minutes): 3.433
Quant Ion : 103.00
Area : 199984
Concentration (ppb(v)) : 4.7139
Integration start scan : 450 Integration stop scan: 466
Y at integration start : 168 Y at integration end: 168

Digitally signed by Jacob E. Bailey on 06/04/2018 at 17:57.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00044.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 17:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 17:56 jeb07445

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

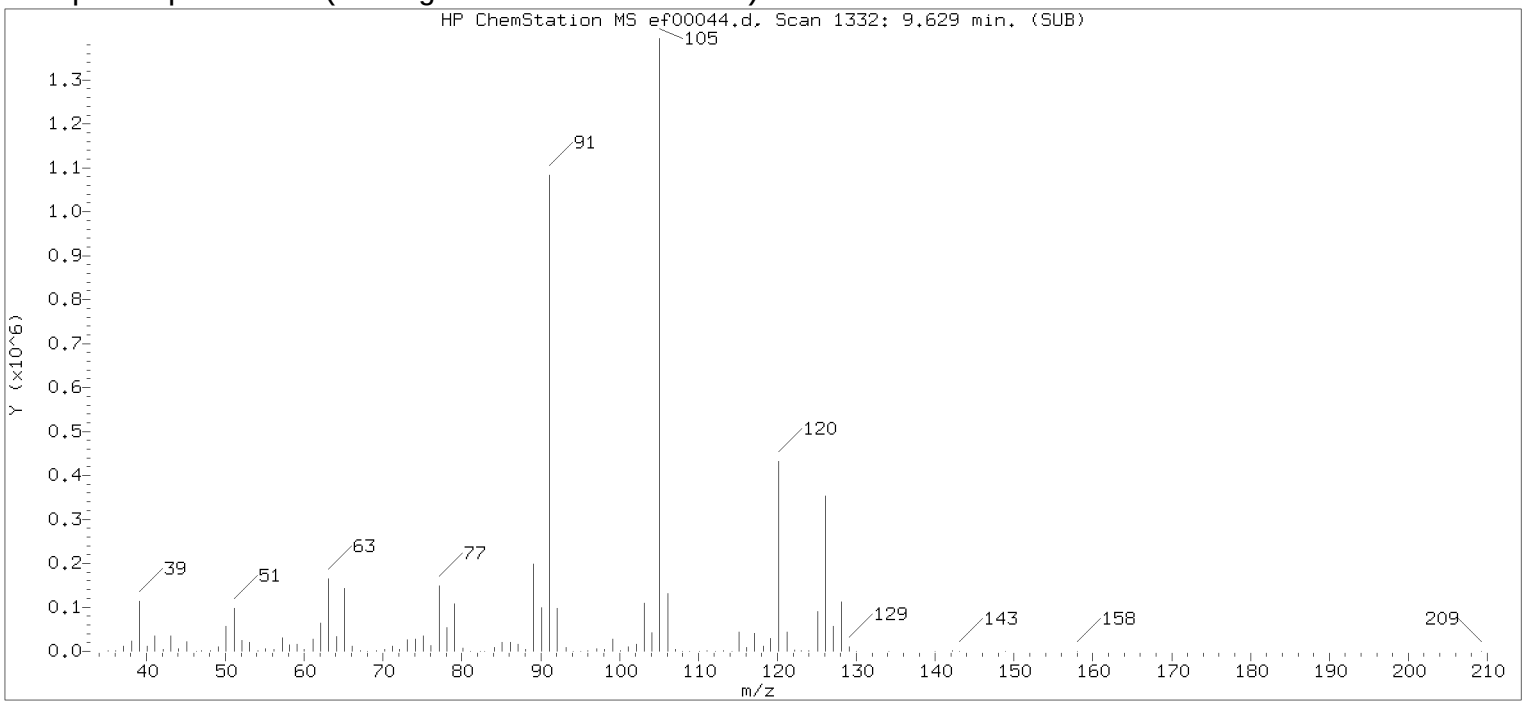
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 1683438M
Concentration (ppb(v)) : 9.5395
Integration start scan : 1324 Integration stop scan: 1334
Y at integration start : 366 Y at integration end: 366

Reason for manual integration: improper integration

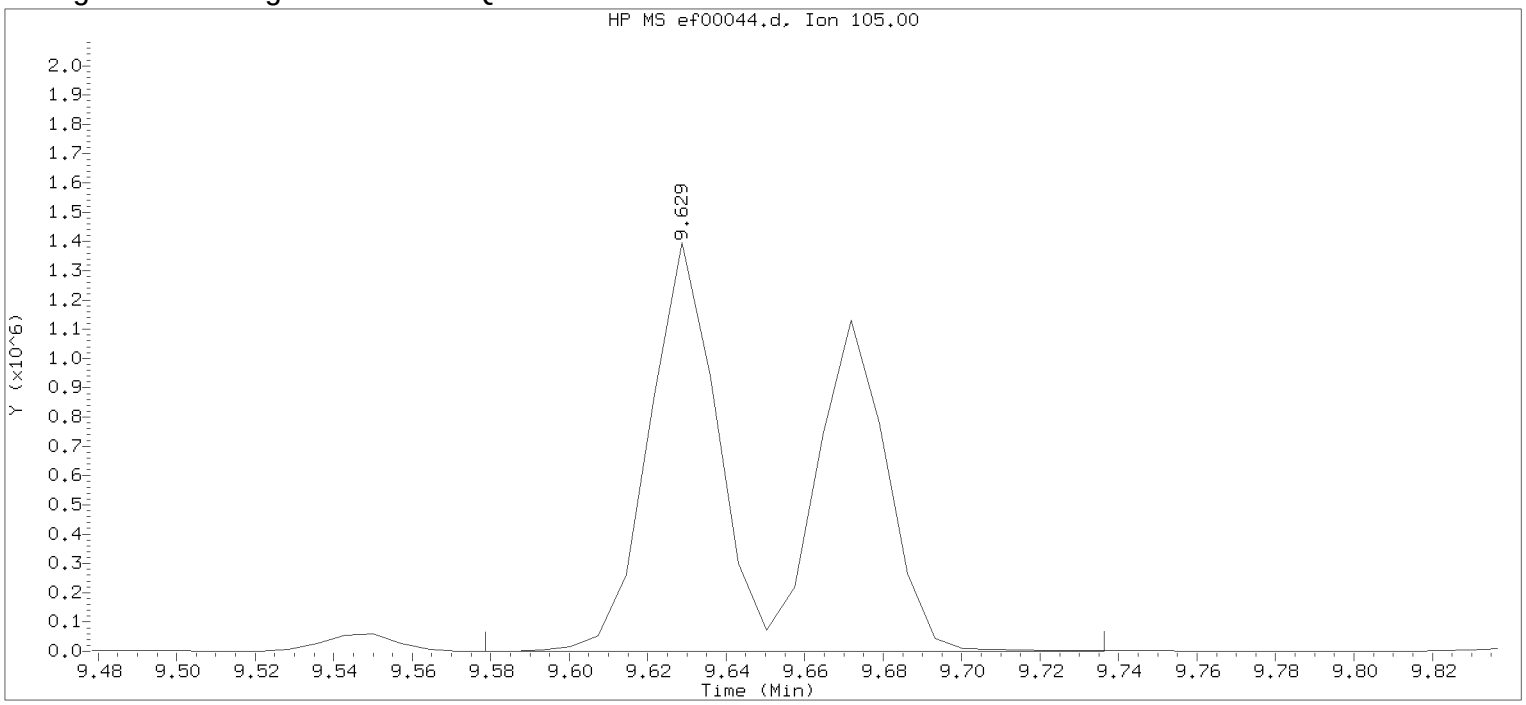
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 17:57.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00044.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 17:24 Analyst ID: jeb07445

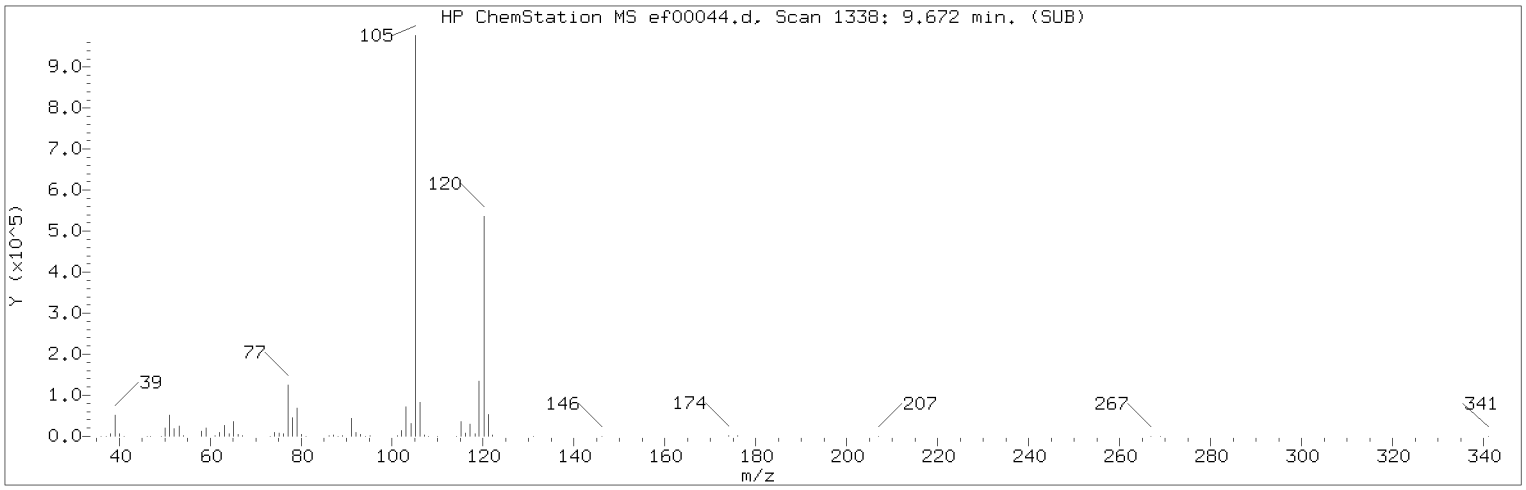
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 17:43 Unknown

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

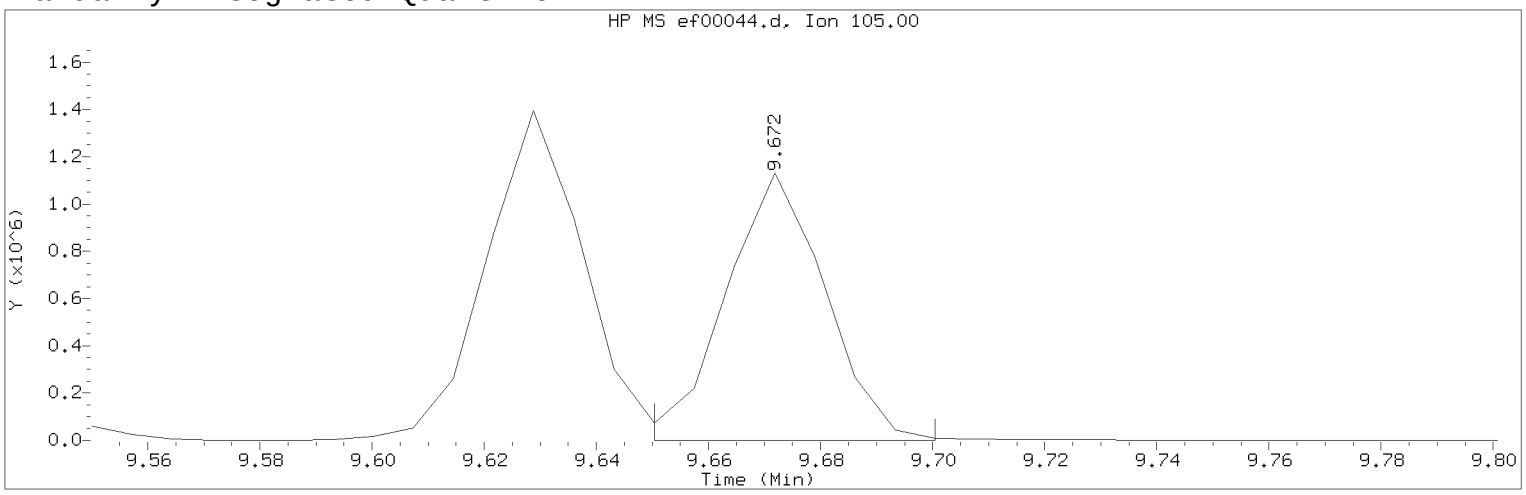
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 3057500
Concentration (ppb(v)) : 17.3259
Integration start scan : 1324 Integration stop scan: 1346
Y at integration start : 366 Y at integration end: 366

Digitally signed by Jacob E. Bailey on 06/04/2018 at 17:57.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00044.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 17:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 17:56 jeb07445

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

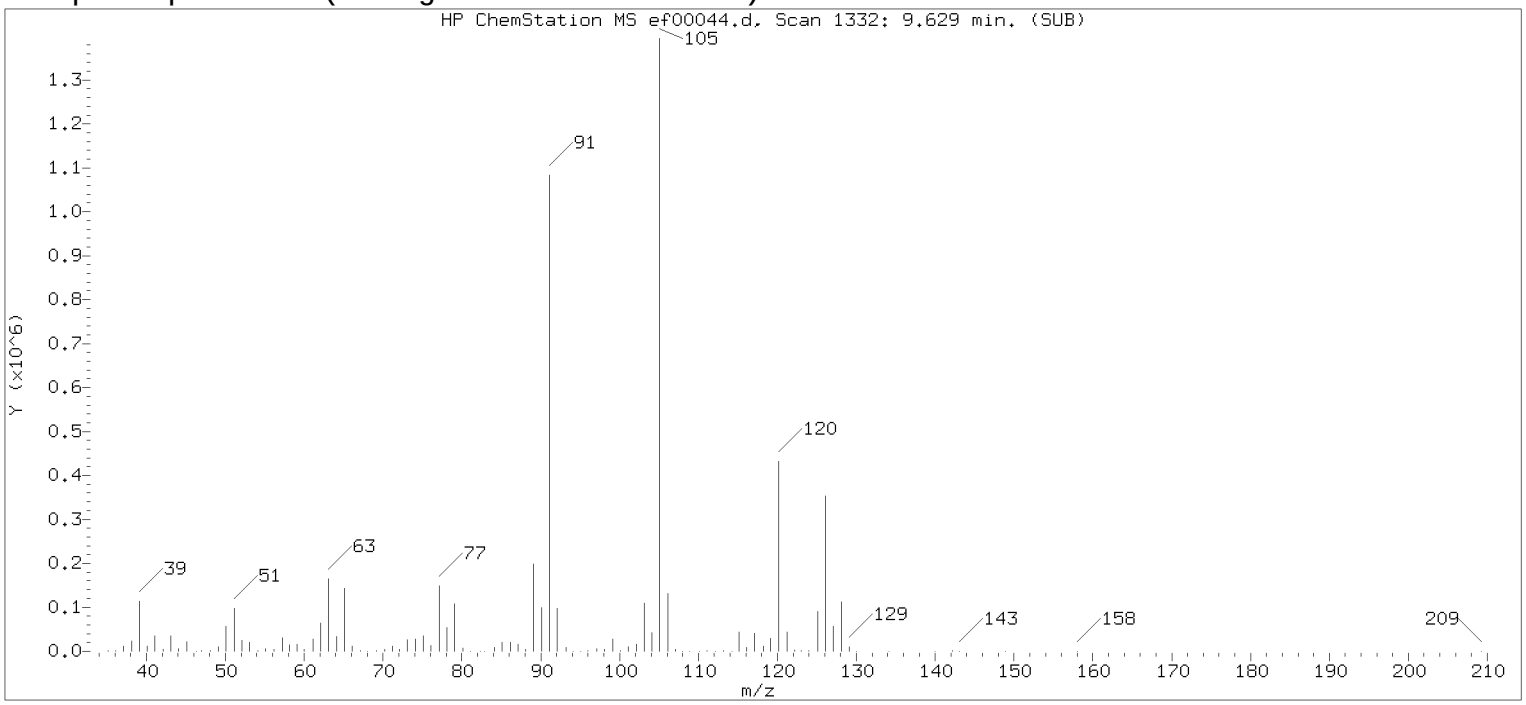
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 1398298M
Concentration (ppb(v)) : 9.5207
Integration start scan : 1334 Integration stop scan: 1341
Y at integration start : 569 Y at integration end: 569

Reason for manual integration: improper integration

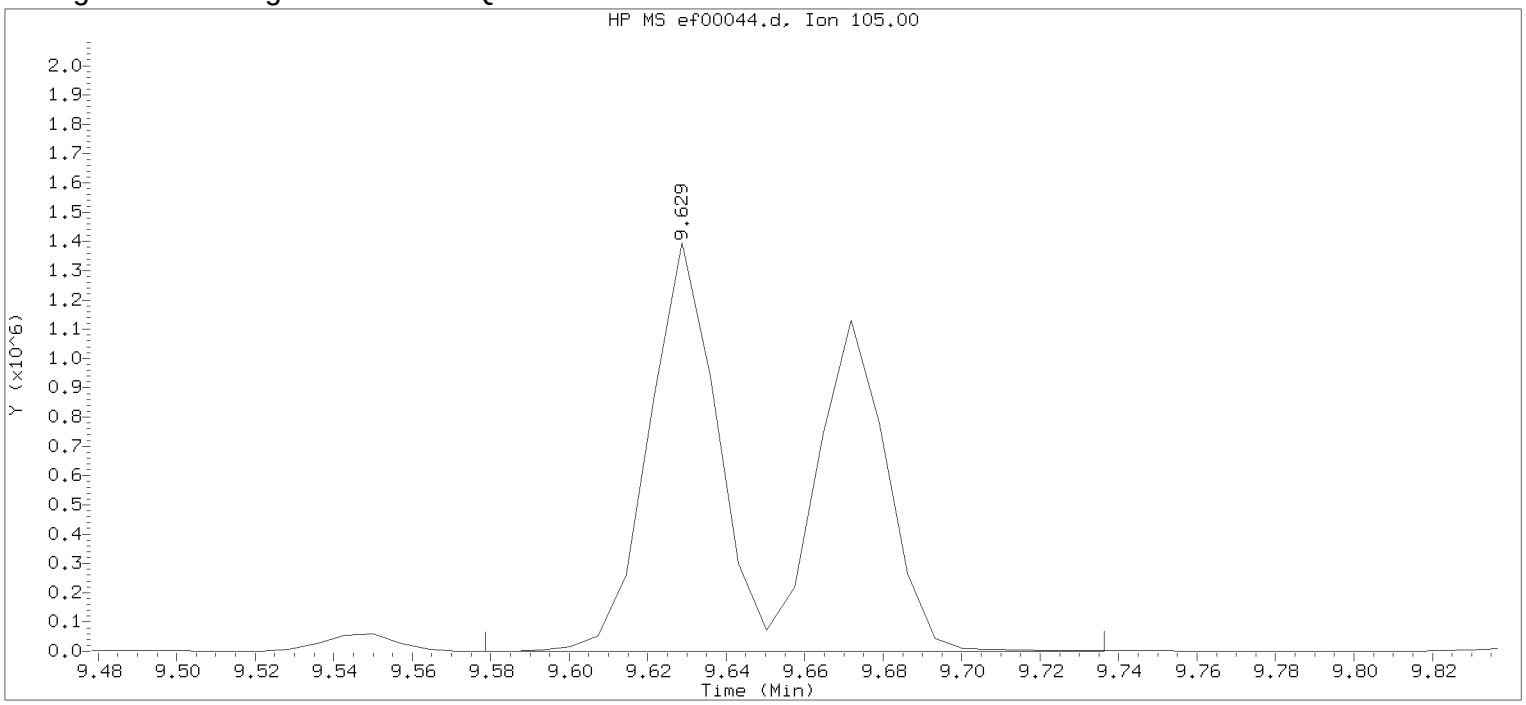
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 17:57.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00044.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 17:24 Analyst ID: jeb07445

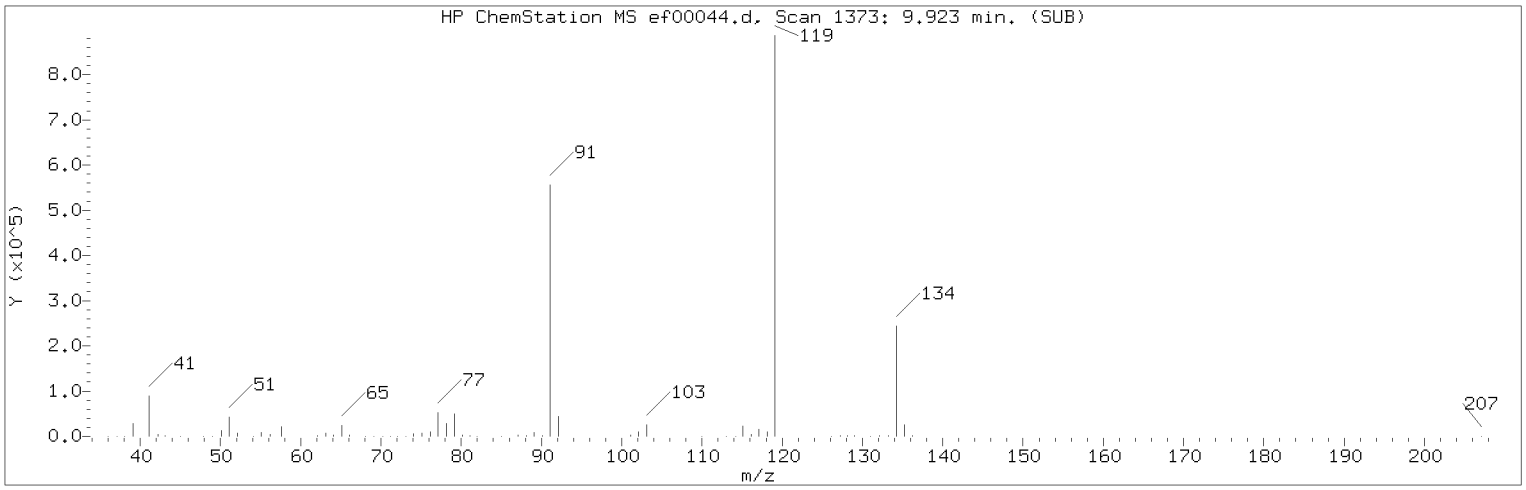
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 17:43 Unknown

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

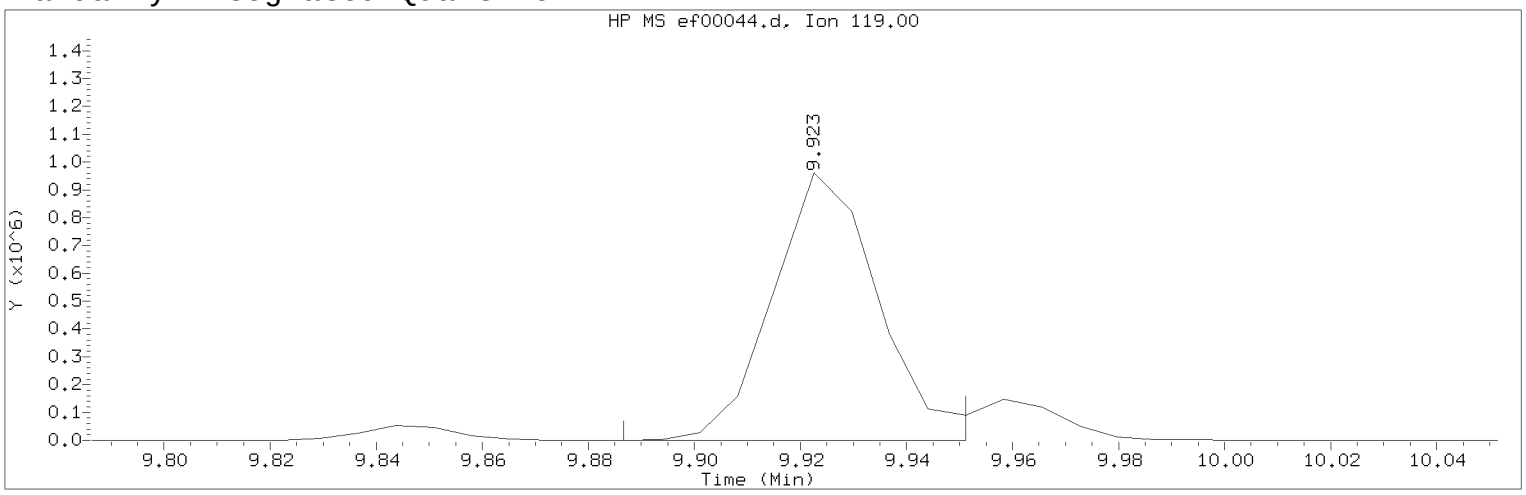
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 3054957
Concentration (ppb(v)) : 20.8005
Integration start scan : 1324 Integration stop scan: 1346
Y at integration start : 617 Y at integration end: 617

Digitally signed by Jacob E. Bailey on 06/04/2018 at 17:57.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00044.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 17:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 17:56 jeb07445

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

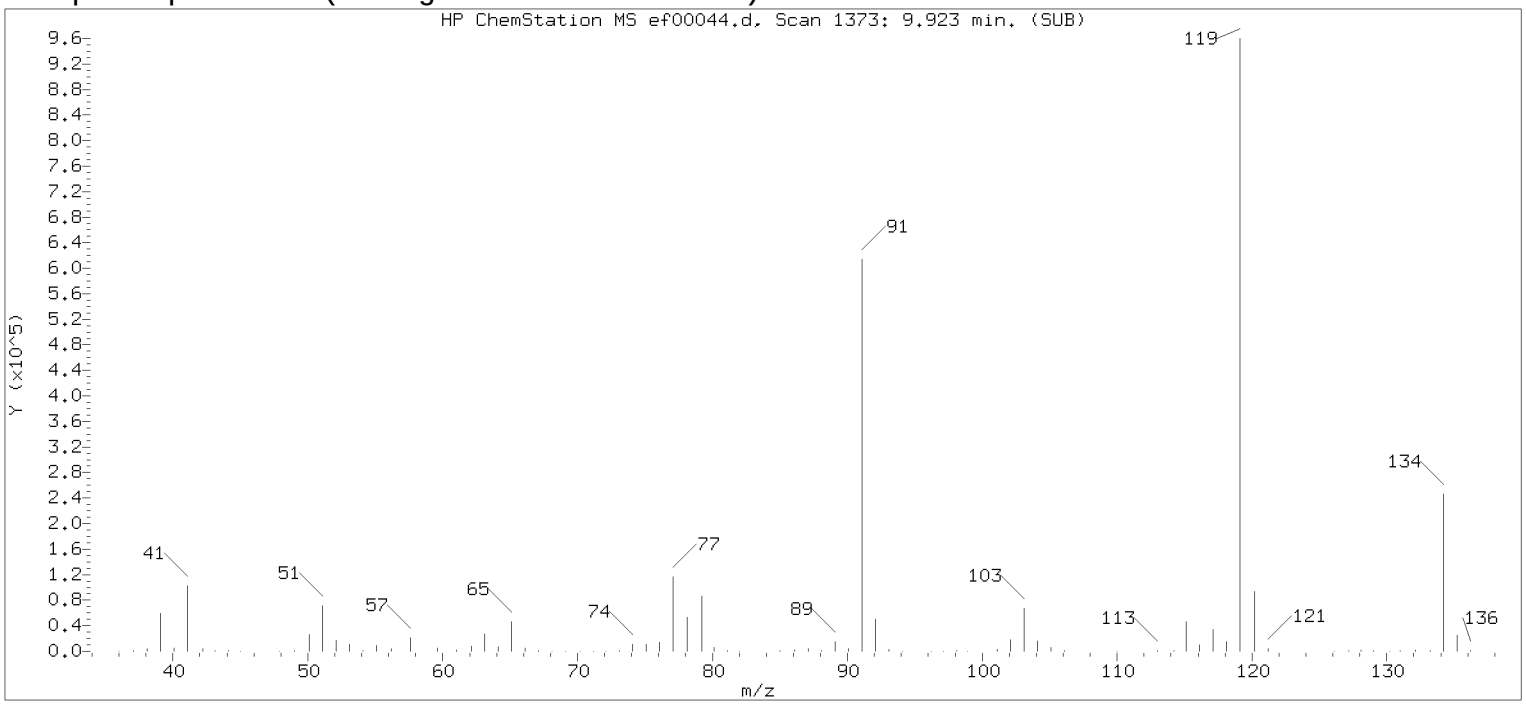
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.923
Quant Ion : 119.00
Area (flag) : 1334581M
Concentration (ppb(v)) : 8.7110
Integration start scan : 1367 Integration stop scan: 1376
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

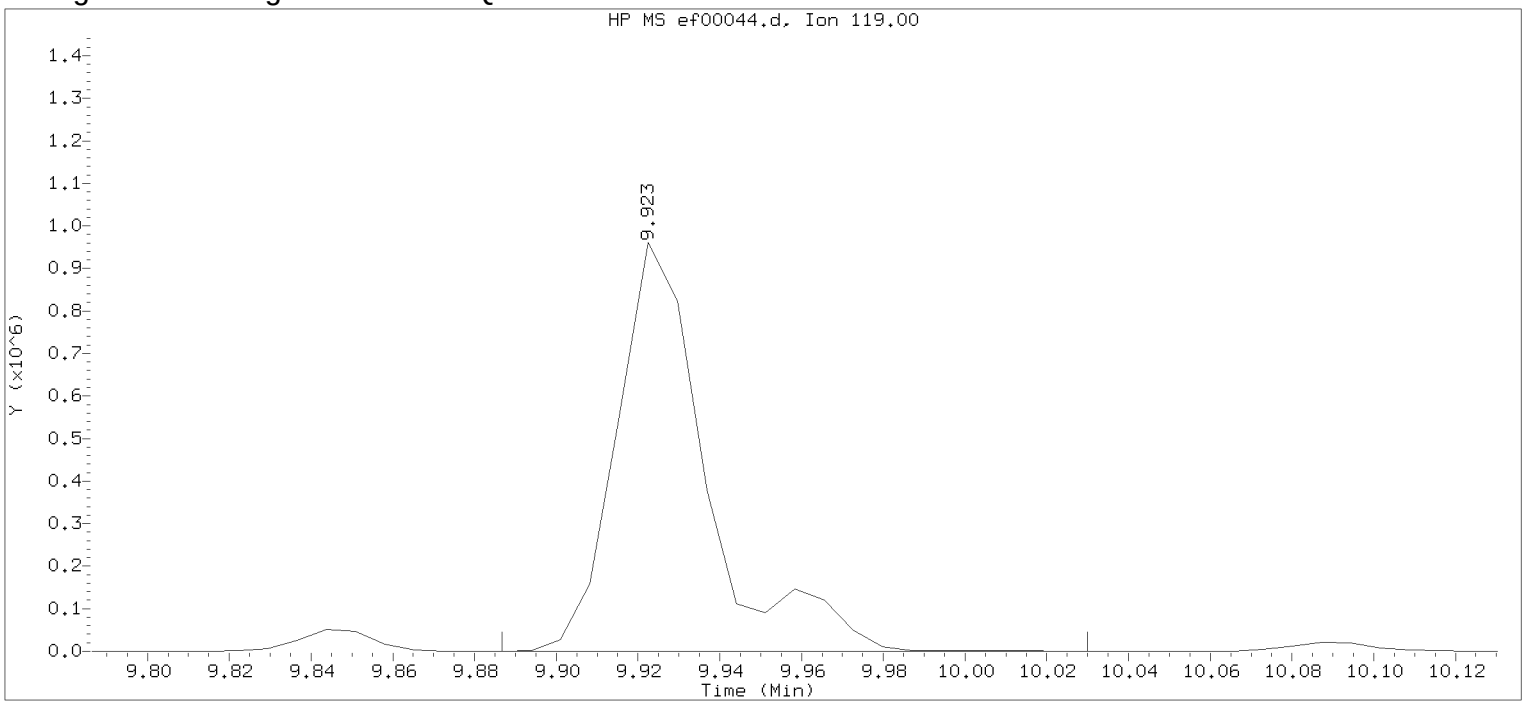
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 17:57.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00044.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 17:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 17:43 Unknown

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.923
Quant Ion : 119.00
Area : 1478379
Concentration (ppb(v)) : 9.6496
Integration start scan : 1367 Integration stop scan: 1387
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/04/2018 at 17:57.
Target 3.5 esignature user ID: jeb07445

Lancaster Laboratories
Volatiles in Air
Runlog for Agilent GC/MS System HP22820 **HP #05**

Data Directory Path is - D:\data\18jun05\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
jeb07445	EF00070.D	50NGBFB	06/05/2018	12:14		
jeb07445	EF00071.D	VSTD010	06/05/2018	13:01		
jeb07445	EF00072.D	VSTD010	06/05/2018	14:29		
jeb07445	EF00073.D	VBLKE02	06/05/2018	15:21	E1815630AA	
jeb07445	EF00074.D	VBLKE02	06/05/2018	16:05	E1815630AA	
jeb07445	EF00075.D	LCSE02	06/05/2018	16:39	E1815630AA	
jeb07445	EF00076.D	LCSDE02	06/05/2018	17:13	E1815630AA	
jeb07445	EF00077.D	fc1	06/05/2018	18:10	E1815630AA	
jeb07445	EF00078.D	fc2	06/05/2018	18:44	E1815630AA	
jeb07445	EF00079.D	cc820	06/05/2018	19:41	E1815630AA	
jeb07445	EF00080.D	cc1352	06/05/2018	20:14	E1815630AA	
jeb07445	EF00081.D	cc1374	06/05/2018	20:48	E1815630AA	

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKE02
Canister ID:	N/A	Lab File ID:	ef00074.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/05/2018
Injection Volume:	200 cc	Analyzed Time:	16:05
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
115-07-1	Propene	0.50	U
75-71-8	Dichlorodifluoromethane	0.20	U
75-45-6	Chlorodifluoromethane	0.20	U
76-14-2	Freon 114	0.20	U
74-87-3	Chloromethane	0.20	U
75-01-4	Vinyl Chloride	0.20	U
106-99-0	1,3-Butadiene	0.40	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.20	U
593-60-2	Bromoethene	0.40	U
75-43-4	Dichlorofluoromethane	0.20	U
75-69-4	Trichlorofluoromethane	0.20	U
109-66-0	Pentane	0.50	U
64-17-5	Ethanol	0.50	U
107-02-8	Acrolein	1.0	U
75-35-4	1,1-Dichloroethene	0.20	U
76-13-1	Freon 113	0.50	U
67-64-1	Acetone	0.50	U
74-88-4	Methyl Iodide	0.20	U
75-15-0	Carbon Disulfide	0.50	U
67-63-0	Isopropanol	0.50	U
75-05-8	Acetonitrile	0.50	U
107-05-1	3-Chloropropene	0.20	U
75-09-2	Methylene Chloride	0.20	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKE02
Canister ID:	N/A	Lab File ID:	ef00074.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/05/2018
Injection Volume:	200 cc	Analyzed Time:	16:05
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-65-0	tert-Butyl Alcohol	0.50	U
107-13-1	Acrylonitrile	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.20	U
1634-04-4	Methyl t-Butyl Ether	0.20	U
110-54-3	Hexane	0.20	U
75-34-3	1,1-Dichloroethane	0.20	U
108-05-4	Vinyl Acetate	1.0	U
108-20-3	Di-Isopropyl Ether	0.20	U
637-92-3	Ethyl Tert-Butyl Ether	0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	U
540-59-0	1,2-Dichloroethene (total)	0.20	U
78-93-3	2-Butanone	0.50	U
141-78-6	Ethyl Acetate	0.50	U
96-33-3	Methyl Acrylate	0.20	U
109-99-9	Tetrahydrofuran	0.50	U
67-66-3	Chloroform	0.20	U
71-55-6	1,1,1-Trichloroethane	0.20	U
110-82-7	Cyclohexane	0.20	U
56-23-5	Carbon Tetrachloride	0.20	U
71-43-2	Benzene	0.20	U
107-06-2	1,2-Dichloroethane	0.20	U
540-84-1	Isooctane	0.20	U
994-05-8	Tert-Amyl Methyl Ether	0.20	U
142-82-5	Heptane	0.50	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKE02
Canister ID:	N/A	Lab File ID:	ef00074.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/05/2018
Injection Volume:	200 cc	Analyzed Time:	16:05
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
79-01-6	Trichloroethene	0.20	U
140-88-5	Ethyl Acrylate	0.20	U
78-87-5	1,2-Dichloropropane	0.20	U
74-95-3	Dibromomethane	0.20	U
123-91-1	1,4-Dioxane	0.50	U
80-62-6	Methyl Methacrylate	0.20	U
75-27-4	Bromodichloromethane	0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	U
108-10-1	4-Methyl-2-Pentanone	0.50	U
108-88-3	Toluene	0.20	U
111-65-9	Octane	0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	U
542-75-6	1,3-Dichloropropene (total)	0.20	U
97-63-2	Ethyl Methacrylate	0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	U
127-18-4	Tetrachloroethene	0.20	U
591-78-6	2-Hexanone	0.50	U
124-48-1	Dibromochloromethane	0.20	U
106-93-4	1,2-Dibromoethane	0.20	U
108-90-7	Chlorobenzene	0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	U
100-41-4	Ethylbenzene	0.20	U
179601-23-1	m/p-Xylene	0.20	U
95-47-6	o-Xylene	0.20	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKE02
Canister ID:	N/A	Lab File ID:	ef00074.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/05/2018
Injection Volume:	200 cc	Analyzed Time:	16:05
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
1330-20-7	Xylene (total)	0.20	U
100-42-5	Styrene	0.20	U
75-25-2	Bromoform	0.20	U
98-82-8	Cumene	0.20	U
108-86-1	Bromobenzene	0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U
96-18-4	1,2,3-Trichloropropane	0.20	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.20	U
622-96-8	4-Ethyltoluene	0.20	U
108-67-8	1,3,5-Trimethylbenzene	0.20	U
98-83-9	Alpha Methyl Styrene	0.20	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.20	U
135-98-8	sec-Butylbenzene	0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	U
99-87-6	p-Isopropyltoluene	0.20	U
100-44-7	Benzyl Chloride	0.50	U
95-50-1	1,2-Dichlorobenzene	0.20	U
104-51-8	n-Butylbenzene	0.20	U
67-72-1	Hexachloroethane	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKE02
Canister ID:	N/A	Lab File ID:	ef00074.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/05/2018
Injection Volume:	200 cc	Analyzed Time:	16:05
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
87-68-3	Hexachlorobutadiene	0.40	U
91-20-3	Naphthalene	0.40	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 LCS File ID: ef00075.d LCSD File ID: ef00076.d

Batch: E1815630AA LCS Injected: 06/05/2018 LCSD Injected: 06/05/2018

Method: EPA TO-15 LCS Client ID: LCSE02 LCSD Client ID: LCSDE02

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	10.00	13.24	13.07	132 *	131 *	78-126	1	25	NO
Dichlorodifluoromethane	10.00	12.08	11.88	121	119	74-133	2	25	YES
Chlorodifluoromethane	10.00	14.28	14.01	143 *	140 *	70-138	2	25	NO
Freon 114	10.00	11.97	11.82	120	118	66-126	1	25	YES
Chloromethane	10.00	14.29	13.72	143 *	137	65-140	4	25	NO
Vinyl Chloride	10.00	12.65	12.58	126	126	75-130	1	25	YES
1,3-Butadiene	10.00	11.93	12.03	119	120	72-122	1	25	YES
Bromomethane	10.00	11.75	11.65	117	116	71-133	1	25	YES
Chloroethane	10.00	12.15	12.36	122	124	76-129	2	25	YES
Bromoethene	10.00	10.77	10.81	108	108	77-123	0	25	YES
Dichlorofluoromethane	10.00	13.07	12.89	131	129	75-137	1	25	YES
Trichlorofluoromethane	10.00	11.77	11.46	118	115	73-132	3	25	YES
Pentane	10.00	15.09	14.82	151 *	148 *	69-125	2	25	NO
Ethanol	10.00	10.90	11.27	109	113	56-149	3	25	YES
Acrolein	10.00	12.06	12.06	121	121	54-132	0	25	YES
1,1-Dichloroethene	10.00	12.37	12.37	124	124	70-129	0	25	YES
Freon 113	10.00	11.15	11.01	111	110	66-119	1	25	YES
Acetone	10.00	13.34	13.10	133	131	71-136	2	25	YES
Methyl Iodide	10.00	9.70	9.80	97	98	72-127	1	25	YES
Carbon Disulfide	10.00	11.77	11.61	118	116	72-128	1	25	YES
Isopropanol	10.00	10.64	10.98	106	110	69-160	3	25	YES
Acetonitrile	10.00	11.38	12.04	114	120	56-136	6	25	YES
3-Chloropropene	10.00	12.82	13.06	128	131	67-141	2	25	YES
Methylene Chloride	10.00	12.90	12.69	129 *	127	69-128	2	25	NO
tert-Butyl Alcohol	10.00	9.76	10.09	98	101	71-154	3	25	YES
Acrylonitrile	10.00	13.18	12.89	132	129	68-135	2	25	YES
trans-1,2-Dichloroethene	10.00	12.29	12.18	123	122	77-128	1	25	YES
Methyl t-Butyl Ether	10.00	11.26	11.20	113	112	71-119	1	25	YES
Hexane	10.00	14.04	13.82	140 *	138 *	70-118	2	25	NO
1,1-Dichloroethane	10.00	12.24	12.09	122	121	74-129	1	25	YES
Vinyl Acetate	10.00	9.61	9.75	96	97	75-161	1	25	YES
Di-Isopropyl Ether	10.00	12.32	12.42	123 *	124 *	71-122	1	25	NO
Ethyl Tert-Butyl Ether	10.00	9.92	9.77	99	98	68-121	1	25	YES
cis-1,2-Dichloroethene	10.00	12.00	11.95	120	119	76-126	0	25	YES
2-Butanone	10.00	10.95	10.91	109	109	75-126	0	25	YES
Ethyl Acetate	10.00	9.28	9.61	93	96	73-124	4	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 LCS File ID: ef00075.d LCSD File ID: ef00076.d

Batch: E1815630AA LCS Injected: 06/05/2018 LCSD Injected: 06/05/2018

Method: EPA TO-15 LCS Client ID: LCSE02 LCSD Client ID: LCSDE02

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	10.00	11.16	11.25	112	112	75-125	1	25	YES
Tetrahydrofuran	10.00	12.93	12.89	129*	129*	67-127	0	25	NO
Chloroform	10.00	11.78	11.50	118	115	75-127	2	25	YES
1,1,1-Trichloroethane	10.00	10.59	10.65	106	106	74-122	1	25	YES
Cyclohexane	10.00	11.82	11.72	118	117	70-118	1	25	YES
Carbon Tetrachloride	10.00	10.63	10.55	106	105	72-127	1	25	YES
Benzene	10.00	13.84	13.52	138*	135*	76-123	2	25	NO
1,2-Dichloroethane	10.00	12.88	12.53	129	125	72-138	3	25	YES
Isooctane	10.00	12.13	11.96	121	120	74-127	1	25	YES
Tert-Amyl Methyl Ether	10.00	9.78	9.79	98	98	78-124	0	25	YES
Heptane	10.00	12.72	12.24	127*	122	74-122	4	25	NO
Trichloroethene	10.00	10.48	10.37	105	104	76-118	1	25	YES
Ethyl Acrylate	10.00	10.56	10.47	106	105	71-126	1	25	YES
1,2-Dichloropropane	10.00	11.82	11.69	118	117	75-127	1	25	YES
Dibromomethane	10.00	9.95	9.66	99	97	76-124	3	25	YES
1,4-Dioxane	10.00	10.76	10.67	108	107	76-124	1	25	YES
Methyl Methacrylate	10.00	10.06	10.28	101	103	73-117	2	25	YES
Bromodichloromethane	10.00	11.59	11.36	116	114	75-134	2	25	YES
cis-1,3-Dichloropropene	10.00	10.34	10.11	103	101	51-120	2	25	YES
4-Methyl-2-Pentanone	10.00	12.25	12.10	122	121	79-131	1	25	YES
Toluene	10.00	12.68	12.50	127*	125*	78-119	1	25	NO
Octane	10.00	14.18	14.02	142*	140*	73-122	1	25	NO
trans-1,3-Dichloropropene	10.00	9.58	9.52	96	95	76-131	1	25	YES
Ethyl Methacrylate	10.00	9.58	9.68	96	97	69-137	1	25	YES
1,1,2-Trichloroethane	10.00	10.84	10.70	108	107	76-127	1	25	YES
Tetrachloroethene	10.00	9.63	9.48	96	95	68-123	2	25	YES
2-Hexanone	10.00	11.50	11.61	115	116	74-134	1	25	YES
Dibromochloromethane	10.00	10.48	10.32	105	103	74-131	2	25	YES
1,2-Dibromoethane	10.00	10.50	10.41	105	104	73-121	1	25	YES
Chlorobenzene	10.00	10.00	9.93	100	99	76-117	1	25	YES
1,1,1,2-Tetrachloroethane	10.00	10.18	10.10	102	101	73-137	1	25	YES
Ethylbenzene	10.00	12.03	11.90	120*	119*	77-117	1	25	NO
m/p-Xylene	10.00	13.34	13.36	133*	134*	78-119	0	25	NO
o-Xylene	10.00	12.08	11.92	121	119	78-121	1	25	YES
Xylene (total)	20.00	25.43	25.29	127*	126*	79-120	1	25	NO
Styrene	10.00	10.20	10.17	102	102	77-143	0	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 LCS File ID: ef00075.d LCSD File ID: ef00076.d

Batch: E1815630AA LCS Injected: 06/05/2018 LCSD Injected: 06/05/2018

Method: EPA TO-15 LCS Client ID: LCSE02 LCSD Client ID: LCSDE02

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	9.68	9.55	97	95	58-144	1	25	YES
Cumene	10.00	9.55	9.51	95	95	80-133	0	25	YES
Bromobenzene	10.00	9.20	9.08	92	91	74-118	1	25	YES
1,1,2,2-Tetrachloroethane	10.00	11.26	11.20	113	112	72-133	1	25	YES
1,2,3-Trichloropropane	10.00	10.53	10.54	105	105	71-127	0	25	YES
n-Propylbenzene	10.00	9.29	9.13	93	91	73-120	2	25	YES
2-Chlorotoluene	10.00	9.75	9.70	98	97	74-123	1	25	YES
4-Ethyltoluene	10.00	9.89	9.86	99	99	73-130	0	25	YES
1,3,5-Trimethylbenzene	10.00	10.05	9.74	101	97	72-130	3	25	YES
Alpha Methyl Styrene	10.00	8.98	8.70	90	87	71-138	3	25	YES
tert-Butylbenzene	10.00	8.57	8.73	86	87	78-138	2	25	YES
1,2,4-Trimethylbenzene	10.00	9.69	9.58	97	96	70-138	1	25	YES
sec-Butylbenzene	10.00	9.40	9.19	94	92	79-139	2	25	YES
1,3-Dichlorobenzene	10.00	9.39	9.29	94	93	75-129	1	25	YES
1,4-Dichlorobenzene	10.00	9.25	9.07	93	91	74-123	2	25	YES
p-Isopropyltoluene	10.00	8.99	8.87	90	89	75-145	1	25	YES
Benzyl Chloride	10.00	6.79	6.78	68	68	49-163	0	25	YES
1,2-Dichlorobenzene	10.00	9.03	8.91	90	89	71-126	1	25	YES
n-Butylbenzene	10.00	9.30	9.15	93	92	72-143	2	25	YES
Hexachloroethane	10.00	9.59	9.62	96	96	59-135	0	25	YES
1,2-Dibromo-3-chloropropane	10.00	7.87	7.65	79	77	52-156	3	25	YES
1,2,4-Trichlorobenzene	10.00	6.60	6.70	66	67	45-156	1	25	YES
Hexachlorobutadiene	10.00	6.58	6.67	66	67	49-154	1	25	YES
Naphthalene	10.00	6.42	6.45	64	65	39-152	1	25	YES

COMMENTS:

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FORM 04
VOLATILE ORGANICS IN AIR
METHOD BLANK SUMMARY

SDG No.:

Lab Sample ID: VBLKE02 Analyzed Date: 06/05/2018

Lab File ID: ef00074.d Analyzed Time: 16:05

Instrument ID: 22820

THIS BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS AND LCSD:

LAB SAMPLE ID	LAB FILE ID	CANISTER ID	DATE ANALYZED	TIME ANALYZED
LCSE02	ef00075.d	N/A	06/05/2018	16:39
LCSDE02	ef00076.d	N/A	06/05/2018	17:13
cc820	ef00079.d	820	06/05/2018	19:41
cc1352	ef00080.d	1352	06/05/2018	20:14
cc1374	ef00081.d	1374	06/05/2018	20:48

COMMENTS:

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

SDG No.:

Lab File ID: ef00070.d

BFB Injection Date: 06/05/2018

Instrument ID: 22820

BFB Injection Time: 12:14

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0% - 40.0% of mass 95	18.02
75	30.0% - 66.0% of mass 95	48.73
95	Base peak, 100% relative abundance	100.00
96	5.0% - 9.0% of mass 95	6.86
173	< 2.0% of mass 174	0.43 (0.55)
174	> 50.0% of mass 95	79.09
175	4.0% - 9.0% of mass 174	5.65 (7.15)
176	93.0% - 101.0% of mass 174	76.59 (96.84)
177	5.0% - 9.0% of mass 176	5.01 (6.54)

THIS CHECK APPLIES TO THE FOLLOWING:

LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD010	ef00072.d	06/05/2018	14:29
VBLKE02	ef00074.d	06/05/2018	16:05
LCSE02	ef00075.d	06/05/2018	16:39
LCSDE02	ef00076.d	06/05/2018	17:13
cc820	ef00079.d	06/05/2018	19:41
cc1352	ef00080.d	06/05/2018	20:14
cc1374	ef00081.d	06/05/2018	20:48

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: ef00072.d

Calibration Date: 06/05/2018

Instrument ID: 22820

Calibration Time: 14:29

Init. Calib. Date(s): 06/04/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
Propene	0.620	0.781	12.590	10	26
Dichlorodifluoromethane	2.403	2.873	11.955	10	20
Chlorodifluoromethane *	1.274	1.667	13.092	10	31 *
Freon 114	2.459	2.801	11.389	10	14
Chloromethane *	0.727	0.966	13.290	10	33 *
Vinyl Chloride	0.892	1.093	12.245	10	22
1,3-Butadiene	0.647	0.792	12.233	10	22
Bromomethane	0.918	1.120	12.202	10	22
Chloroethane	0.504	0.609	12.080	10	21
Bromoethene	0.975	1.013	10.387	10	4
Dichlorofluoromethane	1.945	2.365	12.162	10	22
Trichlorofluoromethane	2.547	2.938	11.535	10	15
Pentane	1.368	1.748	12.780	10	28
Ethanol	0.294	0.350	11.900	10	19
Freon123a	1.691	2.062	13.538	11.1	22
Acrolein	0.348	0.405	11.636	10	16
1,1-Dichloroethene	1.414	1.698	12.006	10	20
Freon 113	1.426	1.592	11.164	10	12
Acetone *	1.176	1.553	13.210	10	32 *
Methyl Iodide	2.735	2.384	8.718	10	-13
Carbon Disulfide	2.648	3.132	11.825	10	18
Isopropanol	1.212	1.353	11.165	10	12
Acetonitrile	0.571	0.641	11.229	10	12
3-Chloropropene	0.415	0.451	12.076	11.1	9
Methylene Chloride	0.805	0.934	12.870	11.1	16
tert-Butyl Alcohol	1.639	1.569	10.626	11.1	-4
Acrylonitrile	0.717	0.907	12.655	10	27
trans-1,2-Dichloroethene	1.279	1.577	12.332	10	23
Methyl t-Butyl Ether	2.729	2.866	10.502	10	5
Hexane	1.405	1.583	11.272	10	13
1,1-Dichloroethane	1.666	1.997	11.984	10	20
Vinyl Acetate	0.244	0.234	10.735	11.2	-4
Di-Isopropyl Ether	2.776	3.373	12.152	10	22
Ethyl Tert-Butyl Ether	2.649	2.790	10.533	10	5
cis-1,2-Dichloroethene	1.235	1.487	12.042	10	20
2-Butanone	0.514	0.557	10.829	10	8
Ethyl Acetate	0.254	0.259	10.218	10	2
Methyl Acrylate	1.558	1.748	11.221	10	12
Tetrahydrofuran	0.910	1.154	12.677	10	27

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: ef00072.d

Calibration Date: 06/05/2018

Instrument ID: 22820

Calibration Time: 14:29

Init. Calib. Date(s): 06/04/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
Chloroform	2.090	2.469	11.812	10	18
1,1,1-Trichloroethane	2.117	2.279	10.762	10	8
Cyclohexane	1.456	1.670	11.464	10	15
Carbon Tetrachloride	2.079	2.219	10.677	10	7
Benzene	0.860	0.990	11.510	10	15
1,2-Dichloroethane	0.350	0.434	12.413	10	24
Isooctane	1.190	1.430	12.010	10	20
Tert-Amyl Methyl Ether	0.717	0.743	10.356	10	4
Heptane	0.407	0.494	12.136	10	21
Trichloroethene	0.427	0.443	10.366	10	4
Ethyl Acrylate	0.544	0.595	10.937	10	9
1,2-Dichloropropane	0.301	0.355	11.782	10	18
Dibromomethane	0.413	0.408	9.869	10	-1
1,4-Dioxane	0.219	0.231	10.582	10	6
Methyl Methacrylate	0.301	0.312	10.378	10	4
Bromodichloromethane	0.589	0.691	11.722	10	17
cis-1,3-Dichloropropene	0.520	0.558	10.731	10	7
4-Methyl-2-Pentanone	0.566	0.686	12.118	10	21
Toluene	1.154	1.279	11.089	10	11
Octane	0.600	0.738	12.301	10	23
trans-1,3-Dichloropropene	0.455	0.484	10.635	10	6
Ethyl Methacrylate	0.516	0.541	10.490	10	5
1,1,2-Trichloroethane	0.408	0.450	11.032	10	10
Tetrachloroethene	0.646	0.642	9.945	10	-1
2-Hexanone	0.577	0.714	12.364	10	24
Dibromochloromethane	0.514	0.560	10.888	10	9
1,2-Dibromoethane	0.634	0.704	11.101	10	11
Chlorobenzene	0.987	1.043	10.559	10	6
1,1,1,2-Tetrachloroethane	0.481	0.512	10.662	10	7
Ethylbenzene	1.543	1.729	11.205	10	12
m/p-Xylene	1.253	1.384	11.052	10	11
o-Xylene	1.238	1.339	10.811	10	8
Styrene	0.938	0.999	10.653	10	7
Bromoform	0.661	0.689	10.418	10	4
Cumene	1.766	1.769	10.021	10	0
Bromobenzene	0.627	0.622	9.919	10	-1
1,1,2,2-Tetrachloroethane	0.868	1.030	11.865	10	19
1,2,3-Trichloropropane	0.277	0.312	11.240	10	12
n-Propylbenzene	0.507	0.515	10.139	10	1

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: ef00072.d

Calibration Date: 06/05/2018

Instrument ID: 22820

Calibration Time: 14:29

Init. Calib. Date(s): 06/04/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
2-Chlorotoluene	0.467	0.480	10.281	10	3
4-Ethyltoluene	1.708	1.869	10.944	10	9
1,3,5-Trimethylbenzene	1.421	1.509	10.620	10	6
Alpha Methyl Styrene	0.745	0.742	9.953	10	0
tert-Butylbenzene	1.483	1.412	9.525	10	-5
1,2,4-Trimethylbenzene	1.403	1.508	10.744	10	7
sec-Butylbenzene	2.123	2.188	10.307	10	3
1,3-Dichlorobenzene	1.043	1.088	10.434	10	4
1,4-Dichlorobenzene	1.063	1.100	10.351	10	4
p-Isopropyltoluene	1.817	1.856	10.214	10	2
Benzyl Chloride	0.961	0.848	8.826	10	-12
1,2-Dichlorobenzene	0.992	1.016	10.236	10	2
n-Butylbenzene	1.633	1.772	10.852	10	9
Hexachloroethane	0.386	0.426	11.045	10	10
1,2-Dibromo-3-chloropropane	0.513	0.523	10.191	10	2
1,2,4-Trichlorobenzene	0.851	0.796	9.357	10	-6
Hexachlorobutadiene	0.727	0.655	9.002	10	-10
Naphthalene	1.881	1.784	9.485	10	-5

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

Continuing Calibration
Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP22820.i/18jun04.b/ef00031.d
/chem/HP22820.i/18jun04.b/ef00032.d
/chem/HP22820.i/18jun04.b/ef00033.d
/chem/HP22820.i/18jun04.b/ef00034.d
/chem/HP22820.i/18jun04.b/ef00036.d
/chem/HP22820.i/18jun04.b/ef00037.d

** ICAL Area and RT are the average from the above standards.

Current Continuing Calibration Standard:

/chem/HP22820.i/18jun05.b/ef00072.d

Area Summary

Internal Standard Name	File ID: ef00072.d	ICAL Area	Low Limit	High Limit	In Spec
Bromochloromethane	318052	334758	200855	468661	Yes
1,4-Difluorobenzene	1168038	1252722	751633	1753811	Yes
Chlorobenzene-d5	1104188	1203406	722044	1684768	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

RT Summary

Internal Standard Name	File ID: ef00072.d	ICAL RT	In Spec
Bromochloromethane	5.467	5.467	Yes
1,4-Difluorobenzene	6.291	6.291	Yes
Chlorobenzene-d5	8.497	8.497	Yes

A "No" indicates the retention time is greater than 30 seconds from the RT of the referenced ICAL average.

Comments:_____

_____

Page 1 of 1

Report generated on 06/05/2018 at 14:54

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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: 06/05/2018

Lab File ID: ef00072.d Analyzed Time: 14:29

Instrument ID: 22820

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	R.T.	Area	R.T.	Area	R.T.
24 HOUR STANDARD	318052	5.47	1168038	6.29	1104188	8.50
UPPER LIMIT	445273	5.80	1635253	6.62	1545863	8.83
LOWER LIMIT	190831	5.14	700823	5.96	662513	8.17
LAB SAMPLE ID						
VBLKE02	306216	5.47	1134666	6.29	1097278	8.50
LCSE02	299832	5.47	1092749	6.29	1043540	8.50
LCSDE02	298556	5.47	1098665	6.29	1047497	8.50
cc820	286920	5.47	1057537	6.29	1030448	8.50
cc1352	278563	5.47	1002612	6.29	997814	8.50
cc1374	279870	5.47	1012711	6.29	975435	8.50

* = 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.

Data File: /chem/HP22820.i/18jun05.b/ef00070.d

Date : 05-JUN-2018 12:14

Client ID: 50NGBFB

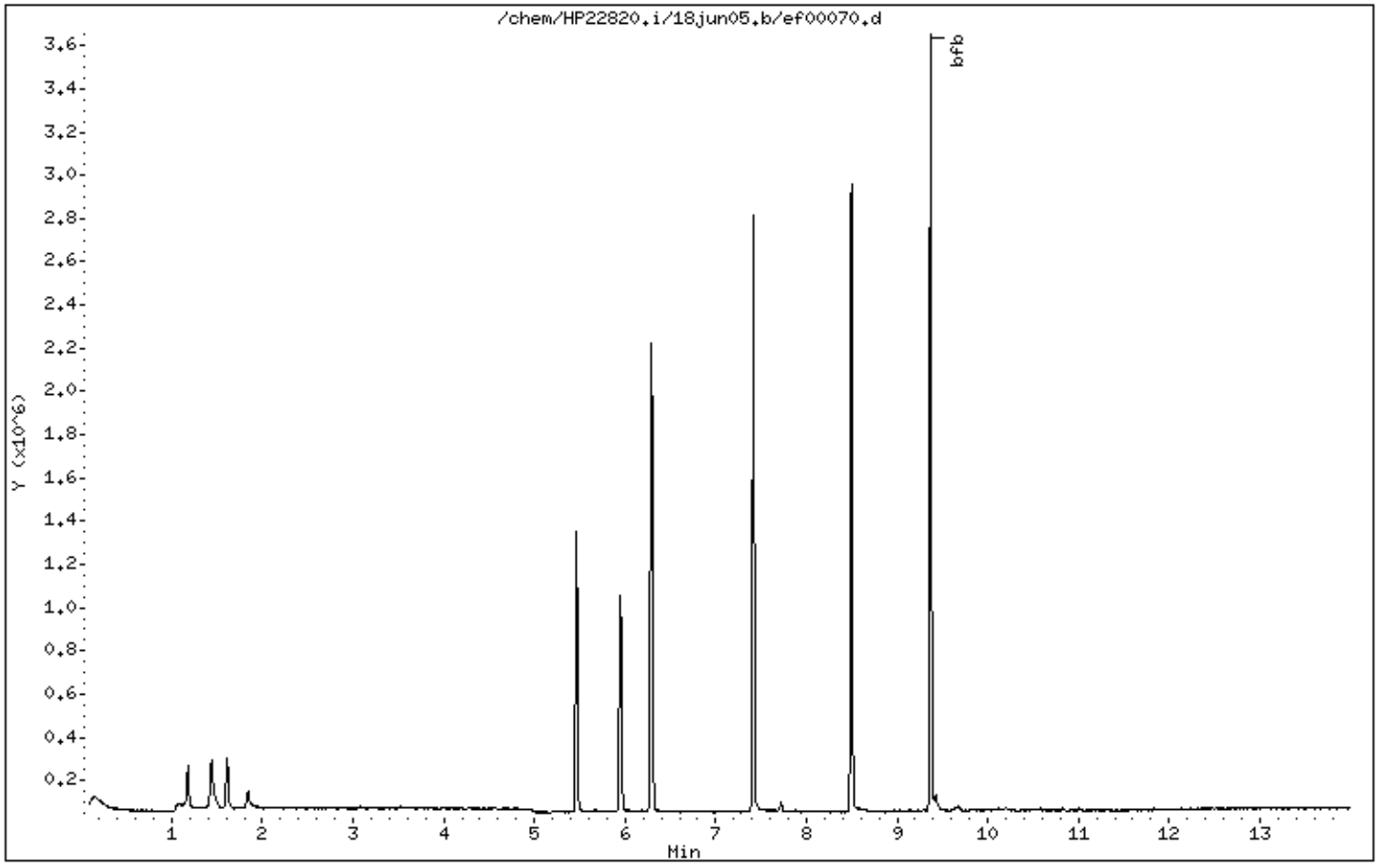
Instrument: HP22820.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25



Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:22.
Target 3.5 esignature user ID: jeb07445

Data File: /chem/HP22820.i/18jun05.b/ef00070.d

Date : 05-JUN-2018 12:14

Client ID: 50NGBFB

Instrument: HP22820.i

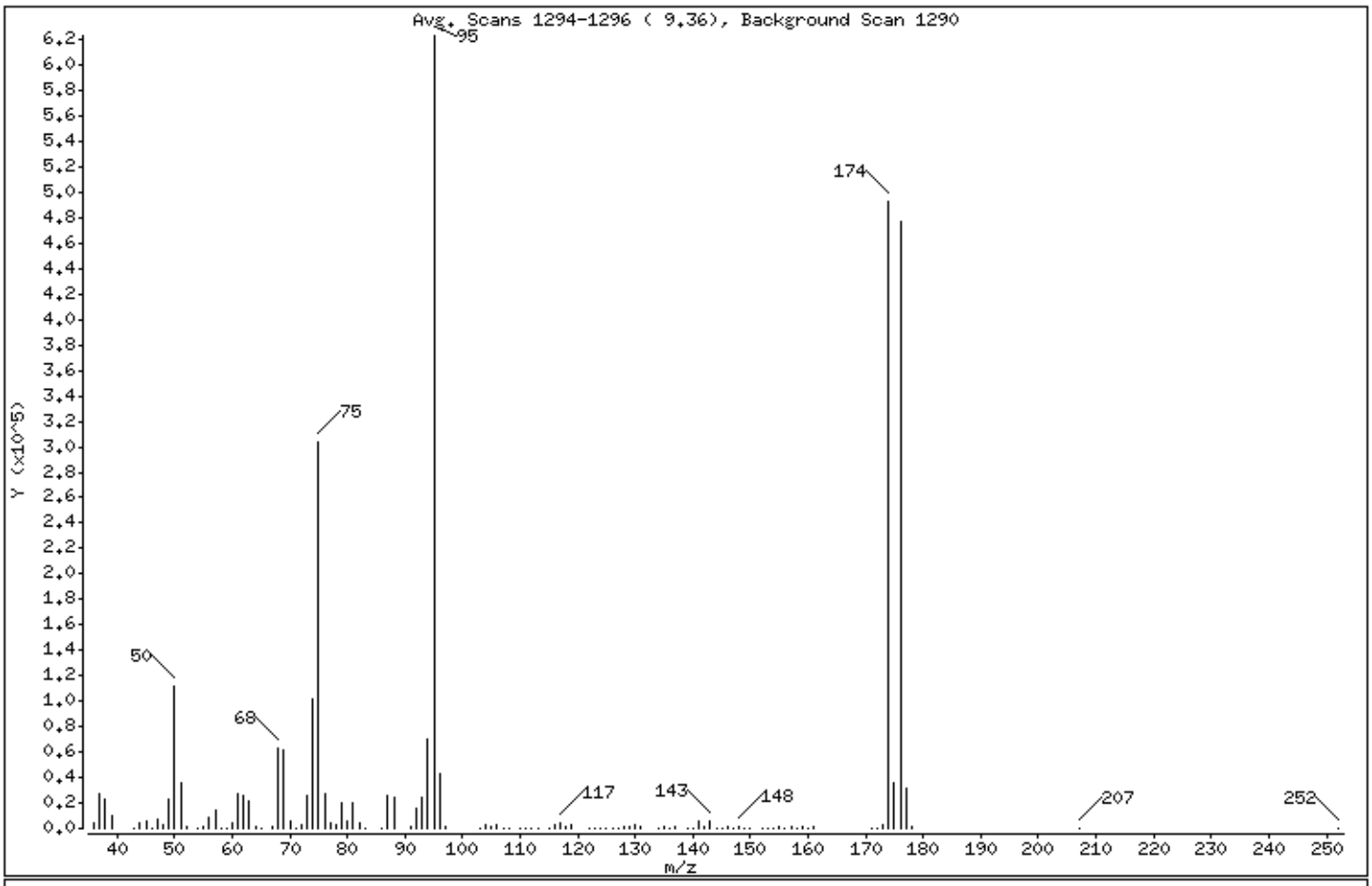
Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	18.02
75	30.00 - 66.00% of mass 95	48.73
96	5.00 - 9.00% of mass 95	6.86
173	Less than 2.00% of mass 174	0.43 (0.55)
174	50.00 - 120.00% of mass 95	79.09
175	4.00 - 9.00% of mass 174	5.65 (7.15)
176	93.00 - 101.00% of mass 174	76.59 (96.84)
177	5.00 - 9.00% of mass 176	5.01 (6.54)

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Target 3.5 esignature user ID: jeb07445

Date : 05-JUN-2018 12:14

Client ID: 50NGBFB Instrument: HP22820.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624 Column diameter: 0.25

Data File: ef00070.d
Spectrum: Avg. Scans 1294-1296 (9.36), Background Scan 1290
Location of Maximum: 95.00
Number of points: 114

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4501	70.00	5451	108.00	161	144.00	238
37.00	27376	71.00	239	110.00	574	145.00	634
38.00	23584	72.00	3047	111.00	694	146.00	772
39.00	9457	73.00	26144	112.00	458	147.00	332
43.00	456	74.00	101328	113.00	423	148.00	1448
44.00	3850	75.00	303616	115.00	626	149.00	476
45.00	5307	76.00	26672	116.00	2190	150.00	634
46.00	677	77.00	4188	117.00	4379	152.00	319
47.00	6625	78.00	2266	118.00	2113	153.00	560
48.00	3128	79.00	19368	119.00	3158	154.00	468
49.00	22520	80.00	5361	122.00	158	155.00	1303
50.00	112280	81.00	19952	123.00	208	156.00	151
51.00	35200	82.00	4282	124.00	387	157.00	904
52.00	1641	83.00	381	125.00	289	158.00	71
54.00	157	86.00	641	126.00	349	159.00	897
55.00	1159	87.00	26304	127.00	222	160.00	138
56.00	8112	88.00	24312	128.00	1950	161.00	753
57.00	14779	91.00	1949	129.00	1244	171.00	82
58.00	586	92.00	16007	130.00	2364	172.00	528
59.00	239	93.00	23856	131.00	775	173.00	2697
60.00	4871	94.00	70808	134.00	115	174.00	492800
61.00	26712	95.00	623104	135.00	916	175.00	35224
62.00	26232	96.00	42728	136.00	166	176.00	477248
63.00	20856	97.00	1515	137.00	1138	177.00	31216
64.00	1758	103.00	374	139.00	214	178.00	967
65.00	329	104.00	2516	140.00	447	207.00	72
67.00	1416	105.00	1176	141.00	5503	252.00	77
68.00	62416	106.00	2640	142.00	848		
69.00	61288	107.00	712	143.00	5948		

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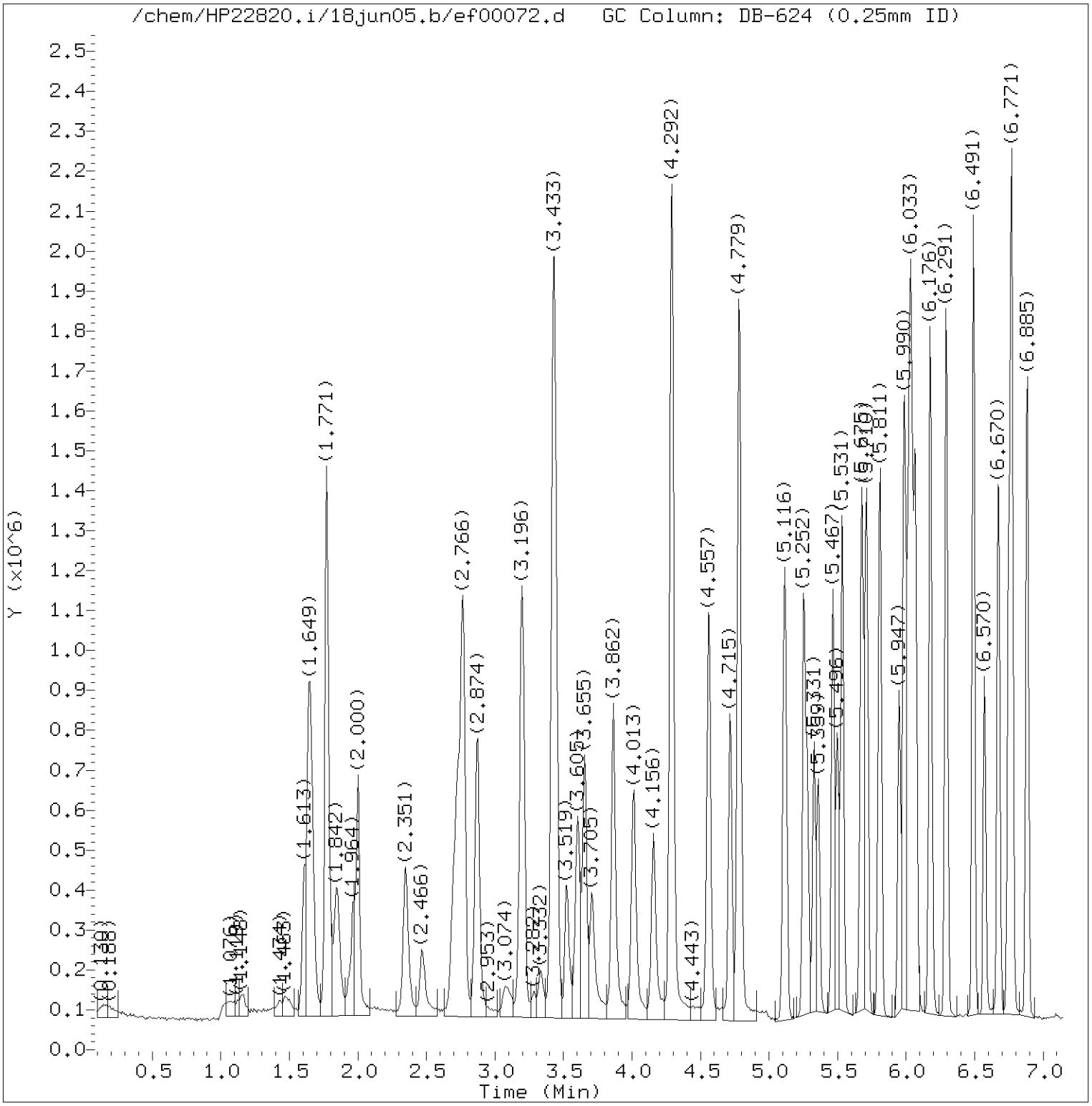
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

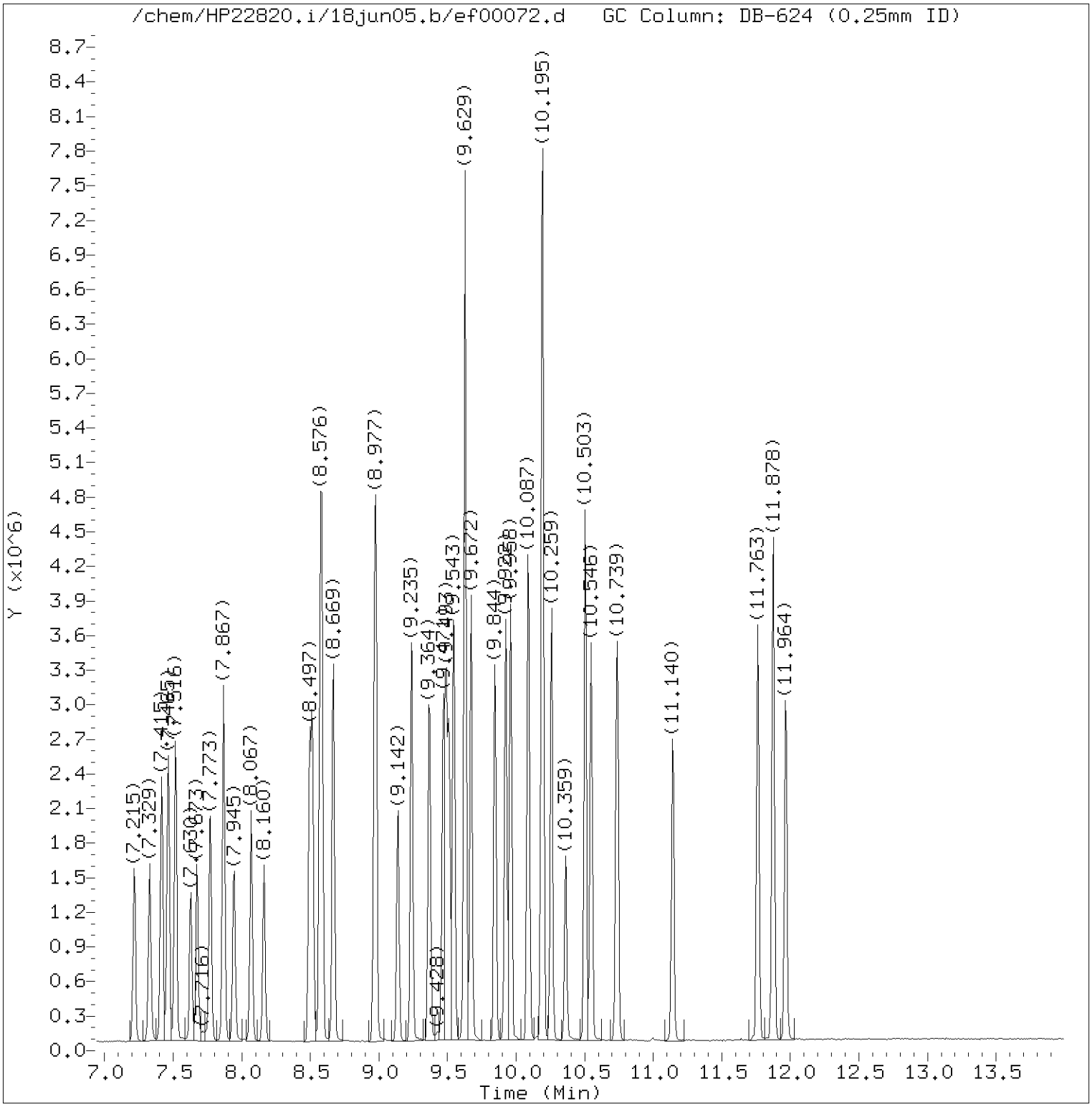
Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 14:56 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 14:56 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 14:56 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.606	41	248283	12.590
2) Dichlorodifluoromethane	(1)	1.642	85	913863	11.955
3) Chlorodifluoromethane	(1)	1.663	51	530281	13.092
4) Freon 114	(1)	1.771	85	890782	11.389
5) Chloromethane	(1)	1.857	50	307276	13.290
6) Vinyl Chloride	(1)	1.964	62	347481	12.245
7) 1,3-Butadiene	(1)	2.000	54	251880	12.233
8) Bromomethane	(1)	2.351	94	356087	12.202
9) Chloroethane	(1)	2.466	64	193748	12.080
10) Bromoethene	(1)	2.695	106	322038	10.387
11) Dichlorofluoromethane	(1)	2.731	67	752332	12.162
12) Trichlorofluoromethane	(1)	2.766	101	934595	11.535
13) Pentane	(1)	2.874	43	555967	12.780
14) Ethanol	(1)	3.067	45	111351M	11.900
15) Freon123a	(1)	3.196	67	728038	13.538
16) Acrolein	(1)	3.332	56	128932	11.636
17) 1,1-Dichloroethene	(1)	3.418	61	540018	12.006
18) Freon 113	(1)	3.433	103	506393	11.164
19) Acetone	(1)	3.519	43	493934	13.210
20) Methyl Iodide	(1)	3.605	142	758274	8.718
21) Carbon Disulfide	(1)	3.655	76	996062	11.825
22) Isopropanol	(1)	3.705	45	430470	11.165
24) 3-Chloropropene	(1)	3.862	76	159372	12.076
23) Acetonitrile	(1)	3.870	40	203828	11.229
25) Methylene Chloride	(1)	4.013	84	329641	12.870
26) tert-Butyl Alcohol	(1)	4.156	59	553849	10.626
28) trans-1,2-Dichloroethene	(1)	4.285	61	501626	12.332
27) Acrylonitrile	(1)	4.292	53	288410M	12.655
29) Methyl t-Butyl Ether	(1)	4.292	73	911594	10.502
30) Hexane	(1)	4.564	57	503530	11.272
31) 1,1-Dichloroethane	(1)	4.715	63	635166	11.984
32) Vinyl Acetate	(1)	4.779	86	83191	10.735
33) Di-Isopropyl Ether	(1)	4.779	45	1072792	12.152
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	887367	10.533
35) cis-1,2-Dichloroethene	(1)	5.252	61	472883	12.042
37) 2-Butanone	(1)	5.281	72	177001	10.829
38) Ethyl Acetate	(1)	5.324	70	82407	10.218
39) Methyl Acrylate	(1)	5.359	55	556032	11.221

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 14:56 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	318052	10.000
41) Tetrahydrofuran	(1)	5.496	42	366948	12.677
42) Chloroform	(1)	5.531	83	785366	11.812
43) 1,1,1-Trichloroethane	(1)	5.675	97	724804	10.762
44) Cyclohexane	(1)	5.710	56	531017	11.464
45) Carbon Tetrachloride	(1)	5.811	117	705903	10.677
46) Benzene	(2)	5.983	78	1156242	11.510
47) 1,2-Dichloroethane	(2)	6.011	62	506822	12.413
48) Isooctane	(2)	6.033	57	1669938	12.010
49) Tert-Amyl Methyl Ether	(2)	6.069	73	867731	10.356
50) Heptane	(2)	6.176	43	576698	12.136
51)*1,4-Difluorobenzene	(2)	6.291	114	1168038	10.000
52) Trichloroethene	(2)	6.491	130	517323	10.366
53) Ethyl Acrylate	(2)	6.570	55	695355	10.937
36) 1,2-Dichloroethene (total)	(1)		61	974509	24.374
54) 1,2-Dichloropropane	(2)	6.670	63	414292	11.782
57) Methyl Methacrylate	(2)	6.749	69	364940	10.378
55) Dibromomethane	(2)	6.771	174	476655	9.869
56) 1,4-Dioxane	(2)	6.778	88	270228	10.582
58) Bromodichloromethane	(2)	6.885	83	806930	11.722
59) cis-1,3-Dichloropropene	(2)	7.215	75	651293	10.731
60) 4-Methyl-2-Pentanone	(2)	7.329	43	801053	12.118
61) Toluene	(3)	7.465	91	1412550	11.089
62) Octane	(3)	7.516	43	815011	12.301
63) trans-1,3-Dichloropropene	(3)	7.630	75	534144	10.635
65) Ethyl Methacrylate	(3)	7.673	69	597870	10.490
66) 1,1,2-Trichloroethane	(3)	7.773	97	496513	11.032
67) Tetrachloroethene	(3)	7.867	166	708916	9.945
68) 2-Hexanone	(3)	7.945	43	787967	12.364
69) Dibromochloromethane	(3)	8.067	127	618134	10.888
70) 1,2-Dibromoethane	(3)	8.160	107	777535	11.101
71)*Chlorobenzene-d5	(3)	8.497	117	1104188	10.000
72) Chlorobenzene	(3)	8.518	112	1151338	10.559
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	565847	10.662
74) Ethylbenzene	(3)	8.583	91	1909166	11.205
75) m/p-Xylene	(3)	8.669	91	1528738	11.052
76) o-Xylene	(3)	8.970	91	1478222	10.811
78) Styrene	(3)	8.977	104	1103577	10.653

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 14:56 jeb07445

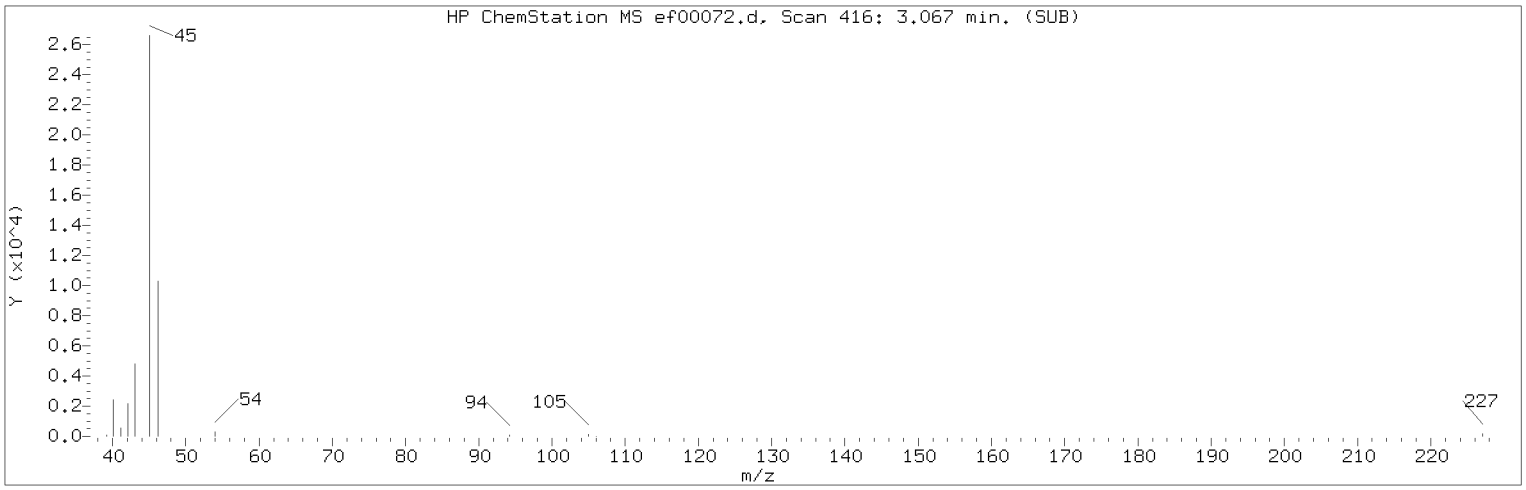
Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	760922	10.418
80) Cumene	(3)	9.235	105	1953699	10.021
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	1137664	11.865
81) Bromobenzene	(3)	9.493	156	687144	9.919
83) 1,2,3-Trichloropropane	(3)	9.514	110	344274	11.240
84) n-Propylbenzene	(3)	9.550	120	568155	10.139
86) 4-Ethyltoluene	(3)	9.629	105	2063744M	10.944
85) 2-Chlorotoluene	(3)	9.629	126	530280	10.281
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	1666626M	10.620
88) Alpha Methyl Styrene	(3)	9.844	118	819272	9.953
89) tert-Butylbenzene	(3)	9.922	119	1559303M	9.525
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	1664635	10.744
91) sec-Butylbenzene	(3)	10.087	105	2416370	10.307
92) 1,3-Dichlorobenzene	(3)	10.195	146	1201390	10.434
94) p-Isopropyltoluene	(3)	10.195	119	2049230	10.214
93) 1,4-Dichlorobenzene	(3)	10.259	146	1214758	10.351
95) Benzyl Chloride	(3)	10.359	91	936876	8.826
97) n-Butylbenzene	(3)	10.503	91	1956436	10.852
96) 1,2-Dichlorobenzene	(3)	10.546	146	1121693	10.236
98) Hexachloroethane	(3)	10.739	117	470448	11.045
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	577294	10.191
100) 1,2,4-Trichlorobenzene	(3)	11.763	180	878800	9.357
101) Hexachlorobutadiene	(3)	11.878	225	723049	9.002
102) Naphthalene	(3)	11.964	128	1969737	9.485
64) 1,3-Dichloropropene (total)	(3)		75	1185437	21.568
77) Xylene (total)	(3)		91	3006960	21.865

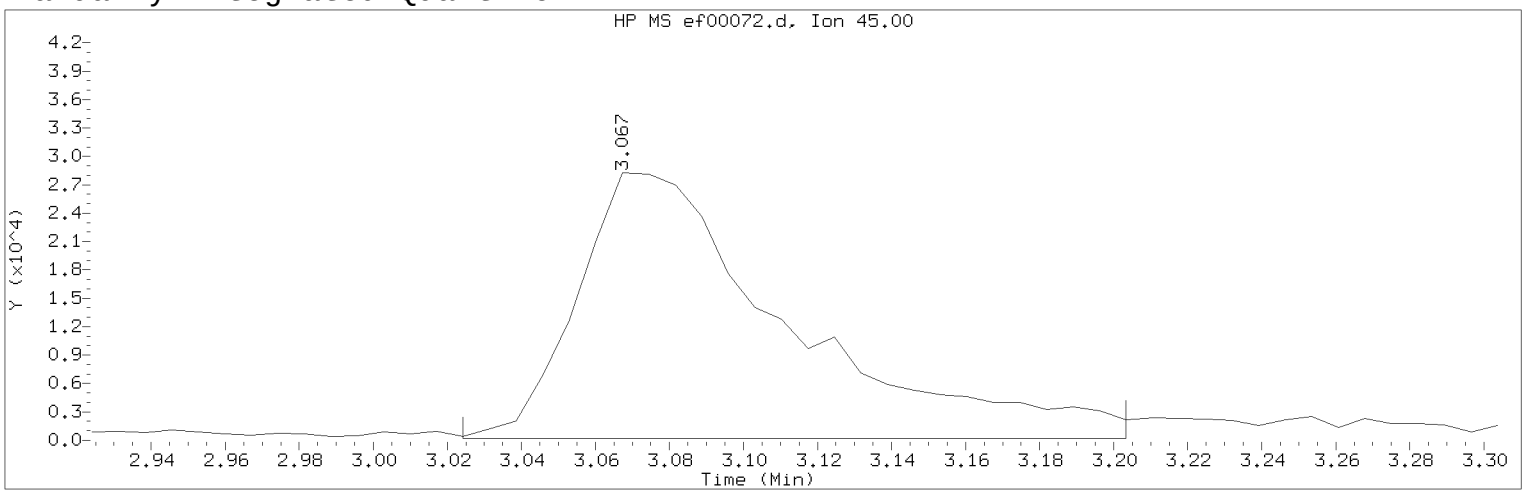
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 14:56 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

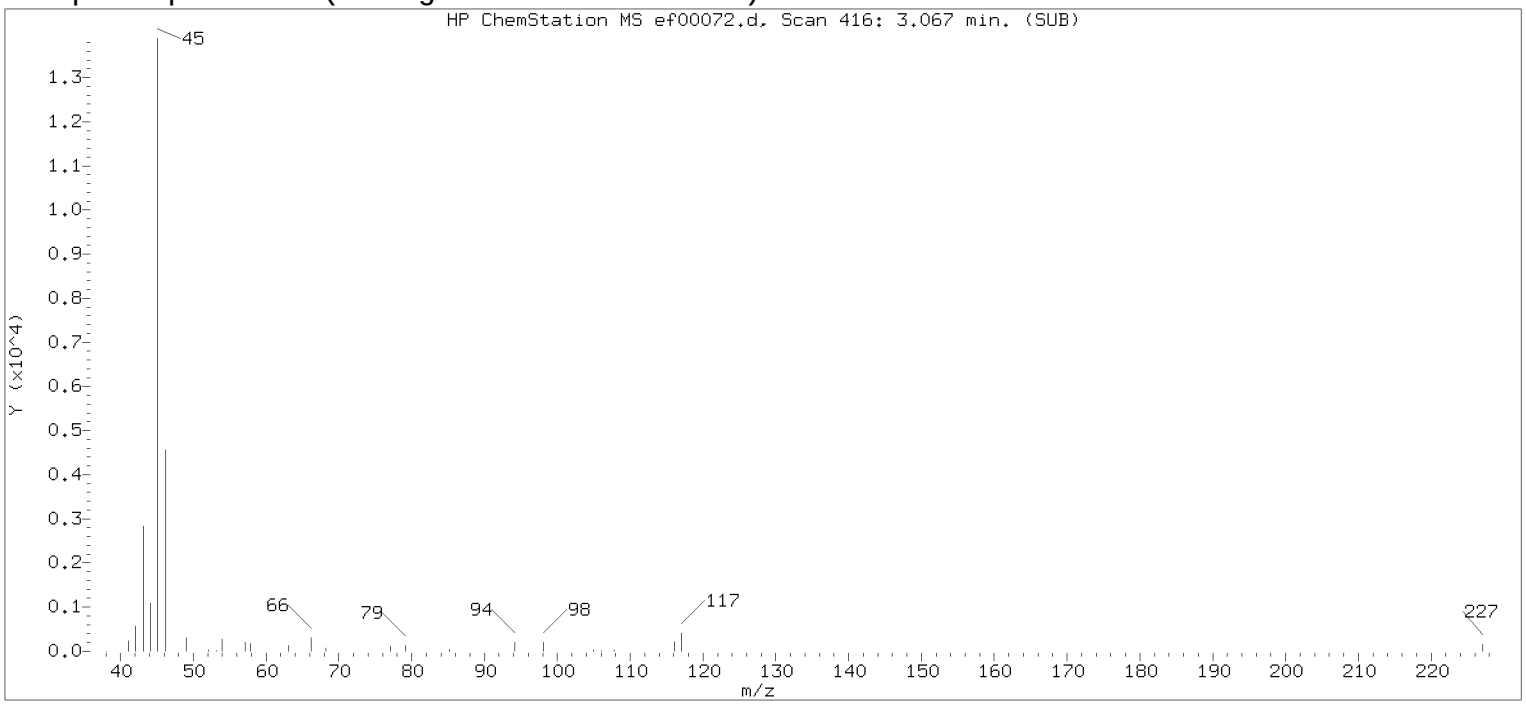
Compound Number : 14
Compound Name : Ethanol
Scan Number : 416
Retention Time (minutes): 3.067
Quant Ion : 45.00
Area (flag) : 111351M
Concentration (ppb(v)) : 11.9003
Integration start scan : 409 Integration stop scan: 434
Y at integration start : 191 Y at integration end: 191

Reason for manual integration: improper integration

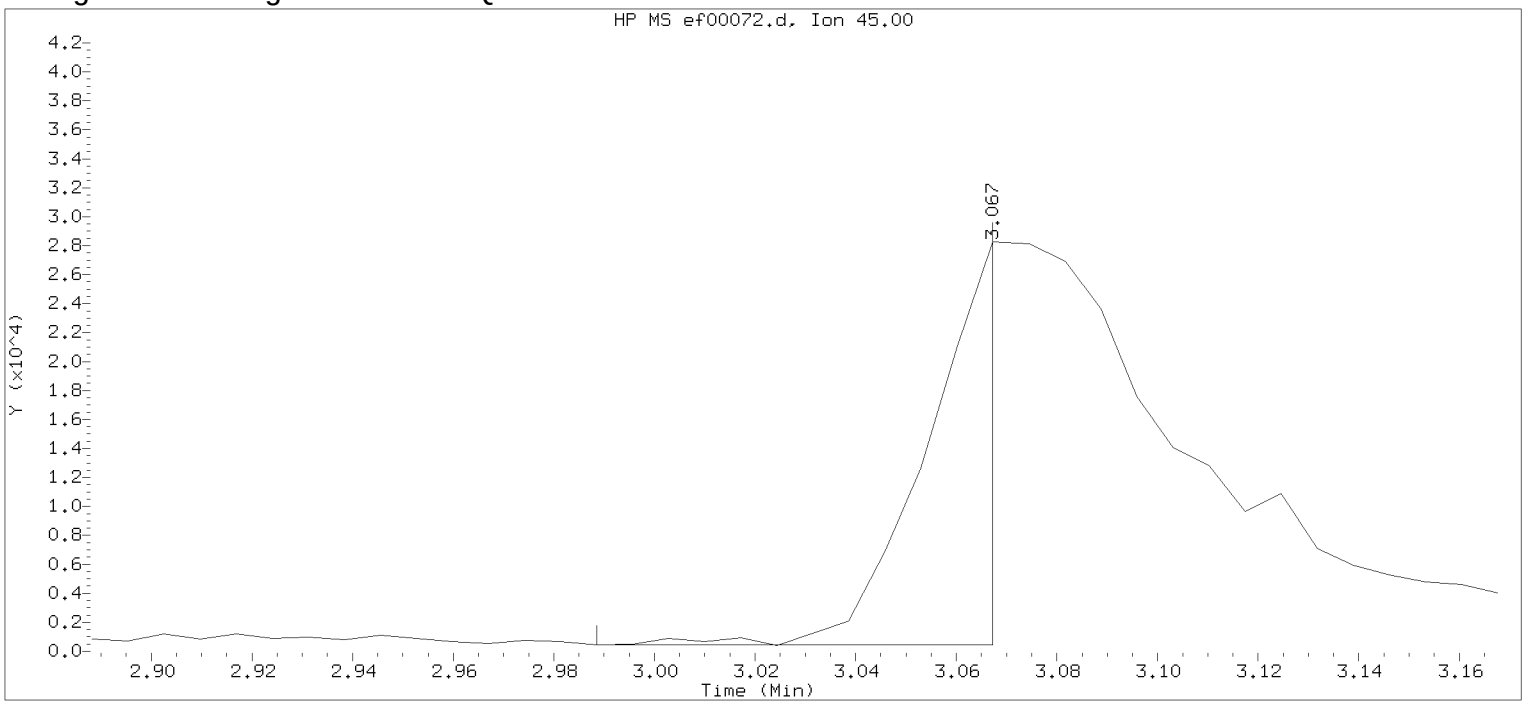
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

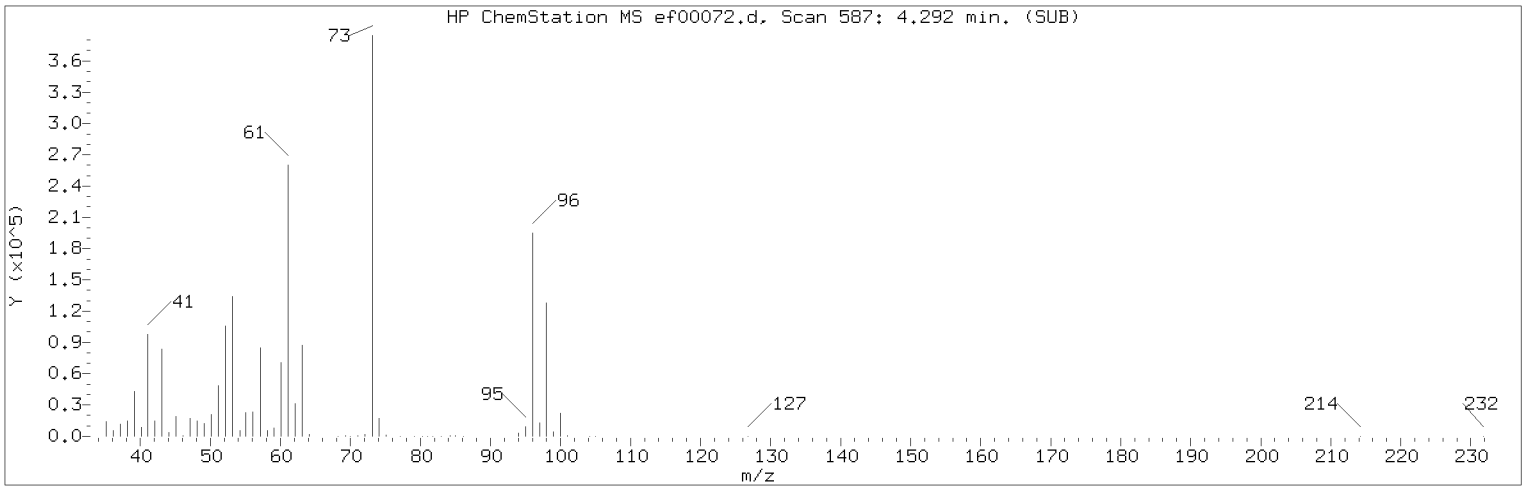
Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 13:27
Date, time and analyst ID of latest file update: 05-Jun-2018 14:48 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

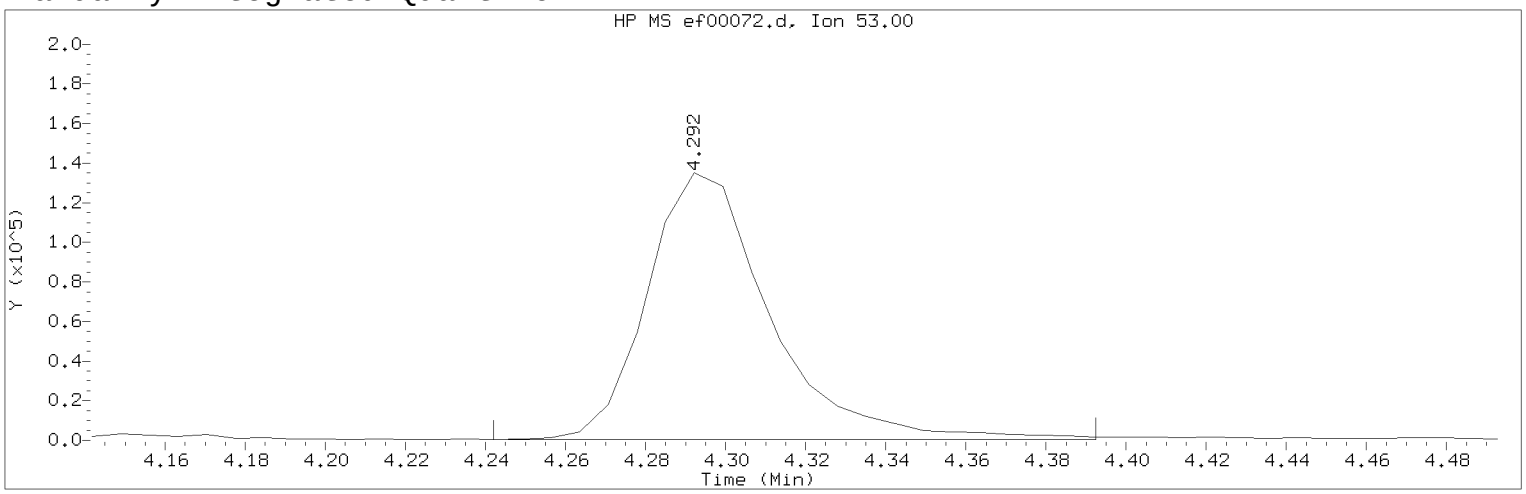
Compound Number : 14
Compound Name : Ethanol
Scan Number : 416
Retention Time (minutes): 3.067
Quant Ion : 45.00
Area : 24376
Concentration (ppb(v)) : 2.6052
Integration start scan : 404 Integration stop scan: 415
Y at integration start : 436 Y at integration end: 436

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 14:56 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

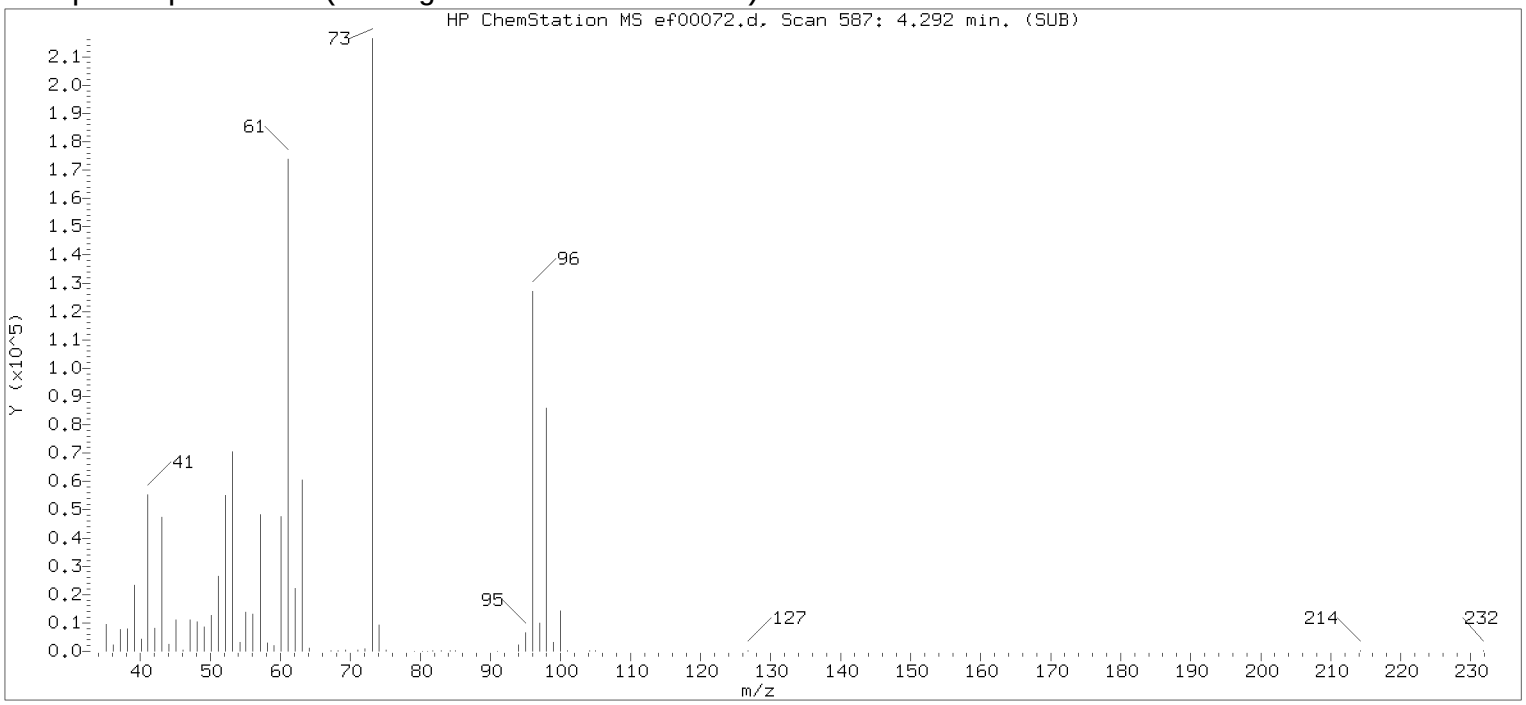
Compound Number : 27
Compound Name : Acrylonitrile
Scan Number : 587
Retention Time (minutes): 4.292
Quant Ion : 53.00
Area (flag) : 288410M
Concentration (ppb(v)) : 12.6551
Integration start scan : 579 Integration stop scan: 600
Y at integration start : 209 Y at integration end: 209

Reason for manual integration: improper integration

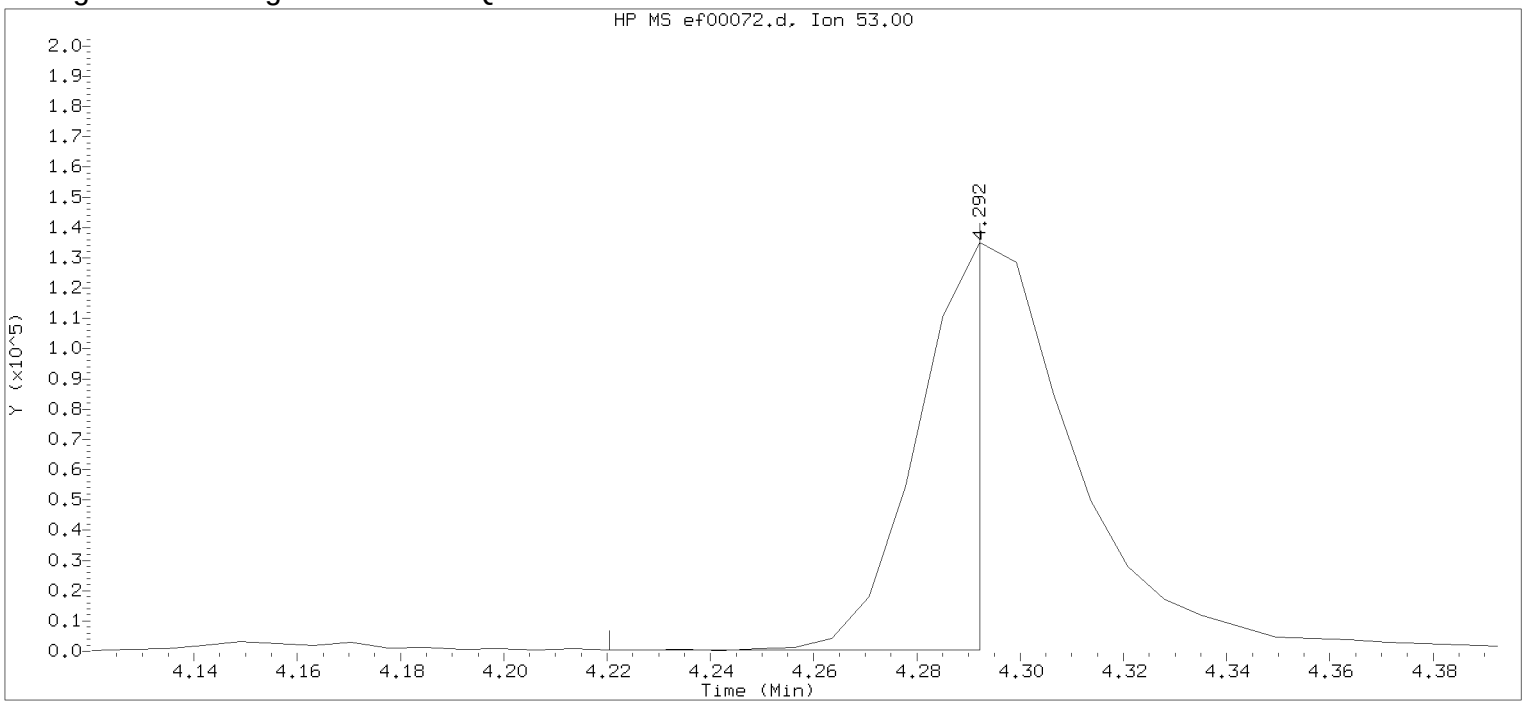
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

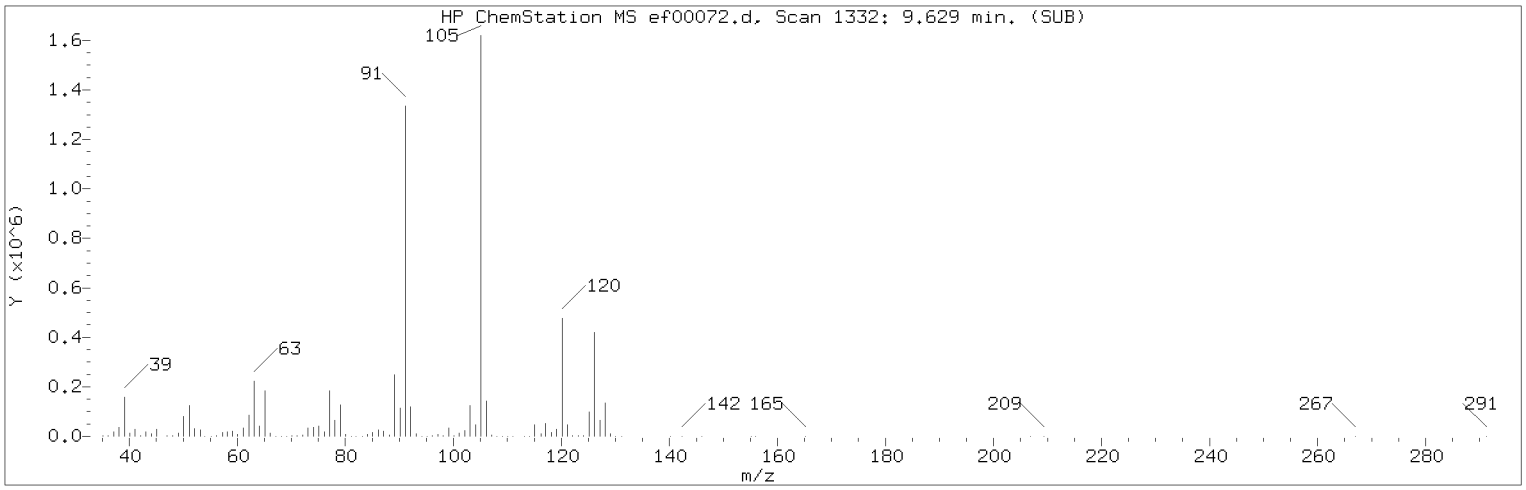
Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 13:27
Date, time and analyst ID of latest file update: 05-Jun-2018 14:48 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

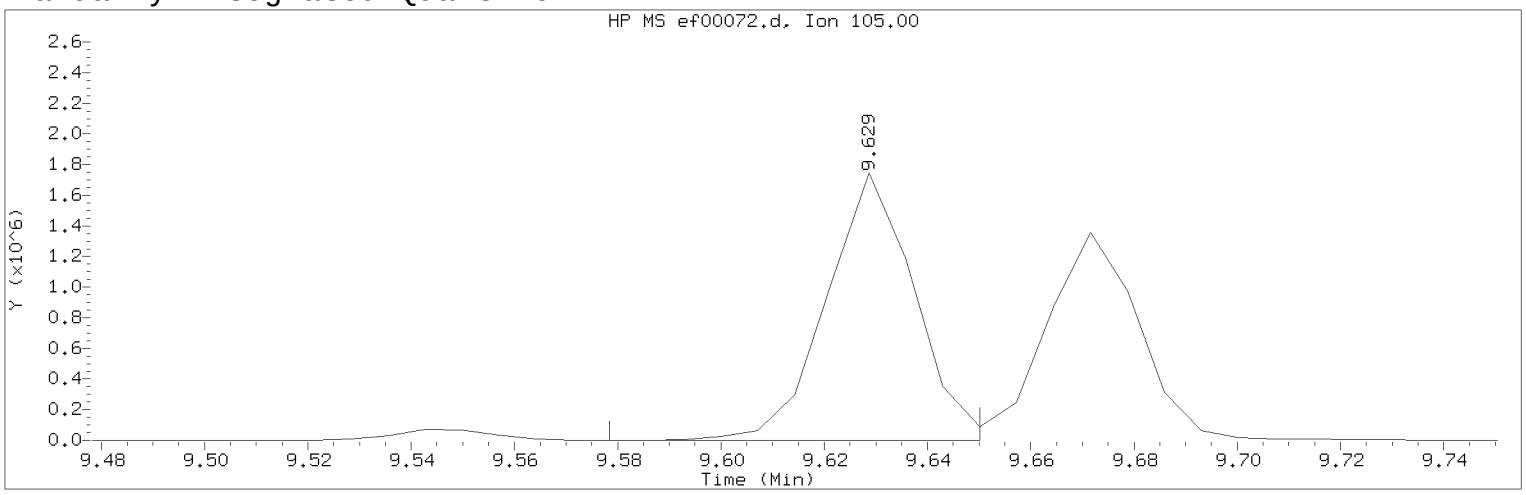
Compound Number : 27
Compound Name : Acrylonitrile
Scan Number : 587
Retention Time (minutes): 4.292
Quant Ion : 53.00
Area : 109482
Concentration (ppb(v)) : 4.8039
Integration start scan : 576 Integration stop scan: 586
Y at integration start : 356 Y at integration end: 356

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 14:56 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

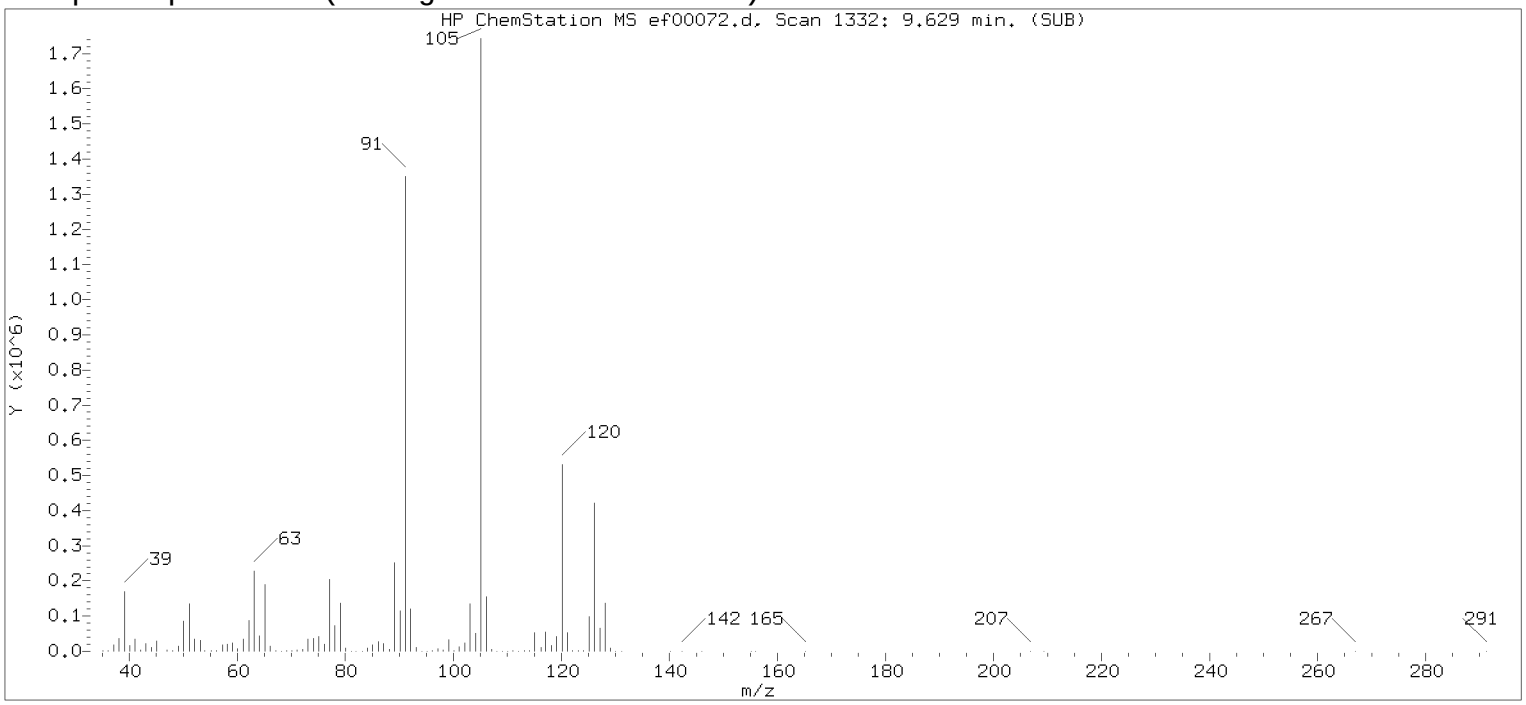
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 2063744M
Concentration (ppb(v)) : 10.9444
Integration start scan : 1324 Integration stop scan: 1334
Y at integration start : 254 Y at integration end: 254

Reason for manual integration: improper integration

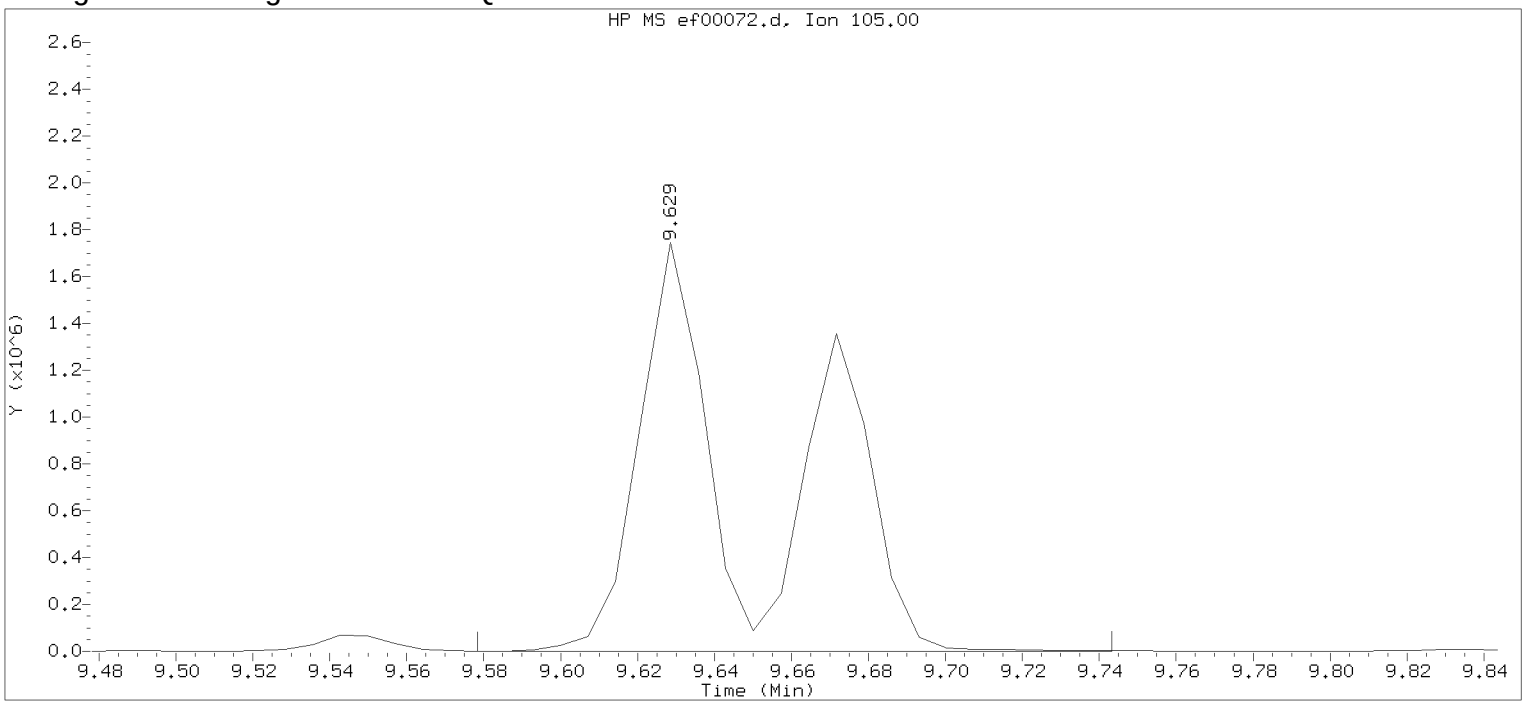
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

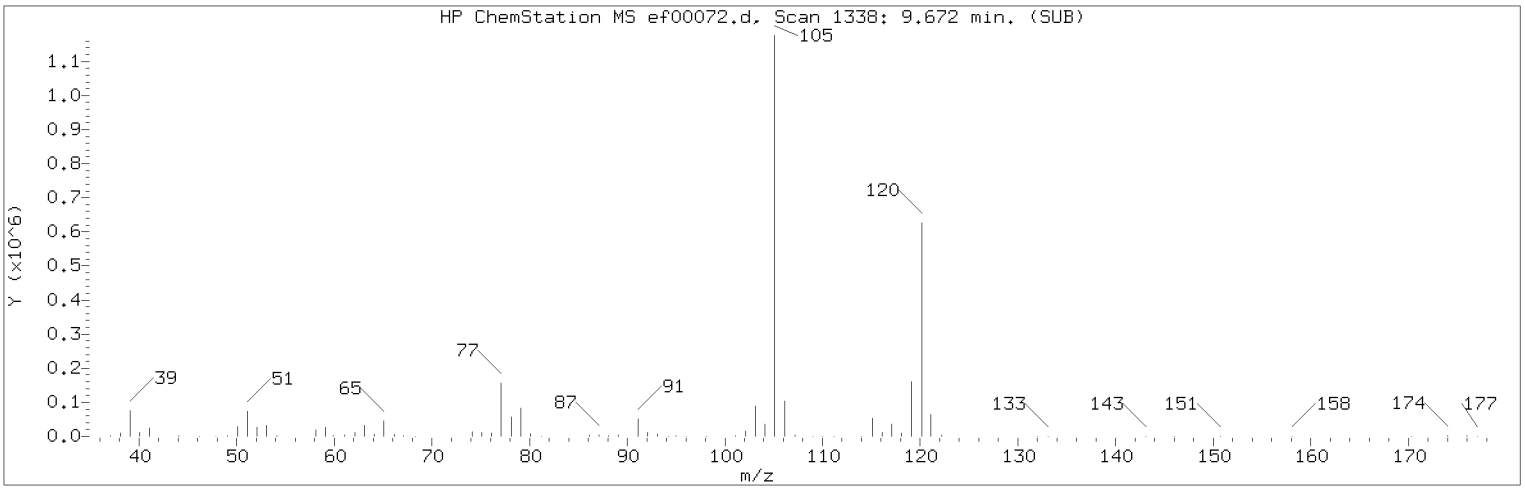
Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 13:27
Date, time and analyst ID of latest file update: 05-Jun-2018 14:48 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

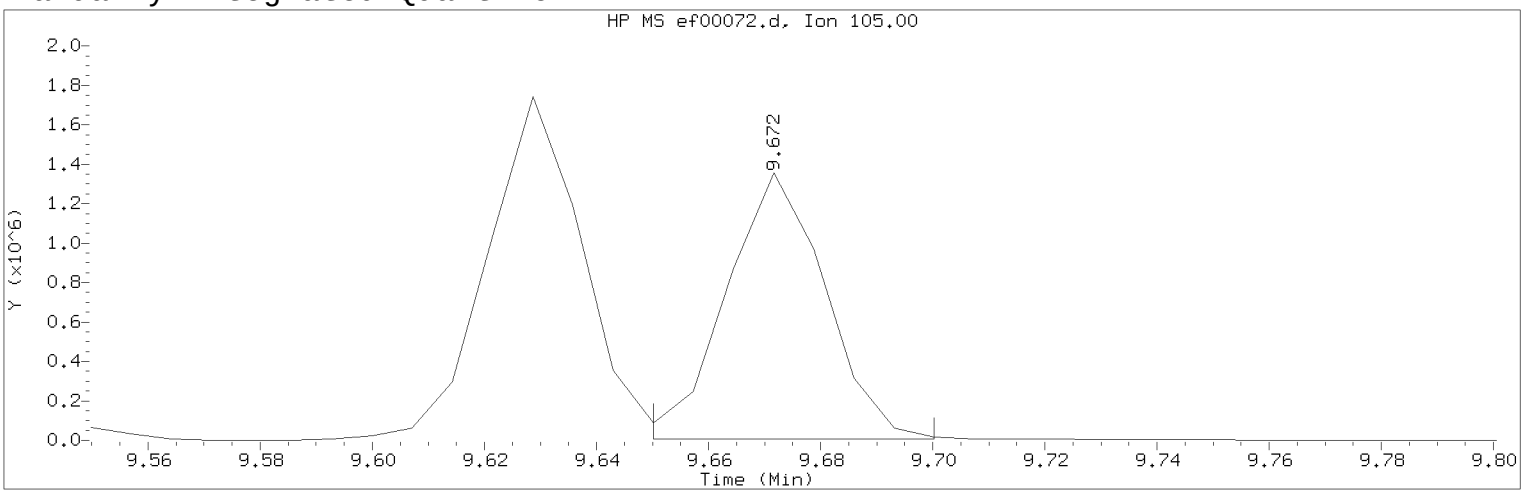
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 3724921
Concentration (ppb(v)) : 19.7540
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 254 Y at integration end: 254

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 14:56 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

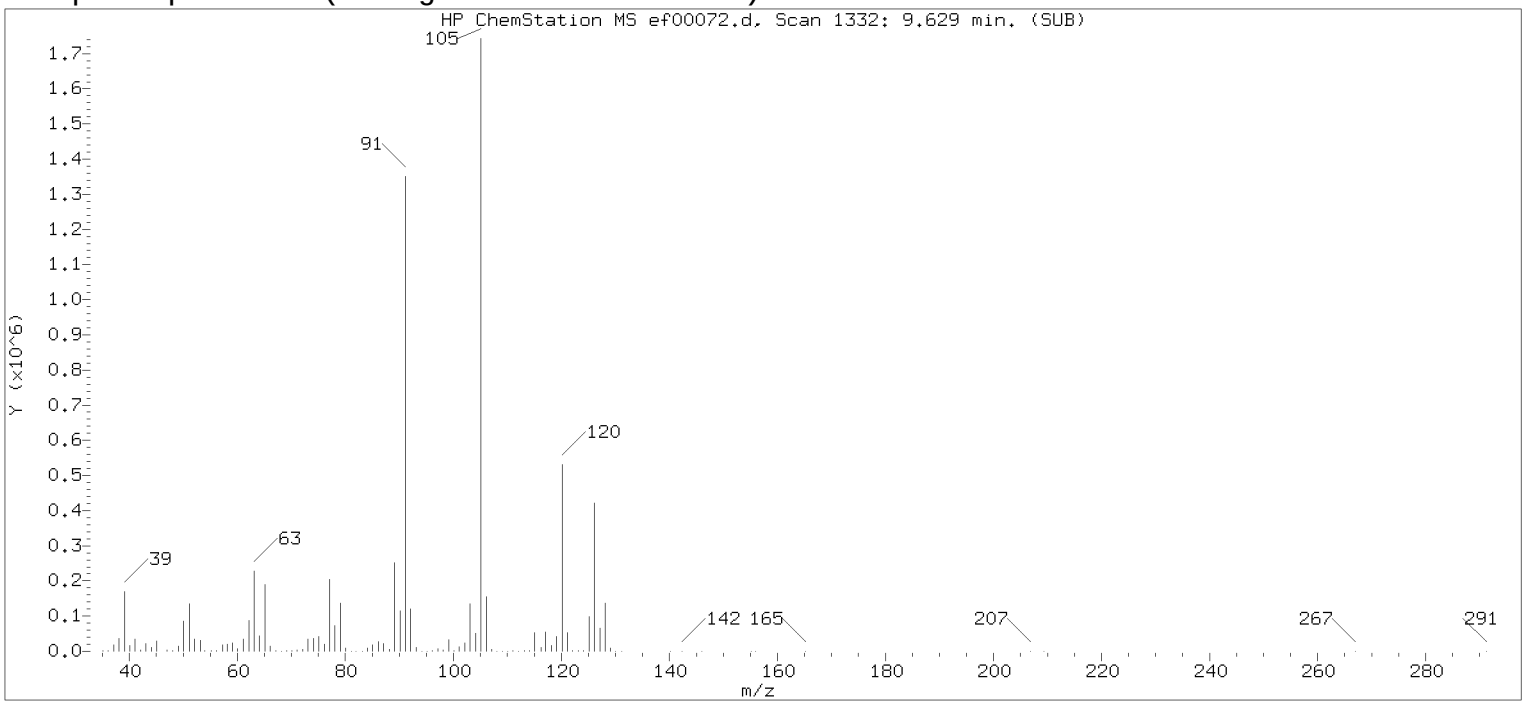
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 1666626M
Concentration (ppb(v)) : 10.6198
Integration start scan : 1334 Integration stop scan: 1341
Y at integration start : 6458 Y at integration end: 6458

Reason for manual integration: improper integration

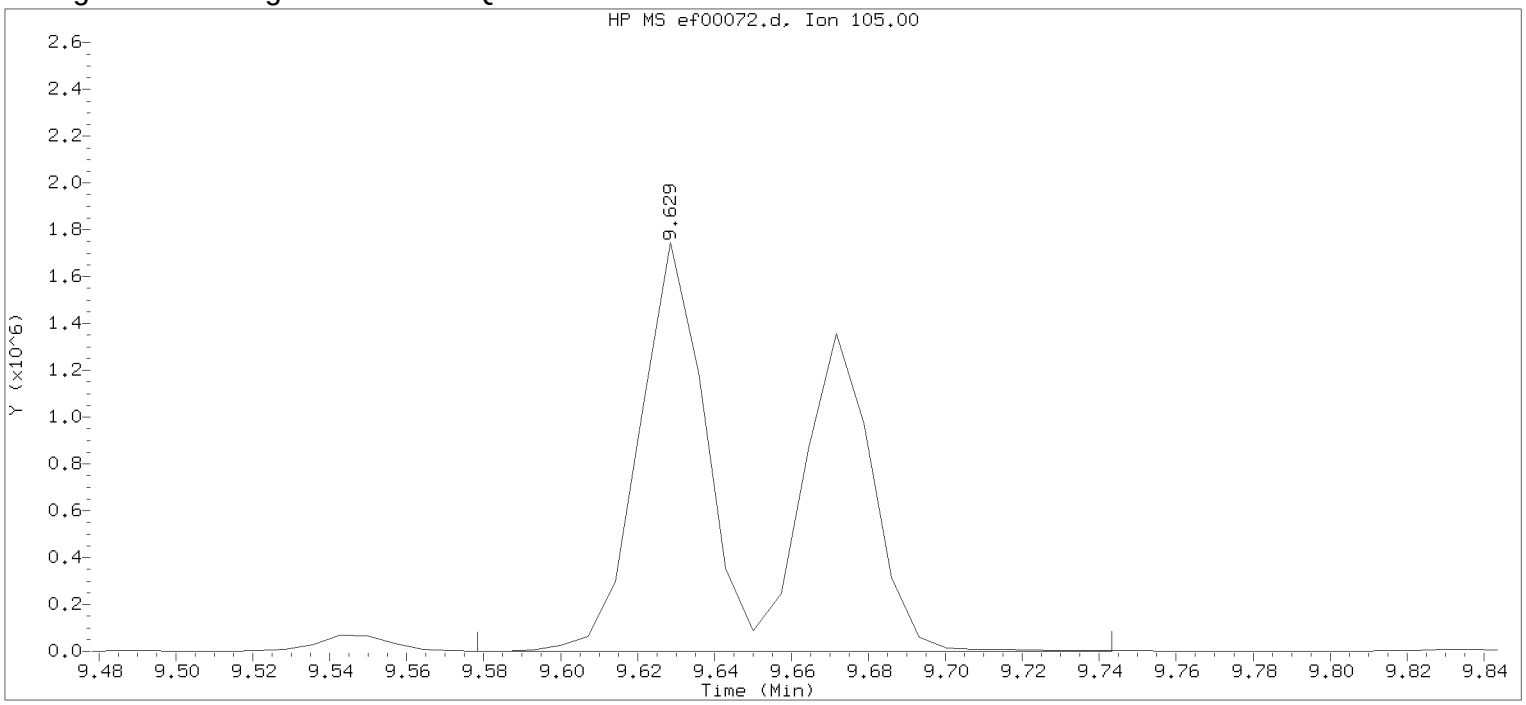
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

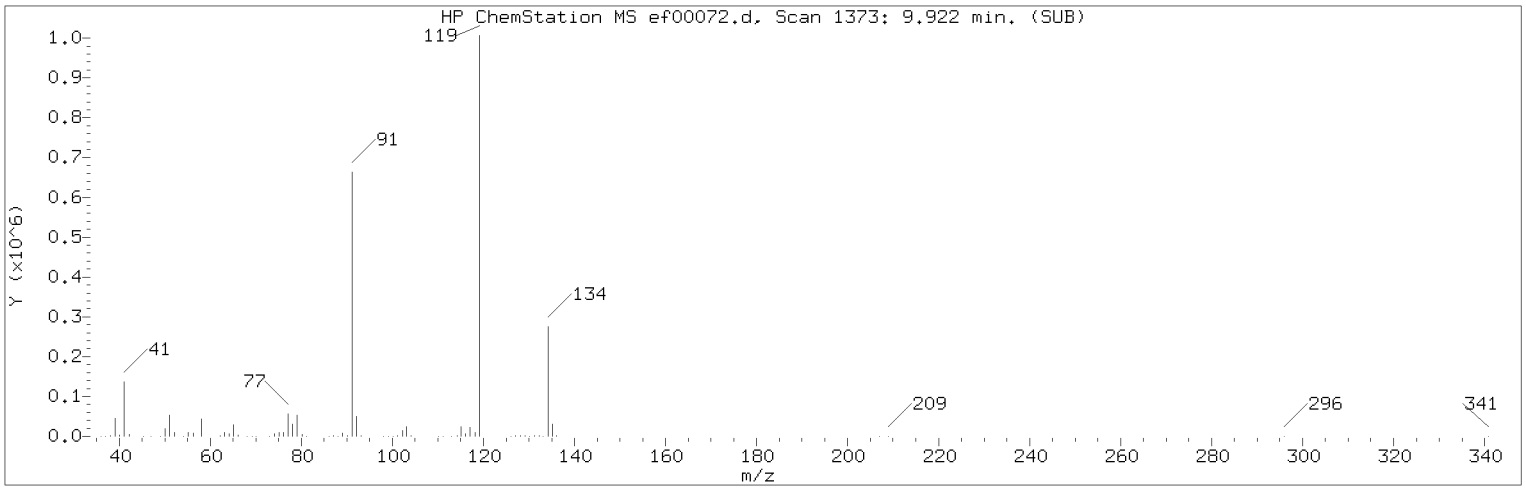
Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 13:27
Date, time and analyst ID of latest file update: 05-Jun-2018 14:48 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

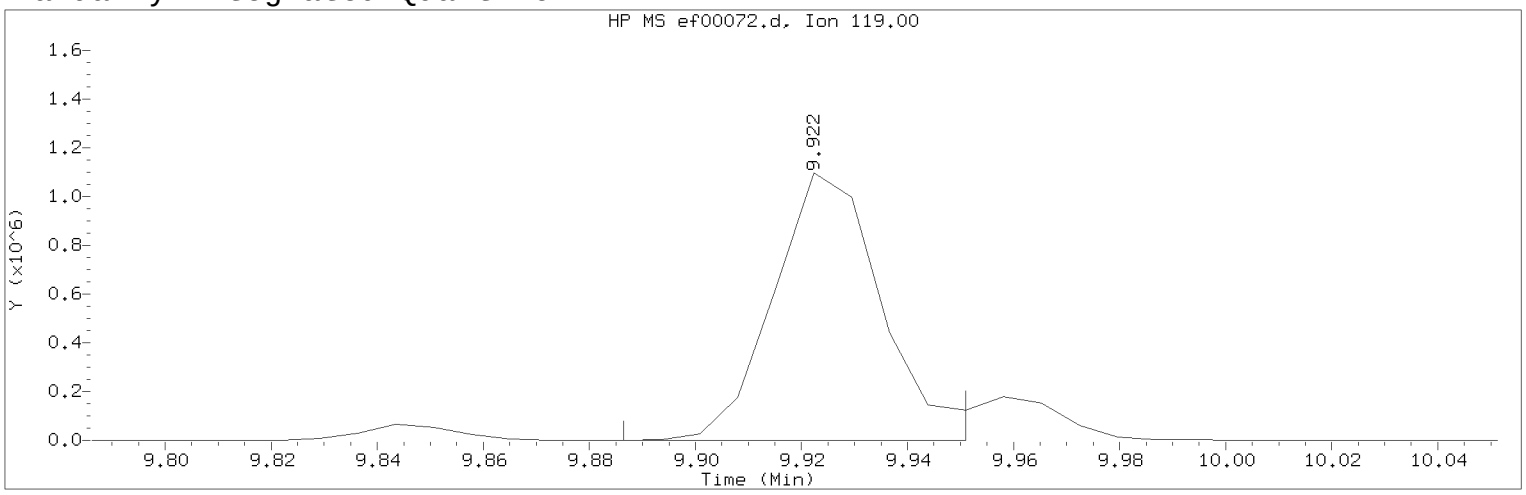
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 3724921
Concentration (ppb(v)) : 23.7353
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 254 Y at integration end: 254

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 14:56 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

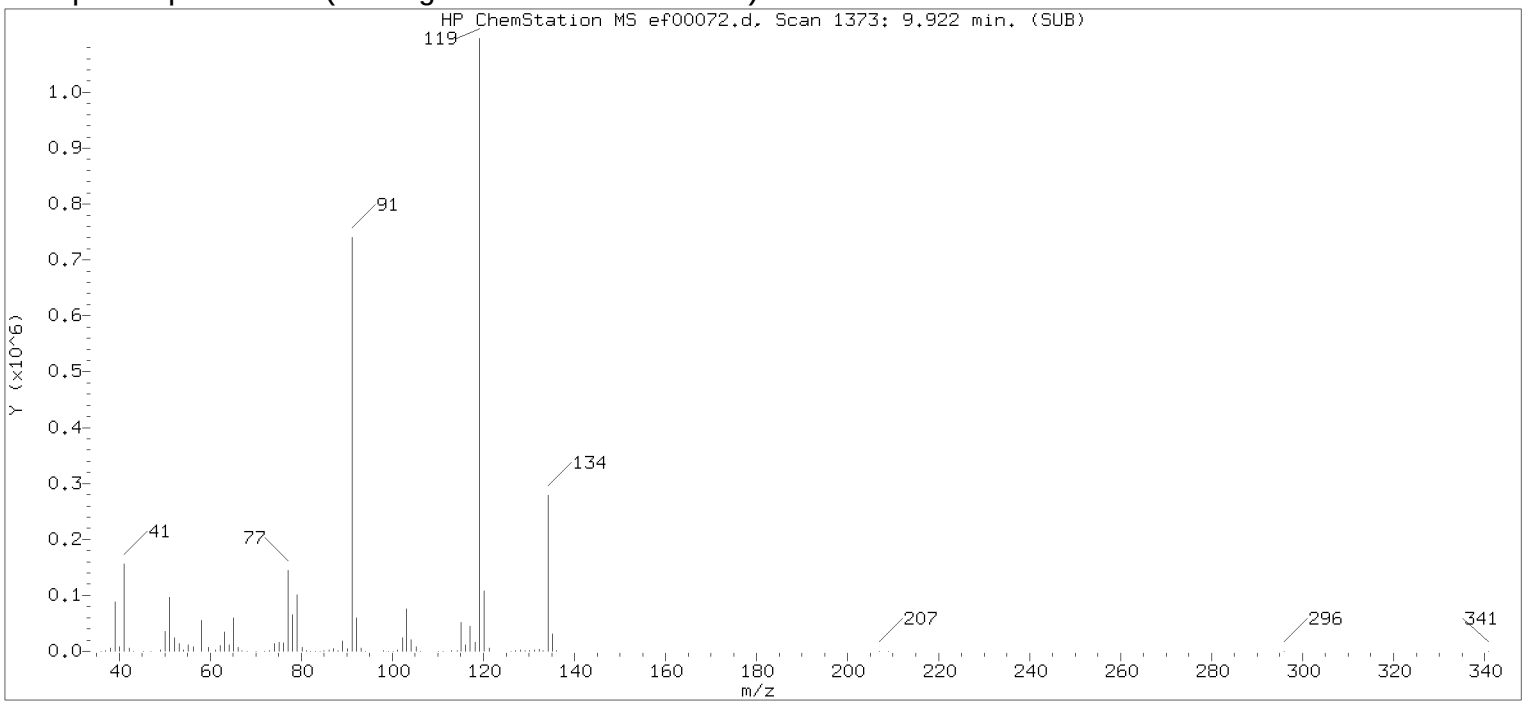
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 1559303M
Concentration (ppb(v)) : 9.5249
Integration start scan : 1367 Integration stop scan: 1376
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

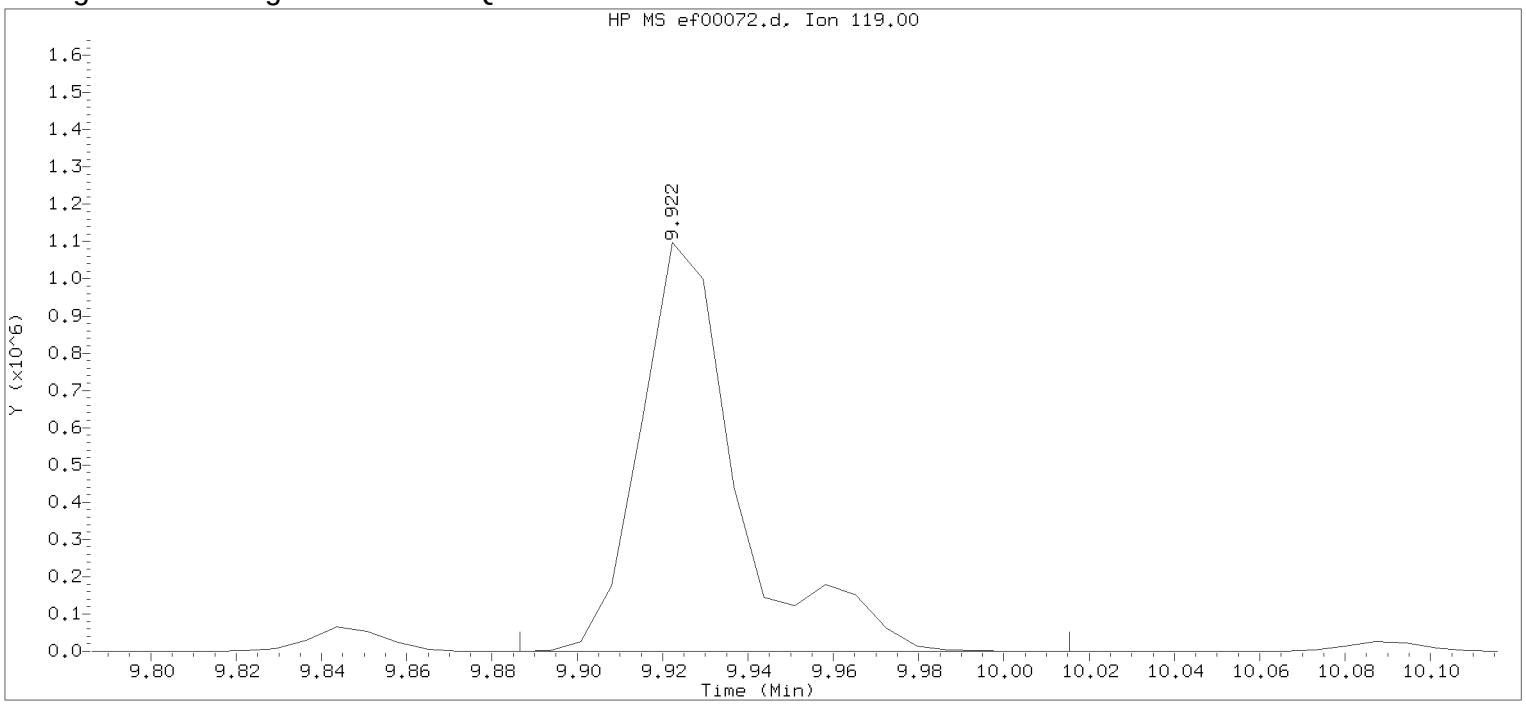
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 13:27
Date, time and analyst ID of latest file update: 05-Jun-2018 14:48 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 1736853
Concentration (ppb(v)) : 10.6095
Integration start scan : 1367 Integration stop scan: 1385
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Lancaster Laboratories, Inc.

Analysis Summary for GC/MS Volatiles in Air

VBLKE02

Data file: /chem/HP22820.i/18jun05.b/ef00074.d Injection date and time: **05-JUN-2018 16:05**
Data file Sample Info. Line: VBLKE02;200;E1815630AA;VBLKE02;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1815630AA**
Date, time and analyst ID of latest file update: 05-Jun-2018 16:33 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun05.b/ef00074.d**

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 05-JUN-2018 14:56
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun05.b/ef00072.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	5.467(0.000)	751	130	306216 (-4)	10.00		190832 - 445272
51) 1,4-Difluorobenzene	6.291(0.000)	866	114	1134666 (-3)	10.00		700823 - 1635253
71) Chlorobenzene-d5	8.497(0.000)	1174	117	1097278 (-1)	10.00		662513 - 1545863

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)			Not Detected					0.5	1
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)			Not Detected					0.2	1
7) 1,3-Butadiene	(1)			Not Detected					0.4	2
8) Bromomethane	(1)			Not Detected					0.5	1
9) Chloroethane	(1)			Not Detected					0.2	1
10) Bromoethene	(1)			Not Detected					0.4	2
11) Dichlorofluoromethane	(1)			Not Detected					0.2	1
12) Trichlorofluoromethane	(1)			Not Detected					0.2	1
13) Pentane	(1)			Not Detected					0.5	1
14) Ethanol	(1)			Not Detected					0.5	2
15) Freon123a	(1)			Not Detected					0.2	1
16) Acrolein	(1)			Not Detected					1	2
17) 1,1-Dichloroethene	(1)			Not Detected					0.2	1
18) Freon 113	(1)			Not Detected					0.5	2
19) Acetone	(1)			Not Detected					0.5	2
20) Methyl Iodide	(1)			Not Detected					0.2	1
21) Carbon Disulfide	(1)			Not Detected					0.5	1
22) Isopropanol	(1)			Not Detected					0.5	2
23) Acetonitrile	(1)			Not Detected					0.5	2
24) 3-Chloropropene	(1)			Not Detected					0.2	1
25) Methylene Chloride	(1)			Not Detected					0.2	1
26) tert-Butyl Alcohol	(1)			Not Detected					0.5	1
27) Acrylonitrile	(1)			Not Detected					0.5	2
28) trans-1,2-Dichloroethene	(1)			Not Detected					0.2	1
29) Methyl t-Butyl Ether	(1)			Not Detected					0.2	1
30) Hexane	(1)			Not Detected					0.2	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.2	1
32) Vinyl Acetate	(1)			Not Detected					1	1
33) Di-Isopropyl Ether	(1)			Not Detected					0.2	1
34) Ethyl Tert-Butyl Ether	(1)			Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.2	1
36) 1,2-Dichloroethene (total)	(1)			Not Detected					0.2	1
37) 2-Butanone	(1)			Not Detected					0.5	2
38) Ethyl Acetate	(1)			Not Detected					0.5	1
39) Methyl Acrylate	(1)			Not Detected					0.2	1
41) Tetrahydrofuran	(1)			Not Detected					0.5	1
42) Chloroform	(1)			Not Detected					0.2	1
43) 1,1,1-Trichloroethane	(1)			Not Detected					0.2	1
44) Cyclohexane	(1)			Not Detected					0.2	1

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun05.b/ef00074.d Injection date and time: **05-JUN-2018 16:05**
Data file Sample Info. Line: VBLKE02;200;E1815630AA;VBLKE02;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1815630AA**
Date, time and analyst ID of latest file update: 05-Jun-2018 16:33 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun05.b/ef00074.d**

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 05-JUN-2018 14:56
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun05.b/ef00072.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
45) Carbon Tetrachloride	(1)				Not Detected					0.2	1
46) Benzene	(2)				Not Detected					0.2	1
47) 1,2-Dichloroethane	(2)				Not Detected					0.2	1
48) Isooctane	(2)				Not Detected					0.2	1
49) Tert-Amyl Methyl Ether	(2)				Not Detected					0.2	1
50) Heptane	(2)				Not Detected					0.5	1
52) Trichloroethene	(2)				Not Detected					0.2	1
53) Ethyl Acrylate	(2)				Not Detected					0.2	1
54) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
55) Dibromomethane	(2)				Not Detected					0.2	1
56) 1,4-Dioxane	(2)				Not Detected					0.5	1
57) Methyl Methacrylate	(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)				Not Detected					0.2	1
62) Octane	(3)				Not Detected					0.2	1
63) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
64) 1,3-Dichloropropene (total)	(3)				Not Detected					0.2	1
65) Ethyl Methacrylate	(3)				Not Detected					0.2	1
66) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
67) Tetrachloroethene	(3)				Not Detected					0.2	1
68) 2-Hexanone	(3)				Not Detected					0.5	2
69) Dibromochloromethane	(3)				Not Detected					0.2	1
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)				Not Detected					0.2	1
75) m/p-Xylene	(3)				Not Detected					0.2	1
76) o-Xylene	(3)				Not Detected					0.2	1
77) Xylene (total)	(3)				Not Detected					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
84) n-Propylbenzene	(3)				Not Detected					0.5	1
85) 2-Chlorotoluene	(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
88) Alpha Methyl Styrene	(3)				Not Detected					0.2	1
89) tert-Butylbenzene	(3)				Not Detected					0.5	1
90) 1,2,4-Trimethylbenzene	(3)				Not Detected					0.2	1
91) sec-Butylbenzene	(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
94) p-Isopropyltoluene	(3)				Not Detected					0.2	1
95) Benzyl Chloride	(3)				Not Detected					0.5	1
96) 1,2-Dichlorobenzene	(3)				Not Detected					0.2	1
97) n-Butylbenzene	(3)				Not Detected					0.2	1
98) Hexachloroethane	(3)				Not Detected					0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)				Not Detected					0.2	1
100) 1,2,4-Trichlorobenzene	(3)				Not Detected					0.5	2

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun05.b/ef00074.d Injection date and time: **05-JUN-2018 16:05**
Data file Sample Info. Line: VBLKE02;200;E1815630AA;VBLKE02;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1815630AA**
Date, time and analyst ID of latest file update: 05-Jun-2018 16:33 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun05.b/ef00074.d**

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 05-JUN-2018 14:56
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun05.b/ef00072.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
101) Hexachlorobutadiene	(3)				Not Detected					0.4	2
102) Naphthalene	(3)				Not Detected					0.4	1

Total number of targets = 99

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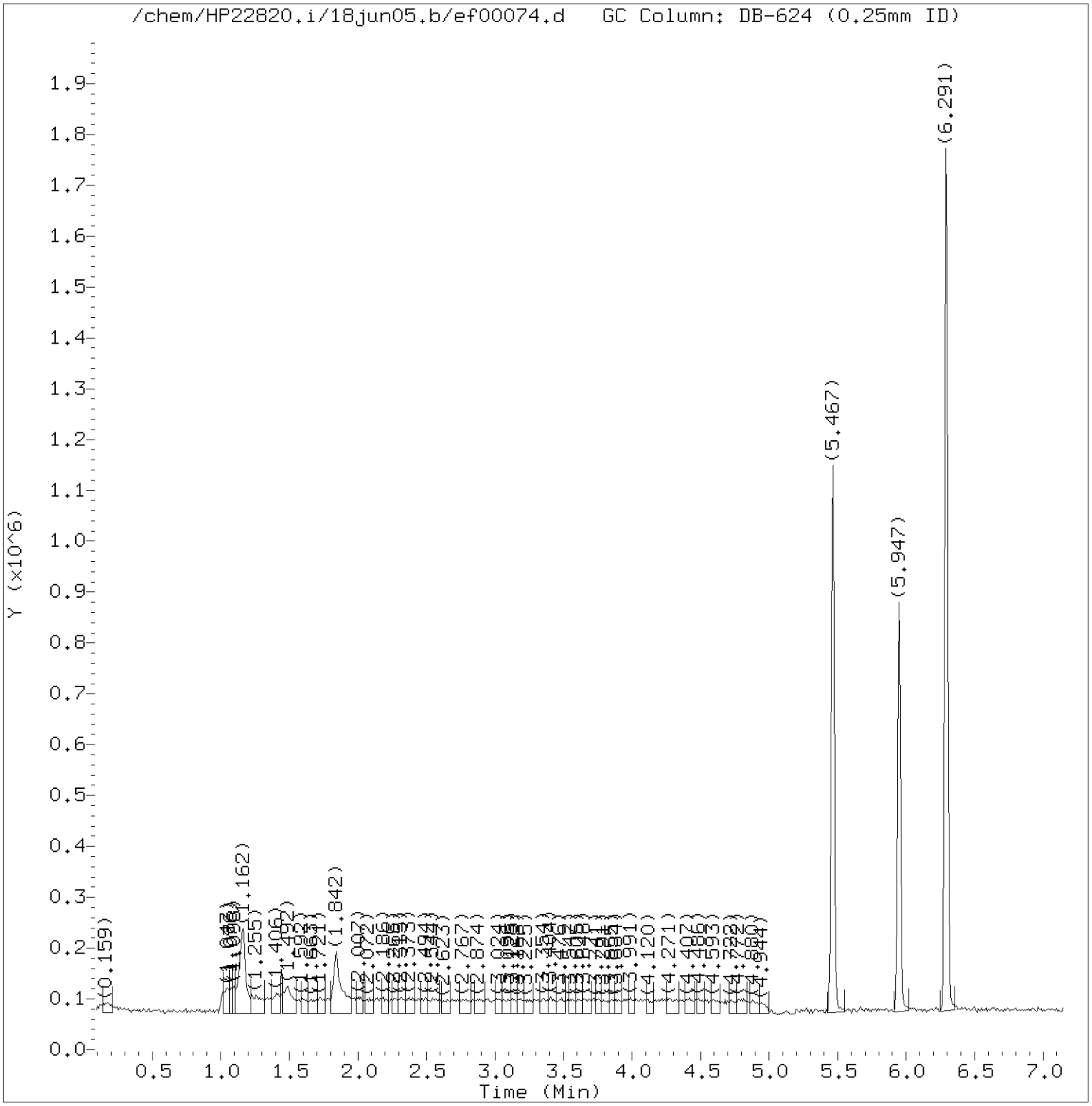
Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00074.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 16:05 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 16:33 jeb07445

Sample Name: VBLKE02 Lab Sample ID: VBLKE02

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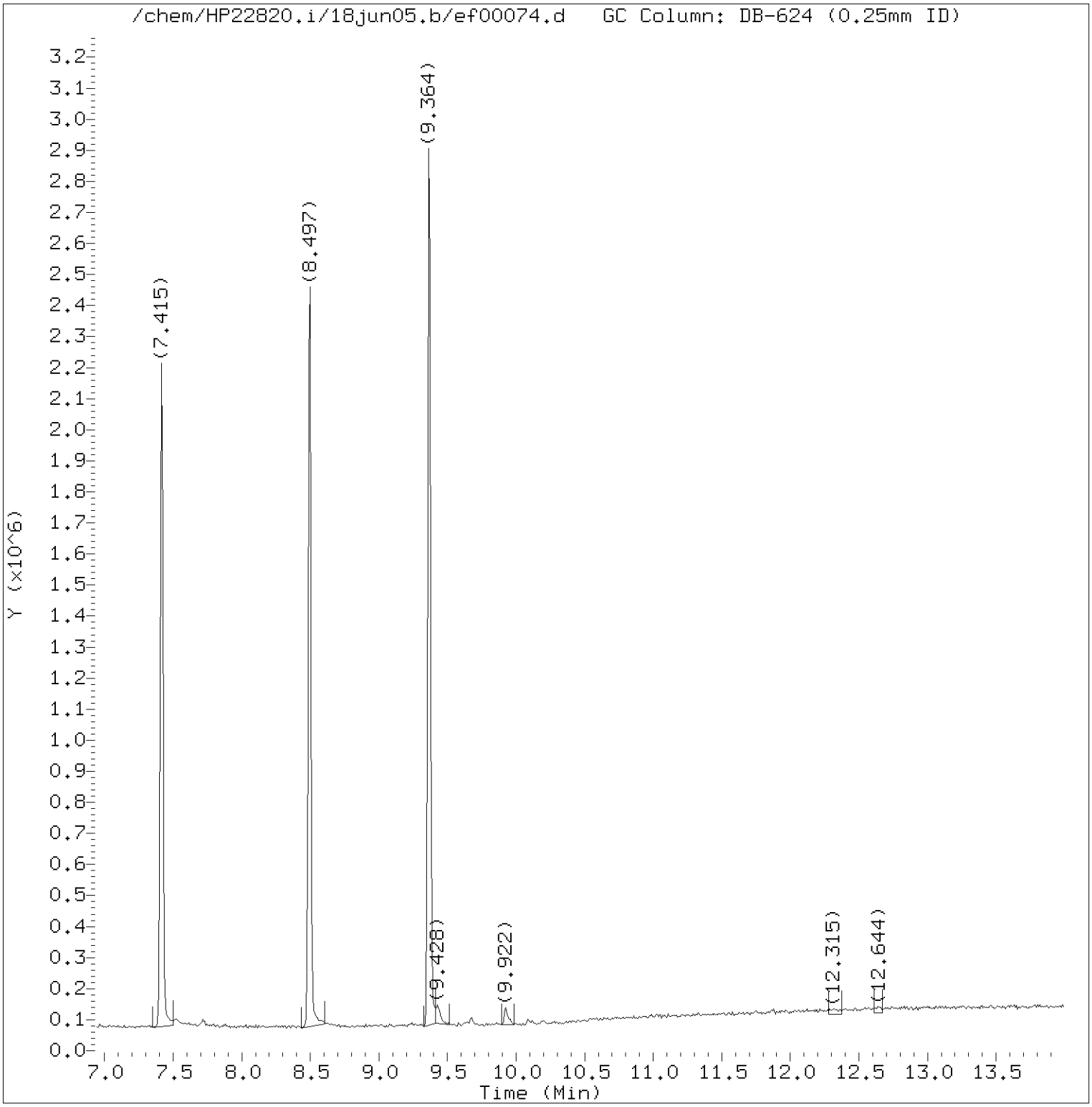
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00074.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 16:05 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 16:33 jeb07445

Sample Name: VBLKE02 Lab Sample ID: VBLKE02

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on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00074.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 16:05 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 16:33 jeb07445

Sample Name: VBLKE02 Lab Sample ID: VBLKE02

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	306216	10.000
51)*1,4-Difluorobenzene	(2)	6.291	114	1134666	10.000
71)*Chlorobenzene-d5	(3)	8.497	117	1097278	10.000

* = Compound is an internal standard.

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on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun05.b/ef00075.d Injection date and time: **05-JUN-2018 16:39**
Data file Sample Info. Line: LCSE02;200;E1815630AA;LCSE02;0;3;LCS; Instrument ID: **HP22820.i** Batch: **E1815630AA**
Date, time and analyst ID of latest file update: 05-Jun-2018 17:21 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun05.b/ef00074.d**

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 05-JUN-2018 14:56
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun05.b/ef00072.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	5.467(0.000)	751	130	299832 (-6)	10.00		190832 - 445272
51) 1,4-Difluorobenzene	6.291(0.000)	866	114	1092749 (-6)	10.00		700823 - 1635253
71) Chlorobenzene-d5	8.497(0.000)	1174	117	1043540 (-5)	10.00		662513 - 1545863

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)	1.606(-0.000)	41	246172	13.242	13.24			0.5	1
2) Dichlorodifluoromethane	(1)	1.642(-0.000)	85	870543	12.081	12.08			0.2	1
3) Chlorodifluoromethane	(1)	1.663(-0.000)	51	545232	14.279	14.28			0.2	1
4) Freon 114	(1)	1.771(-0.000)	85	882569	11.970	11.97			0.2	1
5) Chloromethane	(1)	1.850(0.001)	50	311528	14.293	14.29			0.2	1
6) Vinyl Chloride	(1)	1.964(-0.000)	62	338387	12.649	12.65			0.2	1
7) 1,3-Butadiene	(1)	2.000(-0.000)	54	231600	11.932	11.93			0.4	2
8) Bromomethane	(1)	2.344(0.001)	94	323191	11.747	11.75			0.5	1
9) Chloroethane	(1)	2.466(-0.000)	64	183781	12.155	12.15			0.2	1
10) Bromoethene	(1)	2.688(0.001)	106	314784	10.770	10.77			0.4	2
11) Dichlorofluoromethane	(1)	2.724(0.001)	67	762135	13.069	13.07			0.2	1
12) Trichlorofluoromethane	(1)	2.767(-0.000)	101	899014	11.771	11.77			0.2	1
13) Pentane	(1)	2.867(0.001)	43	618837	15.089	15.09			0.5	1
14) Ethanol	(1)	3.067(-0.000)	45	96112	10.896	10.90			0.5	2
15) Freon123a	(1)	3.196(-0.000)	67	707262	13.951	13.95			0.2	1
16) Acrolein	(1)	3.332(-0.000)	56	126002	12.063	12.06			1	2
17) 1,1-Dichloroethene	(1)	3.418(-0.000)	61	524508	12.370	12.37			0.2	1
18) Freon 113	(1)	3.440(-0.001)	103	476717	11.149	11.15			0.5	2
19) Acetone	(1)	3.526(-0.001)	43	470095	13.337	13.34			0.5	2
20) Methyl Iodide	(1)	3.598(0.001)	142	795039	9.696	9.70			0.2	1
21) Carbon Disulfide	(1)	3.655(-0.000)	76	934654	11.770	11.77			0.5	1
22) Isopropanol	(1)	3.705(-0.000)	45	386832	10.643	10.64			0.5	2
23) Acetonitrile	(1)	3.870(-0.000)	40	194704	11.378	11.38			0.5	2
24) 3-Chloropropene	(1)	3.862(-0.000)	76	159502	12.820	12.82			0.2	1
25) Methylene Chloride	(1)	4.013(-0.000)	84	311372	12.896	12.90			0.2	1
26) tert-Butyl Alcohol	(1)	4.156(-0.000)	59	479563	9.760	9.76			0.5	1
27) Acrylonitrile	(1)	4.292(-0.000)	53	283261	13.184	13.18			0.5	2
28) trans-1,2-Dichloroethene	(1)	4.285(-0.000)	61	471207	12.288	12.29			0.2	1
29) Methyl t-Butyl Ether	(1)	4.285(0.001)	73	921775	11.264	11.26			0.2	1
30) Hexane	(1)	4.557(0.001)	57	591058	14.035	14.04			0.2	1
31) 1,1-Dichloroethane	(1)	4.715(-0.000)	63	611530	12.239	12.24			0.2	1
32) Vinyl Acetate	(1)	4.779(-0.000)	86	70176	9.605	9.61			1	1
33) Di-Isopropyl Ether	(1)	4.779(-0.000)	45	1025067	12.317	12.32			0.2	1
34) Ethyl Tert-Butyl Ether	(1)	5.116(0.000)	59	787511	9.916	9.92			0.2	1
35) cis-1,2-Dichloroethene	(1)	5.252(0.000)	61	444209	11.999	12.00			0.2	1
36) 1,2-Dichloroethene (total)	(1)		61	915416	24.287	24.29			0.2	1
37) 2-Butanone	(1)	5.281(0.000)	72	168712	10.949	10.95			0.5	2
38) Ethyl Acetate	(1)	5.331(-0.001)	70	70552	9.279	9.28			0.5	1
39) Methyl Acrylate	(1)	5.360(0.000)	55	521485	11.163	11.16			0.2	1
41) Tetrahydrofuran	(1)	5.496(0.000)	42	352838	12.930	12.93			0.5	1
42) Chloroform	(1)	5.532(0.000)	83	738613	11.784	11.78			0.2	1
43) 1,1,1-Trichloroethane	(1)	5.675(0.000)	97	672280	10.589	10.59			0.2	1
44) Cyclohexane	(1)	5.711(0.000)	56	515958	11.815	11.82			0.2	1

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun05.b/ef00075.d Injection date and time: **05-JUN-2018 16:39**
Data file Sample Info. Line: LCSE02;200;E1815630AA;LCSE02;0;3;LCS; Instrument ID: **HP22820.i** Batch: **E1815630AA**
Date, time and analyst ID of latest file update: 05-Jun-2018 17:21 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun05.b/ef00074.d**

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 05-JUN-2018 14:56
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun05.b/ef00072.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
45) Carbon Tetrachloride	(1)	5.811(0.000)	117	662383	10.627	10.63			0.2	1
46) Benzene	(2)	5.983(0.000)	78	1300722	13.840	13.84			0.2	1
47) 1,2-Dichloroethane	(2)	6.011(0.000)	62	492097	12.882	12.88			0.2	1
48) Isooctane	(2)	6.033(0.000)	57	1577792	12.129	12.13			0.2	1
49) Tert-Amyl Methyl Ether	(2)	6.069(0.000)	73	766987	9.785	9.78			0.2	1
50) Heptane	(2)	6.176(0.000)	43	565261	12.715	12.72			0.5	1
52) Trichloroethene	(2)	6.491(0.000)	130	489497	10.484	10.48			0.2	1
53) Ethyl Acrylate	(2)	6.570(0.000)	55	628090	10.560	10.56			0.2	1
54) 1,2-Dichloropropane	(2)	6.670(0.000)	63	388830	11.819	11.82			0.2	1
55) Dibromomethane	(2)	6.771(0.000)	174	449512	9.949	9.95			0.2	1
56) 1,4-Dioxane	(2)	6.771(0.001)	88	256958	10.756	10.76			0.5	1
57) Methyl Methacrylate	(2)	6.749(0.000)	69	331020	10.062	10.06			0.2	1
58) Bromodichloromethane	(2)	6.885(0.000)	83	746418	11.590	11.59			0.2	1
59) cis-1,3-Dichloropropene	(2)	7.215(0.000)	75	587184	10.341	10.34			0.2	1
60) 4-Methyl-2-Pentanone	(2)	7.329(0.000)	43	757405	12.248	12.25			0.5	2
61) Toluene	(3)	7.466(-0.000)	91	1526093	12.676	12.68			0.2	1
62) Octane	(3)	7.516(-0.000)	43	887611	14.175	14.18			0.2	1
63) trans-1,3-Dichloropropene	(3)	7.630(-0.000)	75	454795	9.581	9.58			0.2	1
64) 1,3-Dichloropropene (total)	(3)		75	1041979	19.923	19.92			0.2	1
65) Ethyl Methacrylate	(3)	7.673(-0.000)	69	516275	9.584	9.58			0.2	1
66) 1,1,2-Trichloroethane	(3)	7.774(-0.000)	97	461022	10.838	10.84			0.2	1
67) Tetrachloroethene	(3)	7.867(-0.000)	166	648802	9.631	9.63			0.2	1
68) 2-Hexanone	(3)	7.945(0.000)	43	692896	11.504	11.50			0.5	2
69) Dibromochloromethane	(3)	8.067(-0.000)	127	562090	10.477	10.48			0.2	1
70) 1,2-Dibromoethane	(3)	8.160(-0.000)	107	694838	10.497	10.50			0.2	1
72) Chlorobenzene	(3)	8.518(0.000)	112	1030198	9.998	10.00			0.2	1
73) 1,1,1,2-Tetrachloroethane	(3)	8.576(-0.000)	131	510698	10.182	10.18			0.2	1
74) Ethylbenzene	(3)	8.583(0.000)	91	1936882	12.029	12.03			0.2	1
75) m/p-Xylene	(3)	8.669(0.000)	91	1744319	13.344	13.34			0.2	1
76) o-Xylene	(3)	8.970(0.000)	91	1561111	12.081	12.08			0.2	1
77) Xylene (total)	(3)		91	3305430	25.425	25.43			0.2	1
78) Styrene	(3)	8.977(0.000)	104	998532	10.199	10.20			0.2	1
79) Bromoform	(3)	9.142(0.000)	173	668494	9.684	9.68			0.2	1
80) Cumene	(3)	9.235(0.000)	105	1759409	9.549	9.55			0.2	1
81) Bromobenzene	(3)	9.486(0.000)	156	602359	9.200	9.20			0.2	1
82) 1,1,2,2-Tetrachloroethane	(3)	9.464(0.000)	83	1020496	11.261	11.26			0.2	1
83) 1,2,3-Trichloropropane	(3)	9.507(0.000)	110	304890	10.532	10.53			0.2	1
84) n-Propylbenzene	(3)	9.543(0.000)	120	492172	9.294	9.29			0.5	1
85) 2-Chlorotoluene	(3)	9.622(0.000)	126	475328	9.751	9.75			0.2	1
86) 4-Ethyltoluene	(3)	9.622(0.000)	105	1762709M	9.891	9.89			0.2	1
87) 1,3,5-Trimethylbenzene	(3)	9.665(0.000)	105	1490904M	10.052	10.05			0.2	1
88) Alpha Methyl Styrene	(3)	9.844(0.000)	118	698590	8.980	8.98			0.2	1
89) tert-Butylbenzene	(3)	9.922(0.000)	119	1325169M	8.565	8.57			0.5	1
90) 1,2,4-Trimethylbenzene	(3)	9.958(0.000)	105	1418401	9.687	9.69			0.2	1
91) sec-Butylbenzene	(3)	10.080(0.000)	105	2082057	9.397	9.40			0.2	1
92) 1,3-Dichlorobenzene	(3)	10.188(0.000)	146	1021405	9.387	9.39			0.2	1
93) 1,4-Dichlorobenzene	(3)	10.252(0.000)	146	1025990	9.251	9.25			0.2	1
94) p-Isopropyltoluene	(3)	10.188(0.000)	119	1704308	8.989	8.99			0.2	1
95) Benzyl Chloride	(3)	10.359(0.000)	91	681001	6.788	6.79			0.5	1
96) 1,2-Dichlorobenzene	(3)	10.538(0.000)	146	935312	9.031	9.03			0.2	1
97) n-Butylbenzene	(3)	10.496(0.000)	91	1584984	9.302	9.30			0.2	1
98) Hexachloroethane	(3)	10.732(0.000)	117	386042	9.590	9.59			0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)	11.133(0.000)	157	421282	7.869	7.87			0.2	1
100) 1,2,4-Trichlorobenzene	(3)	11.756(0.000)	180	585819	6.600	6.60			0.5	2

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:21. Target 3.5 esignature user ID: jeb07445

Data file: /chem/HP22820.i/18jun05.b/ef00075.d Injection date and time: **05-JUN-2018 16:39**
Data file Sample Info. Line: LCSE02;200;E1815630AA;LCSE02;0;3;LCS; Instrument ID: **HP22820.i** Batch: **E1815630AA**
Date, time and analyst ID of latest file update: 05-Jun-2018 17:21 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun05.b/ef00074.d**

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 05-JUN-2018 14:56
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun05.b/ef00072.d**

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

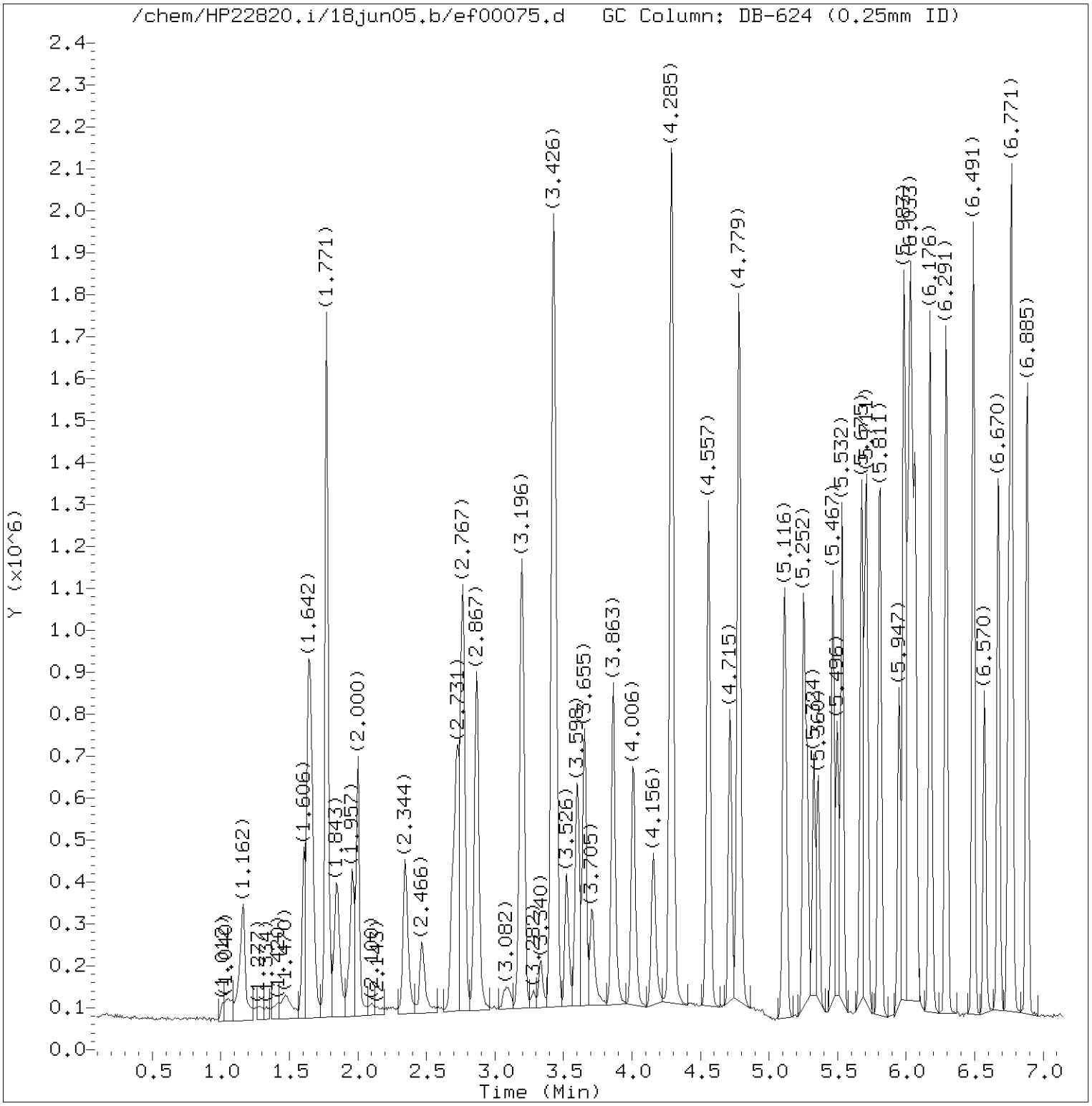
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
101) Hexachlorobutadiene	(3)	11.871(0.000)	225	499609	6.582	6.58			0.4	2
102) Naphthalene	(3)	11.957(0.000)	128	1259143	6.416	6.42			0.4	1

Total number of targets = 99

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:21. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

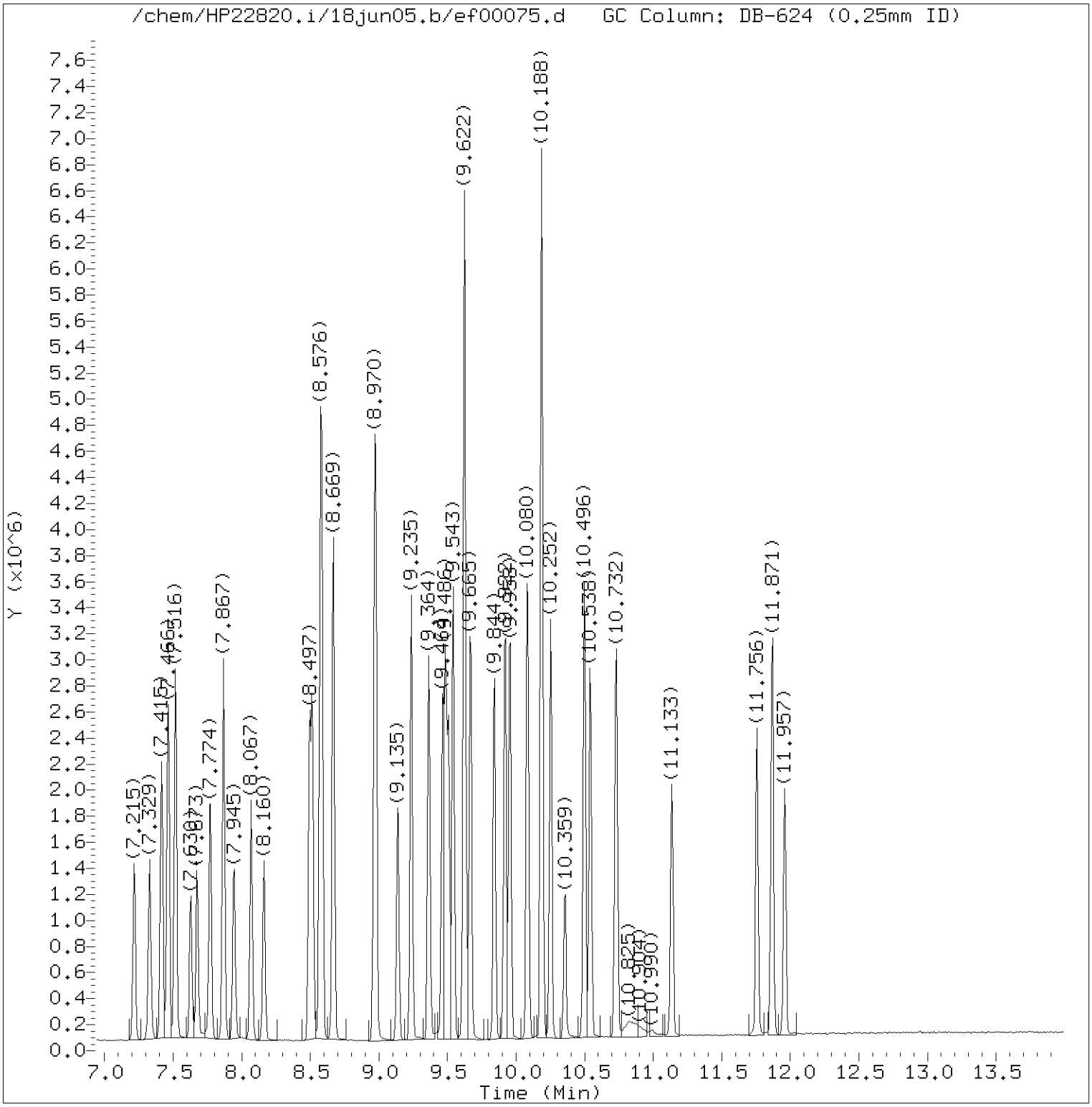
Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00075.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 16:39 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:21 jeb07445

Sample Name: LCSE02 Lab Sample ID: LCSE02

Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00075.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 16:39 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:21 jeb07445

Sample Name: LCSE02 Lab Sample ID: LCSE02

Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00075.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 16:39 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:21 jeb07445

Sample Name: LCSE02 Lab Sample ID: LCSE02

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.606	41	246172	13.242
2) Dichlorodifluoromethane	(1)	1.642	85	870543	12.081
3) Chlorodifluoromethane	(1)	1.663	51	545232	14.279
4) Freon 114	(1)	1.771	85	882569	11.970
5) Chloromethane	(1)	1.850	50	311528	14.293
6) Vinyl Chloride	(1)	1.964	62	338387	12.649
7) 1,3-Butadiene	(1)	2.000	54	231600	11.932
8) Bromomethane	(1)	2.344	94	323191	11.747
9) Chloroethane	(1)	2.466	64	183781	12.155
10) Bromoethene	(1)	2.688	106	314784	10.770
11) Dichlorofluoromethane	(1)	2.724	67	762135	13.069
12) Trichlorofluoromethane	(1)	2.767	101	899014	11.771
13) Pentane	(1)	2.867	43	618837	15.089
14) Ethanol	(1)	3.067	45	96112	10.896
15) Freon123a	(1)	3.196	67	707262	13.951
16) Acrolein	(1)	3.332	56	126002	12.063
17) 1,1-Dichloroethene	(1)	3.418	61	524508	12.370
18) Freon 113	(1)	3.440	103	476717	11.149
19) Acetone	(1)	3.526	43	470095	13.337
20) Methyl Iodide	(1)	3.598	142	795039	9.696
21) Carbon Disulfide	(1)	3.655	76	934654	11.770
22) Isopropanol	(1)	3.705	45	386832	10.643
24) 3-Chloropropene	(1)	3.863	76	159502	12.820
23) Acetonitrile	(1)	3.870	40	194704	11.378
25) Methylene Chloride	(1)	4.013	84	311372	12.896
26) tert-Butyl Alcohol	(1)	4.156	59	479563	9.760
28) trans-1,2-Dichloroethene	(1)	4.285	61	471207	12.288
29) Methyl t-Butyl Ether	(1)	4.285	73	921775	11.264
27) Acrylonitrile	(1)	4.292	53	283261	13.184
30) Hexane	(1)	4.557	57	591058	14.035
31) 1,1-Dichloroethane	(1)	4.715	63	611530	12.239
32) Vinyl Acetate	(1)	4.779	86	70176	9.605
33) Di-Isopropyl Ether	(1)	4.779	45	1025067	12.317
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	787511	9.916
35) cis-1,2-Dichloroethene	(1)	5.252	61	444209	11.999
37) 2-Butanone	(1)	5.281	72	168712	10.949
38) Ethyl Acetate	(1)	5.331	70	70552	9.279
39) Methyl Acrylate	(1)	5.360	55	521485	11.163

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on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00075.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 16:39 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:21 jeb07445

Sample Name: LCSE02 Lab Sample ID: LCSE02

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	299832	10.000
41) Tetrahydrofuran	(1)	5.496	42	352838	12.930
42) Chloroform	(1)	5.532	83	738613	11.784
43) 1,1,1-Trichloroethane	(1)	5.675	97	672280	10.589
44) Cyclohexane	(1)	5.711	56	515958	11.815
45) Carbon Tetrachloride	(1)	5.811	117	662383	10.627
46) Benzene	(2)	5.983	78	1300722	13.840
47) 1,2-Dichloroethane	(2)	6.011	62	492097	12.882
48) Isooctane	(2)	6.033	57	1577792	12.129
49) Tert-Amyl Methyl Ether	(2)	6.069	73	766987	9.785
50) Heptane	(2)	6.176	43	565261	12.715
51)*1,4-Difluorobenzene	(2)	6.291	114	1092749	10.000
52) Trichloroethene	(2)	6.491	130	489497	10.484
53) Ethyl Acrylate	(2)	6.570	55	628090	10.560
36) 1,2-Dichloroethene (total)	(1)		61	915416	24.287
54) 1,2-Dichloropropane	(2)	6.670	63	388830	11.819
57) Methyl Methacrylate	(2)	6.749	69	331020	10.062
56) 1,4-Dioxane	(2)	6.771	88	256958	10.756
55) Dibromomethane	(2)	6.771	174	449512	9.949
58) Bromodichloromethane	(2)	6.885	83	746418	11.590
59) cis-1,3-Dichloropropene	(2)	7.215	75	587184	10.341
60) 4-Methyl-2-Pentanone	(2)	7.329	43	757405	12.248
61) Toluene	(3)	7.466	91	1526093	12.676
62) Octane	(3)	7.516	43	887611	14.175
63) trans-1,3-Dichloropropene	(3)	7.630	75	454795	9.581
65) Ethyl Methacrylate	(3)	7.673	69	516275	9.584
66) 1,1,2-Trichloroethane	(3)	7.774	97	461022	10.838
67) Tetrachloroethene	(3)	7.867	166	648802	9.631
68) 2-Hexanone	(3)	7.945	43	692896	11.504
69) Dibromochloromethane	(3)	8.067	127	562090	10.477
70) 1,2-Dibromoethane	(3)	8.160	107	694838	10.497
71)*Chlorobenzene-d5	(3)	8.497	117	1043540	10.000
72) Chlorobenzene	(3)	8.519	112	1030198	9.998
73) 1,1,1,2-Tetrachloroethane	(3)	8.576	131	510698	10.182
74) Ethylbenzene	(3)	8.583	91	1936882	12.029
75) m/p-Xylene	(3)	8.669	91	1744319	13.344
76) o-Xylene	(3)	8.970	91	1561111	12.081
78) Styrene	(3)	8.977	104	998532	10.199

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00075.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 16:39 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:21 jeb07445

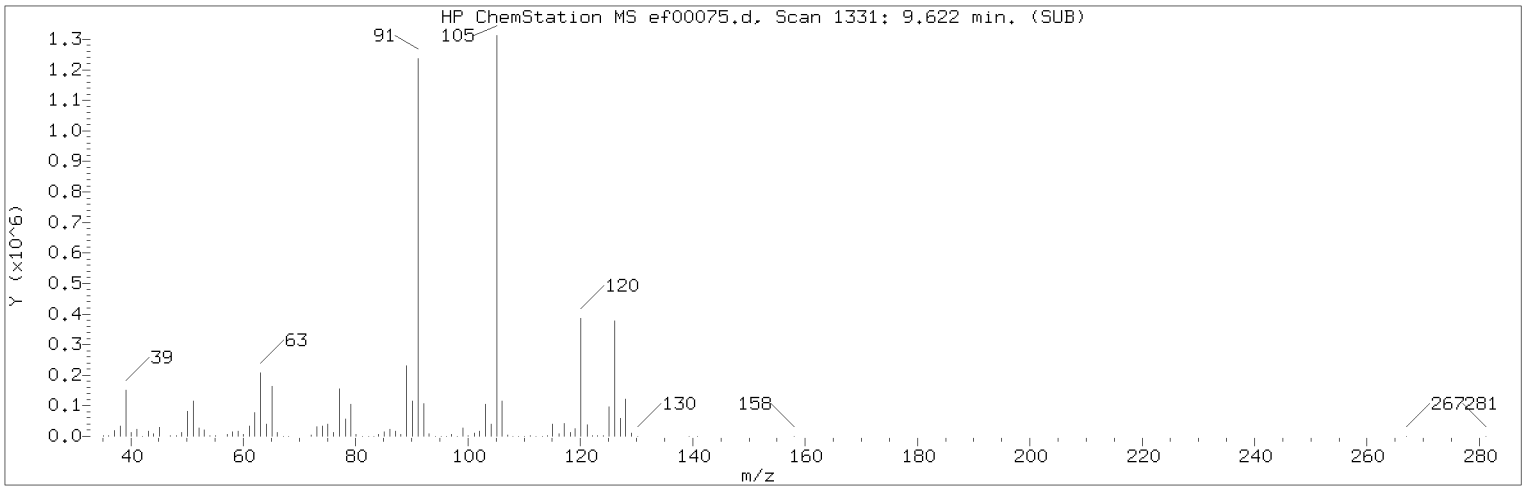
Sample Name: LCSE02 Lab Sample ID: LCSE02

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	668494	9.684
80) Cumene	(3)	9.235	105	1759409	9.549
82) 1,1,2,2-Tetrachloroethane	(3)	9.464	83	1020496	11.261
81) Bromobenzene	(3)	9.486	156	602359	9.200
83) 1,2,3-Trichloropropane	(3)	9.507	110	304890	10.532
84) n-Propylbenzene	(3)	9.543	120	492172	9.294
86) 4-Ethyltoluene	(3)	9.622	105	1762709M	9.891
85) 2-Chlorotoluene	(3)	9.622	126	475328	9.751
87) 1,3,5-Trimethylbenzene	(3)	9.665	105	1490904M	10.052
88) Alpha Methyl Styrene	(3)	9.844	118	698590	8.980
89) tert-Butylbenzene	(3)	9.922	119	1325169M	8.565
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	1418401	9.687
91) sec-Butylbenzene	(3)	10.080	105	2082057	9.397
92) 1,3-Dichlorobenzene	(3)	10.188	146	1021405	9.387
94) p-Isopropyltoluene	(3)	10.188	119	1704308	8.989
93) 1,4-Dichlorobenzene	(3)	10.252	146	1025990	9.251
95) Benzyl Chloride	(3)	10.359	91	681001	6.788
97) n-Butylbenzene	(3)	10.496	91	1584984	9.302
96) 1,2-Dichlorobenzene	(3)	10.538	146	935312	9.031
98) Hexachloroethane	(3)	10.732	117	386042	9.590
99) 1,2-Dibromo-3-chloropropane	(3)	11.133	157	421282	7.869
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	585819	6.600
101) Hexachlorobutadiene	(3)	11.871	225	499609	6.582
102) Naphthalene	(3)	11.957	128	1259143	6.416
64) 1,3-Dichloropropene (total)	(3)		75	1041979	19.923
77) Xylene (total)	(3)		91	3305430	25.425

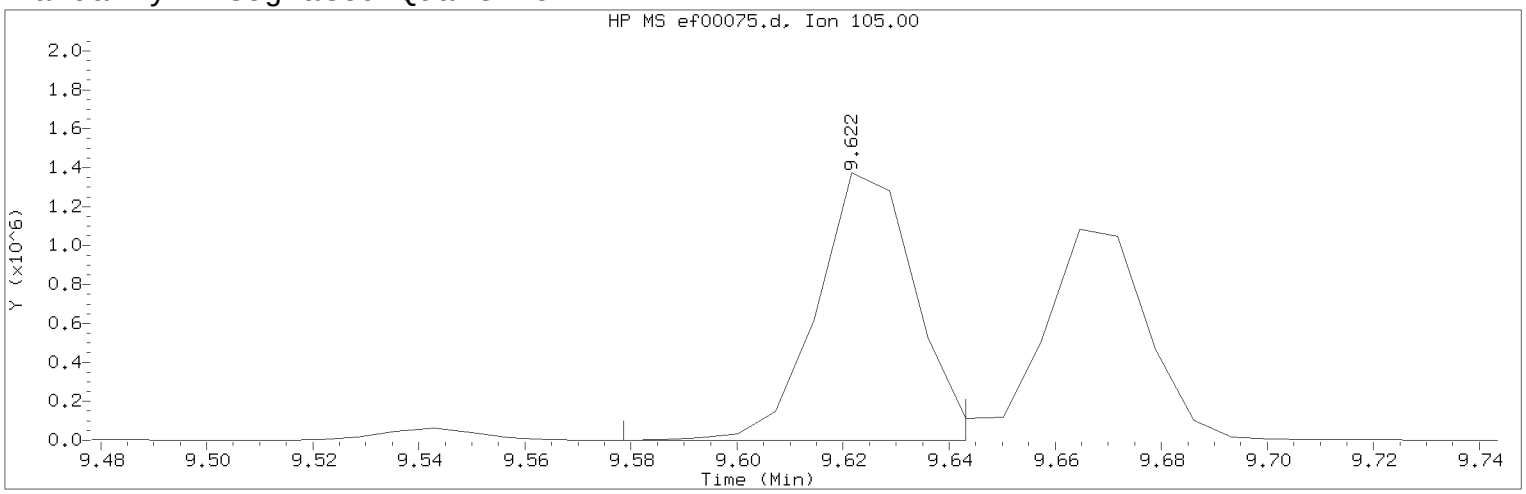
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00075.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 16:39 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:21 jeb07445

Sample Name: LCSE02 Lab Sample ID: LCSE02

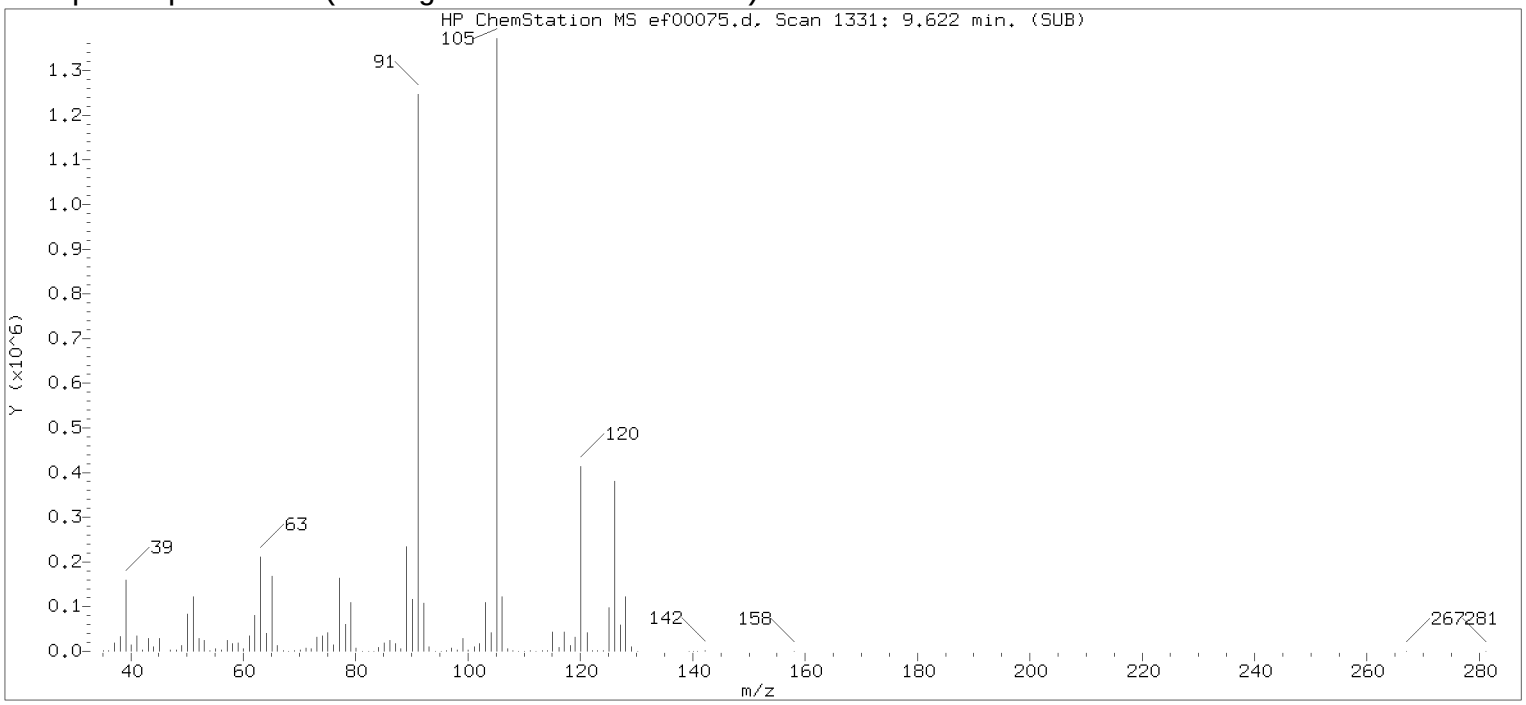
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1331
Retention Time (minutes): 9.622
Quant Ion : 105.00
Area (flag) : 1762709M
Concentration (ppb(v)) : 9.8913
Integration start scan : 1324 Integration stop scan: 1333
Y at integration start : 396 Y at integration end: 396

Reason for manual integration: improper integration

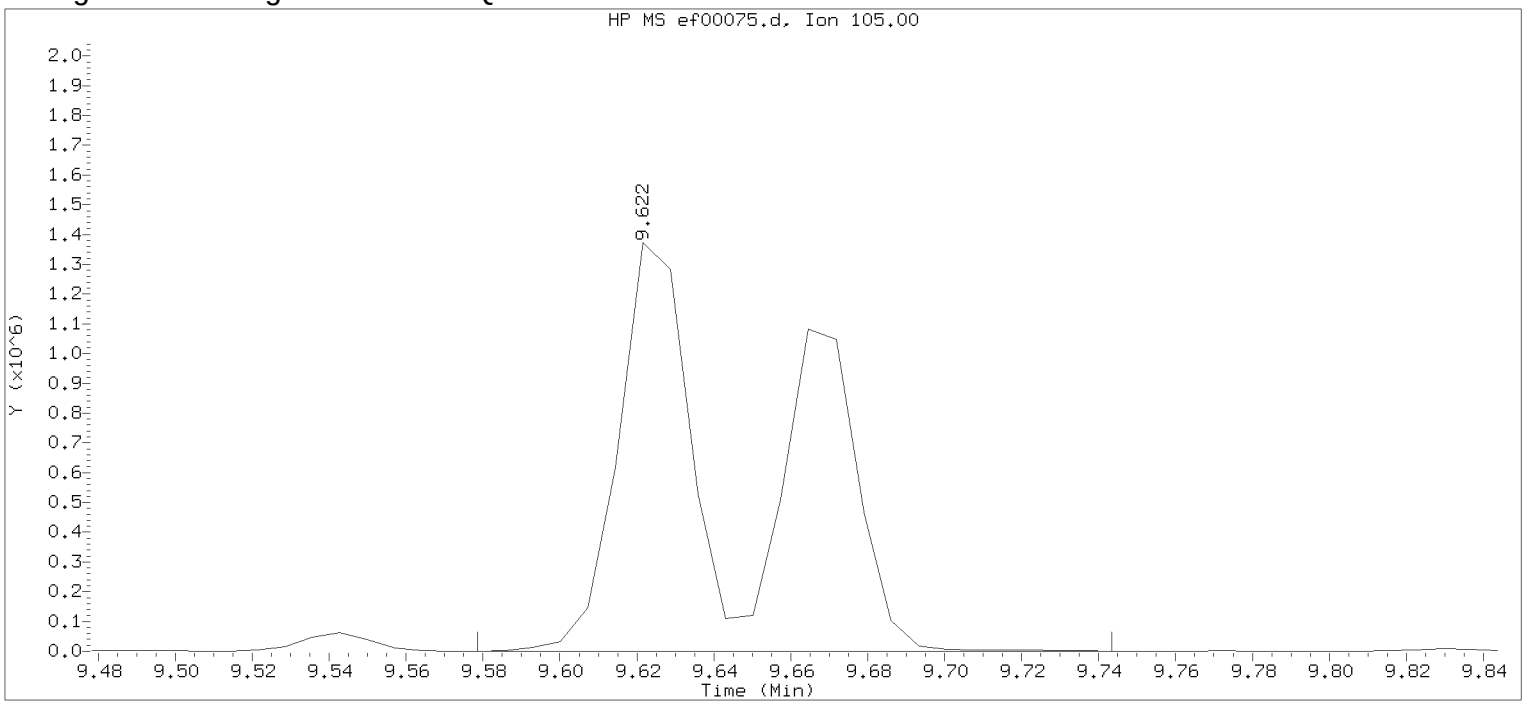
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00075.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 16:39 Analyst ID: jeb07445

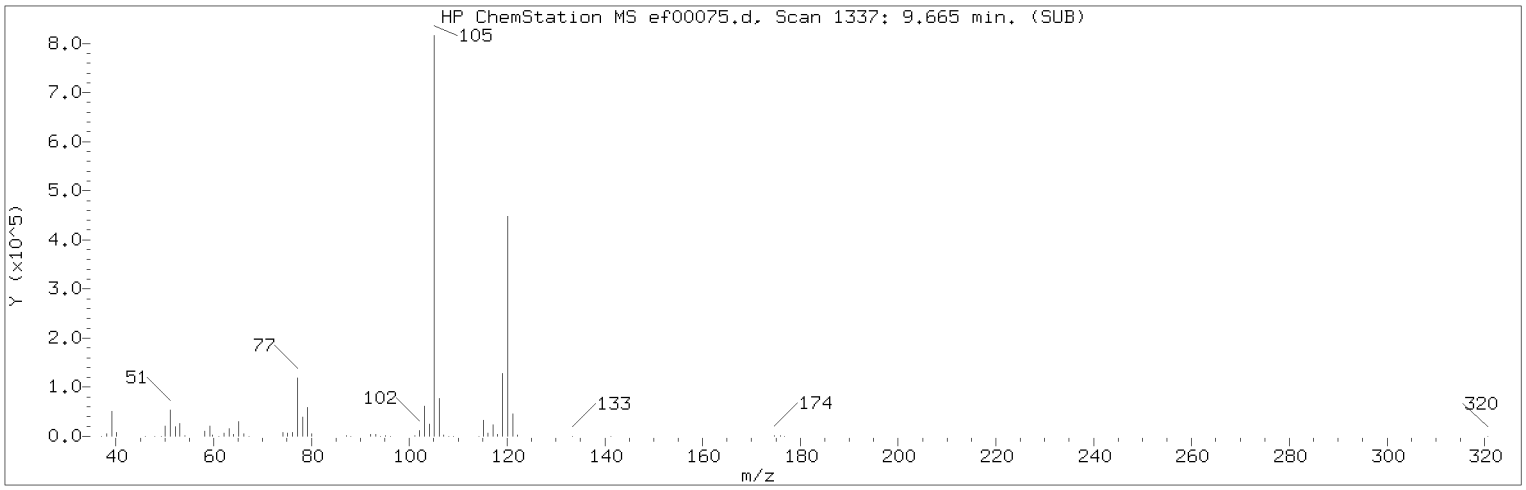
Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 16:57 Unknown

Sample Name: LCSE02 Lab Sample ID: LCSE02

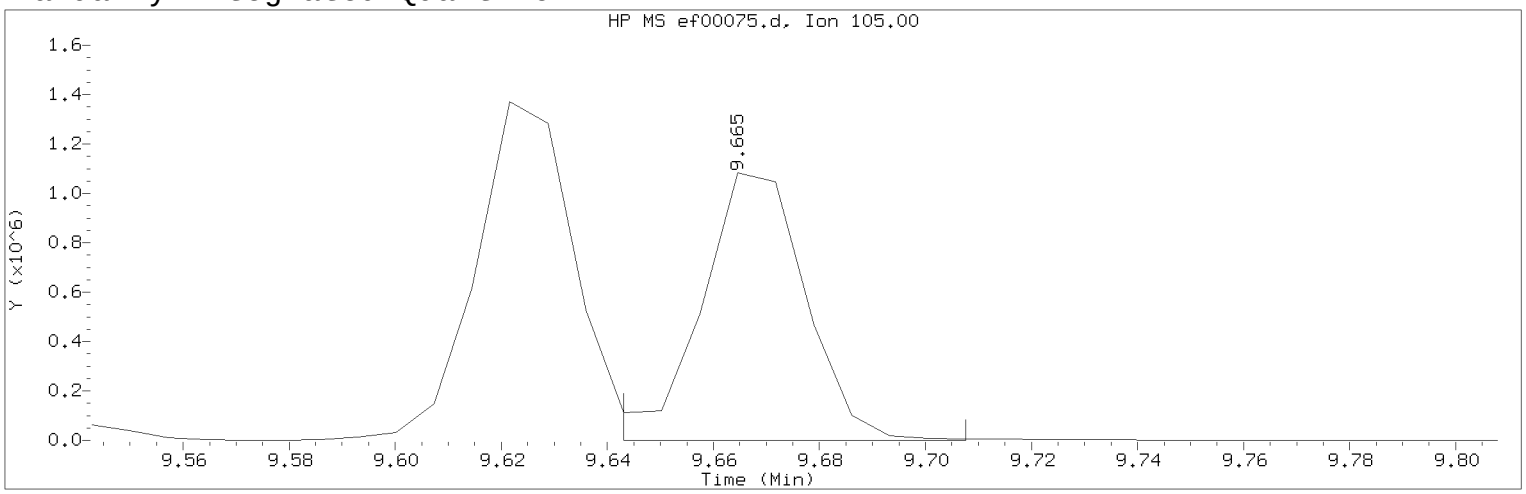
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1331
Retention Time (minutes): 9.622
Quant Ion : 105.00
Area : 3209088
Concentration (ppb(v)) : 18.0075
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 396 Y at integration end: 396

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00075.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 16:39 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:21 jeb07445

Sample Name: LCSE02 Lab Sample ID: LCSE02

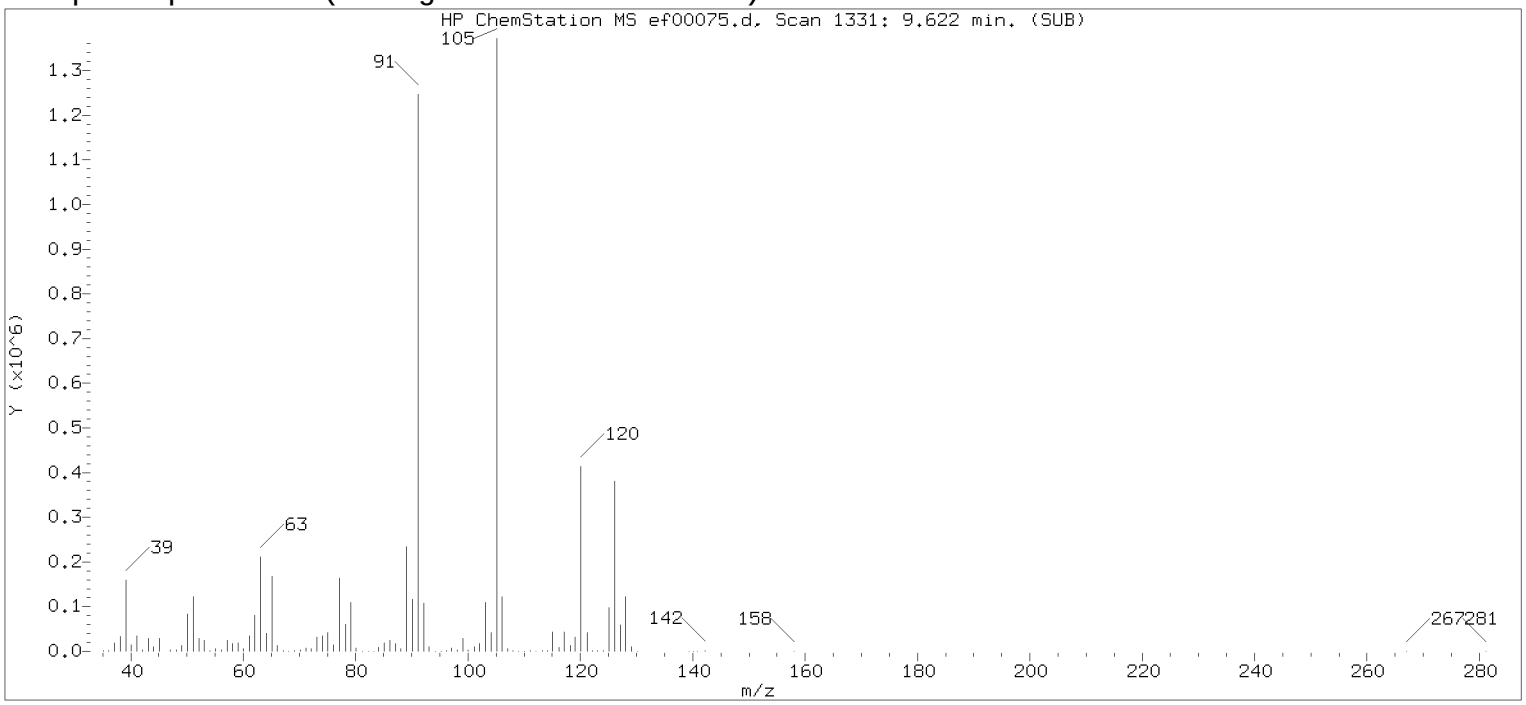
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1337
Retention Time (minutes): 9.665
Quant Ion : 105.00
Area (flag) : 1490904M
Concentration (ppb(v)) : 10.0522
Integration start scan : 1333 Integration stop scan: 1342
Y at integration start : 200 Y at integration end: 200

Reason for manual integration: improper integration

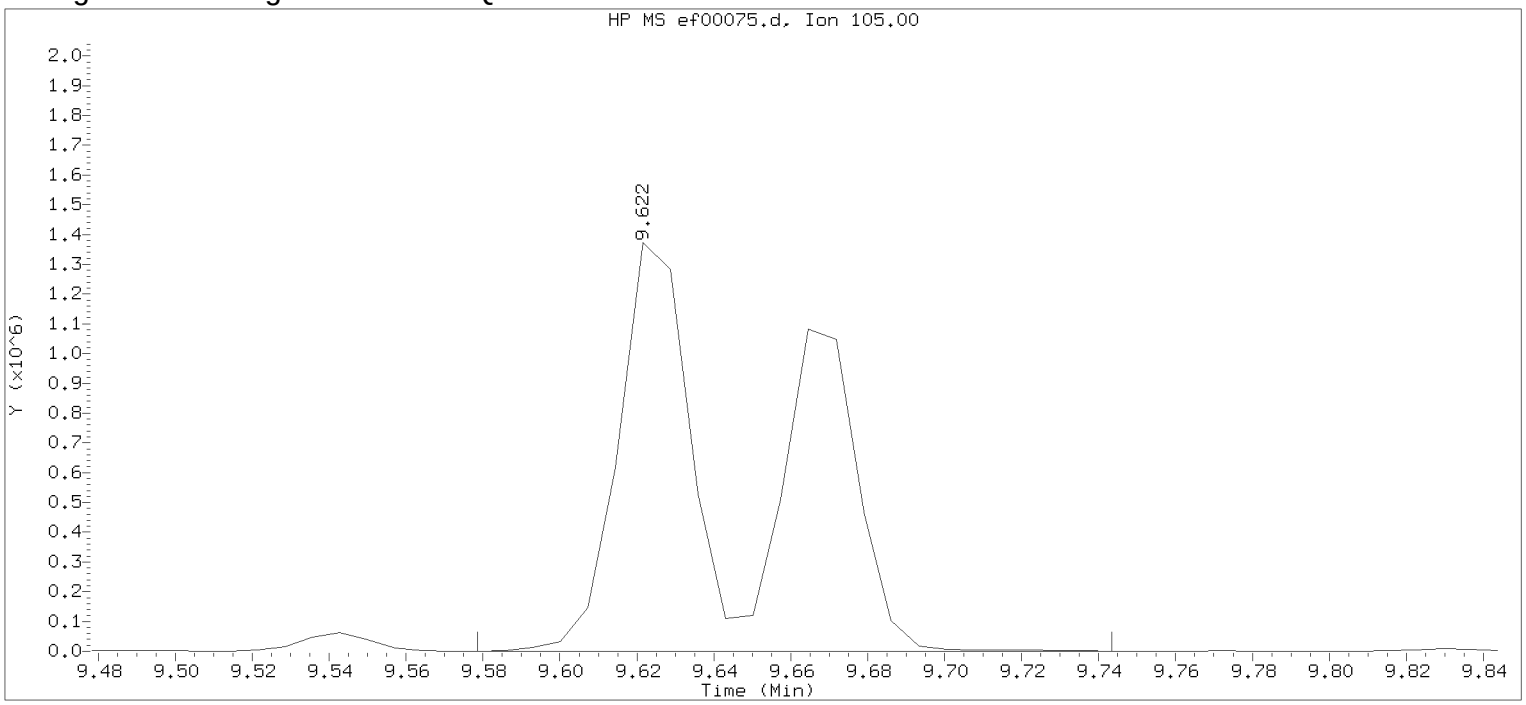
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00075.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 16:39 Analyst ID: jeb07445

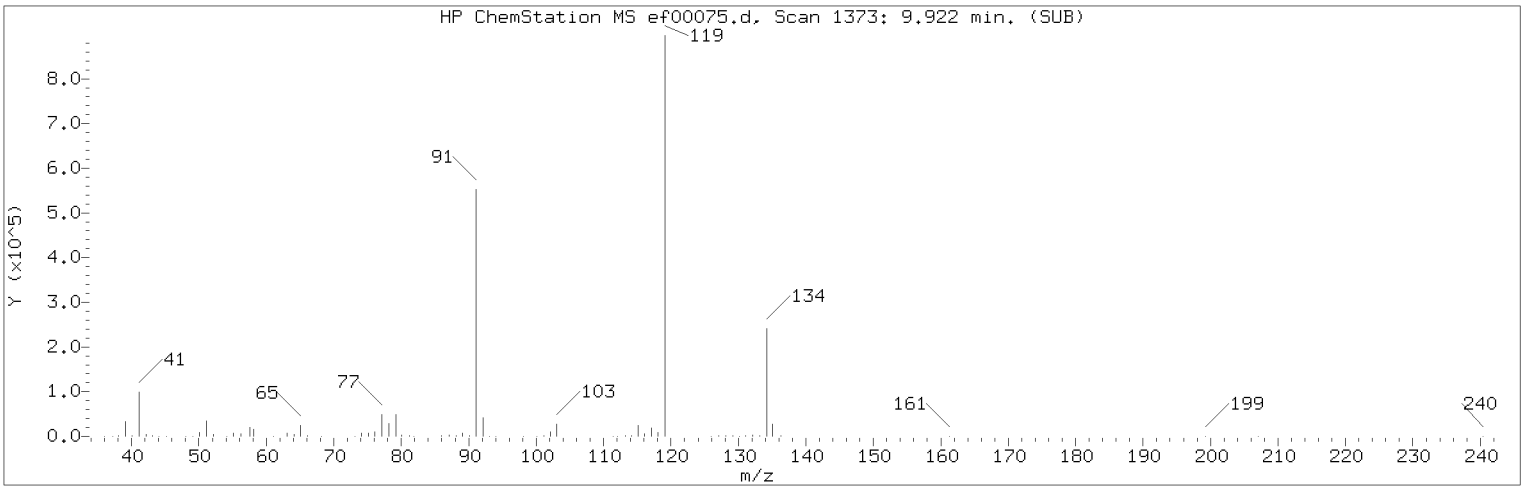
Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 16:57 Unknown

Sample Name: LCSE02 Lab Sample ID: LCSE02

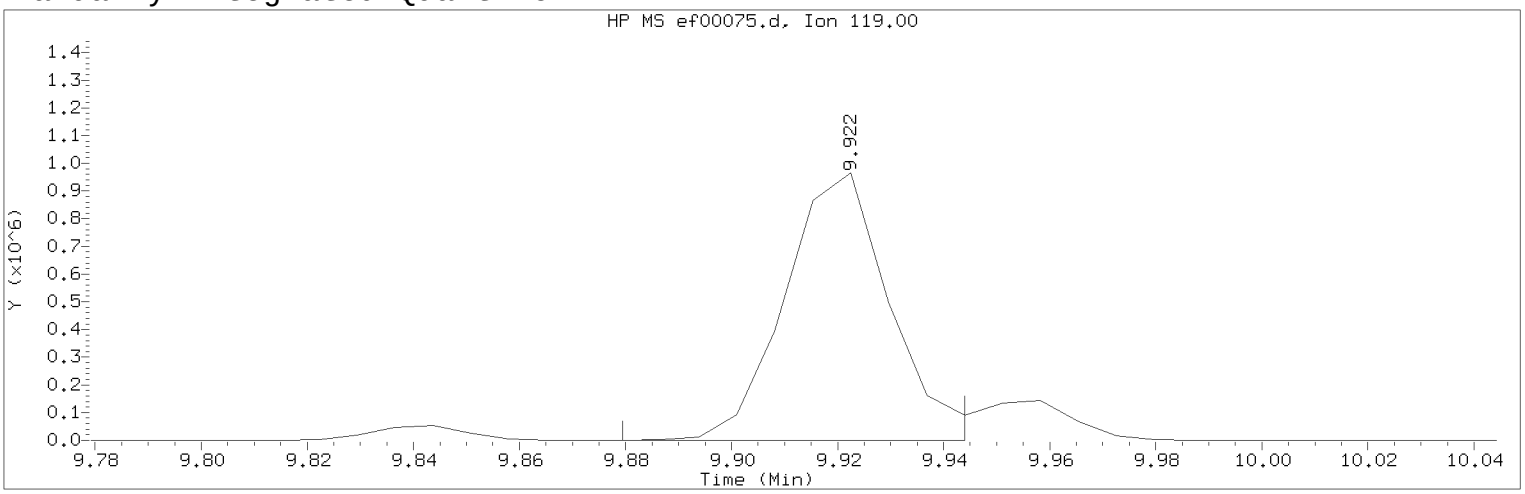
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1331
Retention Time (minutes): 9.622
Quant Ion : 105.00
Area : 3208722
Concentration (ppb(v)) : 21.6343
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 433 Y at integration end: 433

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00075.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 16:39 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:21 jeb07445

Sample Name: LCSE02 Lab Sample ID: LCSE02

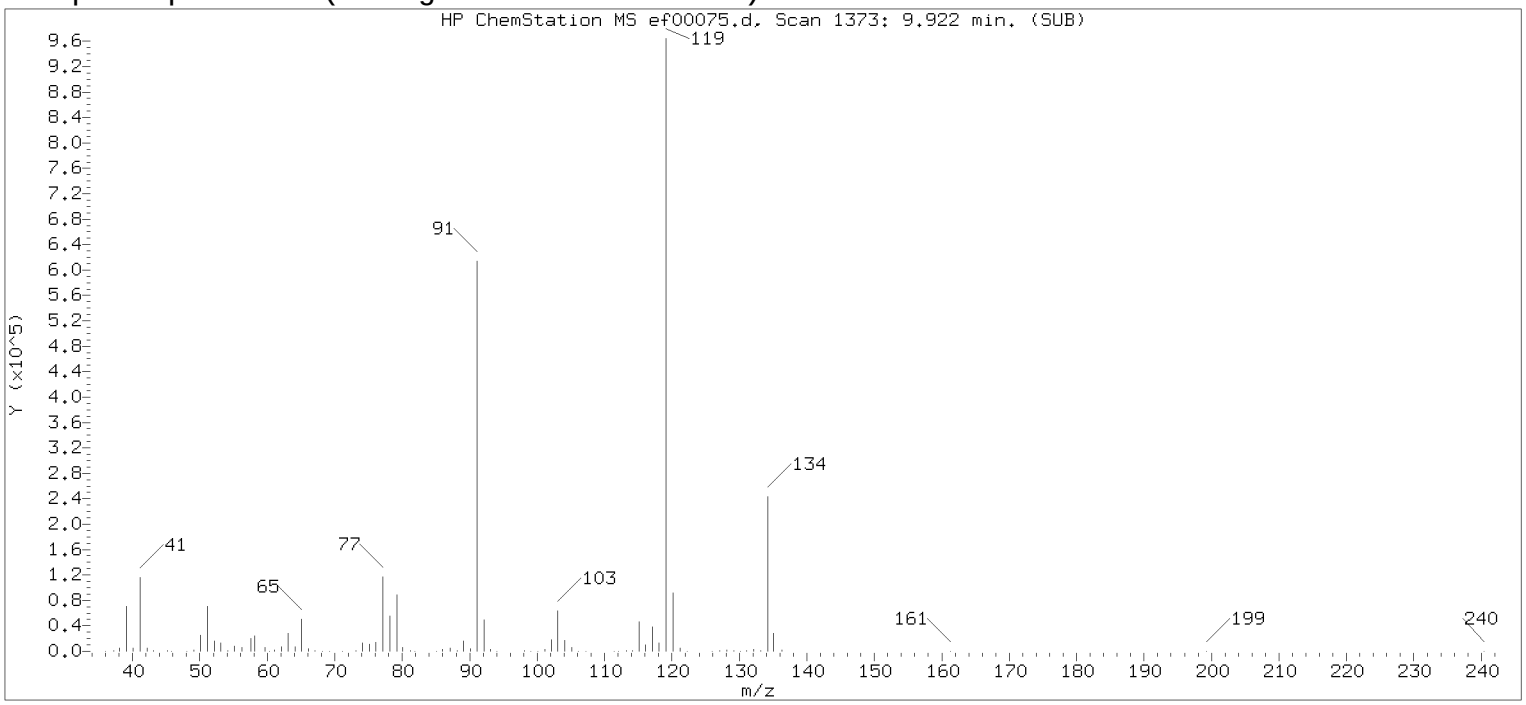
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 1325169M
Concentration (ppb(v)) : 8.5652
Integration start scan : 1366 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

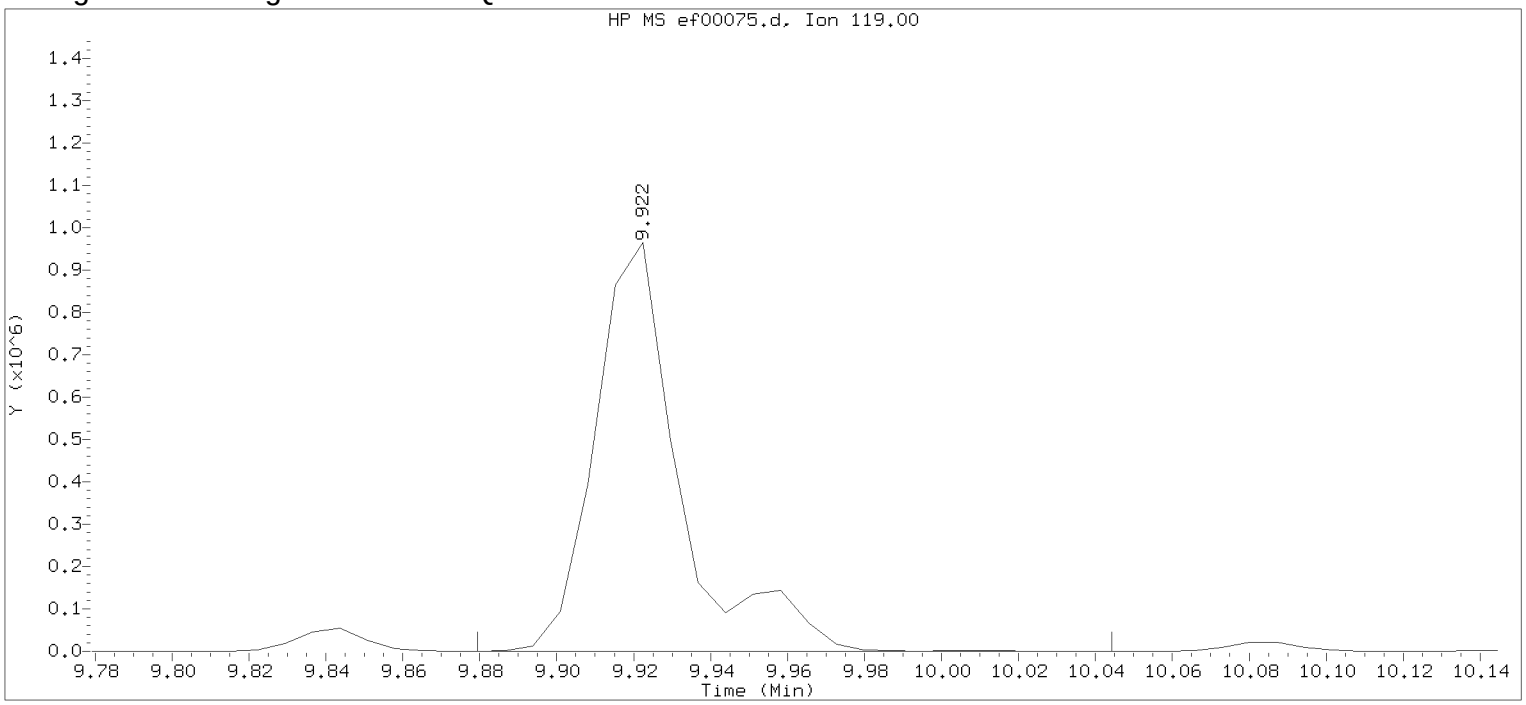
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00075.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 16:39 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 16:57 Unknown

Sample Name: LCSE02 Lab Sample ID: LCSE02

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 1484669
Concentration (ppb(v)) : 9.5961
Integration start scan : 1366 Integration stop scan: 1389
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun05.b/ef00076.d Injection date and time: **05-JUN-2018 17:13**
Data file Sample Info. Line: LCSDE02;200;E1815630AA;LCSDE02;0;3;LCSD; Instrument ID: **HP22820.i** Batch: **E1815630AA**
Date, time and analyst ID of latest file update: 05-Jun-2018 17:35 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun05.b/ef00074.d**

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 05-JUN-2018 14:56
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun05.b/ef00072.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	5.467(0.000)	751	130	298556 (-6)	10.00		190832 - 445272
51) 1,4-Difluorobenzene	6.291(0.000)	866	114	1098665 (-6)	10.00		700823 - 1635253
71) Chlorobenzene-d5	8.497(0.000)	1174	117	1047497 (-5)	10.00		662513 - 1545863

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)	1.606(-0.000)	41	241905	13.068	13.07			0.5	1
2) Dichlorodifluoromethane	(1)	1.642(-0.000)	85	852283	11.878	11.88			0.2	1
3) Chlorodifluoromethane	(1)	1.663(-0.000)	51	532697	14.010	14.01			0.2	1
4) Freon 114	(1)	1.771(-0.000)	85	867974	11.822	11.82			0.2	1
5) Chloromethane	(1)	1.850(0.001)	50	297667	13.715	13.72			0.2	1
6) Vinyl Chloride	(1)	1.964(-0.000)	62	334975	12.575	12.58			0.2	1
7) 1,3-Butadiene	(1)	2.000(-0.000)	54	232601	12.034	12.03			0.4	2
8) Bromomethane	(1)	2.344(0.001)	94	319103	11.648	11.65			0.5	1
9) Chloroethane	(1)	2.466(-0.000)	64	186133	12.363	12.36			0.2	1
10) Bromoethene	(1)	2.688(0.001)	106	314690	10.813	10.81			0.4	2
11) Dichlorofluoromethane	(1)	2.724(0.001)	67	748613	12.892	12.89			0.2	1
12) Trichlorofluoromethane	(1)	2.766(-0.000)	101	871523	11.459	11.46			0.2	1
13) Pentane	(1)	2.867(0.001)	43	605377	14.824	14.82			0.5	1
14) Ethanol	(1)	3.074(-0.001)	45	99027	11.274	11.27			0.5	2
15) Freon123a	(1)	3.196(-0.000)	67	710783	14.081	14.08			0.2	1
16) Acrolein	(1)	3.332(-0.000)	56	125449	12.061	12.06			1	2
17) 1,1-Dichloroethene	(1)	3.418(-0.000)	61	522253	12.370	12.37			0.2	1
18) Freon 113	(1)	3.433(-0.000)	103	468934	11.014	11.01			0.5	2
19) Acetone	(1)	3.519(-0.000)	43	459819	13.101	13.10			0.5	2
20) Methyl Iodide	(1)	3.604(-0.000)	142	800440	9.804	9.80			0.2	1
21) Carbon Disulfide	(1)	3.655(-0.000)	76	918387	11.615	11.61			0.5	1
22) Isopropanol	(1)	3.712(-0.001)	45	397304	10.977	10.98			0.5	2
23) Acetonitrile	(1)	3.870(-0.000)	40	205074	12.035	12.04			0.5	2
24) 3-Chloropropene	(1)	3.862(-0.000)	76	161818	13.061	13.06			0.2	1
25) Methylene Chloride	(1)	4.013(-0.000)	84	305050	12.688	12.69			0.2	1
26) tert-Butyl Alcohol	(1)	4.156(-0.000)	59	493887	10.094	10.09			0.5	1
27) Acrylonitrile	(1)	4.292(-0.000)	53	275787	12.891	12.89			0.5	2
28) trans-1,2-Dichloroethene	(1)	4.285(-0.000)	61	465053	12.179	12.18			0.2	1
29) Methyl t-Butyl Ether	(1)	4.292(-0.000)	73	912825	11.203	11.20			0.2	1
30) Hexane	(1)	4.557(0.001)	57	579527	13.820	13.82			0.2	1
31) 1,1-Dichloroethane	(1)	4.715(-0.000)	63	601346	12.087	12.09			0.2	1
32) Vinyl Acetate	(1)	4.779(-0.000)	86	70901	9.746	9.75			1	1
33) Di-Isopropyl Ether	(1)	4.779(-0.000)	45	1029206	12.419	12.42			0.2	1
34) Ethyl Tert-Butyl Ether	(1)	5.116(-0.000)	59	772816M	9.772	9.77			0.2	1
35) cis-1,2-Dichloroethene	(1)	5.252(-0.000)	61	440437	11.948	11.95			0.2	1
36) 1,2-Dichloroethene (total)	(1)		61	905490	24.128	24.13			0.2	1
37) 2-Butanone	(1)	5.281(-0.000)	72	167438	10.913	10.91			0.5	2
38) Ethyl Acetate	(1)	5.324(-0.000)	70	72756	9.610	9.61			0.5	1
39) Methyl Acrylate	(1)	5.360(0.000)	55	523220	11.248	11.25			0.2	1
41) Tetrahydrofuran	(1)	5.496(0.000)	42	350291	12.891	12.89			0.5	1
42) Chloroform	(1)	5.531(0.000)	83	717756	11.500	11.50			0.2	1
43) 1,1,1-Trichloroethane	(1)	5.675(0.000)	97	673211	10.649	10.65			0.2	1
44) Cyclohexane	(1)	5.710(0.000)	56	509805	11.724	11.72			0.2	1

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:35. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun05.b/ef00076.d Injection date and time: **05-JUN-2018 17:13**
Data file Sample Info. Line: LCSDE02;200;E1815630AA;LCSDE02;0;3;LCSD; Instrument ID: **HP22820.i** Batch: **E1815630AA**
Date, time and analyst ID of latest file update: 05-Jun-2018 17:35 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun05.b/ef00074.d**

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 05-JUN-2018 14:56
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun05.b/ef00072.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
45) Carbon Tetrachloride	(1)	5.804(0.001)	117	654522	10.546	10.55			0.2	1
46) Benzene	(2)	5.983(-0.000)	78	1277353	13.518	13.52			0.2	1
47) 1,2-Dichloroethane	(2)	6.011(-0.000)	62	481091	12.527	12.53			0.2	1
48) Isooctane	(2)	6.033(-0.000)	57	1564731	11.964	11.96			0.2	1
49) Tert-Amyl Methyl Ether	(2)	6.069(-0.000)	73	771735	9.792	9.79			0.2	1
50) Heptane	(2)	6.176(-0.000)	43	547011	12.238	12.24			0.5	1
52) Trichloroethene	(2)	6.491(0.000)	130	486722	10.369	10.37			0.2	1
53) Ethyl Acrylate	(2)	6.570(0.000)	55	625923	10.467	10.47			0.2	1
54) 1,2-Dichloropropane	(2)	6.678(-0.001)	63	386616	11.689	11.69			0.2	1
55) Dibromomethane	(2)	6.771(0.000)	174	438634	9.656	9.66			0.2	1
56) 1,4-Dioxane	(2)	6.771(0.001)	88	256337	10.672	10.67			0.5	1
57) Methyl Methacrylate	(2)	6.749(0.000)	69	339876	10.276	10.28			0.2	1
58) Bromodichloromethane	(2)	6.885(0.000)	83	735398	11.358	11.36			0.2	1
59) cis-1,3-Dichloropropene	(2)	7.215(0.000)	75	576887	10.105	10.11			0.2	1
60) 4-Methyl-2-Pentanone	(2)	7.329(0.000)	43	752637	12.105	12.10			0.5	2
61) Toluene	(3)	7.465(0.000)	91	1511105	12.504	12.50			0.2	1
62) Octane	(3)	7.516(-0.000)	43	881278	14.021	14.02			0.2	1
63) trans-1,3-Dichloropropene	(3)	7.630(0.000)	75	453484	9.518	9.52			0.2	1
64) 1,3-Dichloropropene (total)	(3)		75	1030371	19.623	19.62			0.2	1
65) Ethyl Methacrylate	(3)	7.673(-0.000)	69	523399	9.680	9.68			0.2	1
66) 1,1,2-Trichloroethane	(3)	7.773(-0.000)	97	456662	10.695	10.70			0.2	1
67) Tetrachloroethene	(3)	7.866(-0.000)	166	641004	9.479	9.48			0.2	1
68) 2-Hexanone	(3)	7.945(-0.000)	43	701690	11.606	11.61			0.5	2
69) Dibromochloromethane	(3)	8.067(-0.000)	127	555739	10.319	10.32			0.2	1
70) 1,2-Dibromoethane	(3)	8.160(-0.000)	107	692019	10.415	10.41			0.2	1
72) Chlorobenzene	(3)	8.518(0.000)	112	1026713	9.926	9.93			0.2	1
73) 1,1,1,2-Tetrachloroethane	(3)	8.576(-0.000)	131	508300	10.096	10.10			0.2	1
74) Ethylbenzene	(3)	8.583(0.000)	91	1923805	11.902	11.90			0.2	1
75) m/p-Xylene	(3)	8.669(0.000)	91	1753381	13.363	13.36			0.2	1
76) o-Xylene	(3)	8.970(0.000)	91	1546746	11.925	11.92			0.2	1
77) Xylene (total)	(3)		91	3300127	25.287	25.29			0.2	1
78) Styrene	(3)	8.977(0.000)	104	999815	10.174	10.17			0.2	1
79) Bromoform	(3)	9.142(0.000)	173	661562	9.548	9.55			0.2	1
80) Cumene	(3)	9.235(0.000)	105	1758637	9.509	9.51			0.2	1
81) Bromobenzene	(3)	9.492(0.000)	156	596955	9.083	9.08			0.2	1
82) 1,1,2,2-Tetrachloroethane	(3)	9.471(0.000)	83	1018605	11.198	11.20			0.2	1
83) 1,2,3-Trichloropropane	(3)	9.514(0.000)	110	306163	10.536	10.54			0.2	1
84) n-Propylbenzene	(3)	9.543(0.000)	120	485260	9.129	9.13			0.5	1
85) 2-Chlorotoluene	(3)	9.629(0.000)	126	474729	9.702	9.70			0.2	1
86) 4-Ethyltoluene	(3)	9.629(0.000)	105	1764196M	9.862	9.86			0.2	1
87) 1,3,5-Trimethylbenzene	(3)	9.672(0.000)	105	1450593M	9.743	9.74			0.2	1
88) Alpha Methyl Styrene	(3)	9.844(0.000)	118	679706	8.704	8.70			0.2	1
89) tert-Butylbenzene	(3)	9.922(0.000)	119	1355050M	8.725	8.73			0.5	1
90) 1,2,4-Trimethylbenzene	(3)	9.958(0.000)	105	1407946	9.579	9.58			0.2	1
91) sec-Butylbenzene	(3)	10.087(0.000)	105	2044417	9.192	9.19			0.2	1
92) 1,3-Dichlorobenzene	(3)	10.194(0.000)	146	1014569	9.289	9.29			0.2	1
93) 1,4-Dichlorobenzene	(3)	10.259(0.000)	146	1009746	9.070	9.07			0.2	1
94) p-Isopropyltoluene	(3)	10.194(0.000)	119	1688575	8.872	8.87			0.2	1
95) Benzyl Chloride	(3)	10.359(0.000)	91	682895	6.782	6.78			0.5	1
96) 1,2-Dichlorobenzene	(3)	10.546(0.000)	146	926079	8.908	8.91			0.2	1
97) n-Butylbenzene	(3)	10.502(0.000)	91	1565682	9.154	9.15			0.2	1
98) Hexachloroethane	(3)	10.739(0.000)	117	388530	9.615	9.62			0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)	11.140(0.000)	157	411328	7.654	7.65			0.2	1
100) 1,2,4-Trichlorobenzene	(3)	11.763(0.000)	180	596730	6.698	6.70			0.5	2

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:35. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun05.b/ef00076.d Injection date and time: **05-JUN-2018 17:13**
Data file Sample Info. Line: LCSDE02;200;E1815630AA;LCSDE02;0;3;LCSD; Instrument ID: **HP22820.i** Batch: **E1815630AA**
Date, time and analyst ID of latest file update: 05-Jun-2018 17:35 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun05.b/ef00074.d**

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 05-JUN-2018 14:56
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun05.b/ef00072.d**

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

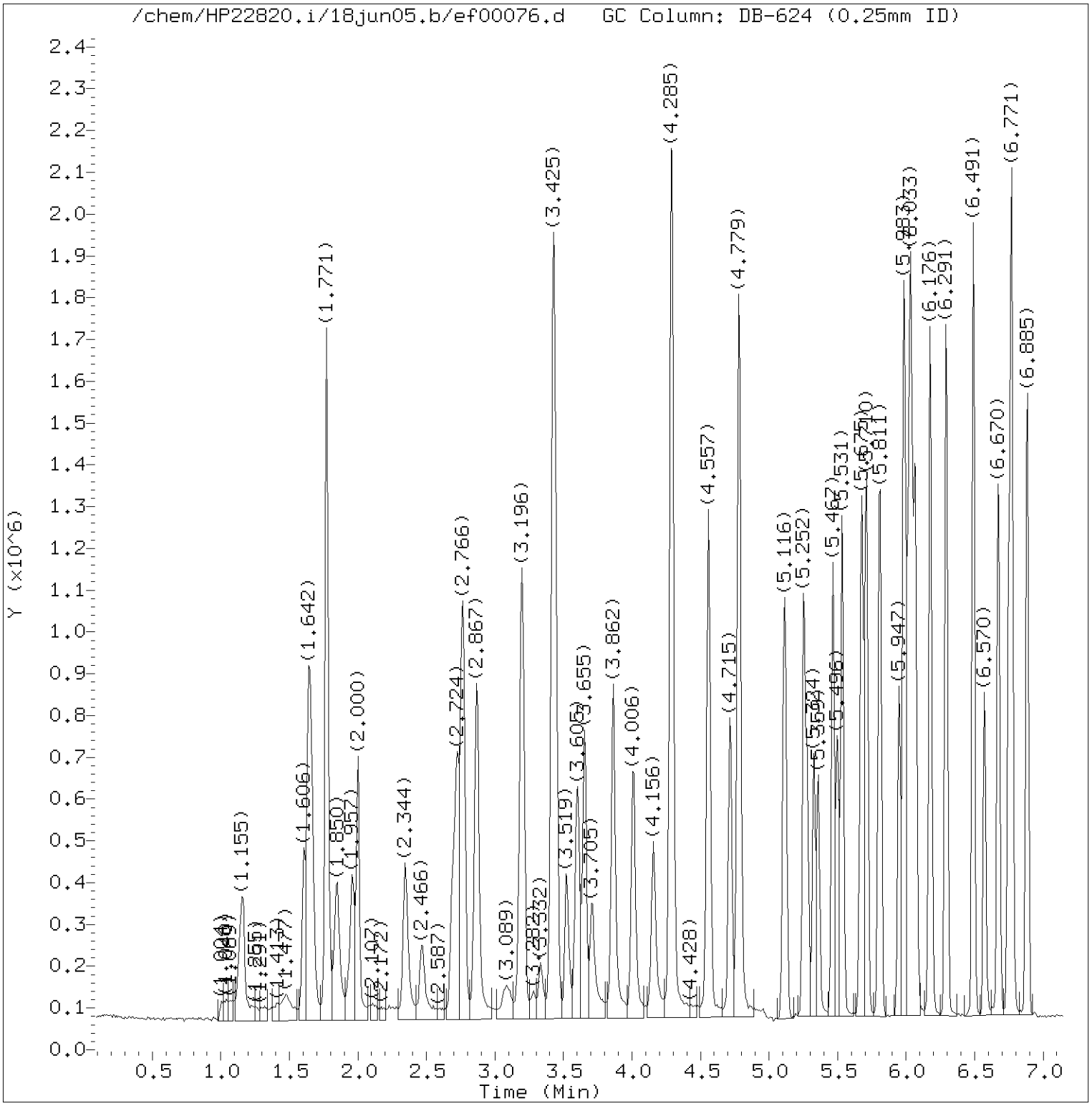
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
101) Hexachlorobutadiene	(3)	11.878(0.000)	225	507911	6.666	6.67			0.4	2
102) Naphthalene	(3)	11.964(0.000)	128	1271398	6.453	6.45			0.4	1

Total number of targets = 99

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:35. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

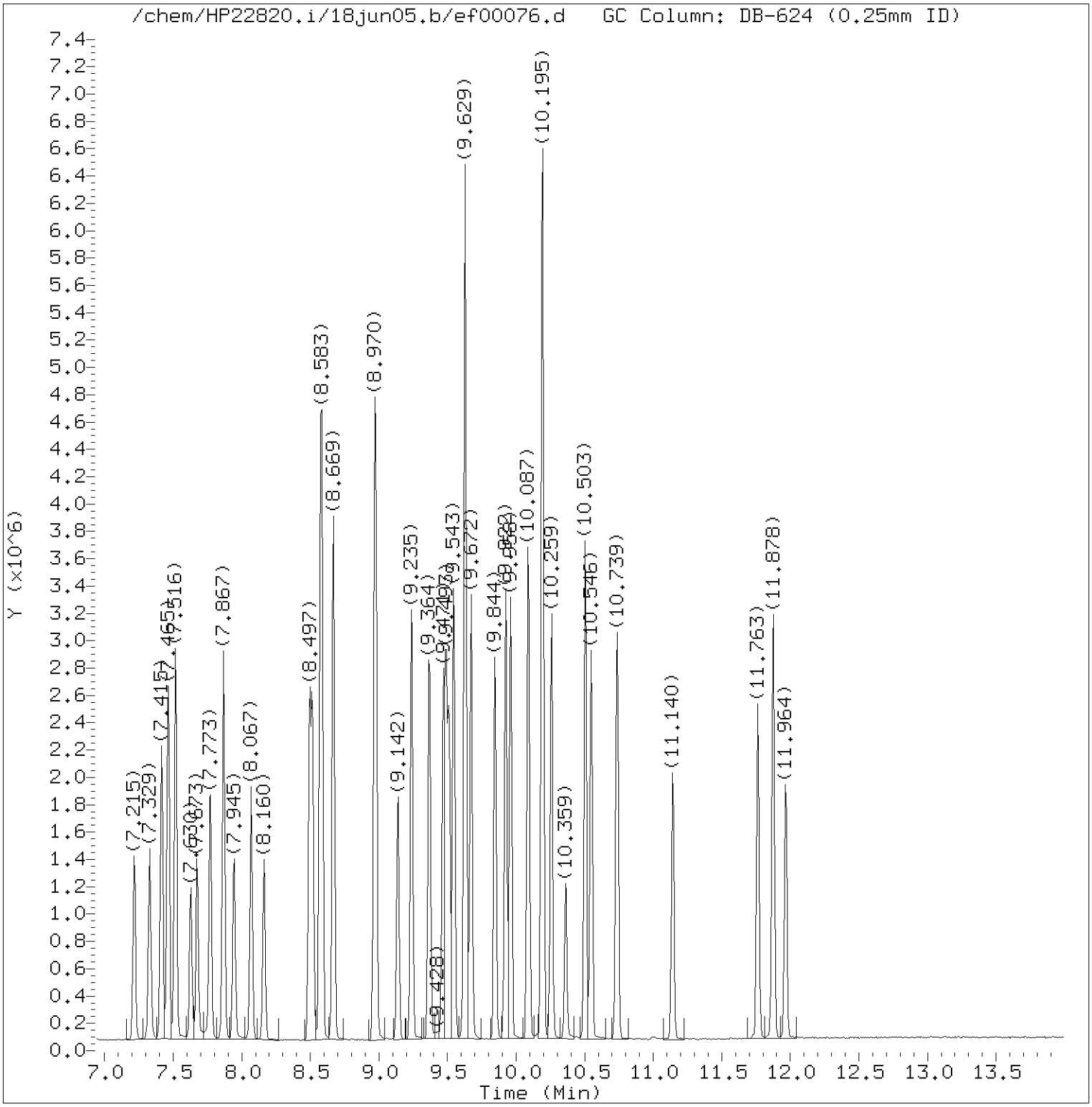
Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00076.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 17:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:35 jeb07445

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:35.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00076.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 17:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:35 jeb07445

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:35.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00076.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 17:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:35 jeb07445

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.606	41	241905	13.068
2) Dichlorodifluoromethane	(1)	1.642	85	852283	11.878
3) Chlorodifluoromethane	(1)	1.663	51	532697	14.010
4) Freon 114	(1)	1.771	85	867974	11.822
5) Chloromethane	(1)	1.850	50	297667	13.715
6) Vinyl Chloride	(1)	1.964	62	334975	12.575
7) 1,3-Butadiene	(1)	2.000	54	232601	12.034
8) Bromomethane	(1)	2.344	94	319103	11.648
9) Chloroethane	(1)	2.466	64	186133	12.363
10) Bromoethene	(1)	2.688	106	314690	10.813
11) Dichlorofluoromethane	(1)	2.724	67	748613	12.892
12) Trichlorofluoromethane	(1)	2.766	101	871523	11.459
13) Pentane	(1)	2.867	43	605377	14.824
14) Ethanol	(1)	3.075	45	99027	11.274
15) Freon123a	(1)	3.196	67	710783	14.081
16) Acrolein	(1)	3.332	56	125449	12.061
17) 1,1-Dichloroethene	(1)	3.418	61	522253	12.370
18) Freon 113	(1)	3.433	103	468934	11.014
19) Acetone	(1)	3.519	43	459819	13.101
20) Methyl Iodide	(1)	3.605	142	800440	9.804
21) Carbon Disulfide	(1)	3.655	76	918387	11.615
22) Isopropanol	(1)	3.712	45	397304	10.977
24) 3-Chloropropene	(1)	3.862	76	161818	13.061
23) Acetonitrile	(1)	3.870	40	205074	12.035
25) Methylene Chloride	(1)	4.013	84	305050	12.688
26) tert-Butyl Alcohol	(1)	4.156	59	493887	10.094
28) trans-1,2-Dichloroethene	(1)	4.285	61	465053	12.179
27) Acrylonitrile	(1)	4.292	53	275787	12.891
29) Methyl t-Butyl Ether	(1)	4.292	73	912825	11.203
30) Hexane	(1)	4.557	57	579527	13.820
31) 1,1-Dichloroethane	(1)	4.715	63	601346	12.087
32) Vinyl Acetate	(1)	4.779	86	70901	9.746
33) Di-Isopropyl Ether	(1)	4.779	45	1029206	12.419
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	772816M	9.772
35) cis-1,2-Dichloroethene	(1)	5.252	61	440437	11.948
37) 2-Butanone	(1)	5.281	72	167438	10.913
38) Ethyl Acetate	(1)	5.324	70	72756	9.610
39) Methyl Acrylate	(1)	5.359	55	523220	11.248

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:35.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00076.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 17:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:35 jeb07445

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	298556	10.000
41) Tetrahydrofuran	(1)	5.496	42	350291	12.891
42) Chloroform	(1)	5.531	83	717756	11.500
43) 1,1,1-Trichloroethane	(1)	5.675	97	673211	10.649
44) Cyclohexane	(1)	5.710	56	509805	11.724
45) Carbon Tetrachloride	(1)	5.804	117	654522	10.546
46) Benzene	(2)	5.983	78	1277353	13.518
47) 1,2-Dichloroethane	(2)	6.011	62	481091	12.527
48) Isooctane	(2)	6.033	57	1564731	11.964
49) Tert-Amyl Methyl Ether	(2)	6.069	73	771735	9.792
50) Heptane	(2)	6.176	43	547011	12.238
51)*1,4-Difluorobenzene	(2)	6.291	114	1098665	10.000
52) Trichloroethene	(2)	6.491	130	486722	10.369
53) Ethyl Acrylate	(2)	6.570	55	625923	10.467
36) 1,2-Dichloroethene (total)	(1)		61	905490	24.128
54) 1,2-Dichloropropane	(2)	6.678	63	386616	11.689
57) Methyl Methacrylate	(2)	6.749	69	339876	10.276
56) 1,4-Dioxane	(2)	6.771	88	256337	10.672
55) Dibromomethane	(2)	6.771	174	438634	9.656
58) Bromodichloromethane	(2)	6.885	83	735398	11.358
59) cis-1,3-Dichloropropene	(2)	7.215	75	576887	10.105
60) 4-Methyl-2-Pentanone	(2)	7.329	43	752637	12.105
61) Toluene	(3)	7.465	91	1511105	12.504
62) Octane	(3)	7.516	43	881278	14.021
63) trans-1,3-Dichloropropene	(3)	7.630	75	453484	9.518
65) Ethyl Methacrylate	(3)	7.673	69	523399	9.680
66) 1,1,2-Trichloroethane	(3)	7.773	97	456662	10.695
67) Tetrachloroethene	(3)	7.867	166	641004	9.479
68) 2-Hexanone	(3)	7.945	43	701690	11.606
69) Dibromochloromethane	(3)	8.067	127	555739	10.319
70) 1,2-Dibromoethane	(3)	8.160	107	692019	10.415
71)*Chlorobenzene-d5	(3)	8.497	117	1047497	10.000
72) Chlorobenzene	(3)	8.518	112	1026713	9.926
73) 1,1,1,2-Tetrachloroethane	(3)	8.576	131	508300	10.096
74) Ethylbenzene	(3)	8.583	91	1923805	11.902
75) m/p-Xylene	(3)	8.669	91	1753381	13.363
76) o-Xylene	(3)	8.970	91	1546746	11.925
78) Styrene	(3)	8.977	104	999815	10.174

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:35.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00076.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 17:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:35 jeb07445

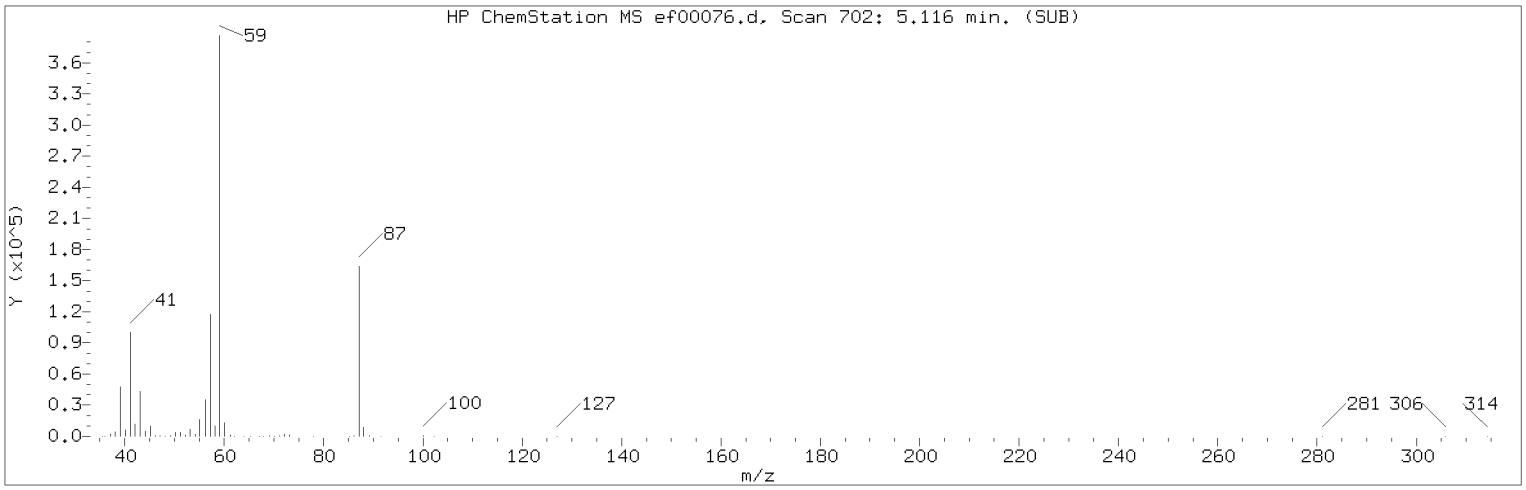
Sample Name: LCSDE02 Lab Sample ID: LCSDE02

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	661562	9.548
80) Cumene	(3)	9.235	105	1758637	9.509
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	1018605	11.198
81) Bromobenzene	(3)	9.493	156	596955	9.083
83) 1,2,3-Trichloropropane	(3)	9.514	110	306163	10.536
84) n-Propylbenzene	(3)	9.543	120	485260	9.129
86) 4-Ethyltoluene	(3)	9.629	105	1764196M	9.862
85) 2-Chlorotoluene	(3)	9.629	126	474729	9.702
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	1450593M	9.743
88) Alpha Methyl Styrene	(3)	9.844	118	679706	8.704
89) tert-Butylbenzene	(3)	9.922	119	1355050M	8.725
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	1407946	9.579
91) sec-Butylbenzene	(3)	10.087	105	2044417	9.192
92) 1,3-Dichlorobenzene	(3)	10.195	146	1014569	9.289
94) p-Isopropyltoluene	(3)	10.195	119	1688575	8.872
93) 1,4-Dichlorobenzene	(3)	10.259	146	1009746	9.070
95) Benzyl Chloride	(3)	10.359	91	682895	6.782
97) n-Butylbenzene	(3)	10.503	91	1565682	9.154
96) 1,2-Dichlorobenzene	(3)	10.546	146	926079	8.908
98) Hexachloroethane	(3)	10.739	117	388530	9.615
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	411328	7.654
100) 1,2,4-Trichlorobenzene	(3)	11.763	180	596730	6.698
101) Hexachlorobutadiene	(3)	11.878	225	507911	6.666
102) Naphthalene	(3)	11.964	128	1271398	6.453
64) 1,3-Dichloropropene (total)	(3)		75	1030371	19.623
77) Xylene (total)	(3)		91	3300127	25.287

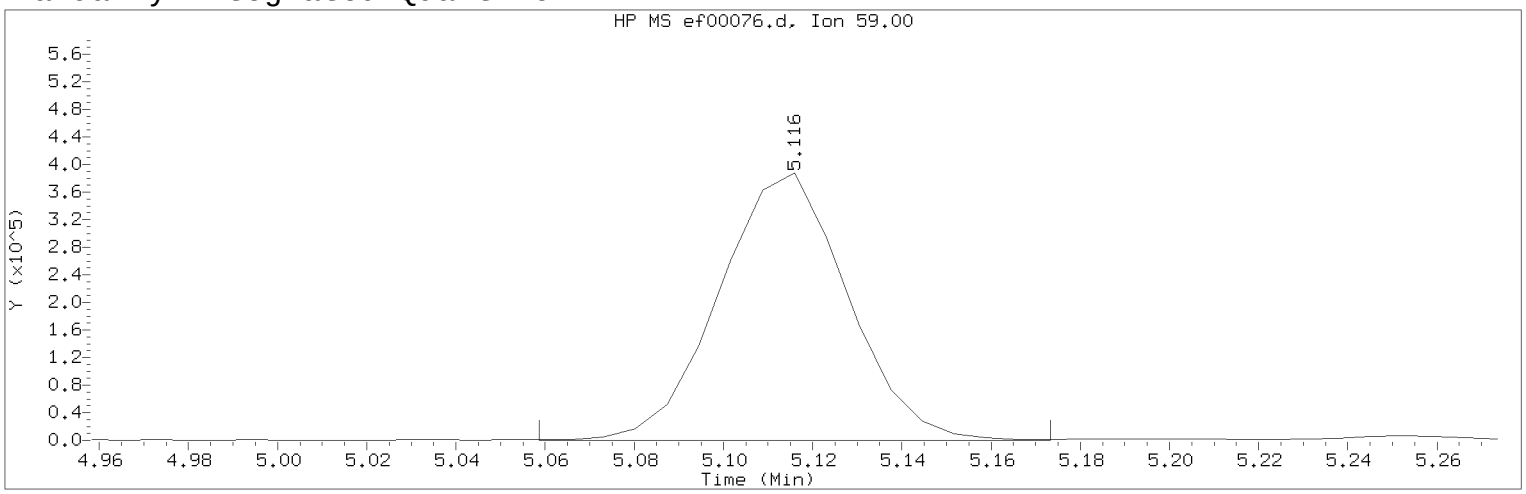
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:35.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00076.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 17:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:35 jeb07445

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

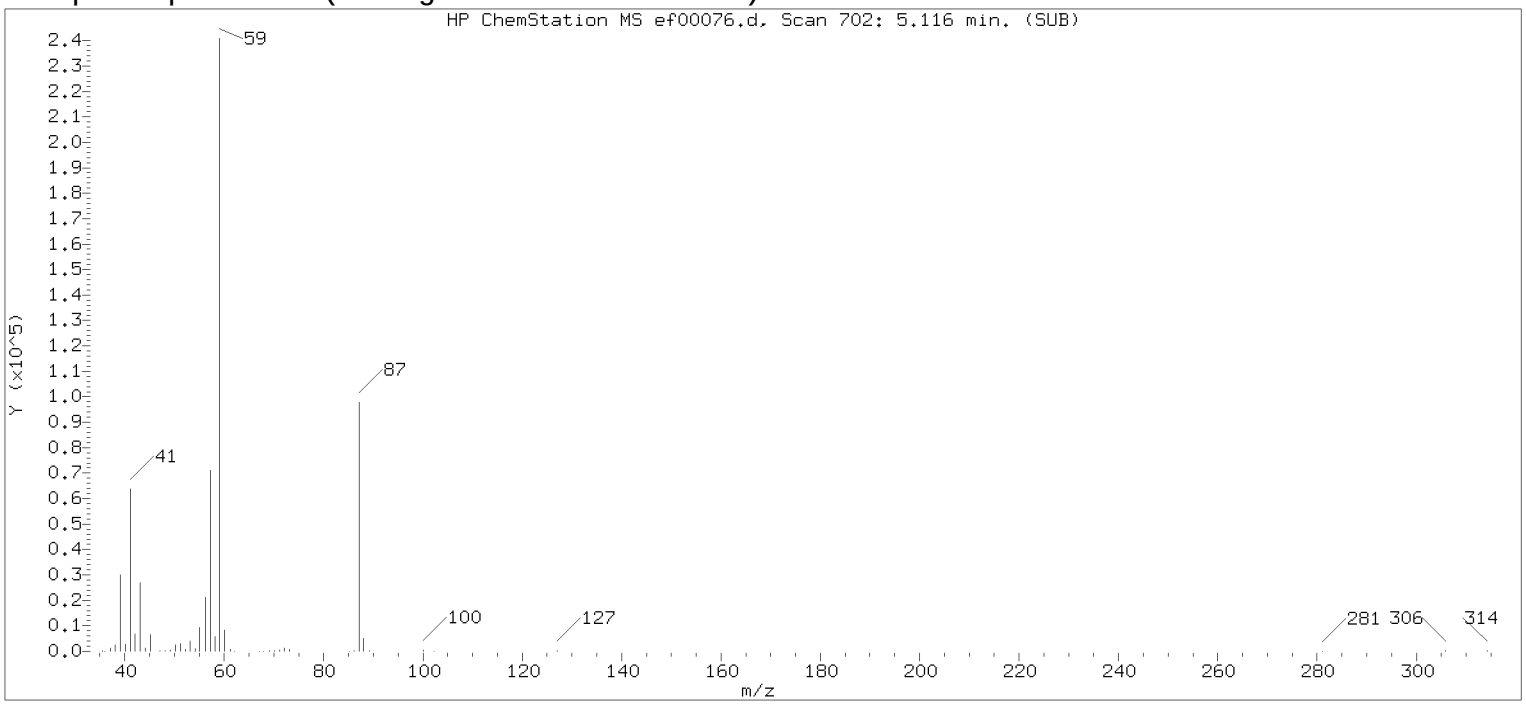
Compound Number : 34
Compound Name : Ethyl Tert-Butyl Ether
Scan Number : 702
Retention Time (minutes): 5.116
Quant Ion : 59.00
Area (flag) : 772816M
Concentration (ppb(v)) : 9.7724
Integration start scan : 693 Integration stop scan: 709
Y at integration start : 142 Y at integration end: 142

Reason for manual integration: improper integration

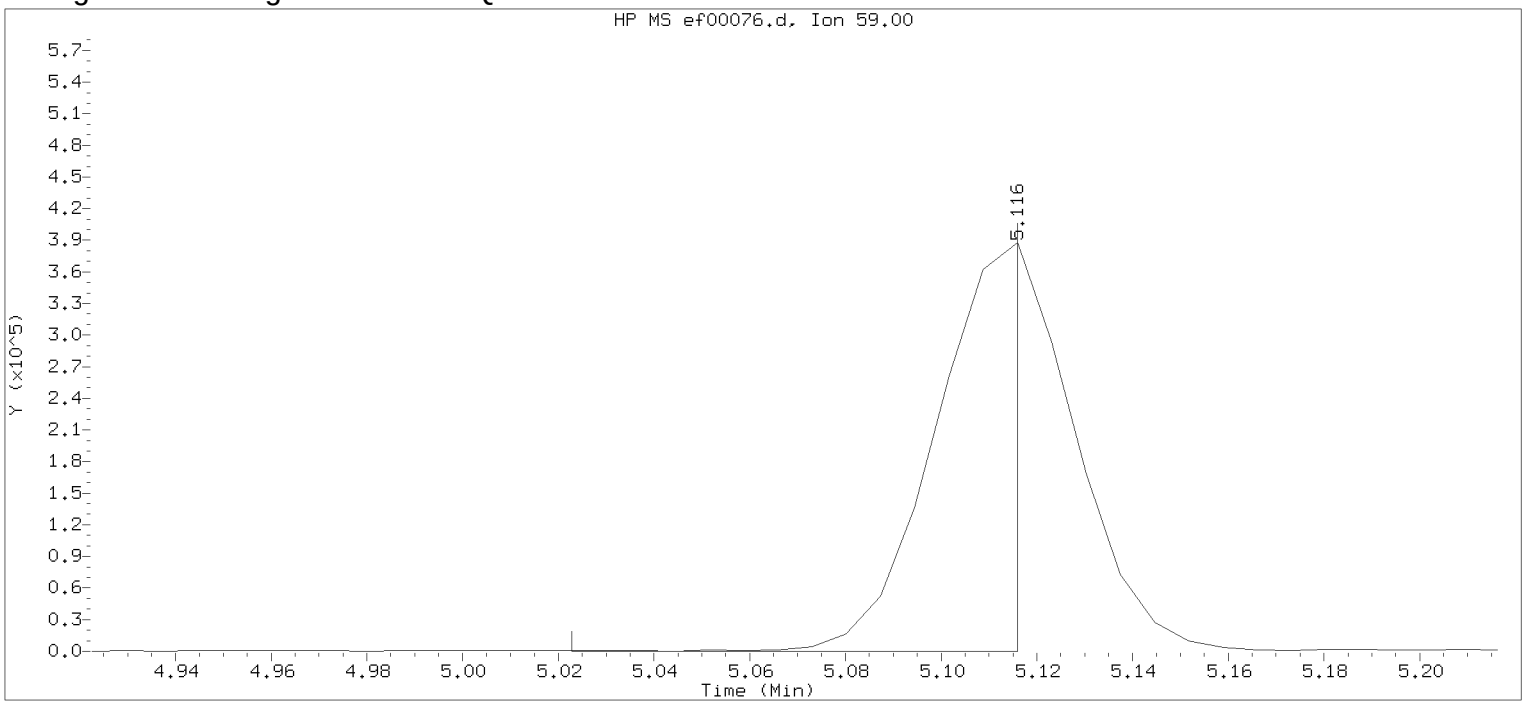
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:35.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00076.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 17:13 Analyst ID: jeb07445

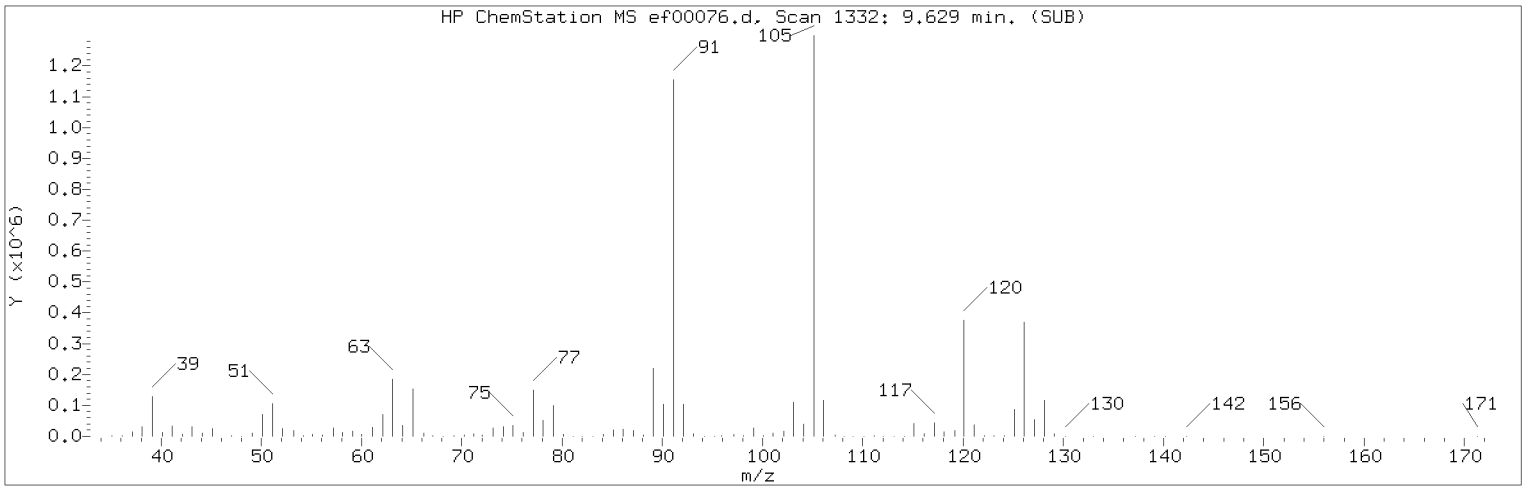
Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:32 Unknown

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

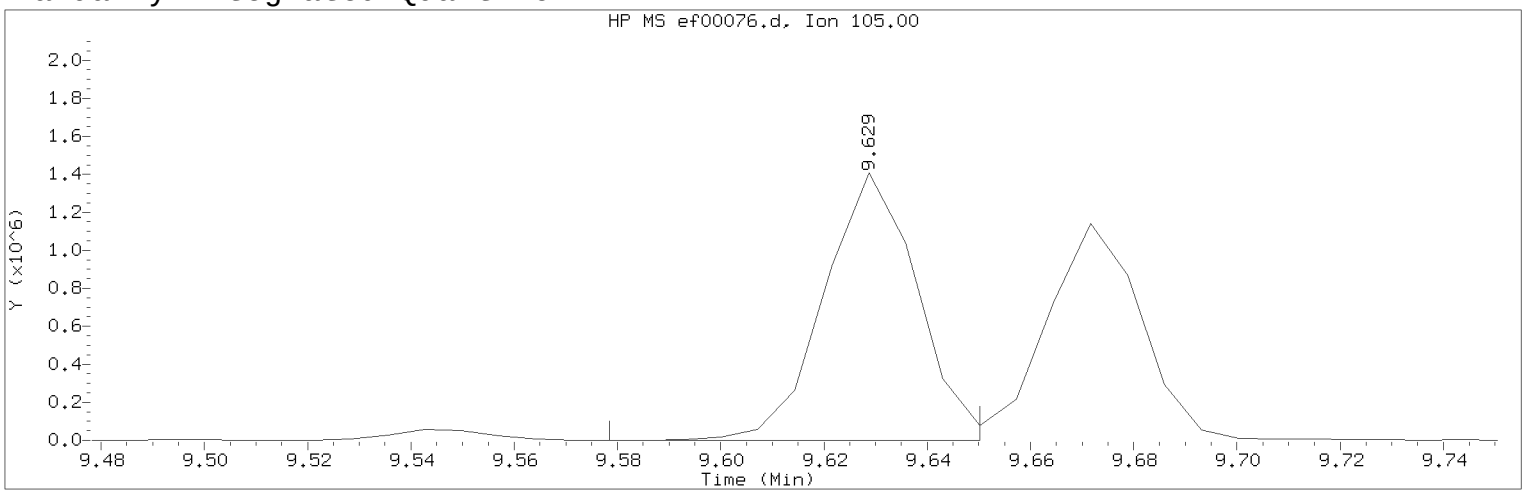
Compound Number : 34
Compound Name : Ethyl Tert-Butyl Ether
Scan Number : 702
Retention Time (minutes): 5.116
Quant Ion : 59.00
Area : 441563
Concentration (ppb(v)) : 5.5836
Integration start scan : 688 Integration stop scan: 701
Y at integration start : 297 Y at integration end: 297

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:35.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00076.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 17:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:35 jeb07445

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

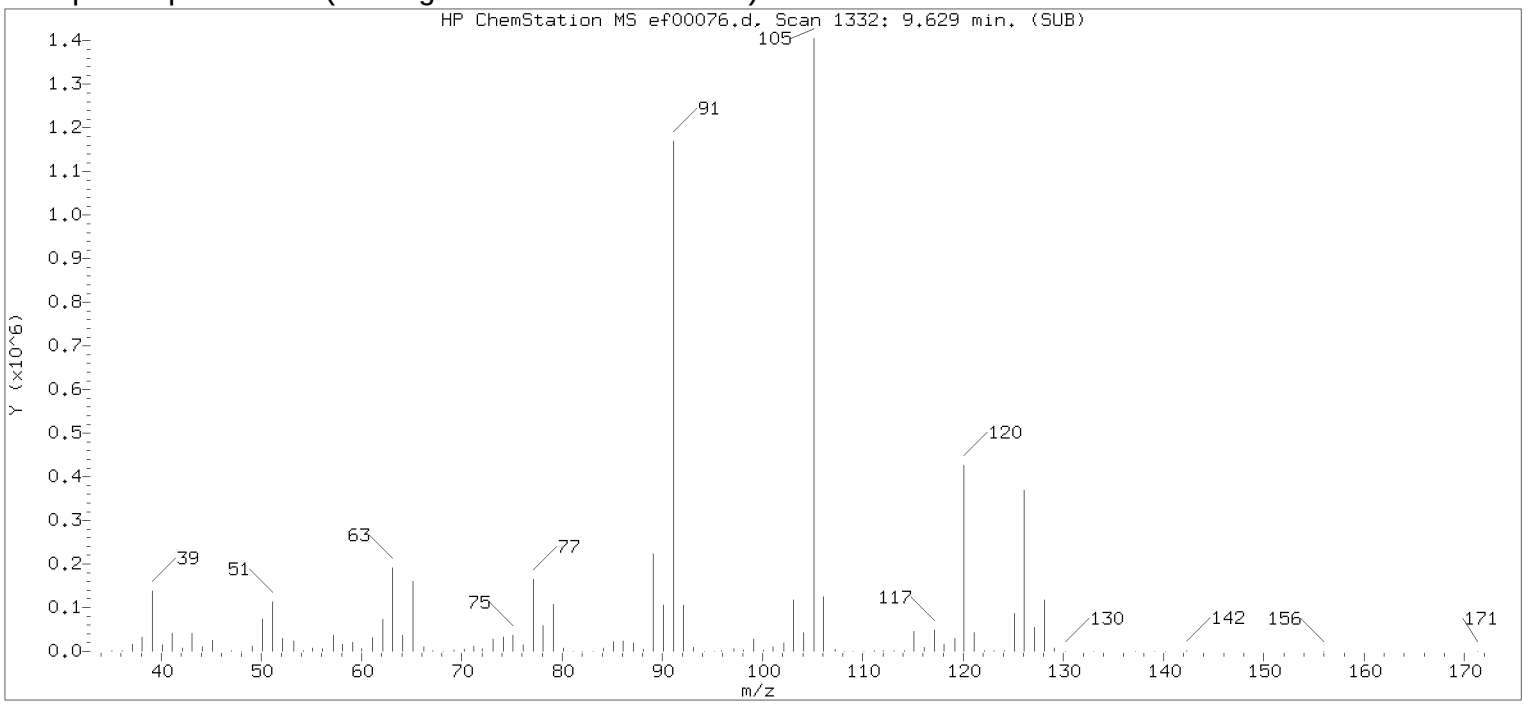
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 1764196M
Concentration (ppb(v)) : 9.8622
Integration start scan : 1324 Integration stop scan: 1334
Y at integration start : 599 Y at integration end: 599

Reason for manual integration: improper integration

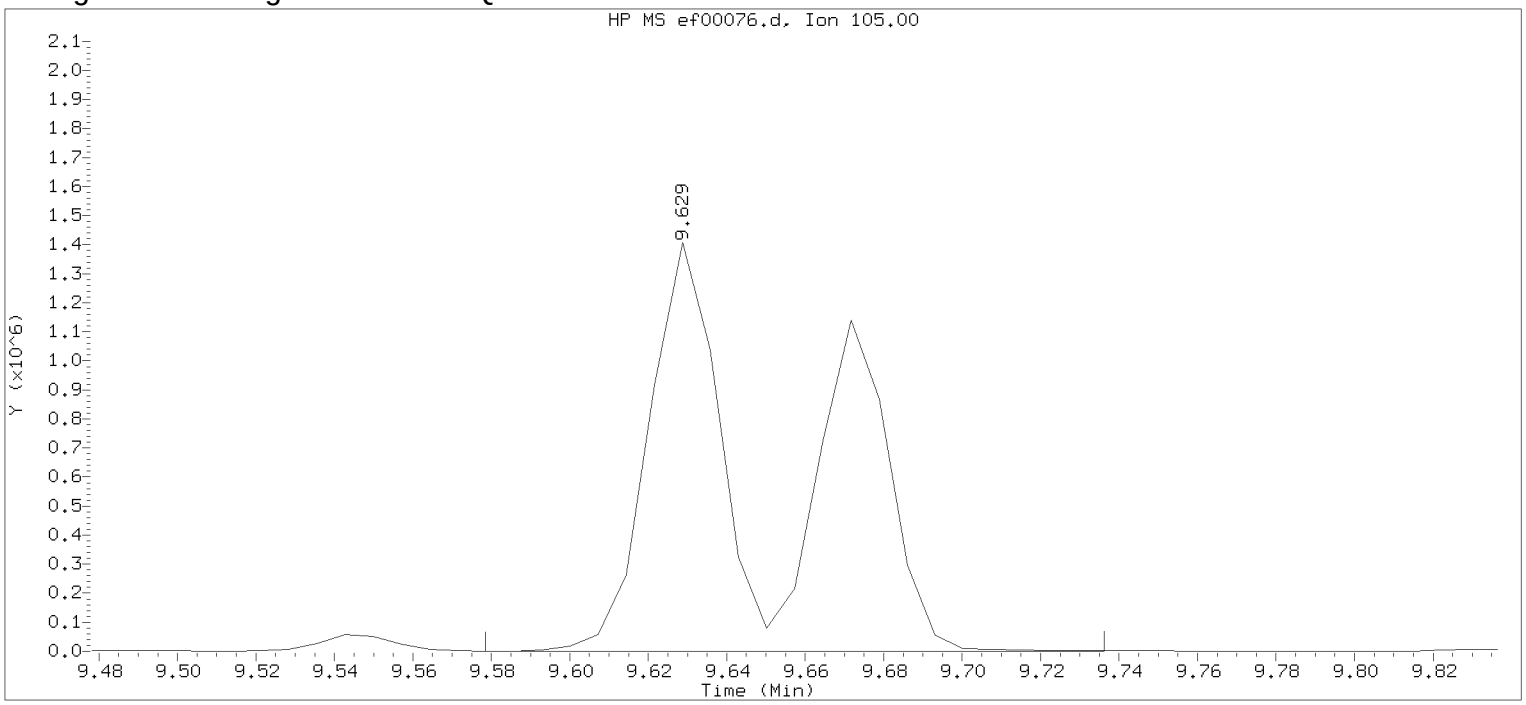
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:35.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00076.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 17:13 Analyst ID: jeb07445

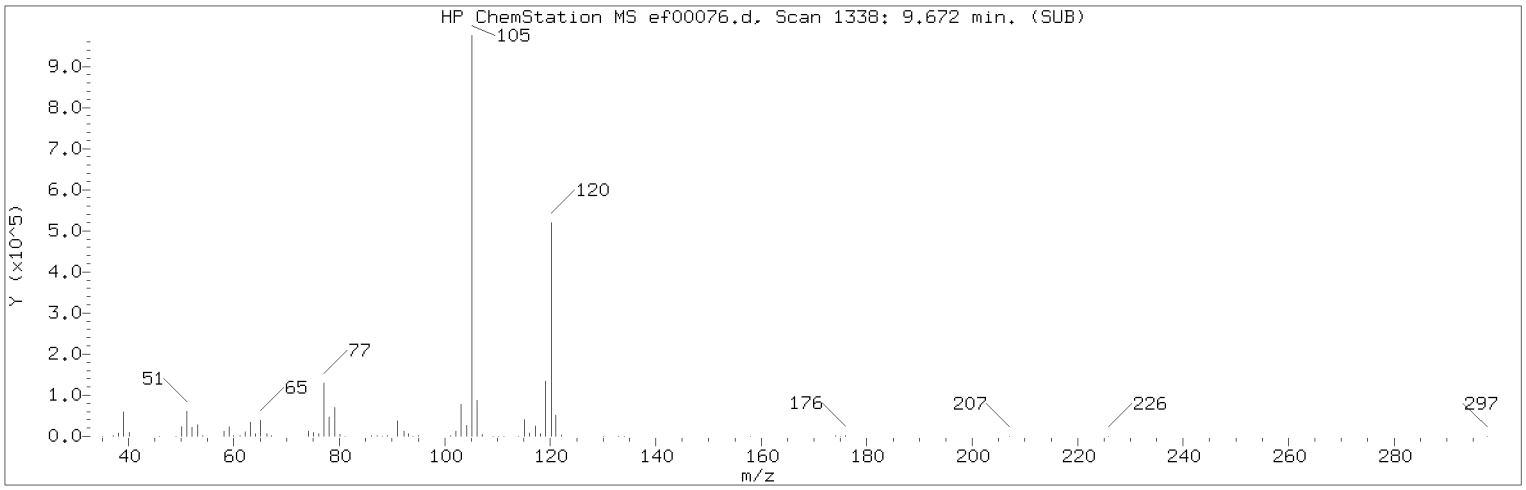
Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:32 Unknown

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

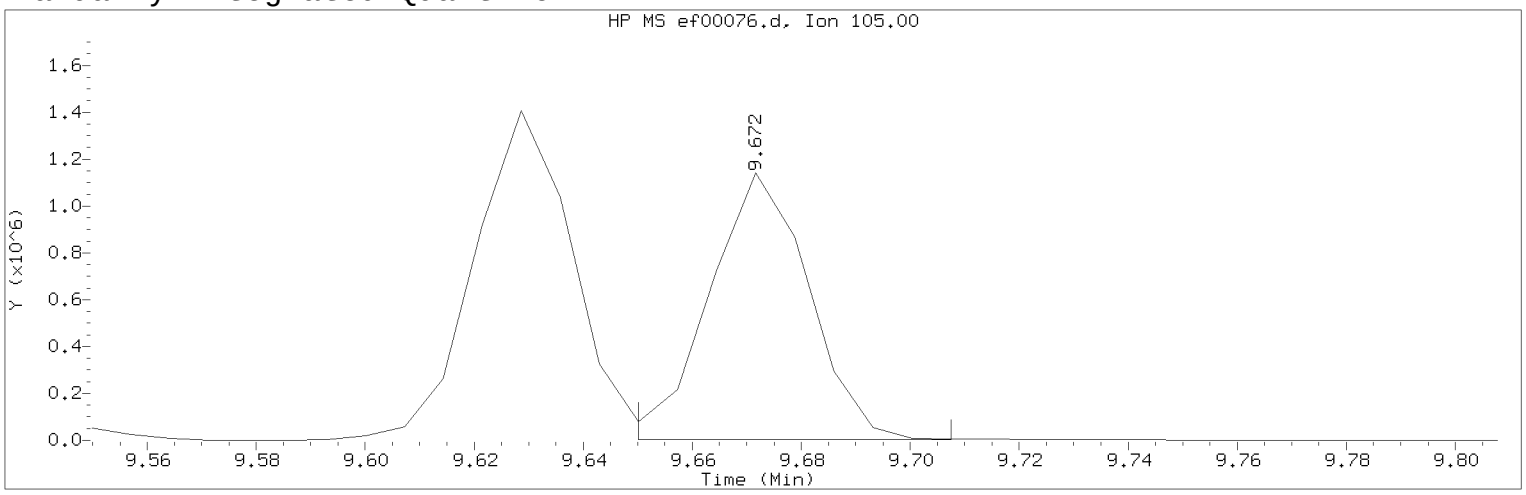
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 3191933
Concentration (ppb(v)) : 17.8436
Integration start scan : 1324 Integration stop scan: 1346
Y at integration start : 599 Y at integration end: 599

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:35.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00076.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 17:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:35 jeb07445

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

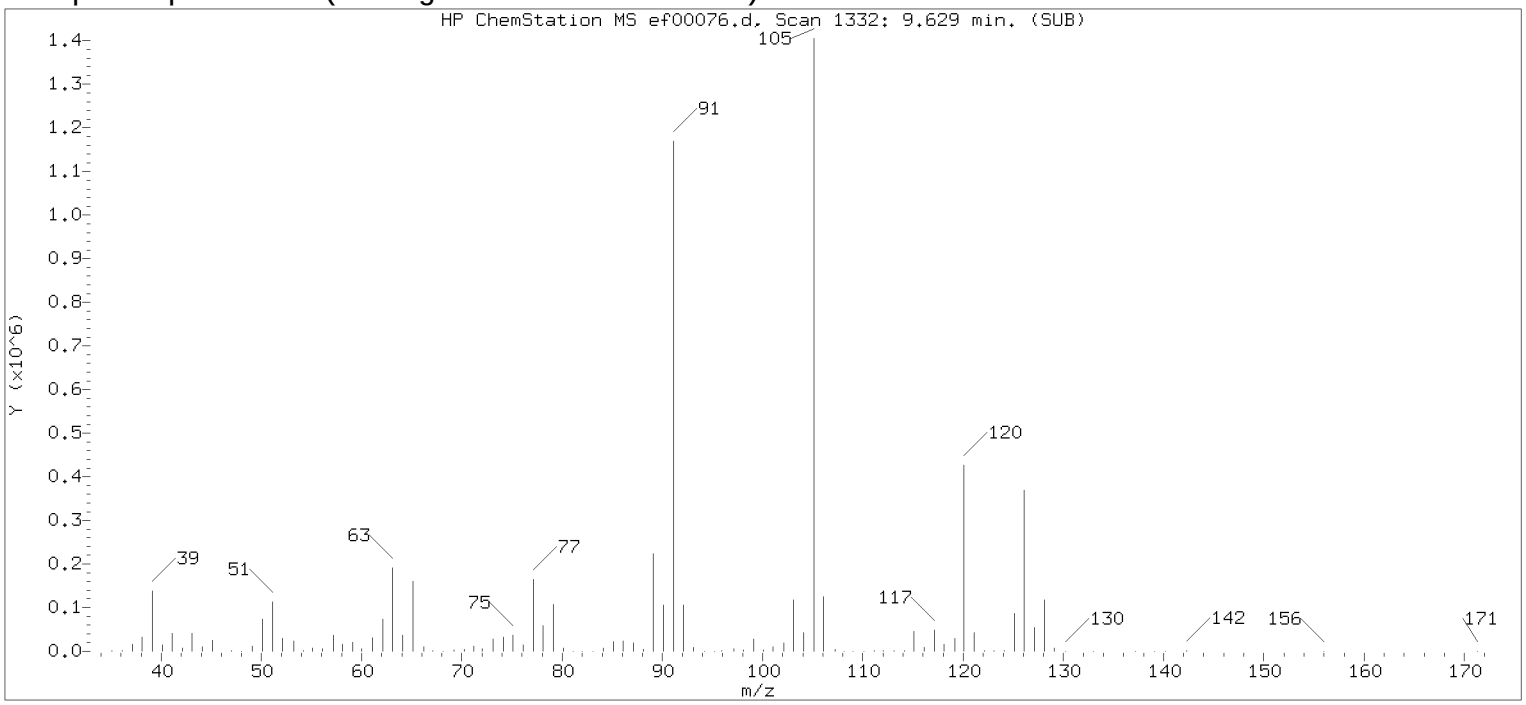
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 1450593M
Concentration (ppb(v)) : 9.7435
Integration start scan : 1334 Integration stop scan: 1342
Y at integration start : 2274 Y at integration end: 2274

Reason for manual integration: improper integration

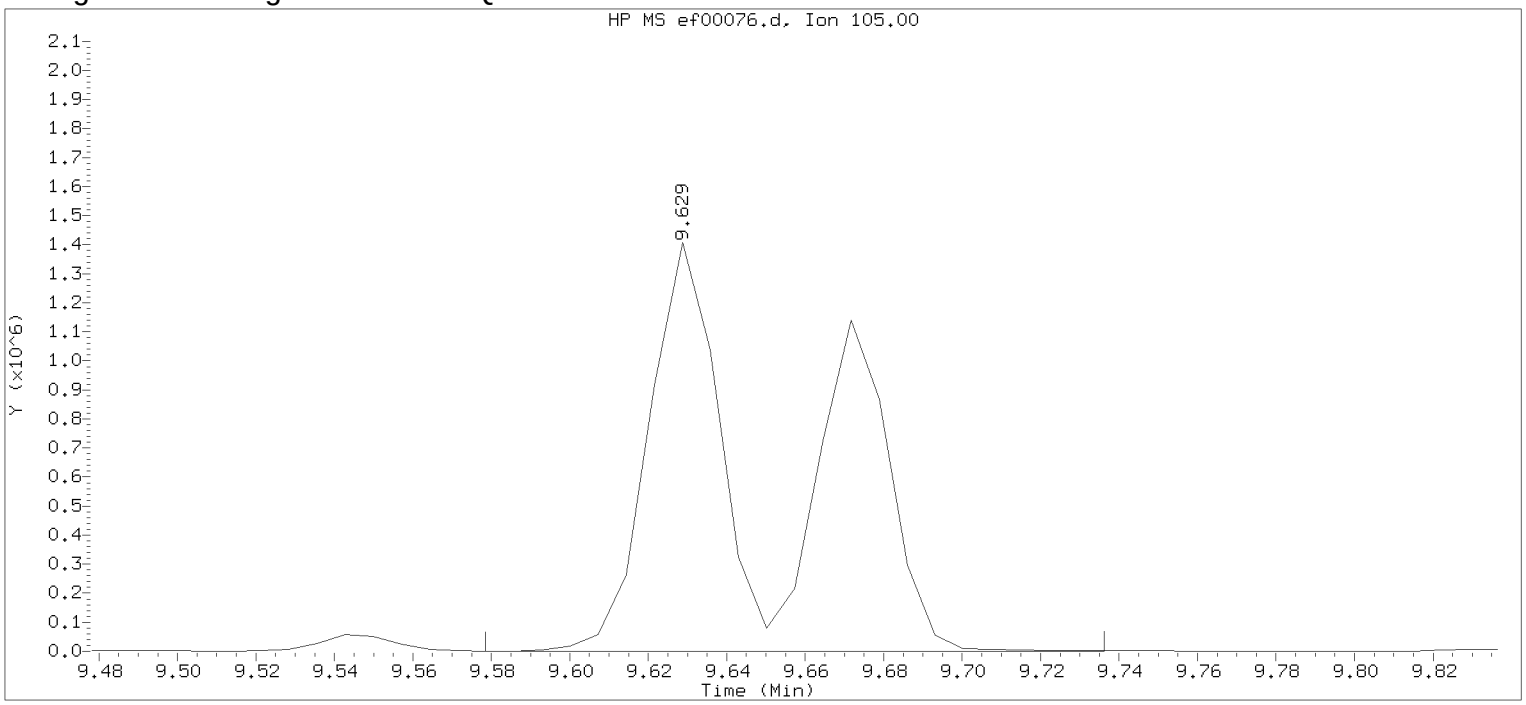
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:35.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00076.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 17:13 Analyst ID: jeb07445

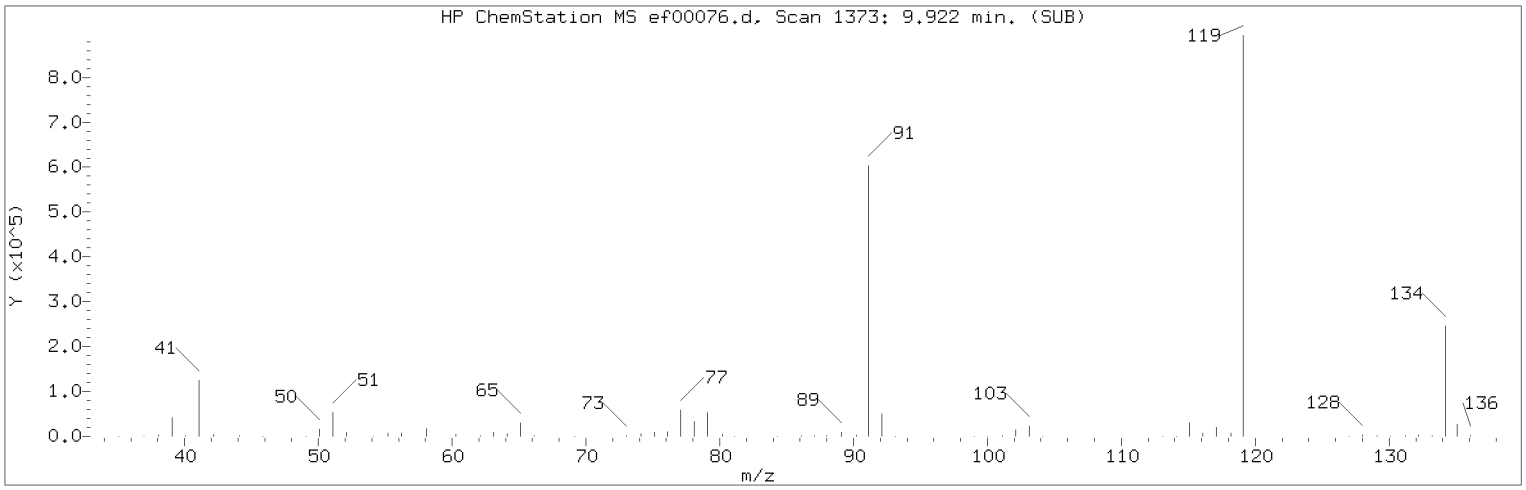
Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:32 Unknown

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

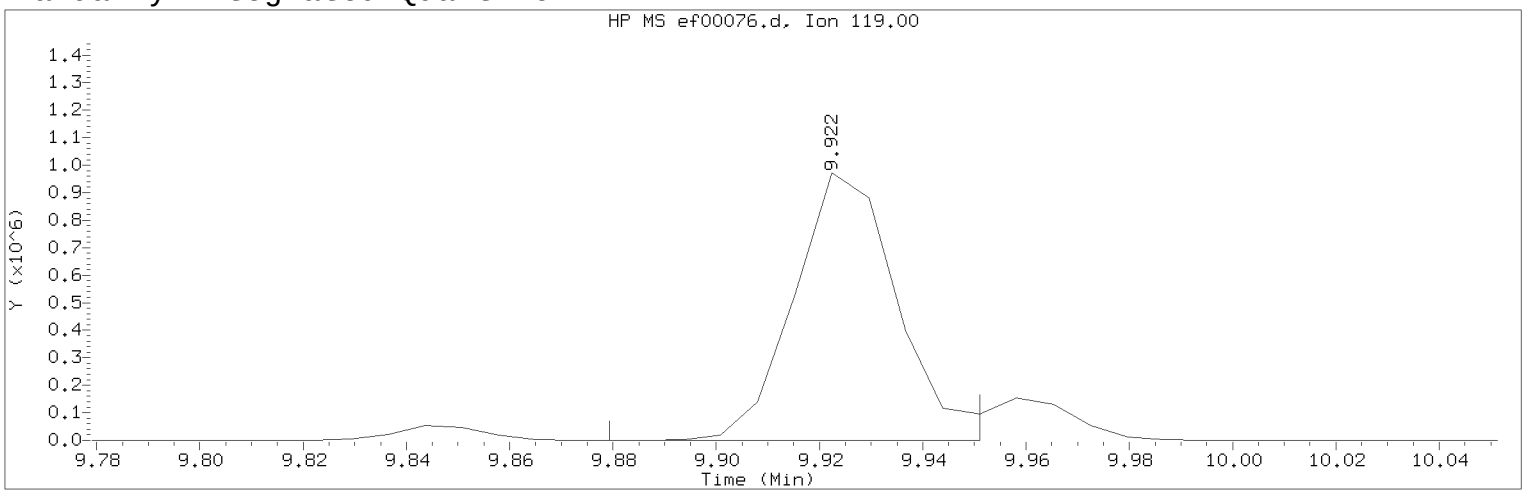
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 3190997
Concentration (ppb(v)) : 21.4335
Integration start scan : 1324 Integration stop scan: 1346
Y at integration start : 698 Y at integration end: 698

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:35.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00076.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 17:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:35 jeb07445

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

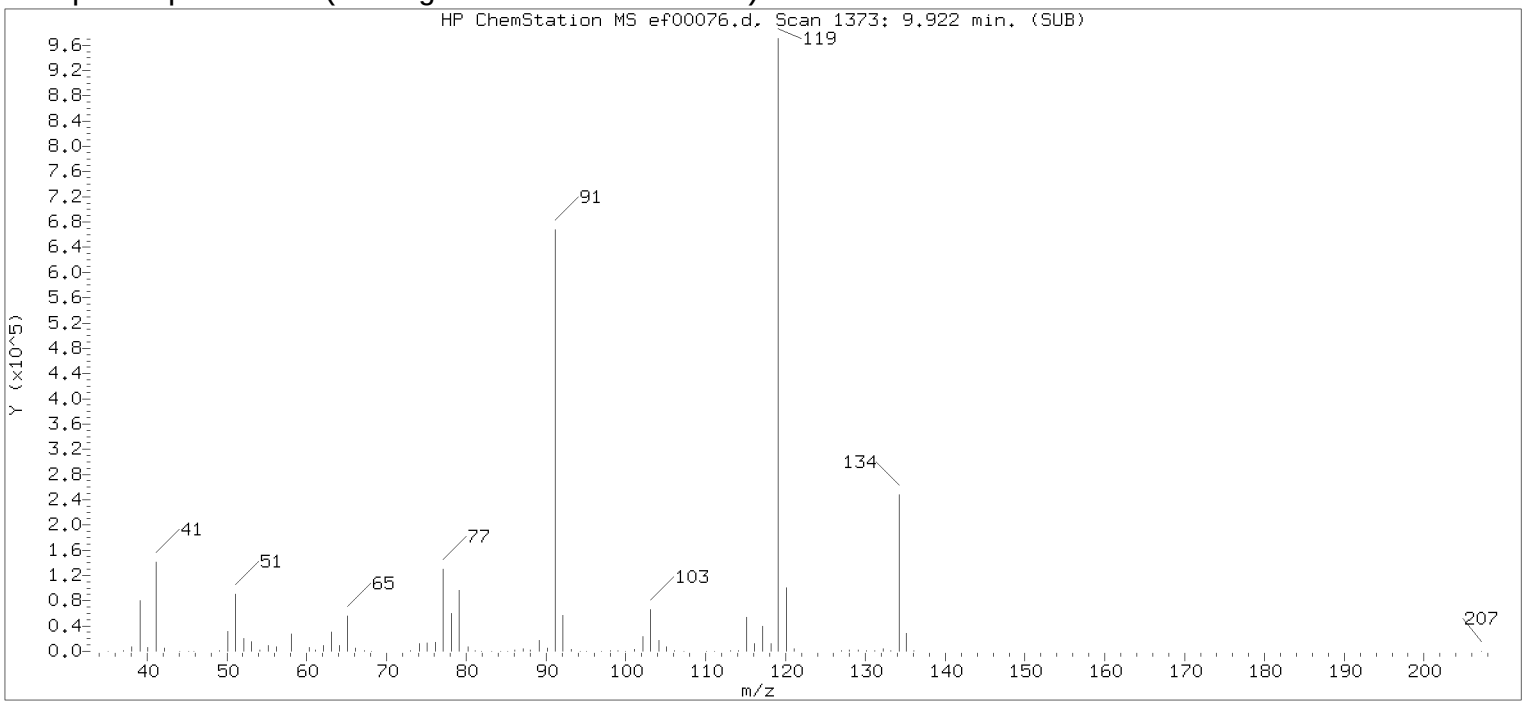
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 1355050M
Concentration (ppb(v)) : 8.7252
Integration start scan : 1366 Integration stop scan: 1376
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

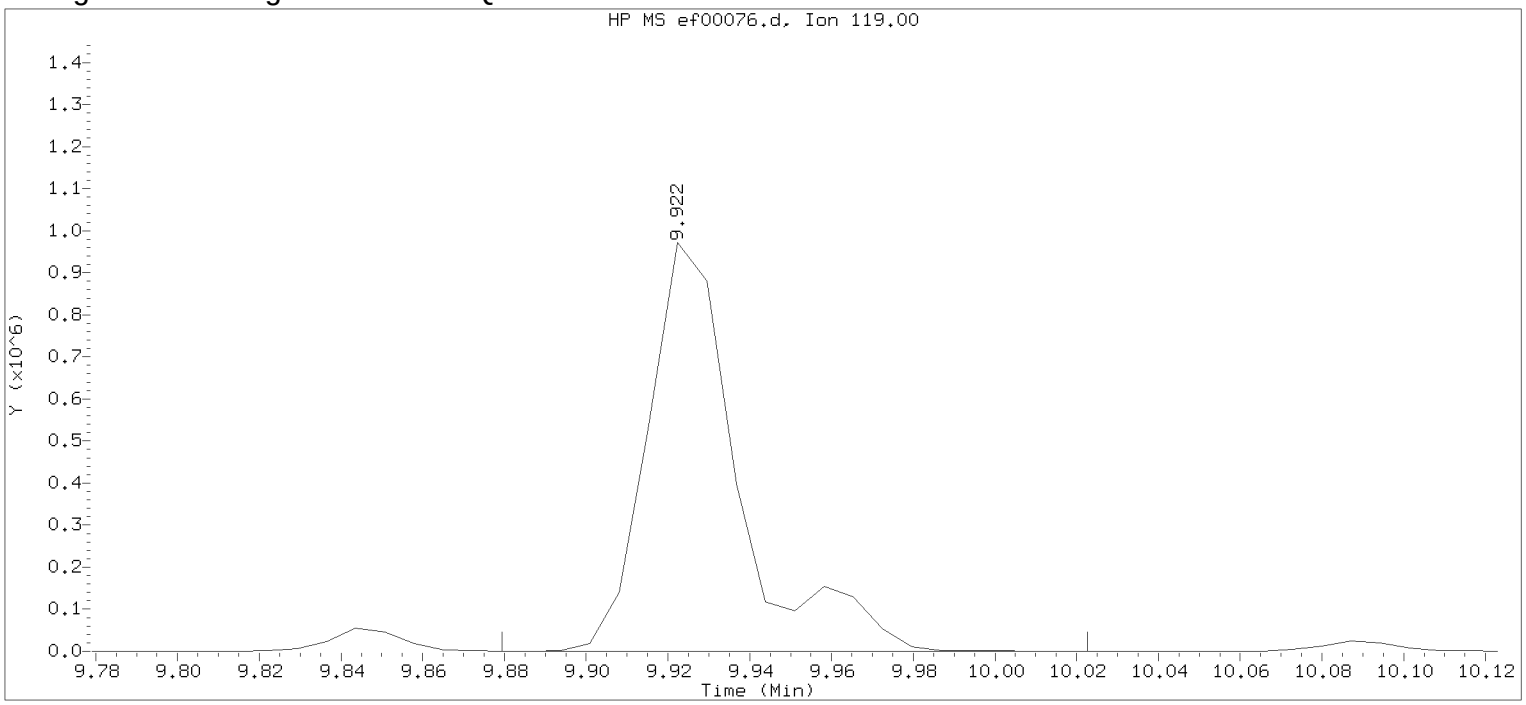
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:35.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00076.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 17:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:32 Unknown

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 1507082
Concentration (ppb(v)) : 9.7041
Integration start scan : 1366 Integration stop scan: 1386
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:35.
Target 3.5 esignature user ID: jeb07445

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

Data file: /chem/HP22820.i/18jun05.b/ef00079.d Injection date and time: **05-JUN-2018 19:41**
Data file Sample Info. Line: cc820;200;E1815630AA;cc820;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1815630AA**
Date, time and analyst ID of latest file update: 14-Aug-2018 18:18 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun05.b/ef00074.d**

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 05-JUN-2018 14:56
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun05.b/ef00072.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	5.467(0.000)	751	130	286920 (-10)	10.00		190832 - 445272
51) 1,4-Difluorobenzene	6.291(0.000)	866	114	1057537 (-9)	10.00		700823 - 1635253
71) Chlorobenzene-d5	8.497(0.000)	1174	117	1030448 (-7)	10.00		662513 - 1545863

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)			Not Detected					0.5	1
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)			Not Detected					0.2	1
7) 1,3-Butadiene	(1)			Not Detected					0.4	2
8) Bromomethane	(1)			Not Detected					0.5	1
9) Chloroethane	(1)			Not Detected					0.2	1
10) Bromoethene	(1)			Not Detected					0.4	2
11) Dichlorofluoromethane	(1)			Not Detected					0.2	1
12) Trichlorofluoromethane	(1)			Not Detected					0.2	1
13) Pentane	(1)			Not Detected					0.5	1
14) Ethanol	(1)			Not Detected					0.5	2
15) Freon123a	(1)			Not Detected					0.2	1
16) Acrolein	(1)			Not Detected					1	2
17) 1,1-Dichloroethene	(1)			Not Detected					0.2	1
18) Freon 113	(1)			Not Detected					0.5	2
19) Acetone	(1)			Not Detected					0.5	2
20) Methyl Iodide	(1)			Not Detected					0.2	1
21) Carbon Disulfide	(1)			Not Detected					0.5	1
22) Isopropanol	(1)			Not Detected					0.5	2
23) Acetonitrile	(1)			Not Detected					0.5	2
24) 3-Chloropropene	(1)			Not Detected					0.2	1
25) Methylene Chloride	(1)			Not Detected					0.2	1
26) tert-Butyl Alcohol	(1)			Not Detected					0.5	1
27) Acrylonitrile	(1)			Not Detected					0.5	2
28) trans-1,2-Dichloroethene	(1)			Not Detected					0.2	1
29) Methyl t-Butyl Ether	(1)			Not Detected					0.2	1
30) Hexane	(1)			Not Detected					0.2	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.2	1
32) Vinyl Acetate	(1)			Not Detected					1	1
33) Di-Isopropyl Ether	(1)			Not Detected					0.2	1
34) Ethyl Tert-Butyl Ether	(1)			Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.2	1
36) 1,2-Dichloroethene (total)	(1)			Not Detected					0.2	1
37) 2-Butanone	(1)			Not Detected					0.5	2
38) Ethyl Acetate	(1)			Not Detected					0.5	1
39) Methyl Acrylate	(1)			Not Detected					0.2	1
41) Tetrahydrofuran	(1)			Not Detected					0.5	1
42) Chloroform	(1)			Not Detected					0.2	1
43) 1,1,1-Trichloroethane	(1)			Not Detected					0.2	1
44) Cyclohexane	(1)			Not Detected					0.2	1

Digitally signed by Jacob E. Bailey on 08/14/2018 at 18:19. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun05.b/ef00079.d Injection date and time: **05-JUN-2018 19:41**
Data file Sample Info. Line: cc820;200;E1815630AA;cc820;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1815630AA**
Date, time and analyst ID of latest file update: 14-Aug-2018 18:18 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun05.b/ef00074.d**

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 05-JUN-2018 14:56
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun05.b/ef00072.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
45) Carbon Tetrachloride	(1)				Not Detected					0.2	1
46) Benzene	(2)				Not Detected					0.2	1
47) 1,2-Dichloroethane	(2)				Not Detected					0.2	1
48) Isooctane	(2)				Not Detected					0.2	1
49) Tert-Amyl Methyl Ether	(2)				Not Detected					0.2	1
50) Heptane	(2)				Not Detected					0.5	1
52) Trichloroethene	(2)				Not Detected					0.2	1
53) Ethyl Acrylate	(2)				Not Detected					0.2	1
54) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
55) Dibromomethane	(2)				Not Detected					0.2	1
56) 1,4-Dioxane	(2)				Not Detected					0.5	1
57) Methyl Methacrylate	(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)				Not Detected					0.2	1
62) Octane	(3)				Not Detected					0.2	1
63) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
64) 1,3-Dichloropropene (total)	(3)				Not Detected					0.2	1
65) Ethyl Methacrylate	(3)				Not Detected					0.2	1
66) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
67) Tetrachloroethene	(3)				Not Detected					0.2	1
68) 2-Hexanone	(3)				Not Detected					0.5	2
69) Dibromochloromethane	(3)				Not Detected					0.2	1
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)				Not Detected					0.2	1
75) m/p-Xylene	(3)				Not Detected					0.2	1
76) o-Xylene	(3)				Not Detected					0.2	1
77) Xylene (total)	(3)				Not Detected					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
84) n-Propylbenzene	(3)				Not Detected					0.5	1
85) 2-Chlorotoluene	(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
88) Alpha Methyl Styrene	(3)				Not Detected					0.2	1
89) tert-Butylbenzene	(3)				Not Detected					0.5	1
90) 1,2,4-Trimethylbenzene	(3)				Not Detected					0.2	1
91) sec-Butylbenzene	(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
94) p-Isopropyltoluene	(3)				Not Detected					0.2	1
95) Benzyl Chloride	(3)				Not Detected					0.5	1
96) 1,2-Dichlorobenzene	(3)				Not Detected					0.2	1
97) n-Butylbenzene	(3)				Not Detected					0.2	1
98) Hexachloroethane	(3)				Not Detected					0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)				Not Detected					0.2	1
100) 1,2,4-Trichlorobenzene	(3)				Not Detected					0.5	2

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun05.b/ef00079.d Injection date and time: **05-JUN-2018 19:41**
Data file Sample Info. Line: cc820;200;E1815630AA;cc820;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1815630AA**
Date, time and analyst ID of latest file update: 14-Aug-2018 18:18 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun05.b/ef00074.d**

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 05-JUN-2018 14:56
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun05.b/ef00072.d**

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

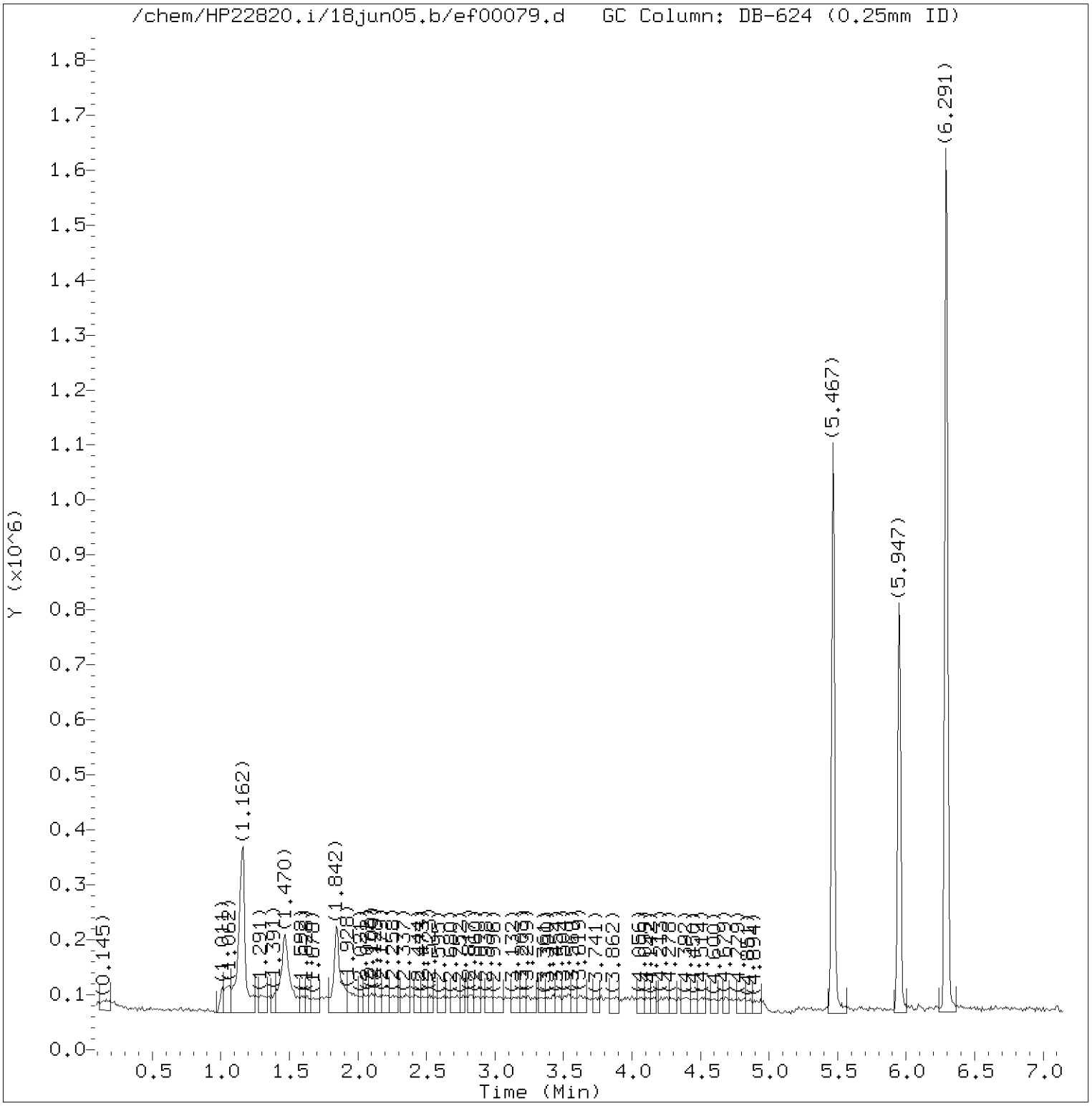
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
101) Hexachlorobutadiene	(3)				Not Detected					0.4	2
102) Naphthalene	(3)				Not Detected					0.4	1

Total number of targets = 99

Digitally signed by Jacob E. Bailey on 08/14/2018 at 18:19. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 10/04/2018 at 12:36. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

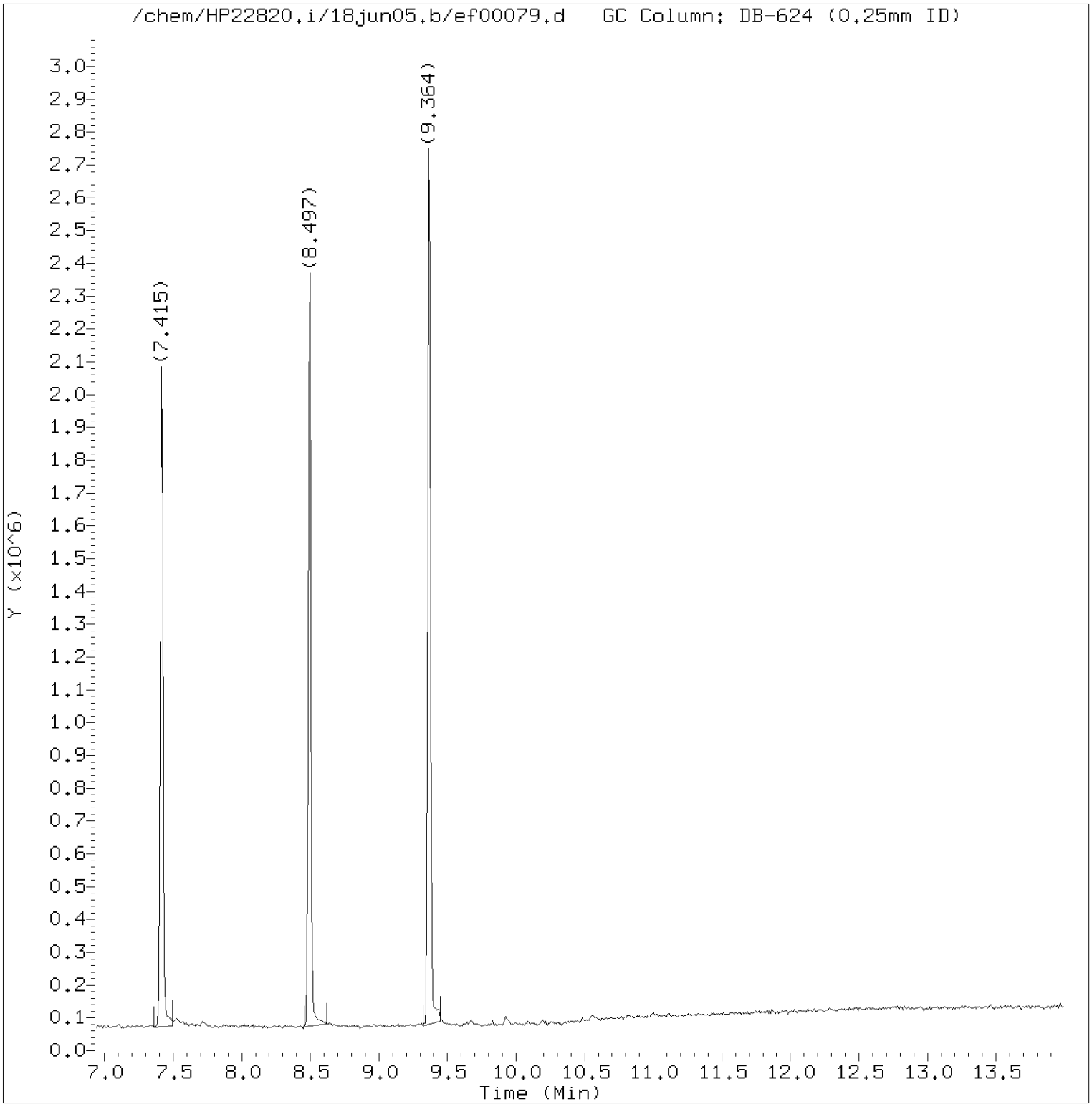
Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00079.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 19:41 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 14-Aug-2018 18:18 jeb07445

Sample Name: cc820 Lab Sample ID: cc820

Digitally signed by Jacob E. Bailey
on 08/14/2018 at 18:19.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00079.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 19:41 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 14-Aug-2018 18:18 jeb07445

Sample Name: cc820 Lab Sample ID: cc820

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on 08/14/2018 at 18:19.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00079.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 19:41 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 14-Aug-2018 18:18 jeb07445

Sample Name: cc820 Lab Sample ID: cc820

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	286920	10.000
51)*1,4-Difluorobenzene	(2)	6.291	114	1057537	10.000
71)*Chlorobenzene-d5	(3)	8.497	117	1030448	10.000

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 08/14/2018 at 18:19.
Target 3.5 esignature user ID: jeb07445

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

Data file: /chem/HP22820.i/18jun05.b/ef00080.d Injection date and time: **05-JUN-2018 20:14**
Data file Sample Info. Line: cc1352;200;E1815630AA;cc1352;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1815630AA**
Date, time and analyst ID of latest file update: 14-Aug-2018 18:18 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun05.b/ef00074.d**

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 05-JUN-2018 14:56
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun05.b/ef00072.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	5.467(0.000)	751	130	278563 (-12)	10.00		190832 - 445272
51) 1,4-Difluorobenzene	6.291(0.000)	866	114	1002612 (-14)	10.00		700823 - 1635253
71) Chlorobenzene-d5	8.497(0.000)	1174	117	997814 (-10)	10.00		662513 - 1545863

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)			Not Detected					0.5	1
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)			Not Detected					0.2	1
7) 1,3-Butadiene	(1)			Not Detected					0.4	2
8) Bromomethane	(1)			Not Detected					0.5	1
9) Chloroethane	(1)			Not Detected					0.2	1
10) Bromoethene	(1)			Not Detected					0.4	2
11) Dichlorofluoromethane	(1)			Not Detected					0.2	1
12) Trichlorofluoromethane	(1)			Not Detected					0.2	1
13) Pentane	(1)			Not Detected					0.5	1
14) Ethanol	(1)			Not Detected					0.5	2
15) Freon123a	(1)			Not Detected					0.2	1
16) Acrolein	(1)			Not Detected					1	2
17) 1,1-Dichloroethene	(1)			Not Detected					0.2	1
18) Freon 113	(1)			Not Detected					0.5	2
19) Acetone	(1)			Not Detected					0.5	2
20) Methyl Iodide	(1)			Not Detected					0.2	1
21) Carbon Disulfide	(1)			Not Detected					0.5	1
22) Isopropanol	(1)			Not Detected					0.5	2
23) Acetonitrile	(1)			Not Detected					0.5	2
24) 3-Chloropropene	(1)			Not Detected					0.2	1
25) Methylene Chloride	(1)			Not Detected					0.2	1
26) tert-Butyl Alcohol	(1)			Not Detected					0.5	1
27) Acrylonitrile	(1)			Not Detected					0.5	2
28) trans-1,2-Dichloroethene	(1)			Not Detected					0.2	1
29) Methyl t-Butyl Ether	(1)			Not Detected					0.2	1
30) Hexane	(1)			Not Detected					0.2	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.2	1
32) Vinyl Acetate	(1)			Not Detected					1	1
33) Di-Isopropyl Ether	(1)			Not Detected					0.2	1
34) Ethyl Tert-Butyl Ether	(1)			Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.2	1
36) 1,2-Dichloroethene (total)	(1)			Not Detected					0.2	1
37) 2-Butanone	(1)			Not Detected					0.5	2
38) Ethyl Acetate	(1)			Not Detected					0.5	1
39) Methyl Acrylate	(1)			Not Detected					0.2	1
41) Tetrahydrofuran	(1)			Not Detected					0.5	1
42) Chloroform	(1)			Not Detected					0.2	1
43) 1,1,1-Trichloroethane	(1)			Not Detected					0.2	1
44) Cyclohexane	(1)			Not Detected					0.2	1

Digitally signed by Jacob E. Bailey on 08/14/2018 at 18:19. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun05.b/ef00080.d Injection date and time: **05-JUN-2018 20:14**
Data file Sample Info. Line: cc1352;200;E1815630AA;cc1352;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1815630AA**
Date, time and analyst ID of latest file update: 14-Aug-2018 18:18 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun05.b/ef00074.d**

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 05-JUN-2018 14:56
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun05.b/ef00072.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
45) Carbon Tetrachloride	(1)			Not Detected					0.2	1
46) Benzene	(2)			Not Detected					0.2	1
47) 1,2-Dichloroethane	(2)			Not Detected					0.2	1
48) Isooctane	(2)			Not Detected					0.2	1
49) Tert-Amyl Methyl Ether	(2)			Not Detected					0.2	1
50) Heptane	(2)			Not Detected					0.5	1
52) Trichloroethene	(2)			Not Detected					0.2	1
53) Ethyl Acrylate	(2)			Not Detected					0.2	1
54) 1,2-Dichloropropane	(2)			Not Detected					0.2	1
55) Dibromomethane	(2)			Not Detected					0.2	1
56) 1,4-Dioxane	(2)			Not Detected					0.5	1
57) Methyl Methacrylate	(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)			Not Detected					0.2	1
62) Octane	(3)			Not Detected					0.2	1
63) trans-1,3-Dichloropropene	(3)			Not Detected					0.2	1
64) 1,3-Dichloropropene (total)	(3)			Not Detected					0.2	1
65) Ethyl Methacrylate	(3)			Not Detected					0.2	1
66) 1,1,2-Trichloroethane	(3)			Not Detected					0.2	1
67) Tetrachloroethene	(3)			Not Detected					0.2	1
68) 2-Hexanone	(3)			Not Detected					0.5	2
69) Dibromochloromethane	(3)			Not Detected					0.2	1
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)			Not Detected					0.2	1
75) m/p-Xylene	(3)			Not Detected					0.2	1
76) o-Xylene	(3)			Not Detected					0.2	1
77) Xylene (total)	(3)			Not Detected					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
84) n-Propylbenzene	(3)			Not Detected					0.5	1
85) 2-Chlorotoluene	(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
88) Alpha Methyl Styrene	(3)			Not Detected					0.2	1
89) tert-Butylbenzene	(3)			Not Detected					0.5	1
90) 1,2,4-Trimethylbenzene	(3)			Not Detected					0.2	1
91) sec-Butylbenzene	(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
94) p-Isopropyltoluene	(3)			Not Detected					0.2	1
95) Benzyl Chloride	(3)			Not Detected					0.5	1
96) 1,2-Dichlorobenzene	(3)			Not Detected					0.2	1
97) n-Butylbenzene	(3)			Not Detected					0.2	1
98) Hexachloroethane	(3)			Not Detected					0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)			Not Detected					0.2	1
100) 1,2,4-Trichlorobenzene	(3)			Not Detected					0.5	2

Digitally signed by Jacob E. Bailey on 08/14/2018 at 18:19. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun05.b/ef00080.d Injection date and time: **05-JUN-2018 20:14**
Data file Sample Info. Line: cc1352;200;E1815630AA;cc1352;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1815630AA**
Date, time and analyst ID of latest file update: 14-Aug-2018 18:18 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun05.b/ef00074.d**

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 05-JUN-2018 14:56
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun05.b/ef00072.d**

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

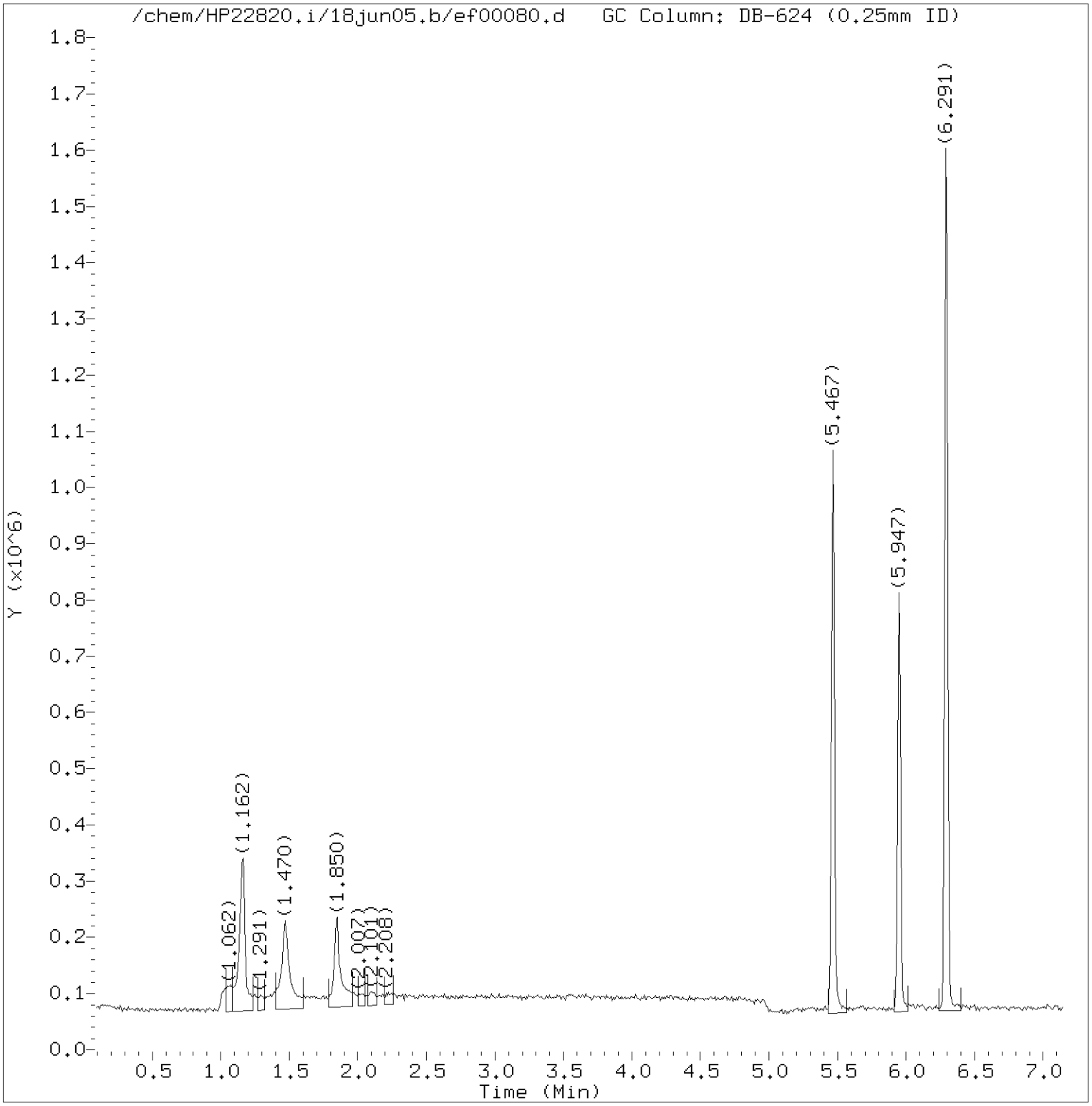
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
101) Hexachlorobutadiene	(3)				Not Detected					0.4	2
102) Naphthalene	(3)				Not Detected					0.4	1

Total number of targets = 99

Digitally signed by Jacob E. Bailey on 08/14/2018 at 18:19. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 10/04/2018 at 12:36. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

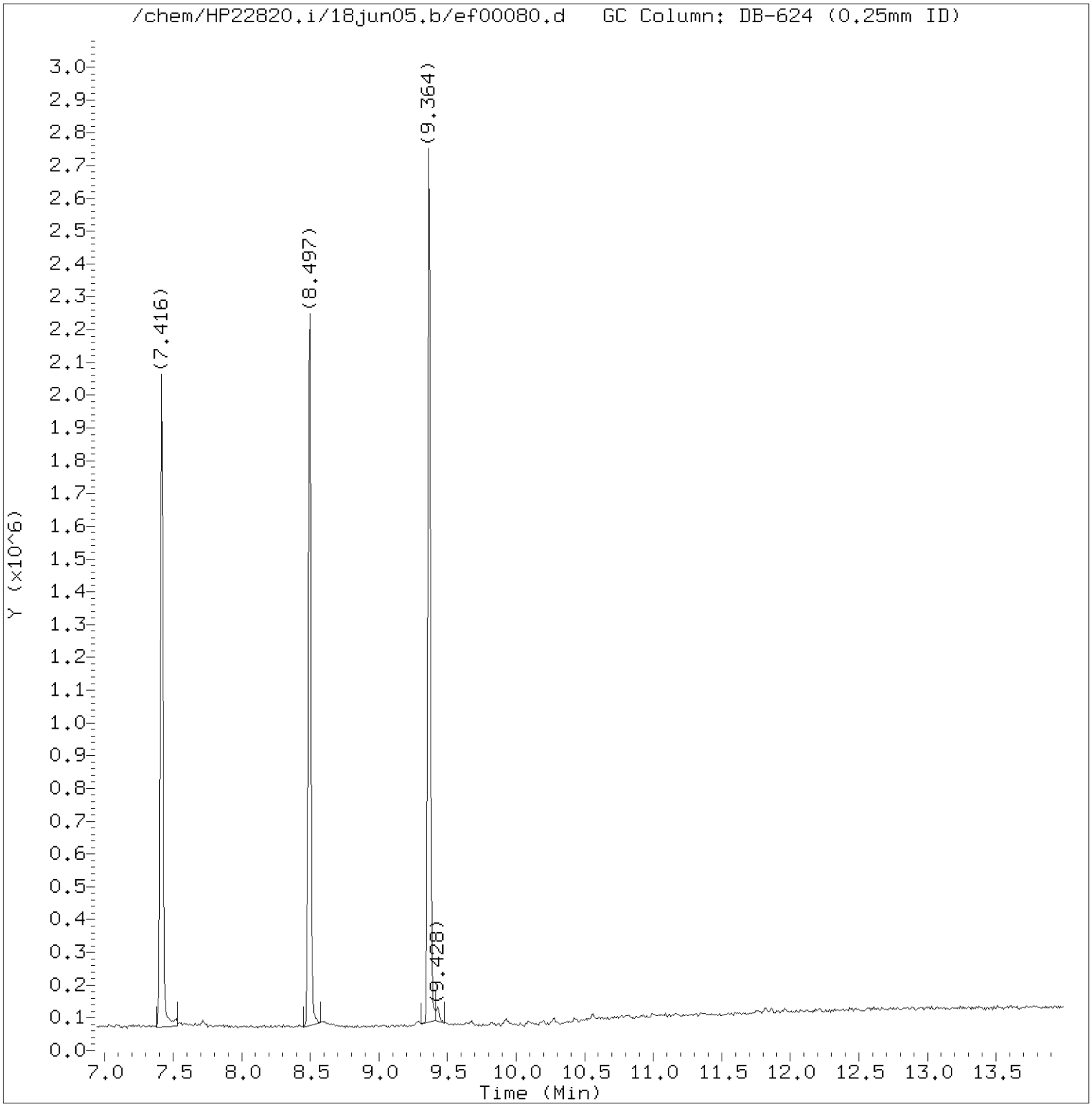
Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00080.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 20:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 14-Aug-2018 18:18 jeb07445

Sample Name: cc1352 Lab Sample ID: cc1352

Digitally signed by Jacob E. Bailey
on 08/14/2018 at 18:19.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00080.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 20:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 14-Aug-2018 18:18 jeb07445

Sample Name: cc1352 Lab Sample ID: cc1352

Digitally signed by Jacob E. Bailey
on 08/14/2018 at 18:19.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00080.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 20:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 14-Aug-2018 18:18 jeb07445

Sample Name: cc1352 Lab Sample ID: cc1352

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	278563	10.000
51)*1,4-Difluorobenzene	(2)	6.291	114	1002612	10.000
71)*Chlorobenzene-d5	(3)	8.497	117	997814	10.000

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 08/14/2018 at 18:19.
Target 3.5 esignature user ID: jeb07445

Lancaster Laboratories
Volatiles in Air
Runlog for Agilent GC/MS System HP22820 **HP #05**

Data Directory Path is - D:\data\18jun10\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
jeb07445	EF00110.D	50NGBFB	06/10/2018	17:35		
jeb07445	EF00111.D	VSTD010	06/10/2018	18:23		
jeb07445	EF00112.D	VSTD005	06/10/2018	18:50		
jeb07445	EF00113.D	VSTD002	06/10/2018	19:15		
jeb07445	EF00114.D	VSTD001	06/10/2018	19:38		
jeb07445	EF00115.D	VSTD0.50	06/10/2018	20:02		
jeb07445	EF00116.D	VSTD025	06/10/2018	20:29		
jeb07445	EF00117.D	VSTD070	06/10/2018	21:06		
jeb07445	EF00118.D	VBLKE04	06/10/2018	21:38	E1816130AA	
jeb07445	EF00119.D	VBLKE04	06/10/2018	22:11	E1816130AA	
jeb07445	EF00120.D	VBLKE04	06/10/2018	22:43	E1816130AA	
jeb07445	EF00121.D	VBLKE04	06/10/2018	23:16	E1816130AA	
jeb07445	EF00122.D	VBLKE04	06/10/2018	23:48	E1816130AA	
jeb07445	EF00123.D	LCSE04	06/11/2018	00:21	E1816130AA	
jeb07445	EF00124.D	LCSDE04	06/11/2018	00:53	E1816130AA	
jeb07445	EF00125.D	LCSDE04	06/11/2018	01:26	E1816130AA	
jeb07445	EF00126.D	mdlv0.5	06/11/2018	01:58	E1816130AA	
jeb07445	EF00127.D	mdlv0.2	06/11/2018	02:25	E1816130AA	

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

SDG No.:

Lab File ID: ef00110.d

BFB Injection Date: 06/10/2018

Instrument ID: 22820

BFB Injection Time: 17:35

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0% - 40.0% of mass 95	19.64
75	30.0% - 66.0% of mass 95	50.50
95	Base peak, 100% relative abundance	100.00
96	5.0% - 9.0% of mass 95	6.55
173	< 2.0% of mass 174	0.43 (0.56)
174	> 50.0% of mass 95	77.01
175	4.0% - 9.0% of mass 174	5.45 (7.08)
176	93.0% - 101.0% of mass 174	74.08 (96.19)
177	5.0% - 9.0% of mass 176	4.96 (6.70)

THIS CHECK APPLIES TO THE FOLLOWING:

LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD010	ef00111.d	06/10/2018	18:23
VSTD005	ef00112.d	06/10/2018	18:50
VSTD002	ef00113.d	06/10/2018	19:15
VSTD001	ef00114.d	06/10/2018	19:38
VSTD025	ef00116.d	06/10/2018	20:29
VSTD070	ef00117.d	06/10/2018	21:06
VBLKE04	ef00122.d	06/10/2018	23:48
LCSE04	ef00123.d	06/11/2018	00:21
LCSDE04	ef00124.d	06/11/2018	00:53
mdlv0.5	ef00126.d	06/11/2018	01:58
mdlv0.2	ef00127.d	06/11/2018	02:25

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FORM 06
VOLATILE ORGANICS IN AIR
INITIAL CALIBRATION DATA

SDG No.:

Instrument ID: 22820 Calibration Start Date: 06/10/2018 Calibration End Date: 06/10/2018

Calibration Start Time: 18:23 Calibration End Time: 21:06

LAB FILE IDs:
RRF 1 = ef00114.d RRF 2 = ef00113.d RRF 5 = ef00112.d RRF 10 = ef00111.d RRF 25 = ef00116.d
RRF 70 = ef00117.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
Propene	0.536	0.458	0.443	0.458	0.460	0.480	0.473	7	AVG
Dichlorodifluoromethane	1.778	1.559	1.611	1.657	1.648	1.679	1.655	4	AVG
Chlorodifluoromethane	1.194	1.045	1.009	1.014	1.017	1.018	1.050	7	AVG
Freon 114	2.130	1.715	1.660	1.734	1.686	1.734	1.777	10	AVG
Chloromethane	0.795	0.659	0.623	0.644	0.643	0.634	0.666	10	AVG
Vinyl Chloride	0.671	0.625	0.611	0.639	0.628	0.648	0.637	3	AVG
1,3-Butadiene	0.484	0.455	0.422	0.450	0.451	0.488	0.458	5	AVG
Bromomethane	0.602	0.487	0.496	0.544	0.538	0.587	0.542	9	AVG
Chloroethane	0.391	0.342	0.343	0.355	0.348	0.351	0.355	5	AVG
Bromoethene	0.553	0.525	0.545	0.553	0.552	0.588	0.553	4	AVG
Dichlorofluoromethane	1.477	1.353	1.392	1.415	1.417	1.420	1.412	3	AVG
Trichlorofluoromethane	2.163	1.760	1.639	1.685	1.674	1.693	1.769	11	AVG
Pentane	1.169	0.979	0.929	0.974	0.985	1.049	1.014	8	AVG
Ethanol	0.176	0.246	0.219	0.220	0.223	0.243	0.221	11	AVG
Freon123a	1.665	1.323	1.218	1.227	1.222	1.213	1.311	14	AVG
Acrolein	0.268	0.209	0.214	0.229	0.232	0.258	0.235	10	AVG
1,1-Dichloroethene	0.977	0.890	0.932	0.999	0.981	1.038	0.969	5	AVG
Freon 113	1.291	1.033	0.921	0.928	0.910	0.908	0.998	15	AVG
Acetone	1.208	0.910	0.898	0.939	0.915	0.949	0.970	12	AVG
Methyl Iodide	1.706	1.542	1.604	1.581	1.588	1.488	1.585	5	AVG
Carbon Disulfide	1.884	1.698	1.776	1.877	1.804	1.848	1.814	4	AVG
Isopropanol	0.906	0.755	0.772	0.793	0.788	0.911	0.821	8	AVG
Acetonitrile	0.515	0.475	0.449	0.395	0.376	0.371	0.430	14	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: 22820 Calibration Start Date: 06/10/2018 Calibration End Date: 06/10/2018

Calibration Start Time: 18:23 Calibration End Time: 21:06

LAB FILE IDs:
RRF 1 = ef00114.d RRF 2 = ef00113.d RRF 5 = ef00112.d RRF 10 = ef00111.d RRF 25 = ef00116.d
RRF 70 = ef00117.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
3-Chloropropene	0.267	0.232	0.232	0.246	0.242	0.263	0.247	6	AVG
Methylene Chloride	0.574	0.525	0.533	0.538	0.531	0.532	0.539	3	AVG
tert-Butyl Alcohol	0.985	0.844	0.845	0.904	0.887	1.036	0.917	8	AVG
Acrylonitrile	0.546	0.503	0.524	0.530	0.542	0.563	0.535	4	AVG
trans-1,2-Dichloroethene	0.906	0.852	0.848	0.904	0.911	0.941	0.894	4	AVG
Methyl t-Butyl Ether	1.707	1.502	1.419	1.459	1.503	1.570	1.527	7	AVG
Hexane	1.102	0.877	0.800	0.864	0.890	0.936	0.912	11	AVG
1,1-Dichloroethane	1.482	1.171	1.151	1.181	1.158	1.200	1.224	10	AVG
Vinyl Acetate	0.135	0.107	0.119	0.127	0.136	0.154	0.130	12	AVG
Di-Isopropyl Ether	2.174	1.864	1.834	1.913	2.001	2.066	1.975	7	AVG
Ethyl Tert-Butyl Ether	1.385	1.225	1.287	1.300	1.332	1.473	1.334	6	AVG
cis-1,2-Dichloroethene	0.903	0.776	0.789	0.835	0.830	0.885	0.836	6	AVG
2-Butanone	0.380	0.289	0.277	0.300	0.315	0.331	0.315	12	AVG
Ethyl Acetate	0.169	0.174	0.141	0.150	0.140	0.153	0.155	9	AVG
Methyl Acrylate	1.097	0.950	0.924	1.021	1.039	1.120	1.025	8	AVG
Tetrahydrofuran	0.803	0.708	0.629	0.647	0.663	0.711	0.694	9	AVG
Chloroform	1.724	1.387	1.385	1.425	1.390	1.411	1.454	9	AVG
1,1,1-Trichloroethane	1.549	1.328	1.271	1.287	1.284	1.329	1.341	8	AVG
Cyclohexane	1.104	0.885	0.888	0.922	0.971	0.987	0.960	9	AVG
Carbon Tetrachloride	1.495	1.247	1.228	1.262	1.281	1.363	1.313	8	AVG
Benzene	0.792	0.583	0.554	0.570	0.582	0.595	0.613	14	AVG
1,2-Dichloroethane	0.354	0.288	0.262	0.271	0.273	0.275	0.287	12	AVG
Isooctane	0.847	0.783	0.765	0.823	0.873	0.911	0.834	7	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: 22820 Calibration Start Date: 06/10/2018 Calibration End Date: 06/10/2018

Calibration Start Time: 18:23 Calibration End Time: 21:06

LAB FILE IDs:
RRF 1 = ef00114.d RRF 2 = ef00113.d RRF 5 = ef00112.d RRF 10 = ef00111.d RRF 25 = ef00116.d
RRF 70 = ef00117.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
Tert-Amyl Methyl Ether	0.422	0.370	0.363	0.373	0.390	0.414	0.388	6	AVG
Heptane	0.383	0.298	0.288	0.304	0.333	0.331	0.323	11	AVG
Trichloroethene	0.341	0.268	0.233	0.250	0.251	0.266	0.268	14	AVG
Ethyl Acrylate	0.435	0.345	0.335	0.346	0.379	0.418	0.376	11	AVG
1,2-Dichloropropane	0.299	0.237	0.207	0.212	0.224	0.225	0.234	14	AVG
Dibromomethane	0.294	0.248	0.225	0.232	0.231	0.245	0.246	10	AVG
1,4-Dioxane	0.156	0.142	0.125	0.132	0.141	0.147	0.141	8	AVG
Methyl Methacrylate	0.232	0.184	0.171	0.180	0.198	0.214	0.196	12	AVG
Bromodichloromethane	0.594	0.458	0.405	0.426	0.429	0.441	0.459	15	AVG
cis-1,3-Dichloropropene	0.389	0.319	0.299	0.309	0.325	0.362	0.334	10	AVG
4-Methyl-2-Pentanone	0.618	0.413	0.393	0.404	0.447	0.463	0.456	18	AVG
Toluene	0.912	0.718	0.654	0.660	0.692	0.674	0.718	14	AVG
Octane	0.520	0.415	0.399	0.426	0.463	0.444	0.445	10	AVG
trans-1,3-Dichloropropene	0.278	0.247	0.232	0.255	0.269	0.296	0.263	9	AVG
Ethyl Methacrylate	0.324	0.277	0.268	0.300	0.325	0.347	0.307	10	AVG
1,1,2-Trichloroethane	0.354	0.276	0.250	0.255	0.254	0.244	0.272	15	AVG
Tetrachloroethene	0.474	0.372	0.330	0.333	0.345	0.345	0.366	15	AVG
2-Hexanone	0.449	0.392	0.373	0.390	0.430	0.428	0.410	7	AVG
Dibromochloromethane	0.390	0.321	0.296	0.307	0.319	0.328	0.327	10	AVG
1,2-Dibromoethane	0.505	0.395	0.371	0.377	0.387	0.382	0.403	13	AVG
Chlorobenzene	0.771	0.629	0.556	0.563	0.567	0.557	0.607	14	AVG
1,1,1,2-Tetrachloroethane	0.337	0.284	0.277	0.282	0.292	0.300	0.295	7	AVG
Ethylbenzene	1.050	0.885	0.814	0.863	0.918	0.890	0.903	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.

SDG No.:

Instrument ID: 22820 Calibration Start Date: 06/10/2018 Calibration End Date: 06/10/2018

Calibration Start Time: 18:23 Calibration End Time: 21:06

LAB FILE IDs:
RRF 1 = ef00114.d RRF 2 = ef00113.d RRF 5 = ef00112.d RRF 10 = ef00111.d RRF 25 = ef00116.d
RRF 70 = ef00117.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
m/p-Xylene	0.797	0.677	0.622	0.658	0.699	0.686	0.690	9	AVG
o-Xylene	0.771	0.638	0.612	0.654	0.690	0.704	0.678	8	AVG
Styrene	0.540	0.458	0.468	0.510	0.550	0.552	0.513	8	AVG
Bromoform	0.444	0.381	0.353	0.372	0.391	0.413	0.392	8	AVG
Cumene	1.034	0.838	0.820	0.885	0.942	****	0.904	10	AVG
Bromobenzene	0.420	0.358	0.319	0.318	0.328	0.326	0.345	11	AVG
1,1,2,2-Tetrachloroethane	0.825	0.672	0.587	0.591	0.568	0.543	0.631	17	AVG
1,2,3-Trichloropropane	0.230	0.190	0.166	0.170	0.166	0.160	0.180	15	AVG
n-Propylbenzene	0.291	0.253	0.251	0.255	0.279	0.279	0.268	6	AVG
2-Chlorotoluene	0.284	0.250	0.235	0.246	0.263	****	0.256	7	AVG
4-Ethyltoluene	1.023	0.890	0.888	0.949	1.009	0.984	0.957	6	AVG
1,3,5-Trimethylbenzene	0.859	0.759	0.714	0.768	0.801	0.785	0.781	6	AVG
Alpha Methyl Styrene	0.386	0.338	0.327	0.358	0.390	****	0.360	8	AVG
tert-Butylbenzene	0.770	0.643	0.668	0.710	0.752	****	0.708	8	AVG
1,2,4-Trimethylbenzene	0.788	0.729	0.722	0.754	0.814	0.788	0.766	5	AVG
sec-Butylbenzene	1.167	1.041	1.015	1.089	1.171	****	1.097	6	AVG
1,3-Dichlorobenzene	0.708	0.590	0.540	0.550	0.579	0.580	0.591	10	AVG
1,4-Dichlorobenzene	0.701	0.589	0.543	0.545	0.570	0.562	0.585	10	AVG
p-Isopropyltoluene	0.912	0.812	0.799	0.875	0.987	****	0.877	9	AVG
Benzyl Chloride	0.384	0.336	0.352	0.424	0.470	****	0.393	14	AVG
1,2-Dichlorobenzene	0.676	0.535	0.514	0.520	0.532	0.522	0.550	11	AVG
n-Butylbenzene	0.906	0.788	0.789	0.851	0.971	****	0.861	9	AVG
Hexachloroethane	0.246	0.208	0.204	0.228	0.264	****	0.230	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.

SDG No.:

Instrument ID: 22820 Calibration Start Date: 06/10/2018 Calibration End Date: 06/10/2018

Calibration Start Time: 18:23 Calibration End Time: 21:06

LAB FILE IDs:
RRF 1 = ef00114.d RRF 2 = ef00113.d RRF 5 = ef00112.d RRF 10 = ef00111.d RRF 25 = ef00116.d
RRF 70 = ef00117.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
1,2-Dibromo-3-chloropropane	0.290	0.246	0.232	0.237	0.254	0.276	0.256	9	AVG
1,2,4-Trichlorobenzene	0.434	0.345	0.309	0.281	0.367	0.401	0.356	16	AVG
Hexachlorobutadiene	0.363	0.294	0.262	0.244	0.317	****	0.296	16	AVG
Naphthalene	0.758	0.660	0.620	0.595	0.812	****	0.689	13	AVG

Average % RSD: 9

GLE01 Page 941 of 1687

* 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.

Internal Standard
Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP22820.i/18jun10.b/ef00111.d VSTD010
/chem/HP22820.i/18jun10.b/ef00112.d VSTD005
/chem/HP22820.i/18jun10.b/ef00113.d VSTD002
/chem/HP22820.i/18jun10.b/ef00114.d VSTD001
/chem/HP22820.i/18jun10.b/ef00116.d VSTD025
/chem/HP22820.i/18jun10.b/ef00117.d VSTD070

Area Summary

Internal Standard Name	File ID: ef00111.d	ef00112.d	ef00113.d	ef00114.d	ef00116.d	ef00117.d	Avg. Area	%RSD	In Spec
Bromochloromethane	350460	350513	329911	269252	324132	320886	324192	9	Yes
1,4-Difluorobenzene	1215795	1225978	1104263	919098	1099104	1093001	1109540	10	Yes
Chlorobenzene-d5	1215922	1234948	1128684	956834	1101291	1135358	1128840	9	Yes

%RSD of internal standard area is flagged out of spec if greater than 30.

RT Summary

Internal Standard Name	File ID: ef00111.d	ef00112.d	ef00113.d	ef00114.d	ef00116.d	ef00117.d	Avg. RT
Bromochloromethane	5.467	5.467	5.467	5.467	5.467	5.467	5.467
1,4-Difluorobenzene	6.291	6.291	6.291	6.291	6.291	6.291	6.291
Chlorobenzene-d5	8.497	8.497	8.490	8.490	8.490	8.497	8.493

Comments:_____

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Report generated on 06/11/2018 at 12:23

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 LCS File ID: ef00123.d LCSD File ID: ef00124.d

Batch: E1816130AA LCS Injected: 06/11/2018 LCSD Injected: 06/11/2018

Method: EPA TO-15 LCS Client ID: LCSE04 LCSD Client ID: LCSDE04

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	10.00	9.74	9.96	97	100	78-126	2	25	YES
Dichlorodifluoromethane	10.00	10.44	10.51	104	105	74-133	1	25	YES
Chlorodifluoromethane	10.00	10.95	10.70	110	107	70-138	2	25	YES
Freon 114	10.00	10.24	10.12	102	101	66-126	1	25	YES
Chloromethane	10.00	10.53	10.58	105	106	65-140	0	25	YES
Vinyl Chloride	10.00	10.56	10.42	106	104	75-130	1	25	YES
1,3-Butadiene	10.00	9.70	9.96	97	100	72-122	3	25	YES
Bromomethane	10.00	10.60	10.77	106	108	71-133	2	25	YES
Chloroethane	10.00	10.53	10.48	105	105	76-129	0	25	YES
Bromoethene	10.00	10.30	10.34	103	103	77-123	0	25	YES
Dichlorofluoromethane	10.00	11.11	11.15	111	112	75-137	0	25	YES
Trichlorofluoromethane	10.00	10.07	10.08	101	101	73-132	0	25	YES
Pentane	10.00	9.60	9.54	96	95	69-125	1	25	YES
Ethanol	10.00	9.62	10.40	96	104	56-149	8	25	YES
Acrolein	10.00	10.64	10.41	106	104	54-132	2	25	YES
1,1-Dichloroethene	10.00	10.52	10.51	105	105	70-129	0	25	YES
Freon 113	10.00	9.58	9.56	96	96	66-119	0	25	YES
Acetone	10.00	10.65	10.41	106	104	71-136	2	25	YES
Methyl Iodide	10.00	9.89	9.89	99	99	72-127	0	25	YES
Carbon Disulfide	10.00	10.41	10.34	104	103	72-128	1	25	YES
Isopropanol	10.00	9.37	9.11	94	91	69-160	3	25	YES
Acetonitrile	10.00	10.34	10.64	103	106	56-136	3	25	YES
3-Chloropropene	10.00	11.63	11.70	116	117	67-141	1	25	YES
Methylene Chloride	10.00	11.84	11.46	118	115	69-128	3	25	YES
tert-Butyl Alcohol	10.00	8.82	9.19	88	92	71-154	4	25	YES
Acrylonitrile	10.00	11.00	10.77	110	108	68-135	2	25	YES
trans-1,2-Dichloroethene	10.00	10.57	10.49	106	105	77-128	1	25	YES
Methyl t-Butyl Ether	10.00	8.97	8.98	90	90	71-119	0	25	YES
Hexane	10.00	9.46	9.52	95	95	70-118	1	25	YES
1,1-Dichloroethane	10.00	10.08	10.20	101	102	74-129	1	25	YES
Vinyl Acetate	10.00	10.32	10.00	103	100	75-161	3	25	YES
Di-Isopropyl Ether	10.00	9.91	9.93	99	99	71-122	0	25	YES
Ethyl Tert-Butyl Ether	10.00	8.16	8.31	82	83	68-121	2	25	YES
cis-1,2-Dichloroethene	10.00	10.06	10.20	101	102	76-126	1	25	YES
2-Butanone	10.00	9.81	9.97	98	100	75-126	2	25	YES
Ethyl Acetate	10.00	9.08	8.72	91	87	73-124	4	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 LCS File ID: ef00123.d LCSD File ID: ef00124.d

Batch: E1816130AA LCS Injected: 06/11/2018 LCSD Injected: 06/11/2018

Method: EPA TO-15 LCS Client ID: LCSE04 LCSD Client ID: LCSDE04

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	10.00	10.19	10.24	102	102	75-125	0	25	YES
Tetrahydrofuran	10.00	9.94	9.74	99	97	67-127	2	25	YES
Chloroform	10.00	10.13	10.26	101	103	75-127	1	25	YES
1,1,1-Trichloroethane	10.00	9.63	9.59	96	96	74-122	0	25	YES
Cyclohexane	10.00	9.87	9.96	99	100	70-118	1	25	YES
Carbon Tetrachloride	10.00	10.02	10.07	100	101	72-127	1	25	YES
Benzene	10.00	10.08	9.90	101	99	76-123	2	25	YES
1,2-Dichloroethane	10.00	10.62	10.43	106	104	72-138	2	25	YES
Isooctane	10.00	10.37	10.40	104	104	74-127	0	25	YES
Tert-Amyl Methyl Ether	10.00	8.61	8.60	86	86	78-124	0	25	YES
Heptane	10.00	10.16	9.66	102	97	74-122	5	25	YES
Trichloroethene	10.00	10.11	9.77	101	98	76-118	3	25	YES
Ethyl Acrylate	10.00	9.51	9.50	95	95	71-126	0	25	YES
1,2-Dichloropropane	10.00	10.13	10.29	101	103	75-127	2	25	YES
Dibromomethane	10.00	10.19	10.19	102	102	76-124	0	25	YES
1,4-Dioxane	10.00	10.32	10.17	103	102	76-124	1	25	YES
Methyl Methacrylate	10.00	9.50	9.47	95	95	73-117	0	25	YES
Bromodichloromethane	10.00	9.99	9.88	100	99	75-134	1	25	YES
cis-1,3-Dichloropropene	10.00	9.28	9.14	93	91	51-120	2	25	YES
4-Methyl-2-Pentanone	10.00	9.85	9.71	99	97	79-131	1	25	YES
Toluene	10.00	10.21	10.08	102	101	78-119	1	25	YES
Octane	10.00	10.50	10.29	105	103	73-122	2	25	YES
trans-1,3-Dichloropropene	10.00	9.06	9.17	91	92	76-131	1	25	YES
Ethyl Methacrylate	10.00	9.56	9.60	96	96	69-137	0	25	YES
1,1,2-Trichloroethane	10.00	10.25	10.16	102	102	76-127	1	25	YES
Tetrachloroethene	10.00	9.75	9.62	97	96	68-123	1	25	YES
2-Hexanone	10.00	10.16	9.87	102	99	74-134	3	25	YES
Dibromochloromethane	10.00	10.29	10.26	103	103	74-131	0	25	YES
1,2-Dibromoethane	10.00	10.25	10.04	102	100	73-121	2	25	YES
Chlorobenzene	10.00	9.99	9.85	100	99	76-117	1	25	YES
1,1,1,2-Tetrachloroethane	10.00	10.37	10.23	104	102	73-137	1	25	YES
Ethylbenzene	10.00	10.27	10.07	103	101	77-117	2	25	YES
m/p-Xylene	10.00	10.14	10.10	101	101	78-119	0	25	YES
o-Xylene	10.00	10.44	10.22	104	102	78-121	2	25	YES
Xylene (total)	20.00	20.58	20.32	103	102	79-120	1	25	YES
Styrene	10.00	10.94	10.72	109	107	77-143	2	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 LCS File ID: ef00123.d LCSD File ID: ef00124.d

Batch: E1816130AA LCS Injected: 06/11/2018 LCSD Injected: 06/11/2018

Method: EPA TO-15 LCS Client ID: LCSE04 LCSD Client ID: LCSDE04

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	10.22	10.17	102	102	58-144	1	25	YES
Cumene	10.00	10.49	10.59	105	106	80-133	1	25	YES
Bromobenzene	10.00	10.00	10.00	100	100	74-118	0	25	YES
1,1,2,2-Tetrachloroethane	10.00	10.62	10.45	106	104	72-133	2	25	YES
1,2,3-Trichloropropane	10.00	10.55	10.29	106	103	71-127	3	25	YES
n-Propylbenzene	10.00	10.49	10.39	105	104	73-120	1	25	YES
2-Chlorotoluene	10.00	10.89	10.55	109	105	74-123	3	25	YES
4-Ethyltoluene	10.00	11.05	11.06	111	111	73-130	0	25	YES
1,3,5-Trimethylbenzene	10.00	11.19	10.90	112	109	72-130	3	25	YES
Alpha Methyl Styrene	10.00	10.86	10.74	109	107	71-138	1	25	YES
tert-Butylbenzene	10.00	11.25	11.16	113	112	78-138	1	25	YES
1,2,4-Trimethylbenzene	10.00	11.36	11.32	114	113	70-138	0	25	YES
sec-Butylbenzene	10.00	11.28	11.14	113	111	79-139	1	25	YES
1,3-Dichlorobenzene	10.00	10.65	10.41	106	104	75-129	2	25	YES
1,4-Dichlorobenzene	10.00	10.34	10.42	103	104	74-123	1	25	YES
p-Isopropyltoluene	10.00	11.53	11.39	115	114	75-145	1	25	YES
Benzyl Chloride	10.00	8.65	8.98	86	90	49-163	4	25	YES
1,2-Dichlorobenzene	10.00	10.48	10.22	105	102	71-126	2	25	YES
n-Butylbenzene	10.00	11.34	11.07	113	111	72-143	2	25	YES
Hexachloroethane	10.00	11.25	11.30	113	113	59-135	0	25	YES
1,2-Dibromo-3-chloropropane	10.00	10.07	10.24	101	102	52-156	2	25	YES
1,2,4-Trichlorobenzene	10.00	9.46	9.67	95	97	45-156	2	25	YES
Hexachlorobutadiene	10.00	10.57	10.61	106	106	49-154	0	25	YES
Naphthalene	10.00	10.17	10.48	102	105	39-152	3	25	YES

COMMENTS:

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Data File: /chem/HP22820.i/18jun10.b/ef00110.d

Date : 10-JUN-2018 17:35

Client ID: 50NGBFB

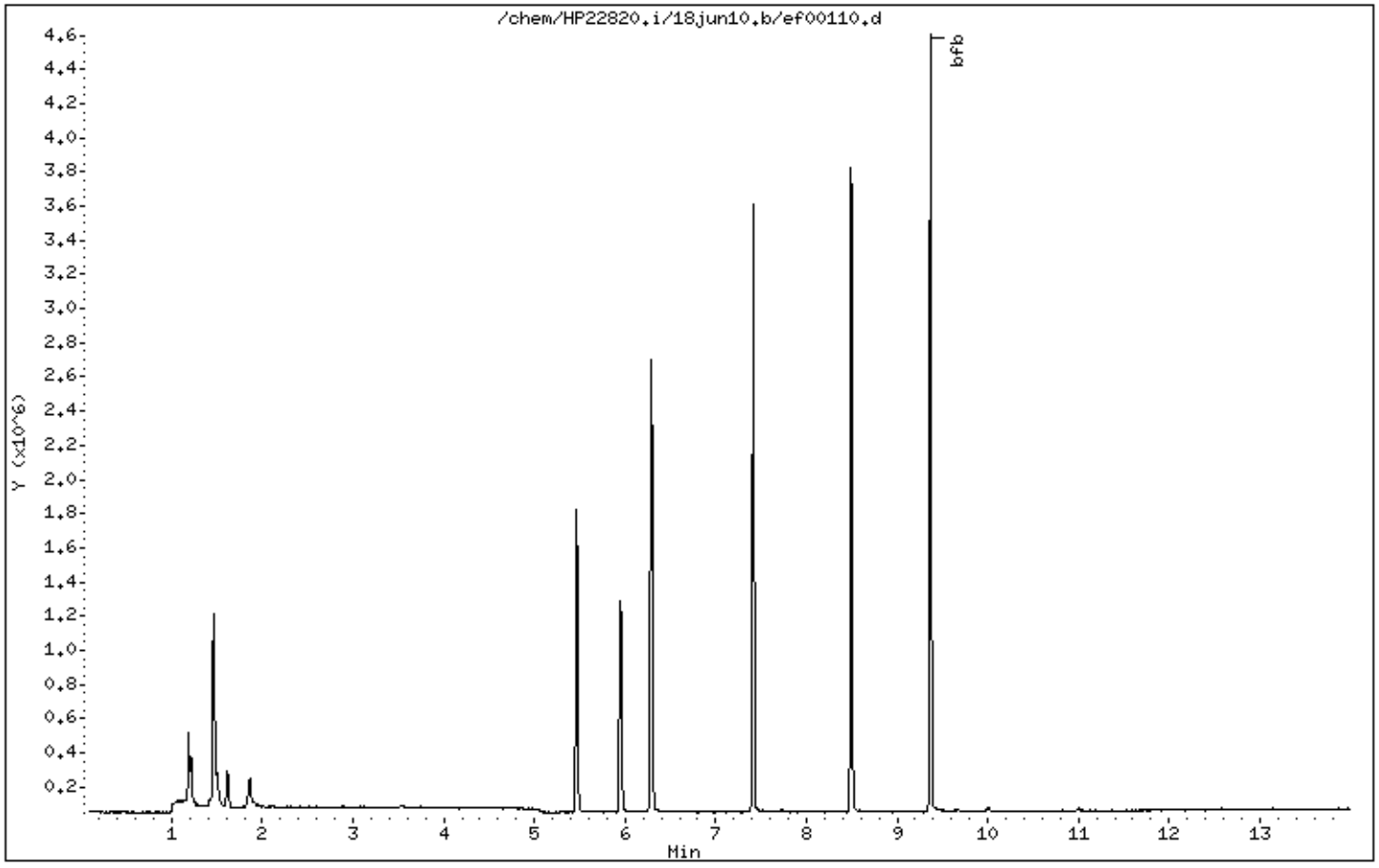
Instrument: HP22820.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25



Digitally signed by Jacob E. Bailey on 06/11/2018 at 12:27.
Target 3.5 esignature user ID: jeb07445

Data File: /chem/HP22820.i/18jun10.b/ef00110.d

Date : 10-JUN-2018 17:35

Client ID: 50NGBFB

Instrument: HP22820.i

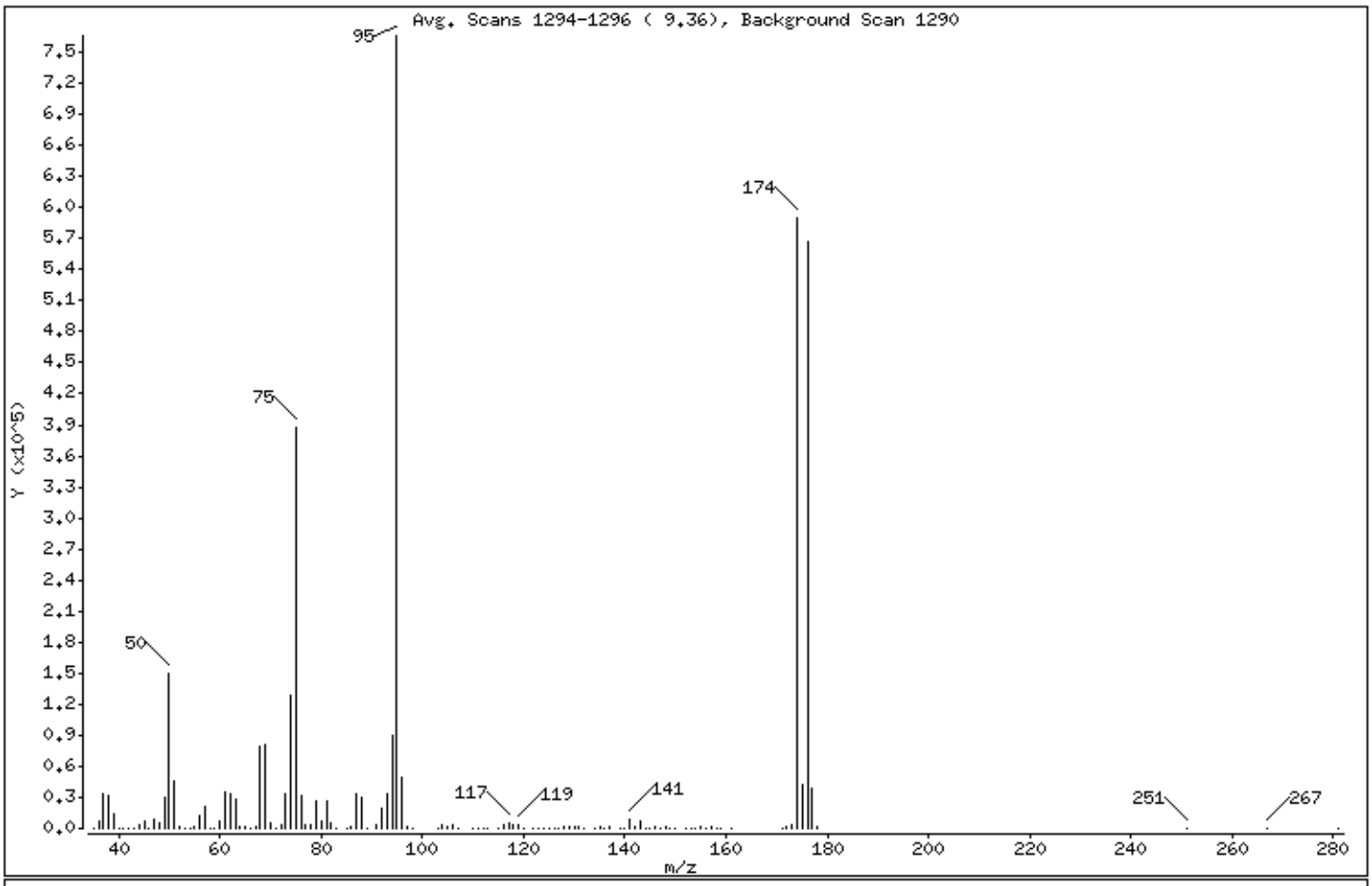
Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	19.64
75	30.00 - 66.00% of mass 95	50.50
96	5.00 - 9.00% of mass 95	6.55
173	Less than 2.00% of mass 174	0.43 (0.56)
174	50.00 - 120.00% of mass 95	77.01
175	4.00 - 9.00% of mass 174	5.45 (7.08)
176	93.00 - 101.00% of mass 174	74.08 (96.19)
177	5.00 - 9.00% of mass 176	4.96 (6.70)

Digitally signed by Jacob E. Bailey on 06/11/2018 at 12:27.
Target 3.5 esignature user ID: jeb07445

Data File: /chem/HP22820.i/18jun10.b/ef00110.d

Date : 10-JUN-2018 17:35

Client ID: 50NGBFB

Instrument: HP22820.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

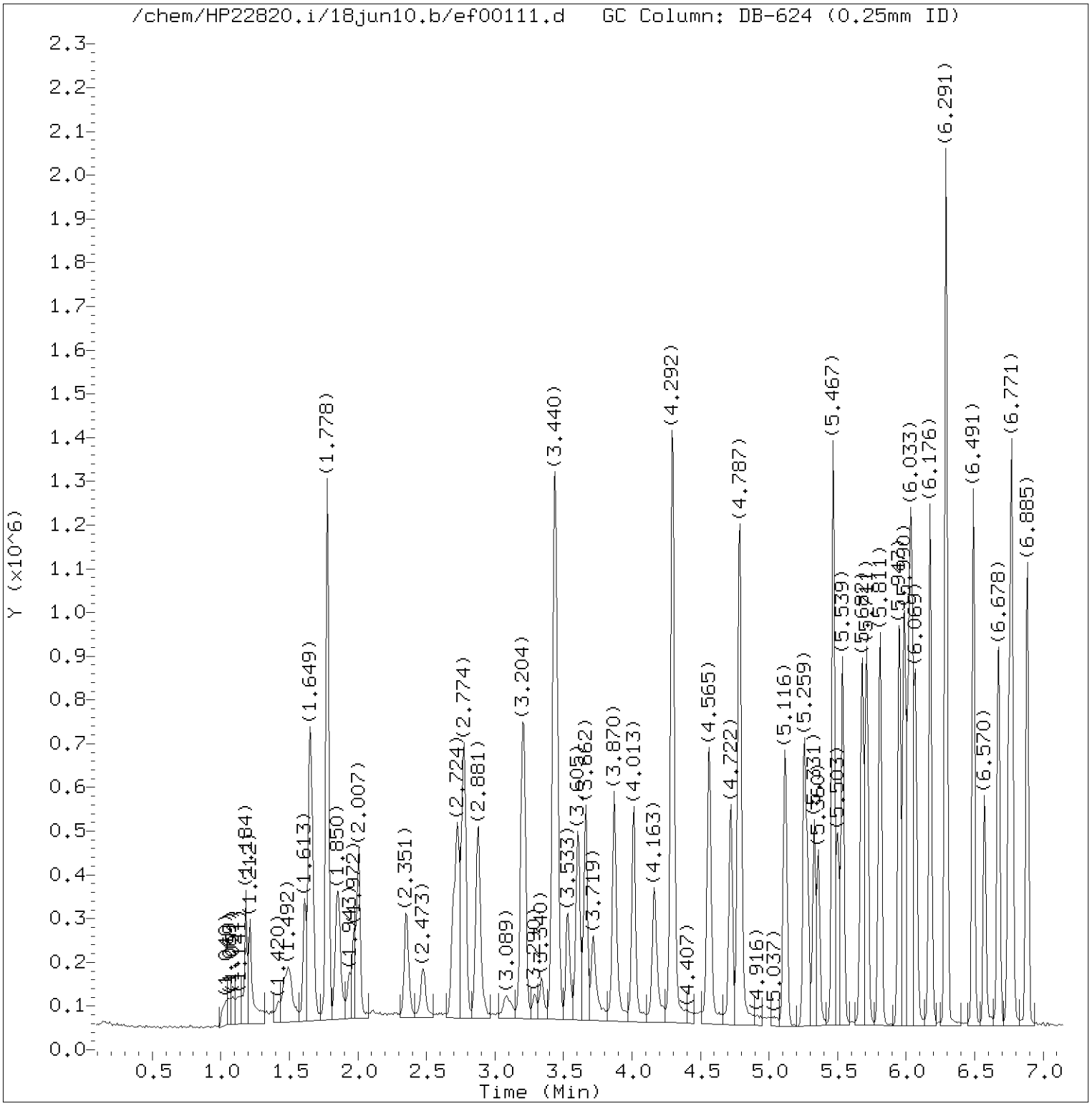
Column phase: DB-624

Column diameter: 0.25

Data File: ef00110.d
Spectrum: Avg. Scans 1294-1296 (9.36), Background Scan 1290
Location of Maximum: 95.00
Number of points: 124

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	195	67.00	2273	105.00	1189	143.00	7642
36.00	6901	68.00	79904	106.00	3882	144.00	395
37.00	33928	69.00	81048	107.00	772	145.00	854
38.00	32384	70.00	5649	110.00	579	146.00	1139
39.00	13622	71.00	211	111.00	831	147.00	801
40.00	525	72.00	3572	112.00	655	148.00	1385
41.00	55	73.00	32736	113.00	856	149.00	449
42.00	148	74.00	129184	115.00	767	150.00	818
43.00	282	75.00	386816	116.00	2901	152.00	368
44.00	3725	76.00	31976	117.00	4422	153.00	413
45.00	7180	77.00	3849	118.00	2880	154.00	545
46.00	388	78.00	2974	119.00	4357	155.00	1568
47.00	8164	79.00	25592	120.00	152	156.00	456
48.00	4770	80.00	7028	122.00	261	157.00	1492
49.00	30440	81.00	25880	123.00	140	158.00	186
50.00	150464	82.00	6125	124.00	455	159.00	875
51.00	46176	83.00	651	125.00	218	161.00	842
52.00	2036	85.00	52	126.00	300	171.00	80
53.00	361	86.00	1011	127.00	108	172.00	1216
54.00	349	87.00	32576	128.00	2395	173.00	3326
55.00	1891	88.00	29440	129.00	1328	174.00	589888
56.00	12569	89.00	273	130.00	2612	175.00	41752
57.00	21792	91.00	3284	131.00	976	176.00	567424
58.00	760	92.00	19848	132.00	98	177.00	38000
59.00	91	93.00	32624	134.00	352	178.00	959
60.00	6313	94.00	89024	135.00	1501	251.00	74
61.00	34656	95.00	765952	136.00	239	267.00	184
62.00	34104	96.00	50168	137.00	1366	281.00	67
63.00	28840	97.00	1631	139.00	259		
64.00	2593	98.00	112	140.00	575		
65.00	982	103.00	597	141.00	7924		
66.00	278	104.00	3811	142.00	1244		

Digitally signed by Jacob E. Bailey on 06/11/2018 at 12:27.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

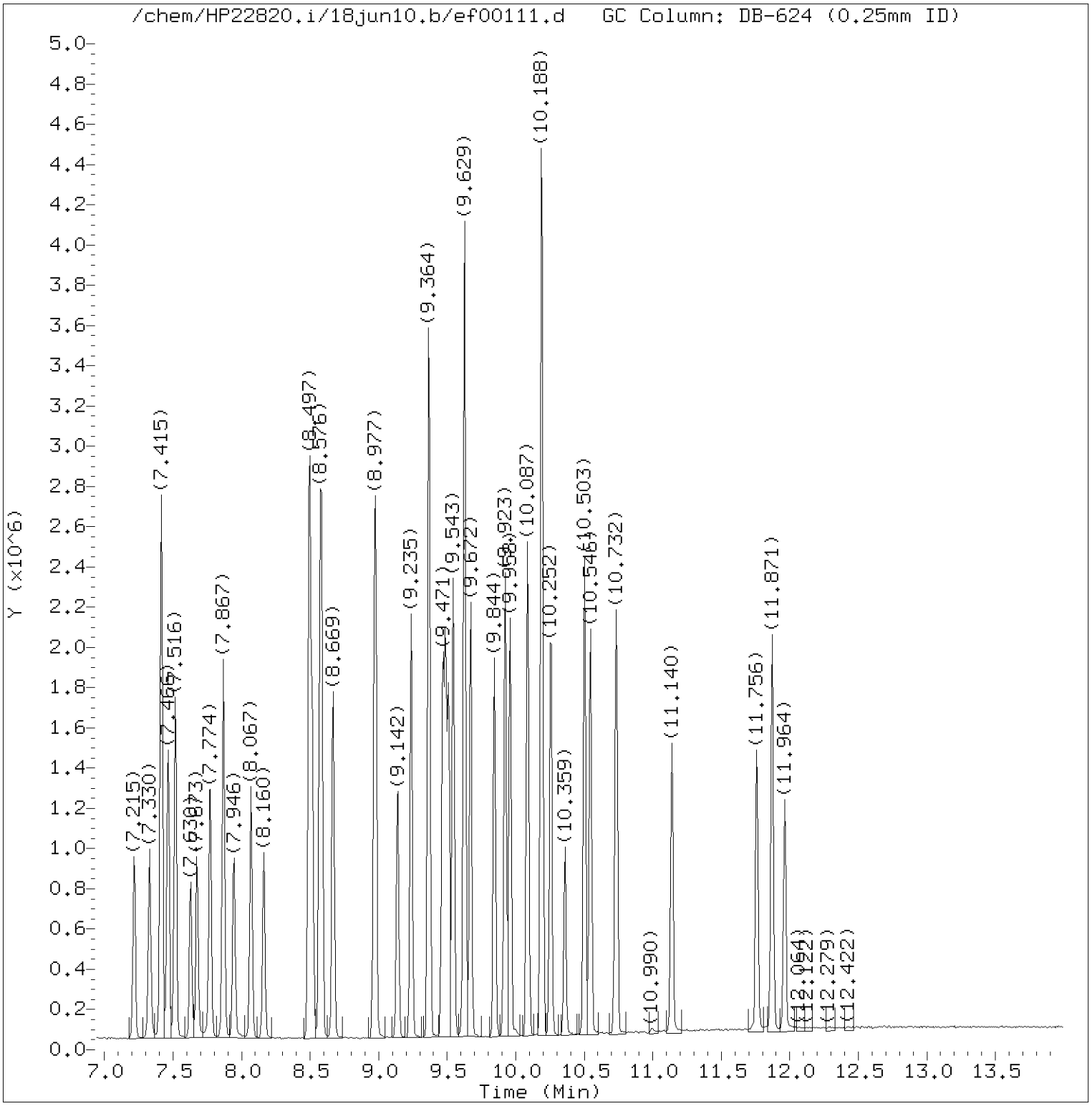
Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00111.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 18:23 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 13:09 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 06/11/2018 at 13:10.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00111.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 18:23 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 13:09 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 06/11/2018 at 13:10.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00111.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 18:23 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 13:09 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.613	41	160513	9.691
2) Dichlorodifluoromethane	(1)	1.649	85	580656	10.009
3) Chlorodifluoromethane	(1)	1.671	51	355466	9.664
4) Freon 114	(1)	1.778	85	607833	9.762
5) Chloromethane	(1)	1.850	50	225868	9.671
6) Vinyl Chloride	(1)	1.972	62	223947	10.031
7) 1,3-Butadiene	(1)	2.007	54	157555	9.811
8) Bromomethane	(1)	2.351	94	190509	10.023
9) Chloroethane	(1)	2.473	64	124319	9.992
10) Bromoethene	(1)	2.695	106	193786	10.006
11) Dichlorofluoromethane	(1)	2.724	67	495776	10.018
12) Trichlorofluoromethane	(1)	2.774	101	590470	9.525
13) Pentane	(1)	2.881	43	341329	9.603
14) Ethanol	(1)	3.082	45	77038	9.935
15) Freon123a	(1)	3.204	67	477173	10.384
16) Acrolein	(1)	3.340	56	80144	9.733
17) 1,1-Dichloroethene	(1)	3.433	61	350001	10.303
18) Freon 113	(1)	3.447	103	325058	9.290
19) Acetone	(1)	3.533	43	329200	9.685
20) Methyl Iodide	(1)	3.605	142	553981	9.975
21) Carbon Disulfide	(1)	3.662	76	657766	10.345
22) Isopropanol	(1)	3.719	45	277879	9.663
24) 3-Chloropropene	(1)	3.870	76	95762	11.060
23) Acetonitrile	(1)	3.877	40	138258	9.170
25) Methylene Chloride	(1)	4.013	84	209243	11.083
26) tert-Butyl Alcohol	(1)	4.163	59	351582	10.943
28) trans-1,2-Dichloroethene	(1)	4.292	61	316841	10.117
29) Methyl t-Butyl Ether	(1)	4.292	73	511335	9.556
27) Acrylonitrile	(1)	4.300	53	185785	9.910
30) Hexane	(1)	4.565	57	302863	9.481
31) 1,1-Dichloroethane	(1)	4.722	63	413789	9.647
32) Vinyl Acetate	(1)	4.787	86	50023	11.017
33) Di-Isopropyl Ether	(1)	4.787	45	670339	9.683
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	455622	9.748
35) cis-1,2-Dichloroethene	(1)	5.259	61	292707	9.986
37) 2-Butanone	(1)	5.281	72	105092	9.506
38) Ethyl Acetate	(1)	5.331	70	52567	9.706
39) Methyl Acrylate	(1)	5.360	55	357873	9.959

Digitally signed by Jacob E. Bailey
on 06/11/2018 at 13:10.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00111.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 18:23 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 13:09 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	350460	10.000
41) Tetrahydrofuran	(1)	5.503	42	226885	9.334
42) Chloroform	(1)	5.539	83	499579	9.806
43) 1,1,1-Trichloroethane	(1)	5.675	97	451217	9.600
44) Cyclohexane	(1)	5.711	56	323116	9.609
45) Carbon Tetrachloride	(1)	5.811	117	442172	9.612
46) Benzene	(2)	5.983	78	693604	9.312
47) 1,2-Dichloroethane	(2)	6.012	62	329901	9.451
48) Isooctane	(2)	6.033	57	1000863	9.873
49) Tert-Amyl Methyl Ether	(2)	6.069	73	453400	9.600
50) Heptane	(2)	6.176	43	369134	9.406
51)*1,4-Difluorobenzene	(2)	6.291	114	1215795	10.000
52) Trichloroethene	(2)	6.491	130	303748	9.323
53) Ethyl Acrylate	(2)	6.570	55	420152	9.181
36) 1,2-Dichloroethene (total)	(1)		61	609548	20.104
54) 1,2-Dichloropropane	(2)	6.678	63	257792	9.056
57) Methyl Methacrylate	(2)	6.749	69	218852	9.164
55) Dibromomethane	(2)	6.771	174	282342	9.446
56) 1,4-Dioxane	(2)	6.778	88	160102	9.367
58) Bromodichloromethane	(2)	6.885	83	518074	9.293
59) cis-1,3-Dichloropropene	(2)	7.215	75	375397	9.251
60) 4-Methyl-2-Pentanone	(2)	7.330	43	491490	8.859
61) Toluene	(3)	7.466	91	802892	9.192
62) Octane	(3)	7.516	43	518579	9.592
63) trans-1,3-Dichloropropene	(3)	7.630	75	309888	9.703
65) Ethyl Methacrylate	(3)	7.673	69	364521	9.769
66) 1,1,2-Trichloroethane	(3)	7.774	97	310574	9.386
67) Tetrachloroethene	(3)	7.867	166	404700	9.085
68) 2-Hexanone	(3)	7.946	43	474300	9.509
69) Dibromochloromethane	(3)	8.067	127	373274	9.397
70) 1,2-Dibromoethane	(3)	8.160	107	458150	9.357
71)*Chlorobenzene-d5	(3)	8.497	117	1215922	10.000
72) Chlorobenzene	(3)	8.519	112	684808	9.276
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	343206	9.557
74) Ethylbenzene	(3)	8.583	91	1049365	9.555
75) m/p-Xylene	(3)	8.669	91	799856	9.538
76) o-Xylene	(3)	8.970	91	794802	9.643
78) Styrene	(3)	8.977	104	620512	9.943

* = Compound is an internal standard.

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on 06/11/2018 at 13:10.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00111.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 18:23 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 13:09 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	451762	9.469
80) Cumene	(3)	9.235	105	1075598	9.787
82) 1,1,2,2-Tetrachloroethane	(3)	9.464	83	718303	9.362
81) Bromobenzene	(3)	9.493	156	386747	9.220
83) 1,2,3-Trichloropropane	(3)	9.514	110	207141	9.457
84) n-Propylbenzene	(3)	9.543	120	310558	9.533
85) 2-Chlorotoluene	(3)	9.622	126	298859	9.612
86) 4-Ethyltoluene	(3)	9.629	105	1154435M	9.918
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	933404M	9.831
88) Alpha Methyl Styrene	(3)	9.844	118	435733	9.956
89) tert-Butylbenzene	(3)	9.923	119	863161M	10.021
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	916343	9.842
91) sec-Butylbenzene	(3)	10.087	105	1323607	9.927
92) 1,3-Dichlorobenzene	(3)	10.188	146	668867	9.307
94) p-Isopropyltoluene	(3)	10.188	119	1064473	9.982
93) 1,4-Dichlorobenzene	(3)	10.259	146	662095	9.310
95) Benzyl Chloride	(3)	10.359	91	515739	10.785
97) n-Butylbenzene	(3)	10.503	91	1034971	9.886
96) 1,2-Dichlorobenzene	(3)	10.546	146	632100	9.457
98) Hexachloroethane	(3)	10.732	117	277196	9.914
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	288293	9.263
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	341252	7.881
101) Hexachlorobutadiene	(3)	11.871	225	296748	8.244
102) Naphthalene	(3)	11.964	128	723144	8.631
64) 1,3-Dichloropropene (total)	(3)		75	685285	19.105
77) Xylene (total)	(3)		91	1594658	19.180

M = Compound was manually integrated.

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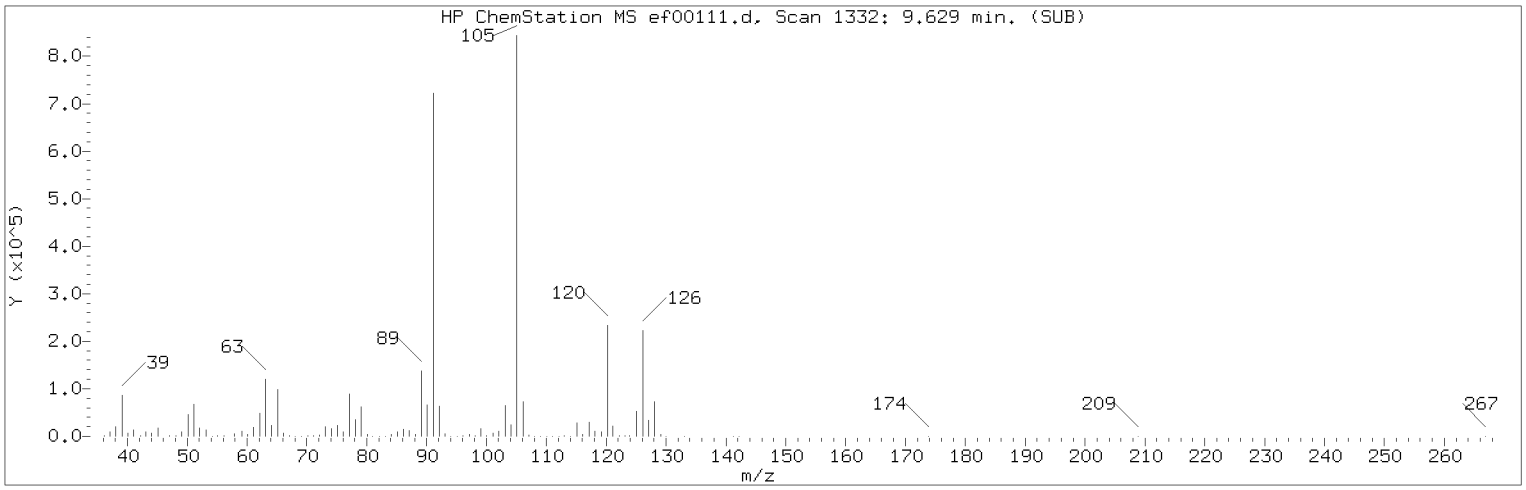
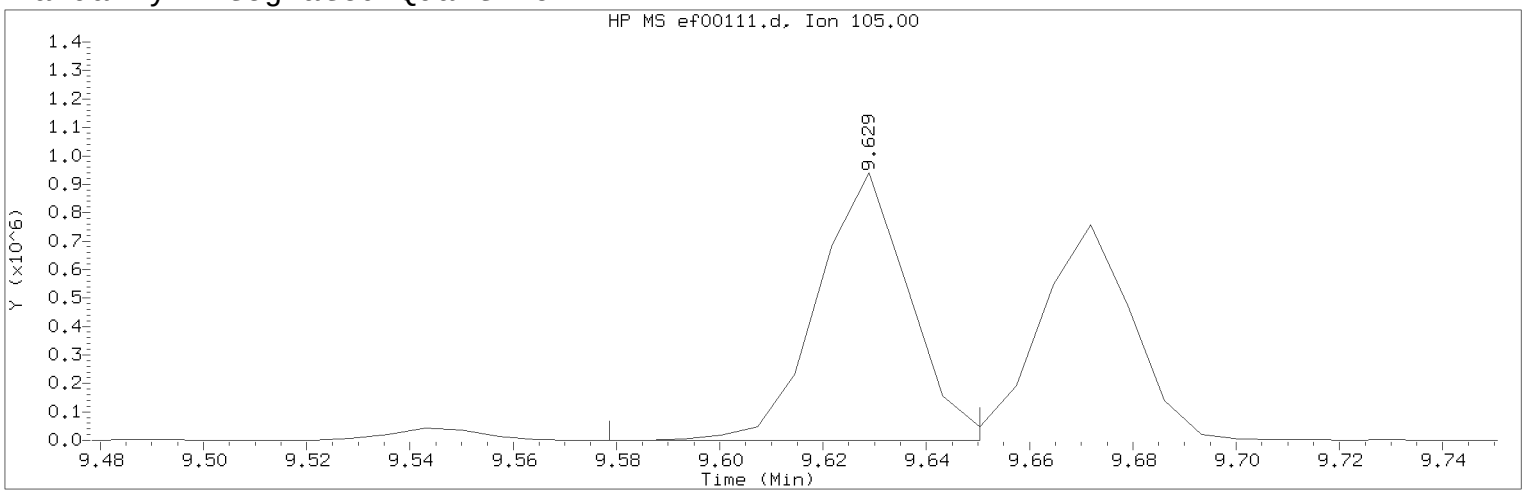
on 06/11/2018 at 13:10.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00111.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 18:23 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 13:09 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

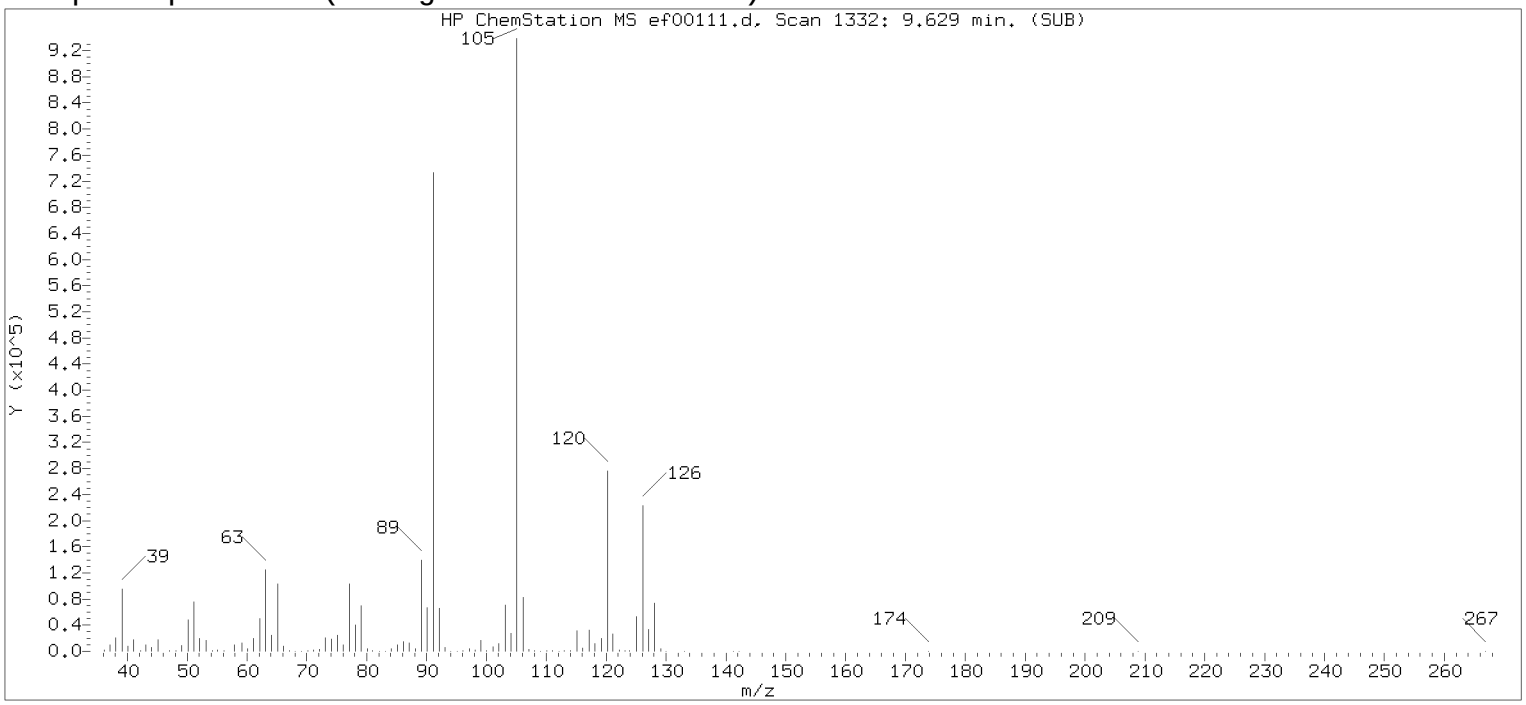
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 1154435M
Concentration (ppb(v)) : 9.9178
Integration start scan : 1324 Integration stop scan: 1334
Y at integration start : 170 Y at integration end: 170

Reason for manual integration: improper integration

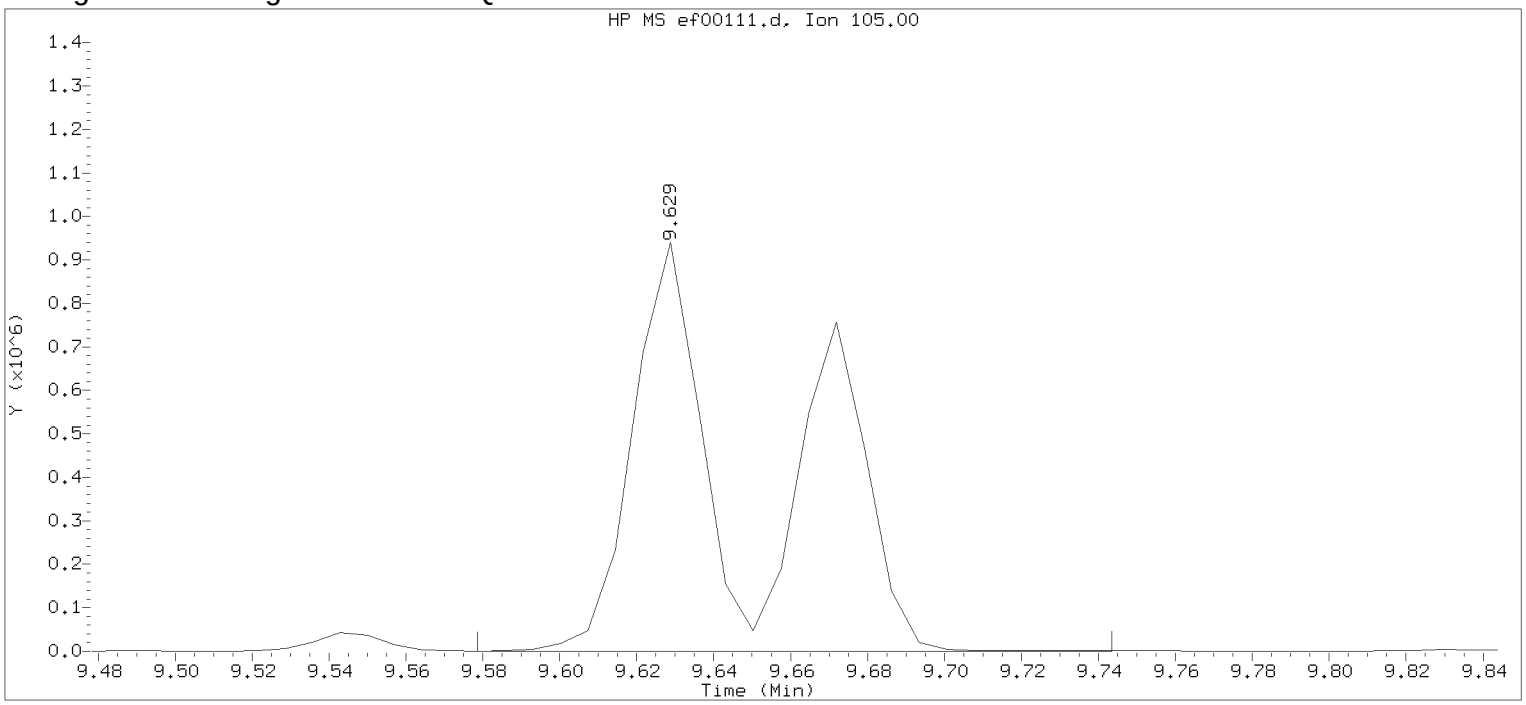
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/11/2018 at 13:10.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:04.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00111.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 18:23 Analyst ID: jeb07445

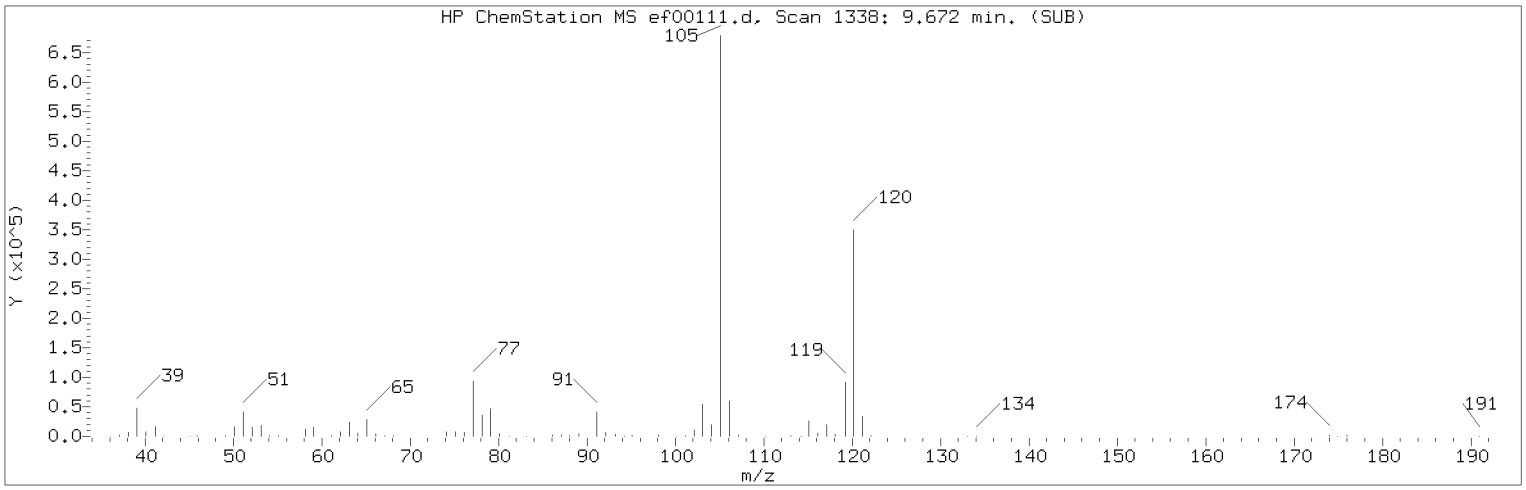
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 07-JUN-2018 19:10
Date, time and analyst ID of latest file update: 10-Jun-2018 18:41 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

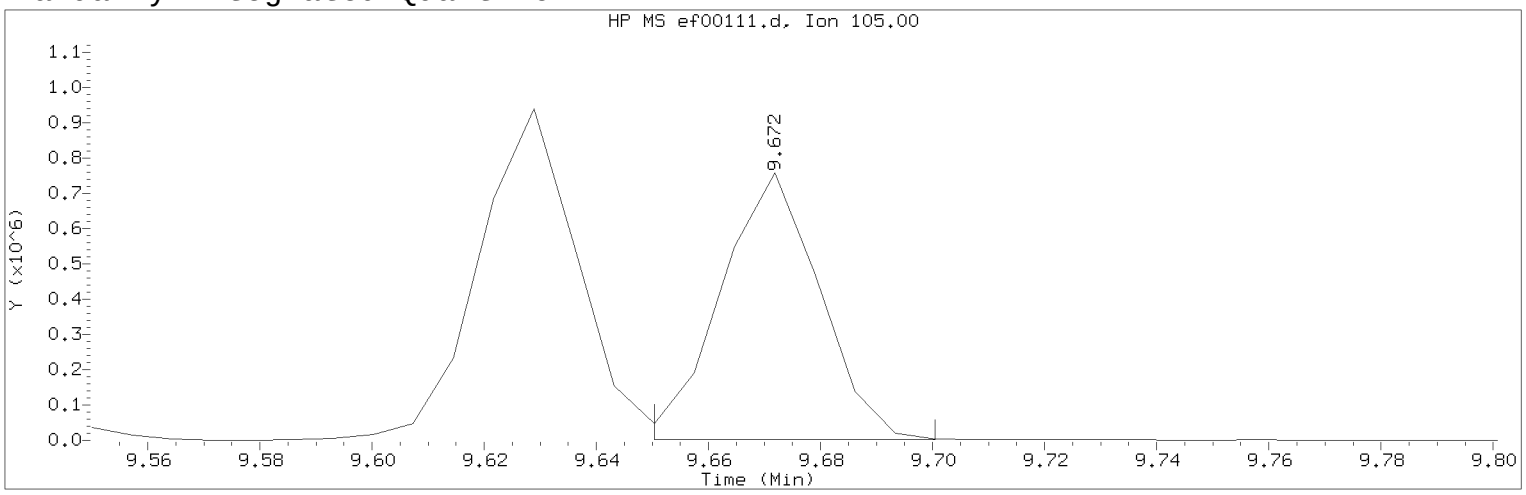
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 2074357
Concentration (ppb(v)) : 9.9898
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 170 Y at integration end: 170

Digitally signed by Jacob E. Bailey on 06/11/2018 at 13:10.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00111.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 18:23 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 13:09 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

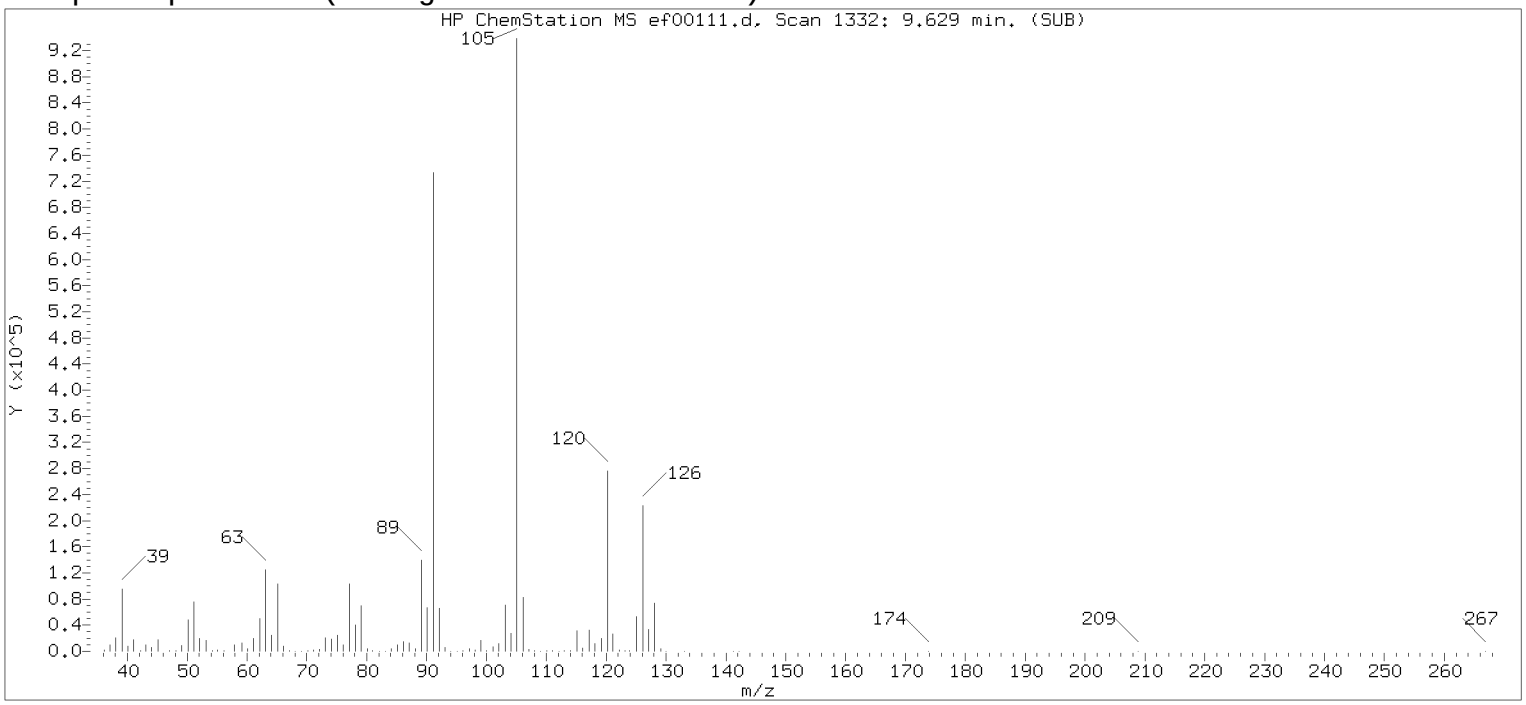
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 933404M
Concentration (ppb(v)) : 9.8310
Integration start scan : 1334 Integration stop scan: 1341
Y at integration start : 1189 Y at integration end: 1189

Reason for manual integration: improper integration

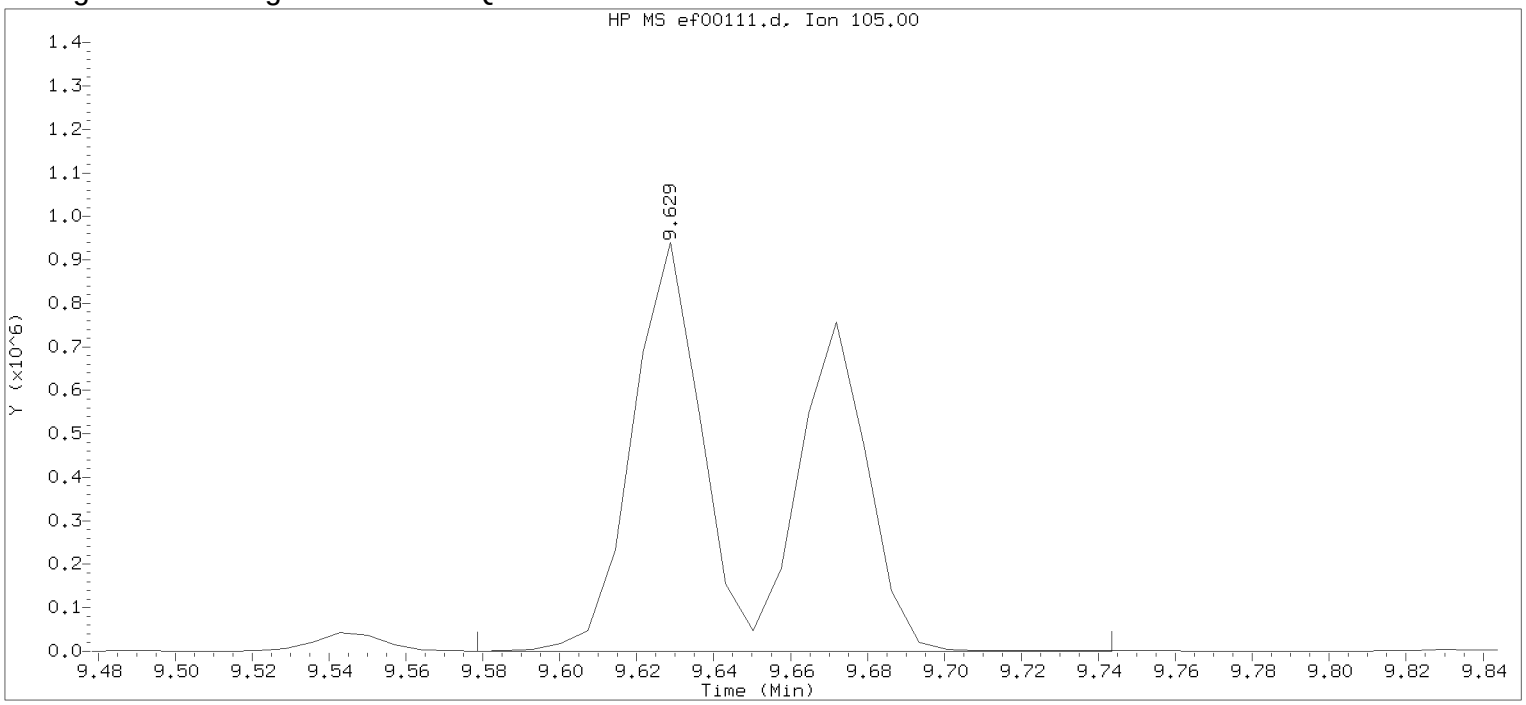
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/11/2018 at 13:10.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:04.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00111.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 18:23 Analyst ID: jeb07445

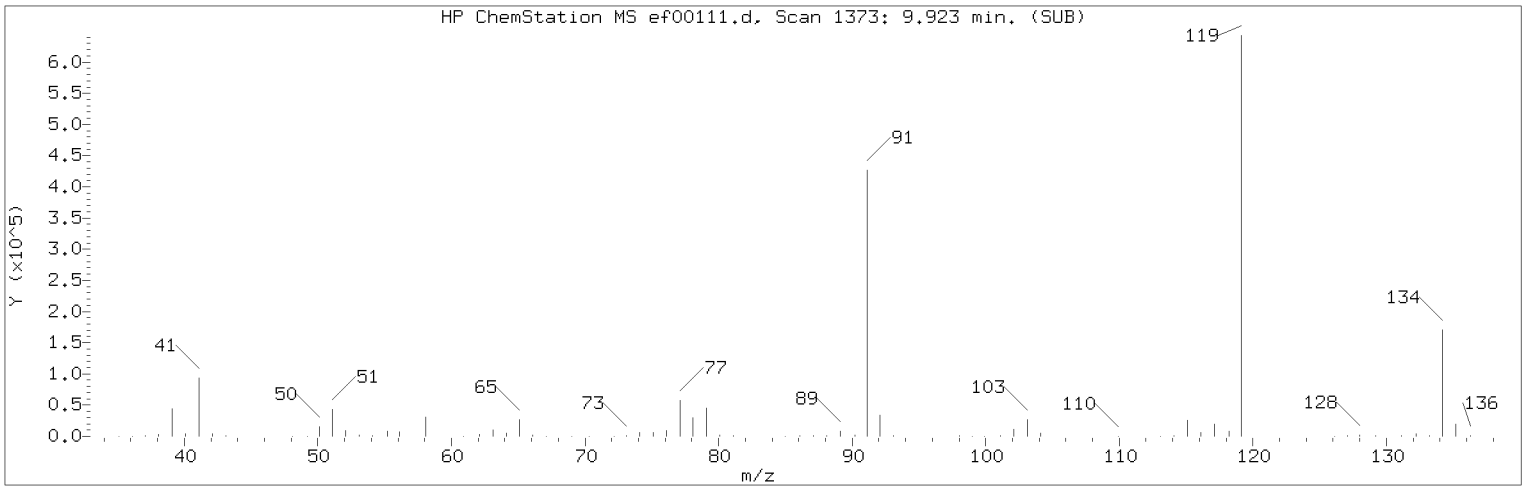
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 07-JUN-2018 19:10
Date, time and analyst ID of latest file update: 10-Jun-2018 18:41 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

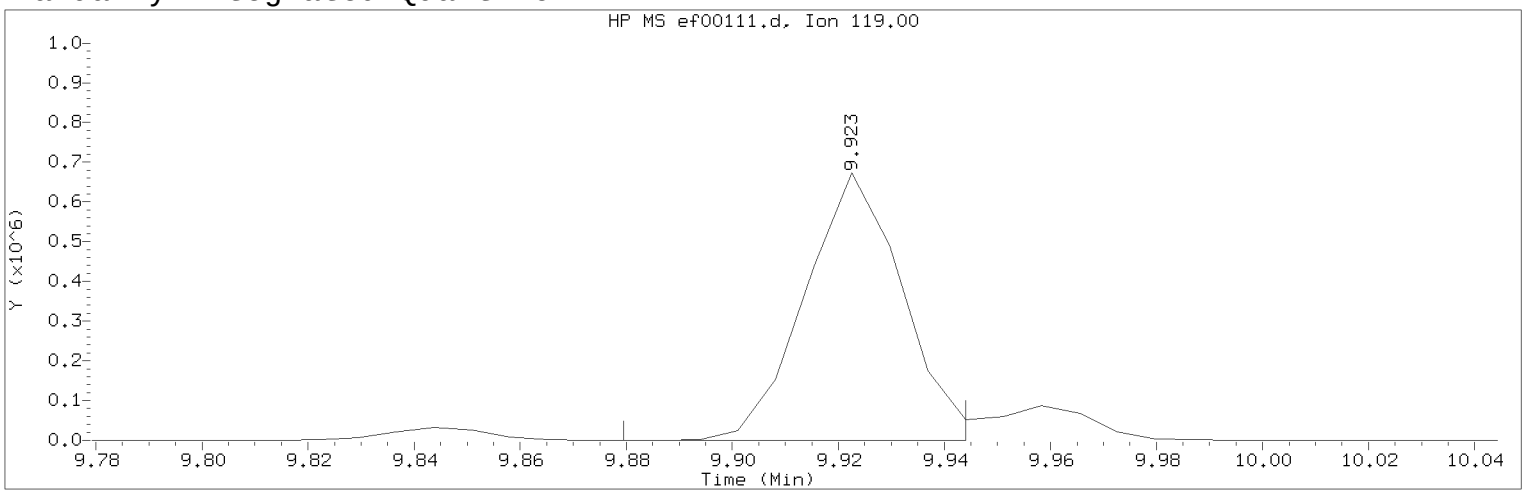
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 2070037
Concentration (ppb(v)) : 11.9782
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 607 Y at integration end: 607

Digitally signed by Jacob E. Bailey on 06/11/2018 at 13:10.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00111.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 18:23 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 13:09 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

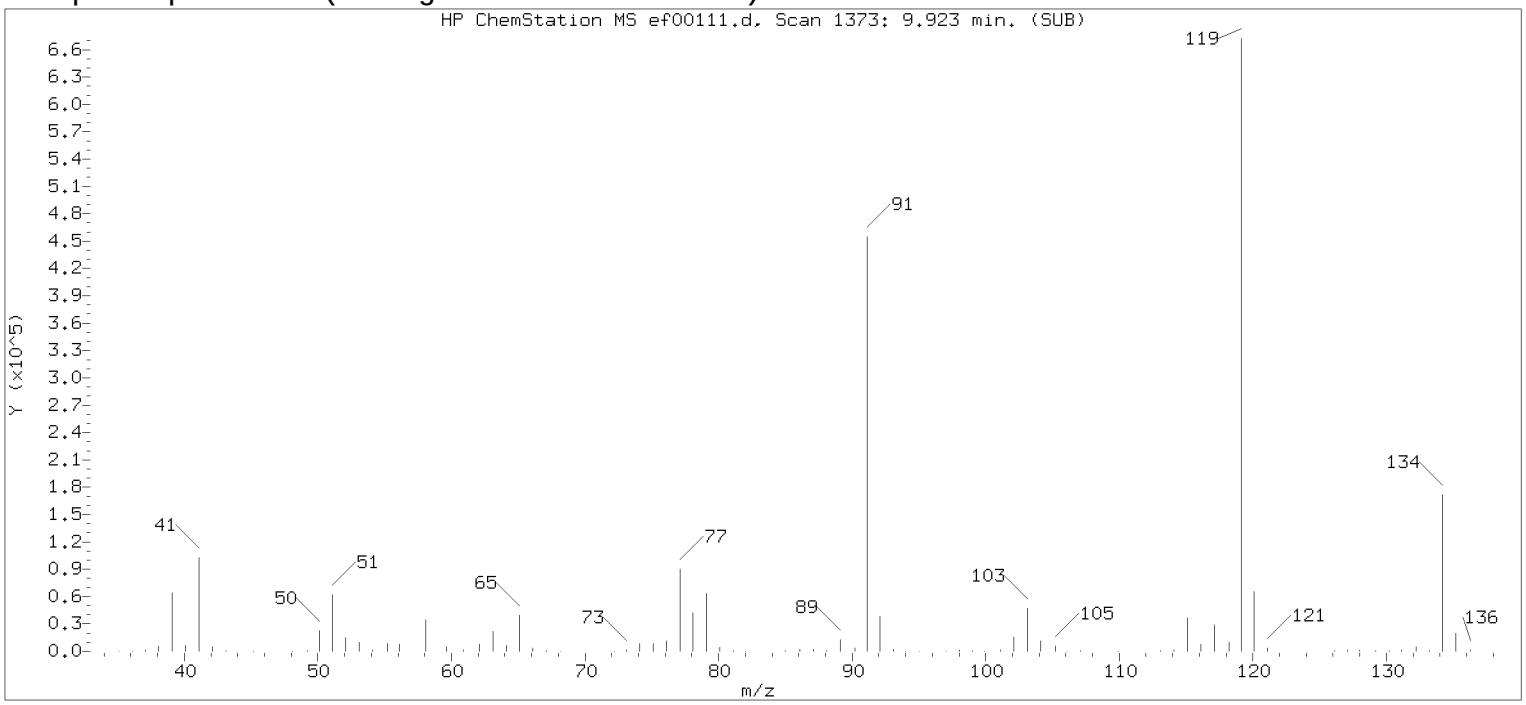
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.923
Quant Ion : 119.00
Area (flag) : 863161M
Concentration (ppb(v)) : 10.0206
Integration start scan : 1366 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

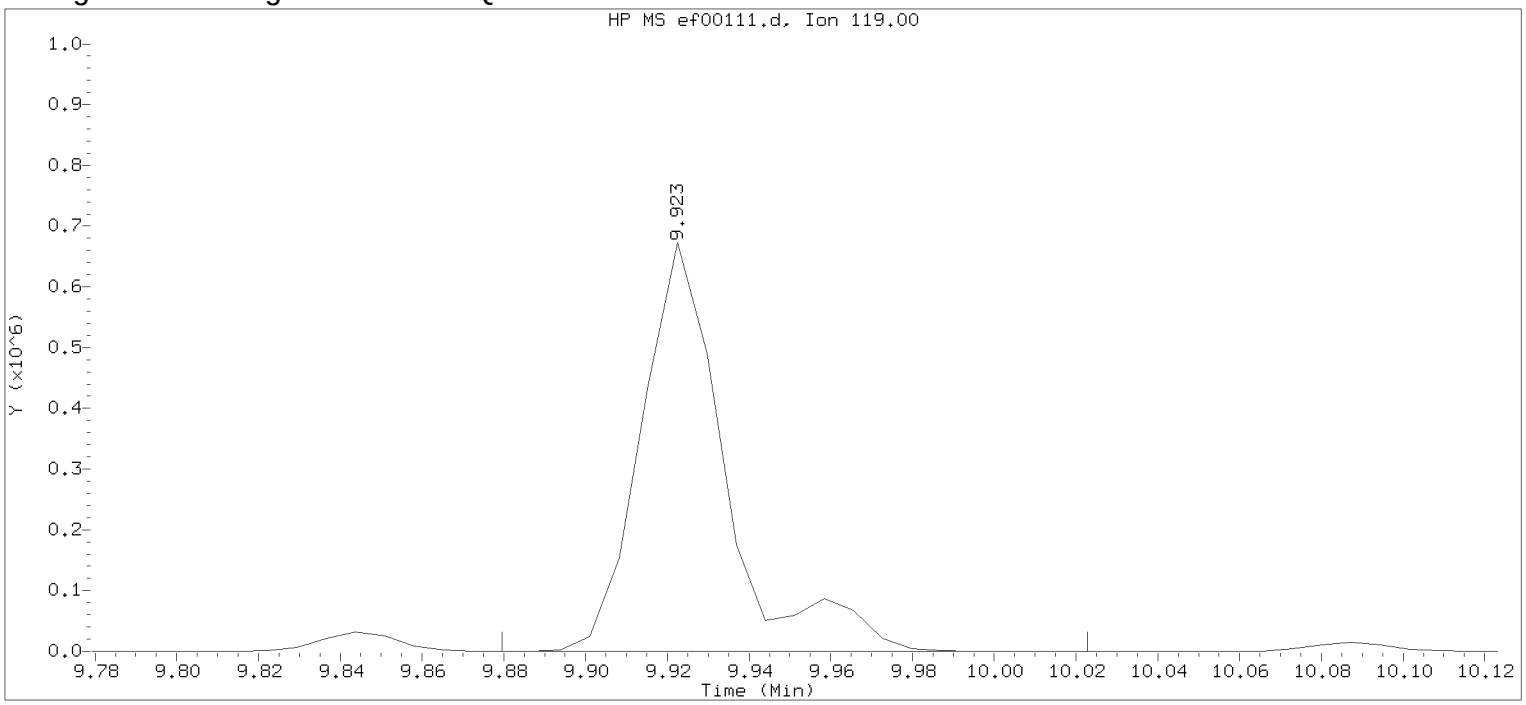
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/11/2018 at 13:10.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:04.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



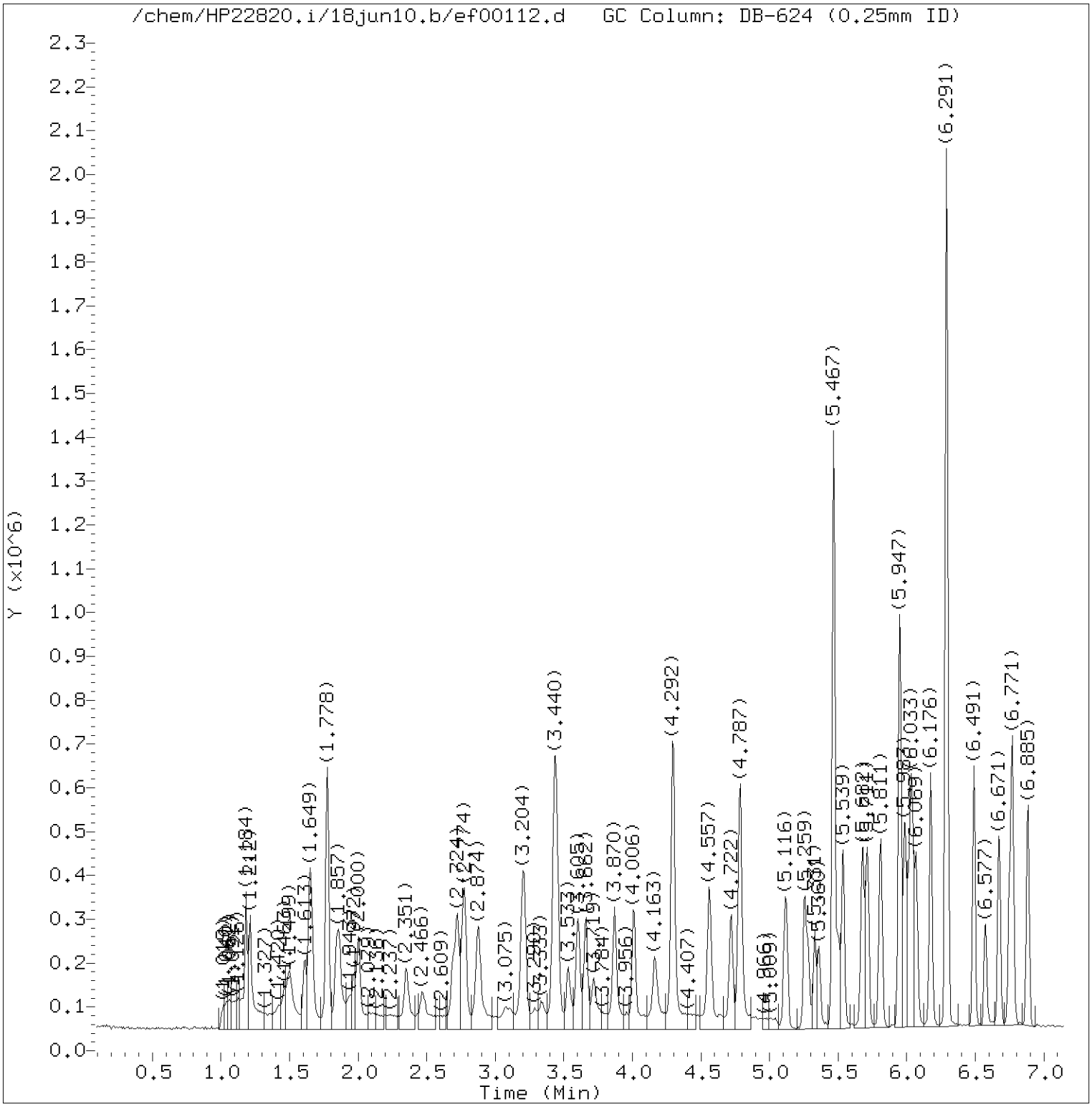
Data File: /chem/HP22820.i/18jun10.b/ef00111.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 18:23 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 07-JUN-2018 19:10
Date, time and analyst ID of latest file update: 10-Jun-2018 18:41 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.923
Quant Ion : 119.00
Area : 966967
Concentration (ppb(v)) : 5.3639
Integration start scan : 1366 Integration stop scan: 1386
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/11/2018 at 13:10.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

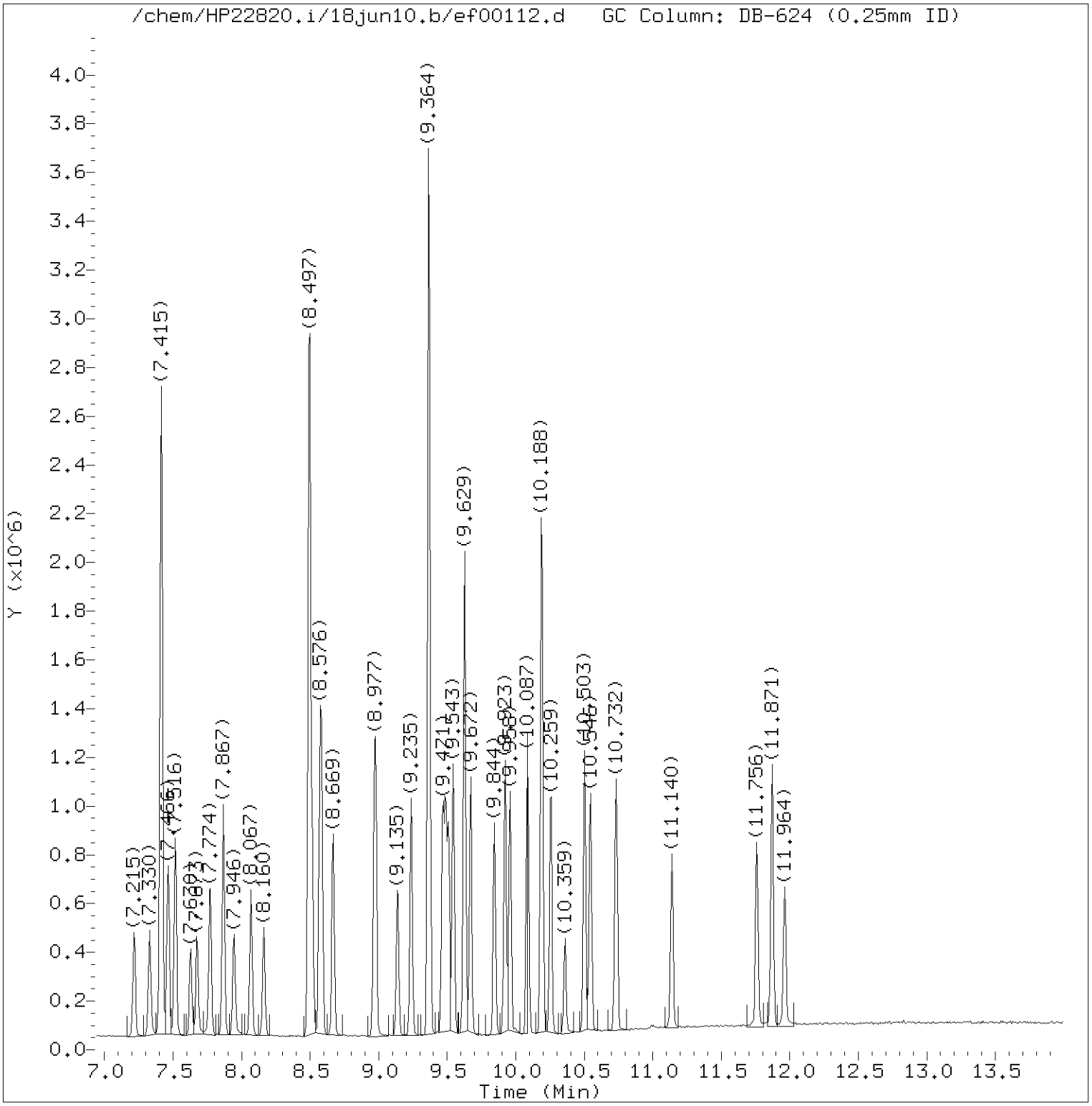
Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00112.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 18:50 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 19:25
Date, time and analyst ID of latest file update: 10-Jun-2018 19:25 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00112.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 18:50 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 19:25
Date, time and analyst ID of latest file update: 10-Jun-2018 19:25 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00112.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 18:50 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 19:25
Date, time and analyst ID of latest file update: 10-Jun-2018 19:25 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.613	41	77610	4.916
2) Dichlorodifluoromethane	(1)	1.649	85	282391	4.930
3) Chlorodifluoromethane	(1)	1.664	51	176749	4.986
4) Freon 114	(1)	1.778	85	291006	4.891
5) Chloromethane	(1)	1.843	50	109180	4.915
6) Vinyl Chloride	(1)	1.972	62	107063	4.888
7) 1,3-Butadiene	(1)	2.007	54	73945	4.841
8) Bromomethane	(1)	2.351	94	86852	4.769
9) Chloroethane	(1)	2.473	64	60149	4.917
10) Bromoethene	(1)	2.695	106	95464	4.962
11) Dichlorofluoromethane	(1)	2.724	67	243992	4.960
12) Trichlorofluoromethane	(1)	2.774	101	287194	4.931
13) Pentane	(1)	2.874	43	162883	4.883
14) Ethanol	(1)	3.068	45	38362	4.989
15) Freon123a	(1)	3.204	67	236954	5.531
16) Acrolein	(1)	3.340	56	37538	4.836
17) 1,1-Dichloroethene	(1)	3.426	61	163285	4.826
18) Freon 113	(1)	3.440	103	161481	4.983
19) Acetone	(1)	3.533	43	157364	4.887
20) Methyl Iodide	(1)	3.605	142	281134	5.037
21) Carbon Disulfide	(1)	3.662	76	311312	4.862
22) Isopropanol	(1)	3.719	45	135228	4.932
23) Acetonitrile	(1)	3.870	40	78667	5.322
24) 3-Chloropropene	(1)	3.870	76	45111	5.384
25) Methylene Chloride	(1)	4.013	84	103605	5.522
26) tert-Butyl Alcohol	(1)	4.163	59	164470	5.365
28) trans-1,2-Dichloroethene	(1)	4.292	61	148542	4.839
27) Acrylonitrile	(1)	4.300	53	91921	4.973
29) Methyl t-Butyl Ether	(1)	4.300	73	248656	4.930
30) Hexane	(1)	4.557	57	140261	4.808
31) 1,1-Dichloroethane	(1)	4.722	63	201802	4.937
32) Vinyl Acetate	(1)	4.779	86	23266	5.397
33) Di-Isopropyl Ether	(1)	4.787	45	321335	4.894
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	225591	4.975
35) cis-1,2-Dichloroethene	(1)	5.259	61	138225	4.857
37) 2-Butanone	(1)	5.281	72	48619	4.806
38) Ethyl Acetate	(1)	5.331	70	24697	4.844
39) Methyl Acrylate	(1)	5.360	55	161892	4.750

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on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00112.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 18:50 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 19:25
Date, time and analyst ID of latest file update: 10-Jun-2018 19:25 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	350513	10.000
41) Tetrahydrofuran	(1)	5.503	42	110196	4.927
42) Chloroform	(1)	5.539	83	242688	4.928
43) 1,1,1-Trichloroethane	(1)	5.675	97	222722	4.967
44) Cyclohexane	(1)	5.711	56	155541	4.905
45) Carbon Tetrachloride	(1)	5.811	117	215292	4.933
46) Benzene	(2)	5.983	78	339566	4.926
47) 1,2-Dichloroethane	(2)	6.012	62	160465	4.910
48) Isooctane	(2)	6.033	57	468747	4.816
49) Tert-Amyl Methyl Ether	(2)	6.069	73	222257	4.930
50) Heptane	(2)	6.176	43	176824	4.872
51)*1,4-Difluorobenzene	(2)	6.291	114	1225978	10.000
52) Trichloroethene	(2)	6.491	130	142559	4.821
53) Ethyl Acrylate	(2)	6.570	55	205570	4.925
36) 1,2-Dichloroethene (total)	(1)		61	286767	9.696
54) 1,2-Dichloropropane	(2)	6.671	63	126975	4.942
57) Methyl Methacrylate	(2)	6.749	69	104683	4.868
55) Dibromomethane	(2)	6.771	174	138161	4.925
56) 1,4-Dioxane	(2)	6.778	88	76601	4.869
58) Bromodichloromethane	(2)	6.885	83	248045	4.871
59) cis-1,3-Dichloropropene	(2)	7.215	75	183266	4.919
60) 4-Methyl-2-Pentanone	(2)	7.330	43	241114	4.932
61) Toluene	(3)	7.466	91	403601	4.975
62) Octane	(3)	7.516	43	246319	4.833
63) trans-1,3-Dichloropropene	(3)	7.630	75	143208	4.764
65) Ethyl Methacrylate	(3)	7.673	69	165659	4.723
66) 1,1,2-Trichloroethane	(3)	7.774	97	154340	4.946
67) Tetrachloroethene	(3)	7.867	166	203666	4.977
68) 2-Hexanone	(3)	7.946	43	230189	4.887
69) Dibromochloromethane	(3)	8.067	127	182514	4.905
70) 1,2-Dibromoethane	(3)	8.160	107	228954	4.960
71)*Chlorobenzene-d5	(3)	8.497	117	1234948	10.000
72) Chlorobenzene	(3)	8.511	112	343576	4.970
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	171045	4.953
74) Ethylbenzene	(3)	8.583	91	502558	4.854
75) m/p-Xylene	(3)	8.669	91	383822	4.858
76) o-Xylene	(3)	8.970	91	377594	4.833
78) Styrene	(3)	8.977	104	288922	4.783

* = Compound is an internal standard.

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on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00112.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 18:50 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 19:25
Date, time and analyst ID of latest file update: 10-Jun-2018 19:25 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	218096	4.874
80) Cumene	(3)	9.235	105	506540	4.812
82) 1,1,2,2-Tetrachloroethane	(3)	9.464	83	362745	4.986
81) Bromobenzene	(3)	9.493	156	197203	5.010
83) 1,2,3-Trichloropropane	(3)	9.514	110	102248	4.929
84) n-Propylbenzene	(3)	9.543	120	154722	4.952
86) 4-Ethyltoluene	(3)	9.629	105	548222M	4.832
85) 2-Chlorotoluene	(3)	9.629	126	145267	4.891
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	440611M	4.817
88) Alpha Methyl Styrene	(3)	9.844	118	201983	4.772
89) tert-Butylbenzene	(3)	9.923	119	412374M	4.847
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	445760	4.893
91) sec-Butylbenzene	(3)	10.087	105	626835M	4.826
92) 1,3-Dichlorobenzene	(3)	10.188	146	333658	4.955
94) p-Isopropyltoluene	(3)	10.188	119	493266	4.771
93) 1,4-Dichlorobenzene	(3)	10.259	146	335578	4.995
95) Benzyl Chloride	(3)	10.359	91	217533	4.537
97) n-Butylbenzene	(3)	10.503	91	486896	4.809
96) 1,2-Dichlorobenzene	(3)	10.546	146	317199	4.970
98) Hexachloroethane	(3)	10.732	117	125923	4.722
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	143272	4.946
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	190765	5.240
101) Hexachlorobutadiene	(3)	11.871	225	162030	5.181
102) Naphthalene	(3)	11.964	128	382906	5.104
64) 1,3-Dichloropropene (total)	(3)		75	326474	9.681
77) Xylene (total)	(3)		91	761416	9.692

M = Compound was manually integrated.

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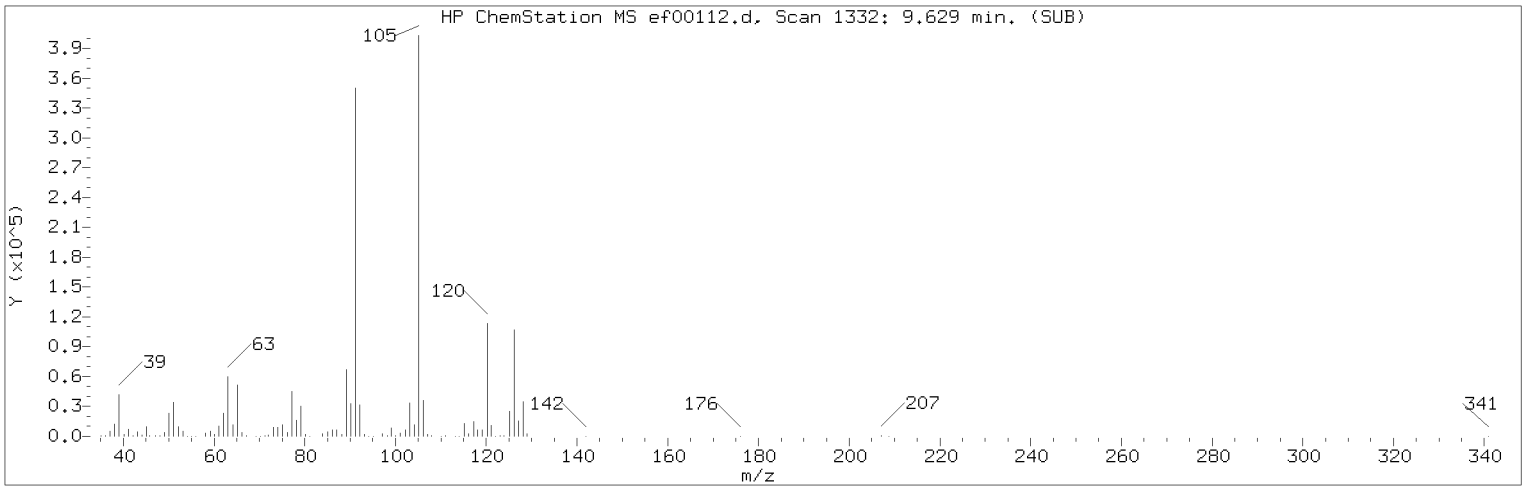
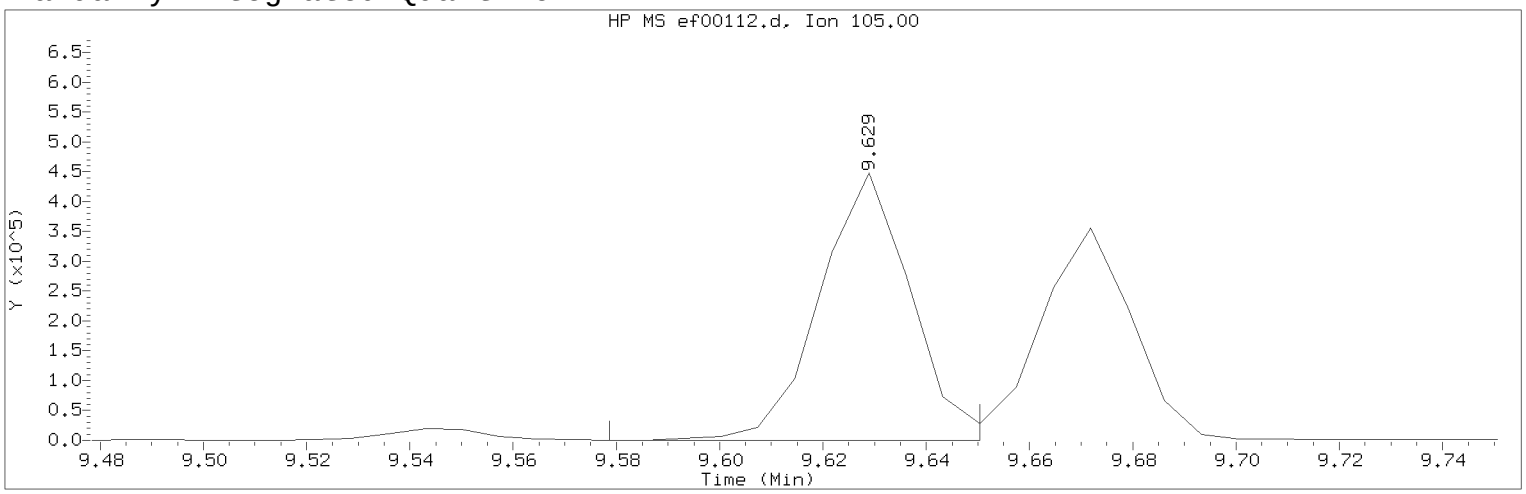
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00112.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 18:50 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 19:25
Date, time and analyst ID of latest file update: 10-Jun-2018 19:25 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

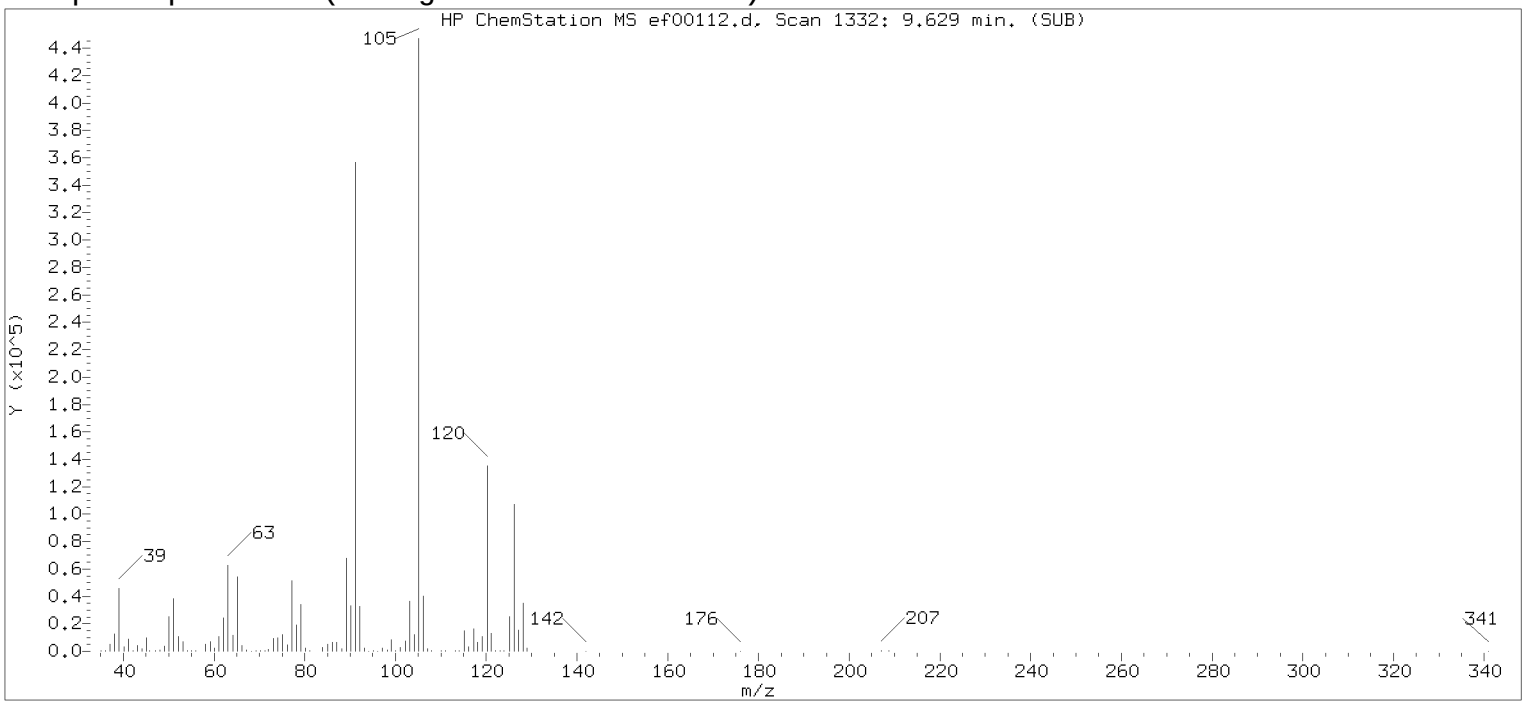
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 548222M
Concentration (ppb(v)) : 4.8324
Integration start scan : 1324 Integration stop scan: 1334
Y at integration start : 222 Y at integration end: 222

Reason for manual integration: improper integration

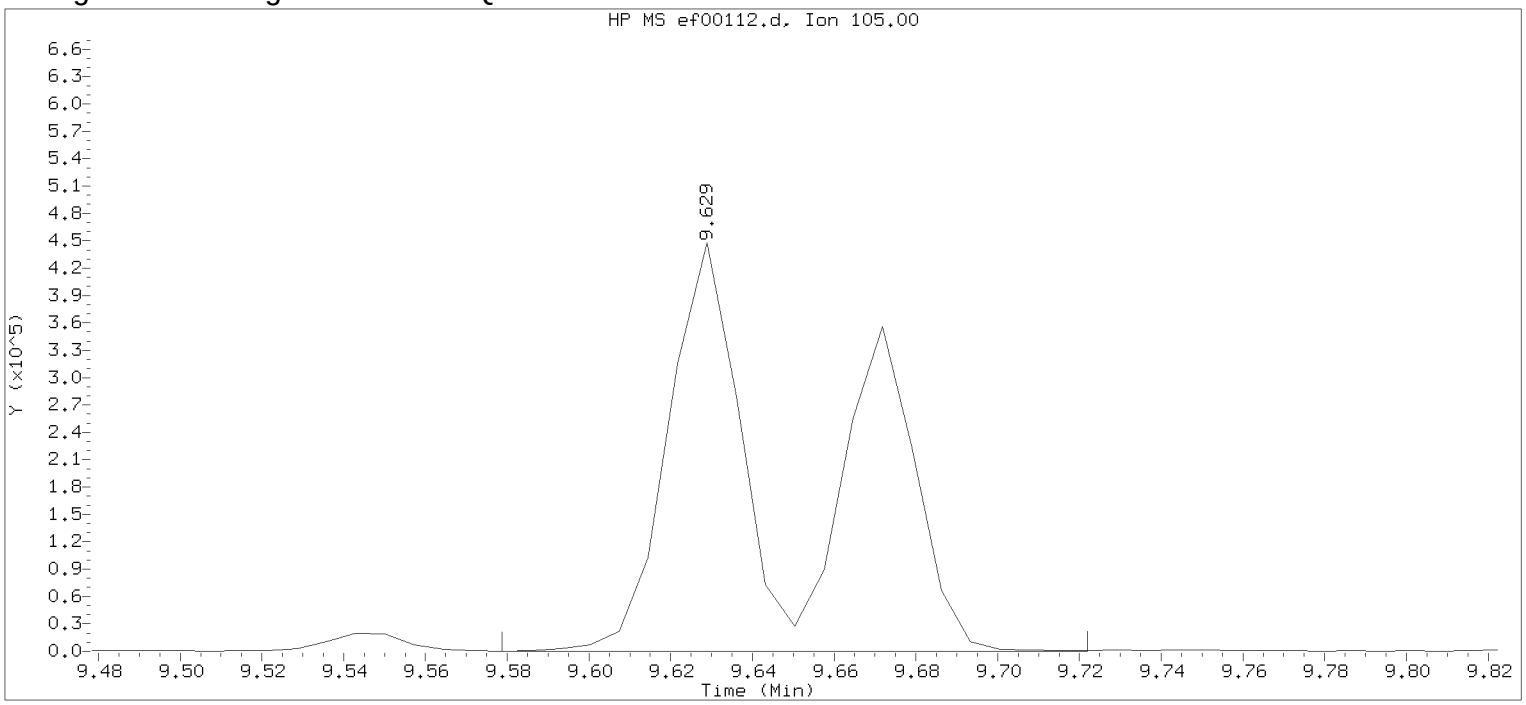
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:04.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00112.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 18:50 Analyst ID: jeb07445

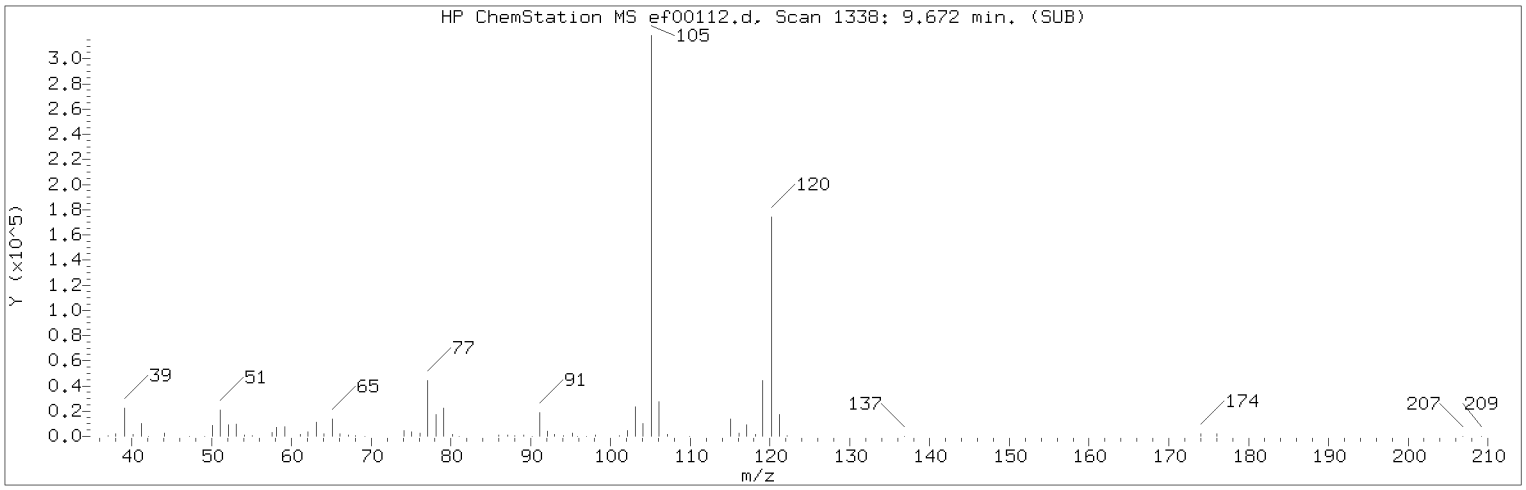
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 18:54
Date, time and analyst ID of latest file update: 10-Jun-2018 19:09 Unknown

Sample Name: VSTD005 Lab Sample ID: VSTD005

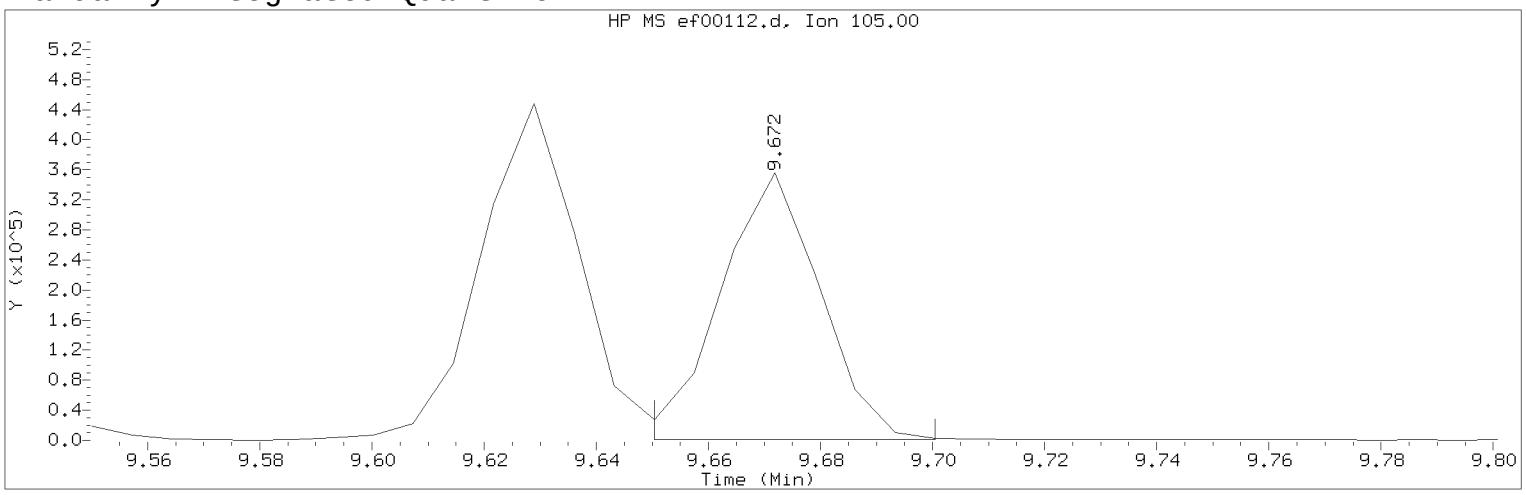
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 979782
Concentration (ppb(v)) : 8.3564
Integration start scan : 1324 Integration stop scan: 1344
Y at integration start : 222 Y at integration end: 222

Digitally signed by Jacob E. Bailey on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00112.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 18:50 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 19:25
Date, time and analyst ID of latest file update: 10-Jun-2018 19:25 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

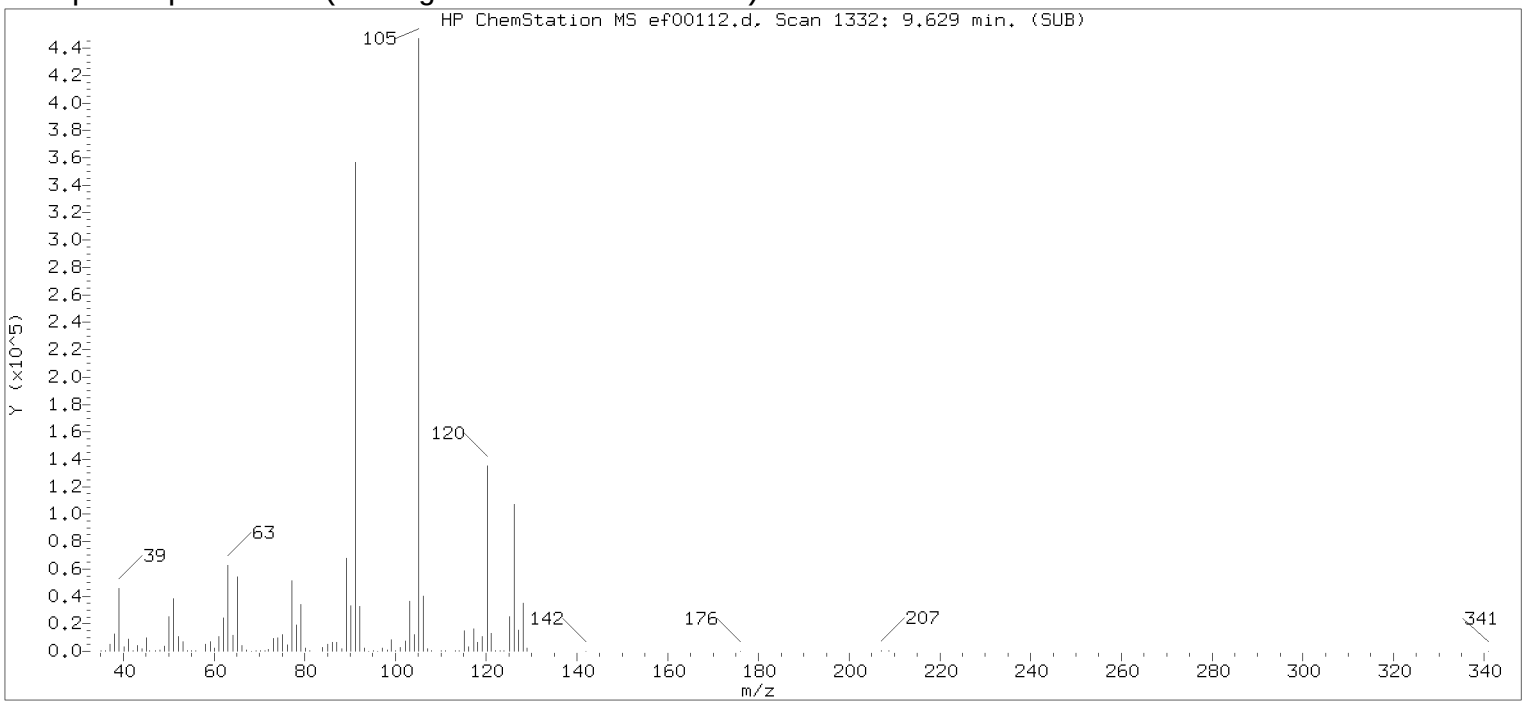
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 440611M
Concentration (ppb(v)) : 4.8174
Integration start scan : 1334 Integration stop scan: 1341
Y at integration start : 697 Y at integration end: 697

Reason for manual integration: improper integration

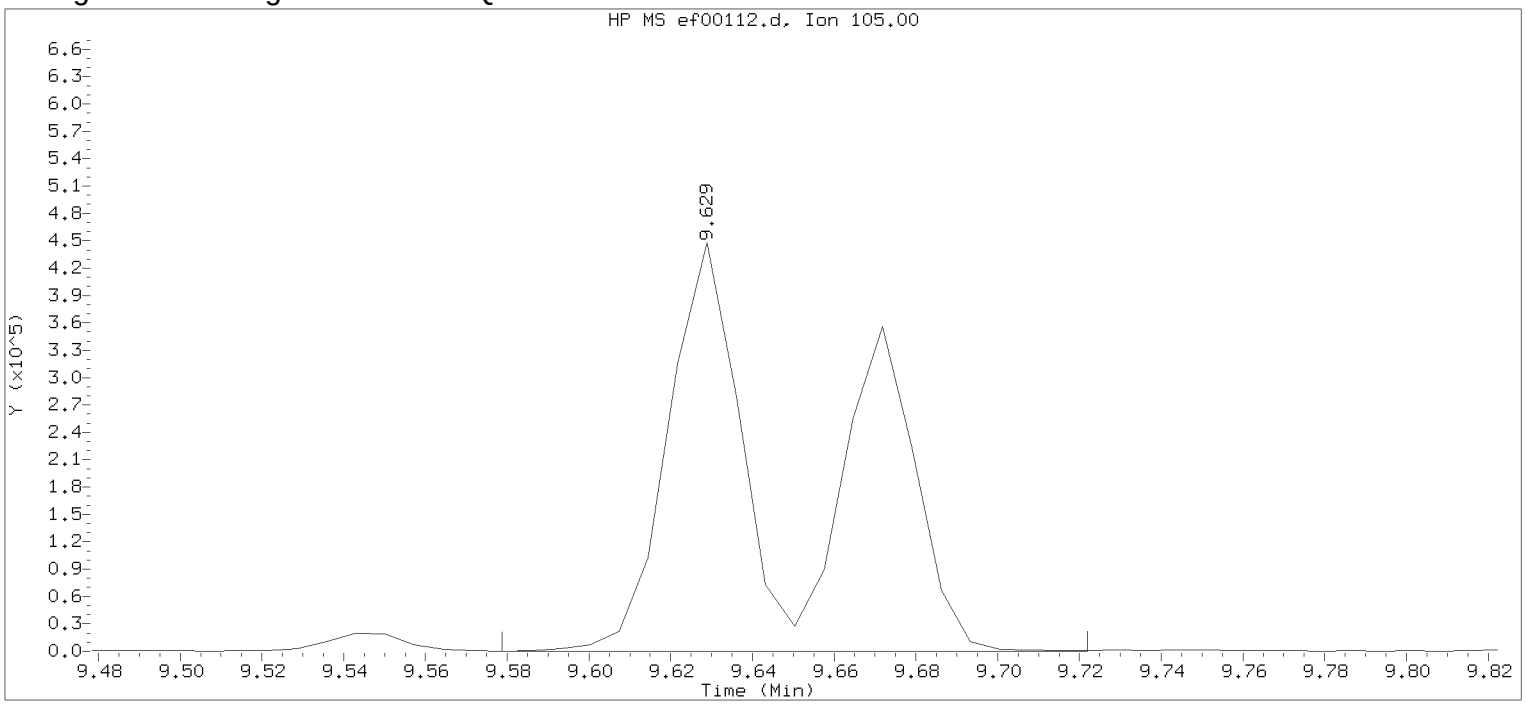
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:04.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00112.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 18:50 Analyst ID: jeb07445

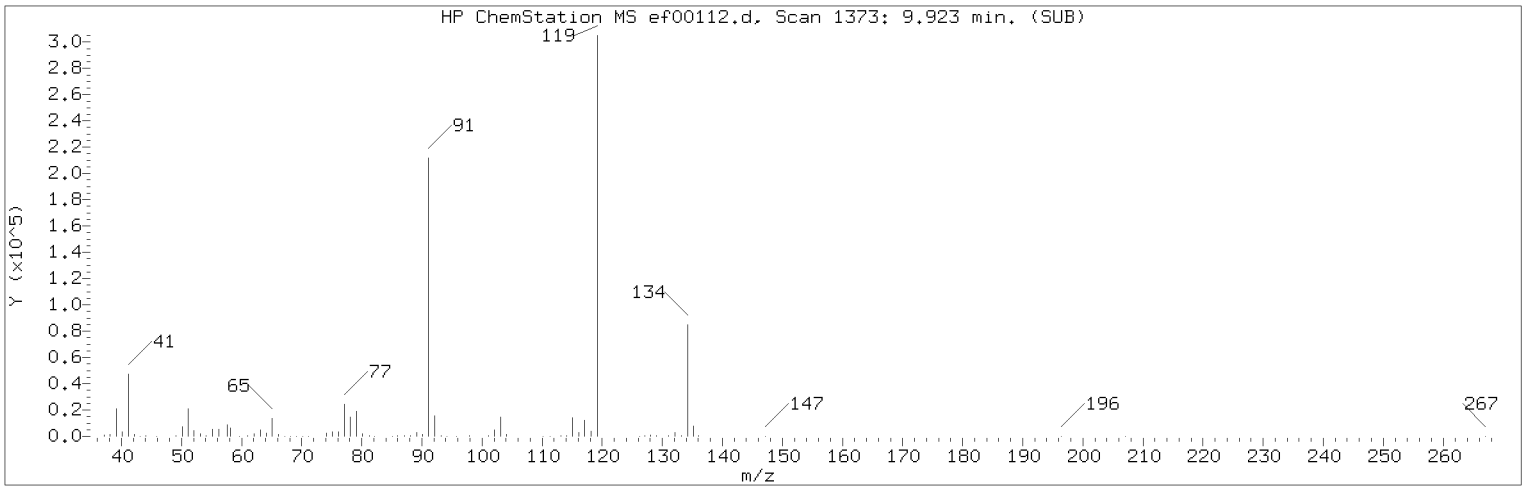
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 18:54
Date, time and analyst ID of latest file update: 10-Jun-2018 19:09 Unknown

Sample Name: VSTD005 Lab Sample ID: VSTD005

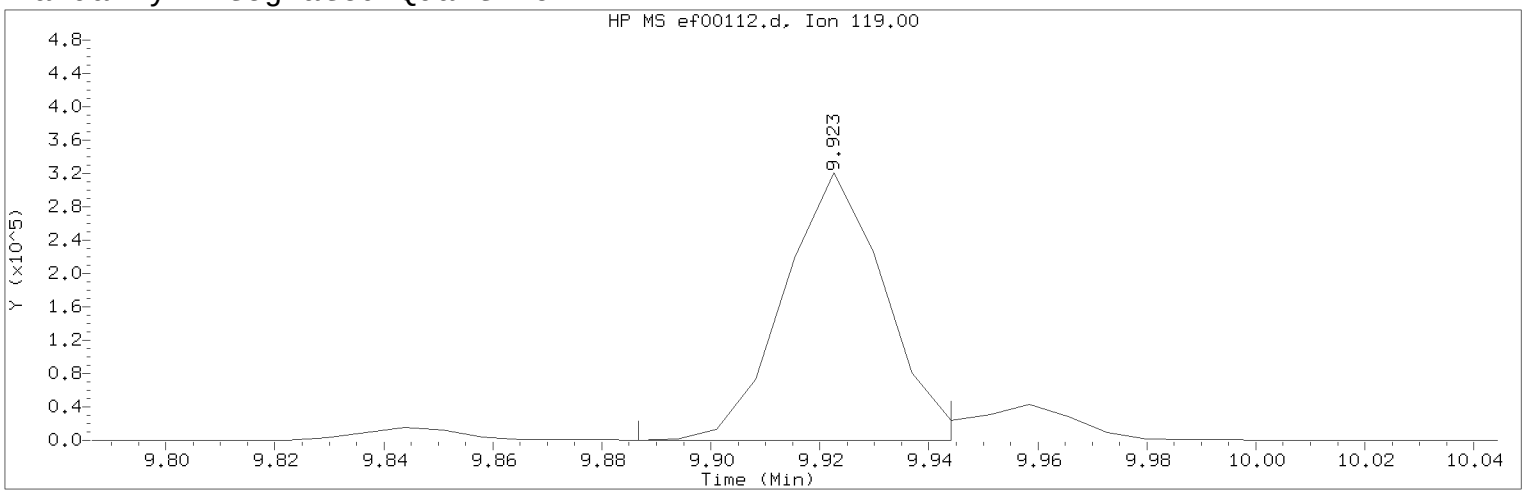
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 979782
Concentration (ppb(v)) : 10.3351
Integration start scan : 1324 Integration stop scan: 1344
Y at integration start : 222 Y at integration end: 222

Digitally signed by Jacob E. Bailey on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00112.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 18:50 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 19:25
Date, time and analyst ID of latest file update: 10-Jun-2018 19:25 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

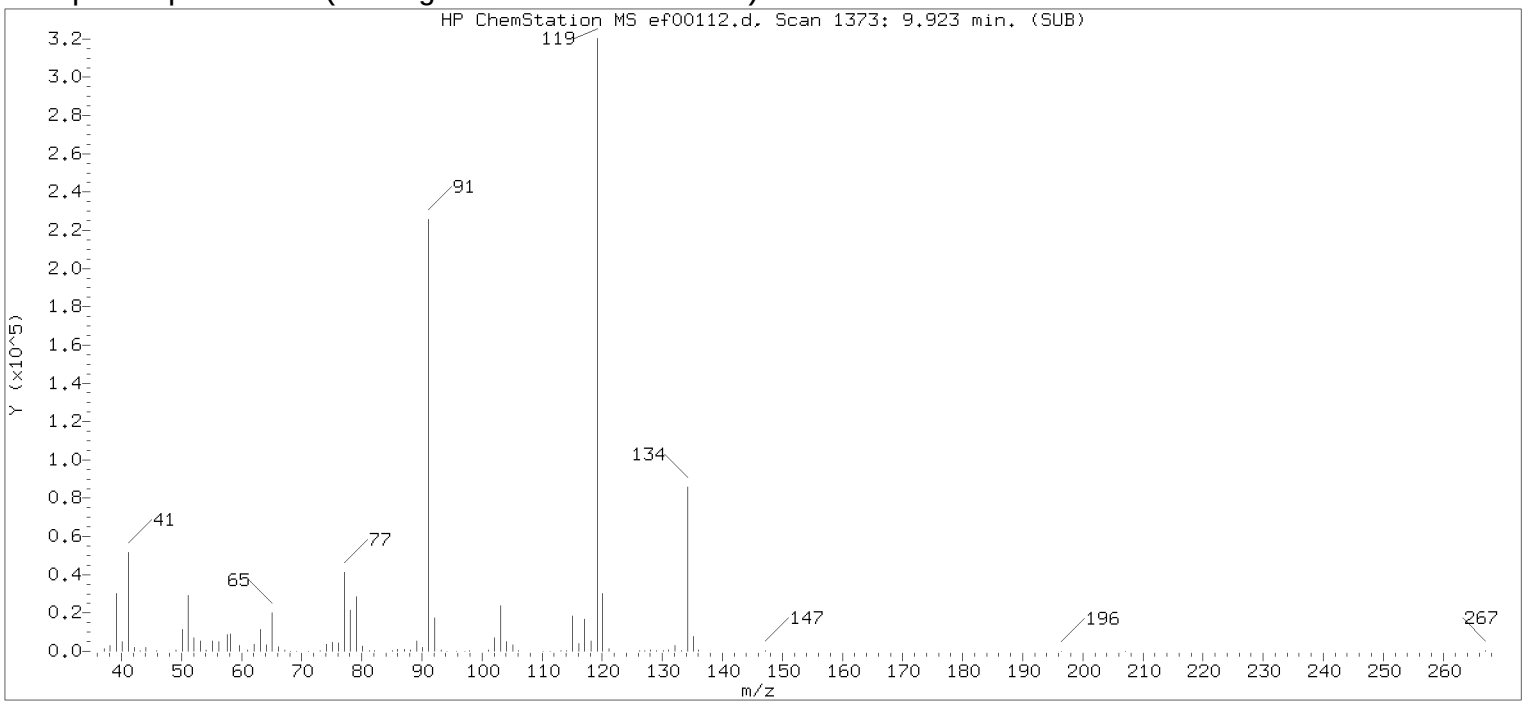
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.923
Quant Ion : 119.00
Area (flag) : 412374M
Concentration (ppb(v)) : 4.8474
Integration start scan : 1367 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

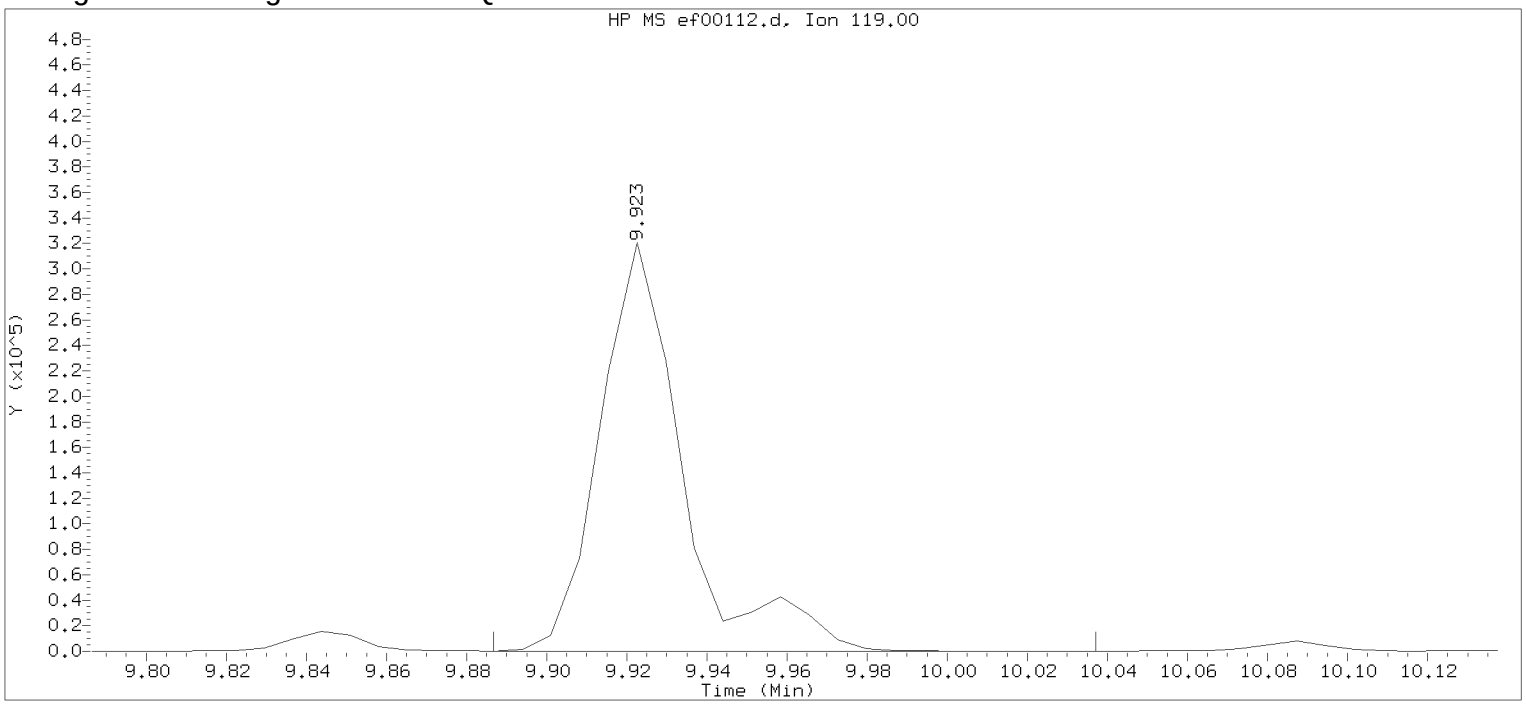
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:04.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00112.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 18:50 Analyst ID: jeb07445

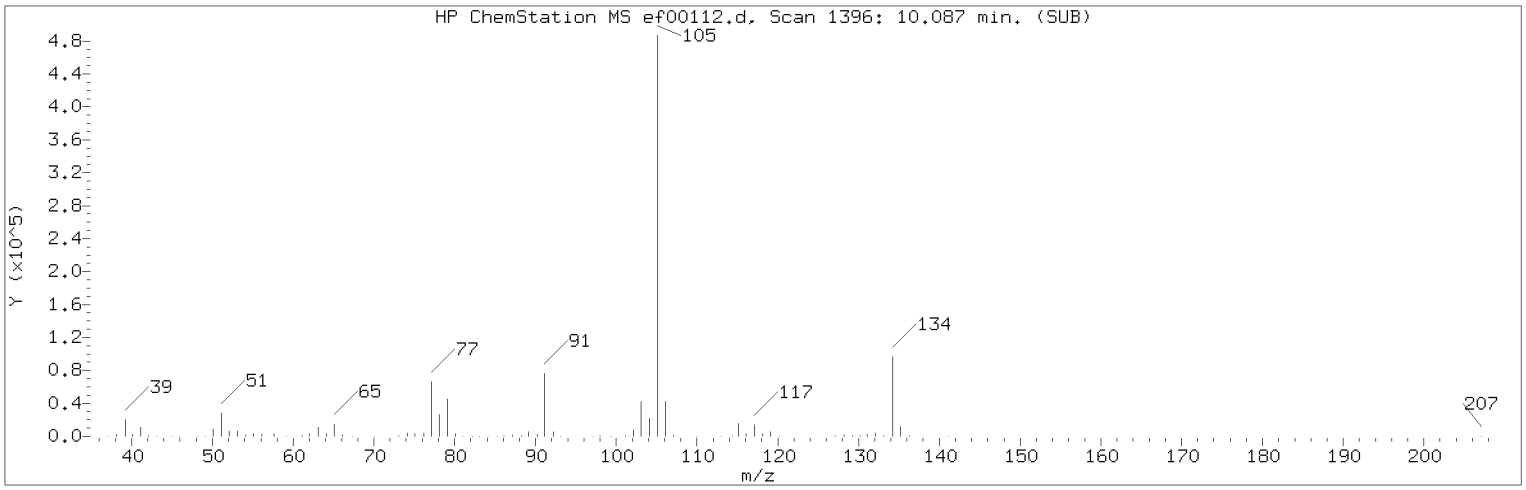
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 18:54
Date, time and analyst ID of latest file update: 10-Jun-2018 19:09 Unknown

Sample Name: VSTD005 Lab Sample ID: VSTD005

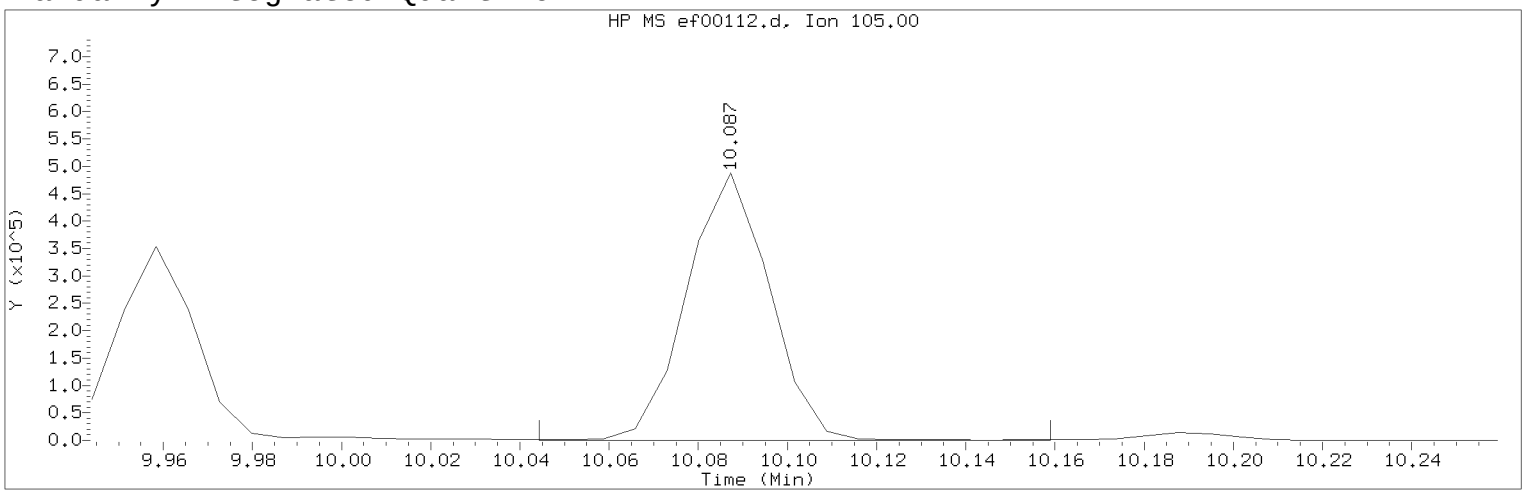
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.923
Quant Ion : 119.00
Area : 461460
Concentration (ppb(v)) : 5.2638
Integration start scan : 1367 Integration stop scan: 1388
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00112.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 18:50 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 19:25
Date, time and analyst ID of latest file update: 10-Jun-2018 19:25 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

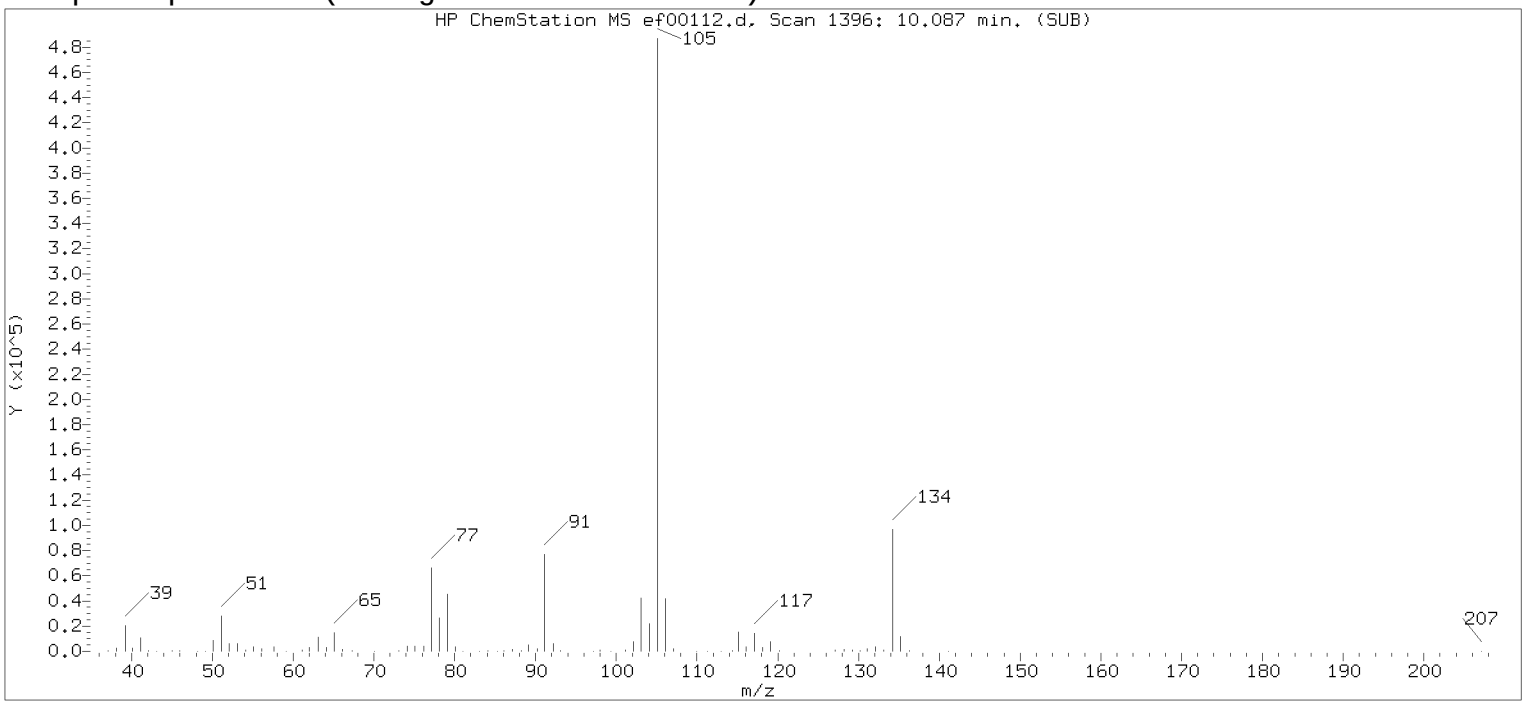
Compound Number : 91
Compound Name : sec-Butylbenzene
Scan Number : 1396
Retention Time (minutes): 10.087
Quant Ion : 105.00
Area (flag) : 626835M
Concentration (ppb(v)) : 4.8255
Integration start scan : 1389 Integration stop scan: 1405
Y at integration start : 361 Y at integration end: 361

Reason for manual integration: improper integration

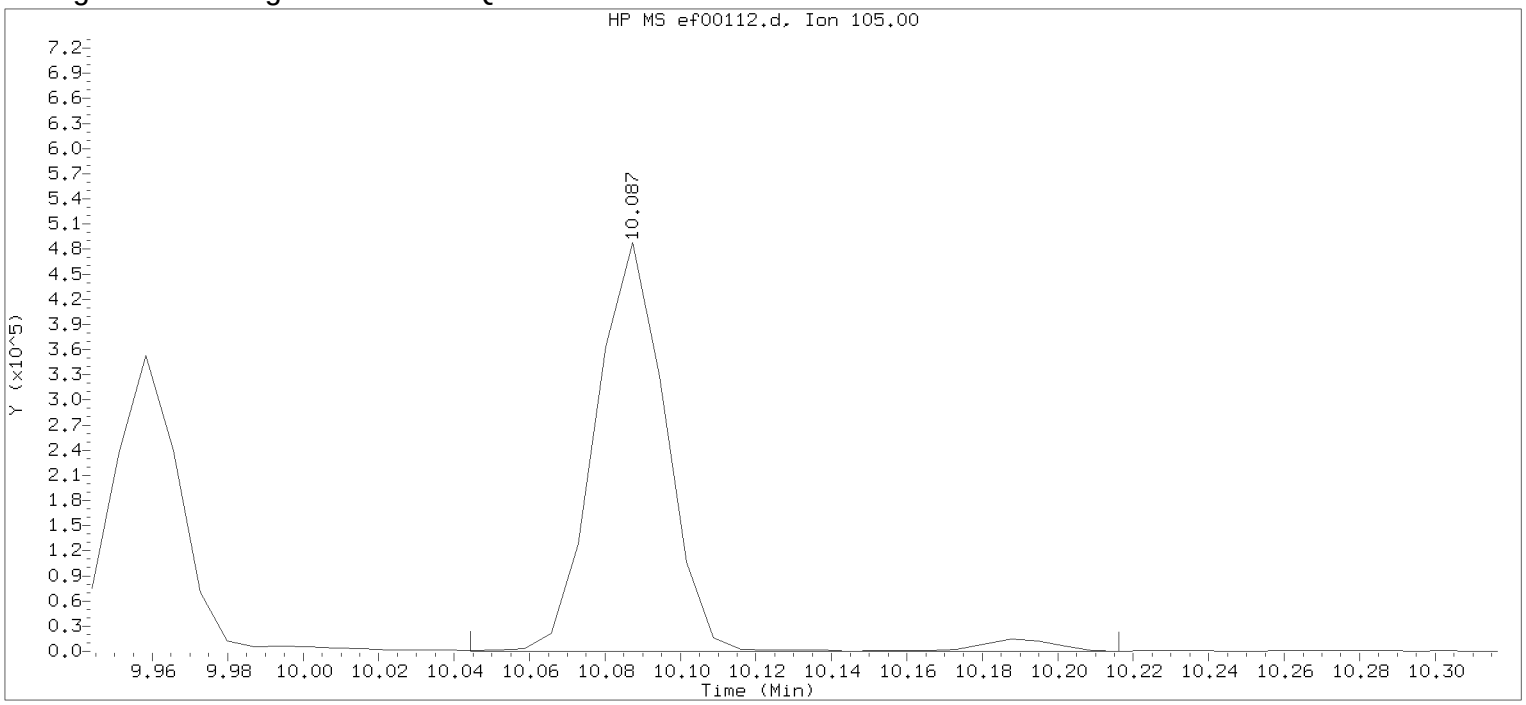
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:04.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



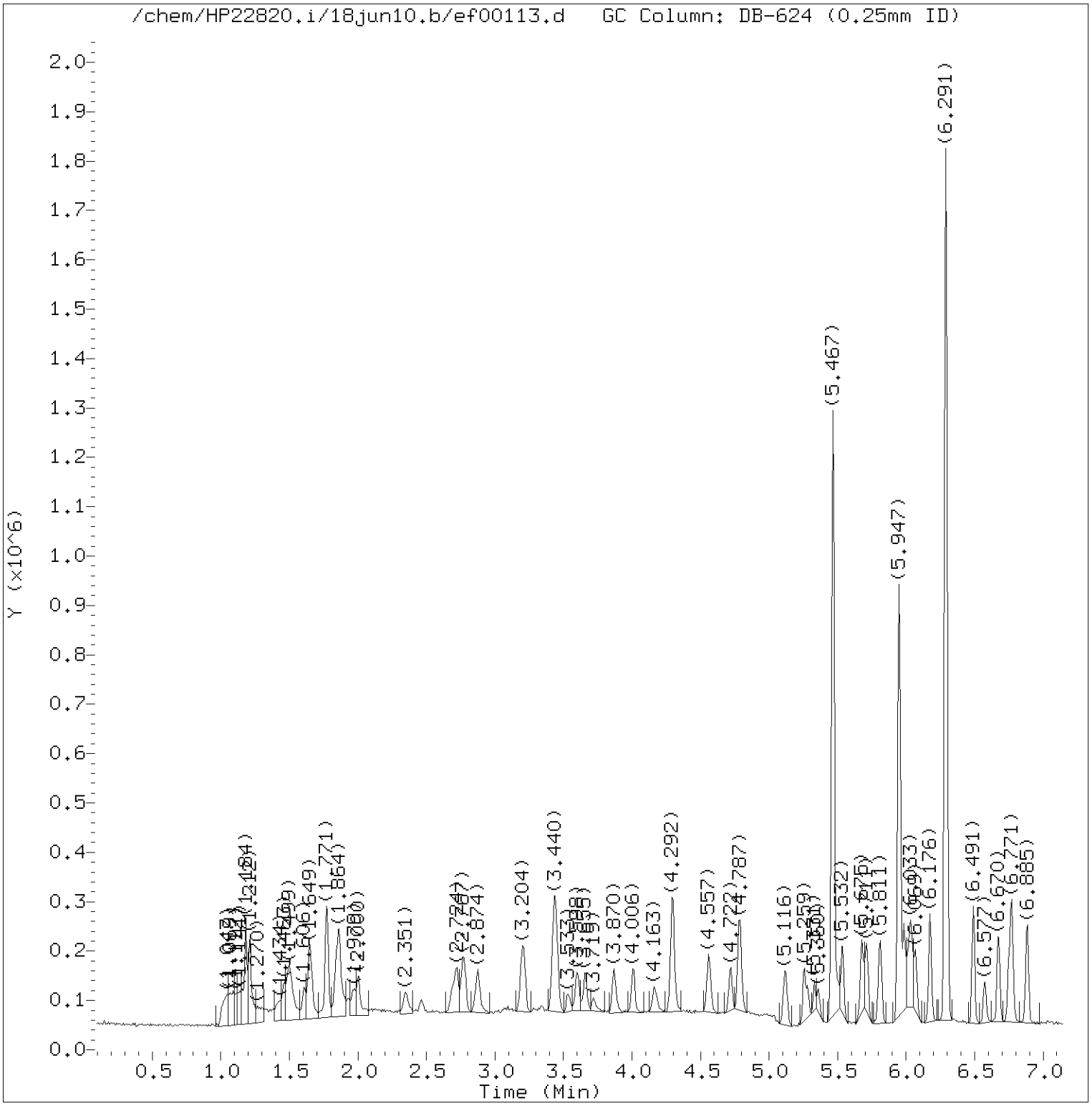
Data File: /chem/HP22820.i/18jun10.b/ef00112.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 18:50 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 18:54
Date, time and analyst ID of latest file update: 10-Jun-2018 19:09 Unknown

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compound Number : 91
Compound Name : sec-Butylbenzene
Scan Number : 1396
Retention Time (minutes): 10.087
Quant Ion : 105.00
Area : 644770
Concentration (ppb(v)) : 4.7963
Integration start scan : 1389 Integration stop scan: 1413
Y at integration start : 361 Y at integration end: 361

Digitally signed by Jacob E. Bailey on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

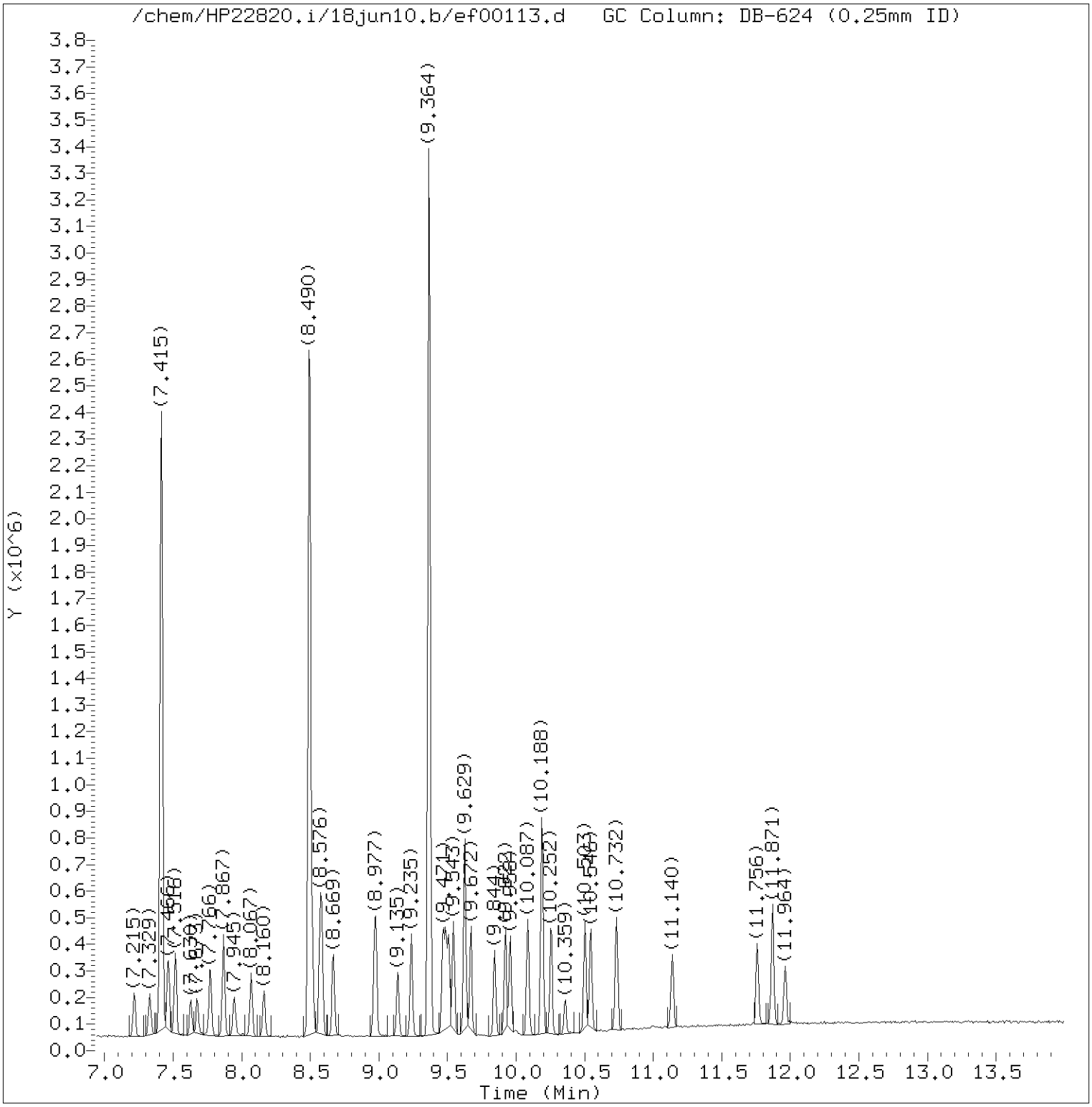
Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00113.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 19:15 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 19:45
Date, time and analyst ID of latest file update: 10-Jun-2018 19:45 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00113.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 19:15 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 19:45
Date, time and analyst ID of latest file update: 10-Jun-2018 19:45 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00113.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 19:15 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 19:45
Date, time and analyst ID of latest file update: 10-Jun-2018 19:45 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.606	41	30200	2.021
2) Dichlorodifluoromethane	(1)	1.642	85	102881	1.938
3) Chlorodifluoromethane	(1)	1.664	51	68946	2.044
4) Freon 114	(1)	1.771	85	113131	2.013
5) Chloromethane	(1)	1.843	50	43495	2.053
6) Vinyl Chloride	(1)	1.972	62	41251	2.000
7) 1,3-Butadiene	(1)	2.000	54	30007	2.057
8) Bromomethane	(1)	2.344	94	32164	1.916
9) Chloroethane	(1)	2.466	64	22554	1.972
10) Bromoethene	(1)	2.688	106	34609	1.940
11) Dichlorofluoromethane	(1)	2.724	67	89248	1.951
12) Trichlorofluoromethane	(1)	2.774	101	116139	2.077
13) Pentane	(1)	2.874	43	64592	2.038
14) Ethanol	(1)	3.082	45	16229	2.155
15) Freon123a	(1)	3.204	67	96868	2.338
16) Acrolein	(1)	3.340	56	13786	1.923
17) 1,1-Dichloroethene	(1)	3.426	61	58725	1.893
18) Freon 113	(1)	3.440	103	68139	2.150
19) Acetone	(1)	3.533	43	60046	1.987
20) Methyl Iodide	(1)	3.598	142	101724	1.957
21) Carbon Disulfide	(1)	3.662	76	112027	1.904
22) Isopropanol	(1)	3.719	45	49811	1.953
23) Acetonitrile	(1)	3.870	40	31336M	2.162
24) 3-Chloropropene	(1)	3.870	76	16977	2.175
25) Methylene Chloride	(1)	4.013	84	38432	2.191
26) tert-Butyl Alcohol	(1)	4.163	59	61798	2.167
28) trans-1,2-Dichloroethene	(1)	4.292	61	56211	1.963
29) Methyl t-Butyl Ether	(1)	4.292	73	99125	2.058
27) Acrylonitrile	(1)	4.300	53	33196	1.938
30) Hexane	(1)	4.565	57	57867	2.070
31) 1,1-Dichloroethane	(1)	4.722	63	77278	2.006
32) Vinyl Acetate	(1)	4.779	86	7929	2.041
33) Di-Isopropyl Ether	(1)	4.787	45	123023	1.994
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	80817	1.928
35) cis-1,2-Dichloroethene	(1)	5.259	61	51222	1.941
37) 2-Butanone	(1)	5.281	72	19049	2.000
38) Ethyl Acetate	(1)	5.331	70	11456	2.243
39) Methyl Acrylate	(1)	5.360	55	62714	1.970

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00113.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 19:15 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 19:45
Date, time and analyst ID of latest file update: 10-Jun-2018 19:45 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	329911	10.000
41) Tetrahydrofuran	(1)	5.503	42	46719	2.141
42) Chloroform	(1)	5.539	83	91530	1.983
43) 1,1,1-Trichloroethane	(1)	5.675	97	87603	2.050
44) Cyclohexane	(1)	5.711	56	58407	1.971
45) Carbon Tetrachloride	(1)	5.811	117	82265	2.002
46) Benzene	(2)	5.983	78	128650	2.048
47) 1,2-Dichloroethane	(2)	6.011	62	63653	2.105
48) Isooctane	(2)	6.033	57	172918	1.981
49) Tert-Amyl Methyl Ether	(2)	6.069	73	81793	2.009
50) Heptane	(2)	6.176	43	65816	2.009
51)*1,4-Difluorobenzene	(2)	6.291	114	1104263	10.000
52) Trichloroethene	(2)	6.491	130	59142	2.142
53) Ethyl Acrylate	(2)	6.577	55	76110	2.016
36) 1,2-Dichloroethene (total)	(1)		61	107433	3.904
54) 1,2-Dichloropropane	(2)	6.678	63	52313	2.166
57) Methyl Methacrylate	(2)	6.749	69	40531	2.061
55) Dibromomethane	(2)	6.771	174	54819	2.110
56) 1,4-Dioxane	(2)	6.778	88	31468	2.142
58) Bromodichloromethane	(2)	6.885	83	101099	2.132
59) cis-1,3-Dichloropropene	(2)	7.215	75	70530	2.067
60) 4-Methyl-2-Pentanone	(2)	7.329	43	91212	2.047
61) Toluene	(3)	7.466	91	161989	2.119
62) Octane	(3)	7.516	43	93755	2.008
63) trans-1,3-Dichloropropene	(3)	7.630	75	55697	2.018
65) Ethyl Methacrylate	(3)	7.673	69	62627	1.969
66) 1,1,2-Trichloroethane	(3)	7.774	97	62214	2.117
67) Tetrachloroethene	(3)	7.867	166	83935	2.157
68) 2-Hexanone	(3)	7.945	43	88585	2.038
69) Dibromochloromethane	(3)	8.067	127	72353	2.083
70) 1,2-Dibromoethane	(3)	8.160	107	89094	2.073
71)*Chlorobenzene-d5	(3)	8.490	117	1128684	10.000
72) Chlorobenzene	(3)	8.511	112	141933	2.158
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	64069	2.020
74) Ethylbenzene	(3)	8.583	91	199686	2.072
75) m/p-Xylene	(3)	8.669	91	152714	2.075
76) o-Xylene	(3)	8.970	91	143908	2.010
78) Styrene	(3)	8.977	104	103478	1.914

* = Compound is an internal standard.

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on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00113.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 19:15 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 19:45
Date, time and analyst ID of latest file update: 10-Jun-2018 19:45 jeb07445

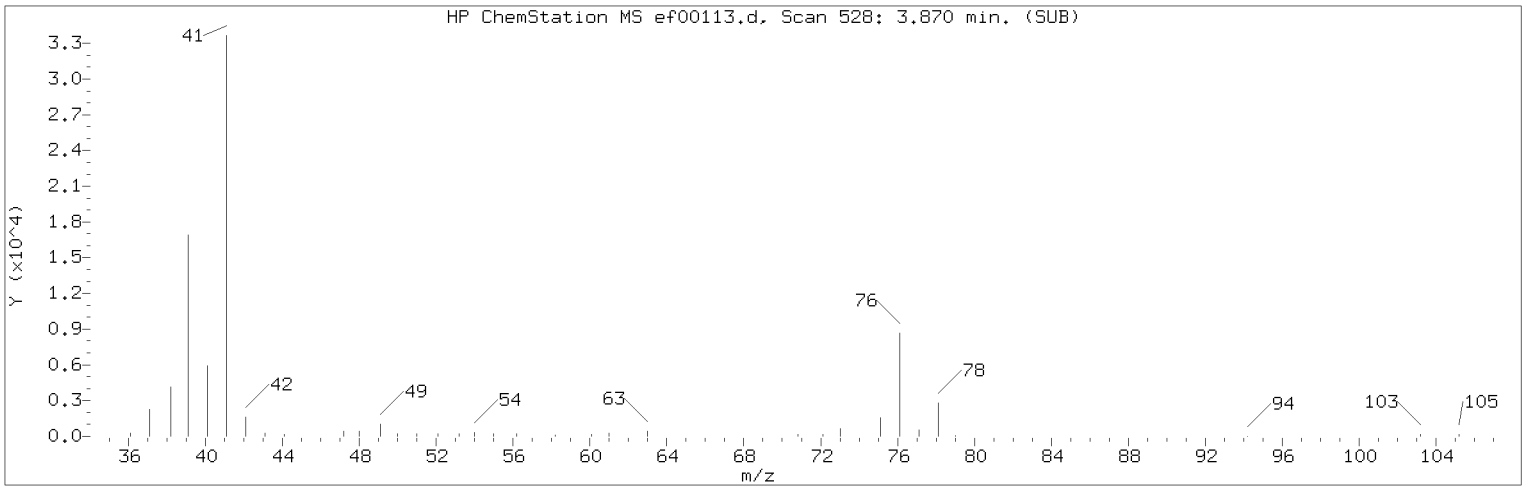
Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.135	173	86045	2.068
80) Cumene	(3)	9.235	105	189272	1.978
82) 1,1,2,2-Tetrachloroethane	(3)	9.464	83	151670	2.179
81) Bromobenzene	(3)	9.486	156	80720	2.156
83) 1,2,3-Trichloropropane	(3)	9.507	110	42835	2.166
84) n-Propylbenzene	(3)	9.543	120	57164	2.001
85) 2-Chlorotoluene	(3)	9.622	126	56410	2.051
86) 4-Ethyltoluene	(3)	9.629	105	200842	1.958
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	171324	2.033
88) Alpha Methyl Styrene	(3)	9.844	118	76295	1.981
89) tert-Butylbenzene	(3)	9.922	119	145039M	1.908
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	164567	1.984
91) sec-Butylbenzene	(3)	10.087	105	235017	1.986
92) 1,3-Dichlorobenzene	(3)	10.188	146	133265	2.107
94) p-Isopropyltoluene	(3)	10.188	119	183211	1.959
93) 1,4-Dichlorobenzene	(3)	10.259	146	132906	2.107
95) Benzyl Chloride	(3)	10.359	91	75919	1.813
97) n-Butylbenzene	(3)	10.503	91	177980	1.948
96) 1,2-Dichlorobenzene	(3)	10.546	146	120757	2.046
98) Hexachloroethane	(3)	10.732	117	47062	1.953
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	55525	2.064
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	77928	2.216
101) Hexachlorobutadiene	(3)	11.871	225	66392	2.204
102) Naphthalene	(3)	11.964	128	149005	2.112
64) 1,3-Dichloropropene (total)	(3)		75	126227	4.063
77) Xylene (total)	(3)		91	296622	4.086

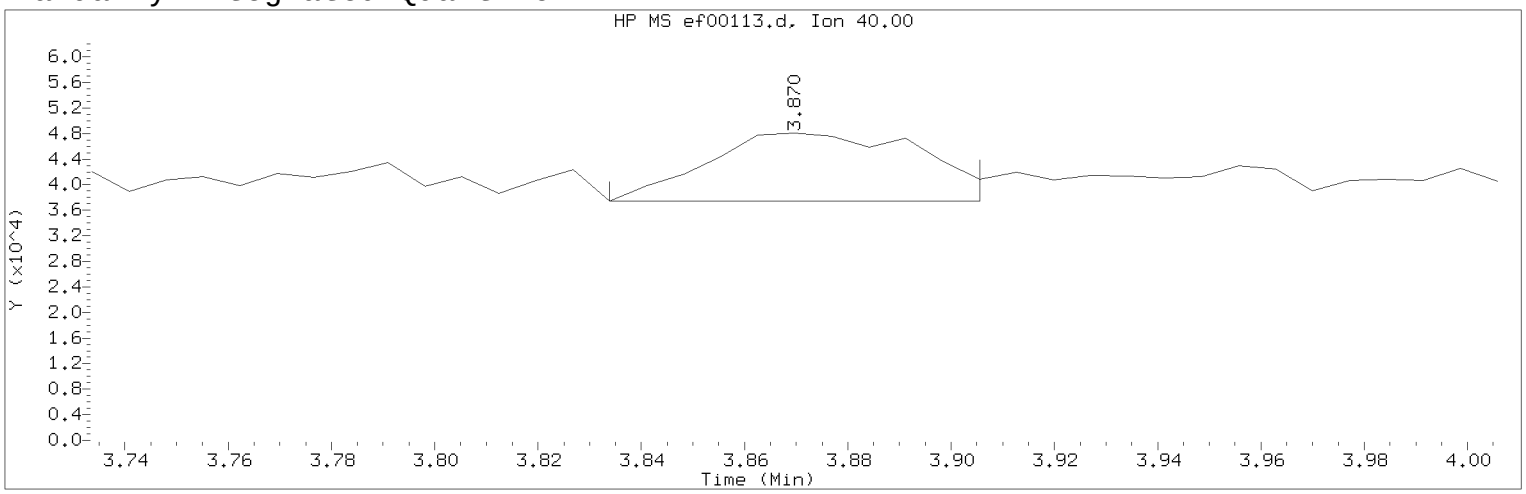
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00113.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 19:15 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 19:45
Date, time and analyst ID of latest file update: 10-Jun-2018 19:45 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

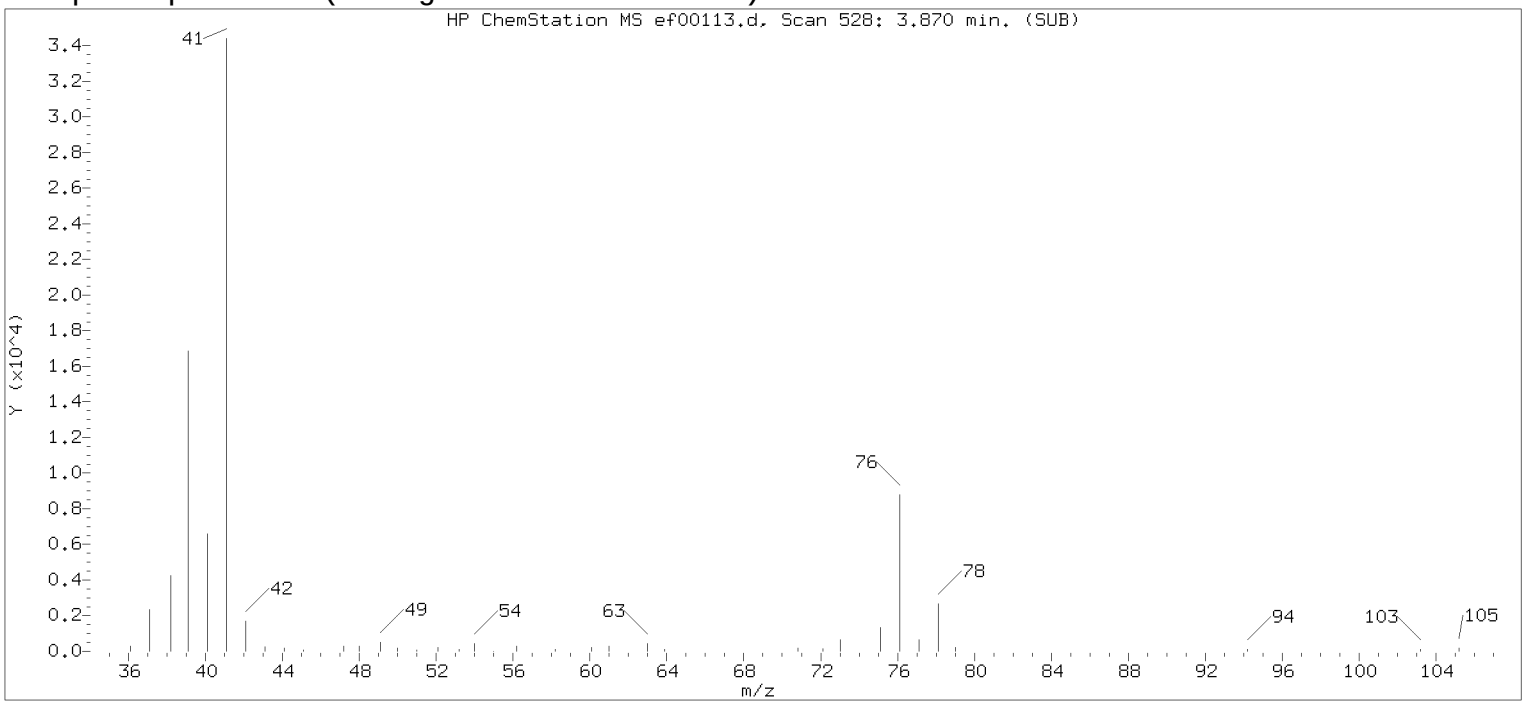
Compound Number : 23
Compound Name : Acetonitrile
Scan Number : 528
Retention Time (minutes): 3.870
Quant Ion : 40.00
Area (flag) : 31336M
Concentration (ppb(v)) : 2.1615
Integration start scan : 522 Integration stop scan: 532
Y at integration start : 37400 Y at integration end: 37400

Reason for manual integration: improper integration

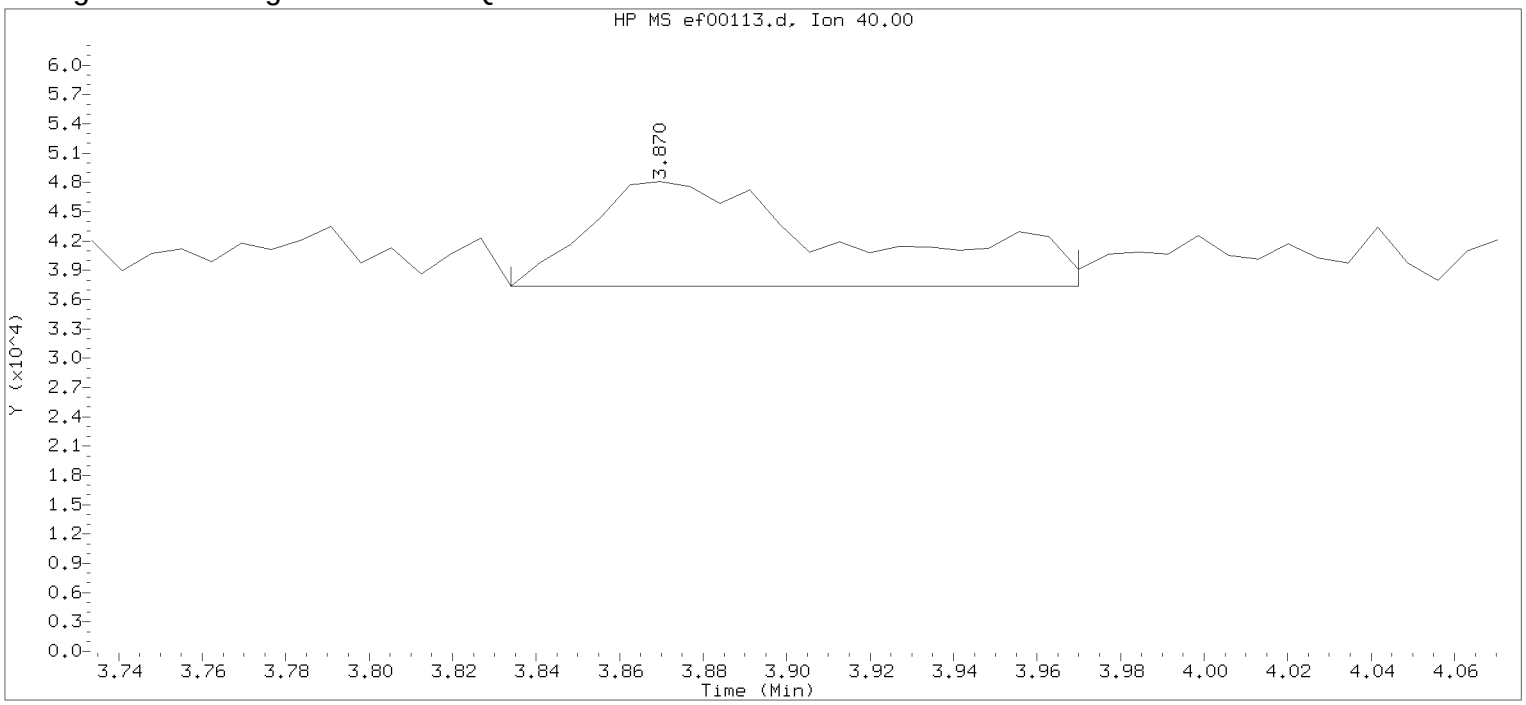
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:04.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00113.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 19:15 Analyst ID: jeb07445

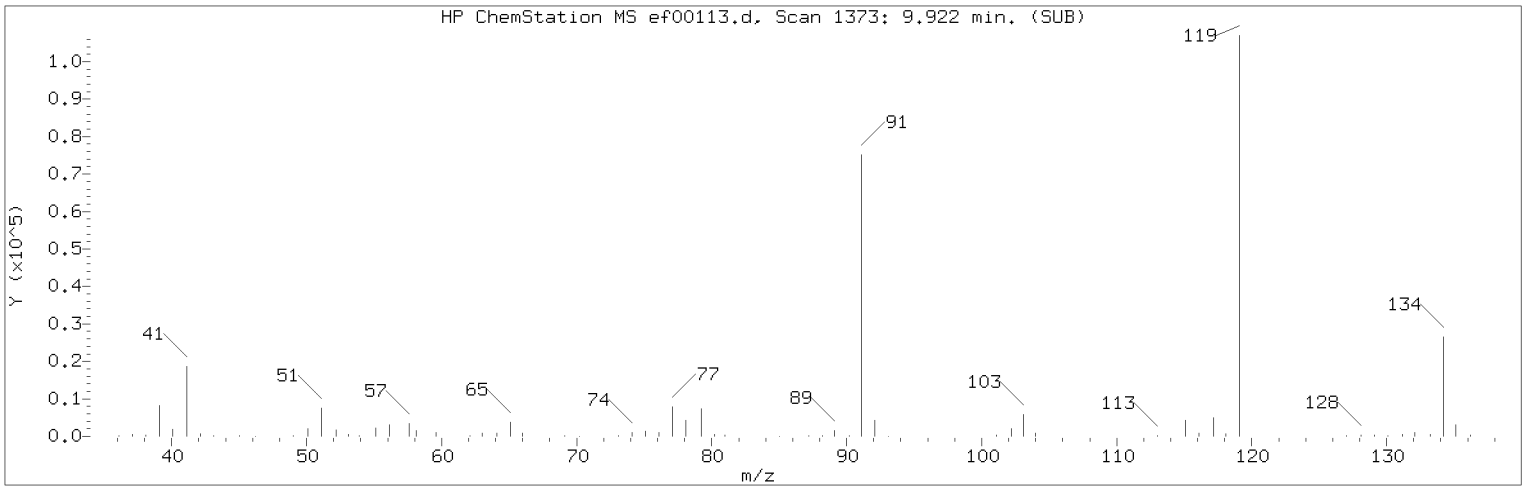
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 19:25
Date, time and analyst ID of latest file update: 10-Jun-2018 19:33 Unknown

Sample Name: VSTD002 Lab Sample ID: VSTD002

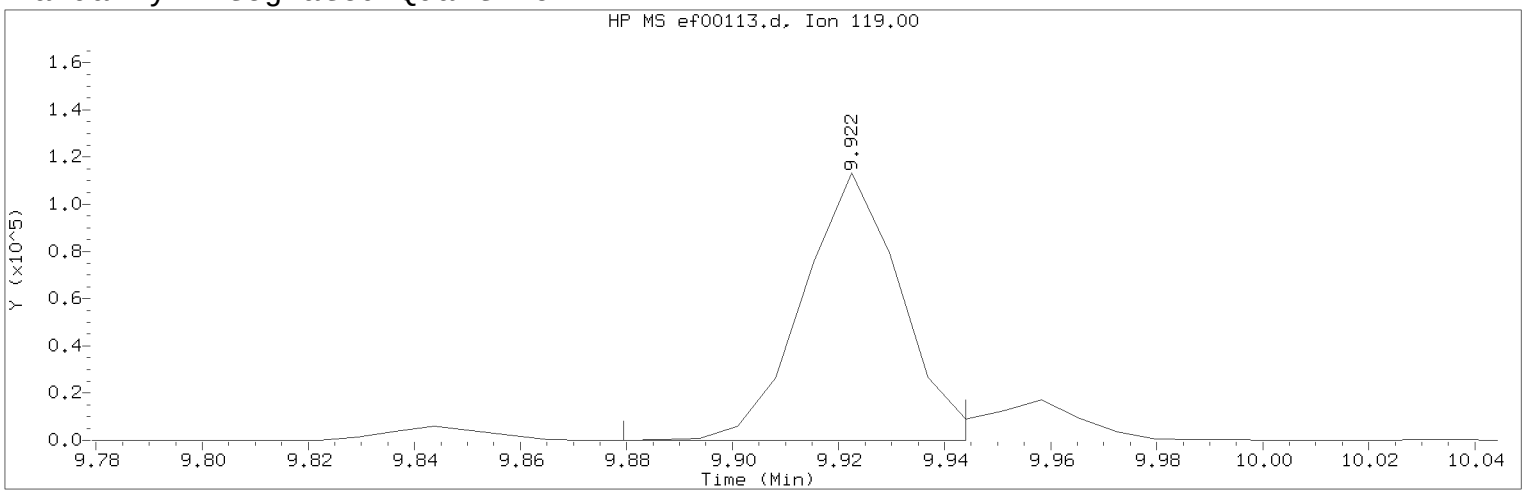
Compound Number : 23
Compound Name : Acetonitrile
Scan Number : 528
Retention Time (minutes): 3.870
Quant Ion : 40.00
Area : 46353
Concentration (ppb(v)) : 3.3319
Integration start scan : 522 Integration stop scan: 541
Y at integration start : 37400 Y at integration end: 37400

Digitally signed by Jacob E. Bailey on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00113.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 19:15 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 19:45
Date, time and analyst ID of latest file update: 10-Jun-2018 19:45 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

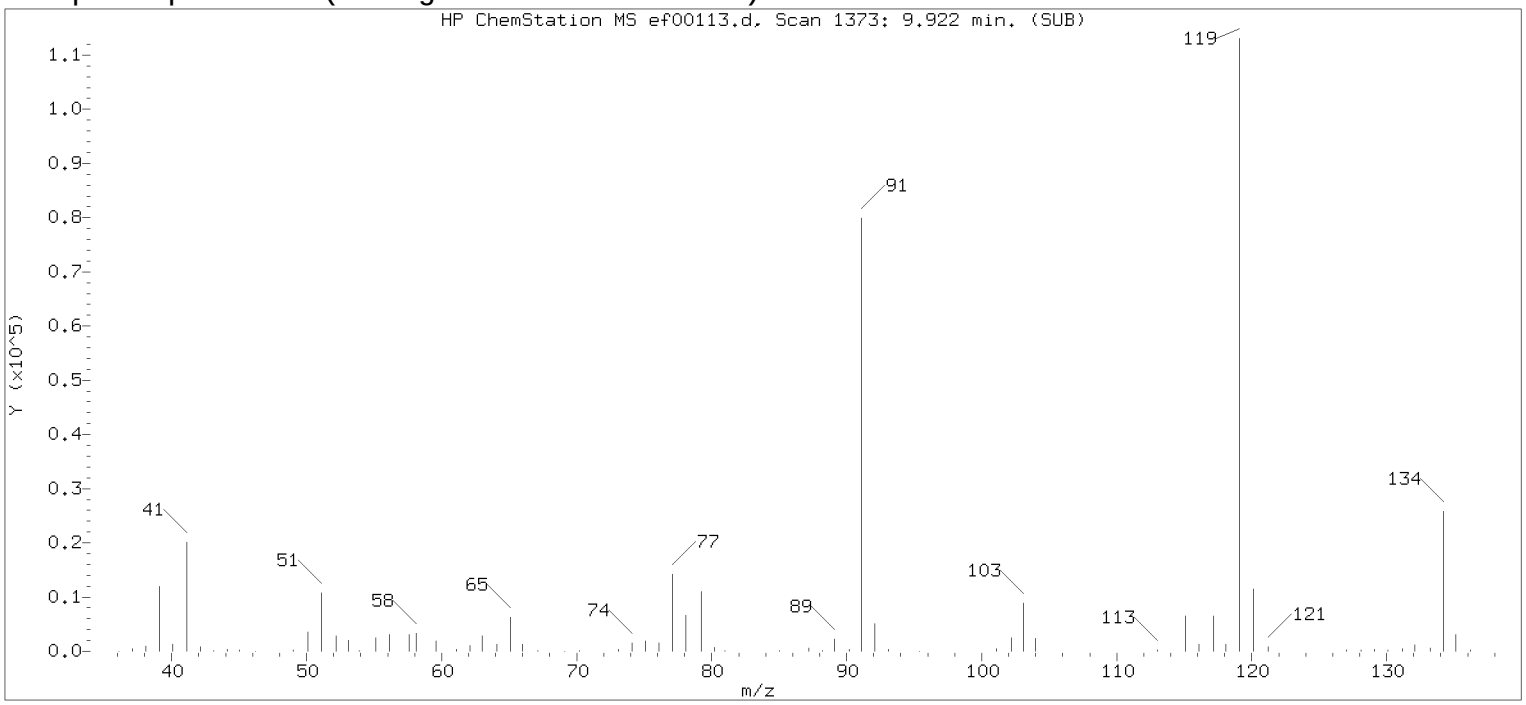
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 145039M
Concentration (ppb(v)) : 1.9082
Integration start scan : 1366 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

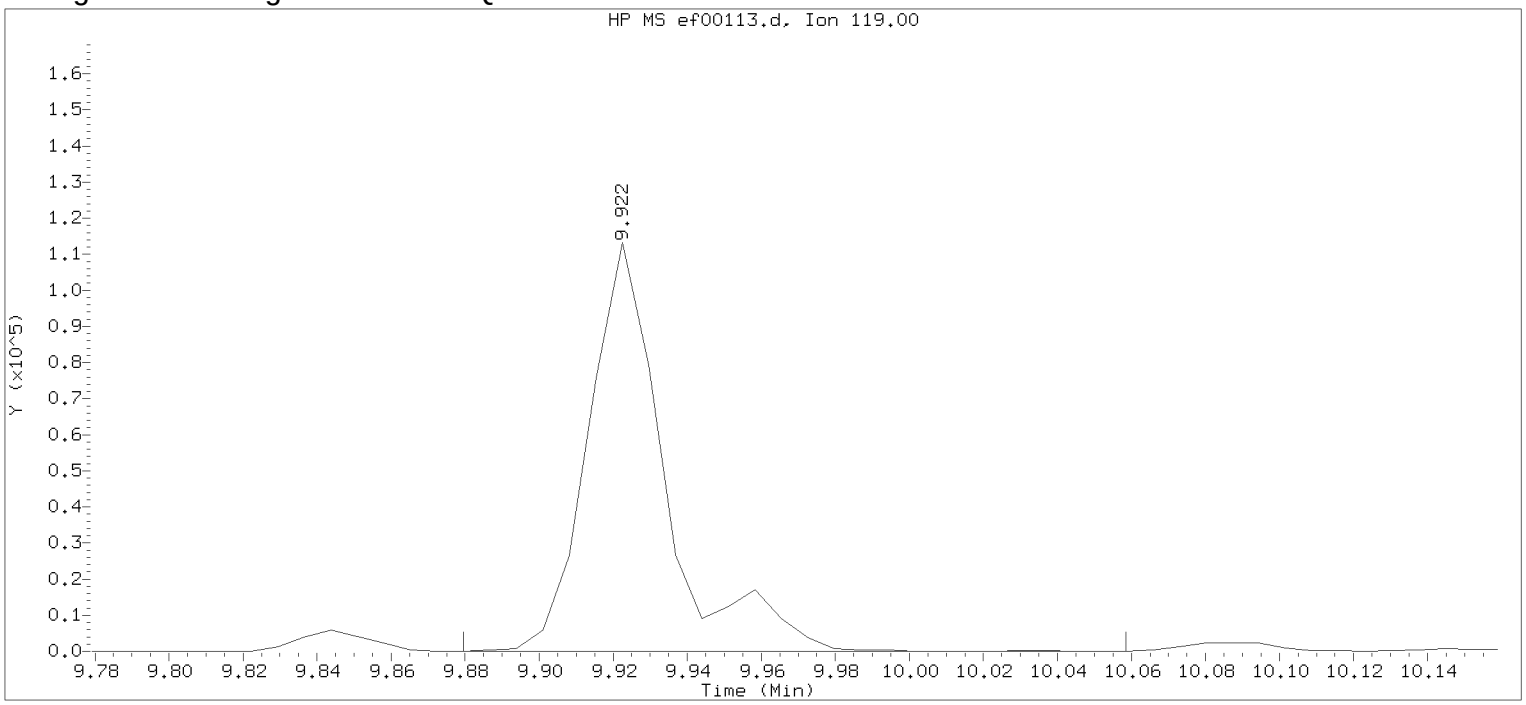
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:04.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



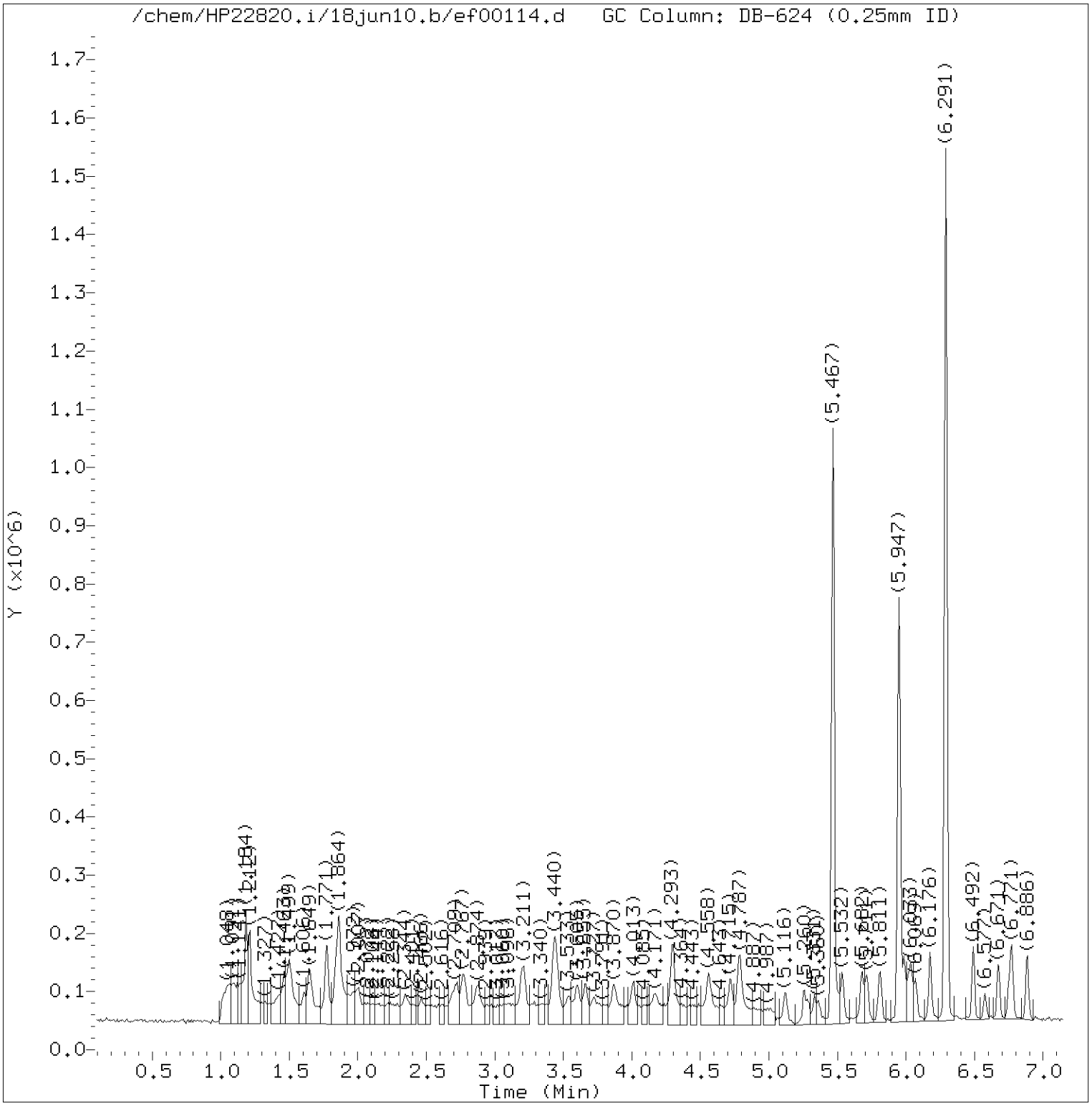
Data File: /chem/HP22820.i/18jun10.b/ef00113.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 19:15 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 19:25
Date, time and analyst ID of latest file update: 10-Jun-2018 19:33 Unknown

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 163968
Concentration (ppb(v)) : 2.1089
Integration start scan : 1366 Integration stop scan: 1391
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

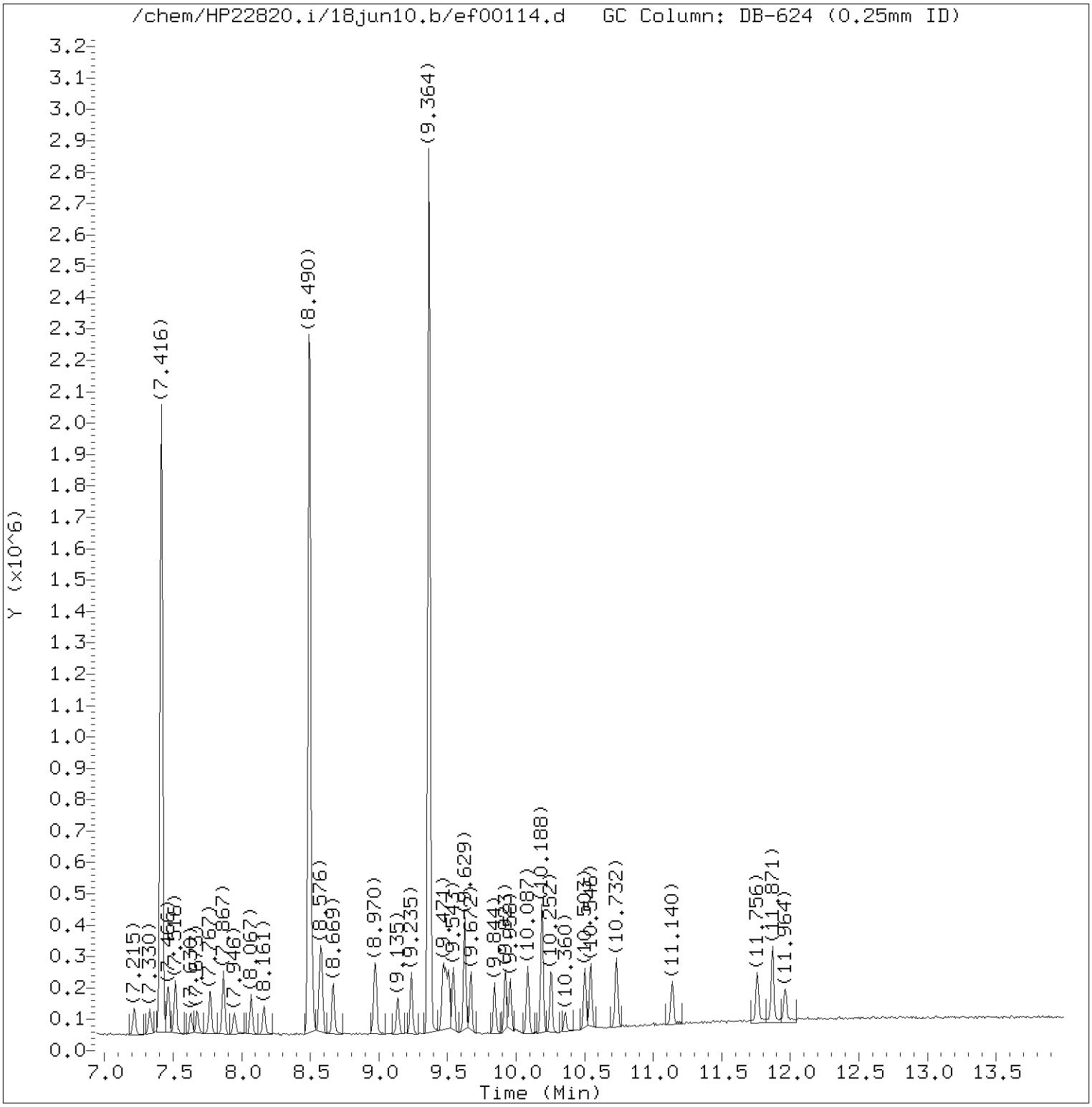
Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00114.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 19:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:05
Date, time and analyst ID of latest file update: 10-Jun-2018 20:05 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00114.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 19:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:05
Date, time and analyst ID of latest file update: 10-Jun-2018 20:05 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00114.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 19:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:05
Date, time and analyst ID of latest file update: 10-Jun-2018 20:05 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.606	41	14435	1.132
2) Dichlorodifluoromethane	(1)	1.642	85	47869	1.077
3) Chlorodifluoromethane	(1)	1.664	51	32154	1.121
4) Freon 114	(1)	1.771	85	57358	1.177
5) Chloromethane	(1)	1.836	50	21394	1.168
6) Vinyl Chloride	(1)	1.965	62	18071	1.054
7) 1,3-Butadiene	(1)	2.000	54	13033	1.070
8) Bromomethane	(1)	2.344	94	16218	1.132
9) Chloroethane	(1)	2.466	64	10541	1.094
10) Bromoethene	(1)	2.688	106	14903	1.018
11) Dichlorofluoromethane	(1)	2.724	67	39756	1.048
12) Trichlorofluoromethane	(1)	2.767	101	58228	1.194
13) Pentane	(1)	2.881	43	31479	1.154
14) Ethanol	(1)	3.068	45	4744M	0.819
15) Freon123a	(1)	3.204	67	49750	1.361
16) Acrolein	(1)	3.354	56	7223	1.166
17) 1,1-Dichloroethene	(1)	3.426	61	26312	1.029
18) Freon 113	(1)	3.440	103	34767	1.238
19) Acetone	(1)	3.533	43	32526	1.222
20) Methyl Iodide	(1)	3.605	142	45929	1.061
21) Carbon Disulfide	(1)	3.662	76	50714	1.041
22) Isopropanol	(1)	3.719	45	24384	1.123
24) 3-Chloropropene	(1)	3.863	76	7992	1.215
23) Acetonitrile	(1)	3.877	40	13873M	1.124
25) Methylene Chloride	(1)	4.006	84	17145	1.174
26) tert-Butyl Alcohol	(1)	4.171	59	29435	1.222
28) trans-1,2-Dichloroethene	(1)	4.293	61	24395	1.033
27) Acrylonitrile	(1)	4.300	53	14709	1.039
29) Methyl t-Butyl Ether	(1)	4.300	73	45974	1.122
30) Hexane	(1)	4.558	57	29664	1.210
31) 1,1-Dichloroethane	(1)	4.715	63	39905	1.189
32) Vinyl Acetate	(1)	4.780	86	4059	1.236
33) Di-Isopropyl Ether	(1)	4.787	45	58547	1.117
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	37283	1.066
37) 2-Butanone	(1)	5.131	72	10239	1.221
35) cis-1,2-Dichloroethene	(1)	5.252	61	24318	1.094
38) Ethyl Acetate	(1)	5.331	70	4557	1.068
39) Methyl Acrylate	(1)	5.360	55	29544	1.099

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00114.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 19:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:05
Date, time and analyst ID of latest file update: 10-Jun-2018 20:05 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	269252	10.000
41) Tetrahydrofuran	(1)	5.503	42	21620	1.152
42) Chloroform	(1)	5.539	83	46426	1.165
43) 1,1,1-Trichloroethane	(1)	5.675	97	41706	1.140
44) Cyclohexane	(1)	5.711	56	29736	1.163
45) Carbon Tetrachloride	(1)	5.811	117	40258	1.143
46) Benzene	(2)	5.983	78	72753	1.267
47) 1,2-Dichloroethane	(2)	6.012	62	32511	1.204
48) Isooctane	(2)	6.040	57	77882	1.053
49) Tert-Amyl Methyl Ether	(2)	6.069	73	38744	1.104
50) Heptane	(2)	6.176	43	35165	1.203
51)*1,4-Difluorobenzene	(2)	6.291	114	919098	10.000
52) Trichloroethene	(2)	6.492	130	31372	1.251
53) Ethyl Acrylate	(2)	6.577	55	40023	1.192
36) 1,2-Dichloroethene (total)	(1)		61	48713	2.126
54) 1,2-Dichloropropane	(2)	6.678	63	27526	1.254
57) Methyl Methacrylate	(2)	6.749	69	21360	1.212
55) Dibromomethane	(2)	6.771	174	26980	1.175
56) 1,4-Dioxane	(2)	6.778	88	14331	1.124
58) Bromodichloromethane	(2)	6.886	83	54550	1.261
59) cis-1,3-Dichloropropene	(2)	7.215	75	35766	1.183
60) 4-Methyl-2-Pentanone	(2)	7.330	43	56804	1.352
61) Toluene	(3)	7.466	91	87310	1.240
62) Octane	(3)	7.516	43	49727	1.181
63) trans-1,3-Dichloropropene	(3)	7.630	75	26591	1.099
65) Ethyl Methacrylate	(3)	7.673	69	30979	1.108
66) 1,1,2-Trichloroethane	(3)	7.767	97	33897	1.248
67) Tetrachloroethene	(3)	7.867	166	45398	1.258
68) 2-Hexanone	(3)	7.946	43	42918	1.119
69) Dibromochloromethane	(3)	8.067	127	37310	1.188
70) 1,2-Dibromoethane	(3)	8.161	107	48333	1.227
71)*Chlorobenzene-d5	(3)	8.490	117	956834	10.000
72) Chlorobenzene	(3)	8.512	112	73801	1.224
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	32285	1.143
74) Ethylbenzene	(3)	8.583	91	100446	1.163
75) m/p-Xylene	(3)	8.669	91	76252	1.158
76) o-Xylene	(3)	8.970	91	73742	1.153
78) Styrene	(3)	8.977	104	51704	1.093

* = Compound is an internal standard.

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on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00114.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 19:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:05
Date, time and analyst ID of latest file update: 10-Jun-2018 20:05 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.135	173	42472	1.146
80) Cumene	(3)	9.235	105	98926	1.156
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	78973M	1.234
81) Bromobenzene	(3)	9.493	156	40224	1.188
83) 1,2,3-Trichloropropane	(3)	9.507	110	21966	1.216
84) n-Propylbenzene	(3)	9.543	120	27855	1.109
86) 4-Ethyltoluene	(3)	9.629	105	97903	1.091
85) 2-Chlorotoluene	(3)	9.629	126	27193	1.120
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	82231	1.109
88) Alpha Methyl Styrene	(3)	9.844	118	36957	1.096
89) tert-Butylbenzene	(3)	9.923	119	73629M	1.103
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	75389M	1.053
91) sec-Butylbenzene	(3)	10.087	105	111634	1.082
92) 1,3-Dichlorobenzene	(3)	10.188	146	67709	1.185
94) p-Isopropyltoluene	(3)	10.188	119	87276	1.074
93) 1,4-Dichlorobenzene	(3)	10.259	146	67097	1.180
95) Benzyl Chloride	(3)	10.360	91	36728	1.026
97) n-Butylbenzene	(3)	10.503	91	86667	1.087
96) 1,2-Dichlorobenzene	(3)	10.546	146	64677	1.205
98) Hexachloroethane	(3)	10.732	117	23498	1.109
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	27781	1.155
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	41534	1.268
101) Hexachlorobutadiene	(3)	11.871	225	34700	1.247
102) Naphthalene	(3)	11.964	128	72568	1.152
64) 1,3-Dichloropropene (total)	(3)		75	62357	2.264
77) Xylene (total)	(3)		91	149994	2.311

M = Compound was manually integrated.

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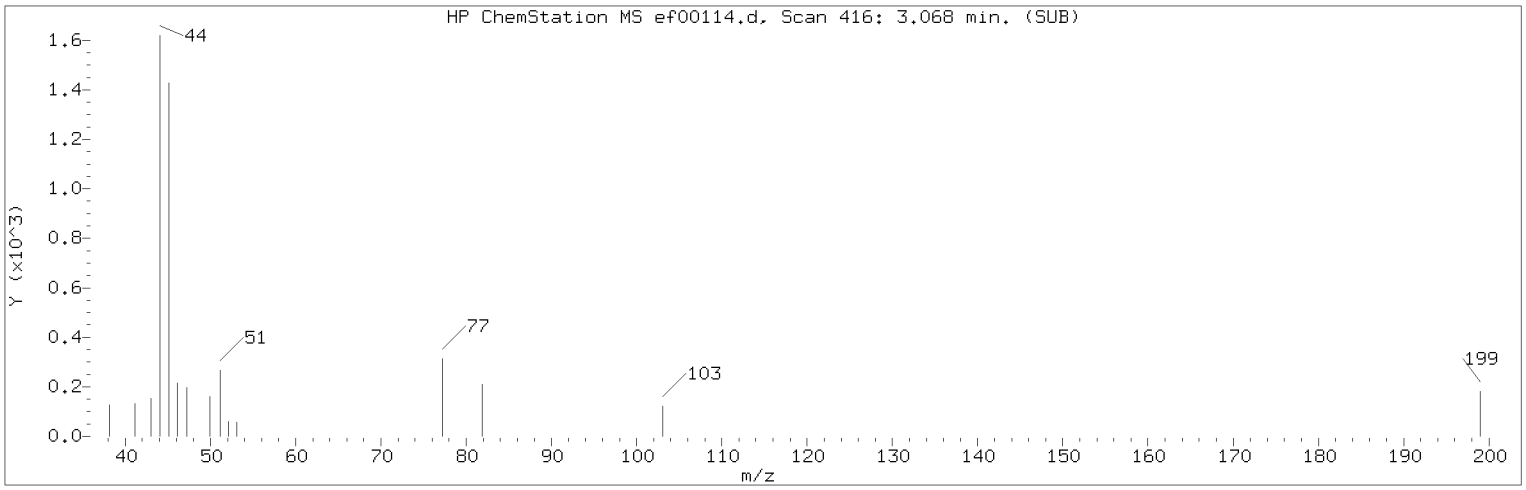
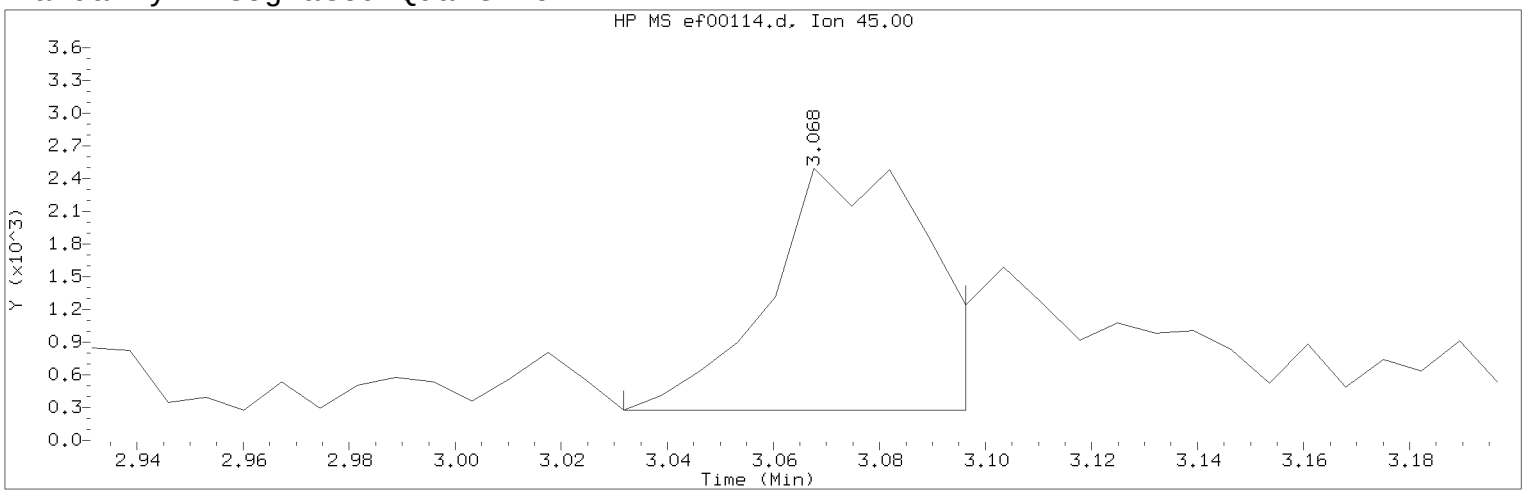
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00114.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 19:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:05
Date, time and analyst ID of latest file update: 10-Jun-2018 20:05 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

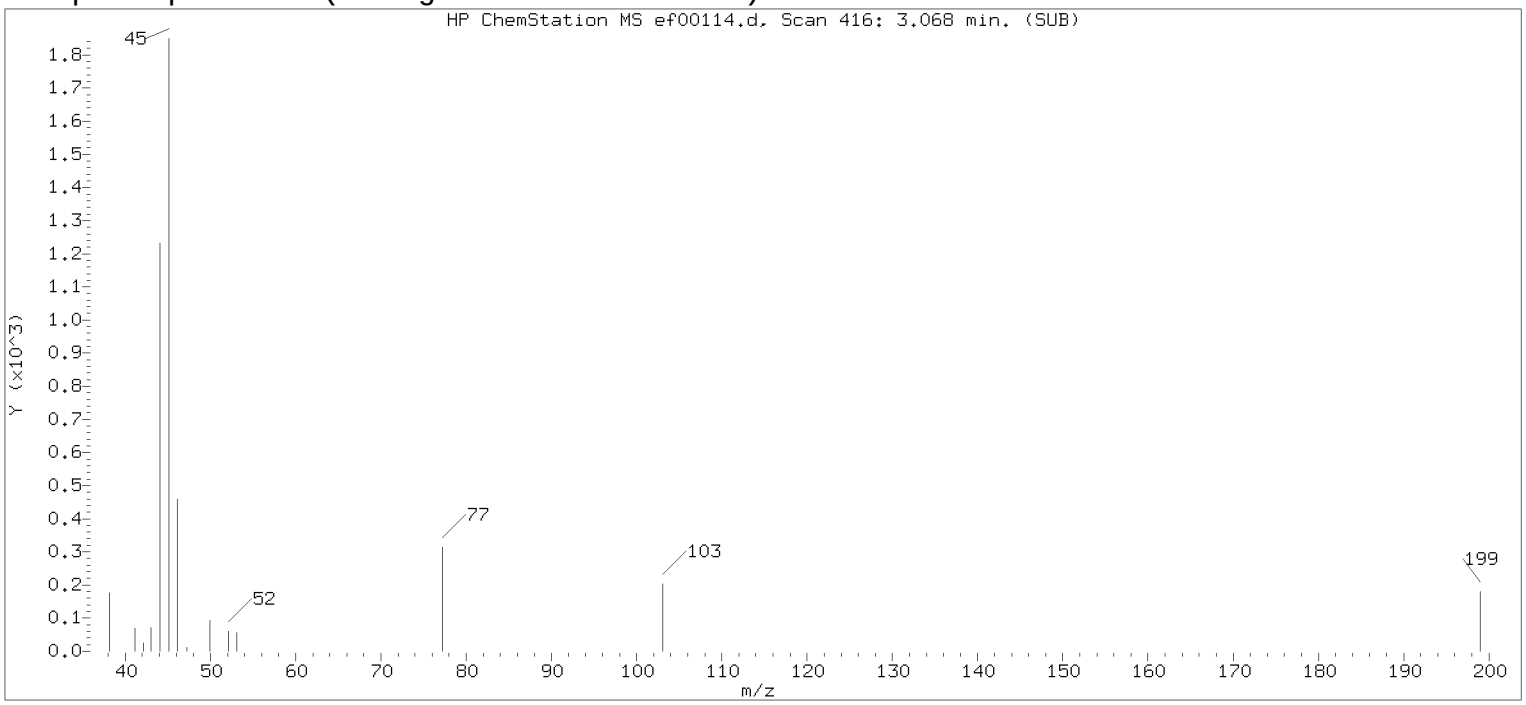
Compound Number : 14
Compound Name : Ethanol
Scan Number : 416
Retention Time (minutes): 3.068
Quant Ion : 45.00
Area (flag) : 4744M
Concentration (ppb(v)) : 0.8187
Integration start scan : 410 Integration stop scan: 419
Y at integration start : 274 Y at integration end: 274

Reason for manual integration: improper integration

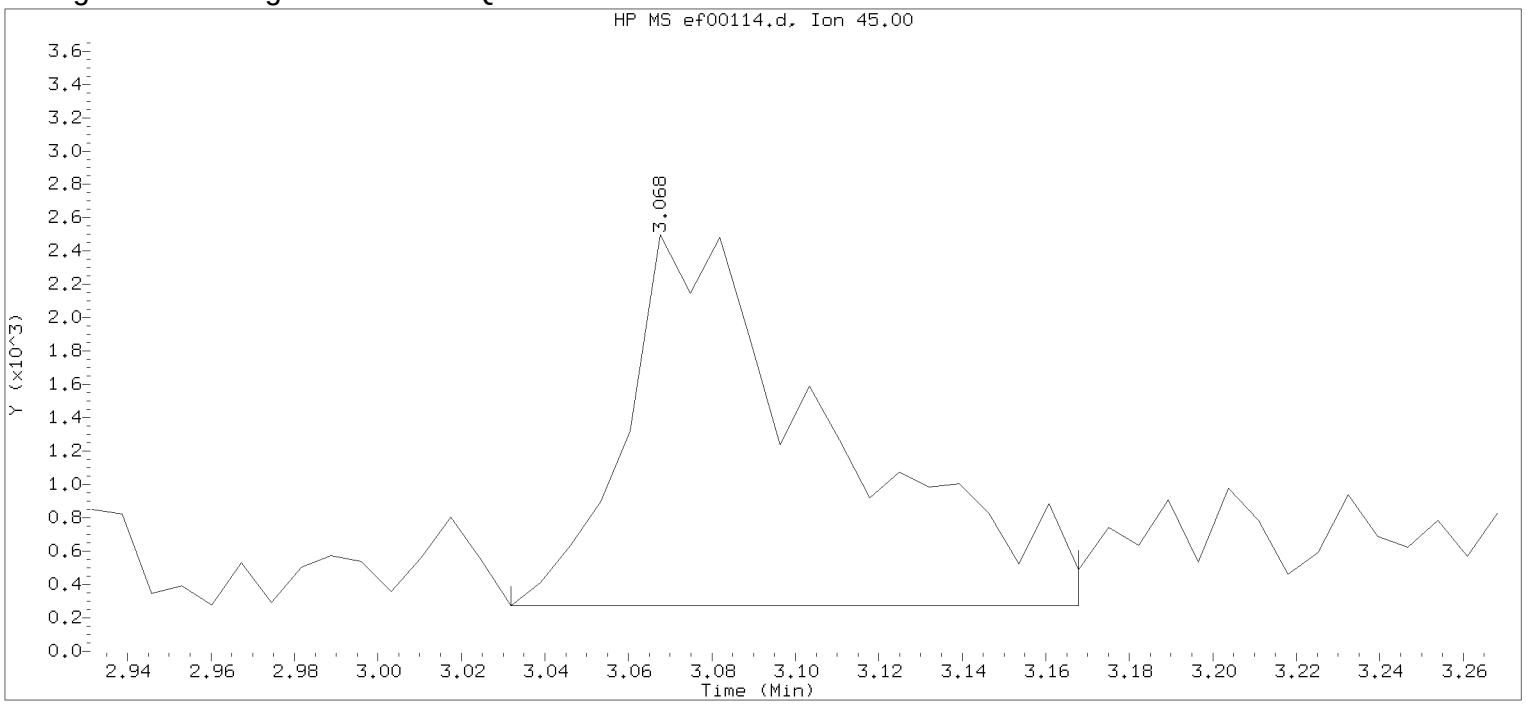
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:04.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00114.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 19:38 Analyst ID: jeb07445

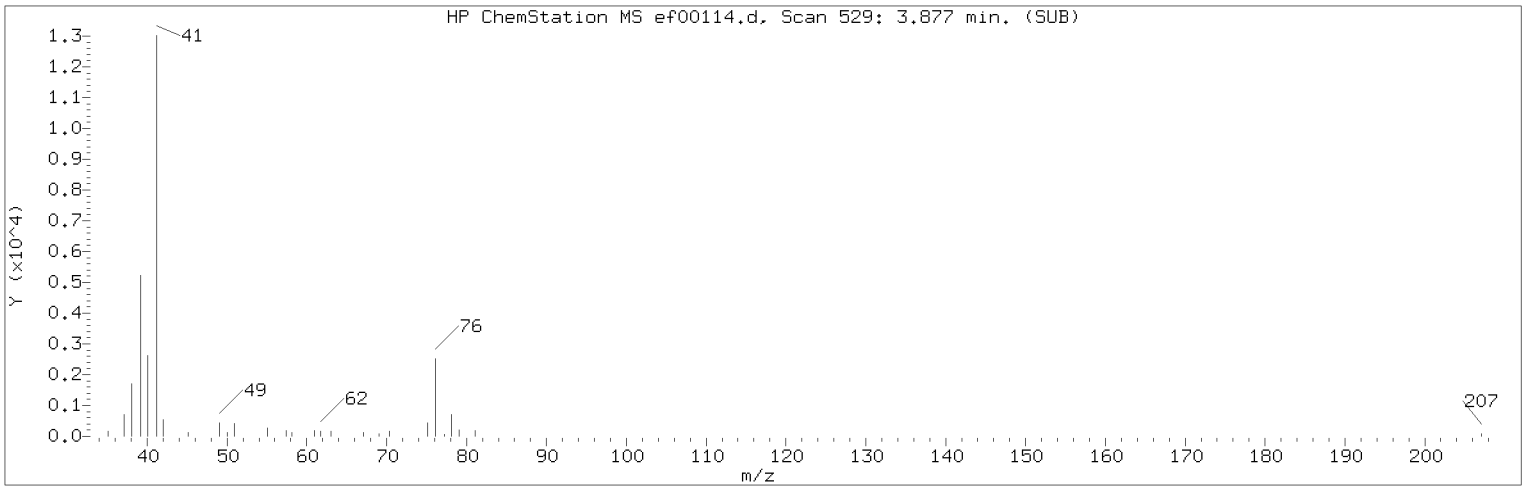
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 19:46
Date, time and analyst ID of latest file update: 10-Jun-2018 19:57 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

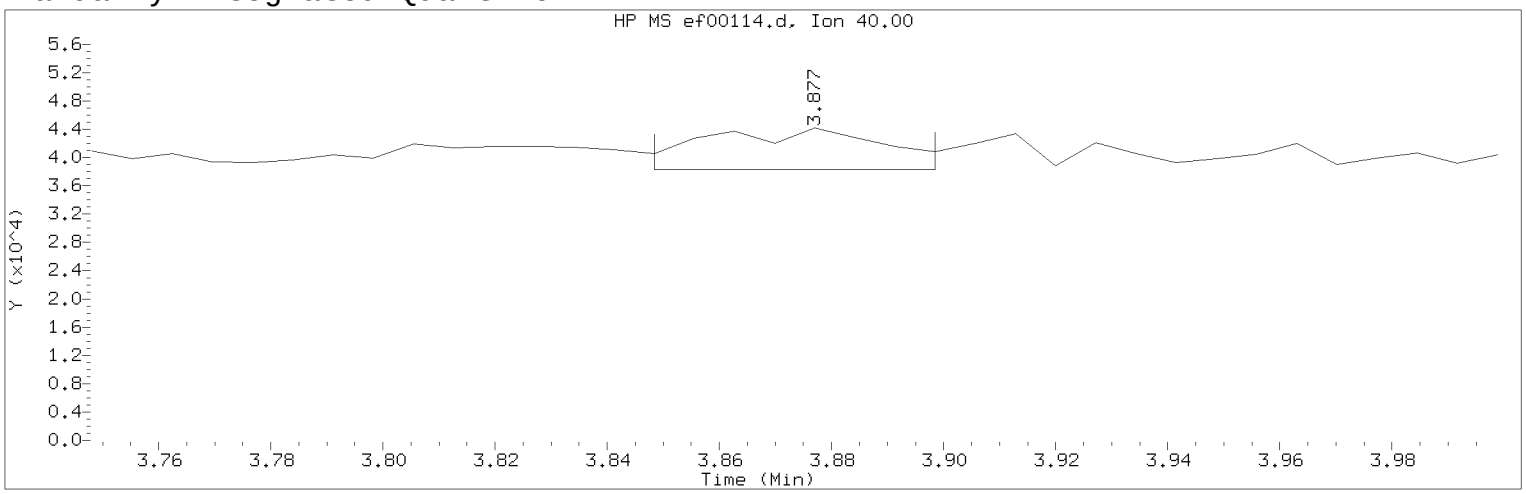
Compound Number : 14
Compound Name : Ethanol
Scan Number : 416
Retention Time (minutes): 3.068
Quant Ion : 45.00
Area : 7629
Concentration (ppb(v)) : 1.2415
Integration start scan : 410 Integration stop scan: 429
Y at integration start : 274 Y at integration end: 274

Digitally signed by Jacob E. Bailey on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00114.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 19:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:05
Date, time and analyst ID of latest file update: 10-Jun-2018 20:05 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

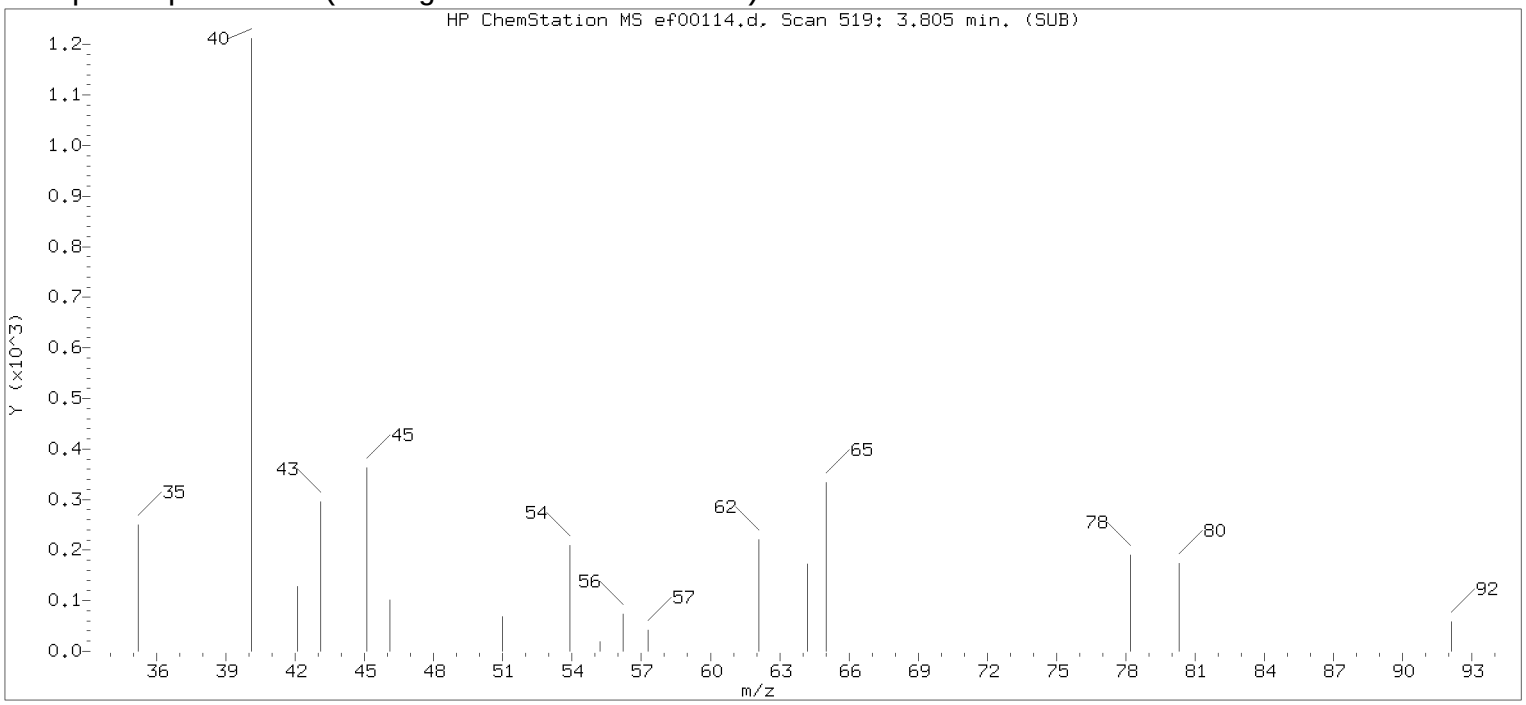
Compound Number : 23
Compound Name : Acetonitrile
Scan Number : 529
Retention Time (minutes): 3.877
Quant Ion : 40.00
Area (flag) : 13873M
Concentration (ppb(v)) : 1.1240
Integration start scan : 524 Integration stop scan: 531
Y at integration start : 38270 Y at integration end: 38270

Reason for manual integration: improper integration

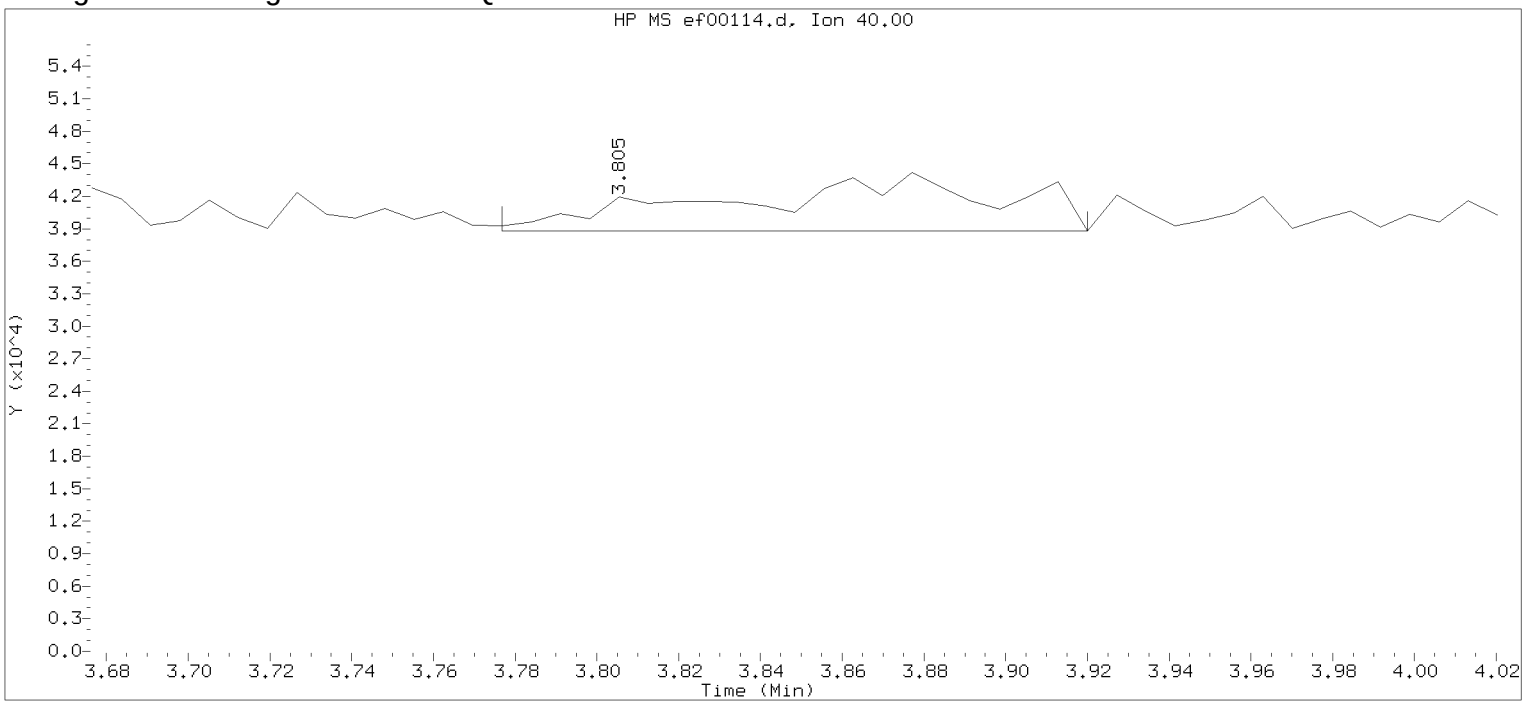
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:04.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00114.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 19:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 19:46
Date, time and analyst ID of latest file update: 10-Jun-2018 19:57 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 23
Compound Name : Acetonitrile
Scan Number : 519
Retention Time (minutes): 3.805
Quant Ion : 40.00
Area : 23827
Concentration (ppb(v)) : 2.0138
Integration start scan : 514 Integration stop scan: 534
Y at integration start : 38816 Y at integration end: 38816

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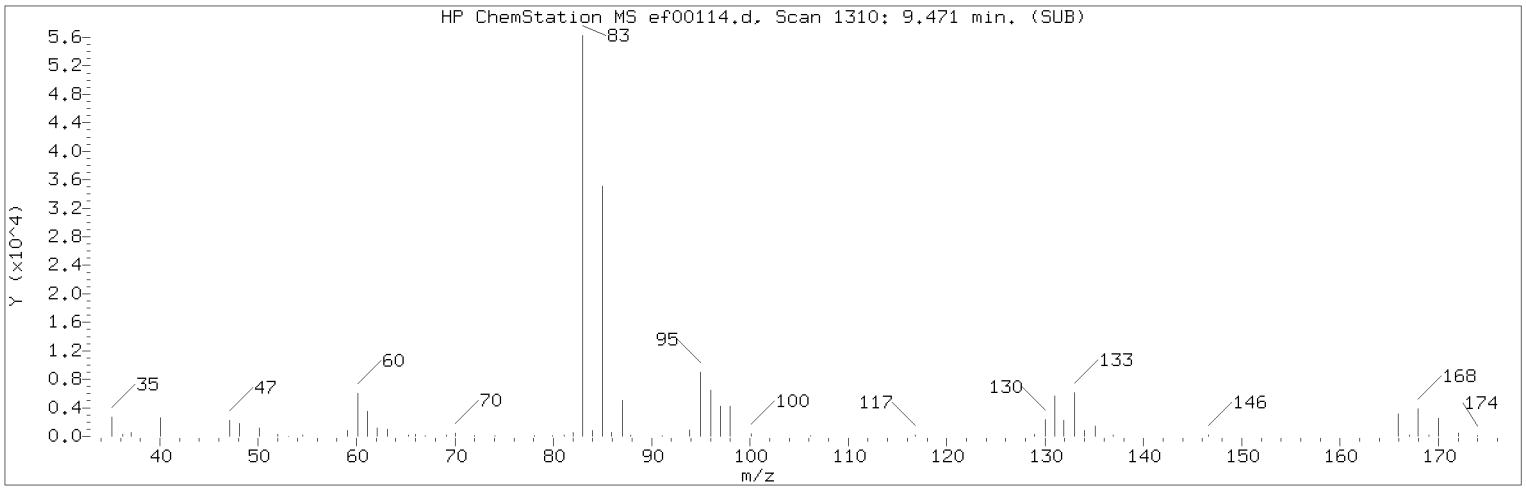
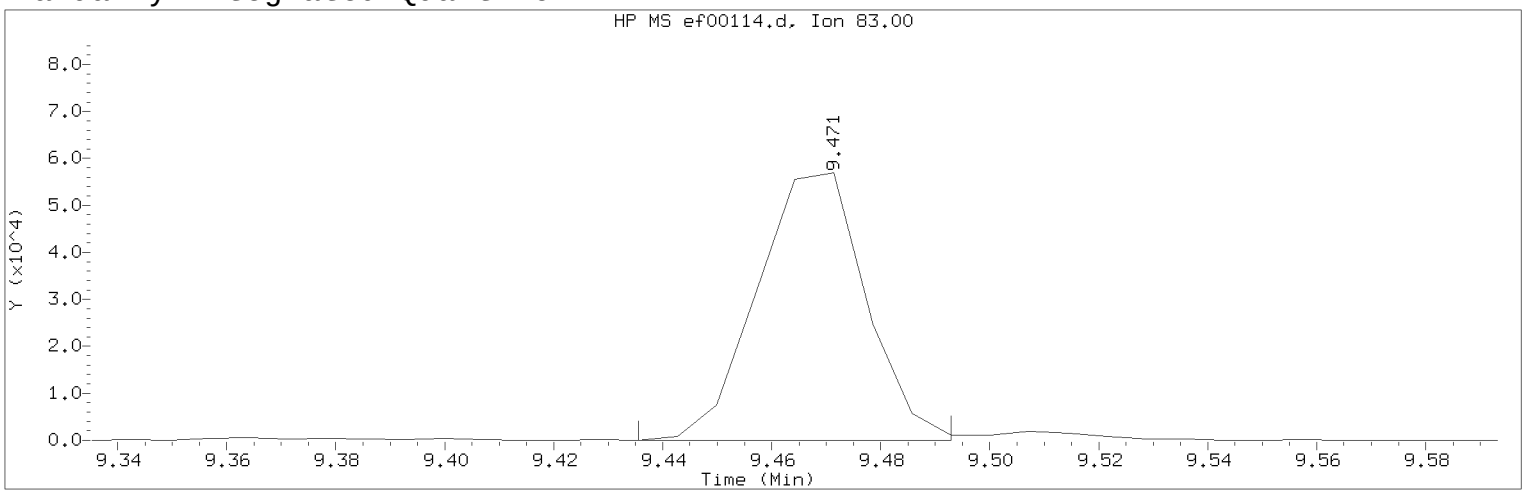
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00114.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 19:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:05
Date, time and analyst ID of latest file update: 10-Jun-2018 20:05 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

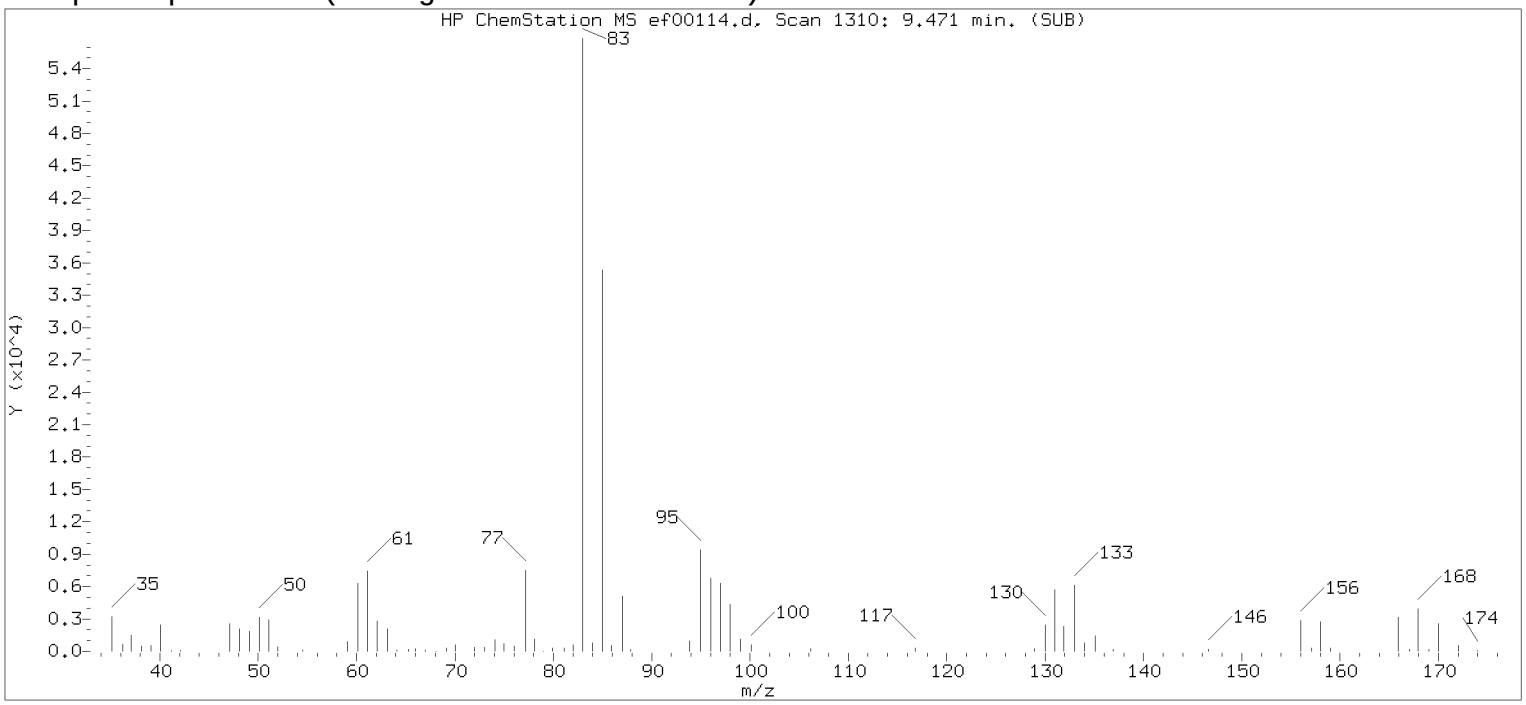
Compound Number : 82
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1310
Retention Time (minutes): 9.471
Quant Ion : 83.00
Area (flag) : 78973M
Concentration (ppb(v)) : 1.2340
Integration start scan : 1304 Integration stop scan: 1312
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

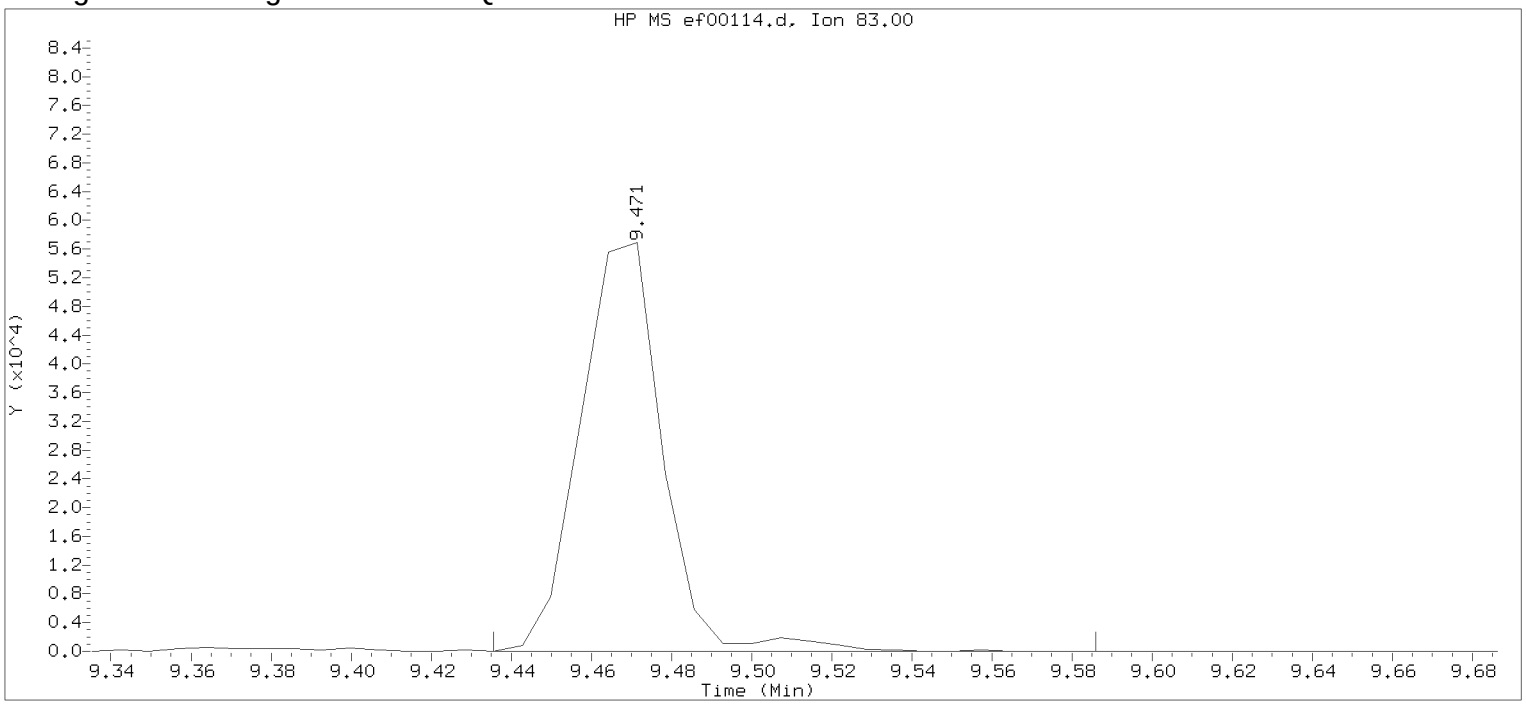
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:04.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00114.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 19:38 Analyst ID: jeb07445

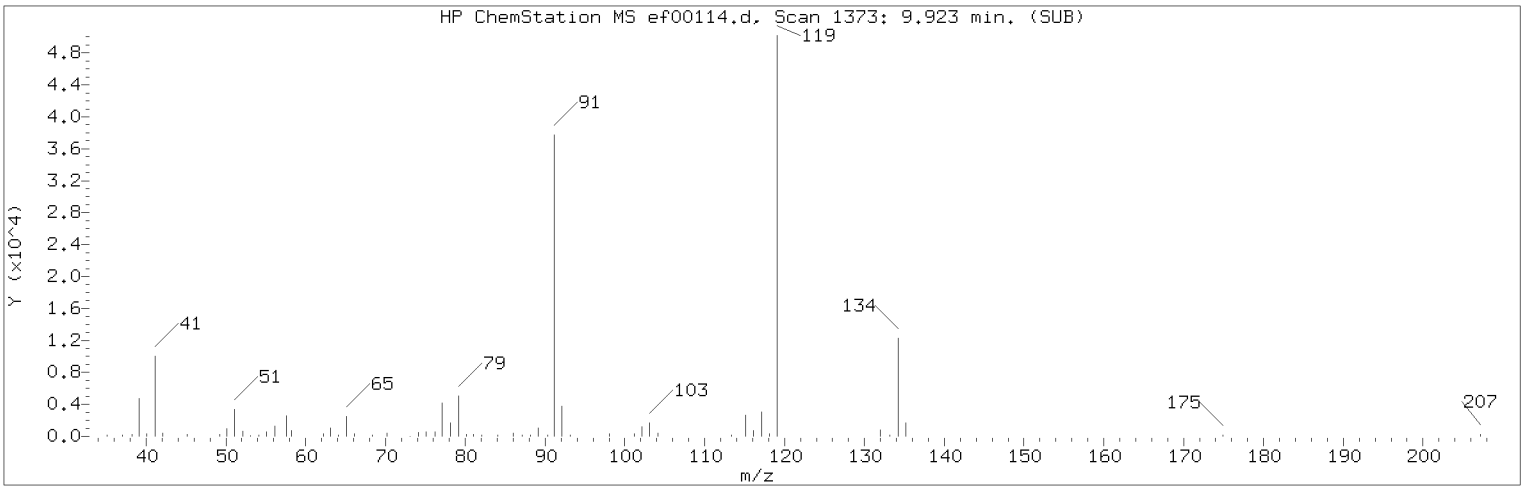
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 19:46
Date, time and analyst ID of latest file update: 10-Jun-2018 19:57 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

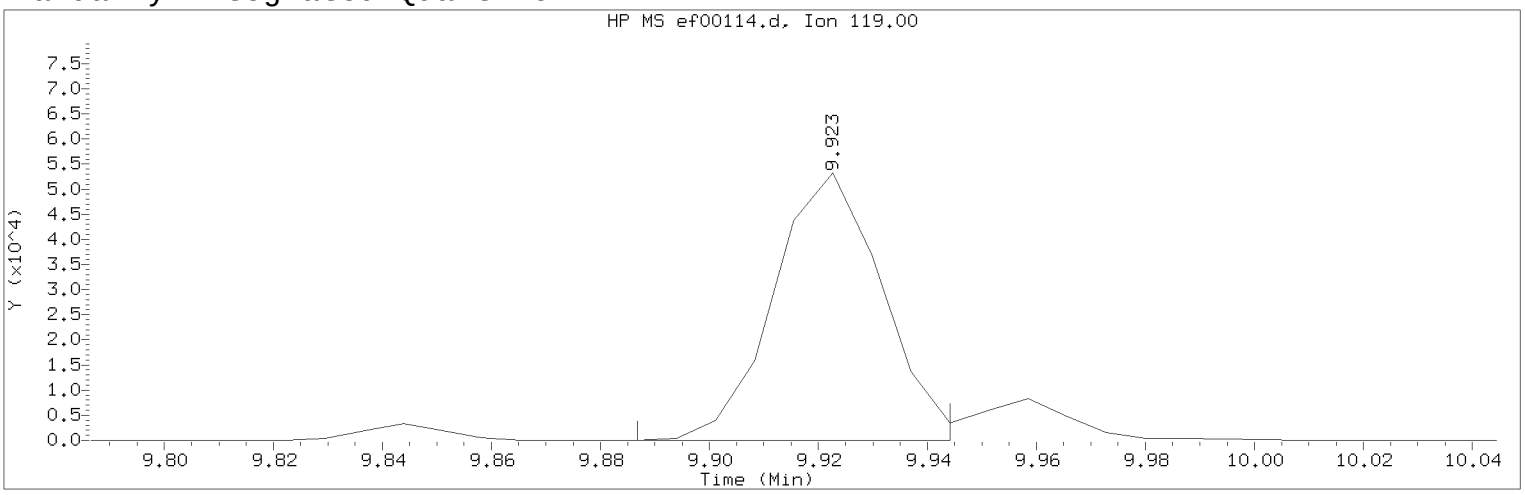
Compound Number : 82
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1310
Retention Time (minutes): 9.471
Quant Ion : 83.00
Area : 81526
Concentration (ppb(v)) : 1.3816
Integration start scan : 1304 Integration stop scan: 1325
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00114.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 19:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:05
Date, time and analyst ID of latest file update: 10-Jun-2018 20:05 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

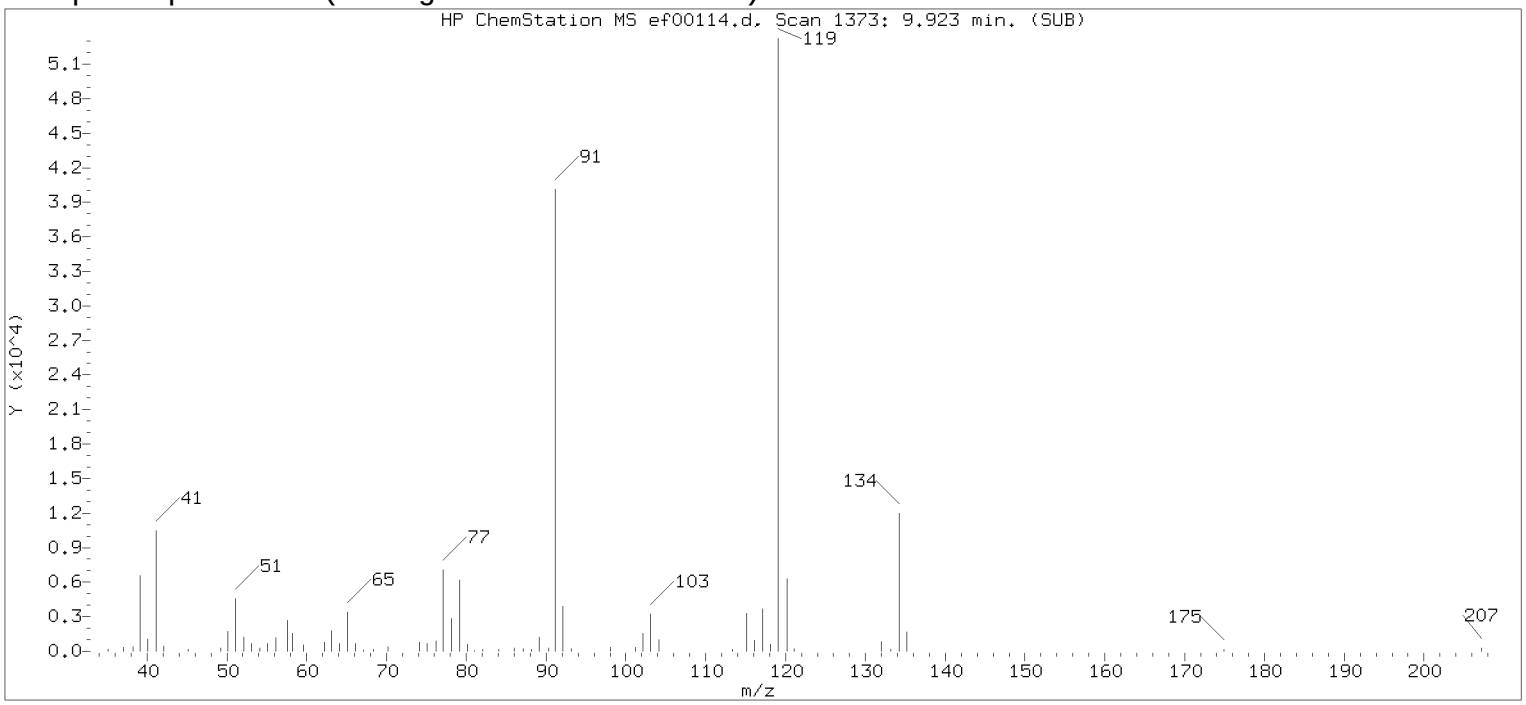
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.923
Quant Ion : 119.00
Area (flag) : 73629M
Concentration (ppb(v)) : 1.1033
Integration start scan : 1367 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

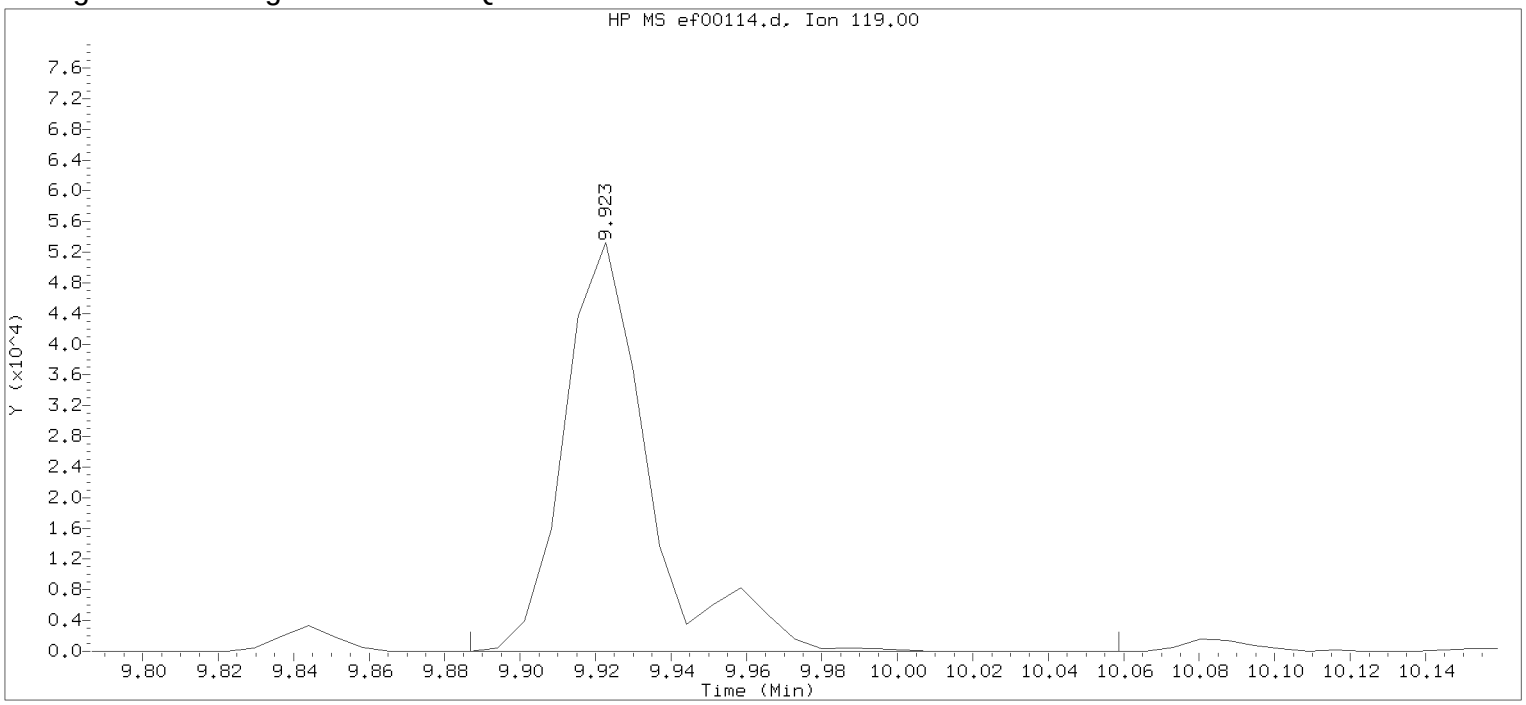
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:04.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00114.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 19:38 Analyst ID: jeb07445

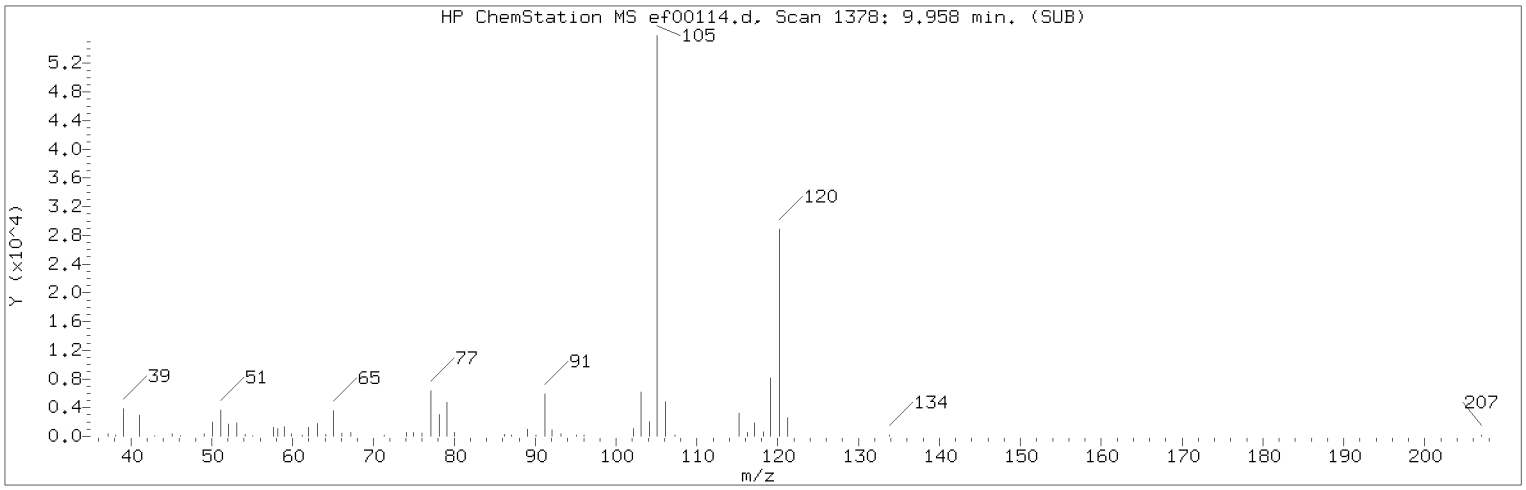
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 19:46
Date, time and analyst ID of latest file update: 10-Jun-2018 19:57 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

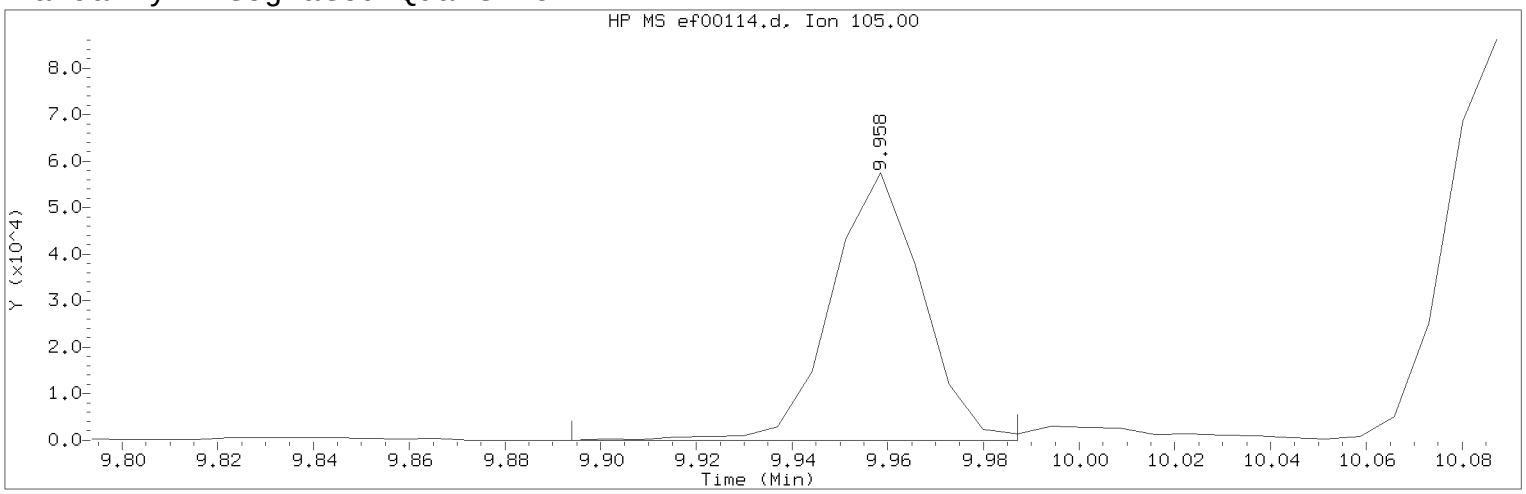
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.923
Quant Ion : 119.00
Area : 83056
Concentration (ppb(v)) : 1.2890
Integration start scan : 1367 Integration stop scan: 1391
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00114.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 19:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:05
Date, time and analyst ID of latest file update: 10-Jun-2018 20:05 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

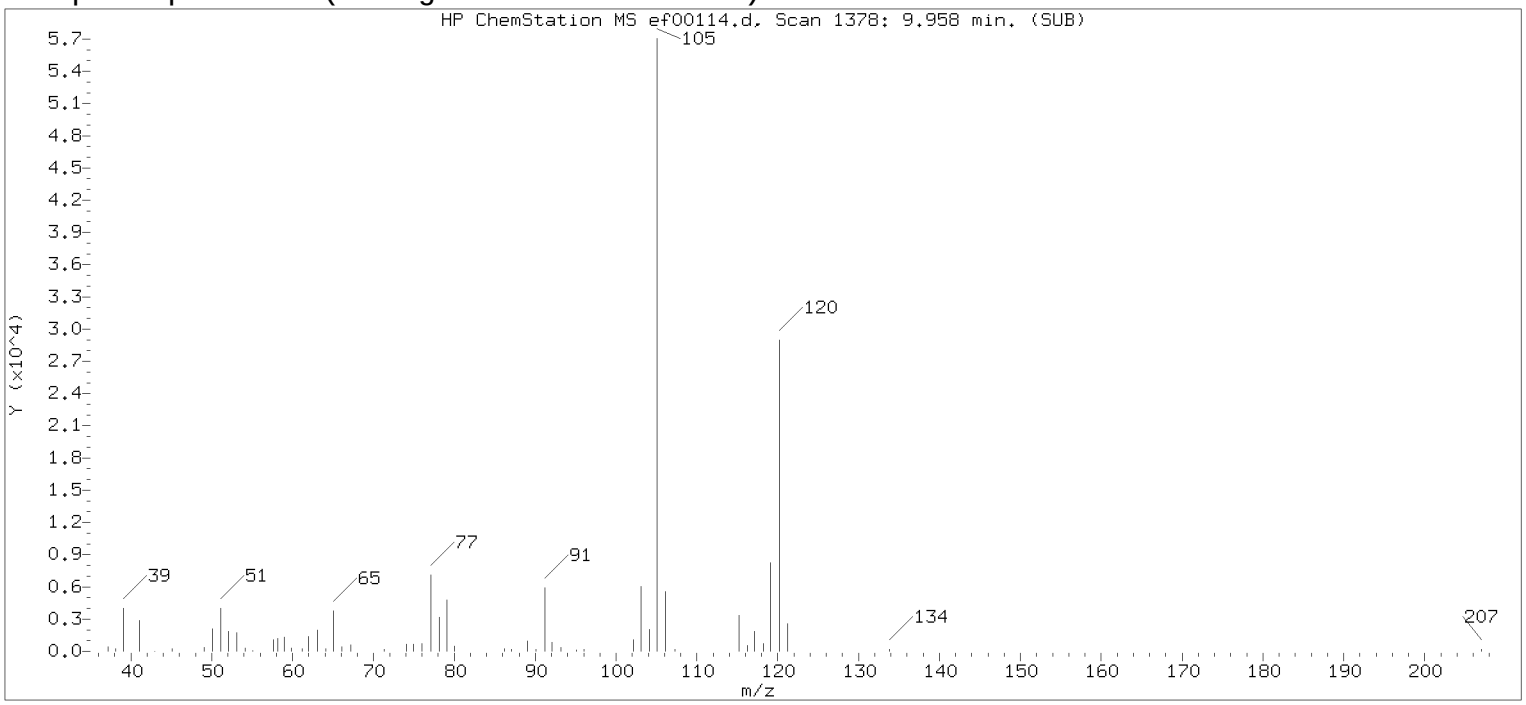
Compound Number : 90
Compound Name : 1,2,4-Trimethylbenzene
Scan Number : 1378
Retention Time (minutes): 9.958
Quant Ion : 105.00
Area (flag) : 75389M
Concentration (ppb(v)) : 1.0532
Integration start scan : 1368 Integration stop scan: 1381
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

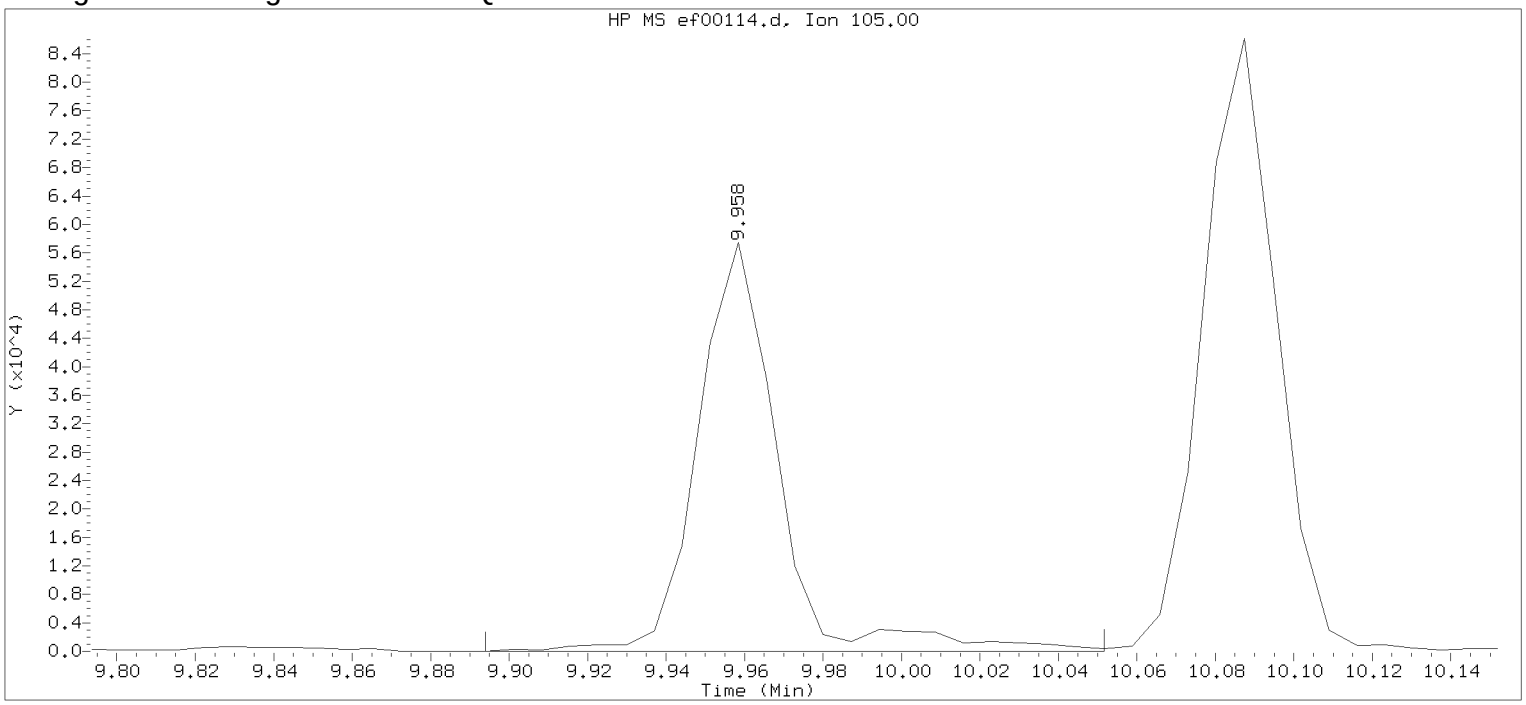
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:04.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



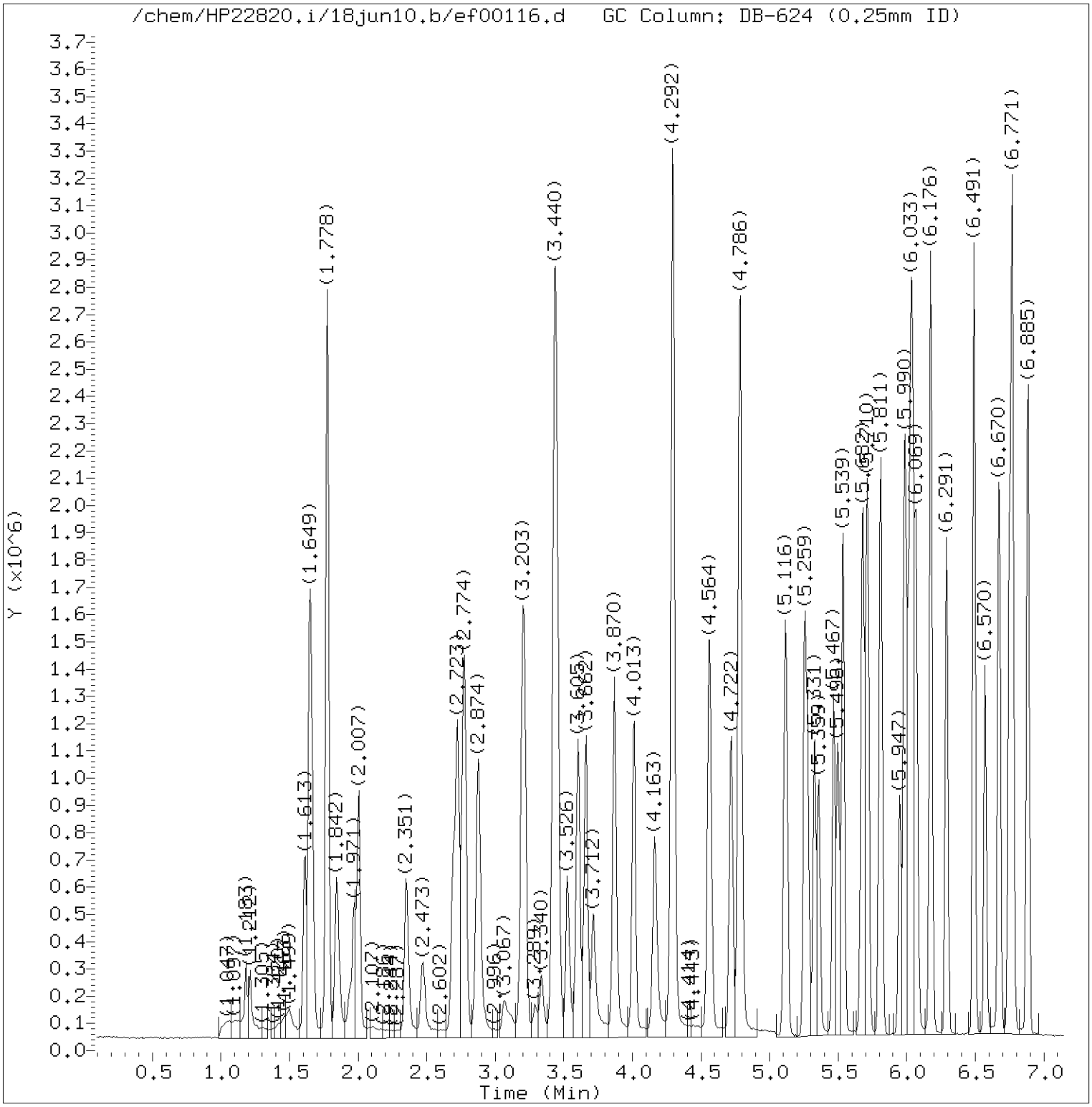
Data File: /chem/HP22820.i/18jun10.b/ef00114.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 19:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 19:46
Date, time and analyst ID of latest file update: 10-Jun-2018 19:57 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 90
Compound Name : 1,2,4-Trimethylbenzene
Scan Number : 1378
Retention Time (minutes): 9.958
Quant Ion : 105.00
Area : 81375
Concentration (ppb(v)) : 1.1573
Integration start scan : 1368 Integration stop scan: 1390
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00116.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 20:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 10-Jun-2018 20:53 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

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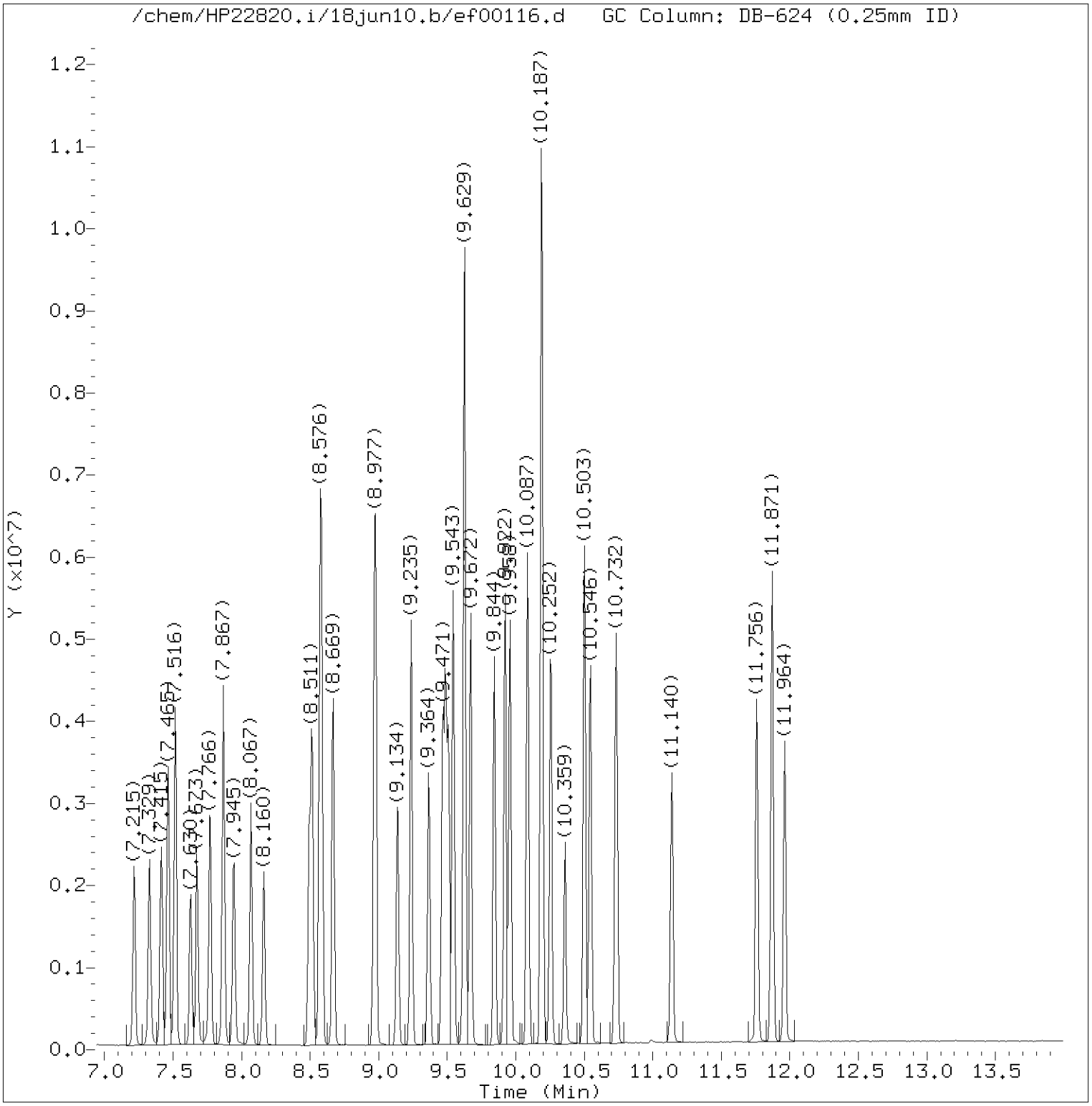
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00116.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 20:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 10-Jun-2018 20:53 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00116.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 20:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 10-Jun-2018 20:53 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.613	41	373153	24.441
2) Dichlorodifluoromethane	(1)	1.649	85	1335267	24.958
3) Chlorodifluoromethane	(1)	1.663	51	824134	24.082
4) Freon 114	(1)	1.778	85	1366422	23.615
5) Chloromethane	(1)	1.842	50	521088	23.893
6) Vinyl Chloride	(1)	1.971	62	508990	24.734
7) 1,3-Butadiene	(1)	2.007	54	365373	24.926
8) Bromomethane	(1)	2.351	94	436151	25.225
9) Chloroethane	(1)	2.473	64	282099	24.456
10) Bromoethene	(1)	2.695	106	447637	25.311
11) Dichlorofluoromethane	(1)	2.723	67	1148510	25.118
12) Trichlorofluoromethane	(1)	2.774	101	1356545	23.458
13) Pentane	(1)	2.874	43	797780	24.437
14) Ethanol	(1)	3.067	45	181042	25.756
15) Freon123a	(1)	3.203	67	1099393	25.486
16) Acrolein	(1)	3.340	56	187892	25.161
17) 1,1-Dichloroethene	(1)	3.425	61	794553	25.651
18) Freon 113	(1)	3.440	103	737195	22.374
19) Acetone	(1)	3.526	43	741541	23.487
20) Methyl Iodide	(1)	3.605	142	1286641	24.747
21) Carbon Disulfide	(1)	3.662	76	1461613	24.946
22) Isopropanol	(1)	3.712	45	638199	24.534
23) Acetonitrile	(1)	3.870	40	305072	21.294
24) 3-Chloropropene	(1)	3.870	76	218054	27.578
25) Methylene Chloride	(1)	4.013	84	477917	27.303
26) tert-Butyl Alcohol	(1)	4.163	59	797774	27.563
28) trans-1,2-Dichloroethene	(1)	4.292	61	738170	25.759
29) Methyl t-Butyl Ether	(1)	4.292	73	1217740	24.748
27) Acrylonitrile	(1)	4.299	53	439574	25.622
30) Hexane	(1)	4.564	57	721262	24.543
31) 1,1-Dichloroethane	(1)	4.722	63	938549	23.566
32) Vinyl Acetate	(1)	4.786	86	123340	30.502
33) Di-Isopropyl Ether	(1)	4.786	45	1621110	25.555
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	1079230	25.500
35) cis-1,2-Dichloroethene	(1)	5.259	61	672374	25.095
37) 2-Butanone	(1)	5.281	72	255595	25.247
38) Ethyl Acetate	(1)	5.331	70	113490	22.623
39) Methyl Acrylate	(1)	5.359	55	842078	25.815

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Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00116.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 20:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 10-Jun-2018 20:53 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	324132	10.000
41) Tetrahydrofuran	(1)	5.496	42	537086	24.015
42) Chloroform	(1)	5.539	83	1125957	23.756
43) 1,1,1-Trichloroethane	(1)	5.682	97	1040132	23.881
44) Cyclohexane	(1)	5.710	56	787033	25.450
45) Carbon Tetrachloride	(1)	5.811	117	1037757	24.580
46) Benzene	(2)	5.983	78	1600536	23.632
47) 1,2-Dichloroethane	(2)	6.011	62	750170	23.567
48) Isooctane	(2)	6.033	57	2399926	26.683
49) Tert-Amyl Methyl Ether	(2)	6.069	73	1070701	25.408
50) Heptane	(2)	6.176	43	913709	25.894
51)*1,4-Difluorobenzene	(2)	6.291	114	1099104	10.000
52) Trichloroethene	(2)	6.491	130	688486	23.337
53) Ethyl Acrylate	(2)	6.570	55	1041831	25.756
36) 1,2-Dichloroethene (total)	(1)		61	1410544	50.854
54) 1,2-Dichloropropane	(2)	6.677	63	616499	23.769
57) Methyl Methacrylate	(2)	6.749	69	542939	25.614
56) 1,4-Dioxane	(2)	6.771	88	388576	25.381
55) Dibromomethane	(2)	6.771	174	634698	23.467
58) Bromodichloromethane	(2)	6.885	83	1177761	23.187
59) cis-1,3-Dichloropropene	(2)	7.215	75	891666	24.723
60) 4-Methyl-2-Pentanone	(2)	7.329	43	1227009	24.534
61) Toluene	(3)	7.465	91	1906100	23.798
62) Octane	(3)	7.516	43	1275587	26.043
63) trans-1,3-Dichloropropene	(3)	7.630	75	740303	26.252
65) Ethyl Methacrylate	(3)	7.673	69	895029	27.193
66) 1,1,2-Trichloroethane	(3)	7.766	97	698162	22.823
67) Tetrachloroethene	(3)	7.867	166	948868	23.241
68) 2-Hexanone	(3)	7.945	43	1183079	26.414
69) Dibromochloromethane	(3)	8.067	127	878982	24.449
70) 1,2-Dibromoethane	(3)	8.160	107	1064344	23.758
71)*Chlorobenzene-d5	(3)	8.490	117	1101291	10.000
72) Chlorobenzene	(3)	8.518	112	1560041	22.949
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	802912	24.762
74) Ethylbenzene	(3)	8.583	91	2526466	25.327
75) m/p-Xylene	(3)	8.669	91	1924678	25.314
76) o-Xylene	(3)	8.970	91	1899449	25.641
78) Styrene	(3)	8.977	104	1514582	27.211

* = 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/HP22820.i/18jun10.b/ef00116.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 20:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 10-Jun-2018 20:53 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	1076169	25.177
80) Cumene	(3)	9.235	105	2592877	26.050
82) 1,1,2,2-Tetrachloroethane	(3)	9.464	83	1562755	21.878
81) Bromobenzene	(3)	9.493	156	903412	23.525
83) 1,2,3-Trichloropropane	(3)	9.507	110	456119	22.486
84) n-Propylbenzene	(3)	9.543	120	767031	26.205
85) 2-Chlorotoluene	(3)	9.621	126	725115	25.750
86) 4-Ethyltoluene	(3)	9.629	105	2779135	26.510
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	2204765	25.664
88) Alpha Methyl Styrene	(3)	9.844	118	1073804	27.089
89) tert-Butylbenzene	(3)	9.922	119	2071448M	26.551
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	2240918	26.729
91) sec-Butylbenzene	(3)	10.087	105	3224551	26.702
92) 1,3-Dichlorobenzene	(3)	10.187	146	1592744	24.373
94) p-Isopropyltoluene	(3)	10.187	119	2717618	28.137
93) 1,4-Dichlorobenzene	(3)	10.259	146	1568717	24.161
95) Benzyl Chloride	(3)	10.359	91	1293203	29.859
97) n-Butylbenzene	(3)	10.503	91	2673691	28.197
96) 1,2-Dichlorobenzene	(3)	10.546	146	1463825	23.940
98) Hexachloroethane	(3)	10.732	117	726314	28.680
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	699985	25.229
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	1009480	26.408
101) Hexachlorobutadiene	(3)	11.871	225	872572	26.765
102) Naphthalene	(3)	11.964	128	2235485	29.459
64) 1,3-Dichloropropene (total)	(3)		75	1631969	51.170
77) Xylene (total)	(3)		91	3824127	50.951

M = Compound was manually integrated.

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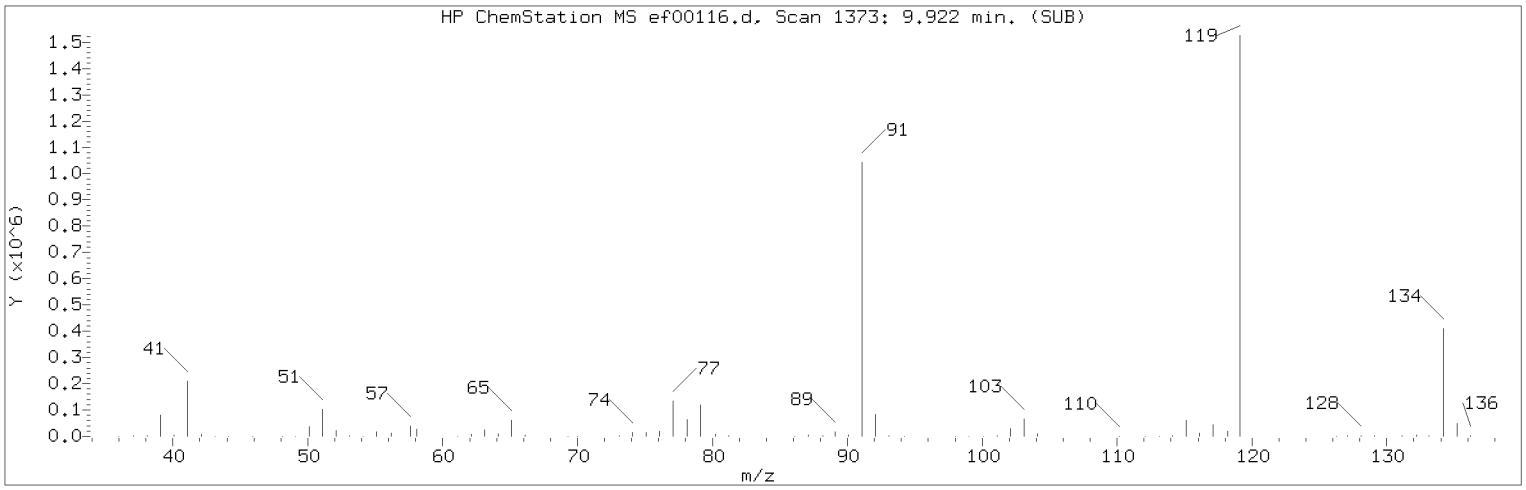
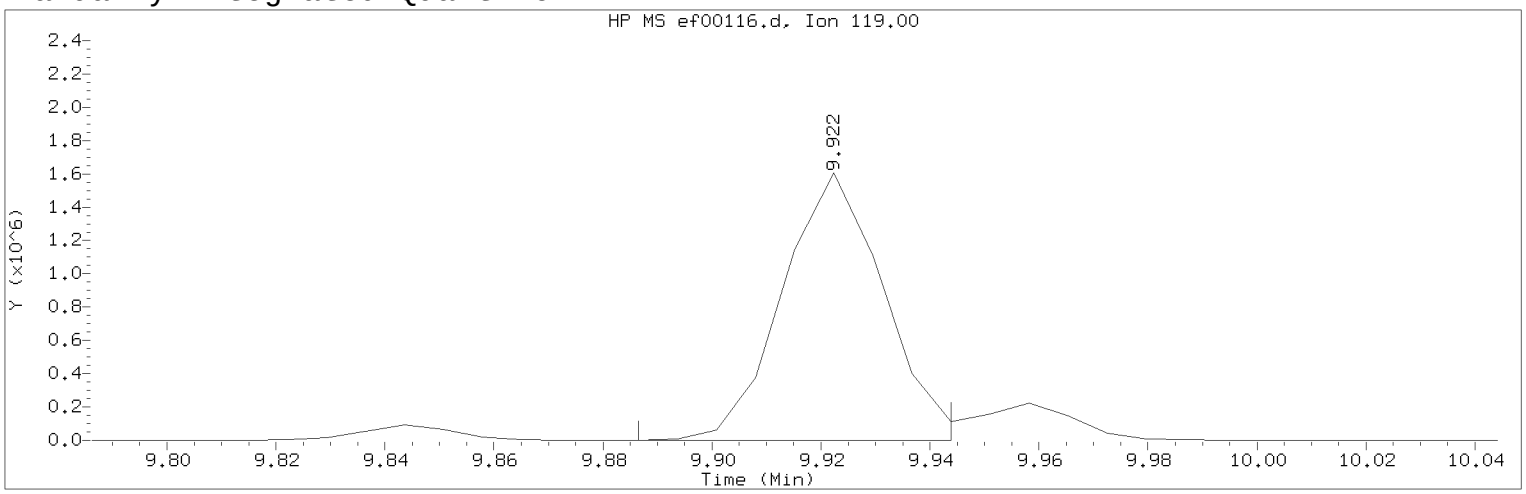
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00116.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 20:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 10-Jun-2018 20:53 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

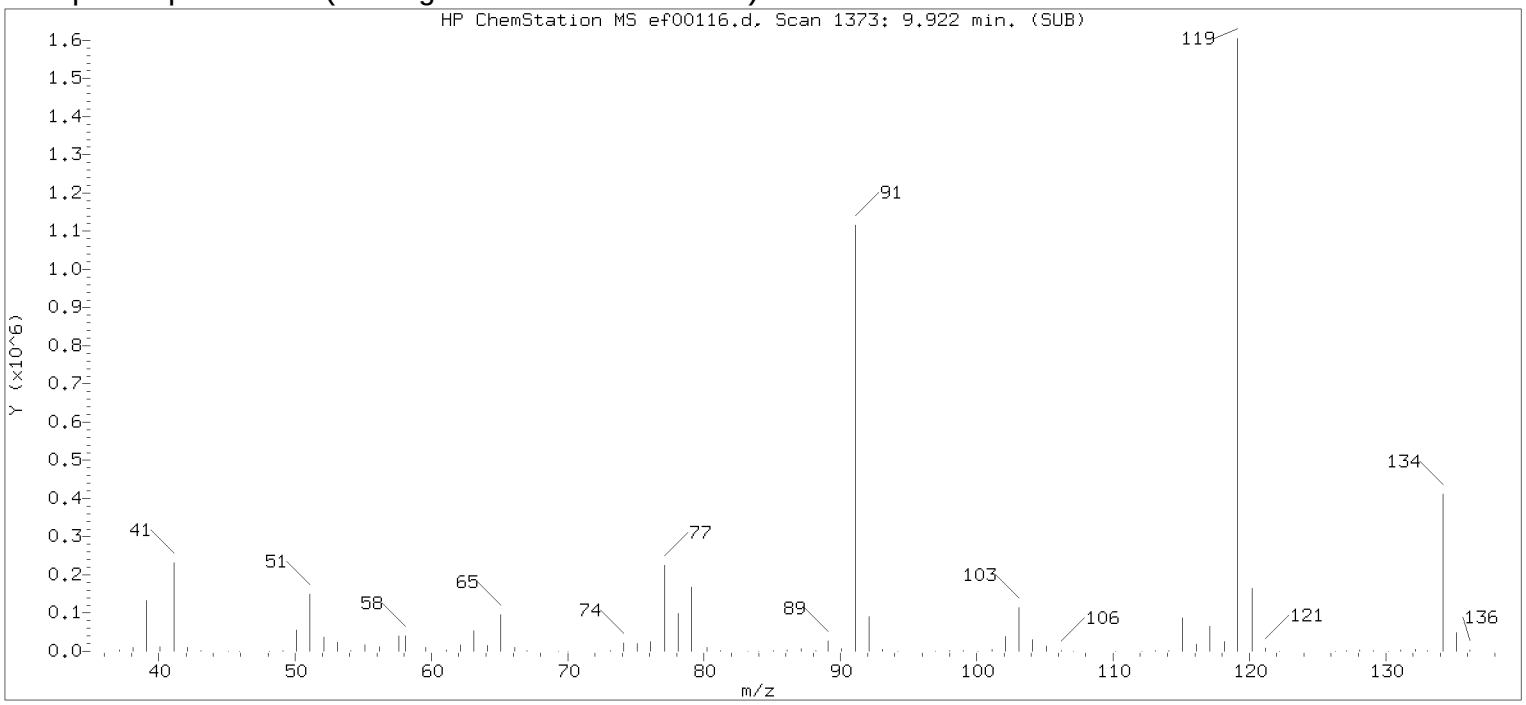
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 2071448M
Concentration (ppb(v)) : 26.5509
Integration start scan : 1367 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

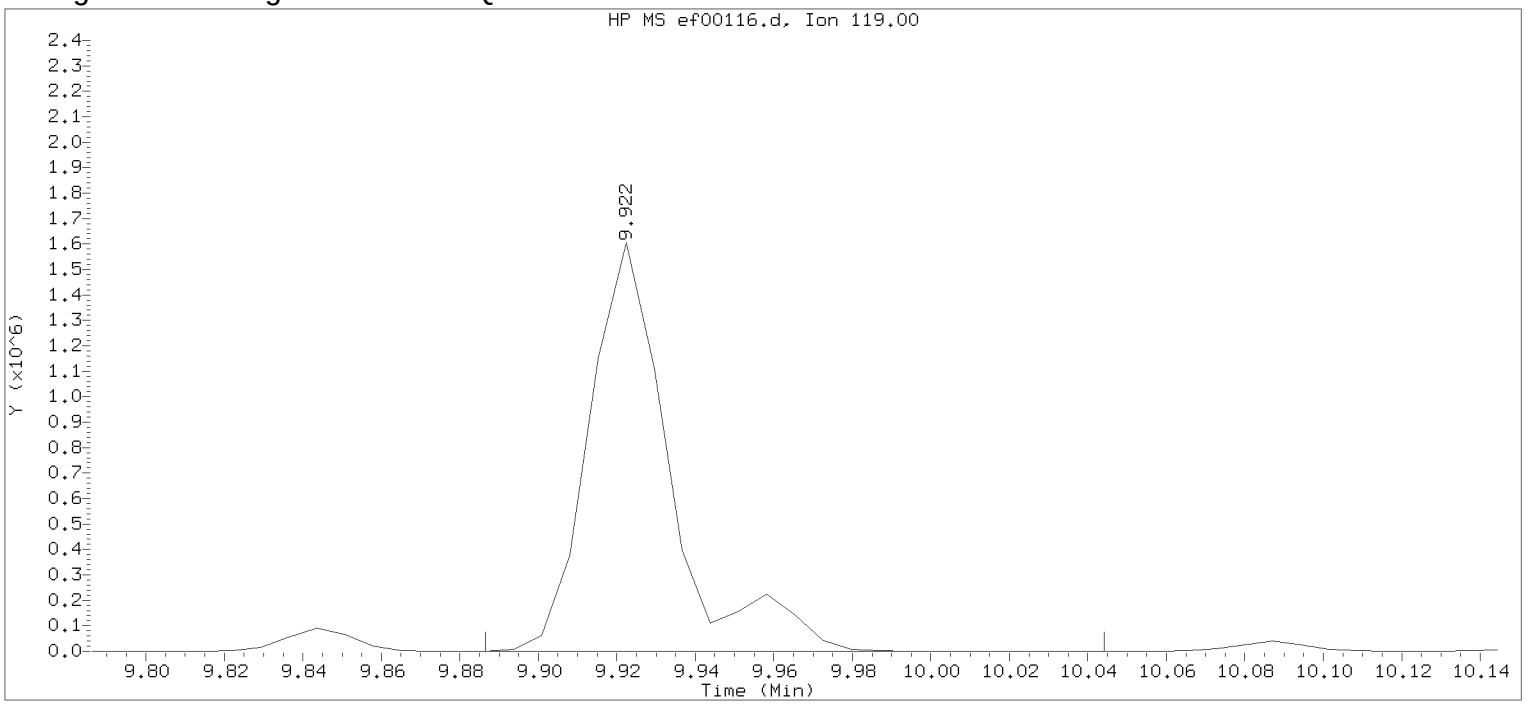
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:04.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



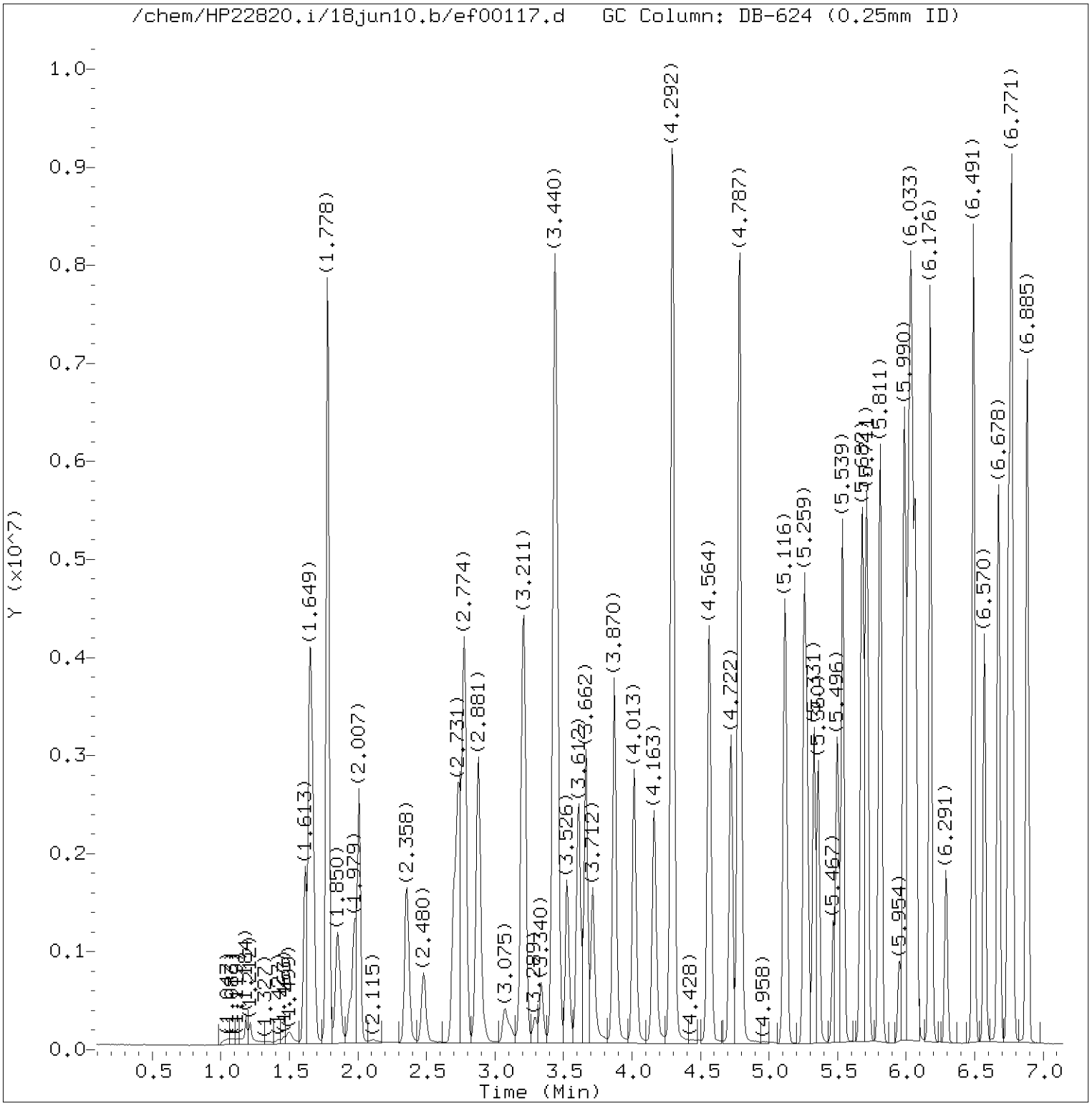
Data File: /chem/HP22820.i/18jun10.b/ef00116.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 20:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:06
Date, time and analyst ID of latest file update: 10-Jun-2018 20:48 Unknown

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 2321981
Concentration (ppb(v)) : 30.2310
Integration start scan : 1367 Integration stop scan: 1389
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/11/2018 at 12:26.
Target 3.5 esignature used.



Total Ion Chromatogram (TIC)

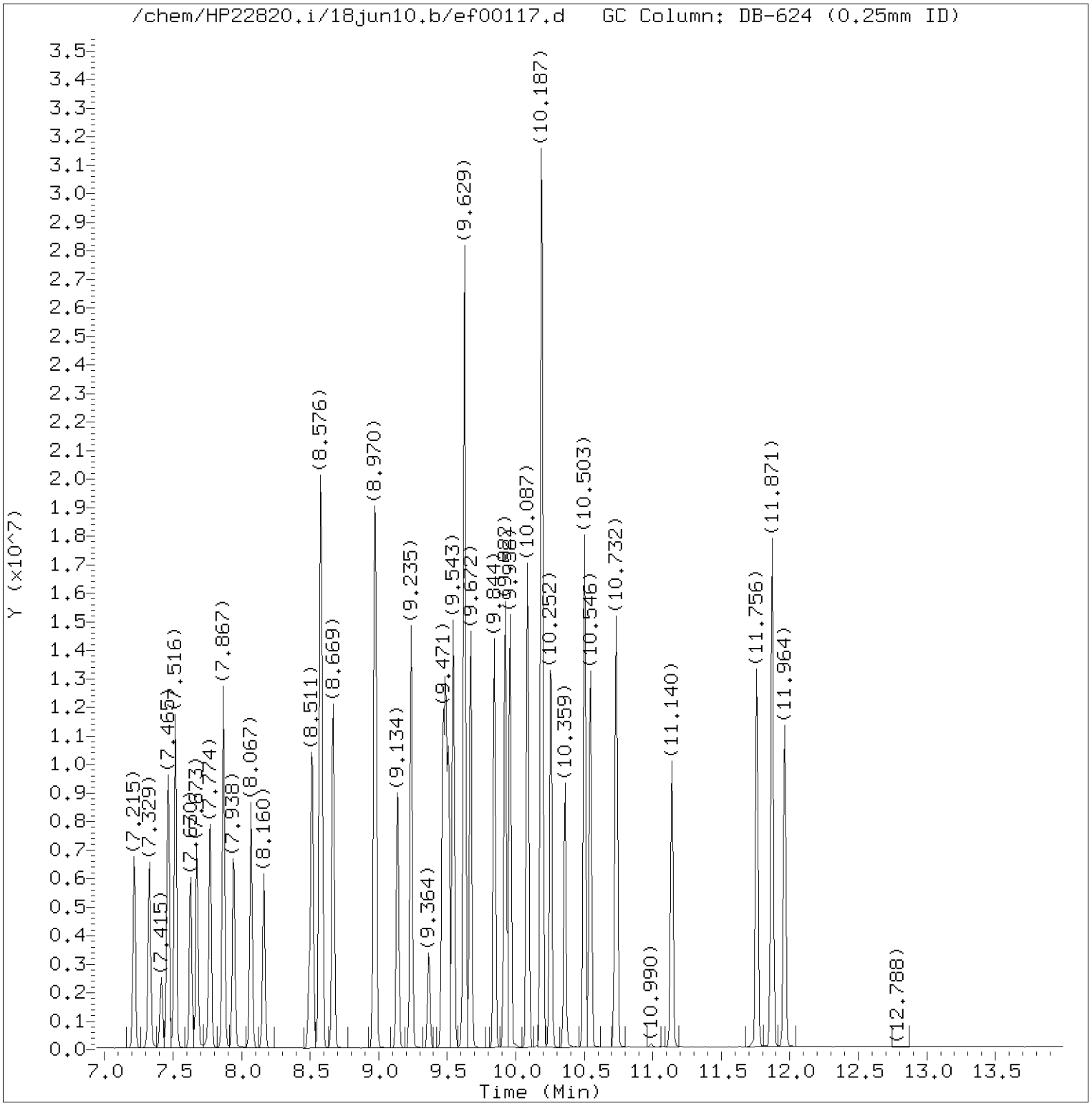
Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00117.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 21:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 07:54
Date, time and analyst ID of latest file update: 11-Jun-2018 07:58 ads07818

Sample Name: VSTD070 Lab Sample ID: VSTD070

Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00117.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 21:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 07:54
Date, time and analyst ID of latest file update: 11-Jun-2018 07:58 ads07818

Sample Name: VSTD070 Lab Sample ID: VSTD070

Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00117.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 21:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 07:54
Date, time and analyst ID of latest file update: 11-Jun-2018 07:58 ads07818

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.613	41	1079263	71.167
2) Dichlorodifluoromethane	(1)	1.649	85	3771955	71.010
3) Chlorodifluoromethane	(1)	1.671	51	2287548	67.922
4) Freon 114	(1)	1.778	85	3894123	68.308
5) Chloromethane	(1)	1.850	50	1424303	66.607
6) Vinyl Chloride	(1)	1.979	62	1455423	71.197
7) 1,3-Butadiene	(1)	2.007	54	1096702	74.584
8) Bromomethane	(1)	2.358	94	1318317	75.751
9) Chloroethane	(1)	2.480	64	787654	69.143
10) Bromoethene	(1)	2.702	106	1320255	74.450
11) Dichlorofluoromethane	(1)	2.738	67	3188766	70.370
12) Trichlorofluoromethane	(1)	2.774	101	3803660	67.009
13) Pentane	(1)	2.881	43	2357203	72.429
14) Ethanol	(1)	3.075	45	546368	76.956
15) Freon123a	(1)	3.211	67	3025363	71.901
16) Acrolein	(1)	3.340	56	578999	76.798
17) 1,1-Dichloroethene	(1)	3.433	61	2331622	74.958
18) Freon 113	(1)	3.447	103	2038537	63.633
19) Acetone	(1)	3.526	43	2131176	68.479
20) Methyl Iodide	(1)	3.612	142	3342532	65.732
21) Carbon Disulfide	(1)	3.662	76	4150107	71.285
22) Isopropanol	(1)	3.712	45	2046072	77.704
23) Acetonitrile	(1)	3.870	40	834062	60.416
24) 3-Chloropropene	(1)	3.870	76	655045M	82.623
25) Methylene Chloride	(1)	4.013	84	1326874	76.755
26) tert-Butyl Alcohol	(1)	4.163	59	2582358	87.783
28) trans-1,2-Dichloroethene	(1)	4.292	61	2113570	73.711
29) Methyl t-Butyl Ether	(1)	4.292	73	3526889	71.990
27) Acrylonitrile	(1)	4.299	53	1264762	73.683
30) Hexane	(1)	4.564	57	2102169	71.870
31) 1,1-Dichloroethane	(1)	4.722	63	2695396	68.630
32) Vinyl Acetate	(1)	4.787	86	386384	92.940
33) Di-Isopropyl Ether	(1)	4.787	45	4641478	73.225
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	3309335	77.330
35) cis-1,2-Dichloroethene	(1)	5.259	61	1987934	74.073
37) 2-Butanone	(1)	5.281	72	743348	73.440
38) Ethyl Acetate	(1)	5.331	70	344447	69.464
39) Methyl Acrylate	(1)	5.360	55	2516356	76.481

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00117.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 21:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 07:54
Date, time and analyst ID of latest file update: 11-Jun-2018 07:58 ads07818

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	320886	10.000
41) Tetrahydrofuran	(1)	5.496	42	1598094	71.806
42) Chloroform	(1)	5.539	83	3169796	67.951
43) 1,1,1-Trichloroethane	(1)	5.682	97	2984444	69.345
44) Cyclohexane	(1)	5.711	56	2216790	71.997
45) Carbon Tetrachloride	(1)	5.811	117	3061330	72.682
46) Benzene	(2)	5.990	78	4551338	67.969
47) 1,2-Dichloroethane	(2)	6.011	62	2101083	66.953
48) Isooctane	(2)	6.033	57	6971109	76.493
49) Tert-Amyl Methyl Ether	(2)	6.069	73	3166108	74.565
50) Heptane	(2)	6.176	43	2535673	71.875
51)*1,4-Difluorobenzene	(2)	6.291	114	1093001	10.000
52) Trichloroethene	(2)	6.491	130	2033758	69.434
53) Ethyl Acrylate	(2)	6.570	55	3199946	77.781
36) 1,2-Dichloroethene (total)	(1)		61	4101504	147.784
54) 1,2-Dichloropropane	(2)	6.678	63	1721038	67.250
57) Methyl Methacrylate	(2)	6.749	69	1639675	76.369
56) 1,4-Dioxane	(2)	6.771	88	1124714	73.198
55) Dibromomethane	(2)	6.771	174	1872537	69.684
58) Bromodichloromethane	(2)	6.885	83	3371407	67.267
59) cis-1,3-Dichloropropene	(2)	7.215	75	2768409	75.888
60) 4-Methyl-2-Pentanone	(2)	7.329	43	3539926	70.976
61) Toluene	(3)	7.465	91	5355972	65.668
62) Octane	(3)	7.516	43	3528133	69.893
63) trans-1,3-Dichloropropene	(3)	7.630	75	2350168	78.805
65) Ethyl Methacrylate	(3)	7.673	69	2756756	79.124
66) 1,1,2-Trichloroethane	(3)	7.774	97	1939576	62.773
67) Tetrachloroethene	(3)	7.867	166	2738323	65.833
68) 2-Hexanone	(3)	7.938	43	3399902	72.999
69) Dibromochloromethane	(3)	8.067	127	2605621	70.250
70) 1,2-Dibromoethane	(3)	8.160	107	3036896	66.425
71)*Chlorobenzene-d5	(3)	8.497	117	1135358	10.000
72) Chlorobenzene	(3)	8.518	112	4425200	64.192
73) 1,1,1,2-Tetrachloroethane	(3)	8.576	131	2384291	71.102
74) Ethylbenzene	(3)	8.583	91	7077063	69.011
75) m/p-Xylene	(3)	8.669	91	5453569	69.646
76) o-Xylene	(3)	8.970	91	5593754	72.684
78) Styrene	(3)	8.977	104	4389287	75.326

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00117.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 21:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 07:54
Date, time and analyst ID of latest file update: 11-Jun-2018 07:58 ads07818

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	3286252	73.770
80) Cumene	(3)	9.235	105	7464927	72.747
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	4314952	60.230
81) Bromobenzene	(3)	9.493	156	2592930	66.204
83) 1,2,3-Trichloropropane	(3)	9.514	110	1270793	62.134
84) n-Propylbenzene	(3)	9.543	120	2213959	72.784
86) 4-Ethyltoluene	(3)	9.629	105	7822074M	71.968
85) 2-Chlorotoluene	(3)	9.629	126	2096488	72.215
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	6236575M	70.347
88) Alpha Methyl Styrene	(3)	9.844	118	3245628	79.421
89) tert-Butylbenzene	(3)	9.922	119	5978088M	74.325
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	6263495	72.044
91) sec-Butylbenzene	(3)	10.087	105	8989244	72.204
92) 1,3-Dichlorobenzene	(3)	10.187	146	4605787	68.632
94) p-Isopropyltoluene	(3)	10.187	119	7844587	78.782
93) 1,4-Dichlorobenzene	(3)	10.259	146	4463039	67.209
95) Benzyl Chloride	(3)	10.359	91	4798589	107.472
97) n-Butylbenzene	(3)	10.503	91	7543853	77.171
96) 1,2-Dichlorobenzene	(3)	10.546	146	4148484	66.473
98) Hexachloroethane	(3)	10.732	117	2448483	93.783
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	2194217	75.504
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	3187961	78.849
101) Hexachlorobutadiene	(3)	11.871	225	2657950	79.082
102) Naphthalene	(3)	11.964	128	6972190	89.121
64) 1,3-Dichloropropene (total)	(3)		75	5118577	152.825
77) Xylene (total)	(3)		91	11047323	142.303

M = Compound was manually integrated.

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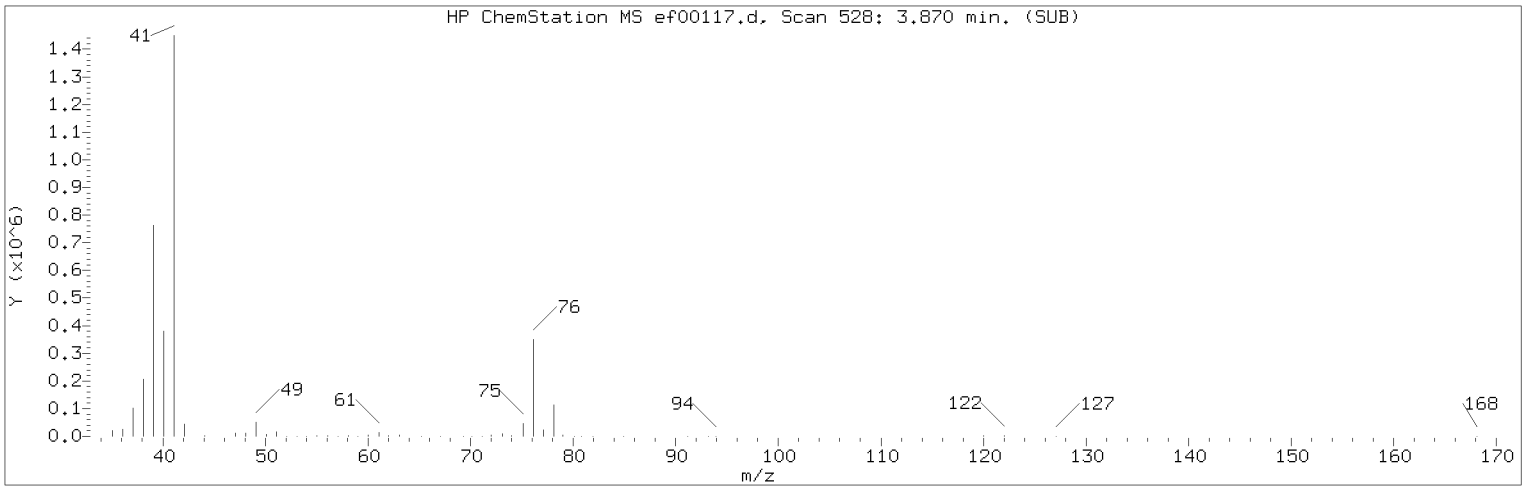
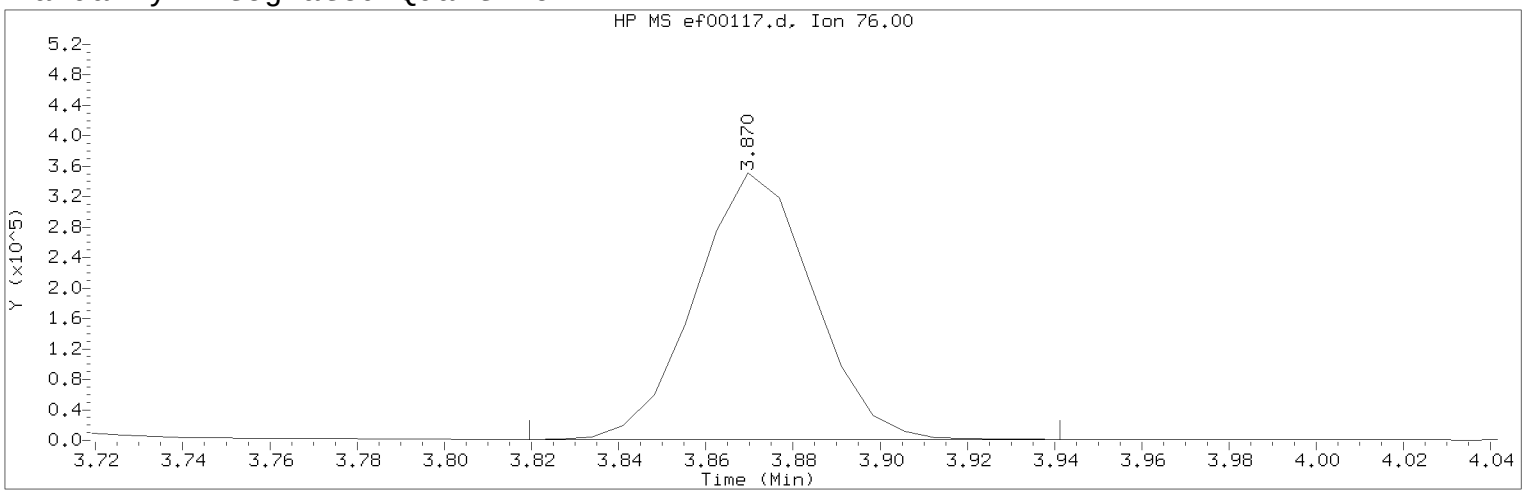
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00117.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 21:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 07:54
Date, time and analyst ID of latest file update: 11-Jun-2018 07:58 ads07818

Sample Name: VSTD070 Lab Sample ID: VSTD070

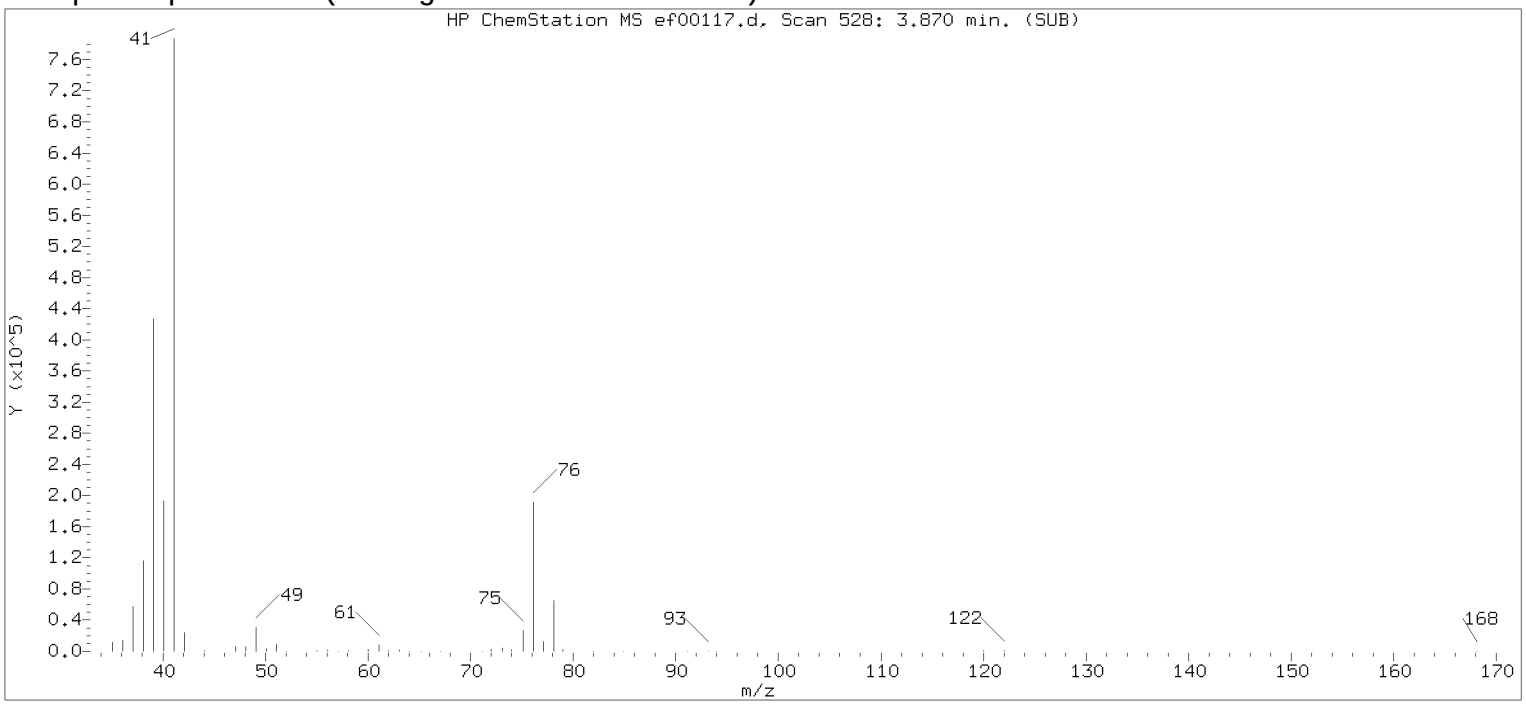
Compound Number : 24
Compound Name : 3-Chloropropene
Scan Number : 528
Retention Time (minutes): 3.870
Quant Ion : 76.00
Area (flag) : 655045M
Concentration (ppb(v)) : 82.6232
Integration start scan : 520 Integration stop scan: 537
Y at integration start : 931 Y at integration end: 931

Reason for manual integration: improper integration

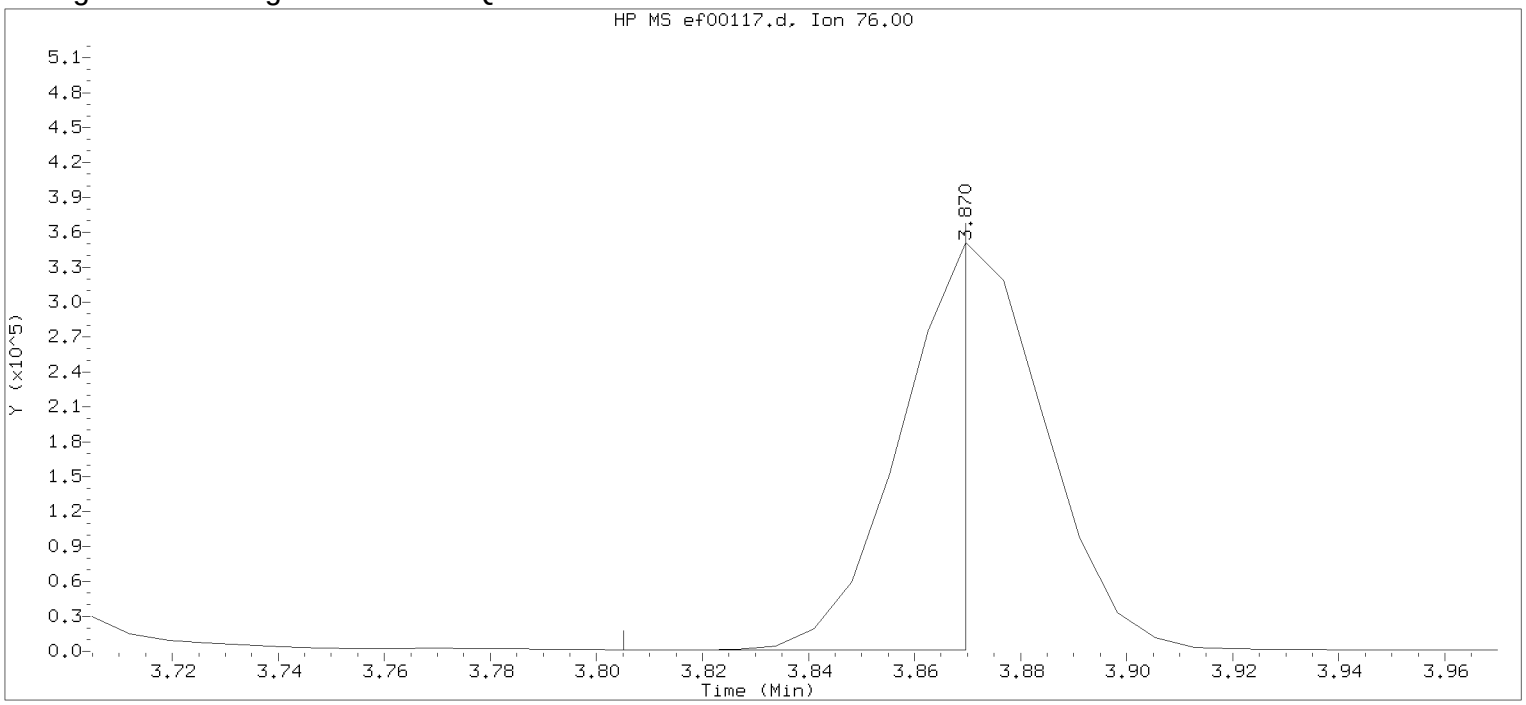
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:04.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00117.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 21:06 Analyst ID: jeb07445

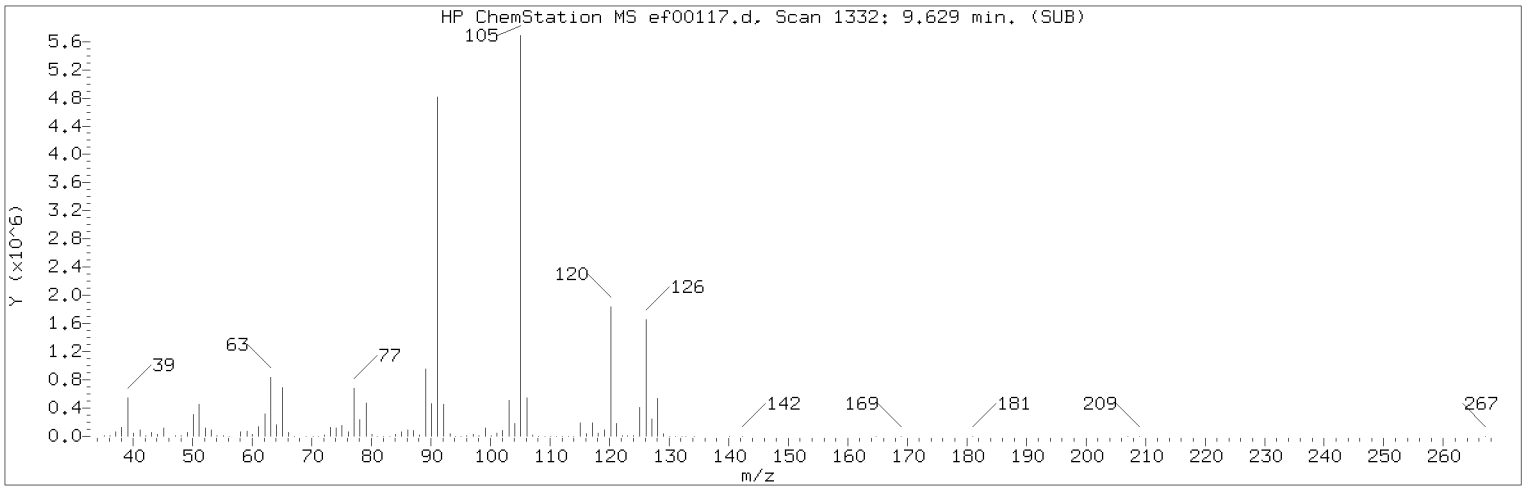
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 10-Jun-2018 21:24 Unknown

Sample Name: VSTD070 Lab Sample ID: VSTD070

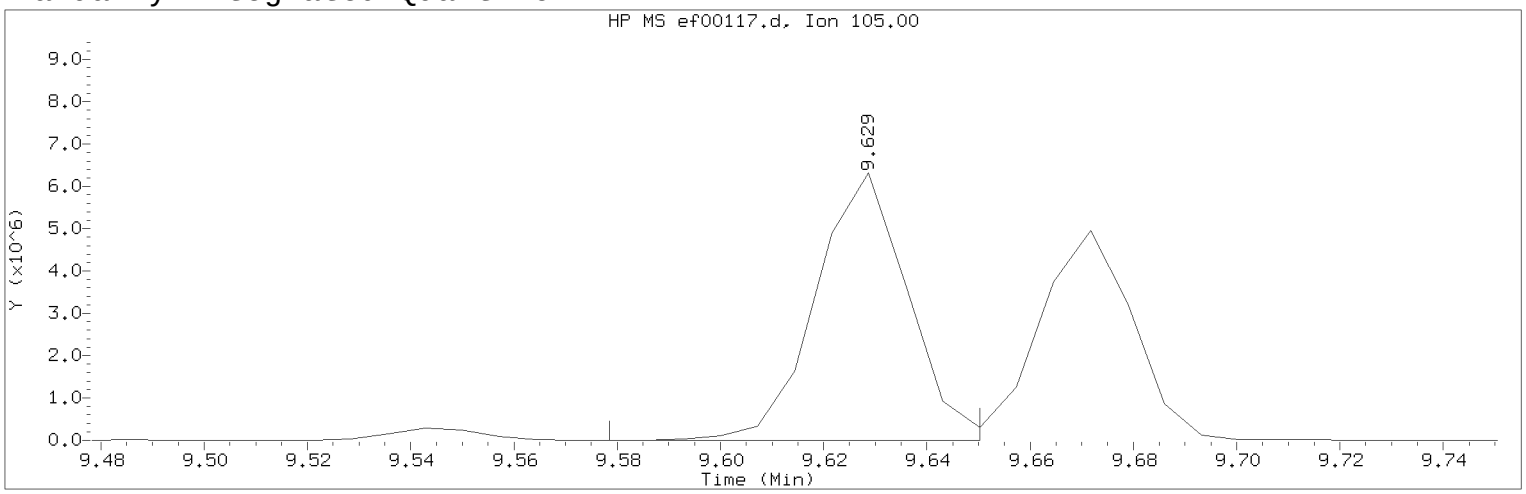
Compound Number : 24
Compound Name : 3-Chloropropene
Scan Number : 528
Retention Time (minutes): 3.870
Quant Ion : 76.00
Area : 292617
Concentration (ppb(v)) : 37.3825
Integration start scan : 518 Integration stop scan: 527
Y at integration start : 1074 Y at integration end: 1074

Digitally signed by Jacob E. Bailey on 06/11/2018 at 12:26.
Target 3.5 esignature used.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00117.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 21:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 07:54
Date, time and analyst ID of latest file update: 11-Jun-2018 07:58 ads07818

Sample Name: VSTD070 Lab Sample ID: VSTD070

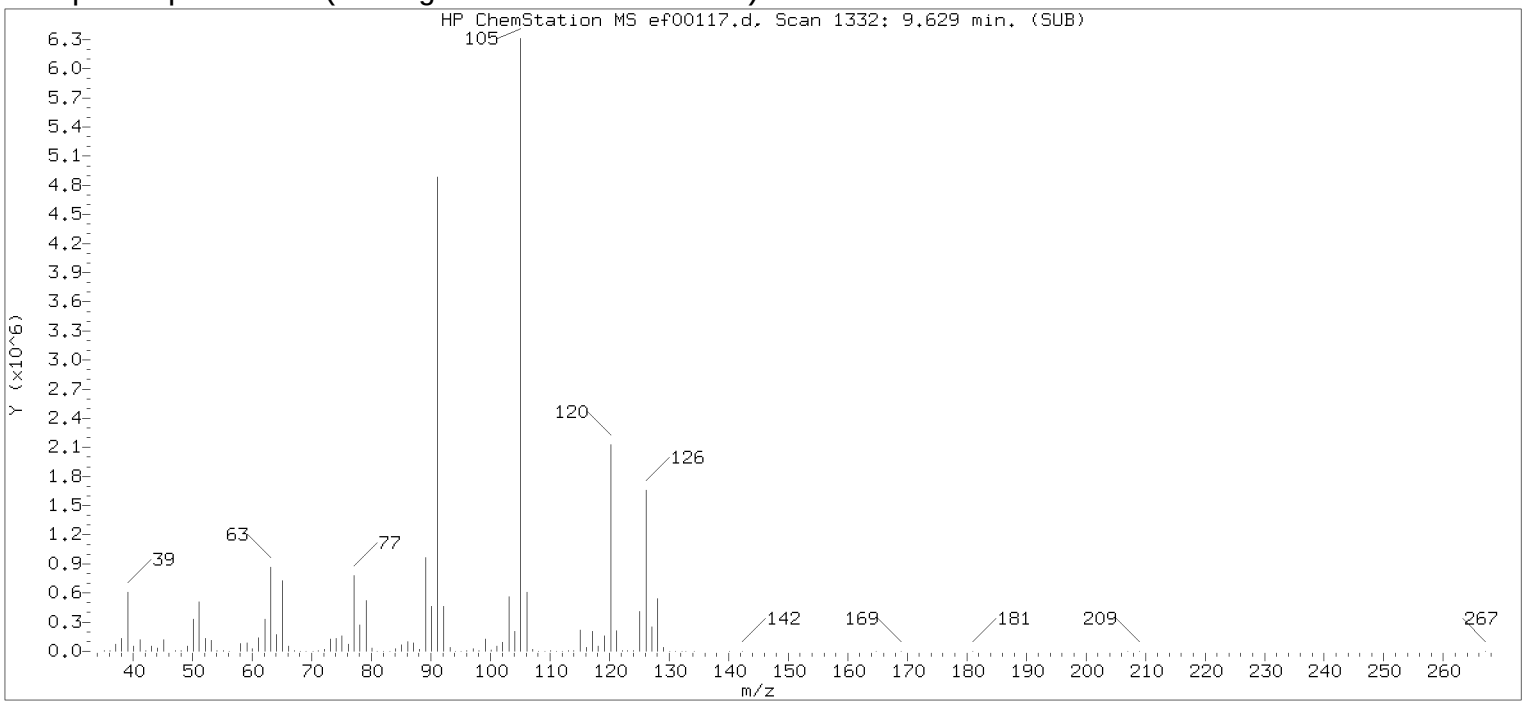
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 7822074M
Concentration (ppb(v)) : 71.9680
Integration start scan : 1324 Integration stop scan: 1334
Y at integration start : 1540 Y at integration end: 1540

Reason for manual integration: improper integration

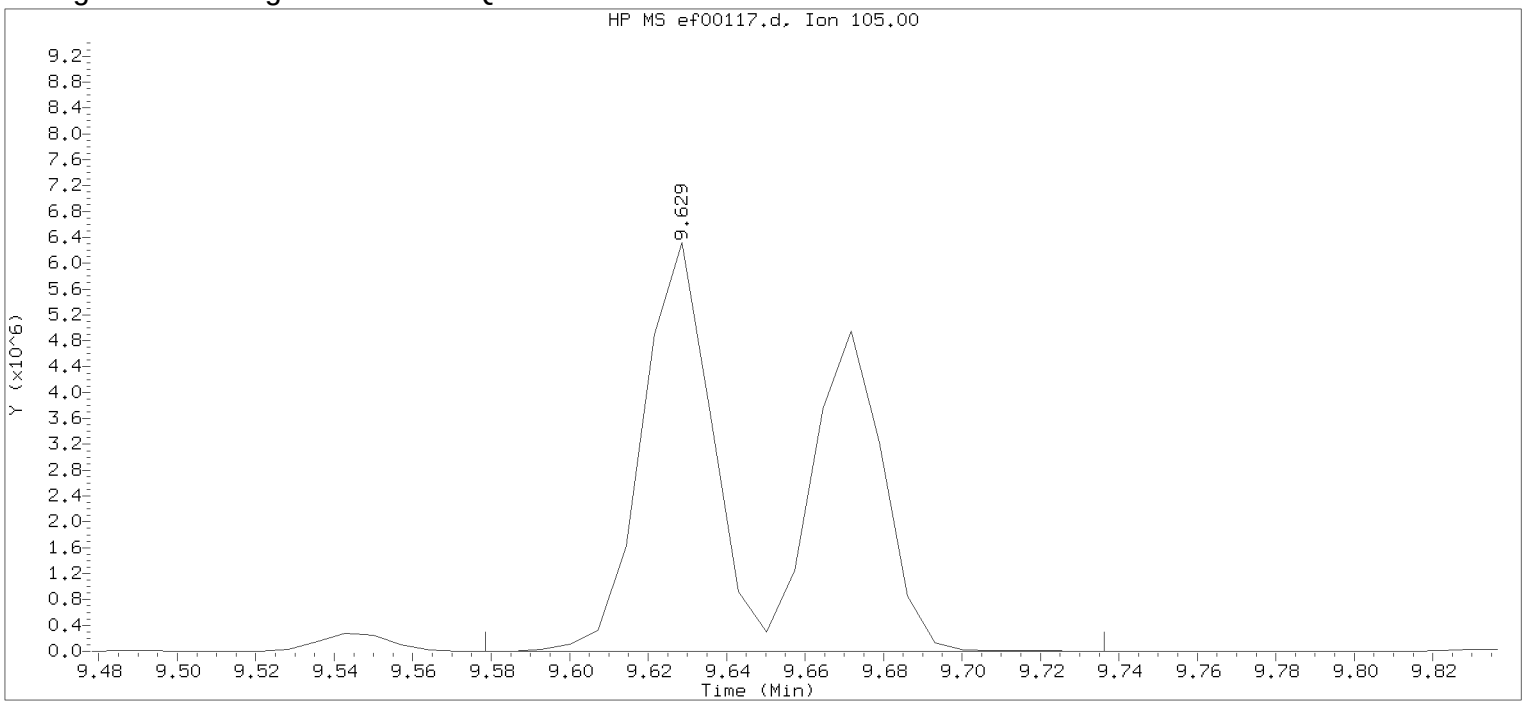
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:04.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00117.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 21:06 Analyst ID: jeb07445

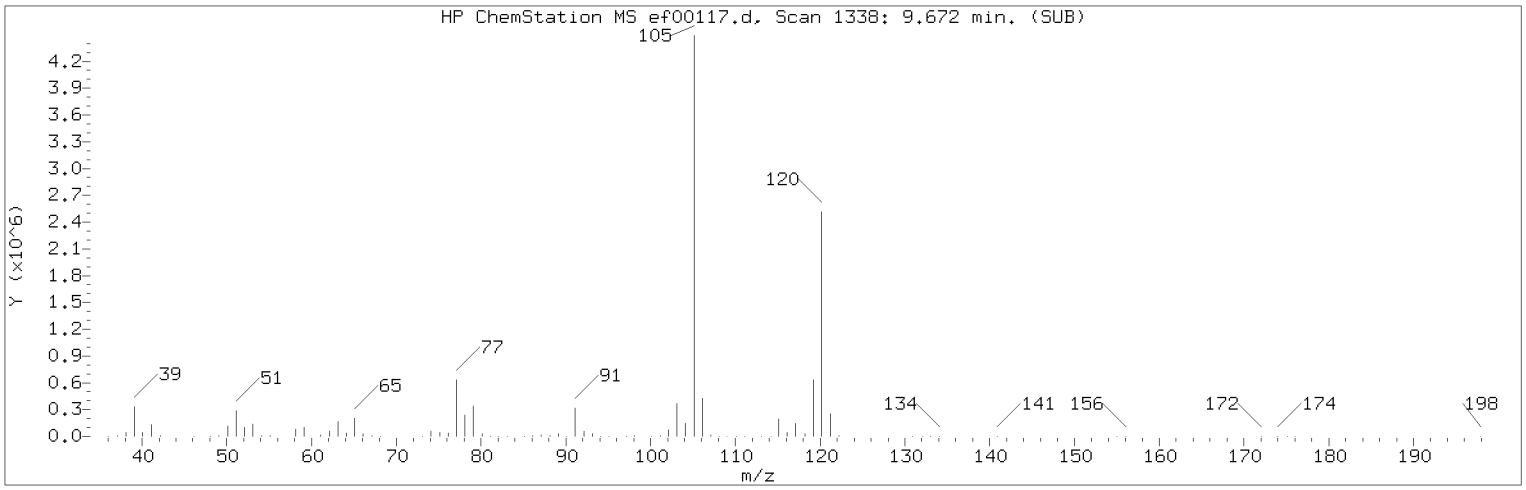
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 10-Jun-2018 21:24 Unknown

Sample Name: VSTD070 Lab Sample ID: VSTD070

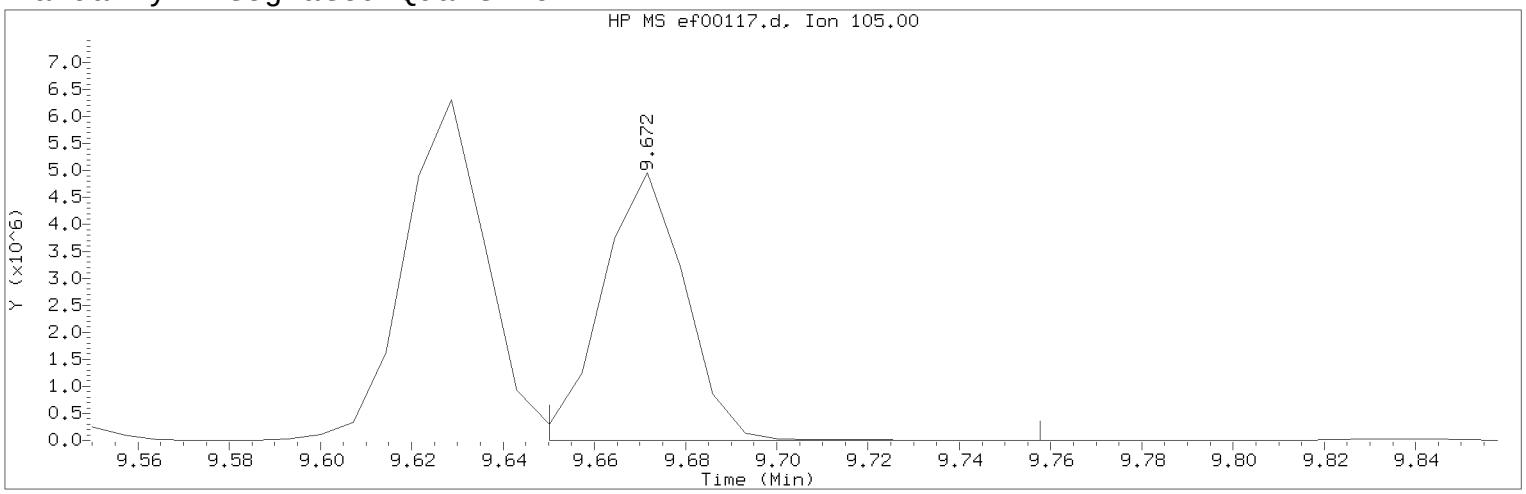
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 13936646
Concentration (ppb(v)) : 128.9509
Integration start scan : 1324 Integration stop scan: 1346
Y at integration start : 651 Y at integration end: 651

Digitally signed by Jacob E. Bailey on 06/11/2018 at 12:26.
Target 3.5 esignature used. EDD Page 1442 of 1687

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00117.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 21:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 07:54
Date, time and analyst ID of latest file update: 11-Jun-2018 07:58 ads07818

Sample Name: VSTD070 Lab Sample ID: VSTD070

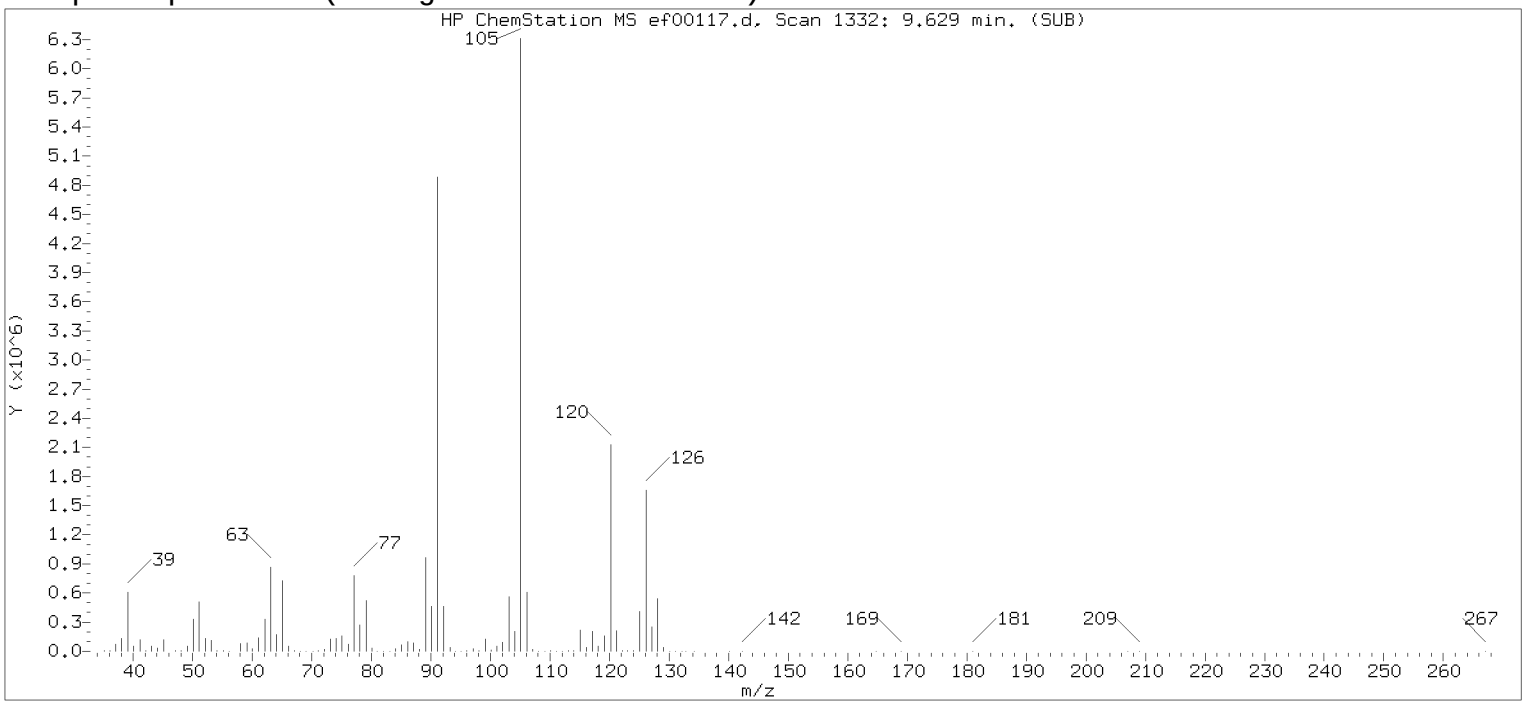
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 6236575M
Concentration (ppb(v)) : 70.3471
Integration start scan : 1334 Integration stop scan: 1349
Y at integration start : 1496 Y at integration end: 1496

Reason for manual integration: improper integration

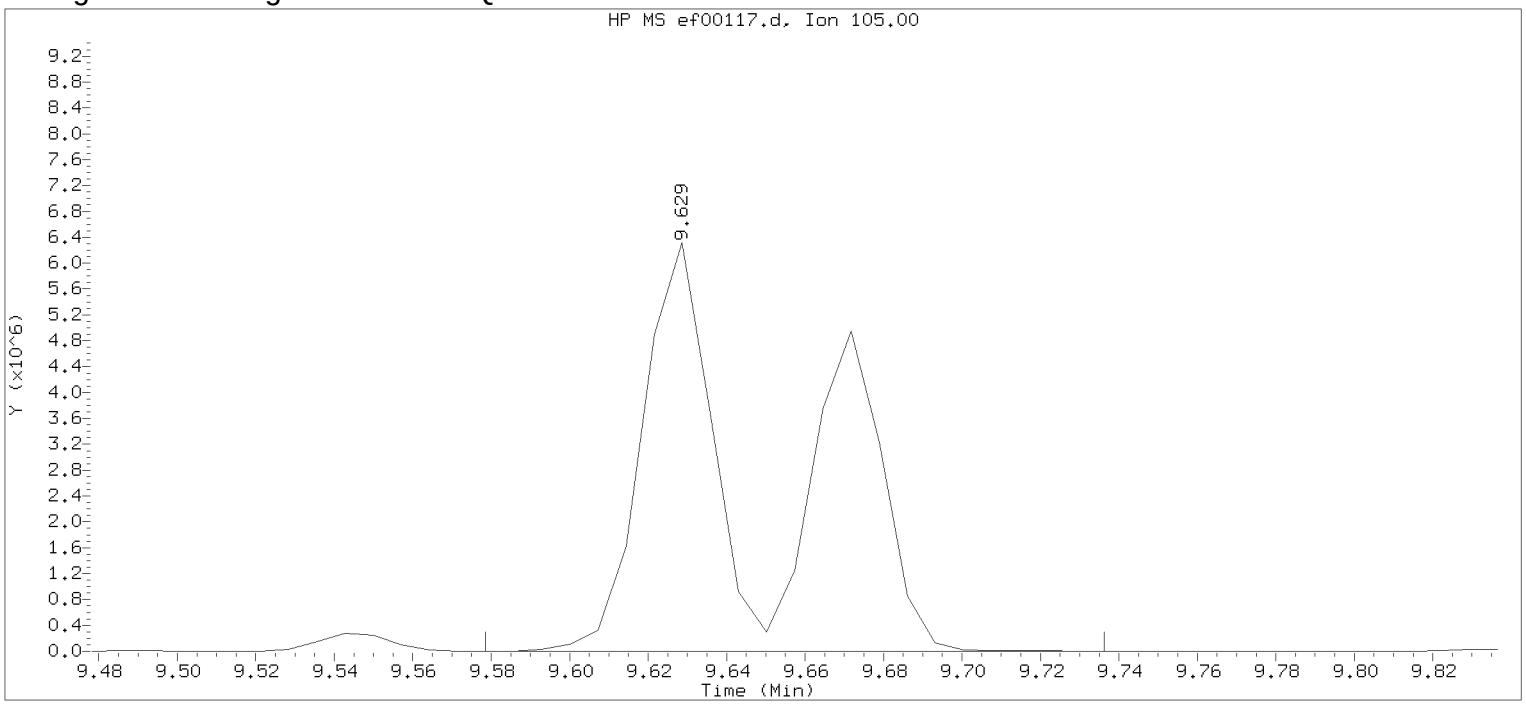
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:04.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00117.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 21:06 Analyst ID: jeb07445

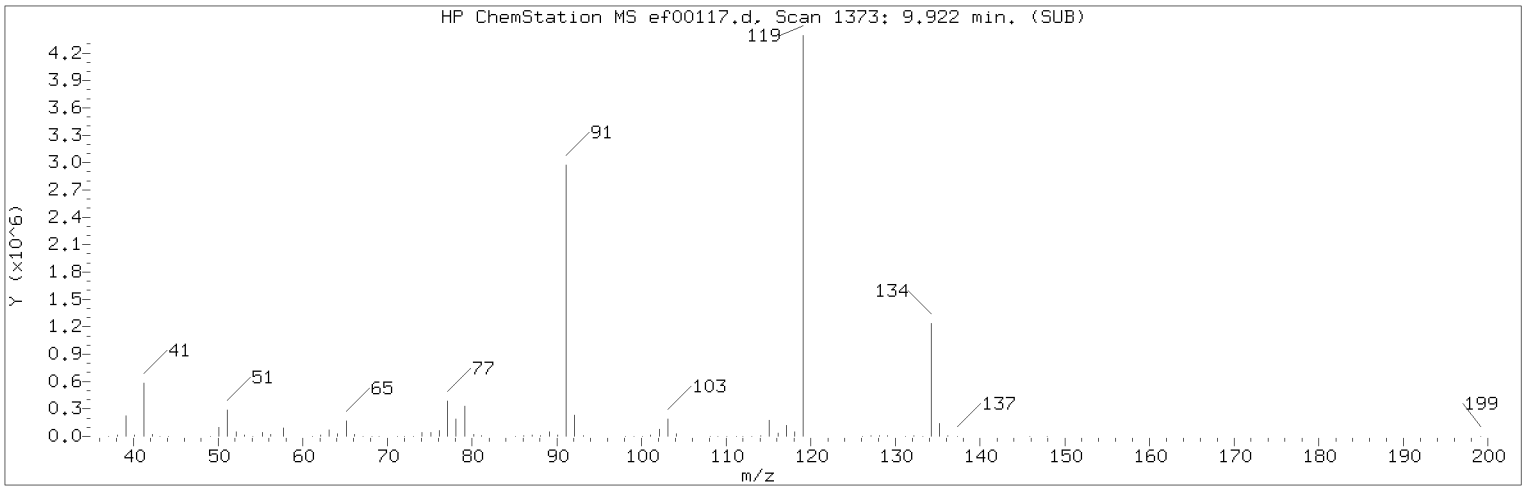
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 10-Jun-2018 21:24 Unknown

Sample Name: VSTD070 Lab Sample ID: VSTD070

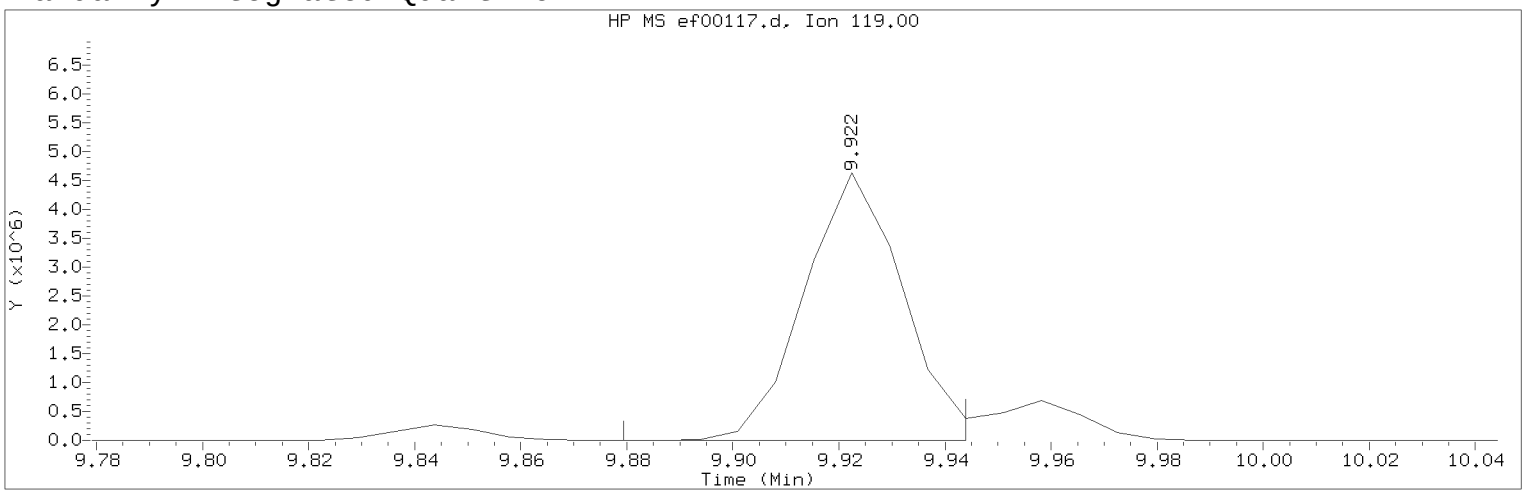
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 13928240
Concentration (ppb(v)) : 157.2631
Integration start scan : 1324 Integration stop scan: 1346
Y at integration start : 1540 Y at integration end: 1540

Digitally signed by Jacob E. Bailey on 06/11/2018 at 12:26.
Target 3.5 esignature used.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00117.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 21:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 07:54
Date, time and analyst ID of latest file update: 11-Jun-2018 07:58 ads07818

Sample Name: VSTD070 Lab Sample ID: VSTD070

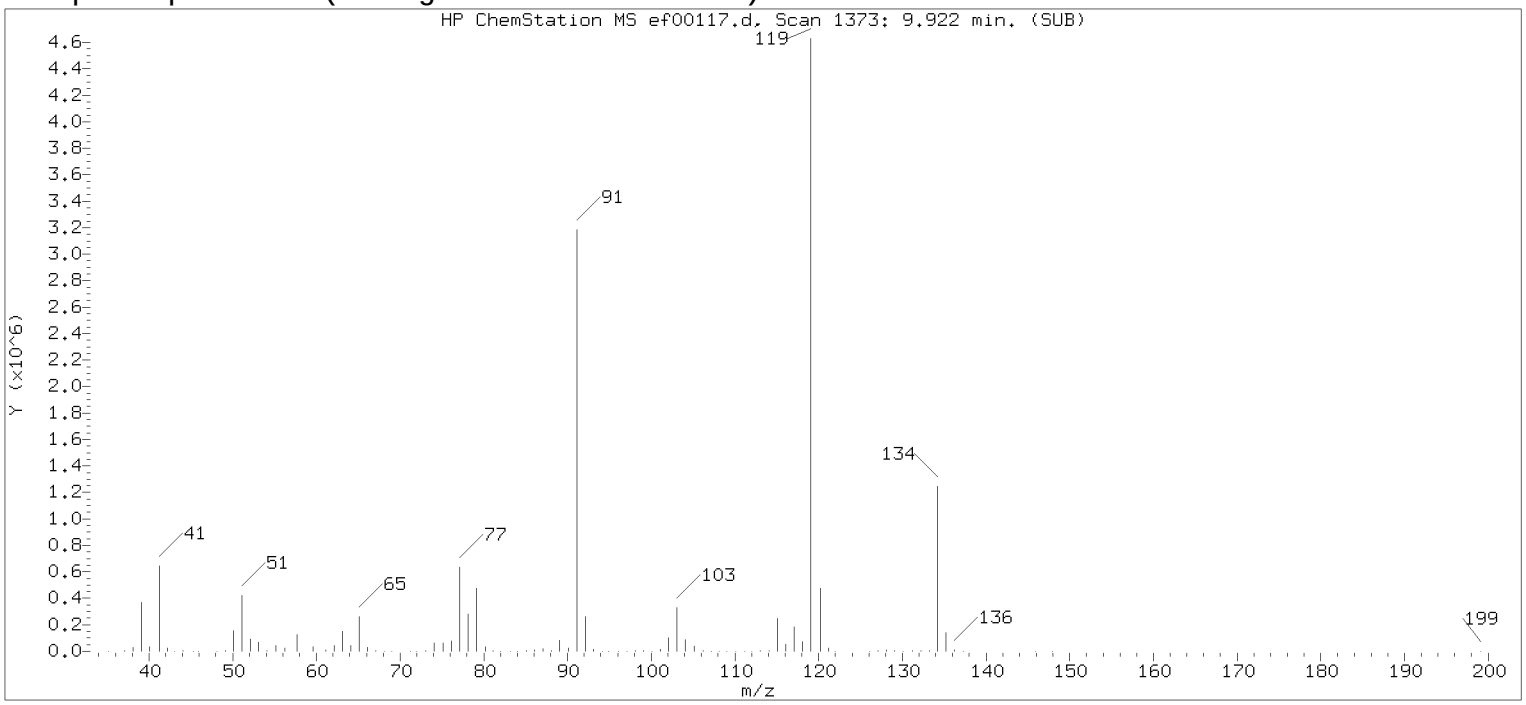
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 5978088M
Concentration (ppb(v)) : 74.3254
Integration start scan : 1366 Integration stop scan: 1375
Y at integration start : 889 Y at integration end: 889

Reason for manual integration: improper integration

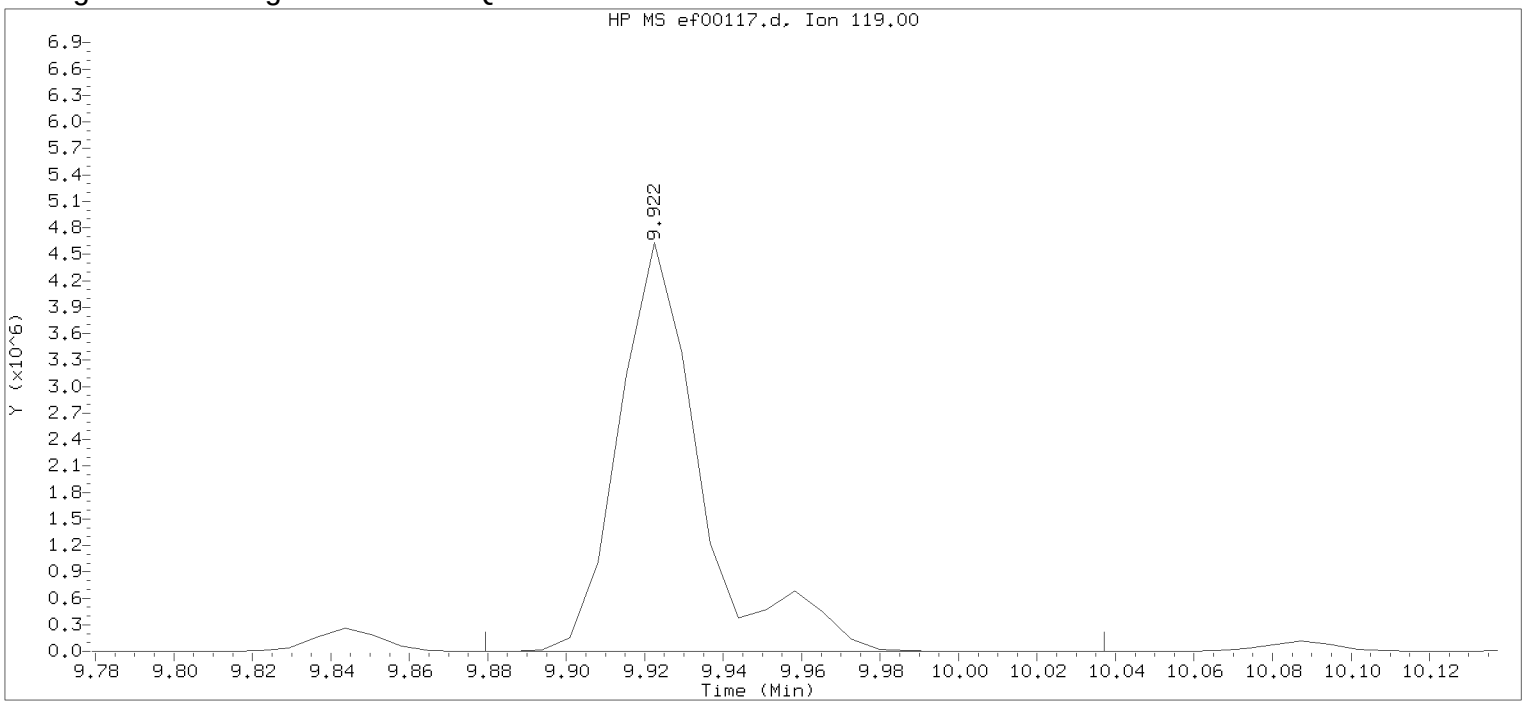
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:04.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



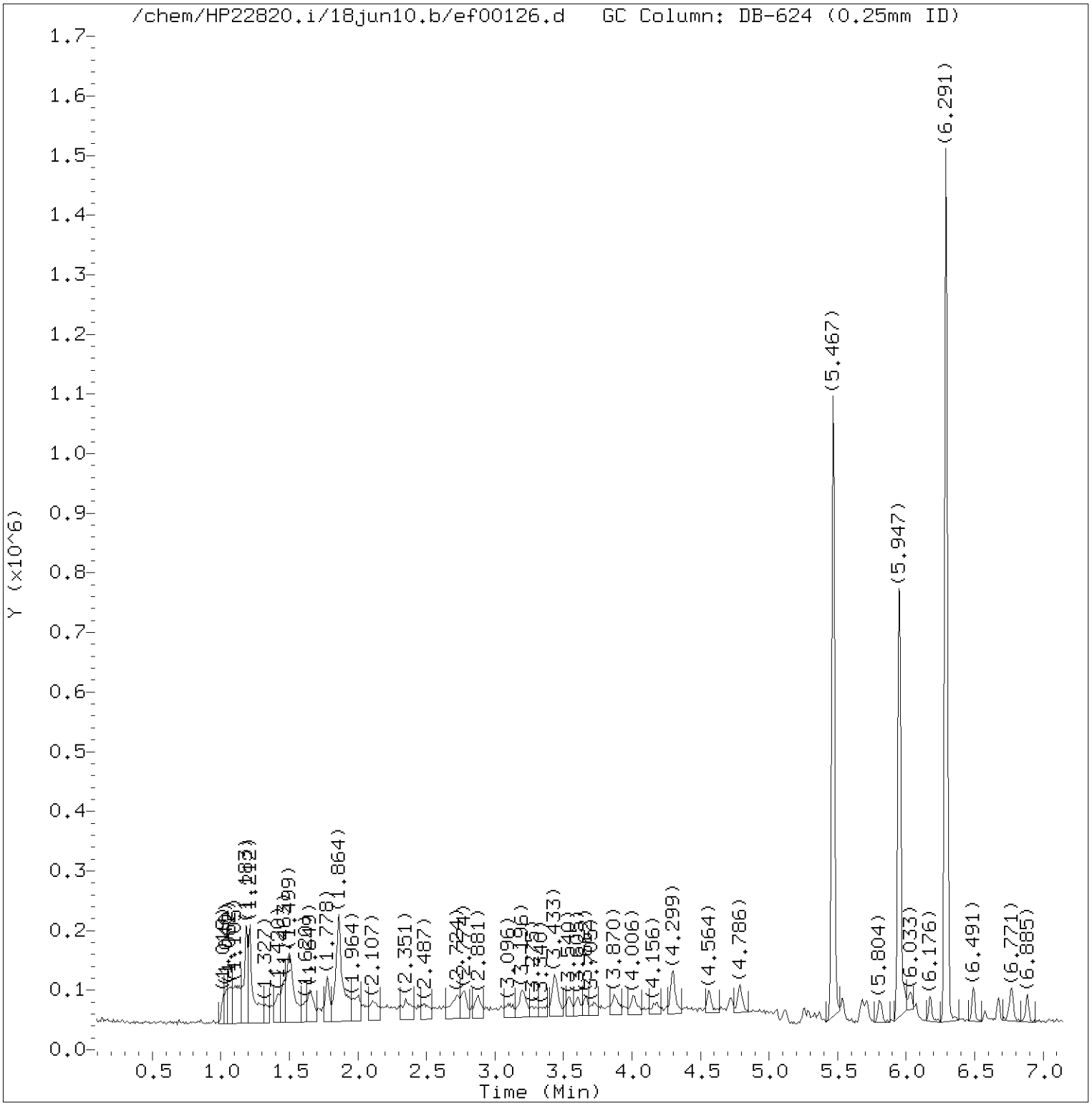
Data File: /chem/HP22820.i/18jun10.b/ef00117.d Instrument ID: HP22820.i
Injection date and time: 10-JUN-2018 21:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 10-Jun-2018 21:24 Unknown

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 6742759
Concentration (ppb(v)) : 83.8324
Integration start scan : 1366 Integration stop scan: 1388
Y at integration start : 241 Y at integration end: 241

Digitally signed by Jacob E. Bailey on 06/11/2018 at 12:26.
Target 3.5 esignature used.



Total Ion Chromatogram (TIC)

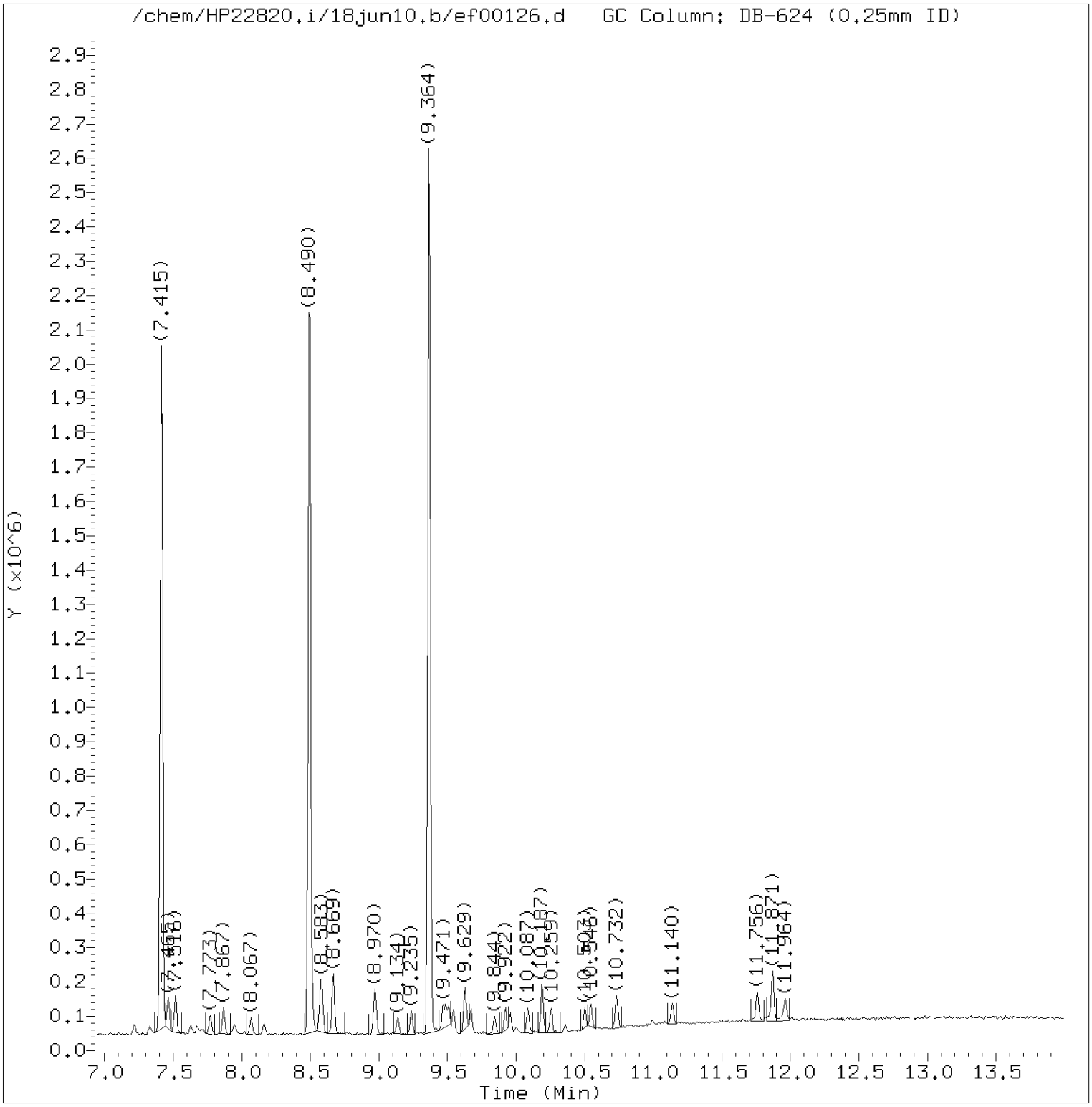
Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00126.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 01:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:05 jbs01304

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

Digitally signed by Jeffrey B. Smith
on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00126.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 01:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:05 jbs01304

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

Digitally signed by Jeffrey B. Smith
on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00126.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 01:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:05 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.613	41	9007	0.692
2) Dichlorodifluoromethane	(1)	1.649	85	27069	0.594
3) Chlorodifluoromethane	(1)	1.671	51	16630	0.576
4) Freon 114	(1)	1.778	85	28427	0.581
5) Chloromethane	(1)	1.850	50	13310	0.725
6) Vinyl Chloride	(1)	1.979	62	10840	0.618
7) 1,3-Butadiene	(1)	2.007	54	8245	0.654
8) Bromomethane	(1)	2.351	94	9210	0.617
9) Chloroethane	(1)	2.473	64	6521	0.667
10) Bromoethene	(1)	2.695	106	9302	0.611
11) Dichlorofluoromethane	(1)	2.731	67	23667	0.609
12) Trichlorofluoromethane	(1)	2.774	101	26360	0.541
13) Pentane	(1)	2.874	43	17096	0.612
14) Ethanol	(1)	3.096	45	9919	1.628
15) Freon123a	(1)	3.203	67	23896	0.662
16) Acrolein	(1)	3.347	56	4168	0.644
17) 1,1-Dichloroethene	(1)	3.433	61	14661	0.549
18) Freon 113	(1)	3.447	103	14837	0.540
19) Acetone	(1)	3.540	43	34853	1.305
20) Methyl Iodide	(1)	3.605	142	23346	0.535
21) Carbon Disulfide	(1)	3.662	76	28680	0.574
22) Isopropanol	(1)	3.719	45	11996	0.531
23) Acetonitrile	(1)	3.870	40	31768	2.682
24) 3-Chloropropene	(1)	3.870	76	4281	0.629
25) Methylene Chloride	(1)	4.013	84	10221	0.689
26) tert-Butyl Alcohol	(1)	4.163	59	11798	0.467
28) trans-1,2-Dichloroethene	(1)	4.299	61	13127	0.534
29) Methyl t-Butyl Ether	(1)	4.299	73	29103	0.692
27) Acrylonitrile	(1)	4.307	53	11362	0.772
30) Hexane	(1)	4.564	57	12439	0.496
31) 1,1-Dichloroethane	(1)	4.722	63	19206	0.570
32) Vinyl Acetate	(1)	4.786	86	1544	0.433
33) Di-Isopropyl Ether	(1)	4.786	45	25888	0.476
37) 2-Butanone	(1)	5.109	72	6396	0.737
34) Ethyl Tert-Butyl Ether	(1)	5.123	59	13713	0.373
35) cis-1,2-Dichloroethene	(1)	5.259	61	13162	0.572
38) Ethyl Acetate	(1)	5.331	70	2010	0.472
39) Methyl Acrylate	(1)	5.367	55	14790	0.524

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Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00126.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 01:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:05 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	275309	10.000
41) Tetrahydrofuran	(1)	5.503	42	10239	0.536
42) Chloroform	(1)	5.539	83	21344	0.533
43) 1,1,1-Trichloroethane	(1)	5.682	97	17986	0.487
44) Cyclohexane	(1)	5.711	56	13637	0.516
45) Carbon Tetrachloride	(1)	5.811	117	18460	0.511
46) Benzene	(2)	5.990	78	37654	0.689
47) 1,2-Dichloroethane	(2)	6.011	62	15700	0.613
48) Isooctane	(2)	6.033	57	36706	0.493
49) Tert-Amyl Methyl Ether	(2)	6.076	73	14434	0.416
50) Heptane	(2)	6.176	43	15063	0.523
51)*1,4-Difluorobenzene	(2)	6.291	114	892417	10.000
52) Trichloroethene	(2)	6.491	130	12913	0.540
53) Ethyl Acrylate	(2)	6.577	55	15212	0.453
36) 1,2-Dichloroethene (total)	(1)		61	26289	1.105
54) 1,2-Dichloropropane	(2)	6.678	63	11160	0.534
57) Methyl Methacrylate	(2)	6.749	69	9106	0.519
55) Dibromomethane	(2)	6.771	174	12073	0.550
56) 1,4-Dioxane	(2)	6.778	88	6338	0.505
58) Bromodichloromethane	(2)	6.885	83	21149	0.517
59) cis-1,3-Dichloropropene	(2)	7.215	75	12591	0.423
60) 4-Methyl-2-Pentanone	(2)	7.329	43	15895	0.390
61) Toluene	(3)	7.465	91	58003	0.886
62) Octane	(3)	7.516	43	30684	0.757
63) trans-1,3-Dichloropropene	(3)	7.630	75	9166	0.383
65) Ethyl Methacrylate	(3)	7.673	69	9627	0.344
66) 1,1,2-Trichloroethane	(3)	7.773	97	12085	0.487
67) Tetrachloroethene	(3)	7.867	166	17122	0.513
68) 2-Hexanone	(3)	7.945	43	16814	0.450
69) Dibromochloromethane	(3)	8.067	127	14483	0.487
70) 1,2-Dibromoethane	(3)	8.160	107	17078	0.465
71)*Chlorobenzene-d5	(3)	8.497	117	911103	10.000
72) Chlorobenzene	(3)	8.518	112	27700	0.501
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	12515	0.465
74) Ethylbenzene	(3)	8.583	91	69844	0.849
75) m/p-Xylene	(3)	8.669	91	80593	1.283
76) o-Xylene	(3)	8.970	91	50788	0.822
78) Styrene	(3)	8.984	104	17606	0.377

* = Compound is an internal standard.

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Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00126.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 01:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:05 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	16189	0.453
80) Cumene	(3)	9.235	105	30804	0.374
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	29272	0.509
81) Bromobenzene	(3)	9.493	156	13566	0.432
83) 1,2,3-Trichloropropane	(3)	9.514	110	8662	0.528
84) n-Propylbenzene	(3)	9.550	120	9043	0.370
86) 4-Ethyltoluene	(3)	9.629	105	30728M	0.352
85) 2-Chlorotoluene	(3)	9.629	126	8504	0.365
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	25823M	0.363
88) Alpha Methyl Styrene	(3)	9.844	118	11720	0.357
89) tert-Butylbenzene	(3)	9.922	119	25125M	0.389
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	25477M	0.365
91) sec-Butylbenzene	(3)	10.087	105	37153	0.372
94) p-Isopropyltoluene	(3)	10.187	119	26641	0.333
92) 1,3-Dichlorobenzene	(3)	10.195	146	25466	0.473
93) 1,4-Dichlorobenzene	(3)	10.259	146	24320	0.456
95) Benzyl Chloride	(3)	10.359	91	11409	0.318
97) n-Butylbenzene	(3)	10.503	91	28379	0.362
96) 1,2-Dichlorobenzene	(3)	10.546	146	21869	0.437
98) Hexachloroethane	(3)	10.732	117	10049	0.480
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	11416	0.490
100) 1,2,4-Trichlorobenzene	(3)	11.763	180	22758	0.701
101) Hexachlorobutadiene	(3)	11.871	225	22802	0.845
102) Naphthalene	(3)	11.964	128	47652	0.759
64) 1,3-Dichloropropene (total)	(3)		75	21757	0.806
77) Xylene (total)	(3)		91	131381	2.105

M = Compound was manually integrated.

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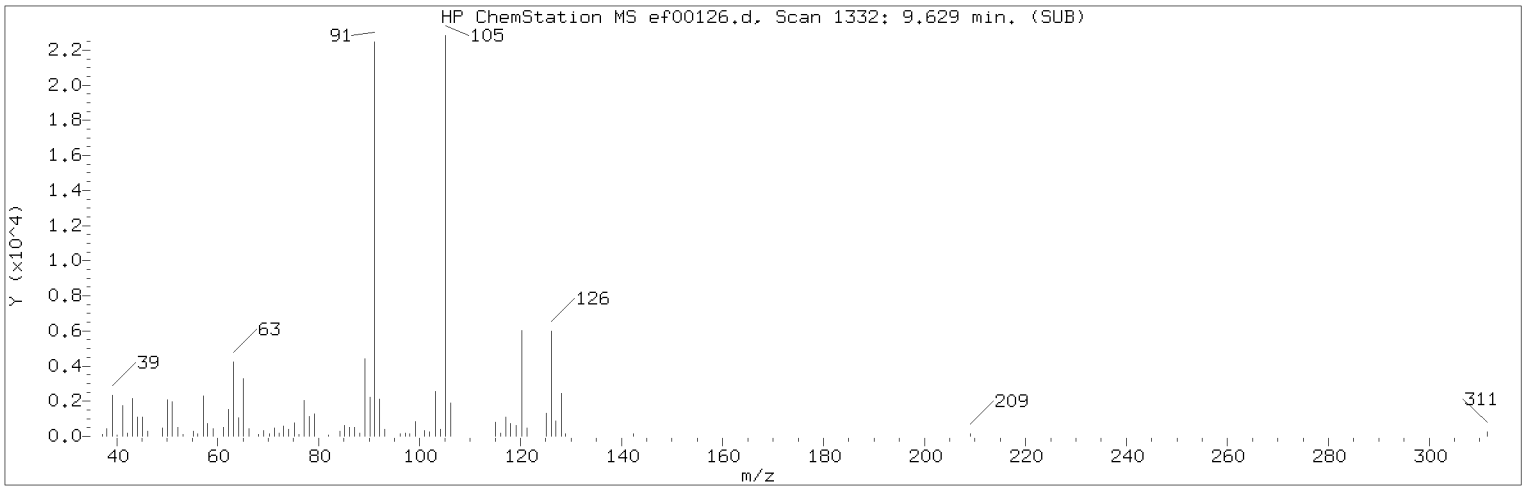
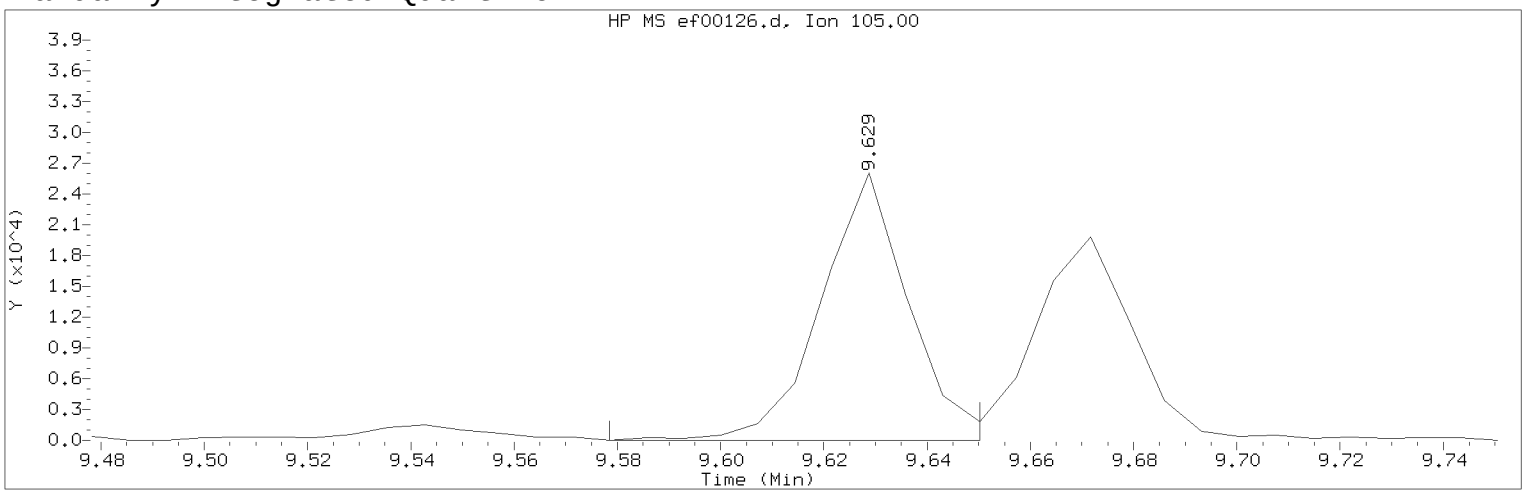
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00126.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 01:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:05 jbs01304

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

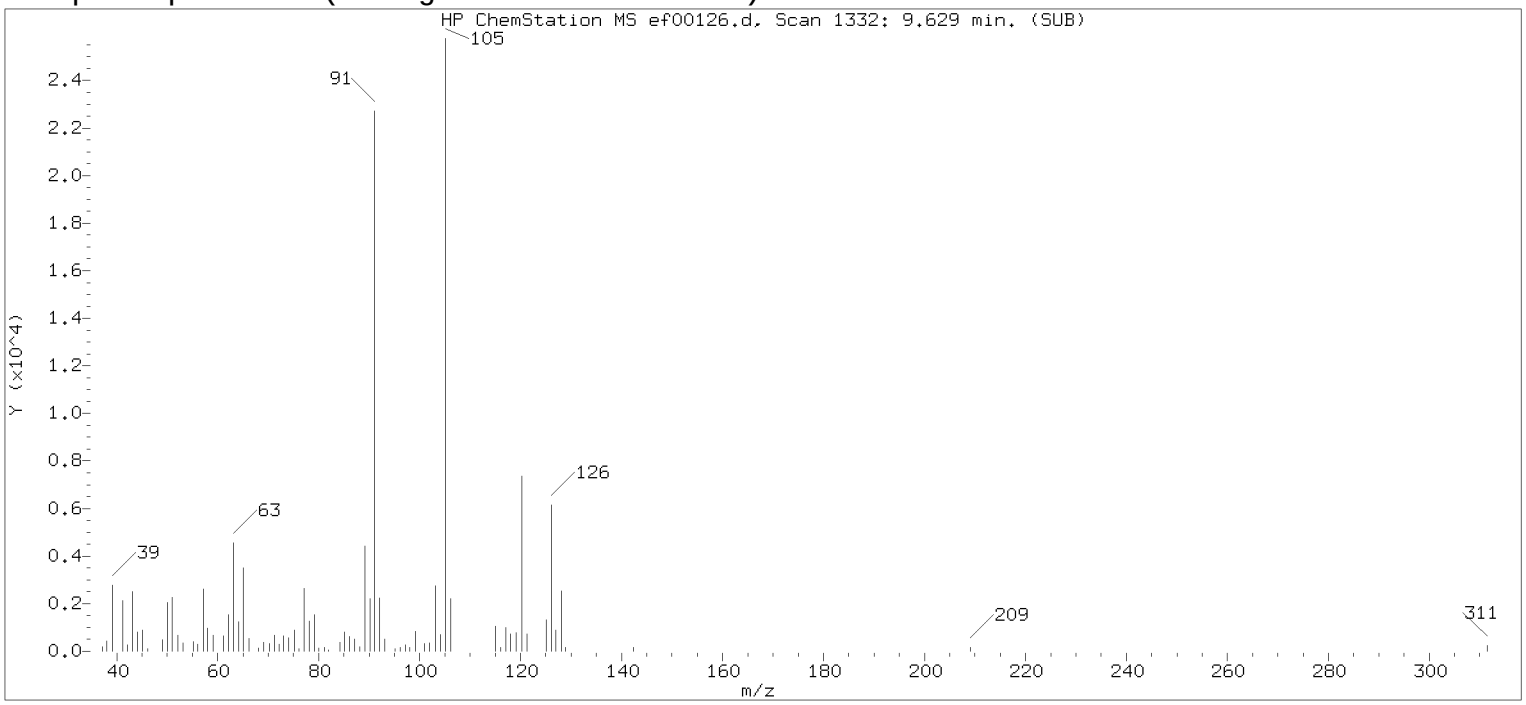
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 30728M
Concentration (ppb(v)) : 0.3523
Integration start scan : 1324 Integration stop scan: 1334
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

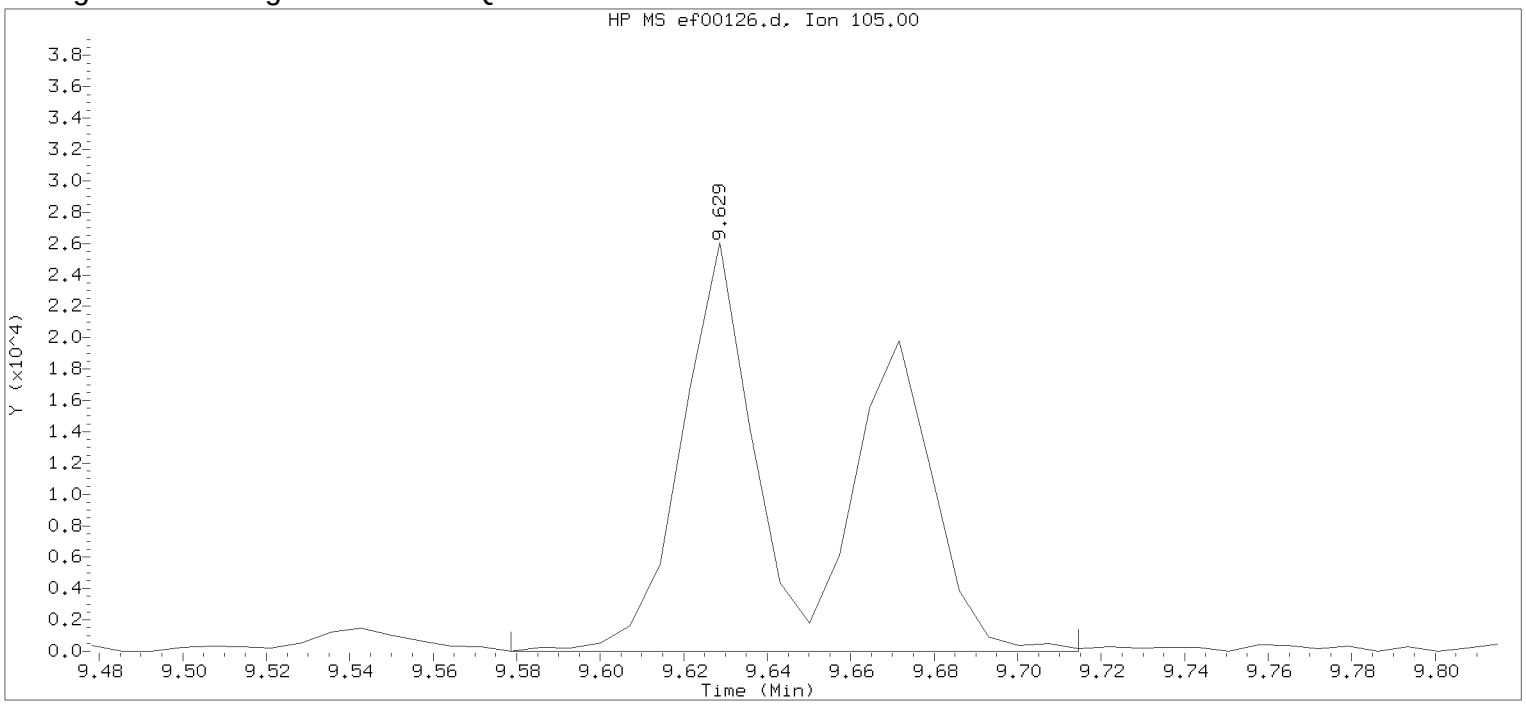
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:08.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00126.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 01:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 02:16 Unknown

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

Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 56151
Concentration (ppb(v)) : 0.6474
Integration start scan : 1324 Integration stop scan: 1343
Y at integration start : 0 Y at integration end: 0

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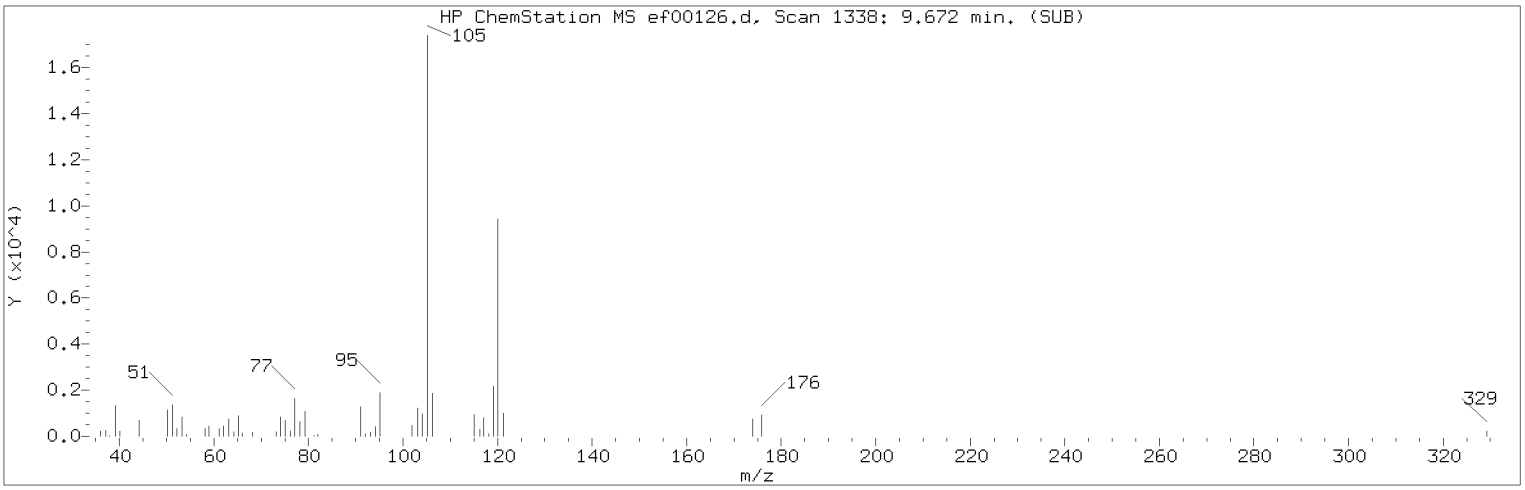
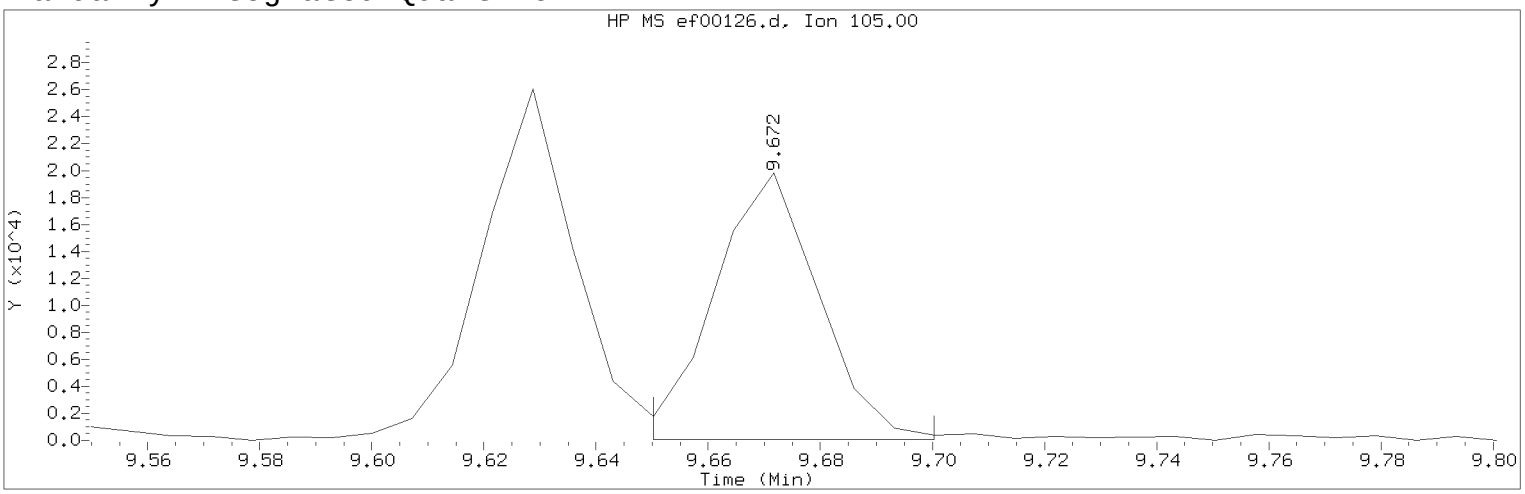
Target 3.5 esignature used. GLEDI Page 1324 of 1687

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00126.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 01:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:05 jbs01304

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

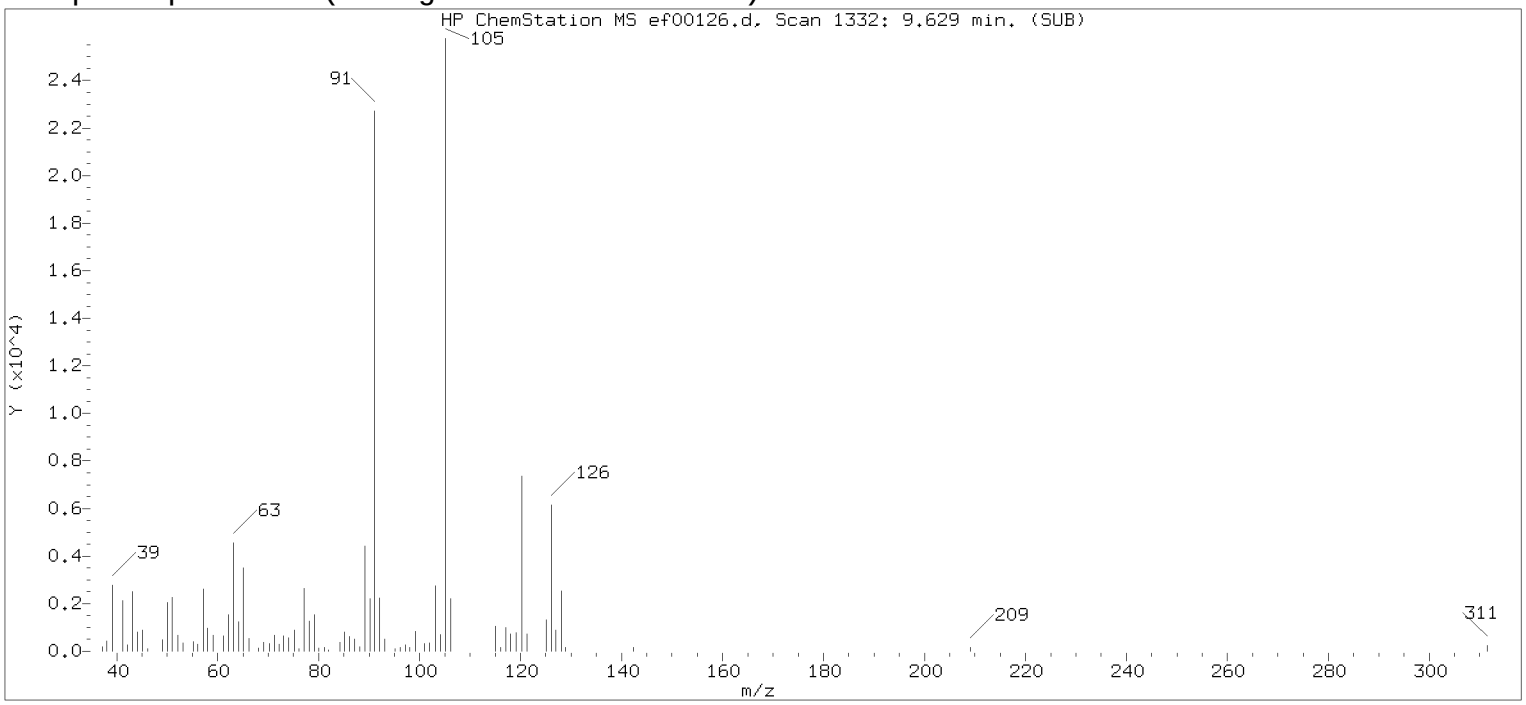
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 25823M
Concentration (ppb(v)) : 0.3630
Integration start scan : 1334 Integration stop scan: 1341
Y at integration start : 37 Y at integration end: 37

Reason for manual integration: improper integration

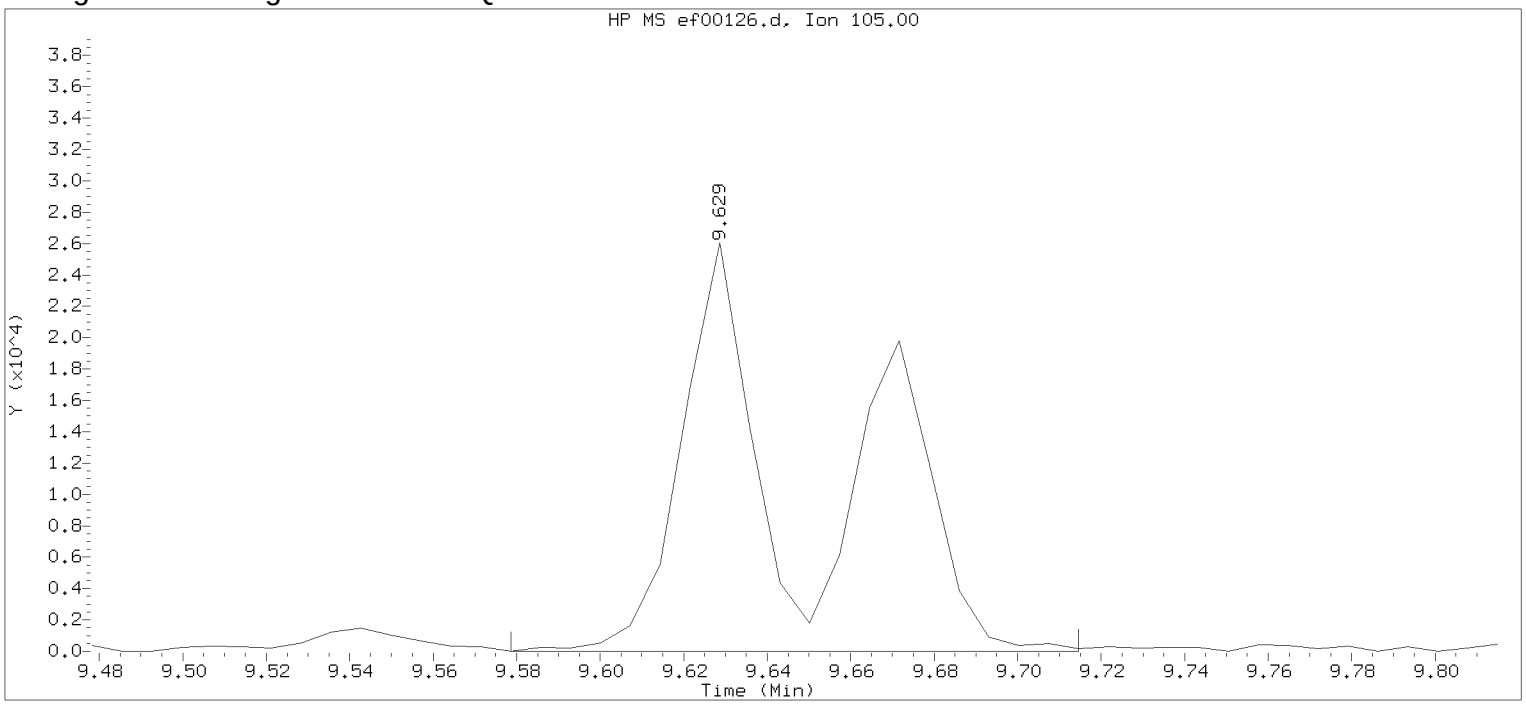
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:08.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00126.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 01:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 02:16 Unknown

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

Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 56151
Concentration (ppb(v)) : 0.7901
Integration start scan : 1324 Integration stop scan: 1343
Y at integration start : 0 Y at integration end: 0

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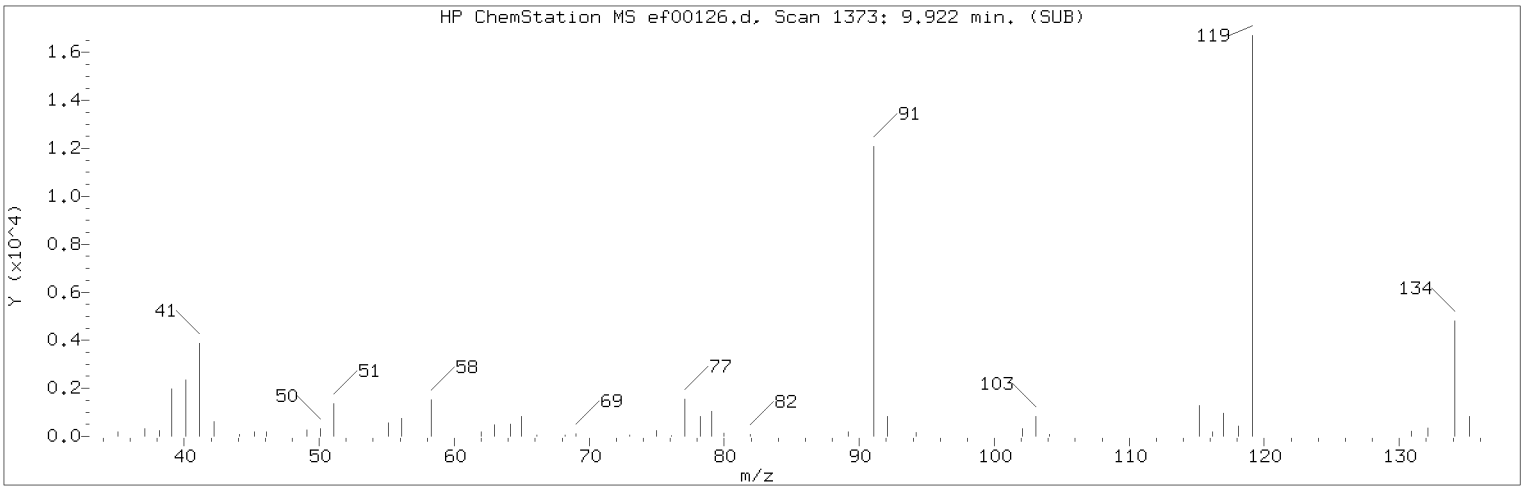
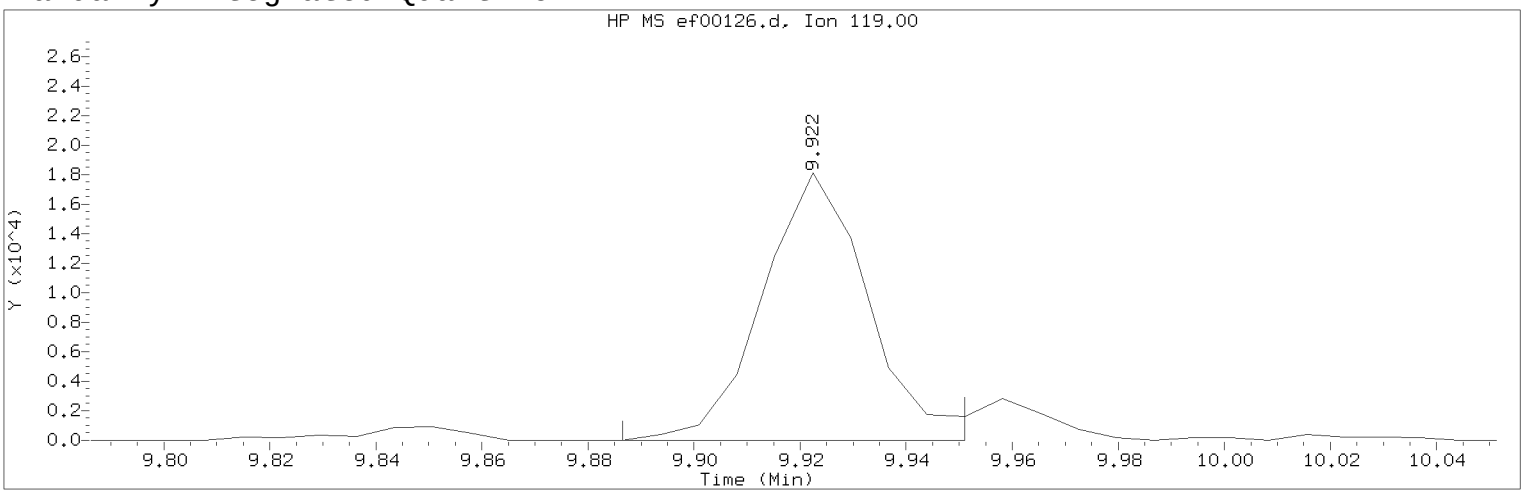
Target 3.5 esignature used. GLEDI Page 1324 of 1687

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00126.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 01:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:05 jbs01304

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

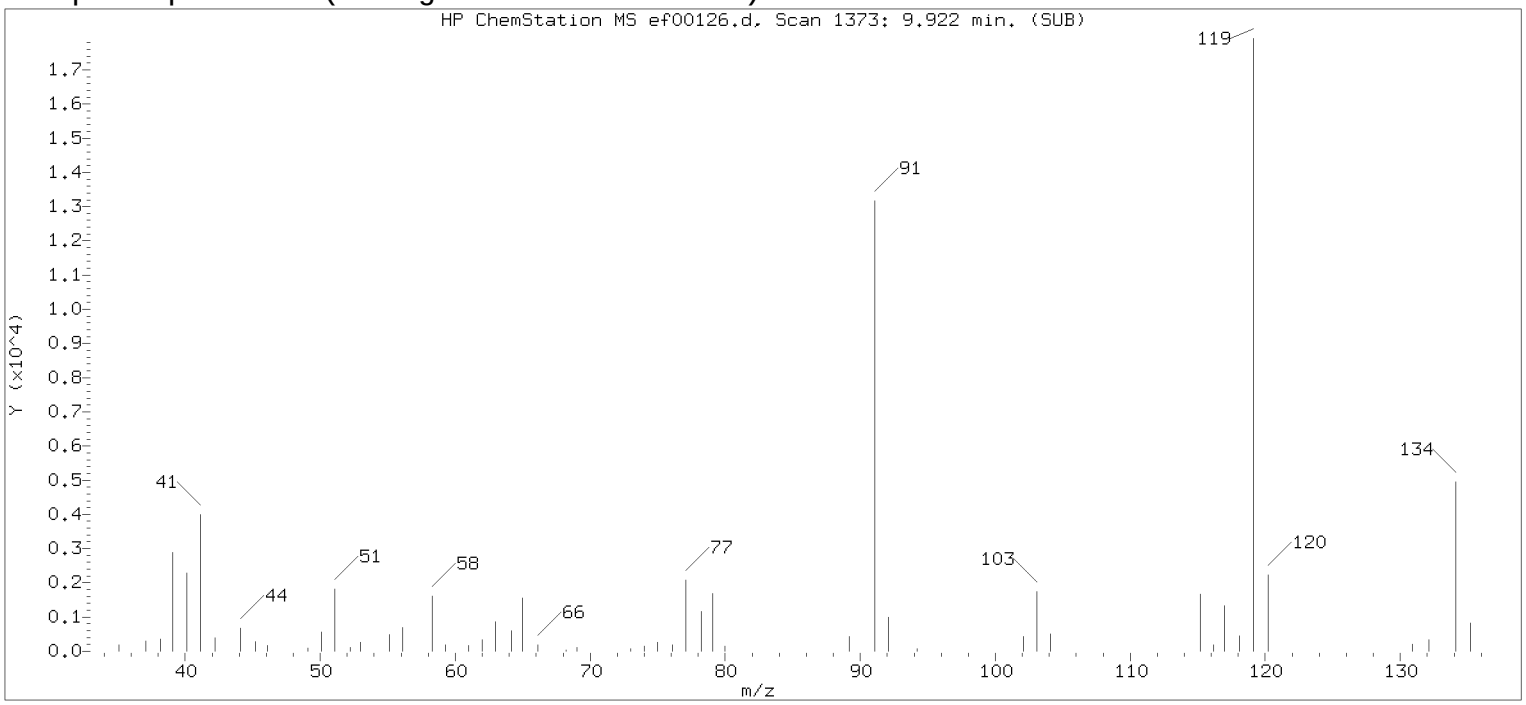
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 25125M
Concentration (ppb(v)) : 0.3893
Integration start scan : 1367 Integration stop scan: 1376
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

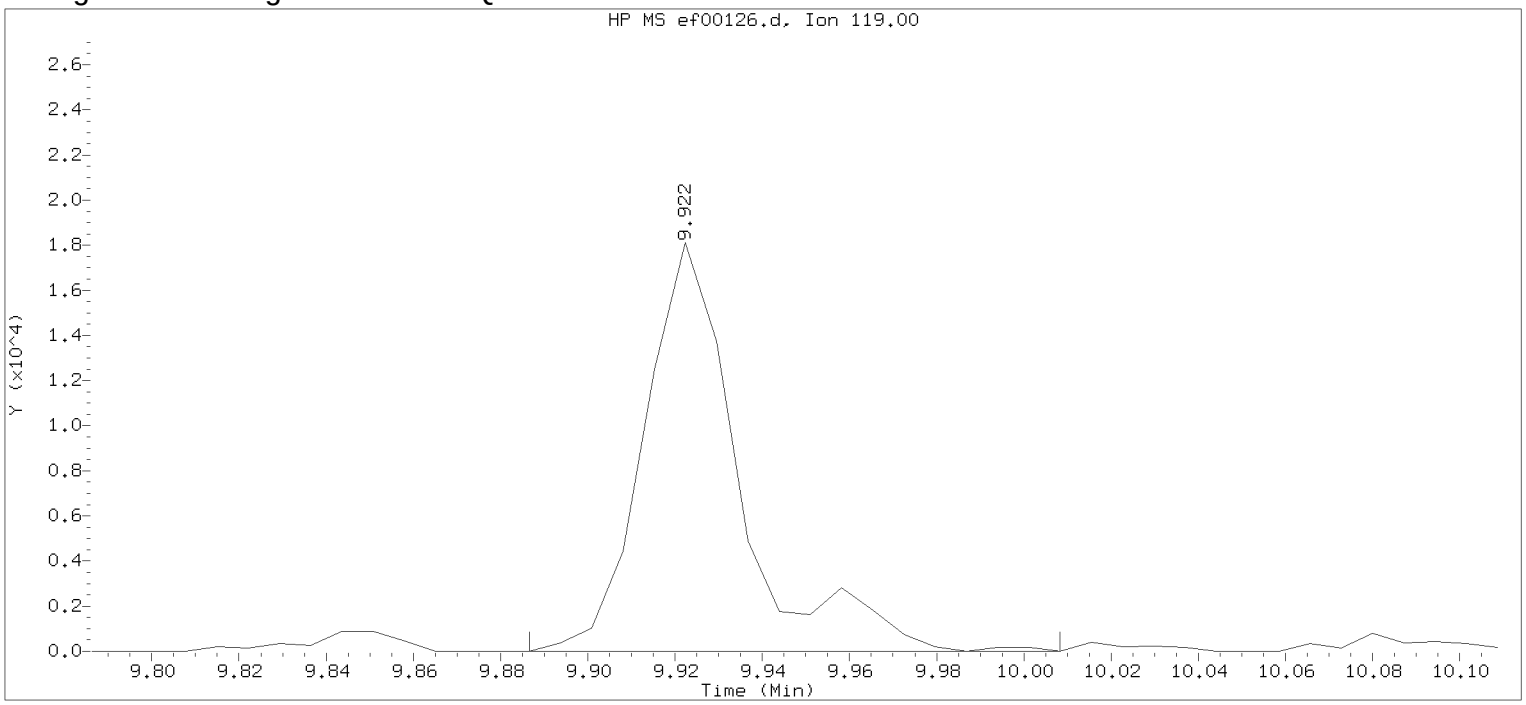
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:08.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00126.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 01:58 Analyst ID: jeb07445

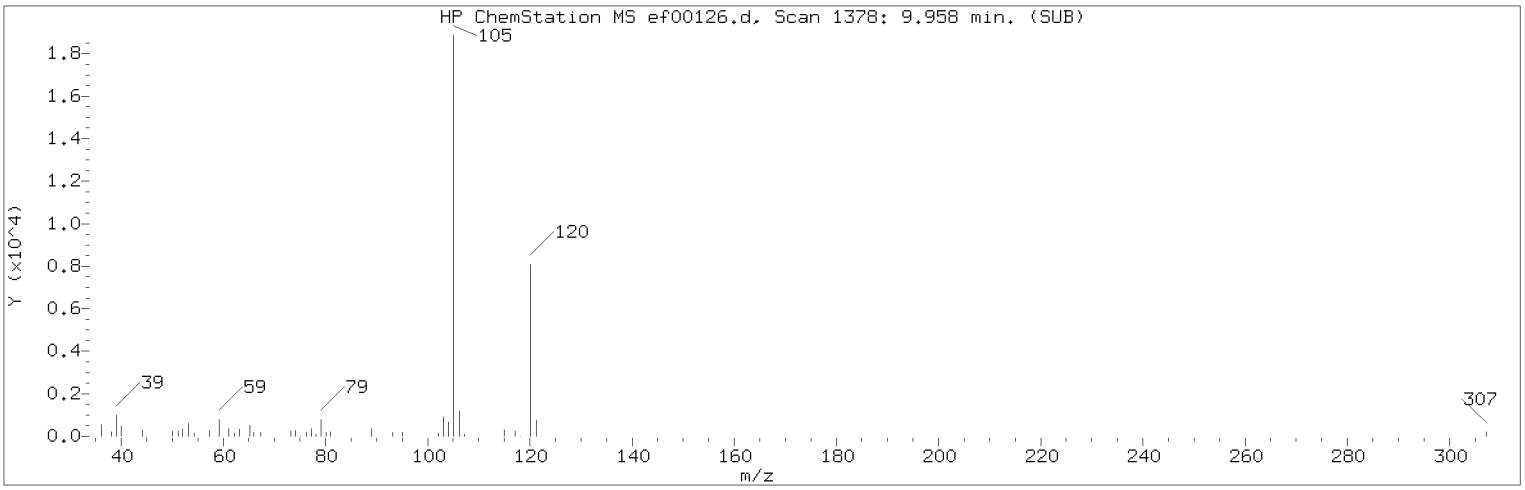
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 02:16 Unknown

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

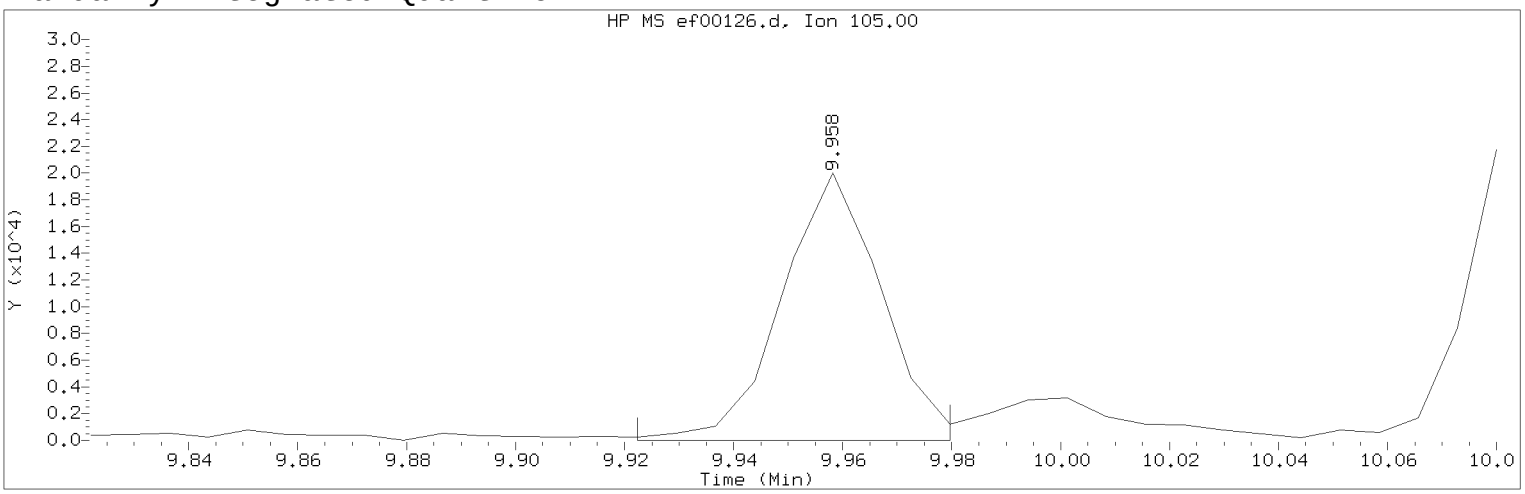
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 27672
Concentration (ppb(v)) : 0.4287
Integration start scan : 1367 Integration stop scan: 1384
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:06.
Target 3.5 esignature used. GLBD1 Page 1324 of 1687

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00126.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 01:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:05 jbs01304

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

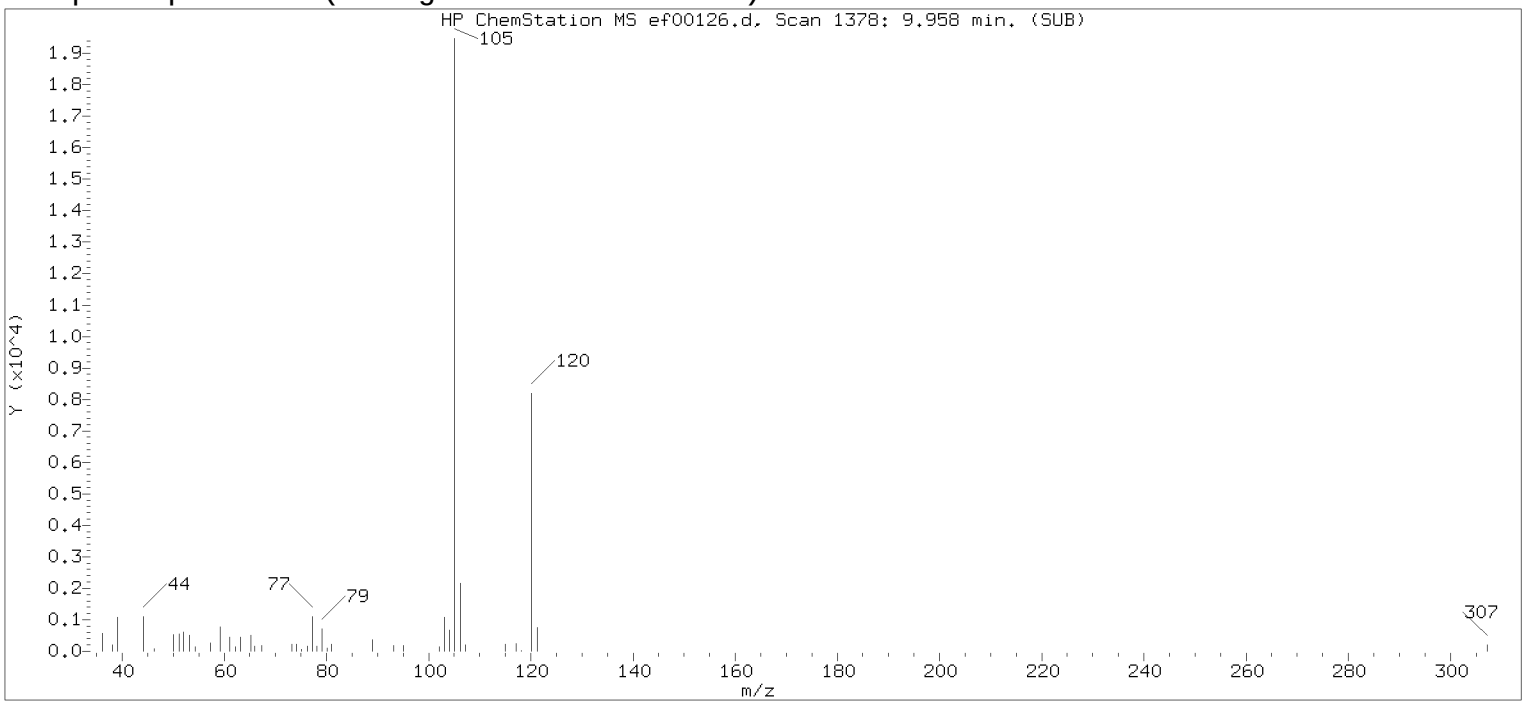
Compound Number : 90
Compound Name : 1,2,4-Trimethylbenzene
Scan Number : 1378
Retention Time (minutes): 9.958
Quant Ion : 105.00
Area (flag) : 25477M
Concentration (ppb(v)) : 0.3652
Integration start scan : 1372 Integration stop scan: 1380
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

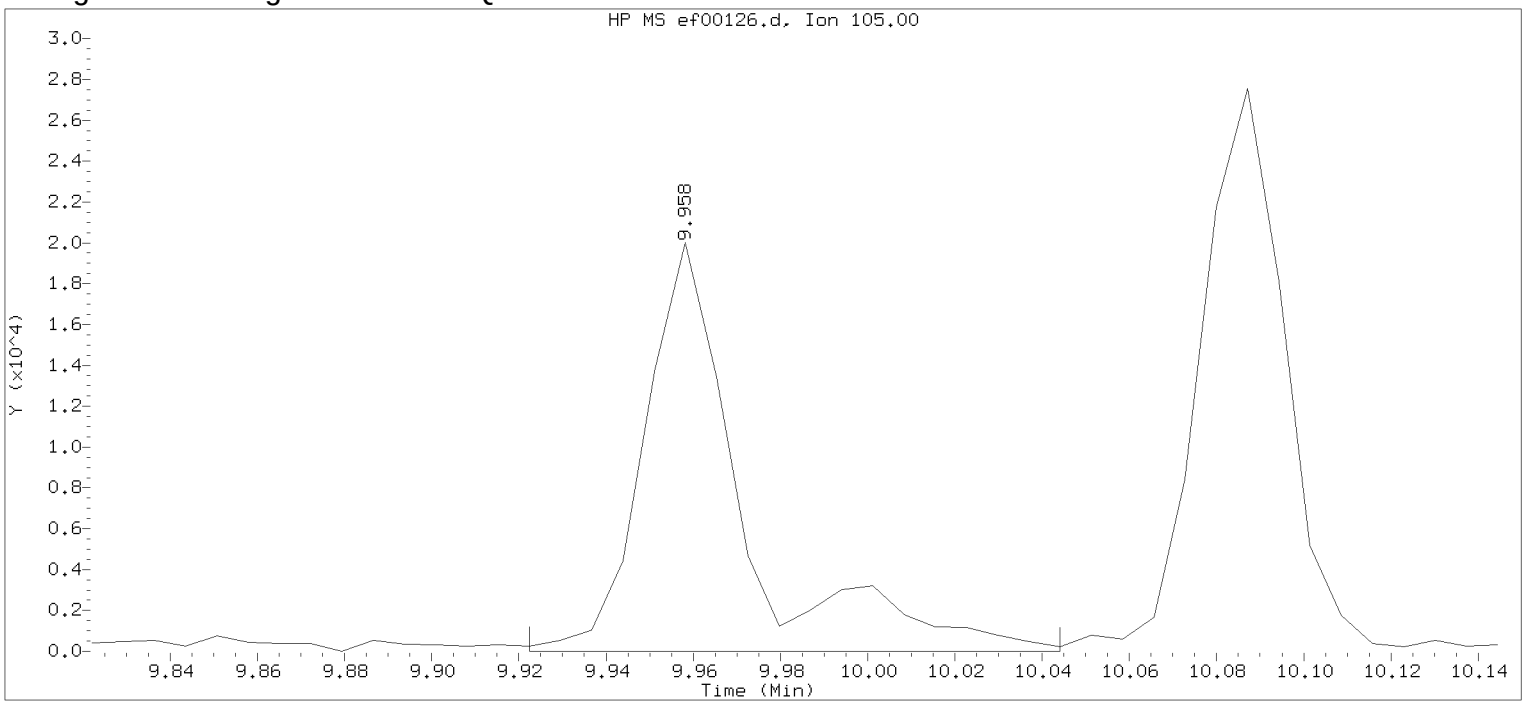
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:08.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



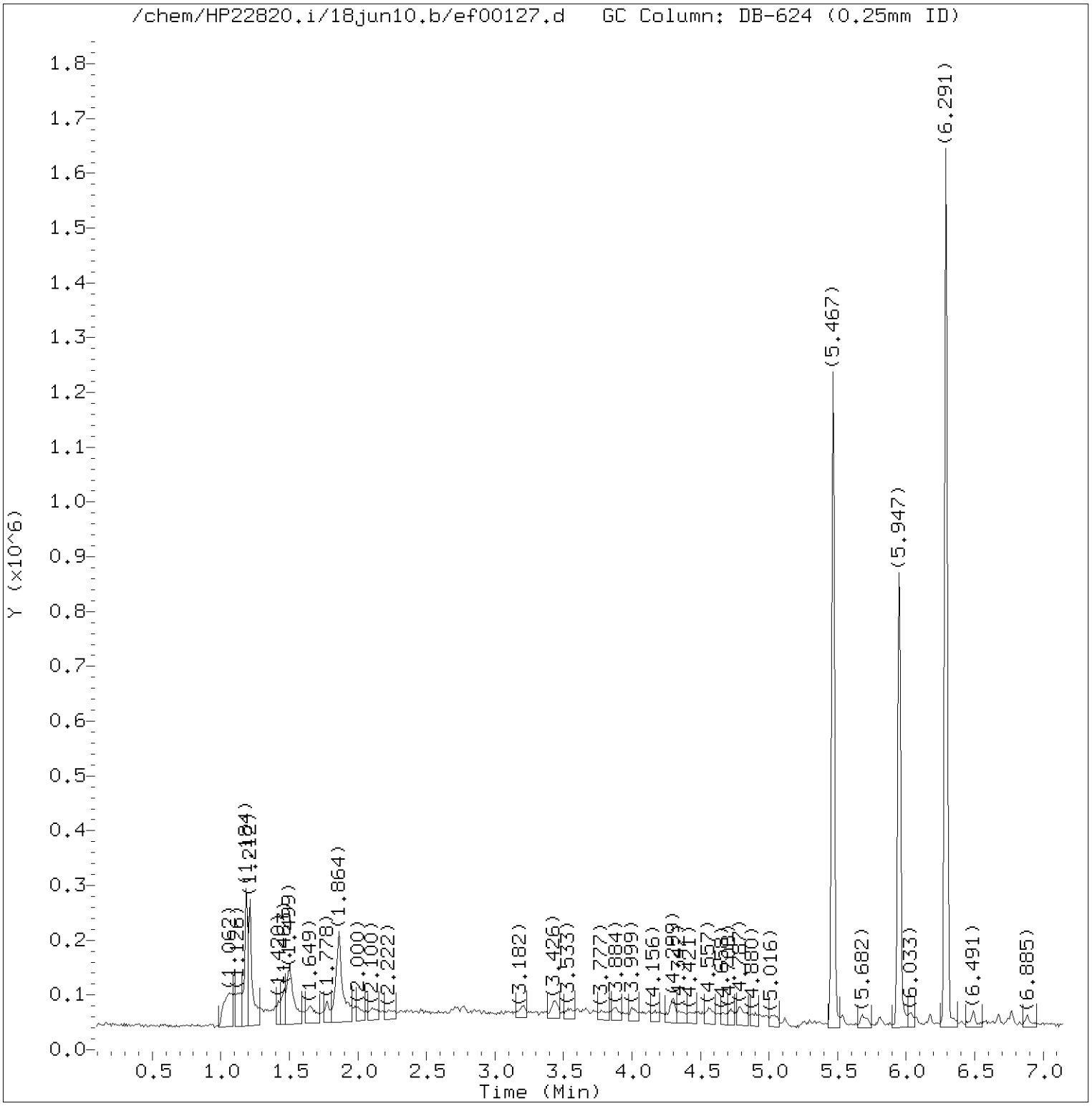
Data File: /chem/HP22820.i/18jun10.b/ef00126.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 01:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 02:16 Unknown

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

Compound Number : 90
Compound Name : 1,2,4-Trimethylbenzene
Scan Number : 1378
Retention Time (minutes): 9.958
Quant Ion : 105.00
Area : 31339
Concentration (ppb(v)) : 0.4518
Integration start scan : 1372 Integration stop scan: 1389
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:06.
Target 3.5 esignature used. GLED1 Page 1324 of 1687



Total Ion Chromatogram (TIC)

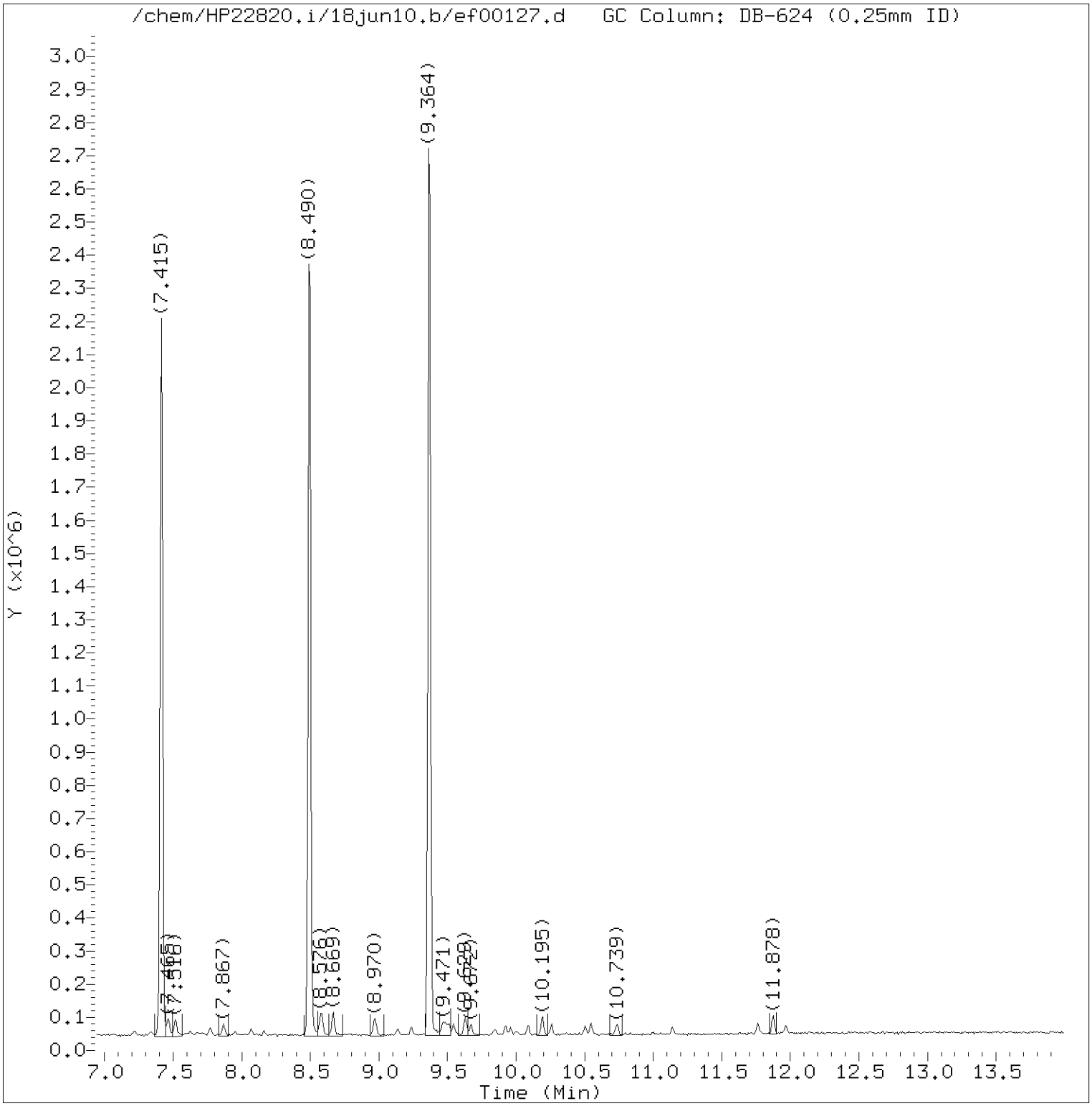
Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:06 jbs01304

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

Digitally signed by Jeffrey B. Smith
on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:06 jbs01304

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

Digitally signed by Jeffrey B. Smith
on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:06 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.606	41	5073	0.353
2) Dichlorodifluoromethane	(1)	1.642	85	10000	0.199
3) Chlorodifluoromethane	(1)	1.671	51	6900	0.216
4) Freon 114	(1)	1.771	85	11741	0.217
5) Chloromethane	(1)	1.842	50	6424	0.317
6) Vinyl Chloride	(1)	1.971	62	3802M	0.196
7) 1,3-Butadiene	(1)	2.007	54	3532M	0.254
8) Bromomethane	(1)	2.358	94	5481M	0.333
9) Chloroethane	(1)	2.473	64	3418M	0.317
10) Bromoethene	(1)	2.695	106	3545M	0.211
11) Dichlorofluoromethane	(1)	2.724	67	9090	0.212
12) Trichlorofluoromethane	(1)	2.767	101	10913	0.203
13) Pentane	(1)	2.874	43	6349	0.206
14) Ethanol	(1)	3.103	45	4423M	0.658
15) Freon123a	(1)	3.211	67	9728	0.244
16) Acrolein	(1)	3.347	56	2136	0.299
17) 1,1-Dichloroethene	(1)	3.426	61	6277	0.213
18) Freon 113	(1)	3.440	103	6891	0.227
19) Acetone	(1)	3.540	43	18082	0.613
20) Methyl Iodide	(1)	3.605	142	9662	0.201
21) Carbon Disulfide	(1)	3.662	76	11235	0.204
22) Isopropanol	(1)	3.726	45	6749	0.271
23) Acetonitrile	(1)	3.827	40	30183	2.309
24) 3-Chloropropene	(1)	3.870	76	1633M	0.217
25) Methylene Chloride	(1)	4.013	84	4371	0.267
26) tert-Butyl Alcohol	(1)	4.170	59	4405	0.158
28) trans-1,2-Dichloroethene	(1)	4.292	61	5394	0.199
27) Acrylonitrile	(1)	4.307	53	5754	0.354
29) Methyl t-Butyl Ether	(1)	4.307	73	11045	0.238
30) Hexane	(1)	4.557	57	5269	0.190
31) 1,1-Dichloroethane	(1)	4.722	63	8248	0.222
33) Di-Isopropyl Ether	(1)	4.787	45	11908	0.198
32) Vinyl Acetate	(1)	4.794	86	459M	0.117
34) Ethyl Tert-Butyl Ether	(1)	5.123	59	5522	0.136
35) cis-1,2-Dichloroethene	(1)	5.259	61	4715	0.186
37) 2-Butanone	(1)	5.288	72	2113M	0.220
38) Ethyl Acetate	(1)	5.324	70	1195	0.254
39) Methyl Acrylate	(1)	5.367	55	5931	0.190

M = Compound was manually integrated.

Digitally signed by Jeffrey B. Smith
on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:06 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	303904	10.000
41) Tetrahydrofuran	(1)	5.503	42	4449	0.211
42) Chloroform	(1)	5.539	83	9301	0.211
43) 1,1,1-Trichloroethane	(1)	5.675	97	7324	0.180
44) Cyclohexane	(1)	5.711	56	7490	0.257
45) Carbon Tetrachloride	(1)	5.811	117	6609	0.166
46) Benzene	(2)	5.983	78	16424	0.282
47) 1,2-Dichloroethane	(2)	6.011	62	7241	0.265
48) Isooctane	(2)	6.033	57	15727	0.198
49) Tert-Amyl Methyl Ether	(2)	6.069	73	5319	0.144
50) Heptane	(2)	6.169	43	8122	0.265
51)*1,4-Difluorobenzene	(2)	6.291	114	950657	10.000
52) Trichloroethene	(2)	6.491	130	5847	0.230
53) Ethyl Acrylate	(2)	6.577	55	7311	0.204
36) 1,2-Dichloroethene (total)	(1)		61	10109	0.384
54) 1,2-Dichloropropane	(2)	6.678	63	5087	0.229
57) Methyl Methacrylate	(2)	6.742	69	3053	0.163
55) Dibromomethane	(2)	6.771	174	4870	0.208
56) 1,4-Dioxane	(2)	6.778	88	2738	0.205
58) Bromodichloromethane	(2)	6.885	83	8953	0.205
59) cis-1,3-Dichloropropene	(2)	7.215	75	5019	0.158
60) 4-Methyl-2-Pentanone	(2)	7.329	43	7804	0.180
61) Toluene	(3)	7.465	91	22999	0.319
62) Octane	(3)	7.516	43	13835	0.310
63) trans-1,3-Dichloropropene	(3)	7.630	75	3341M	0.127
65) Ethyl Methacrylate	(3)	7.673	69	4282	0.139
66) 1,1,2-Trichloroethane	(3)	7.774	97	5042	0.185
67) Tetrachloroethene	(3)	7.867	166	6452	0.175
68) 2-Hexanone	(3)	7.945	43	8638	0.210
69) Dibromochloromethane	(3)	8.067	127	5985	0.183
70) 1,2-Dibromoethane	(3)	8.160	107	6358	0.157
73) 1,1,1,2-Tetrachloroethane	(3)	8.475	131	5389	0.182
71)*Chlorobenzene-d5	(3)	8.497	117	1003638	10.000
72) Chlorobenzene	(3)	8.518	112	12199	0.200
74) Ethylbenzene	(3)	8.583	91	27274	0.301
75) m/p-Xylene	(3)	8.669	91	31722	0.458
76) o-Xylene	(3)	8.970	91	21311	0.313
78) Styrene	(3)	8.977	104	6469	0.126

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

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on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:06 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	5871	0.149
80) Cumene	(3)	9.235	105	11537	0.127
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	12318	0.195
81) Bromobenzene	(3)	9.493	156	5754	0.166
83) 1,2,3-Trichloropropane	(3)	9.514	110	3559M	0.197
84) n-Propylbenzene	(3)	9.543	120	3836M	0.143
86) 4-Ethyltoluene	(3)	9.629	105	11097M	0.115
85) 2-Chlorotoluene	(3)	9.629	126	3493M	0.136
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	10680M	0.136
88) Alpha Methyl Styrene	(3)	9.851	118	4264	0.118
89) tert-Butylbenzene	(3)	9.922	119	9053M	0.127
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	9503M	0.124
91) sec-Butylbenzene	(3)	10.087	105	12761	0.116
92) 1,3-Dichlorobenzene	(3)	10.195	146	9968	0.168
94) p-Isopropyltoluene	(3)	10.195	119	9346	0.106
93) 1,4-Dichlorobenzene	(3)	10.259	146	10000	0.170
95) Benzyl Chloride	(3)	10.359	91	4283	0.109
97) n-Butylbenzene	(3)	10.503	91	11112	0.129
96) 1,2-Dichlorobenzene	(3)	10.546	146	8976	0.163
98) Hexachloroethane	(3)	10.739	117	3265M	0.141
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	4066M	0.158
100) 1,2,4-Trichlorobenzene	(3)	11.763	180	7459	0.209
101) Hexachlorobutadiene	(3)	11.878	225	8638	0.291
102) Naphthalene	(3)	11.964	128	14628	0.212
64) 1,3-Dichloropropene (total)	(3)		75	8360	0.285
77) Xylene (total)	(3)		91	53033	0.772

M = Compound was manually integrated.

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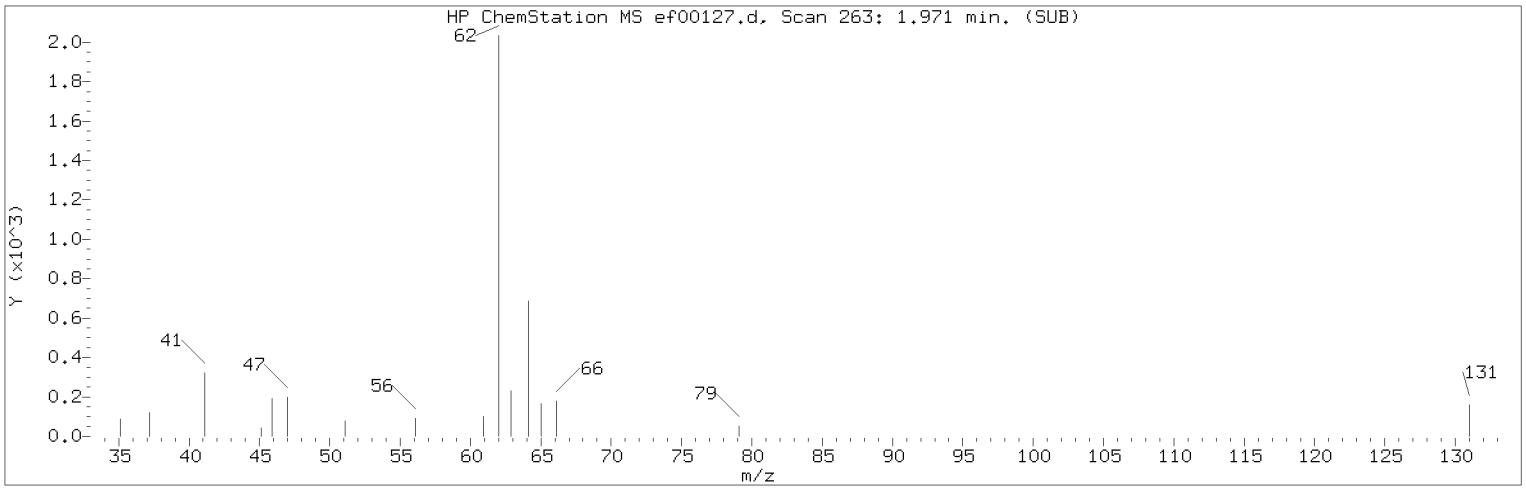
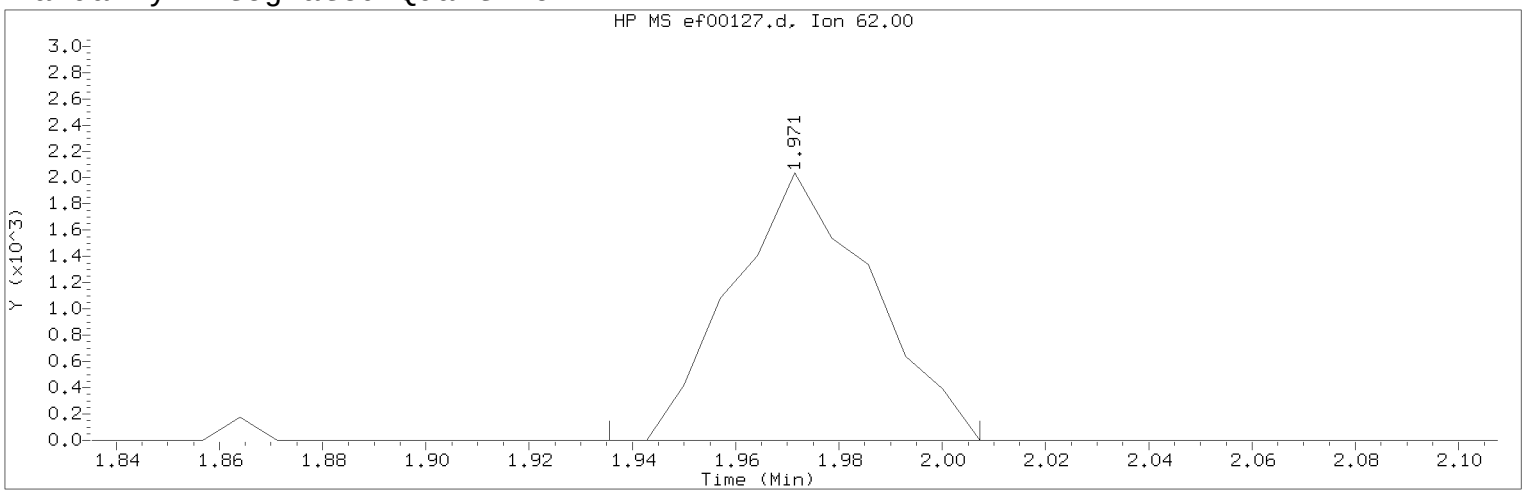
on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:06 jbs01304

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

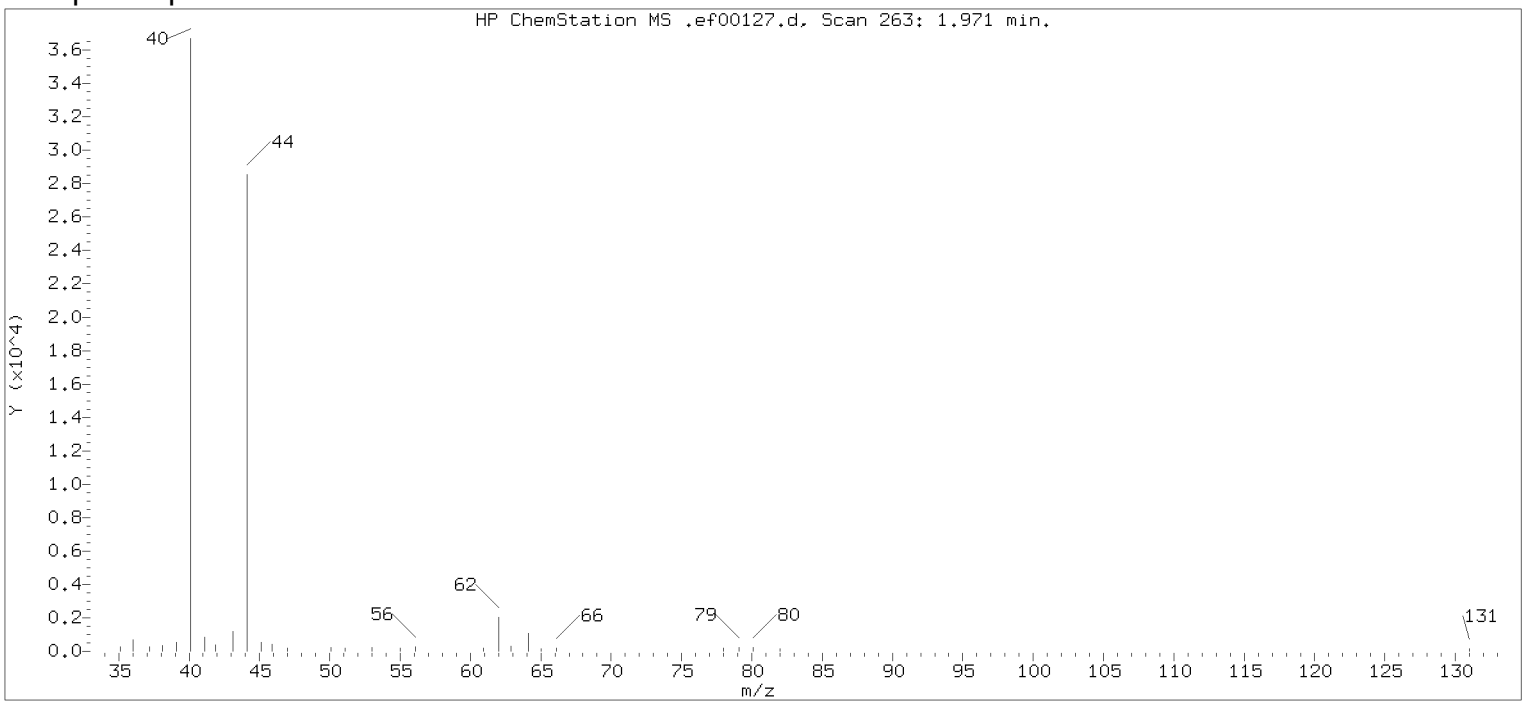
Compound Number : 6
Compound Name : Vinyl Chloride
Scan Number : 263
Retention Time (minutes): 1.971
Quant Ion : 62.00
Area (flag) : 3802M
Concentration (ppb(v)) : 0.1964
Integration start scan : 257 Integration stop scan: 267
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

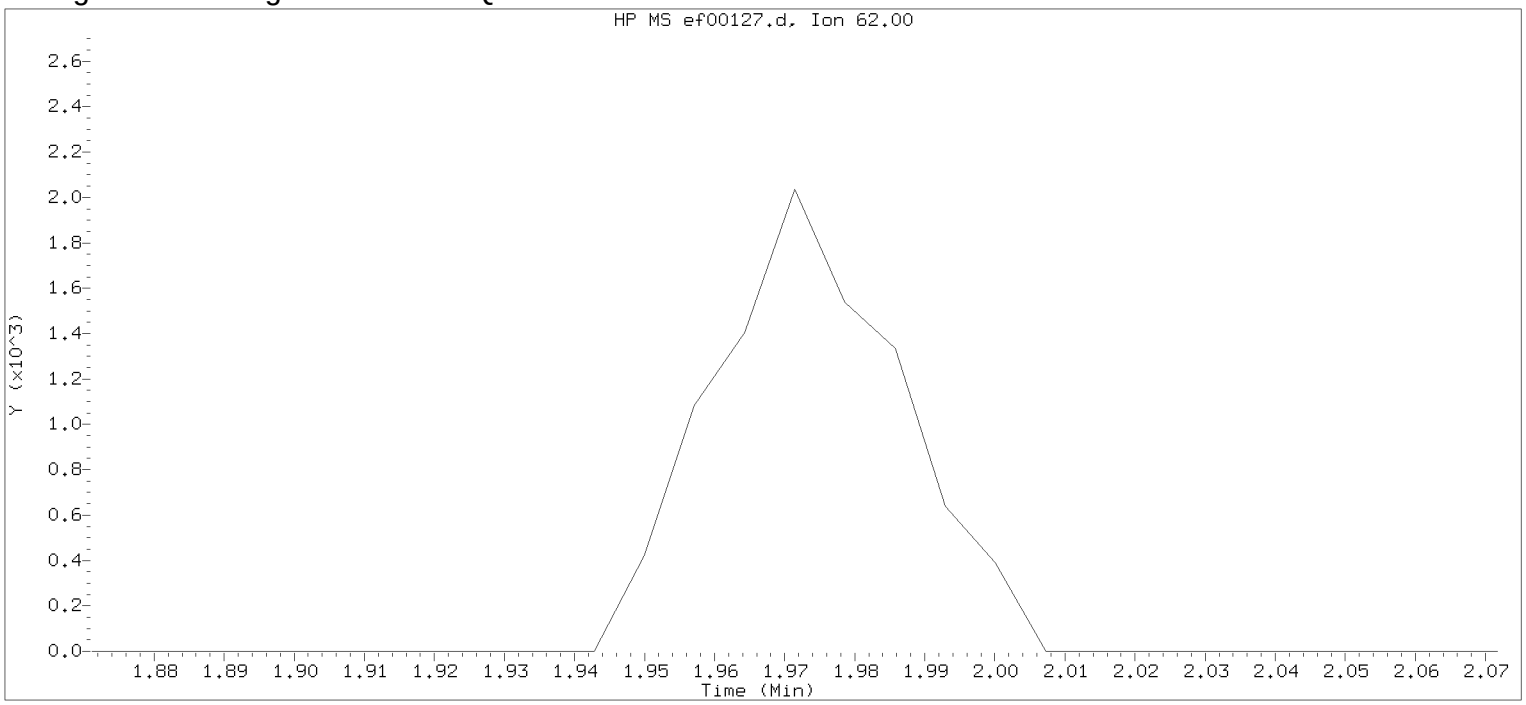
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:08.
PARALLAX ID: jbs01304

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

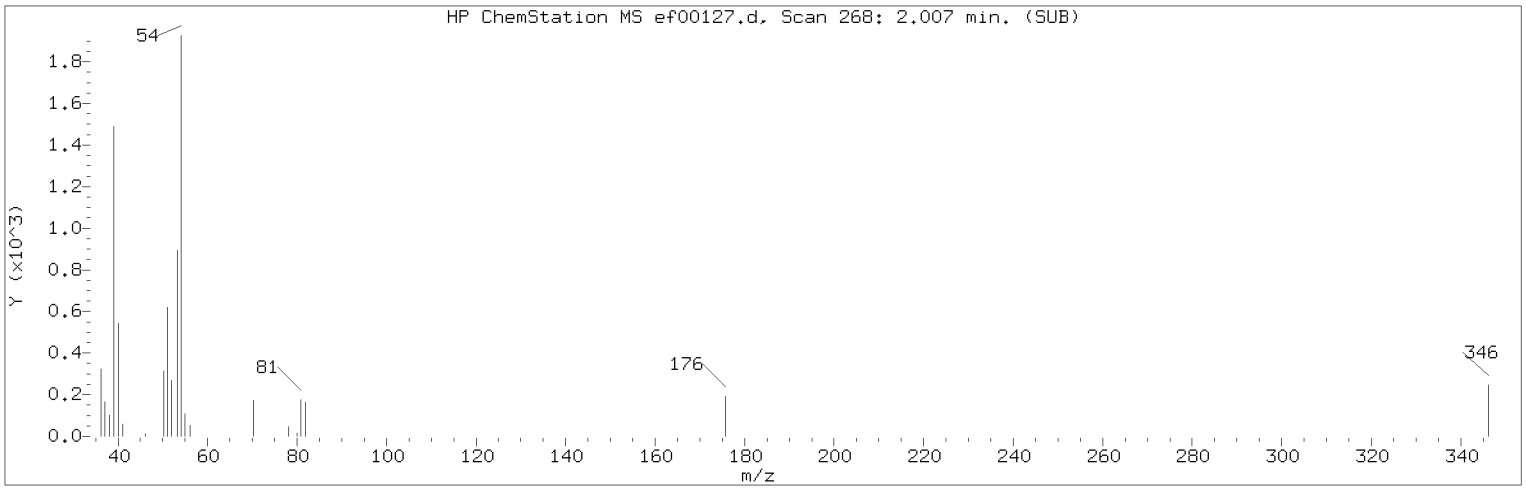
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 02:44 Unknown

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

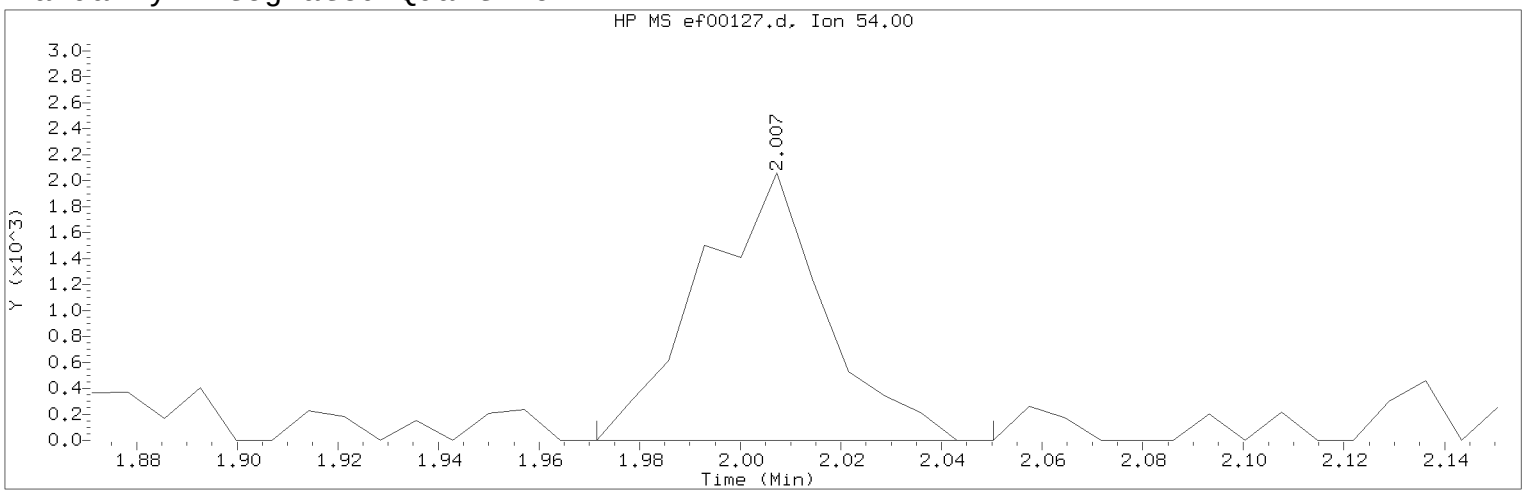
Compound Number : 6
Compound Name : Vinyl Chloride
Expected RT (minutes) : 1.972
Quant Ion : 62.00

Digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:06 jbs01304

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

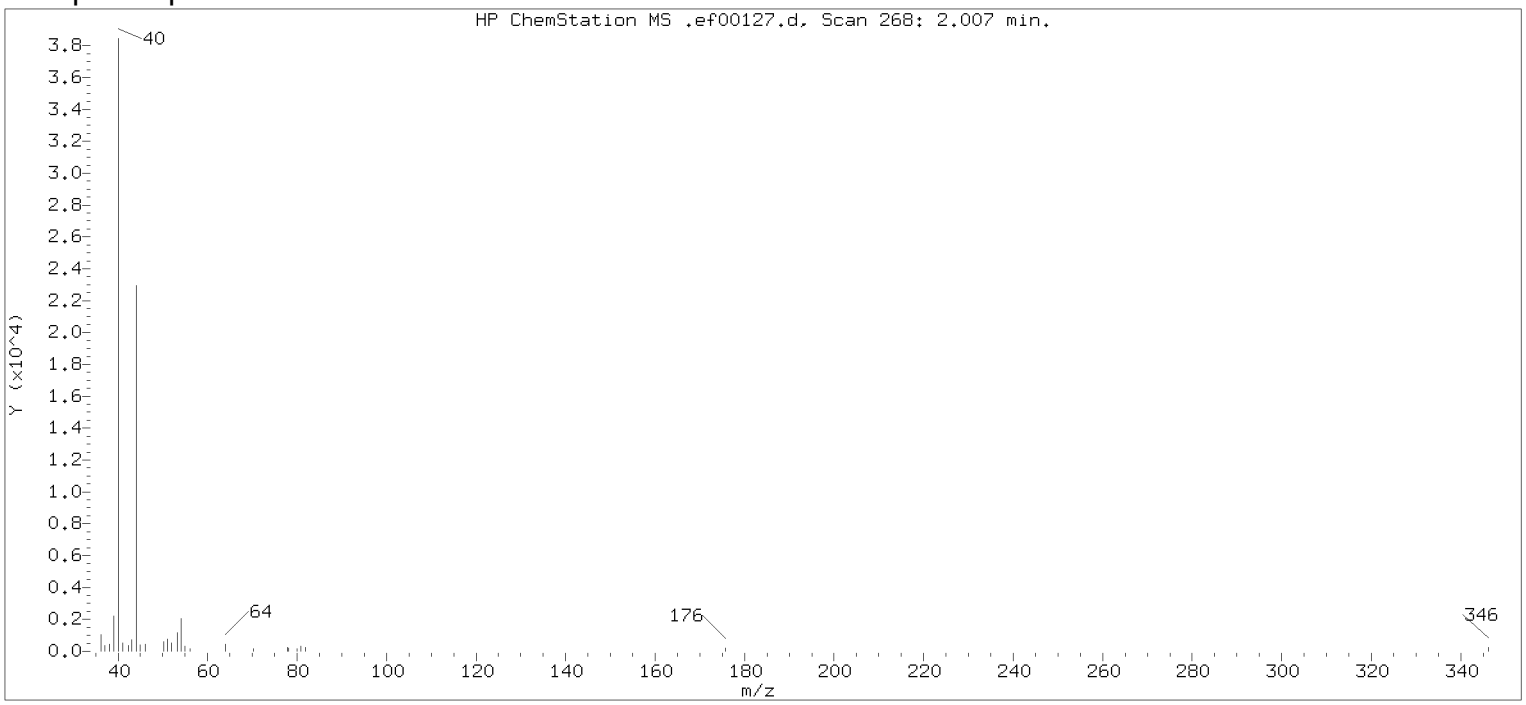
Compound Number : 7
Compound Name : 1,3-Butadiene
Scan Number : 268
Retention Time (minutes): 2.007
Quant Ion : 54.00
Area (flag) : 3532M
Concentration (ppb(v)) : 0.2536
Integration start scan : 262 Integration stop scan: 273
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

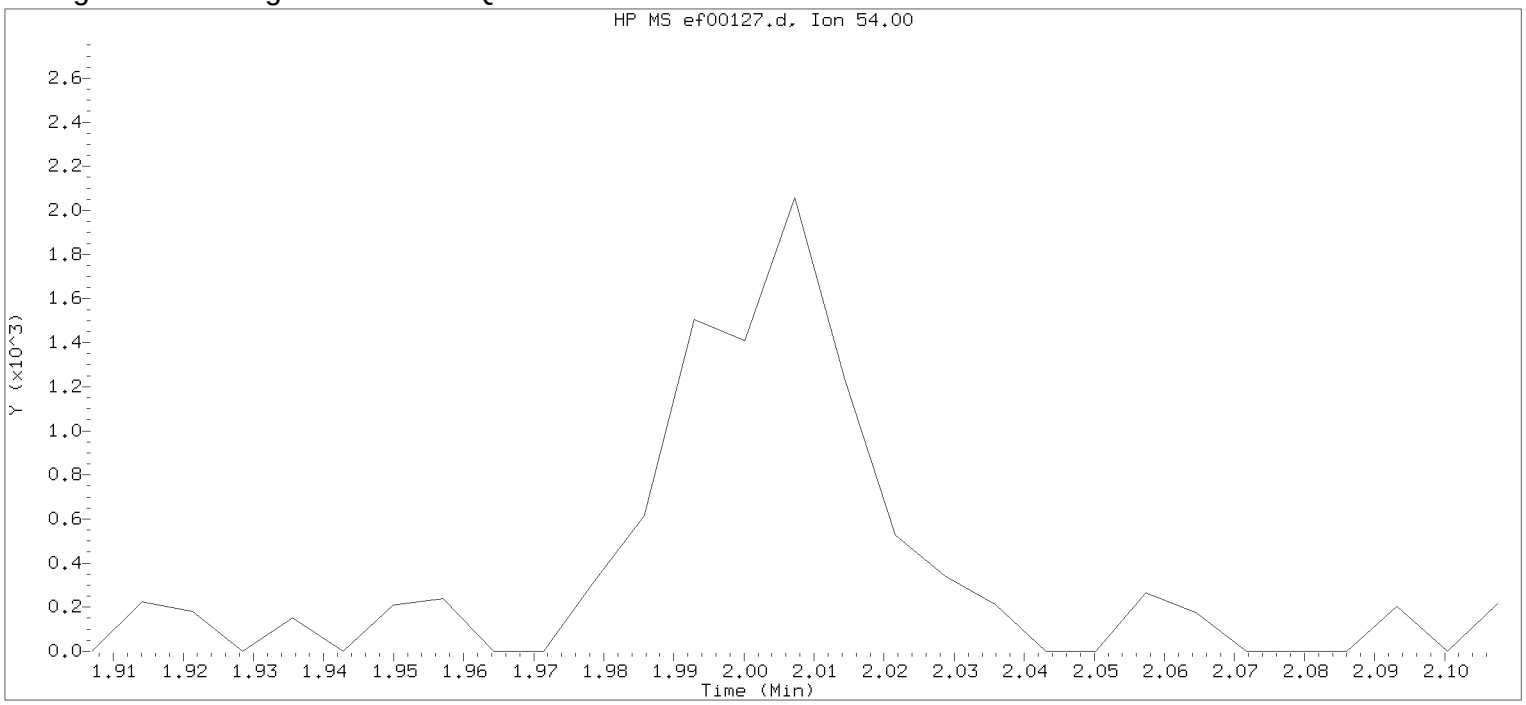
Analyst responsible for change: Digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:08.
PARALLAX ID: jbs01304

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

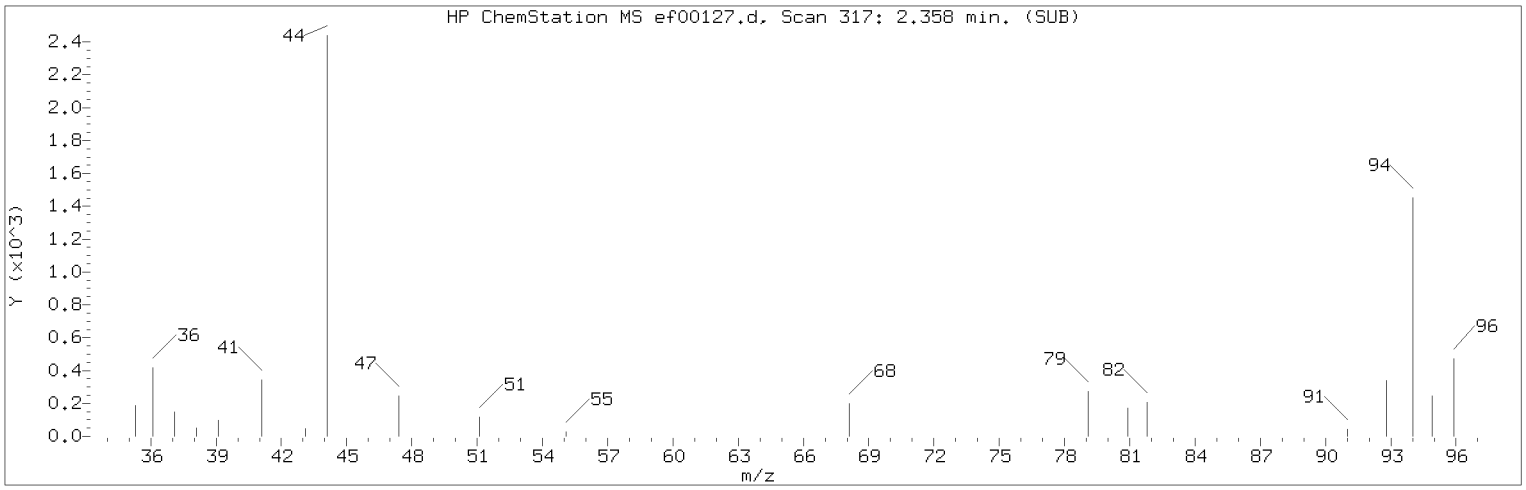
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 02:44 Unknown

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

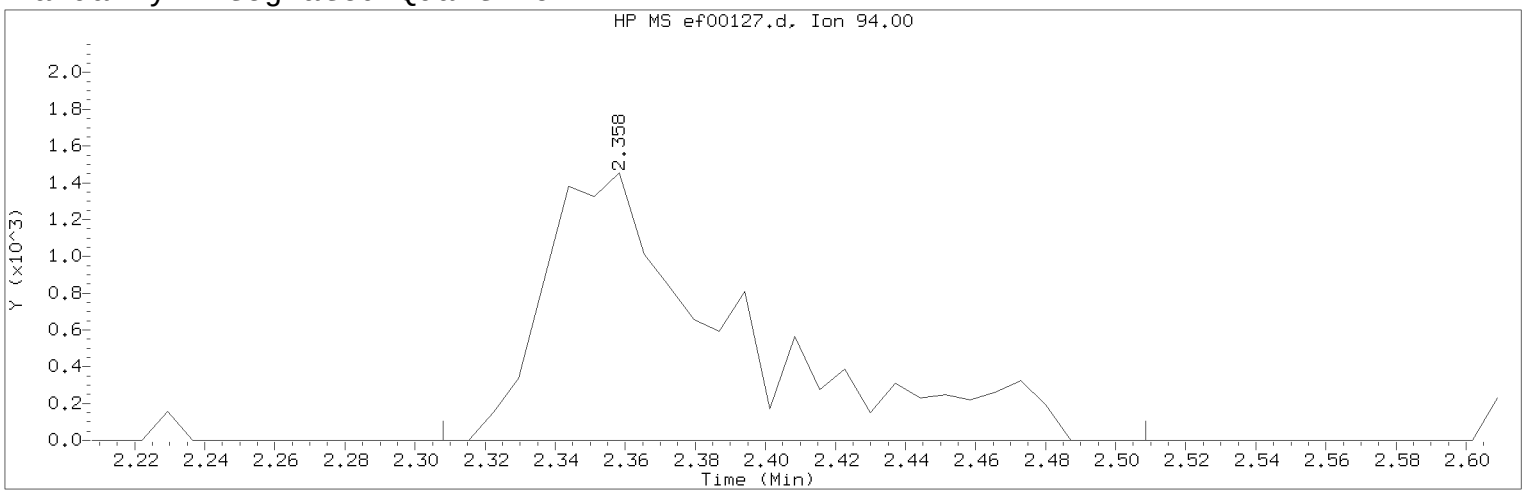
Compound Number : 7
Compound Name : 1,3-Butadiene
Expected RT (minutes) : 2.007
Quant Ion : 54.00

Digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:06 jbs01304

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

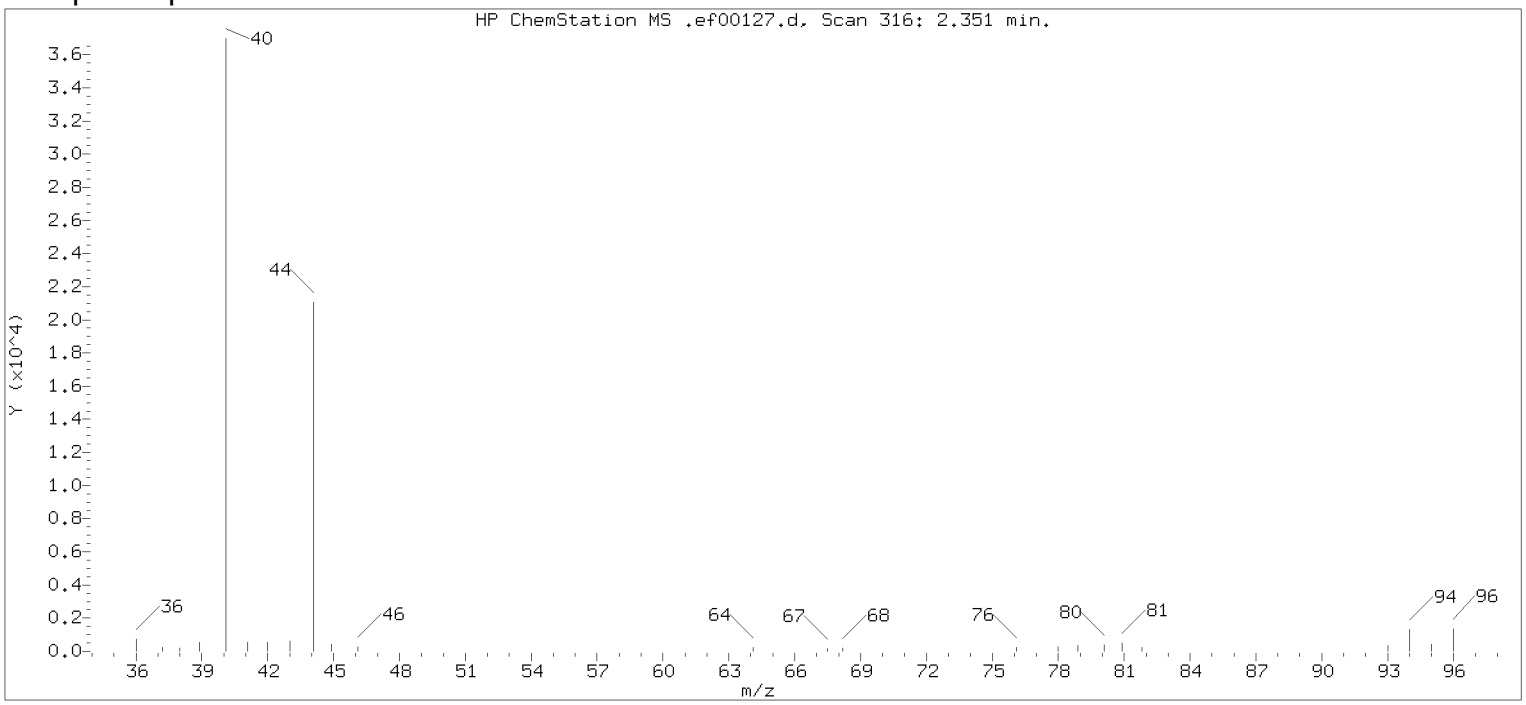
Compound Number : 8
Compound Name : Bromomethane
Scan Number : 317
Retention Time (minutes): 2.358
Quant Ion : 94.00
Area (flag) : 5481M
Concentration (ppb(v)) : 0.3325
Integration start scan : 309 Integration stop scan: 337
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

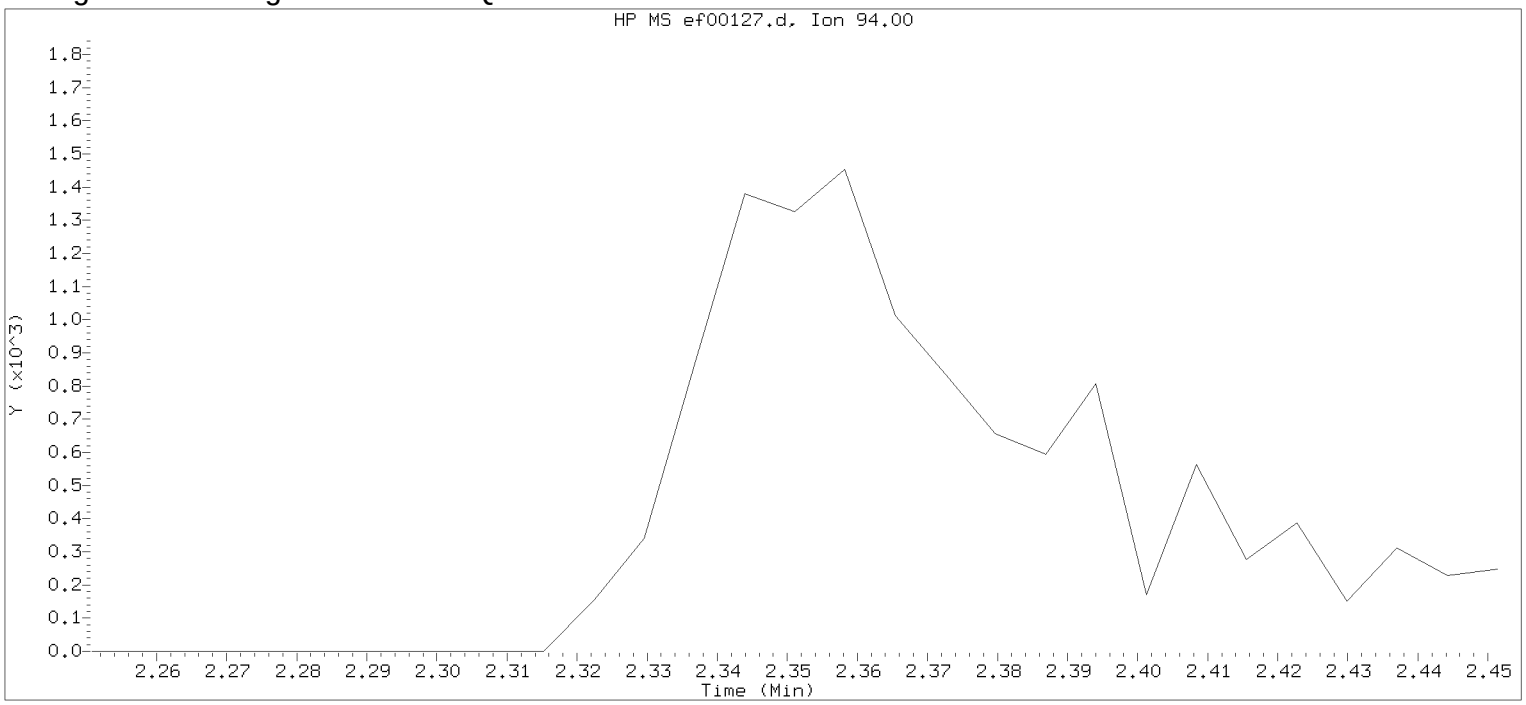
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:08.
PARALLAX ID: jbs01304

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

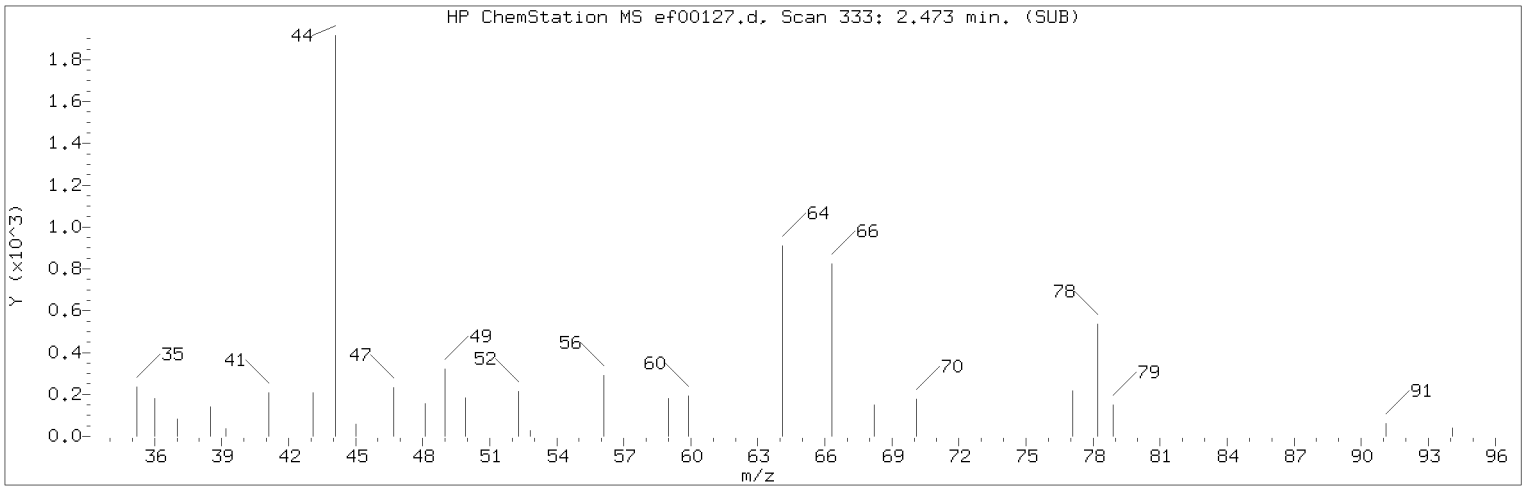
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 02:44 Unknown

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

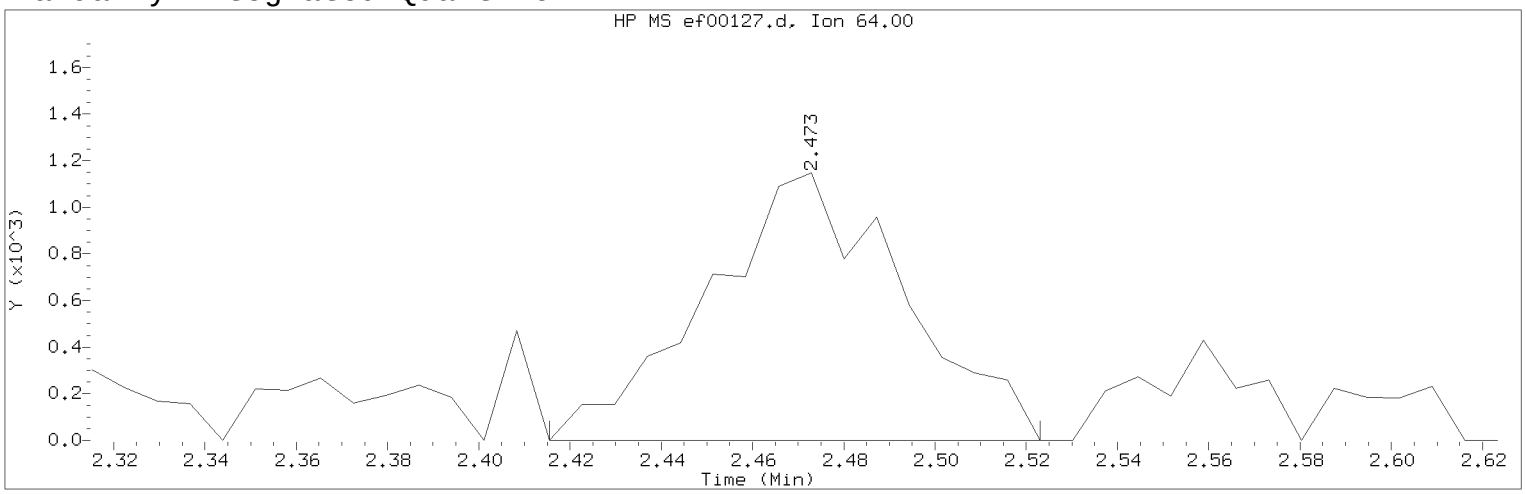
Compound Number : 8
Compound Name : Bromomethane
Expected RT (minutes) : 2.351
Quant Ion : 94.00

Digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:06 jbs01304

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

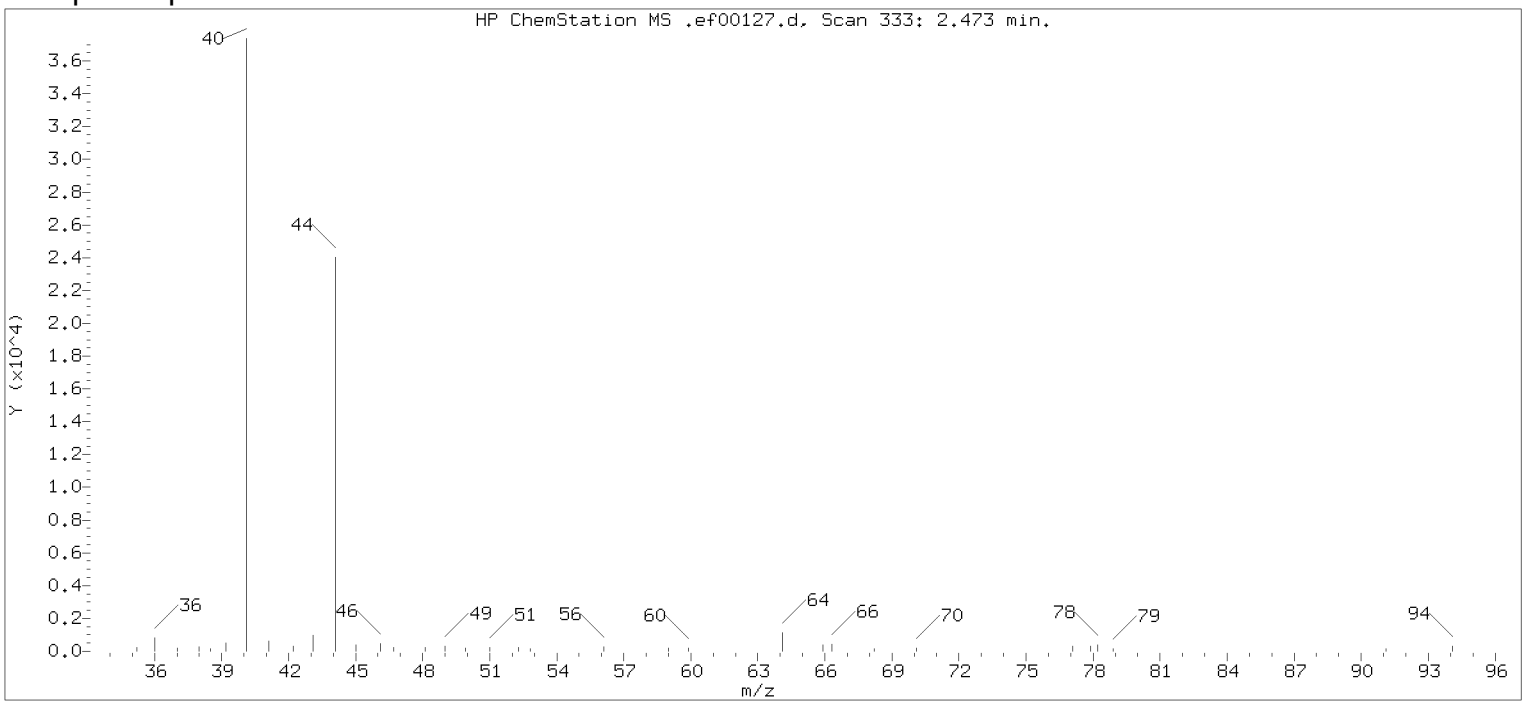
Compound Number : 9
Compound Name : Chloroethane
Scan Number : 333
Retention Time (minutes): 2.473
Quant Ion : 64.00
Area (flag) : 3418M
Concentration (ppb(v)) : 0.3168
Integration start scan : 324 Integration stop scan: 339
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

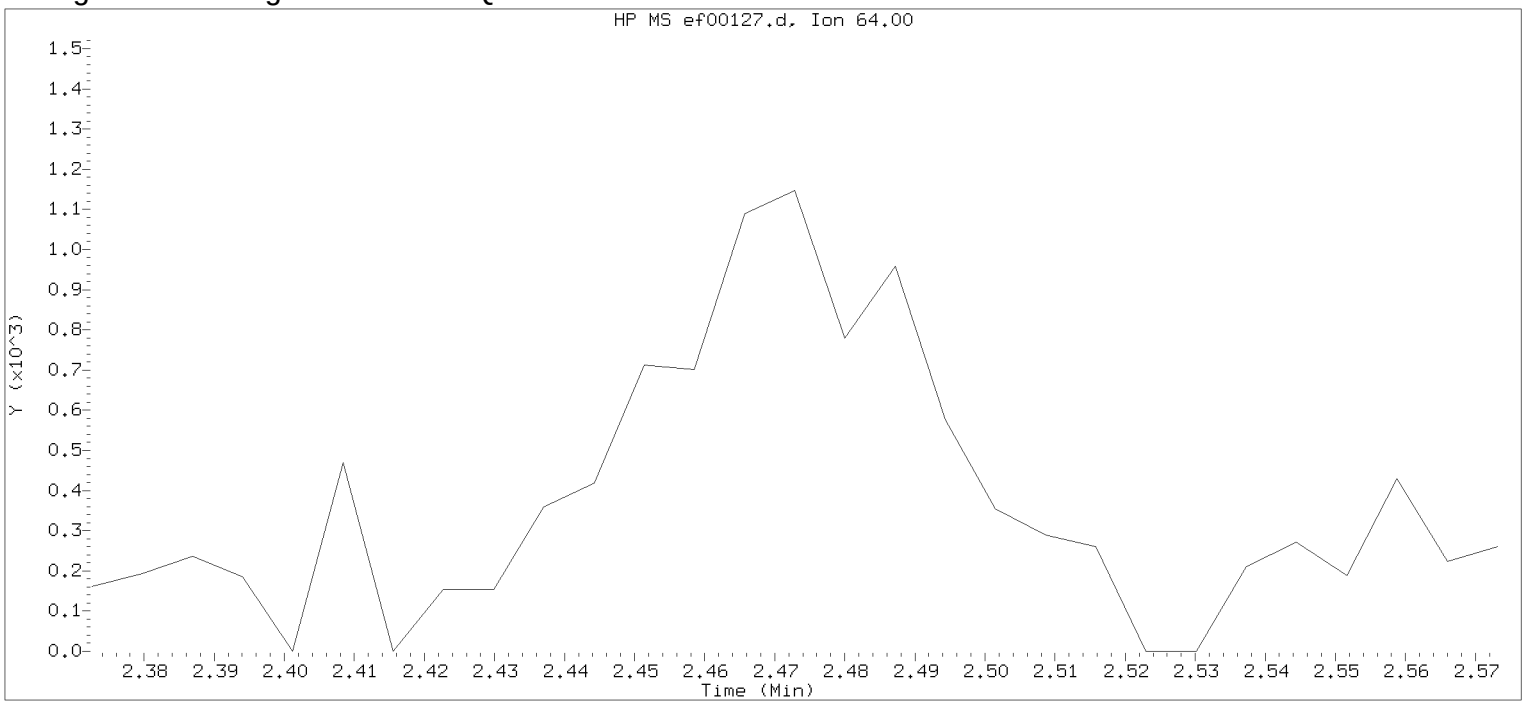
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:08.
PARALLAX ID: jbs01304

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

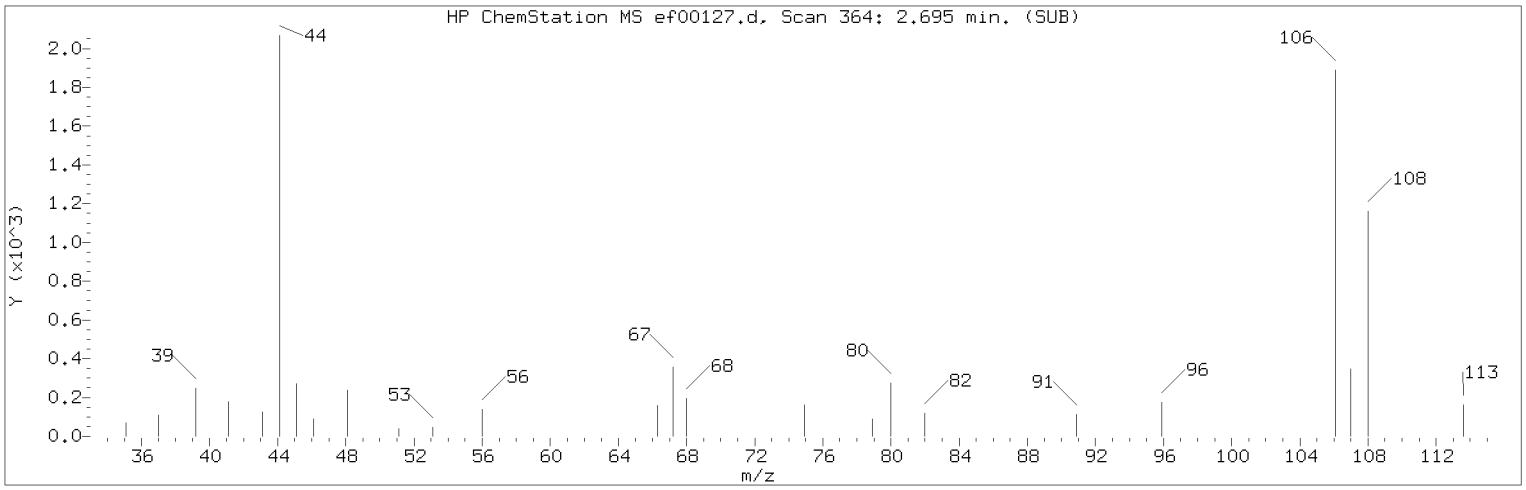
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 02:44 Unknown

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

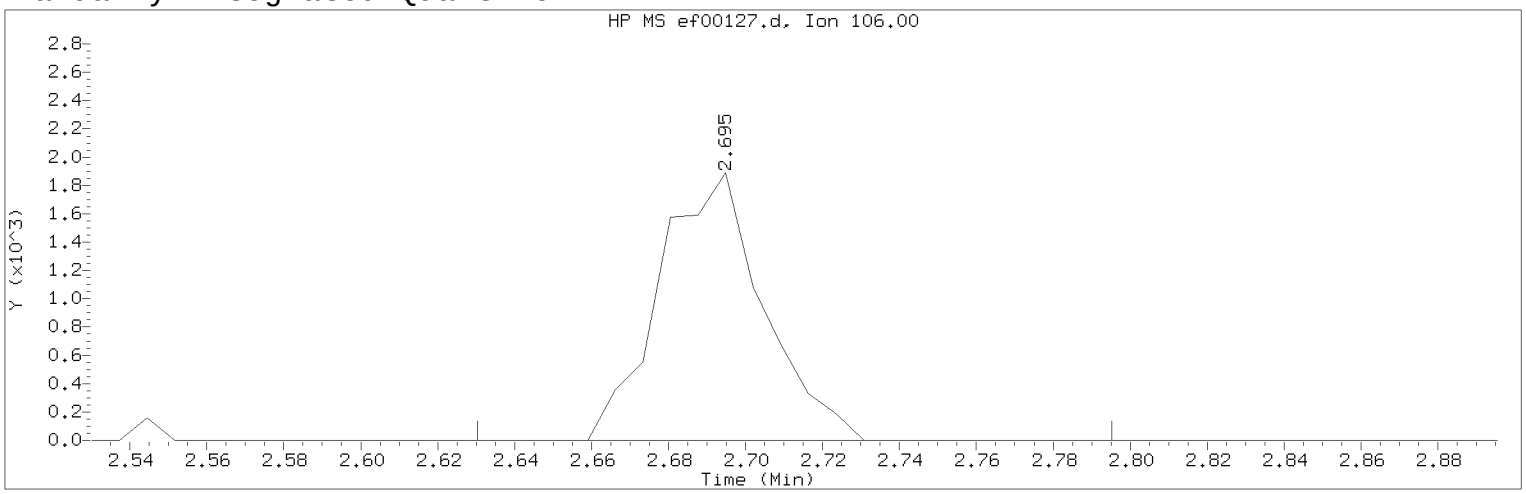
Compound Number : 9
Compound Name : Chloroethane
Expected RT (minutes) : 2.473
Quant Ion : 64.00

Digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:06 jbs01304

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

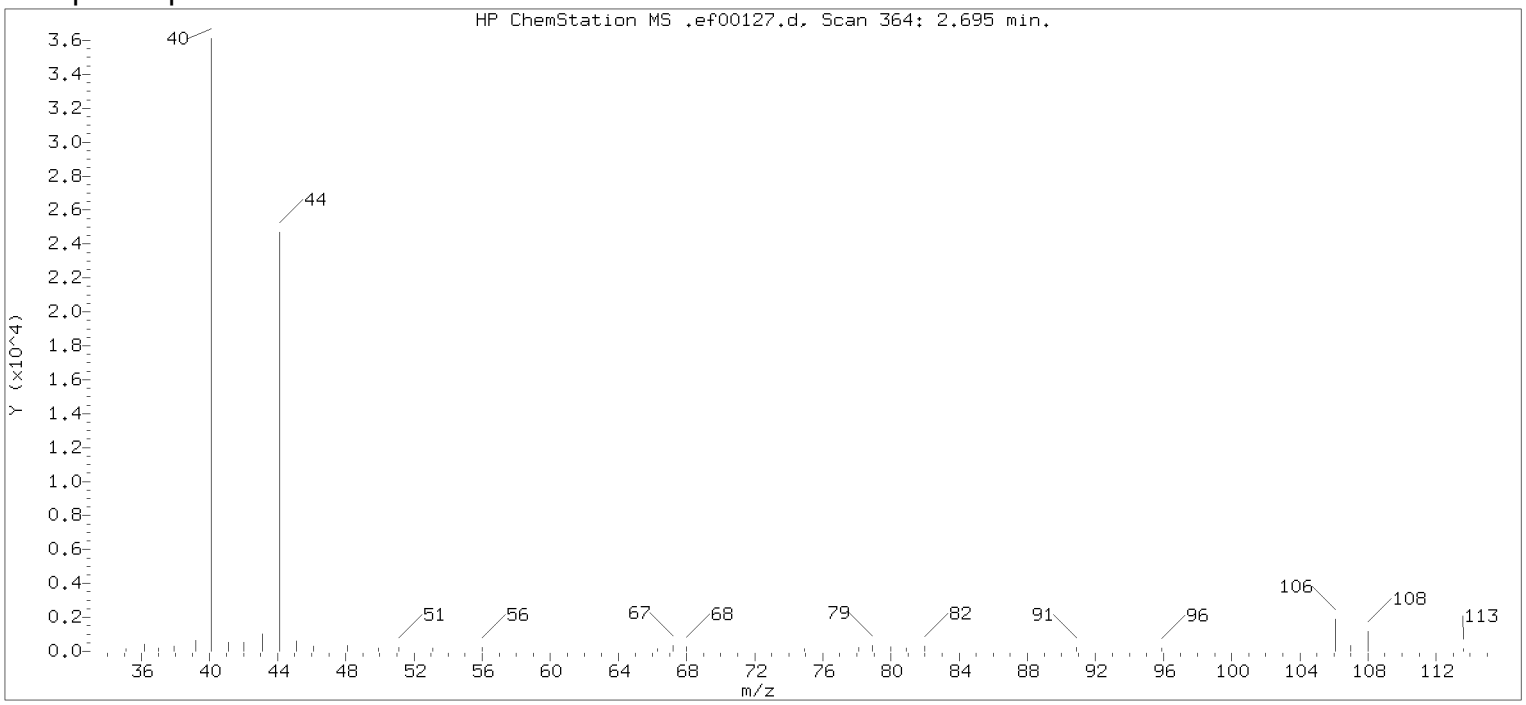
Compound Number : 10
Compound Name : Bromoethene
Scan Number : 364
Retention Time (minutes): 2.695
Quant Ion : 106.00
Area (flag) : 3545M
Concentration (ppb(v)) : 0.2111
Integration start scan : 354 Integration stop scan: 377
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

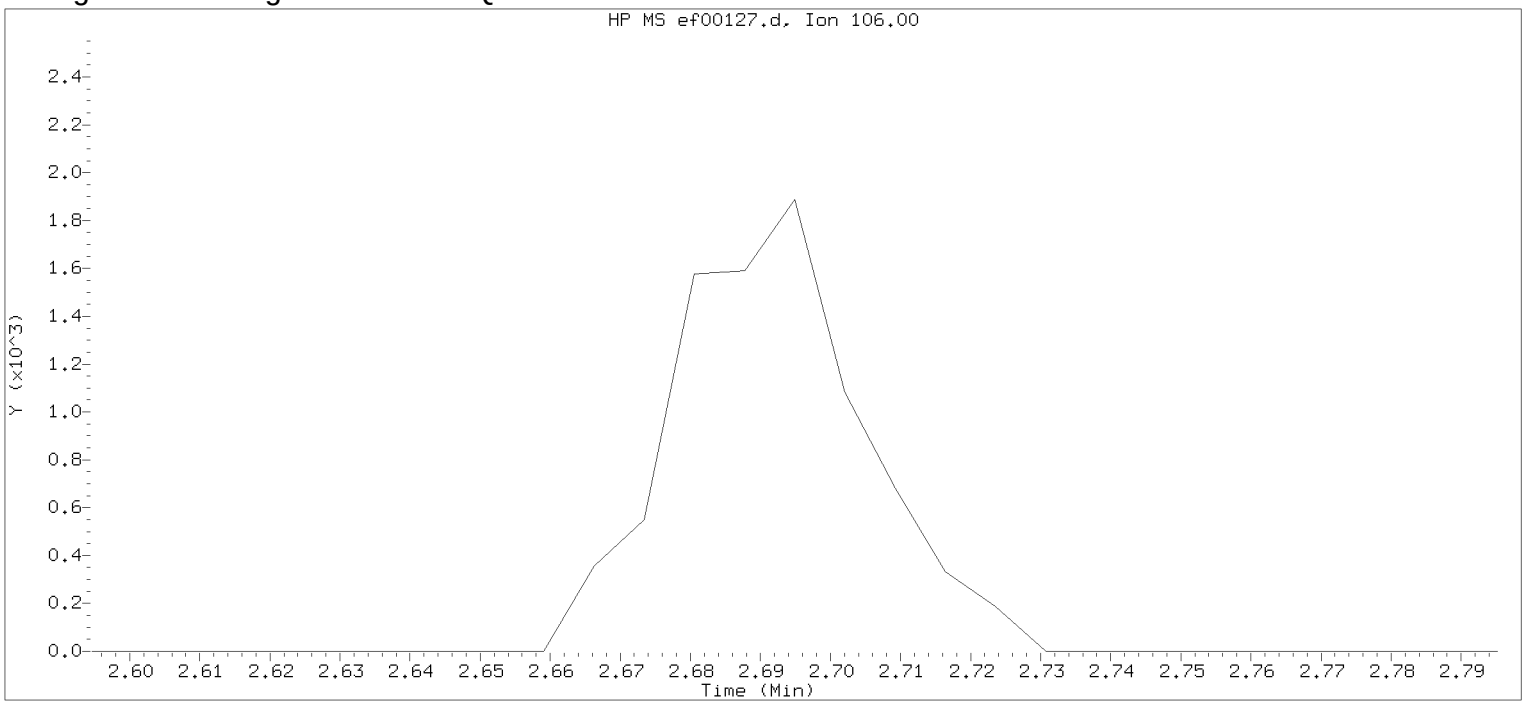
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:08.
PARALLAX ID: jbs01304

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

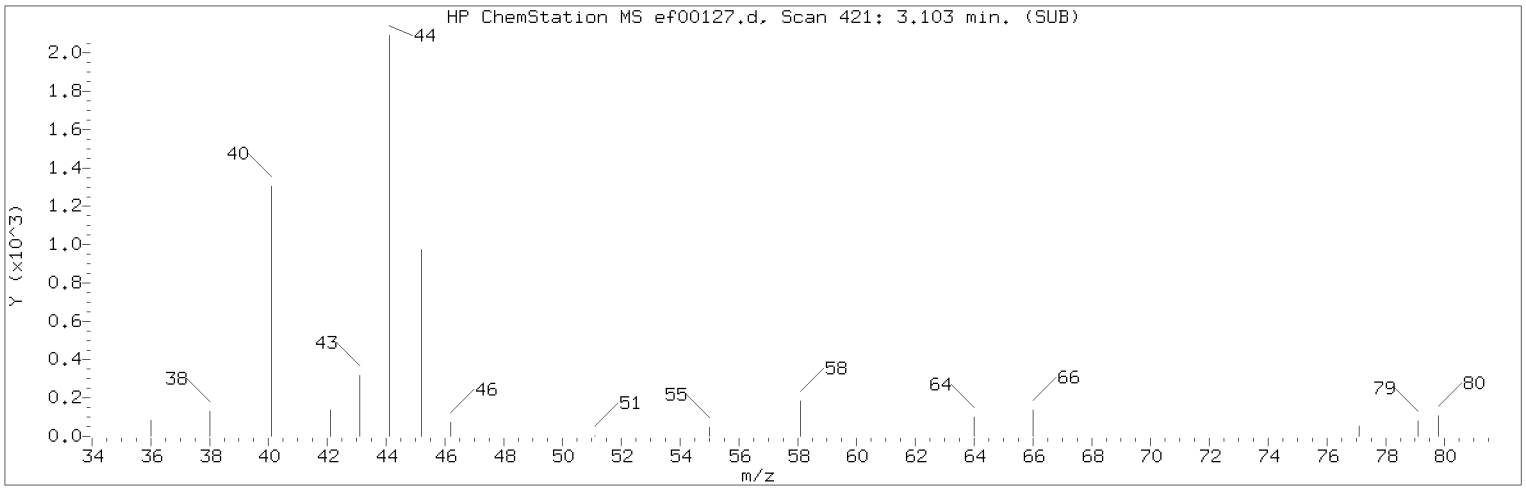
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 02:44 Unknown

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

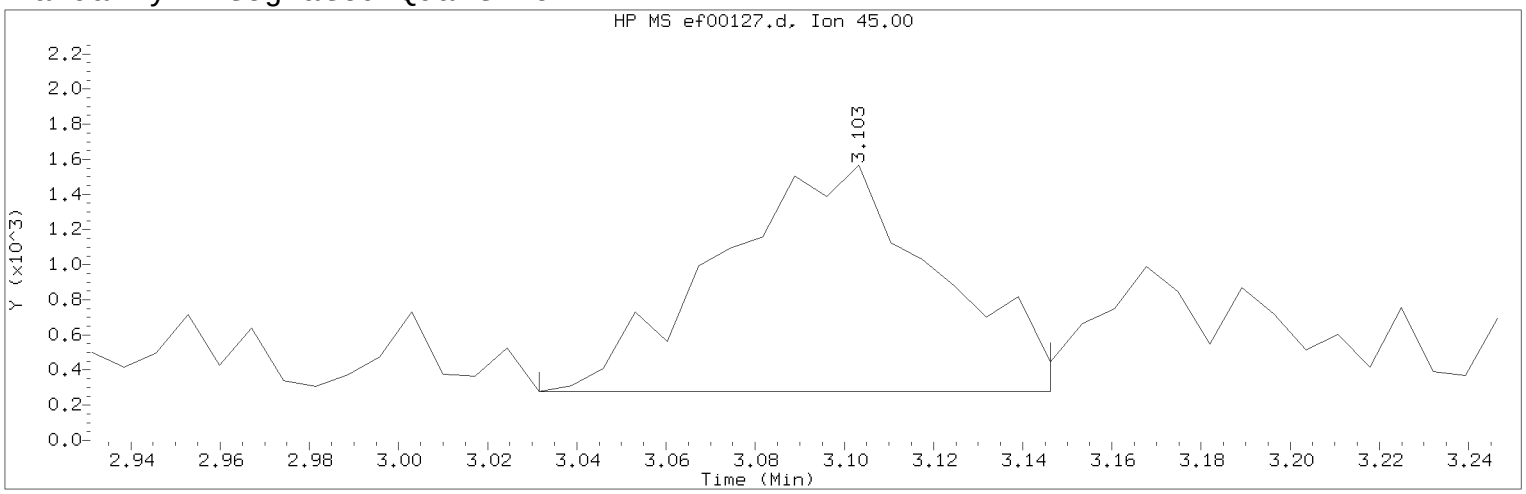
Compound Number : 10
Compound Name : Bromoethene
Expected RT (minutes) : 2.695
Quant Ion : 106.00

Digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:06 jbs01304

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

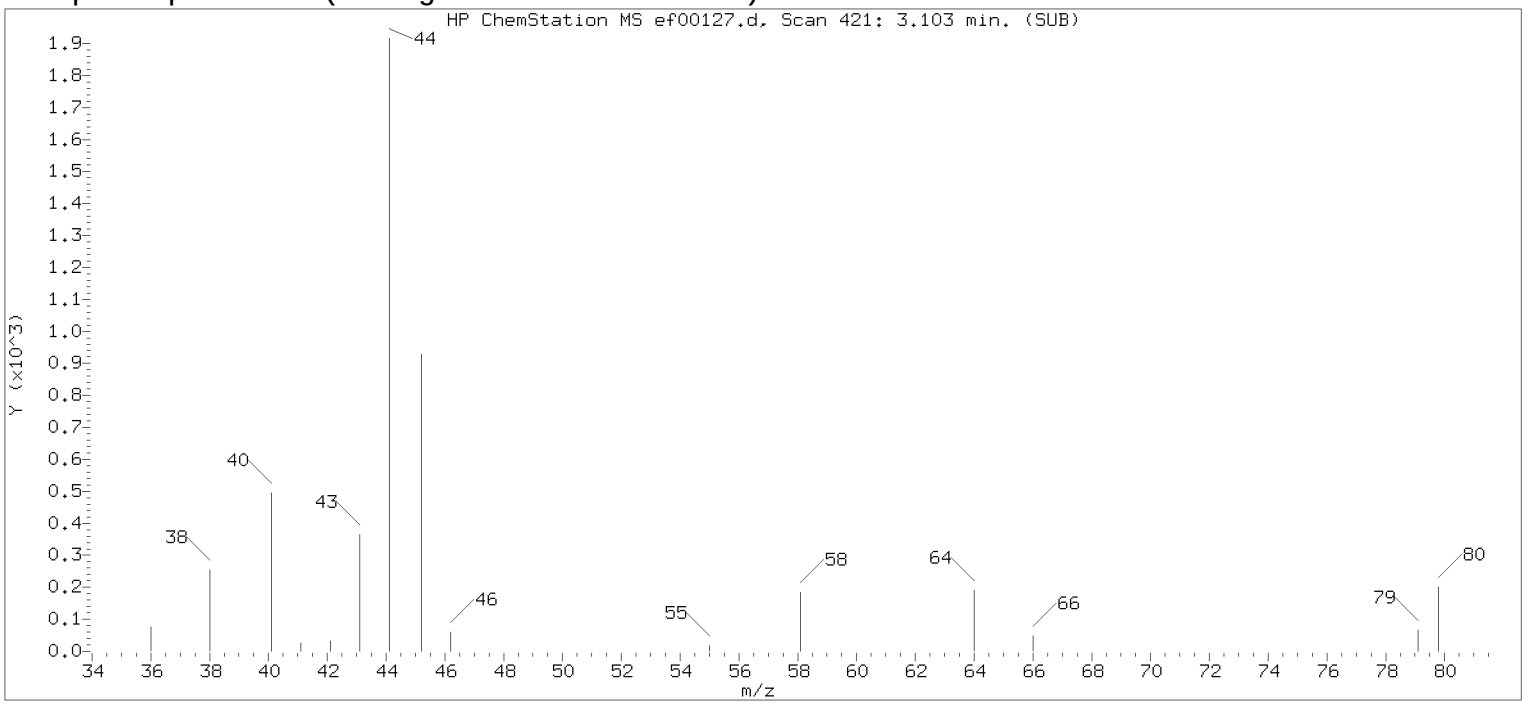
Compound Number : 14
Compound Name : Ethanol
Scan Number : 421
Retention Time (minutes): 3.103
Quant Ion : 45.00
Area (flag) : 4423M
Concentration (ppb(v)) : 0.6578
Integration start scan : 410 Integration stop scan: 426
Y at integration start : 277 Y at integration end: 277

Reason for manual integration: improper integration

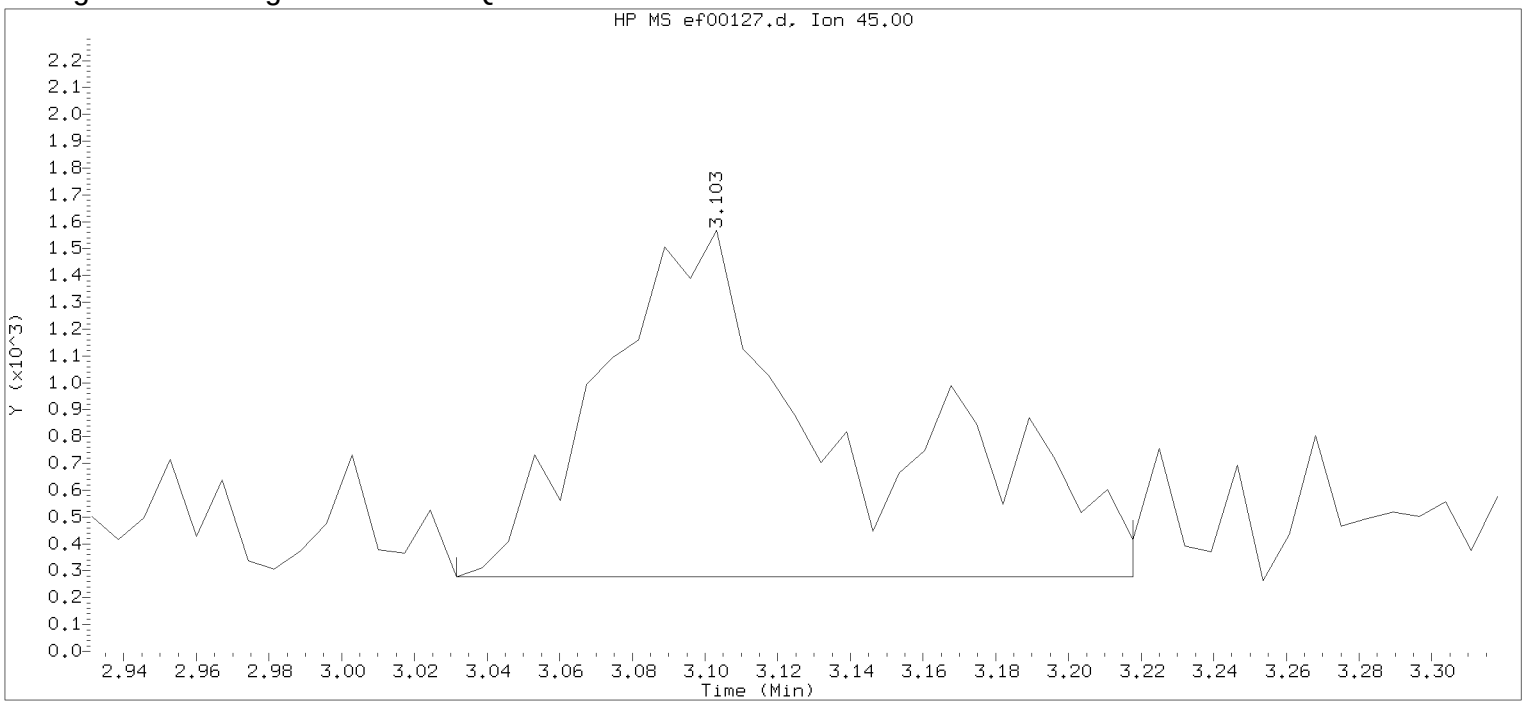
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:08.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

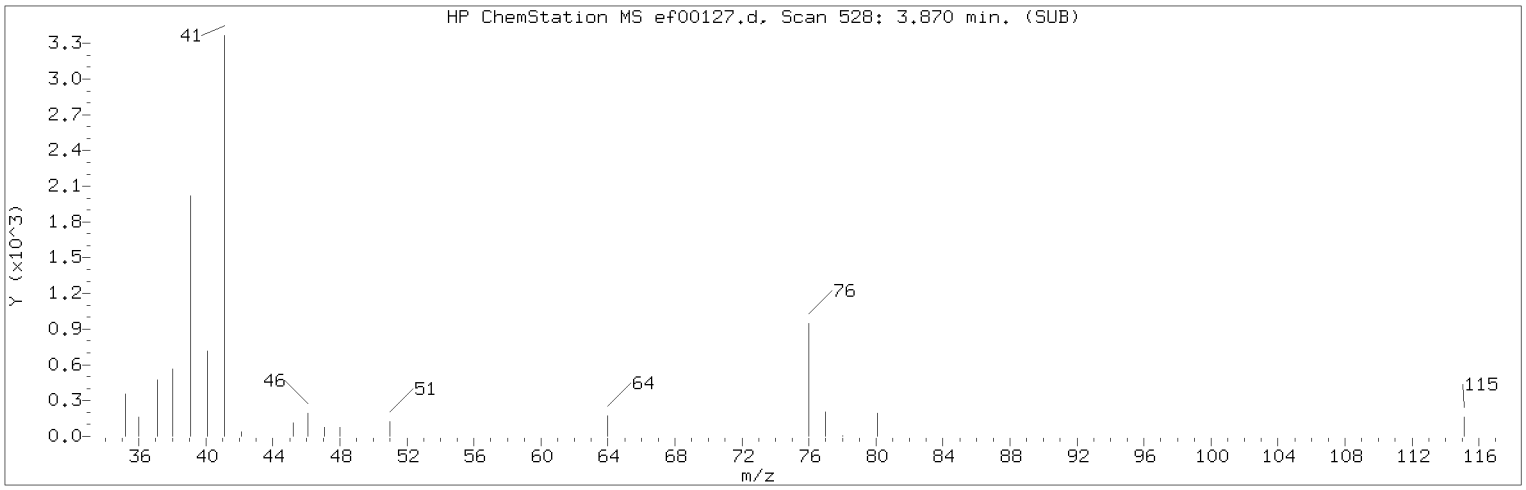
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 02:44 Unknown

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

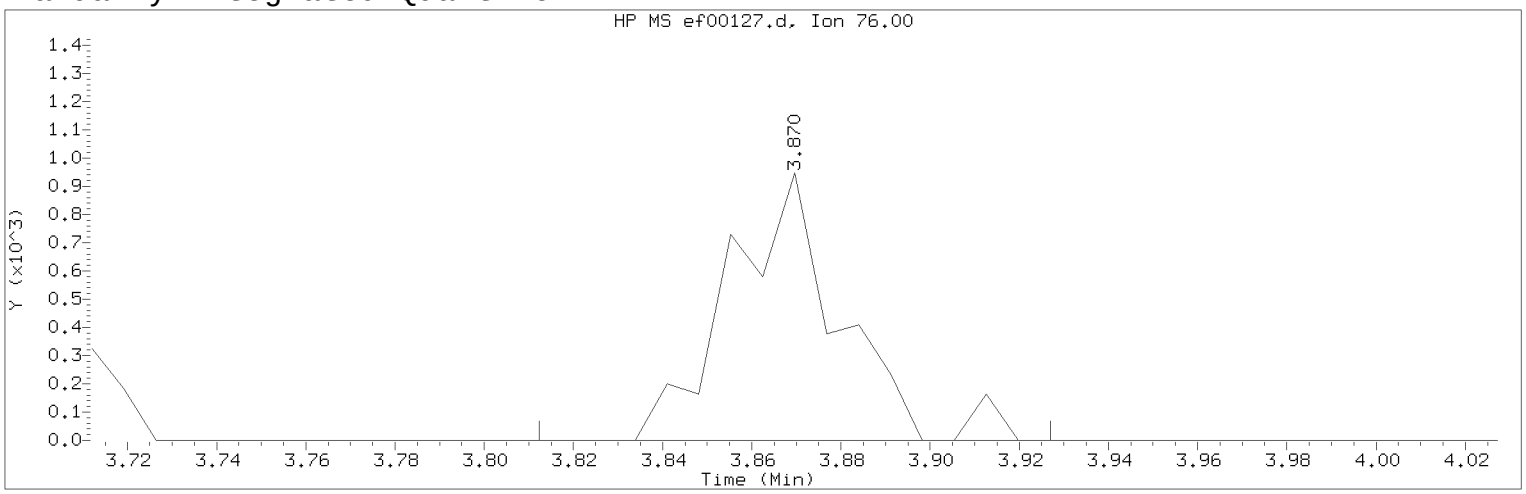
Compound Number : 14
Compound Name : Ethanol
Scan Number : 421
Retention Time (minutes): 3.103
Quant Ion : 45.00
Area : 6176
Concentration (ppb(v)) : 0.9373
Integration start scan : 410 Integration stop scan: 436
Y at integration start : 277 Y at integration end: 277

Digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:06.
Target 3.5 esignature used. EDI Page 1346

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:06 jbs01304

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

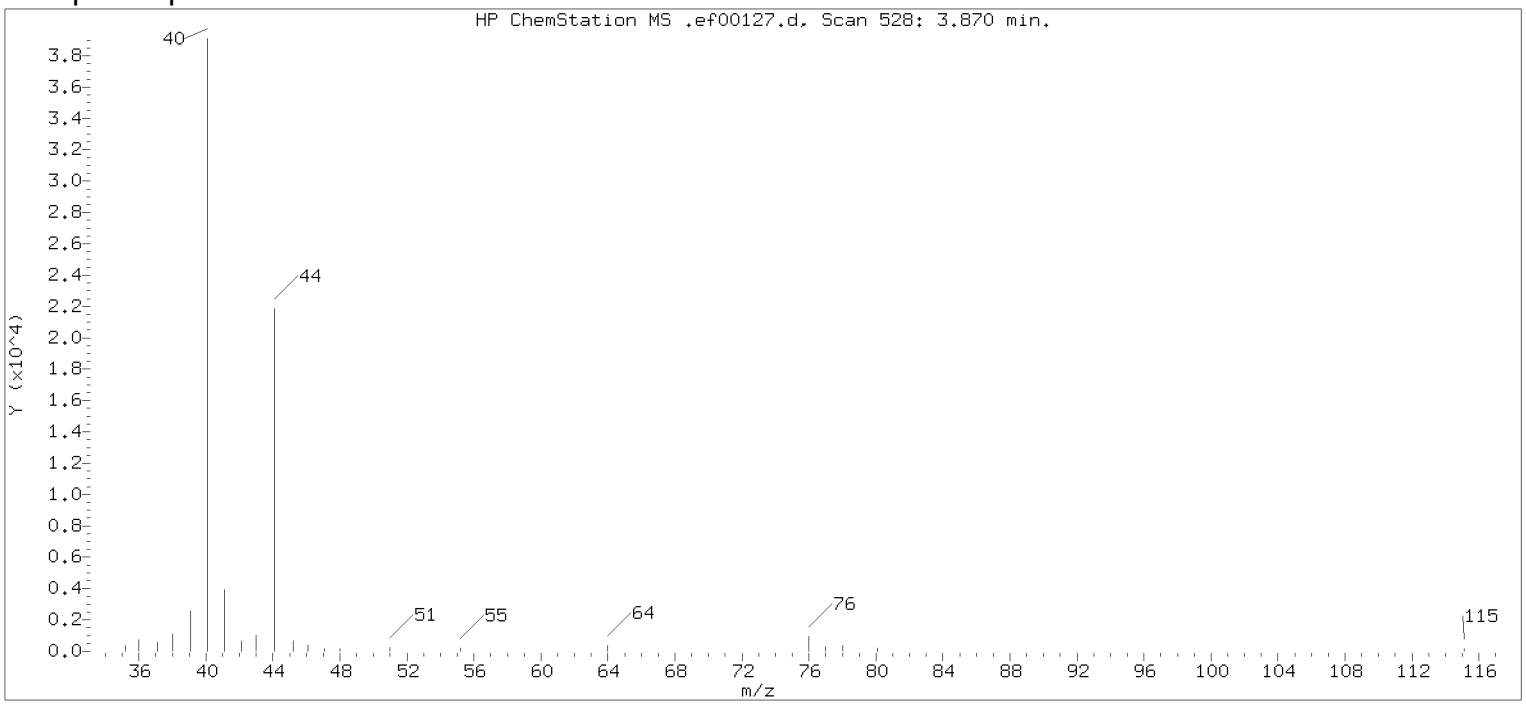
Compound Number : 24
Compound Name : 3-Chloropropene
Scan Number : 528
Retention Time (minutes): 3.870
Quant Ion : 76.00
Area (flag) : 1633M
Concentration (ppb(v)) : 0.2175
Integration start scan : 519 Integration stop scan: 535
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

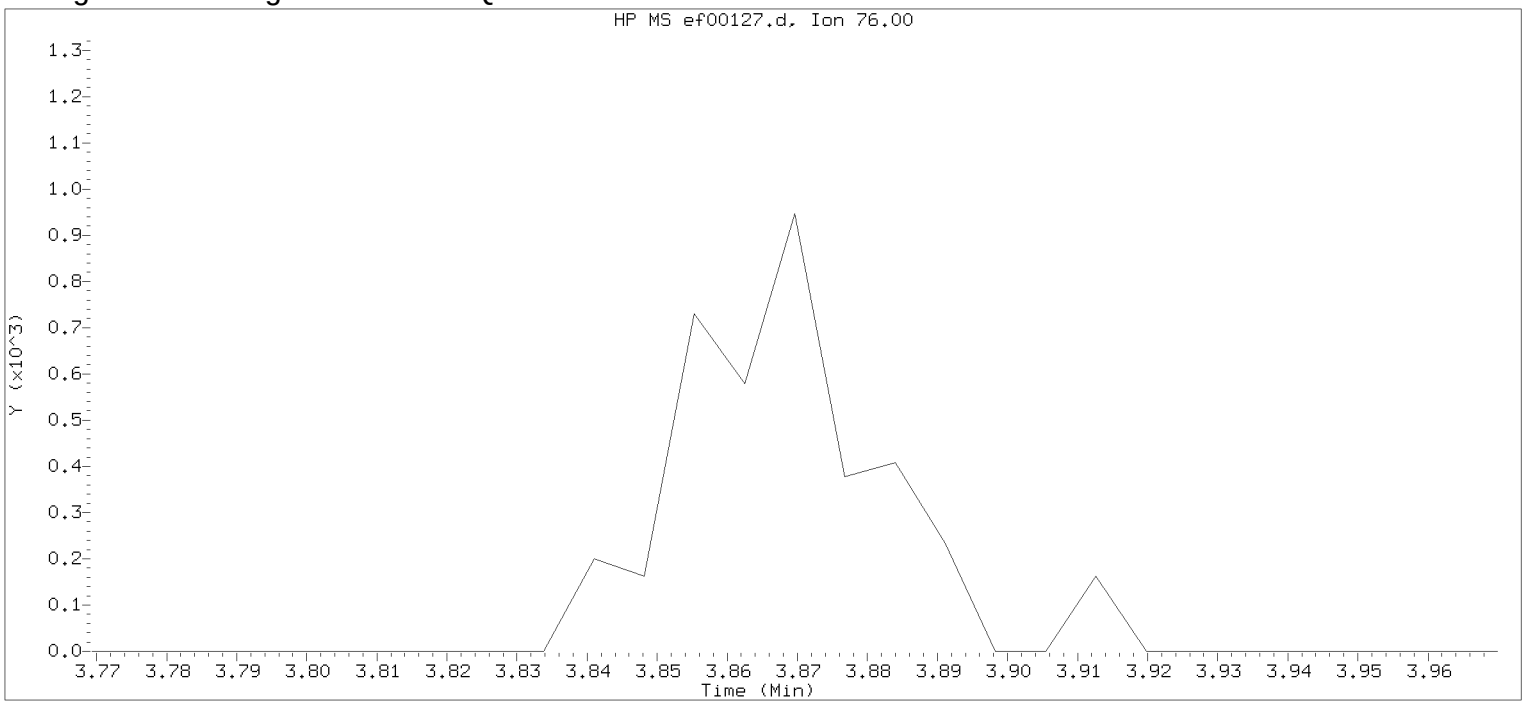
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:08.
PARALLAX ID: jbs01304

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

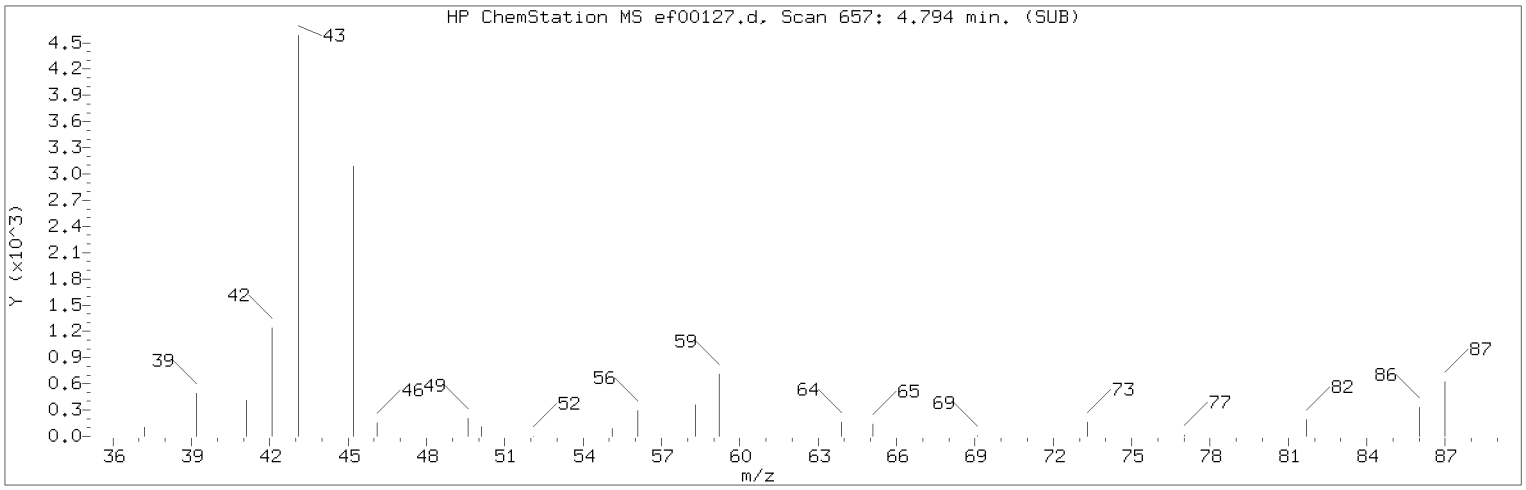
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 02:44 Unknown

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

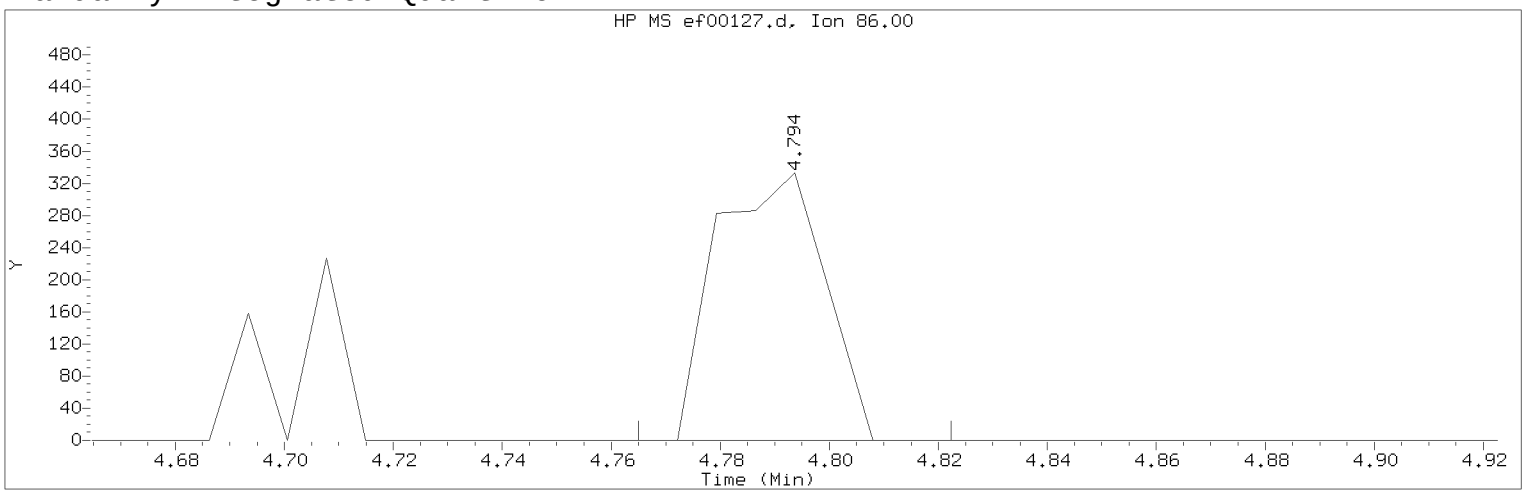
Compound Number : 24
Compound Name : 3-Chloropropene
Expected RT (minutes) : 3.870
Quant Ion : 76.00

Digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:06 jbs01304

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

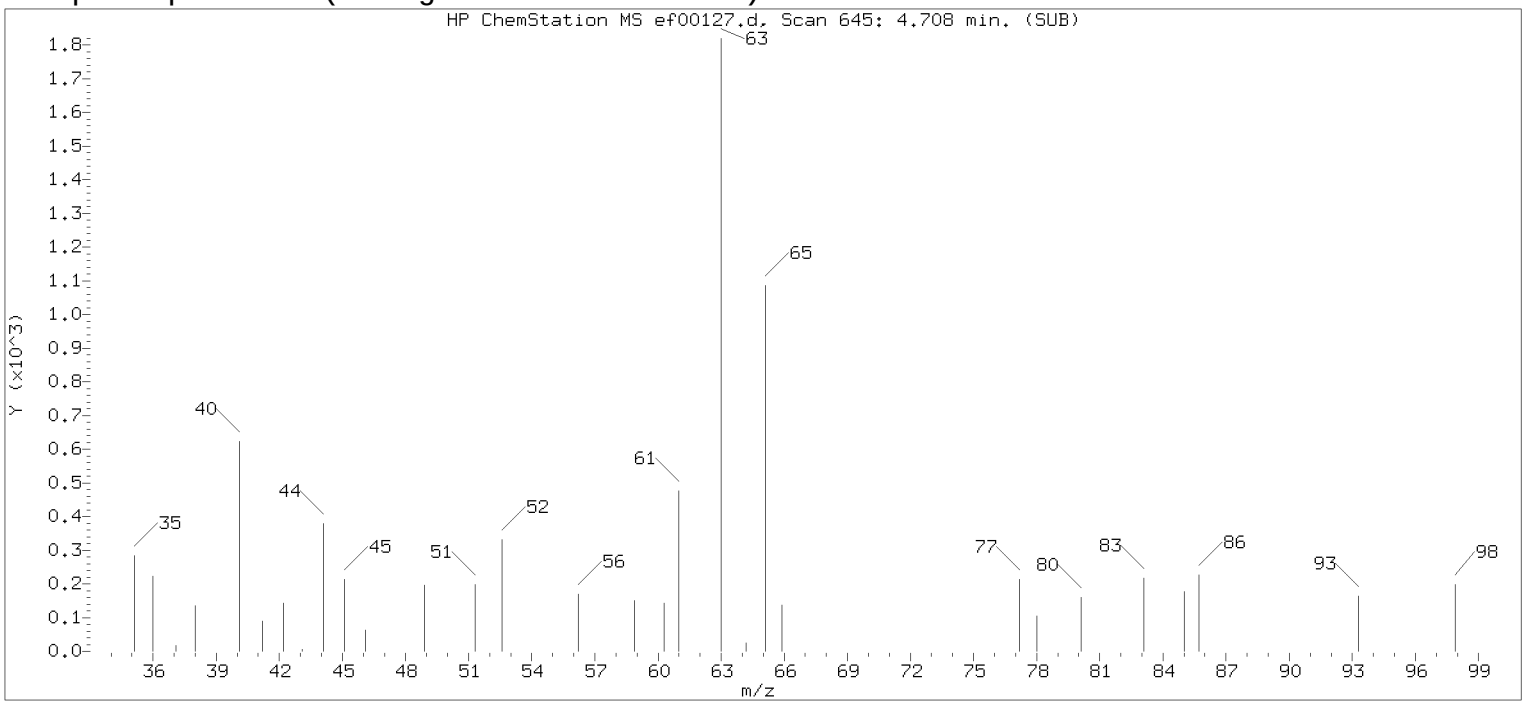
Compound Number : 32
Compound Name : Vinyl Acetate
Scan Number : 657
Retention Time (minutes): 4.794
Quant Ion : 86.00
Area (flag) : 459M
Concentration (ppb(v)) : 0.1166
Integration start scan : 652 Integration stop scan: 660
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

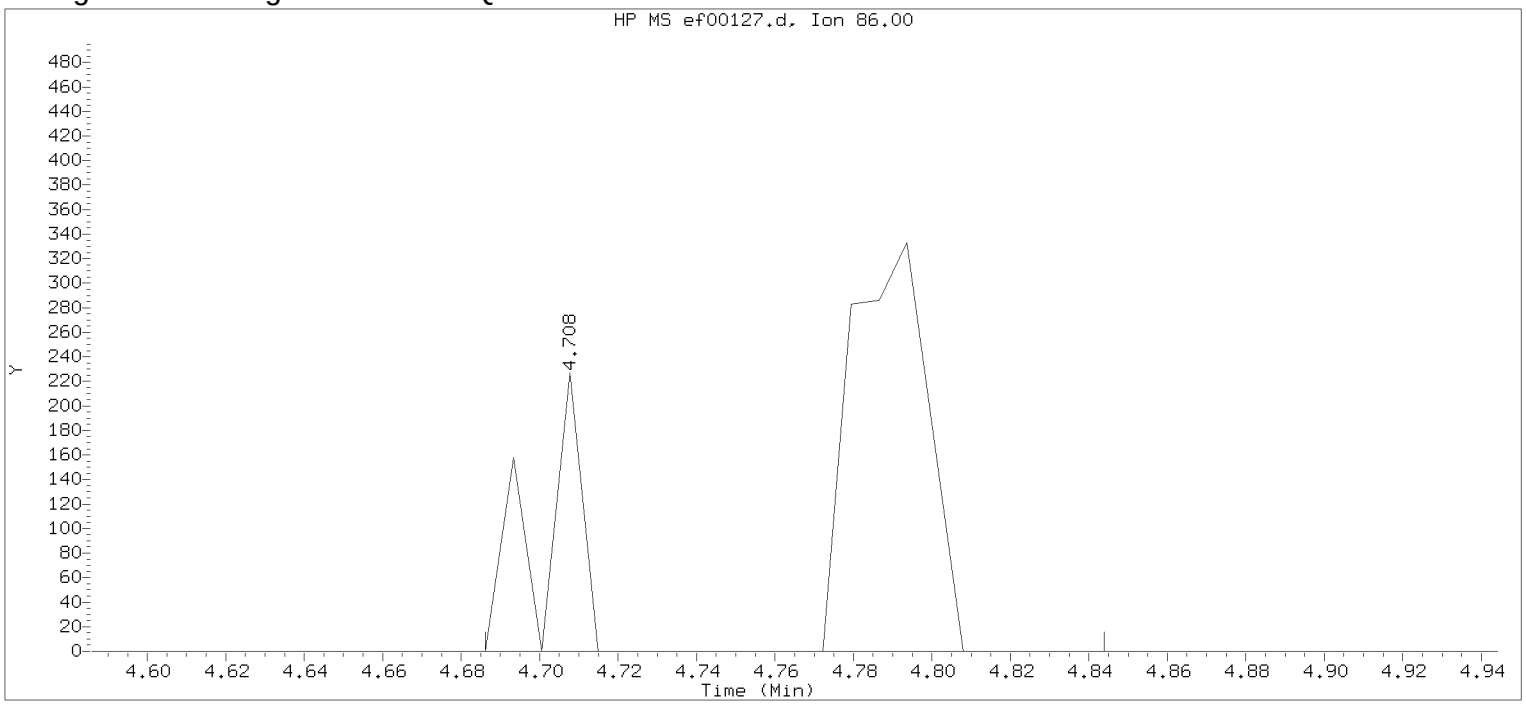
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:08.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

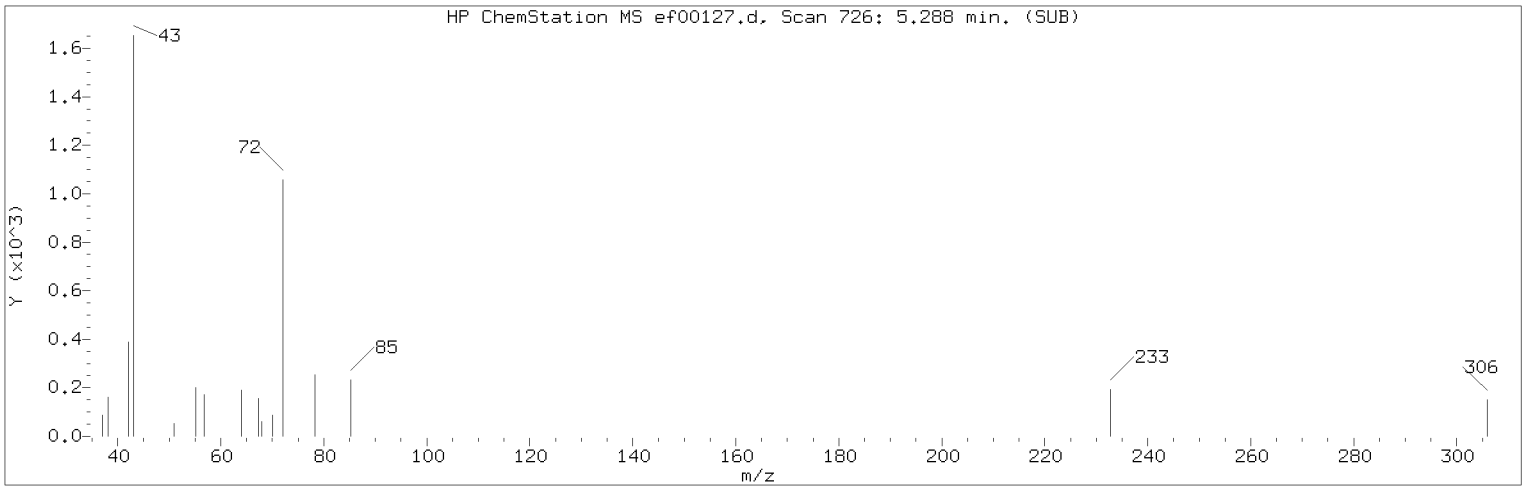
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 02:44 Unknown

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

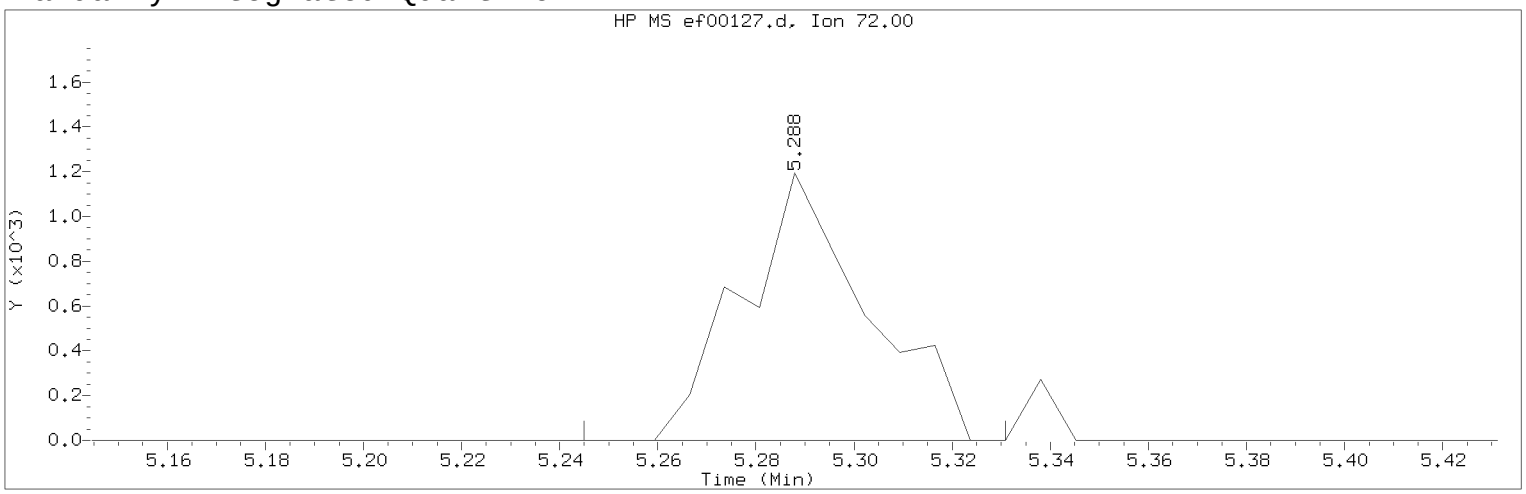
Compound Number : 32
Compound Name : Vinyl Acetate
Scan Number : 645
Retention Time (minutes): 4.708
Quant Ion : 86.00
Area : 624
Concentration (ppb(v)) : 0.1648
Integration start scan : 641 Integration stop scan: 663
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:06.
Target 3.5 esignature used. GLED1 Page 1354 of 1687

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:06 jbs01304

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

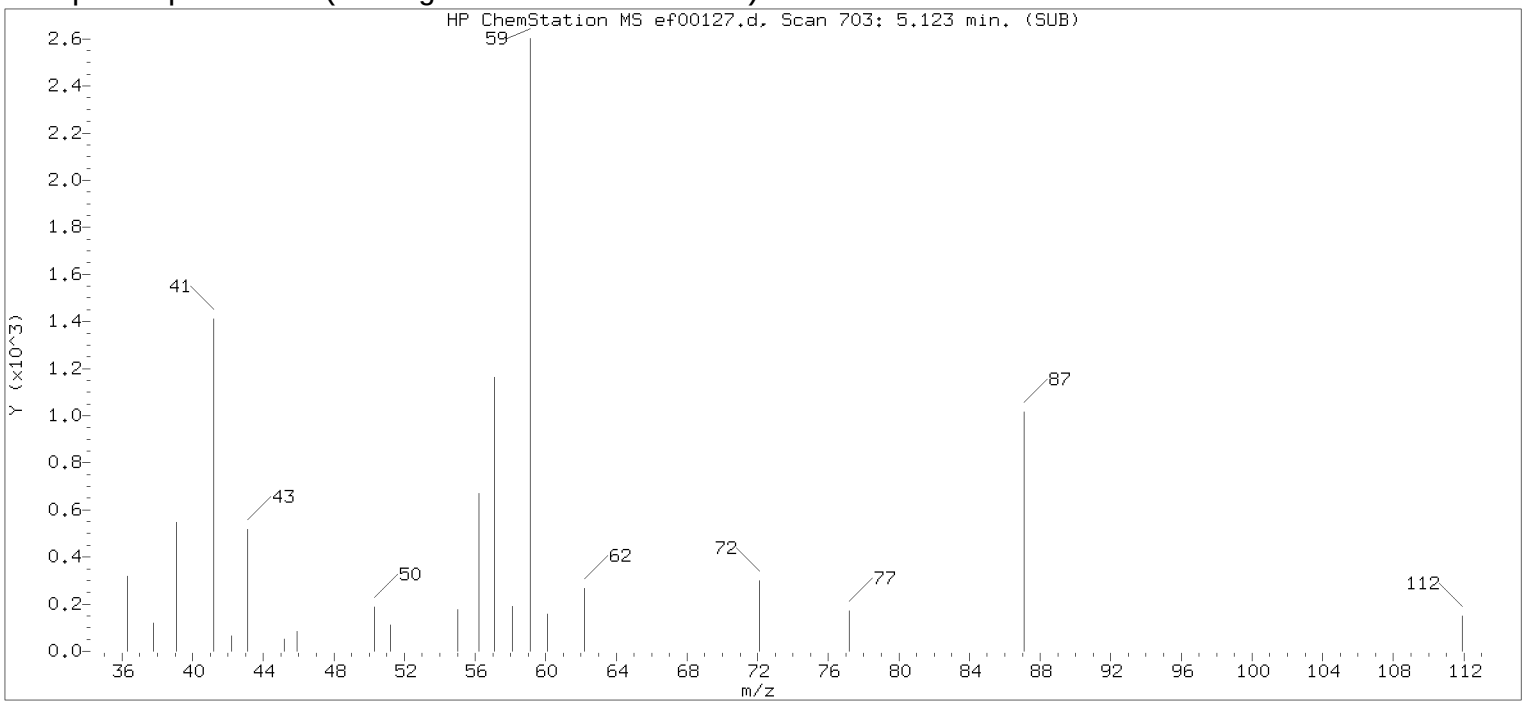
Compound Number : 37
Compound Name : 2-Butanone
Scan Number : 726
Retention Time (minutes): 5.288
Quant Ion : 72.00
Area (flag) : 2113M
Concentration (ppb(v)) : 0.2204
Integration start scan : 719 Integration stop scan: 731
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

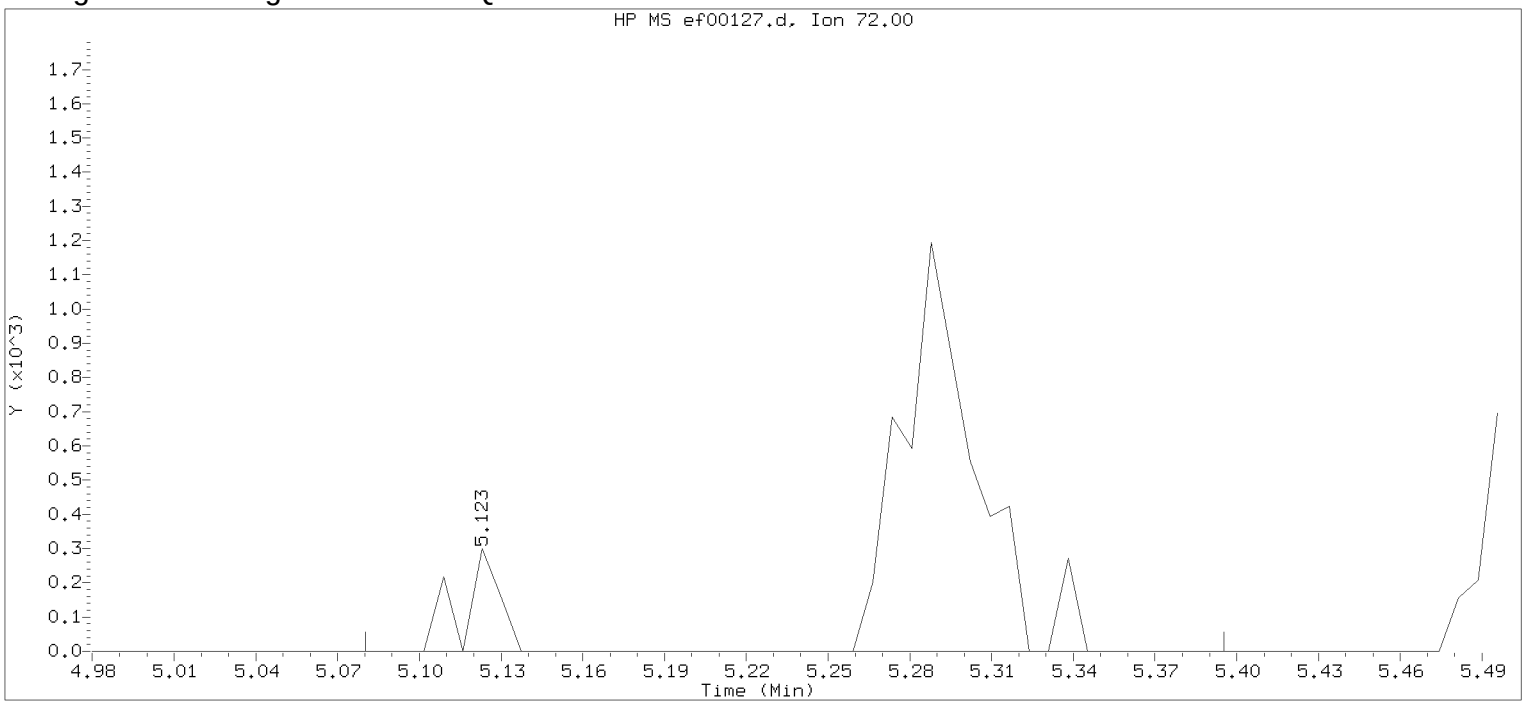
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:08.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

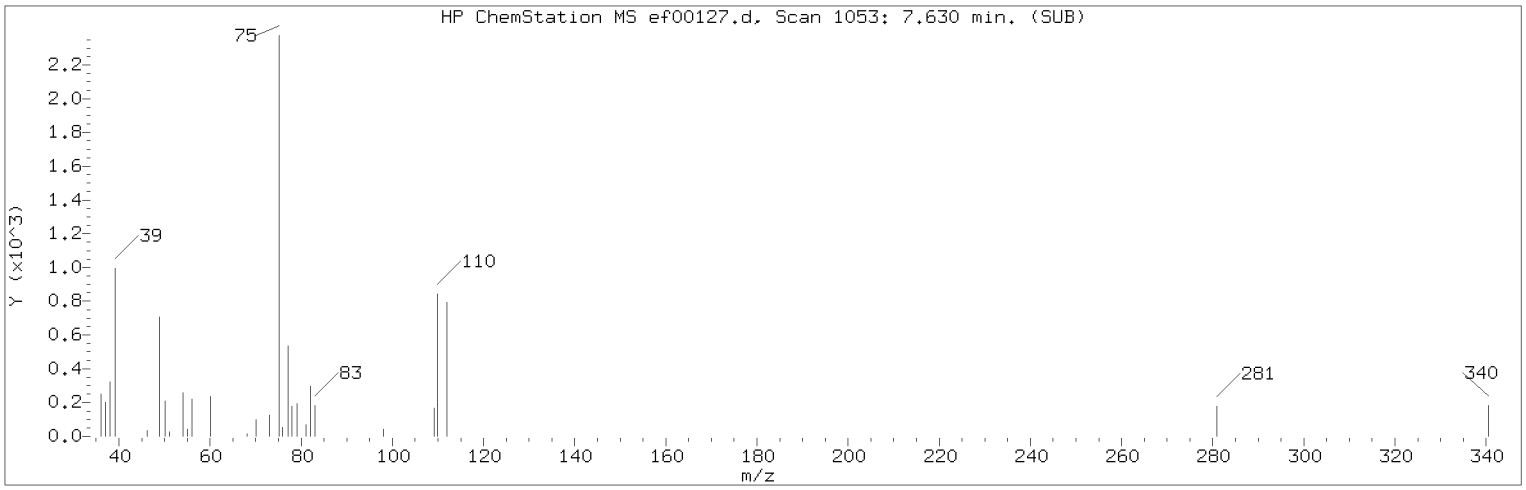
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 02:44 Unknown

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

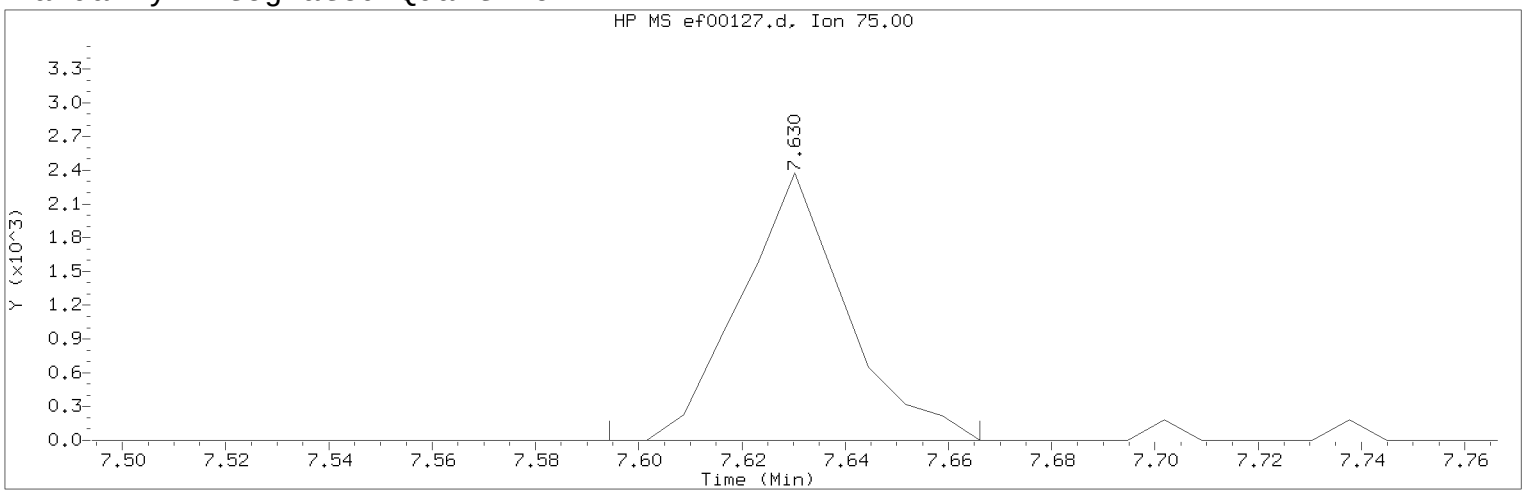
Compound Number : 37
Compound Name : 2-Butanone
Scan Number : 703
Retention Time (minutes): 5.123
Quant Ion : 72.00
Area : 2518
Concentration (ppb(v)) : 0.2653
Integration start scan : 696 Integration stop scan: 740
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:06.
Target 3.5 esignature used. GLED1 Page 1354 of 1687

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:06 jbs01304

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

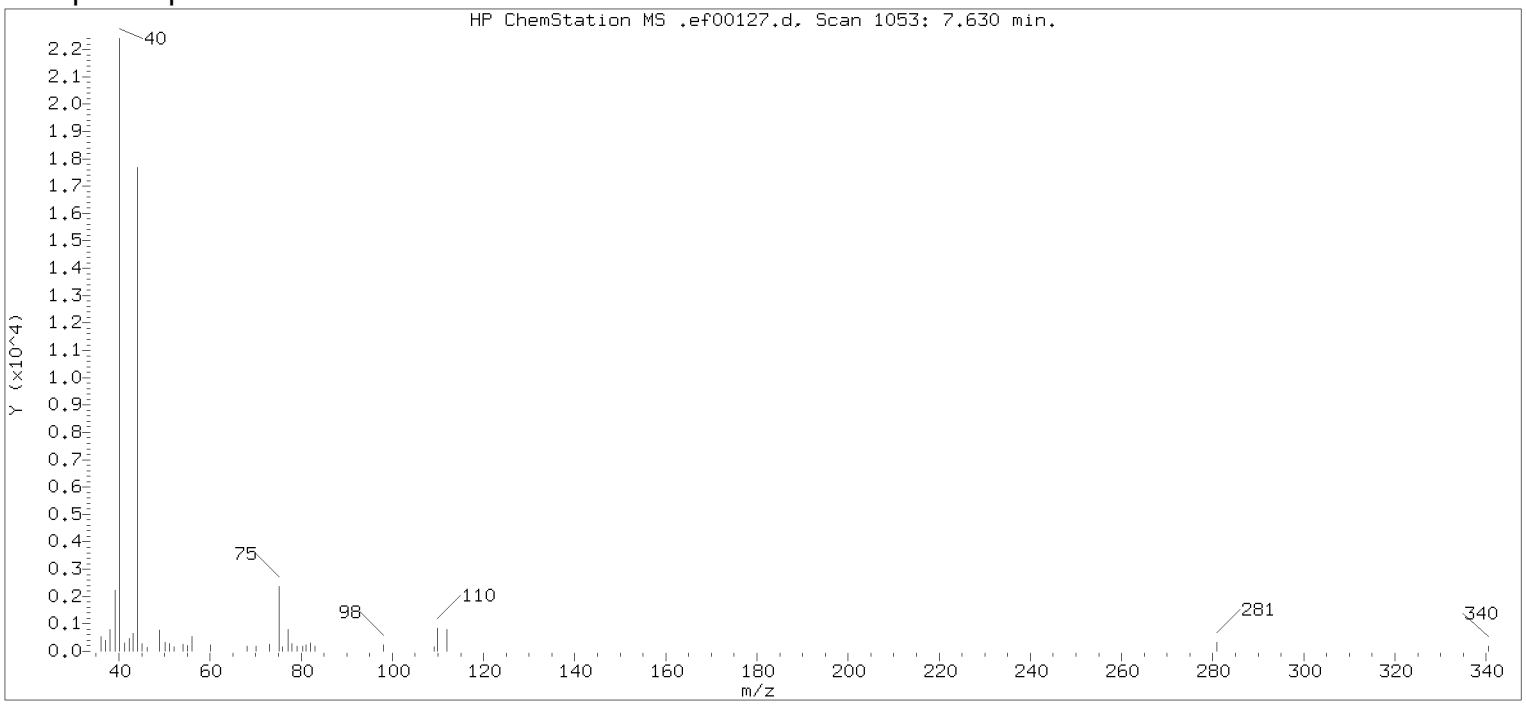
Compound Number : 63
Compound Name : trans-1,3-Dichloropropene
Scan Number : 1053
Retention Time (minutes): 7.630
Quant Ion : 75.00
Area (flag) : 3341M
Concentration (ppb(v)) : 0.1267
Integration start scan : 1047 Integration stop scan: 1057
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

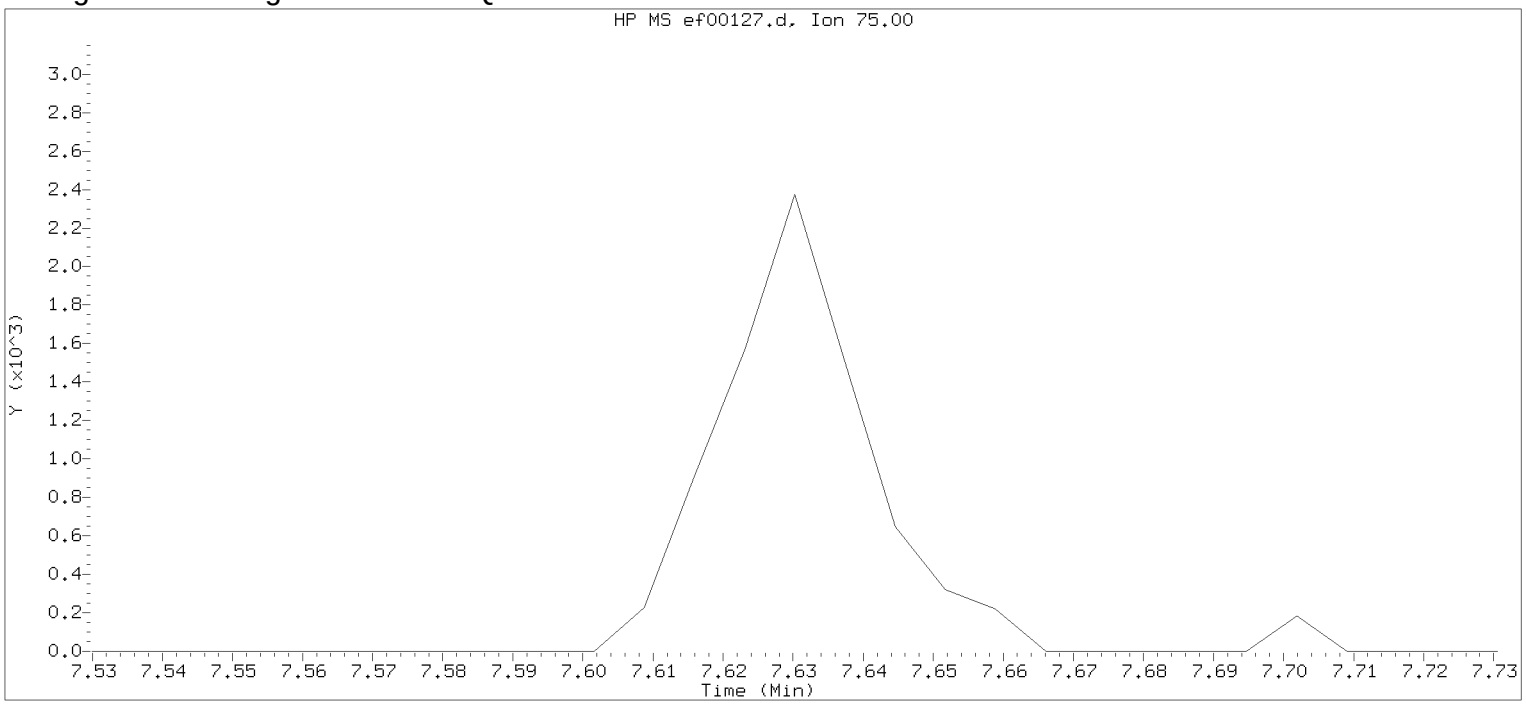
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:08.
PARALLAX ID: jbs01304

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

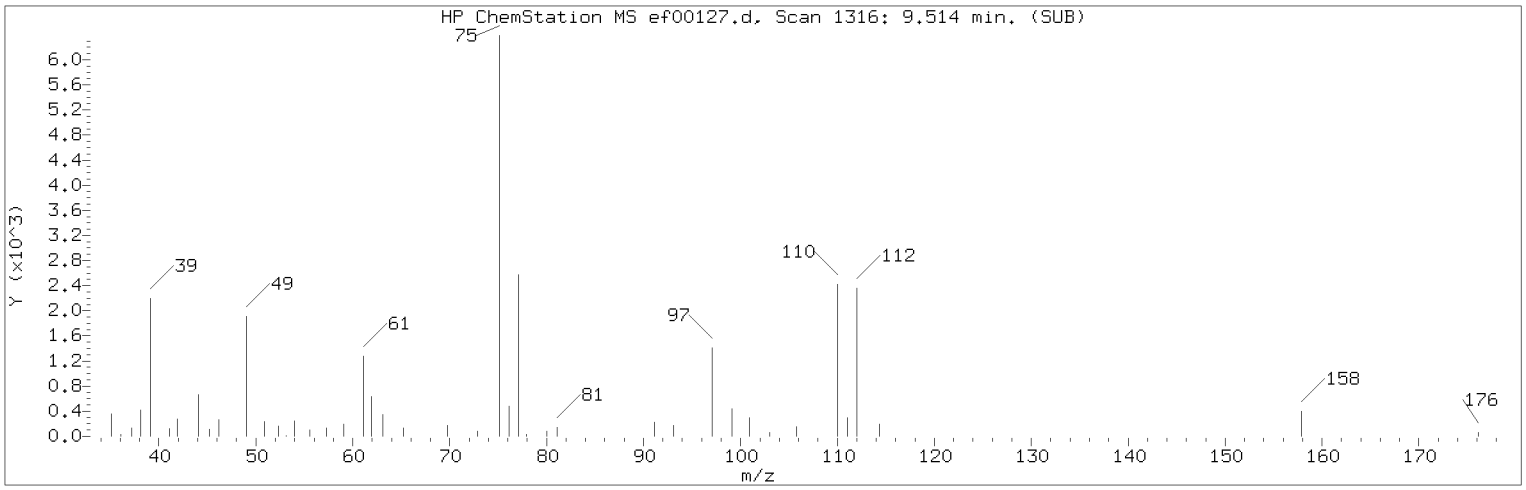
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 02:44 Unknown

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

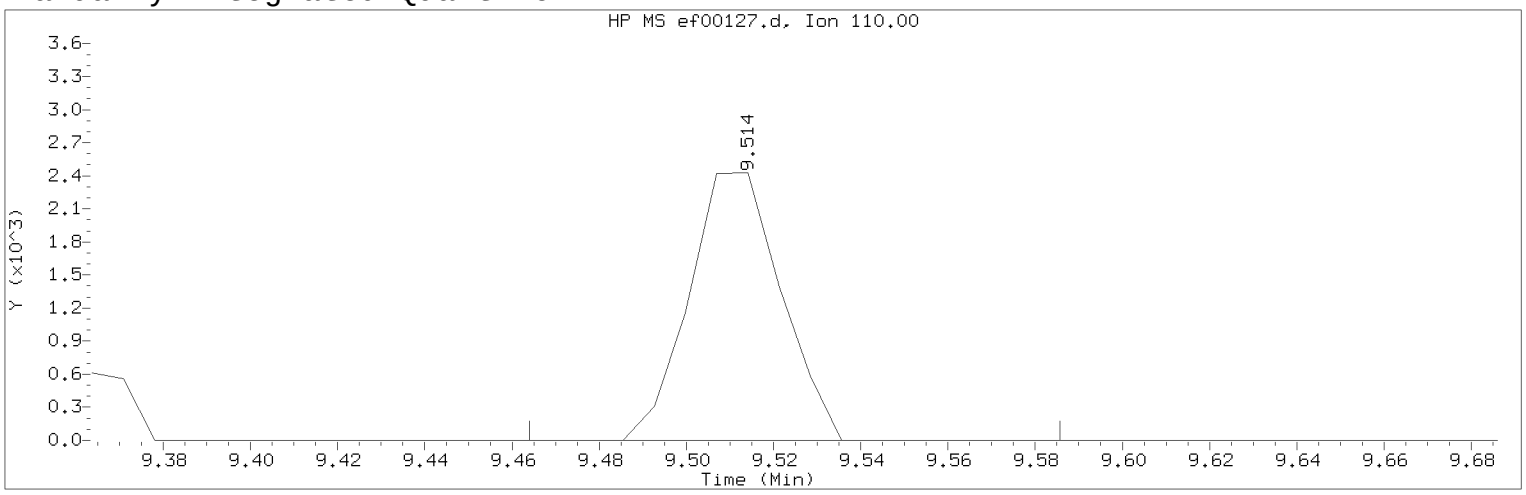
Compound Number : 63
Compound Name : trans-1,3-Dichloropropene
Expected RT (minutes) : 7.630
Quant Ion : 75.00

Digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:06 jbs01304

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

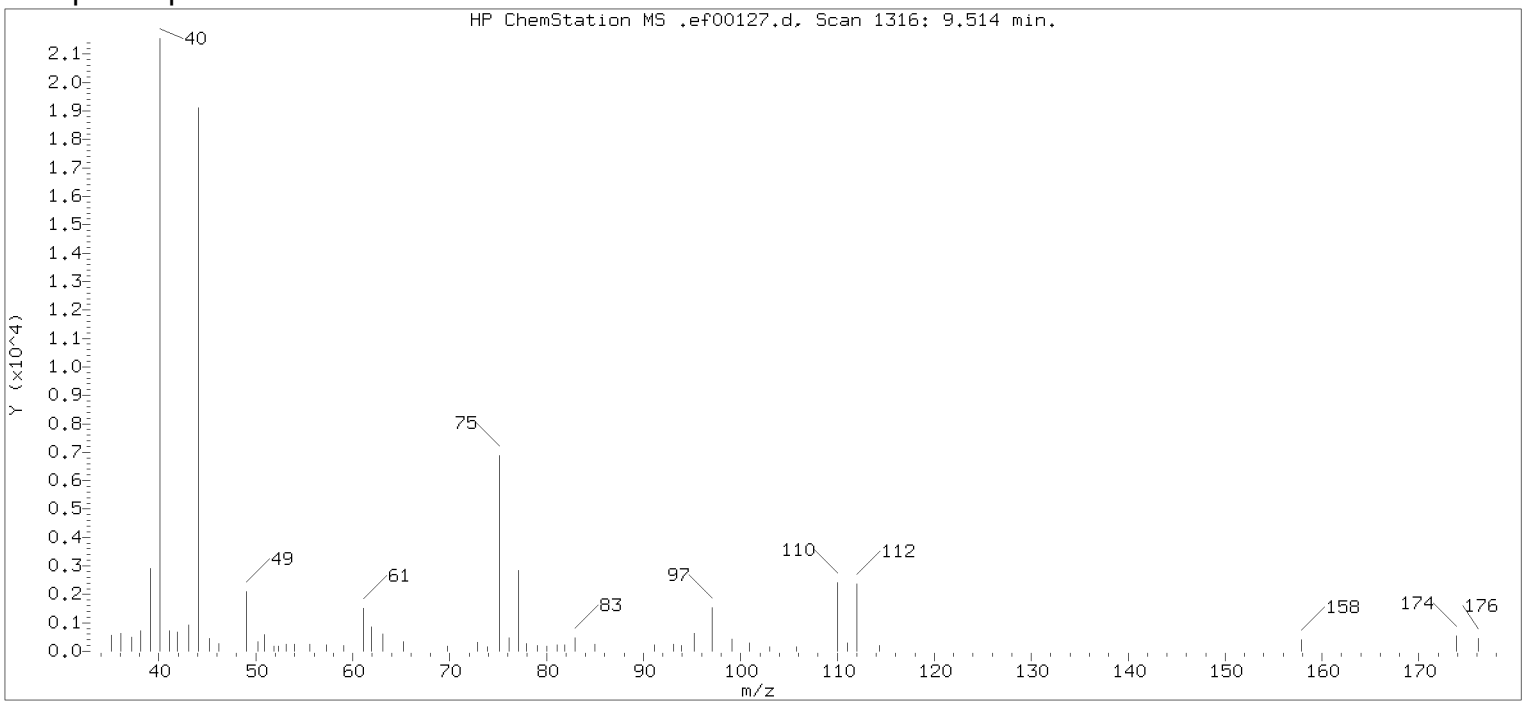
Compound Number : 83
Compound Name : 1,2,3-Trichloropropane
Scan Number : 1316
Retention Time (minutes): 9.514
Quant Ion : 110.00
Area (flag) : 3559M
Concentration (ppb(v)) : 0.1969
Integration start scan : 1308 Integration stop scan: 1325
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

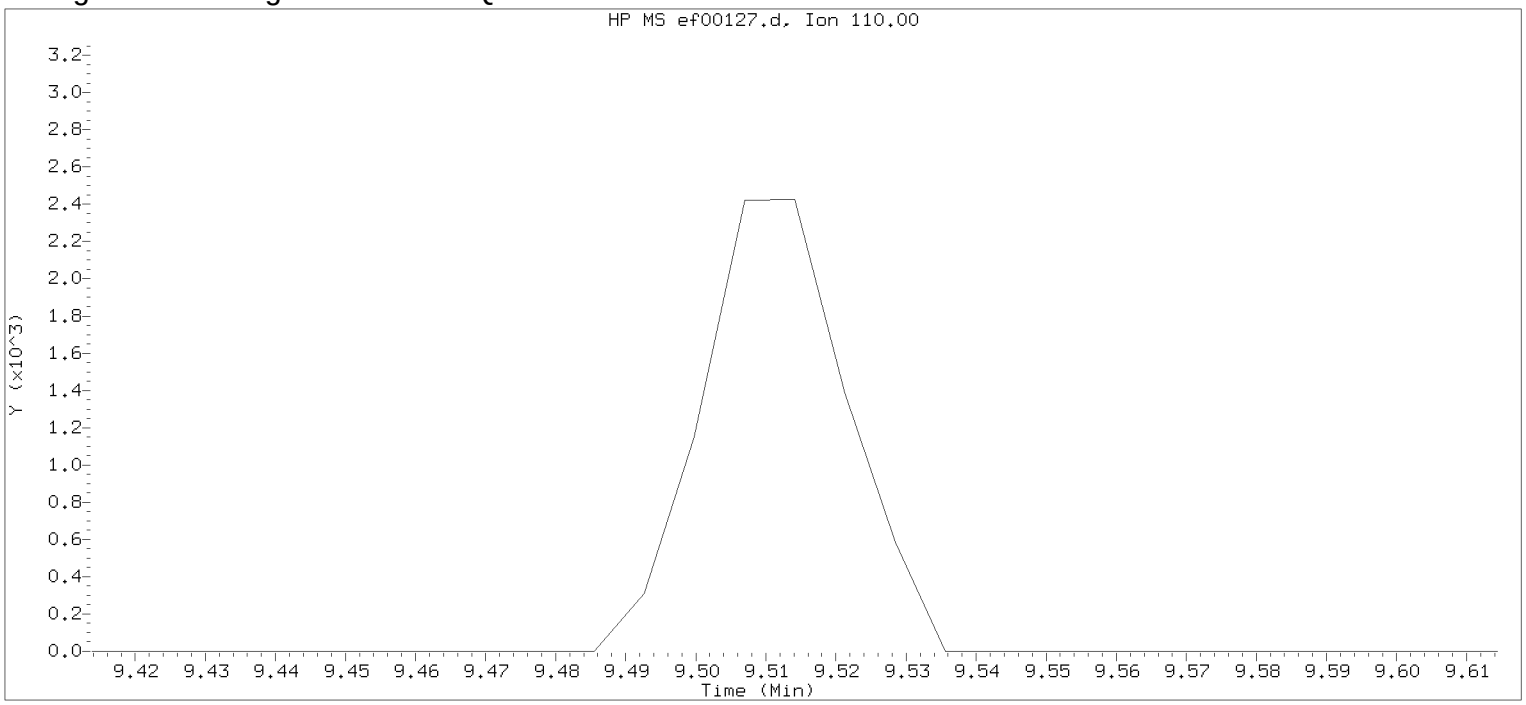
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:08.
PARALLAX ID: jbs01304

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

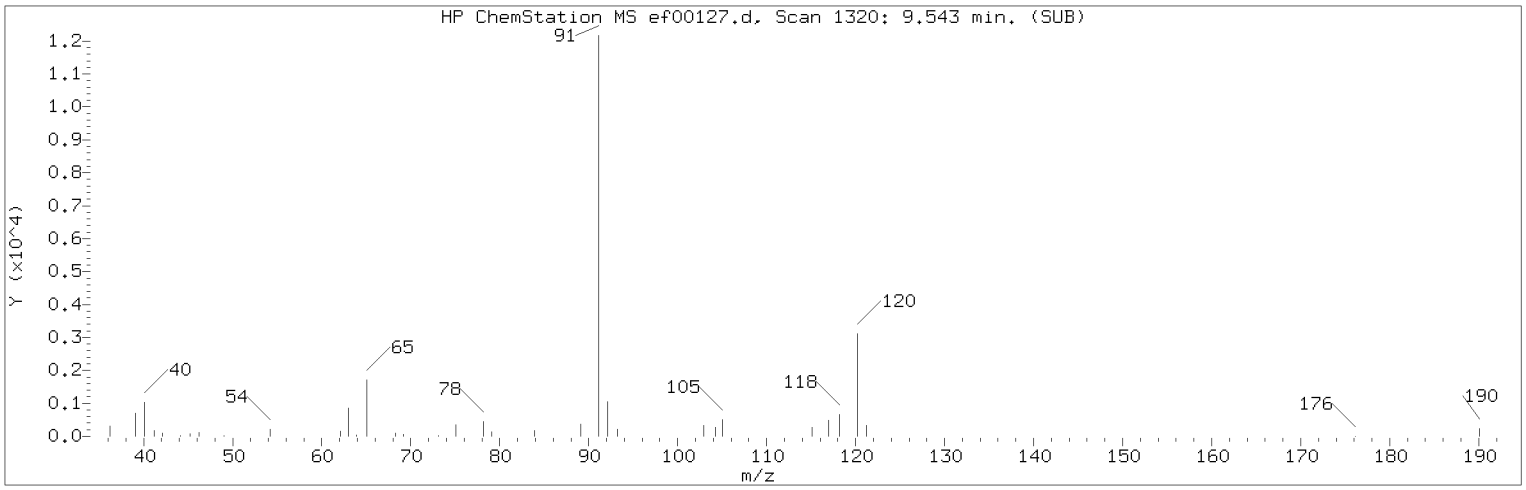
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 02:44 Unknown

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

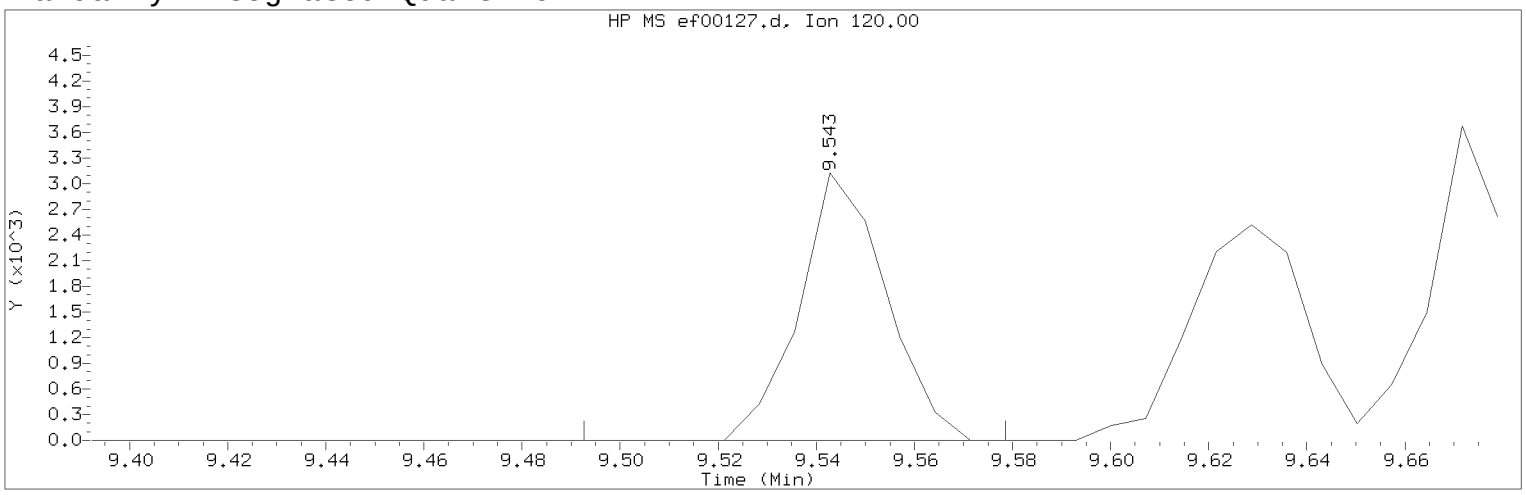
Compound Number : 83
Compound Name : 1,2,3-Trichloropropane
Expected RT (minutes) : 9.514
Quant Ion : 110.00

Digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:06 jbs01304

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

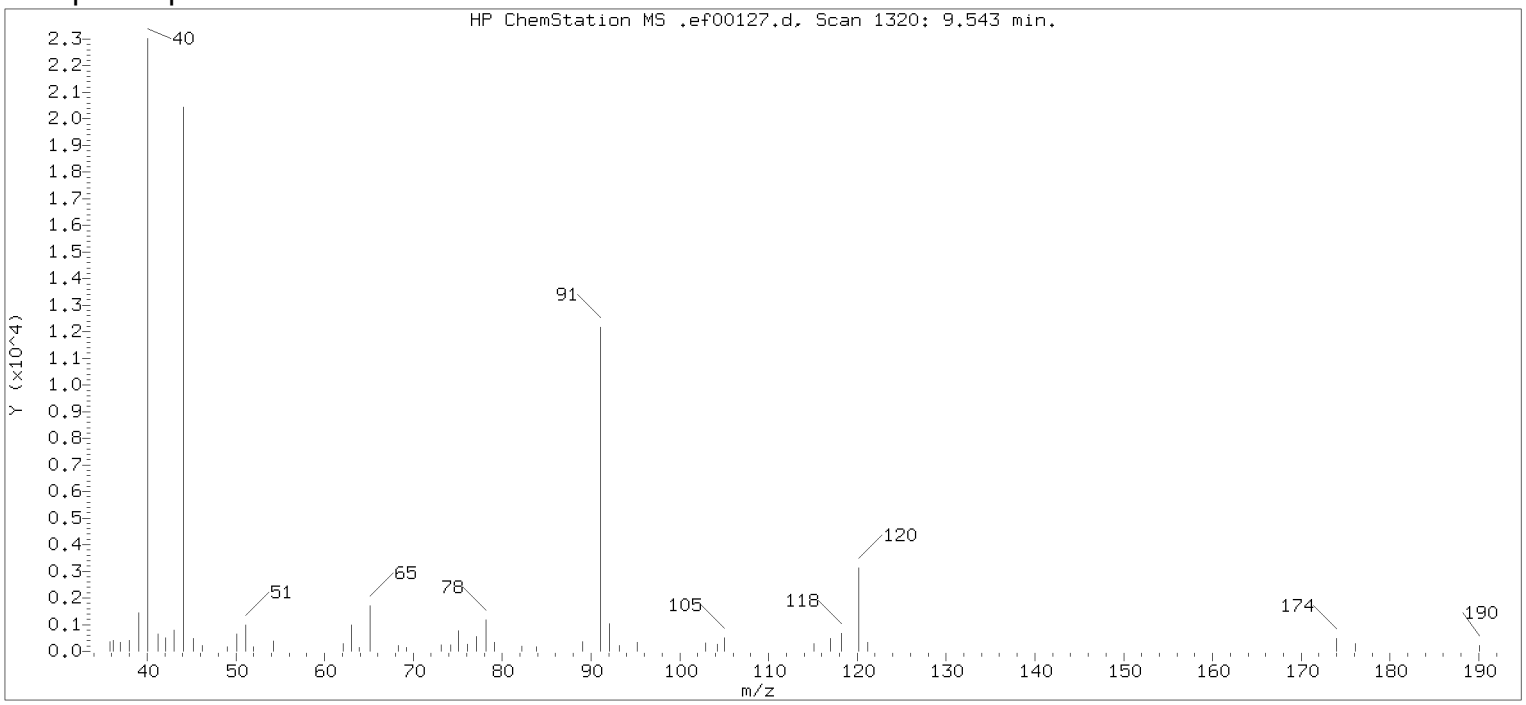
Compound Number : 84
Compound Name : n-Propylbenzene
Scan Number : 1320
Retention Time (minutes): 9.543
Quant Ion : 120.00
Area (flag) : 3836M
Concentration (ppb(v)) : 0.1427
Integration start scan : 1312 Integration stop scan: 1324
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

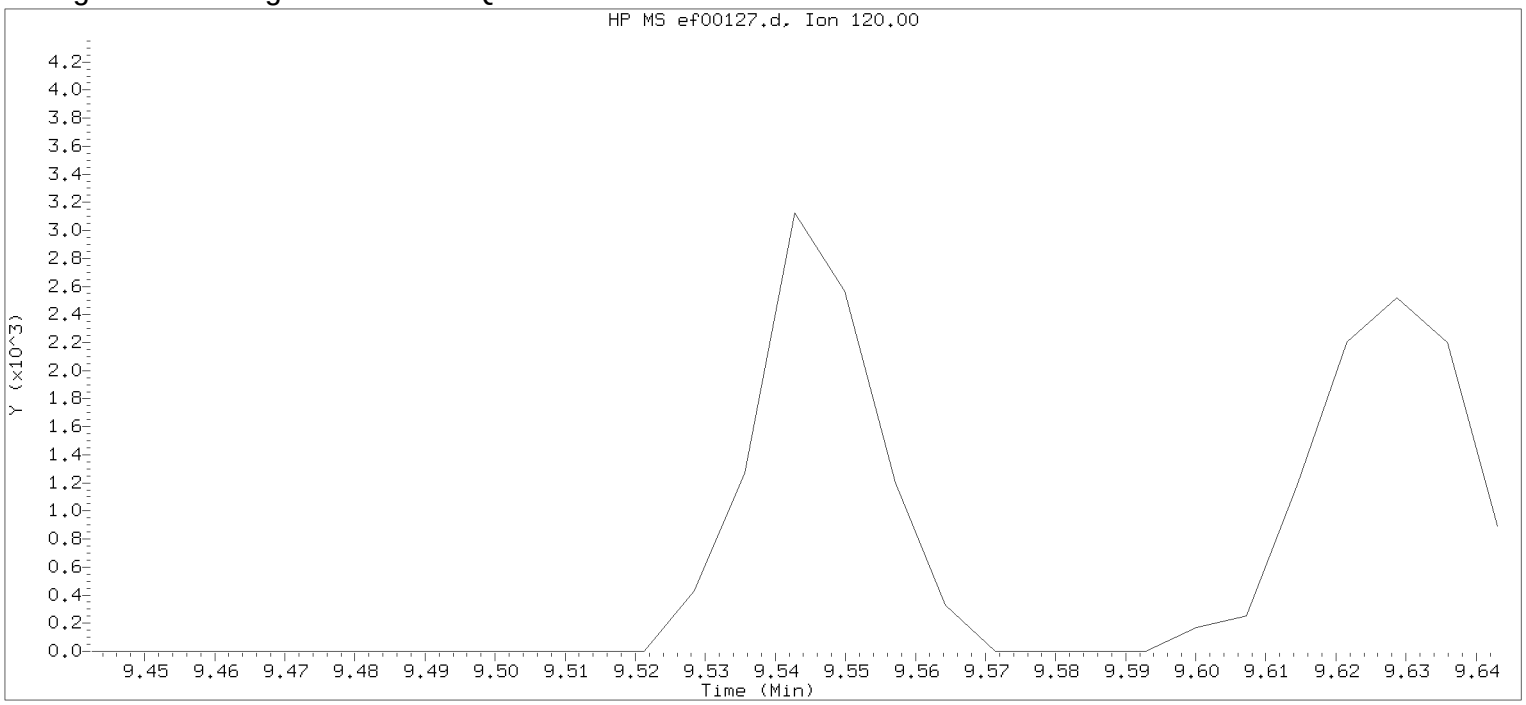
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:08.
PARALLAX ID: jbs01304

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

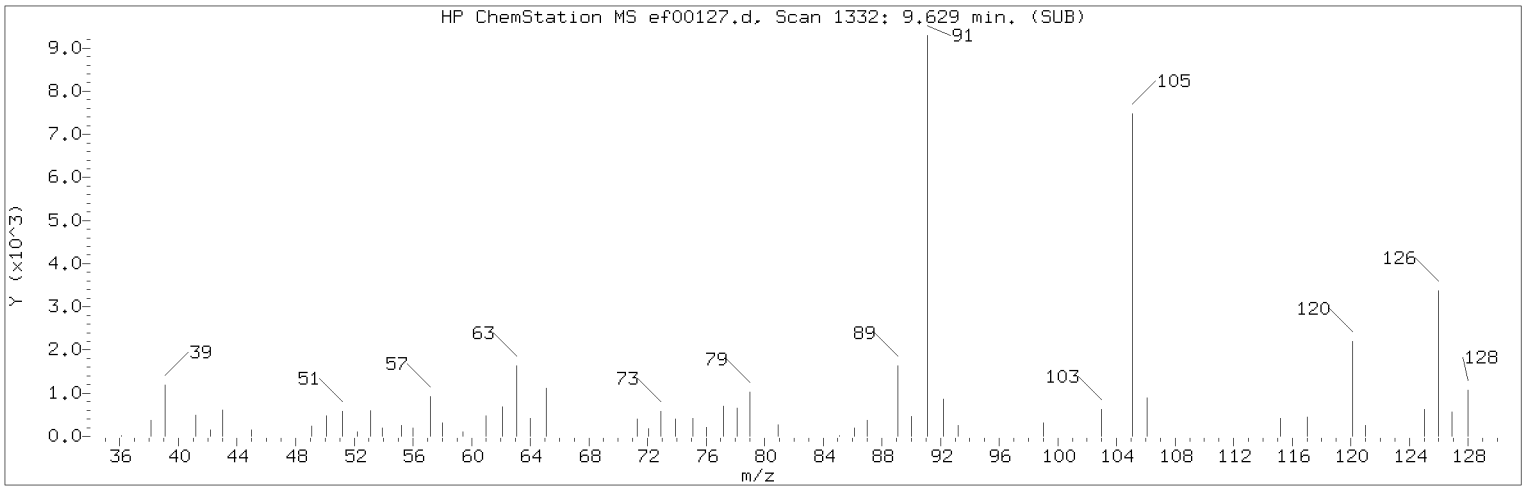
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 02:44 Unknown

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

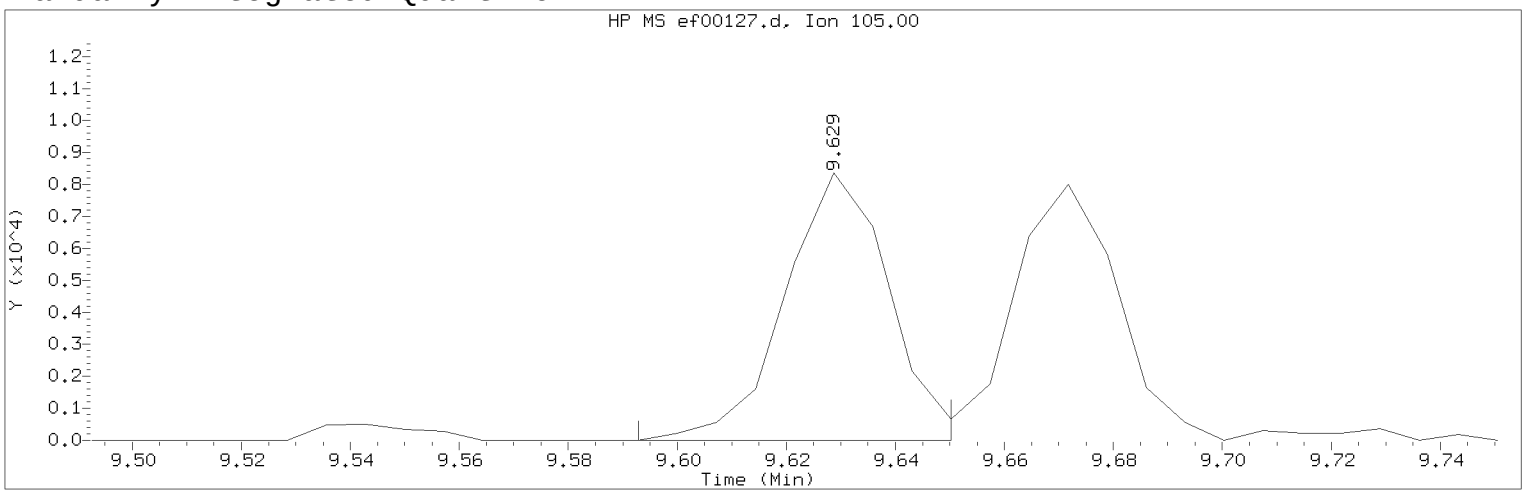
Compound Number : 84
Compound Name : n-Propylbenzene
Expected RT (minutes) : 9.543
Quant Ion : 120.00

Digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:06 jbs01304

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

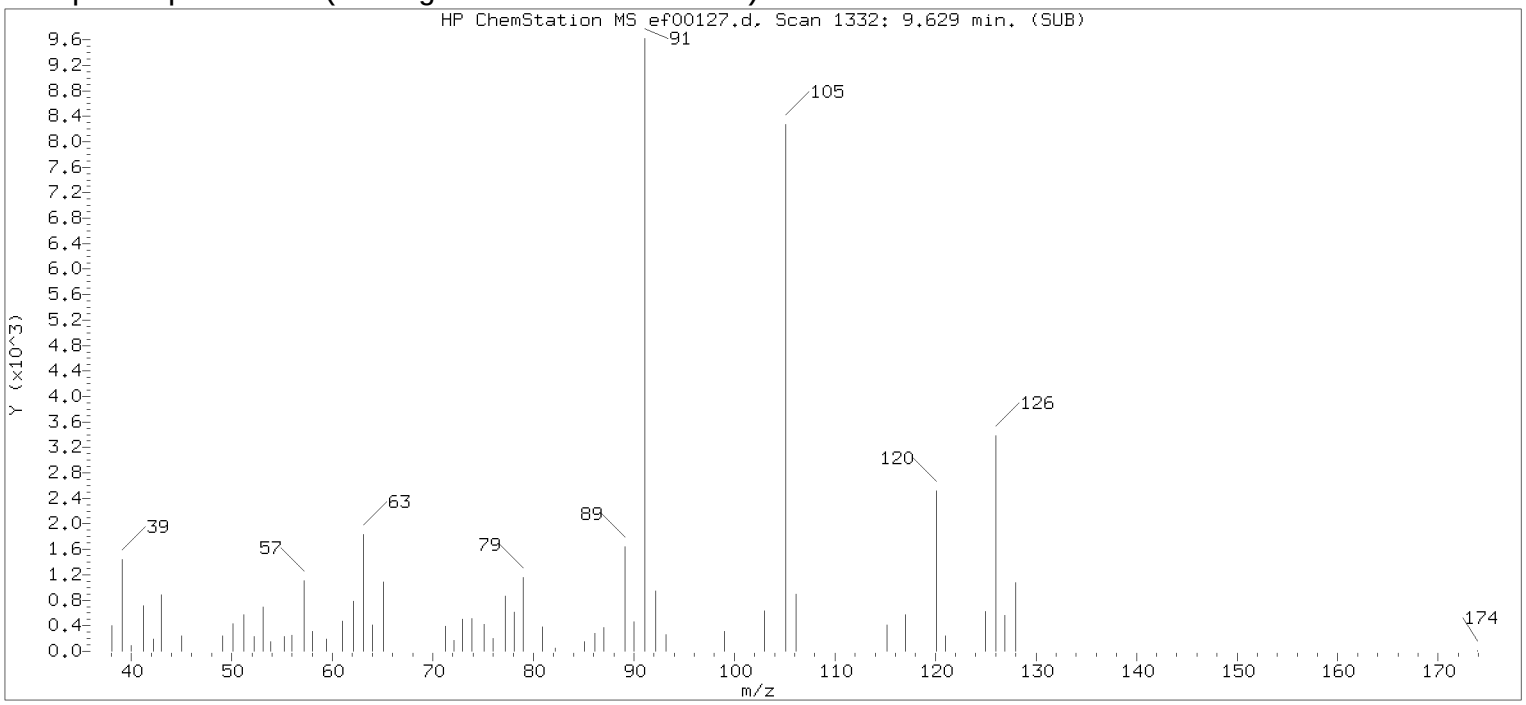
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 11097M
Concentration (ppb(v)) : 0.1155
Integration start scan : 1326 Integration stop scan: 1334
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

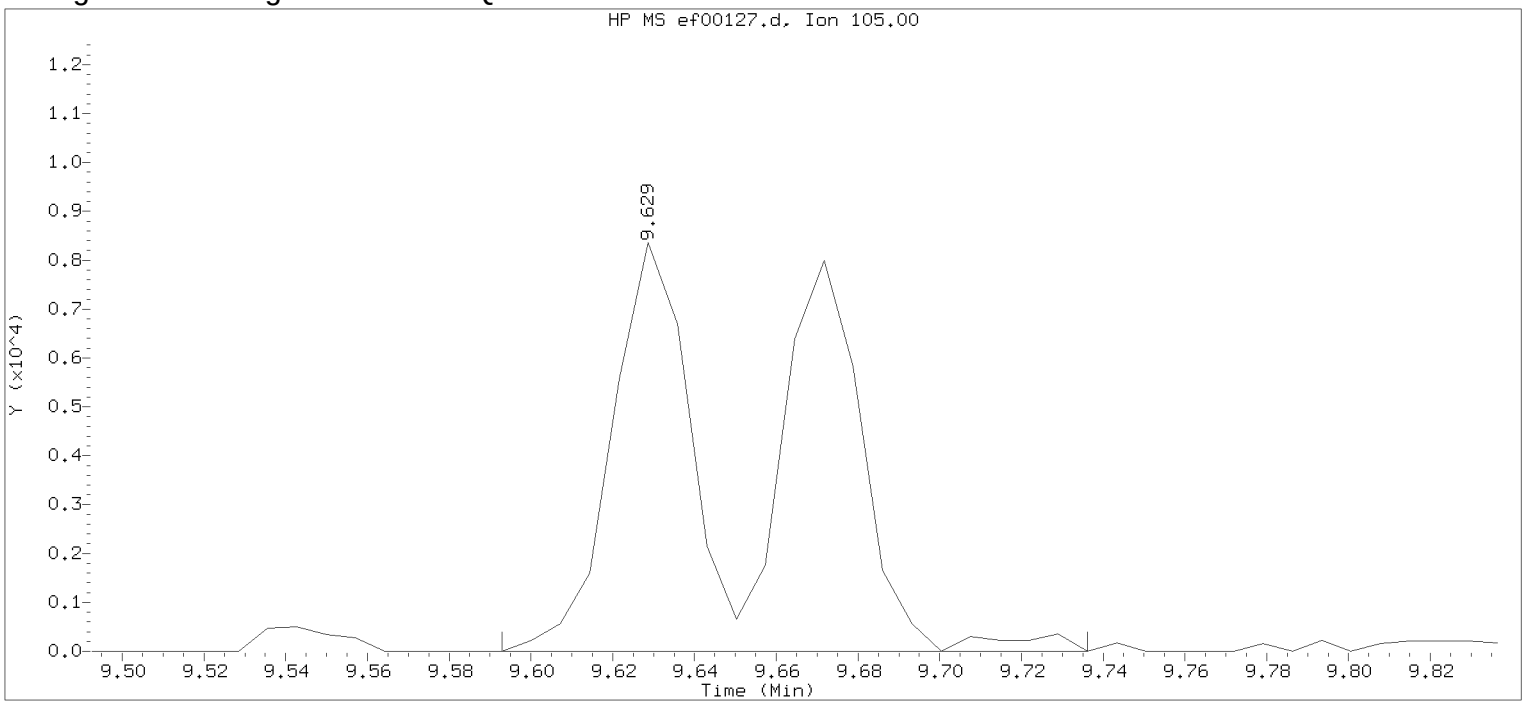
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:08.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

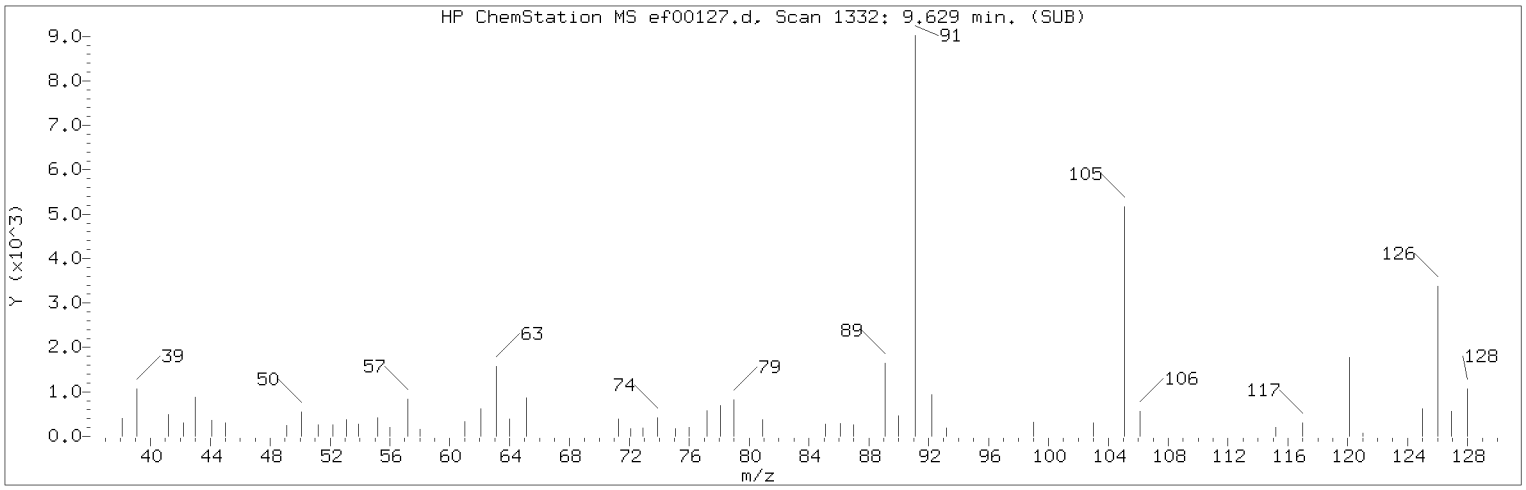
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 02:44 Unknown

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

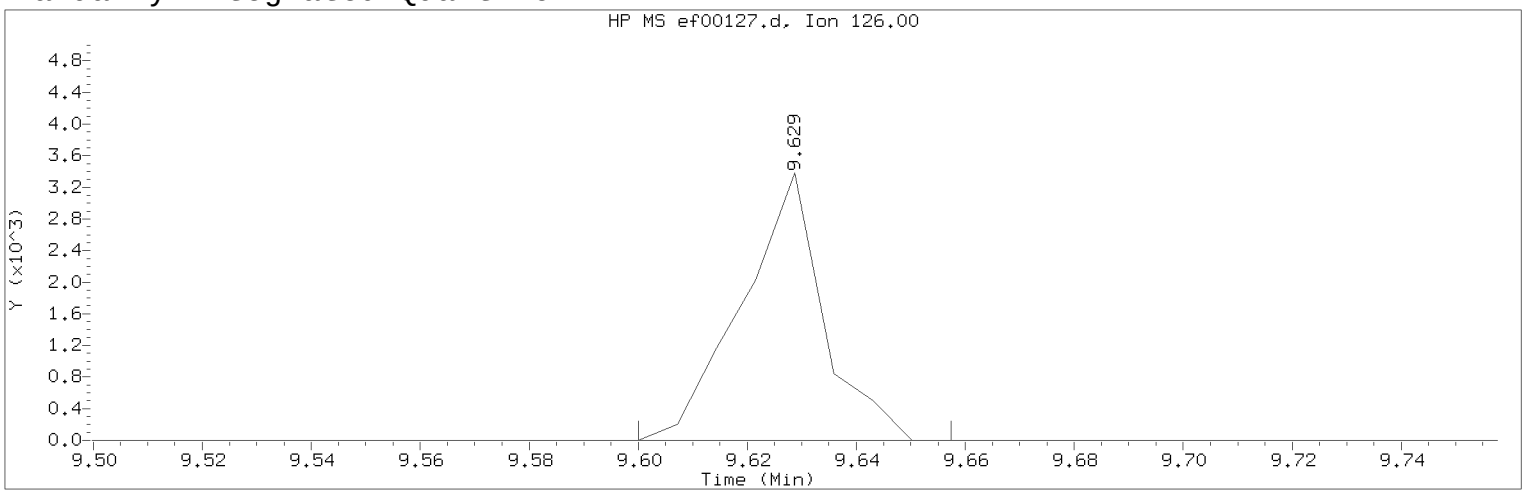
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 21973
Concentration (ppb(v)) : 0.2300
Integration start scan : 1326 Integration stop scan: 1346
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:06.
Target 3.5 esignature used.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:06 jbs01304

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

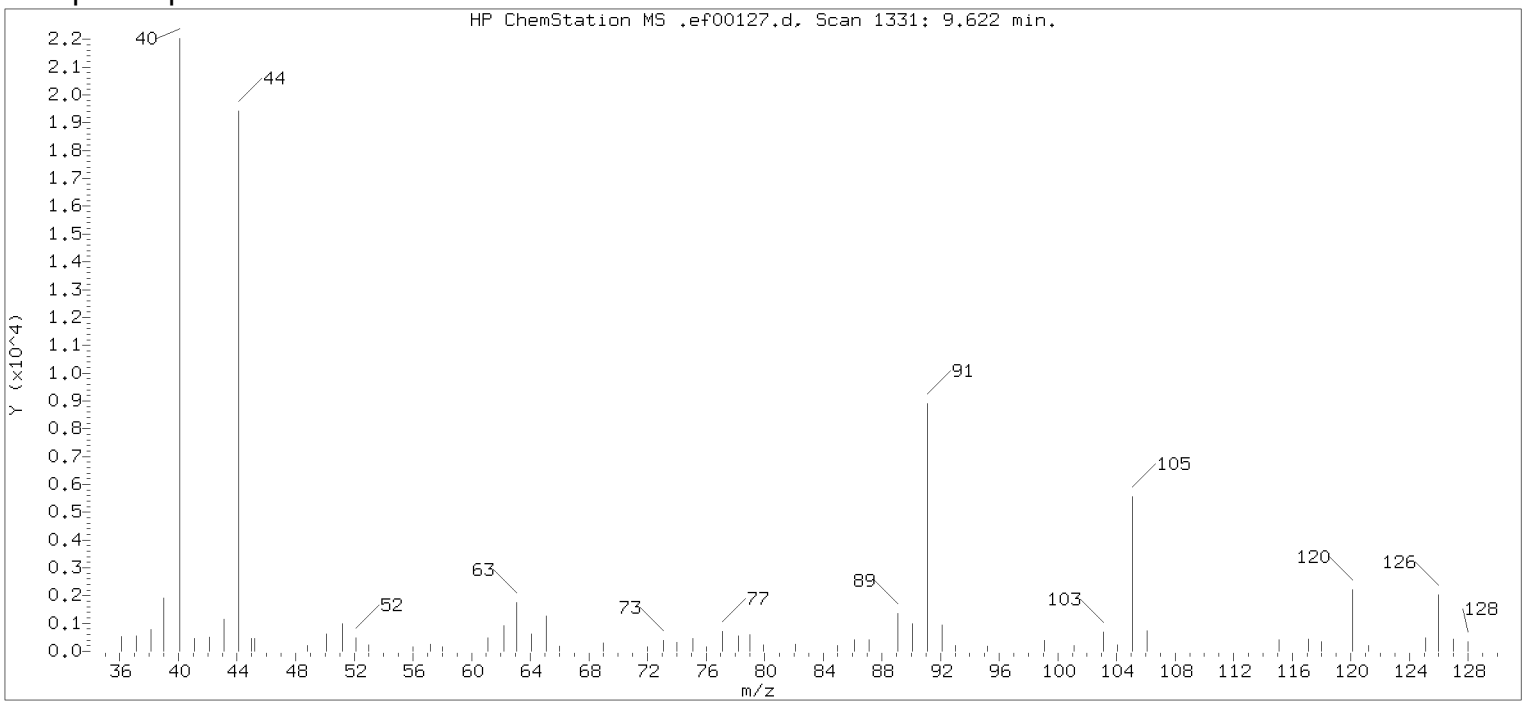
Compound Number : 85
Compound Name : 2-Chlorotoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 126.00
Area (flag) : 3493M
Concentration (ppb(v)) : 0.1361
Integration start scan : 1327 Integration stop scan: 1335
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

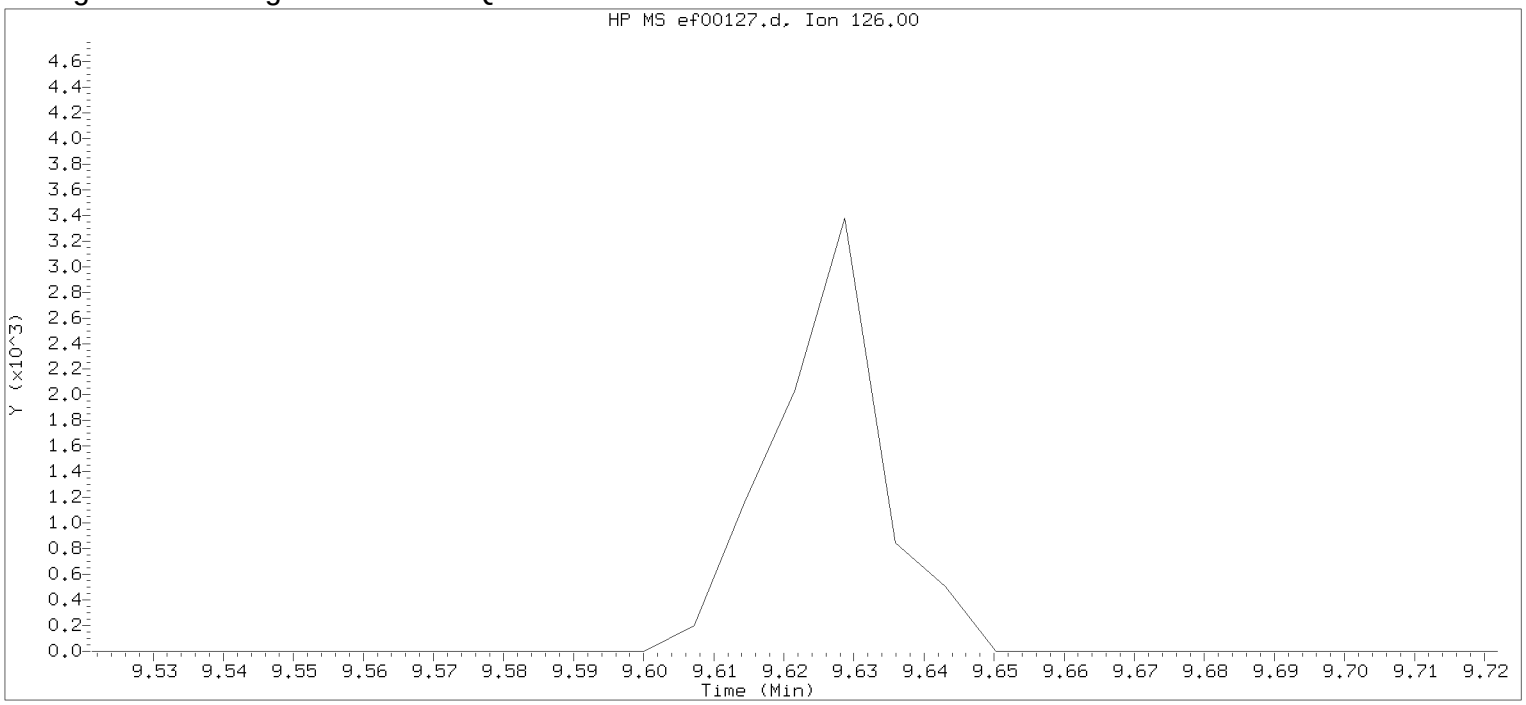
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:08.
PARALLAX ID: jbs01304

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

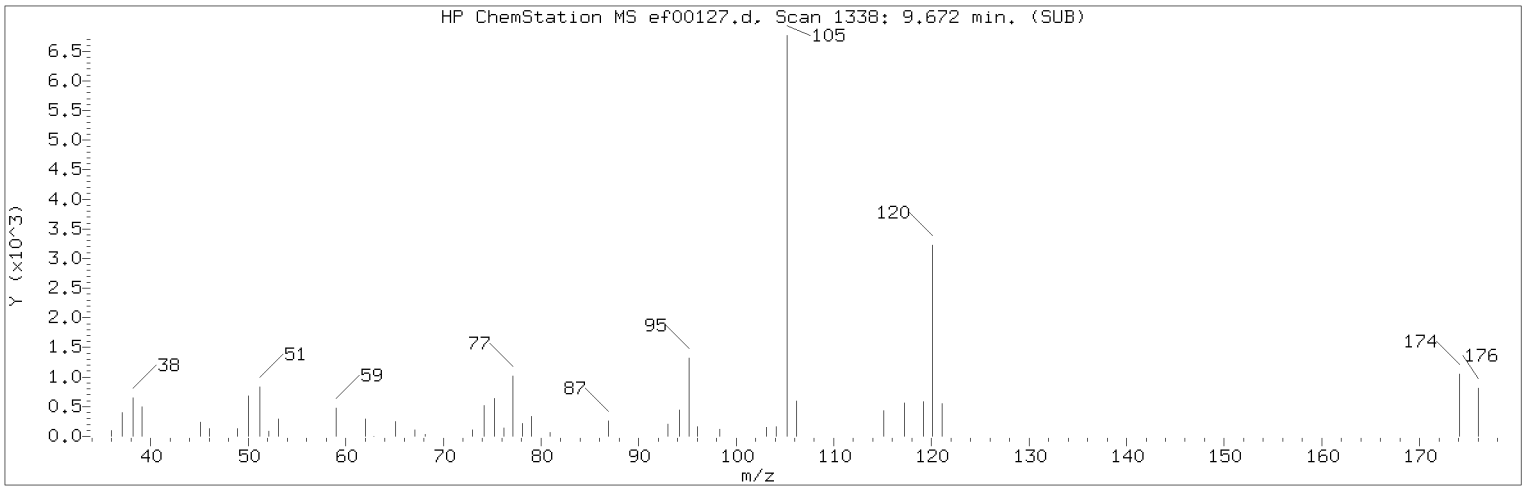
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 02:44 Unknown

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

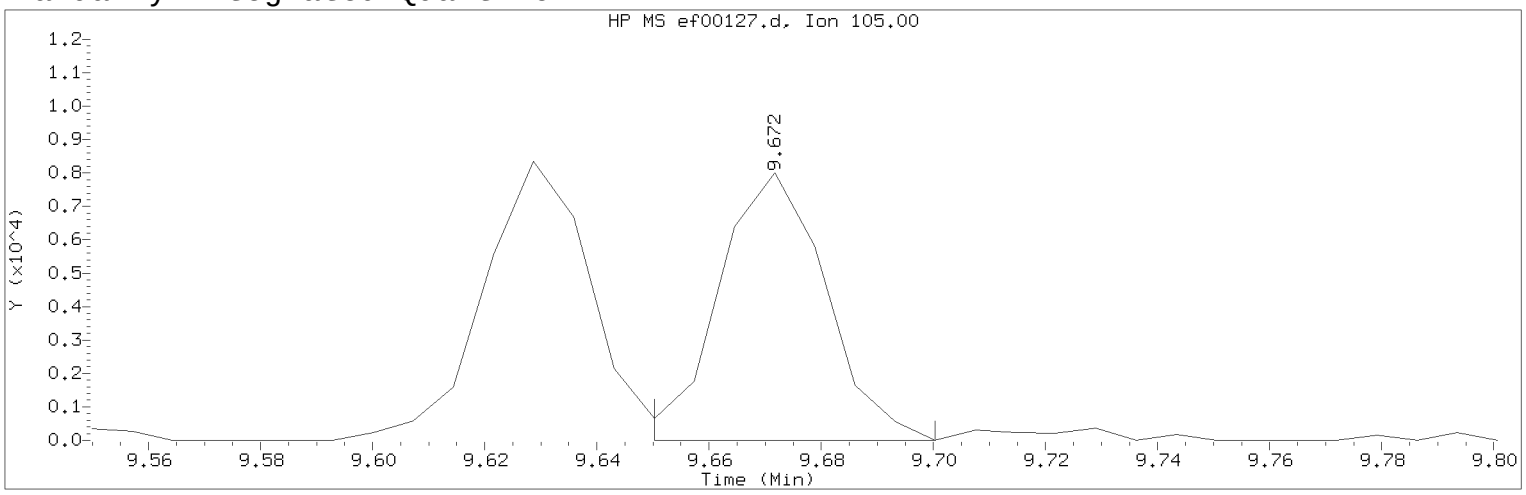
Compound Number : 85
Compound Name : 2-Chlorotoluene
Expected RT (minutes) : 9.622
Quant Ion : 126.00

Digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:06 jbs01304

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

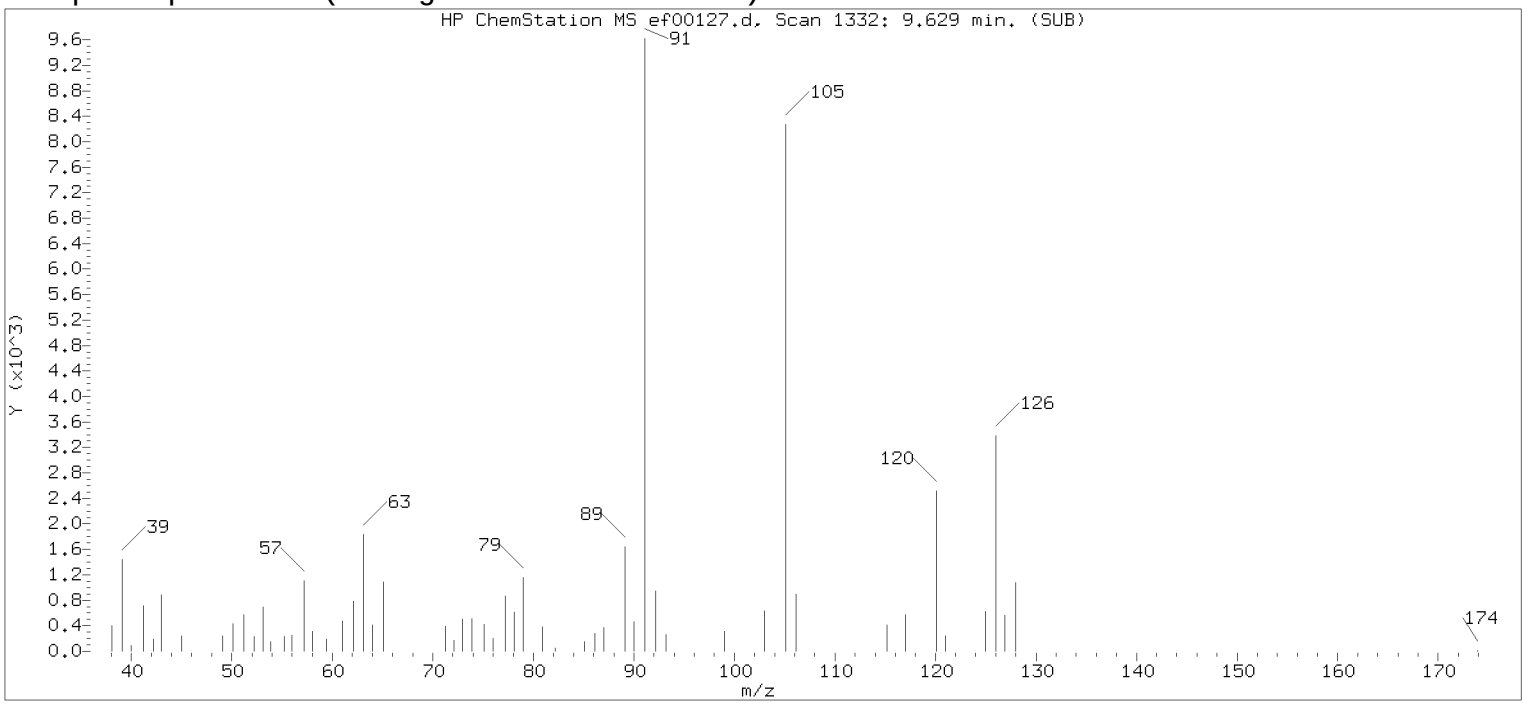
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 10680M
Concentration (ppb(v)) : 0.1363
Integration start scan : 1334 Integration stop scan: 1341
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

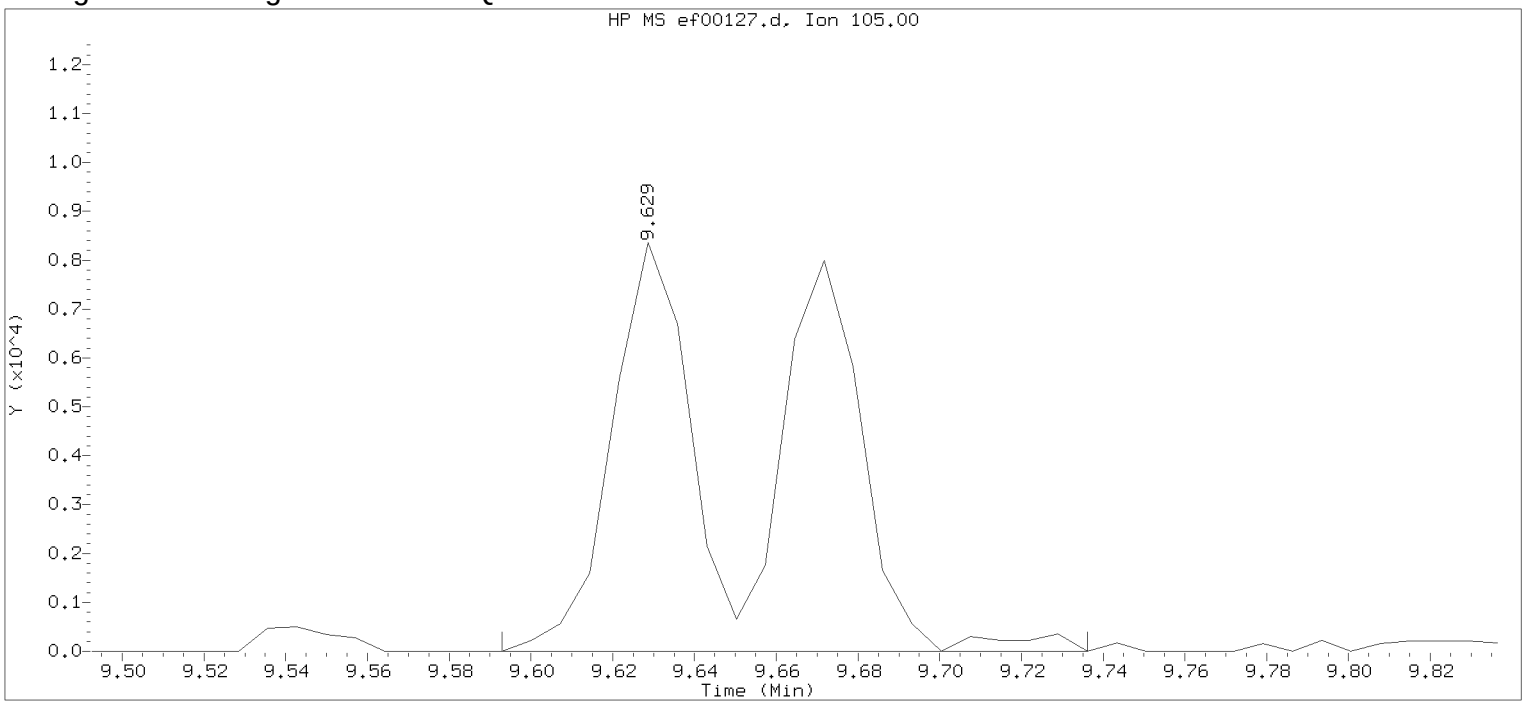
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:08.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

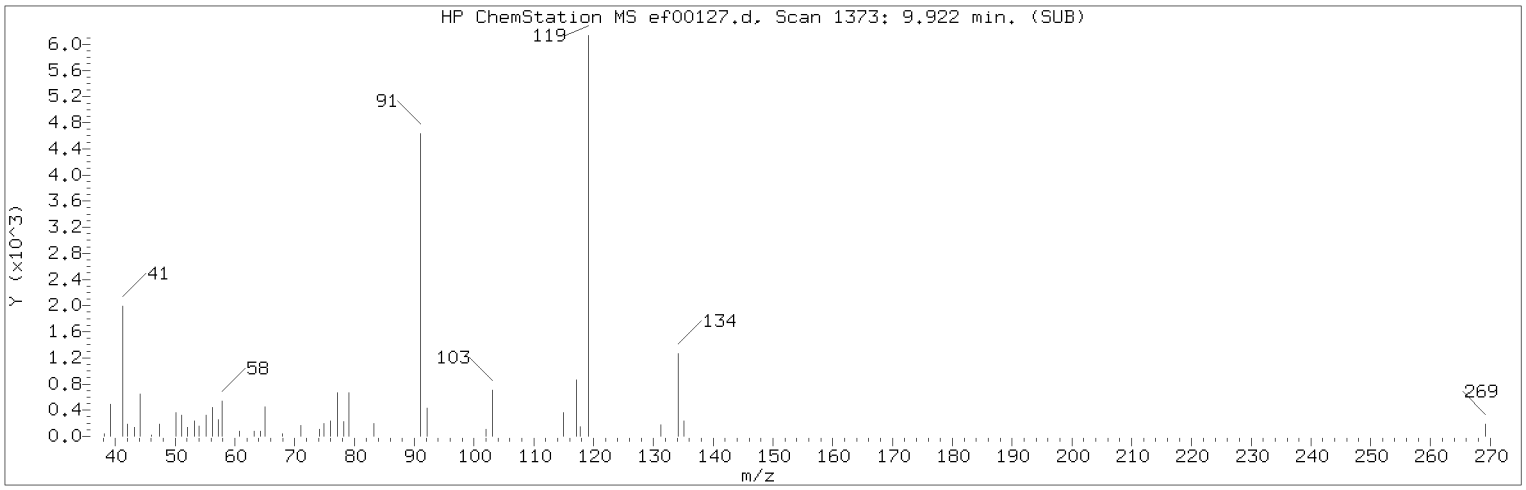
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 02:44 Unknown

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

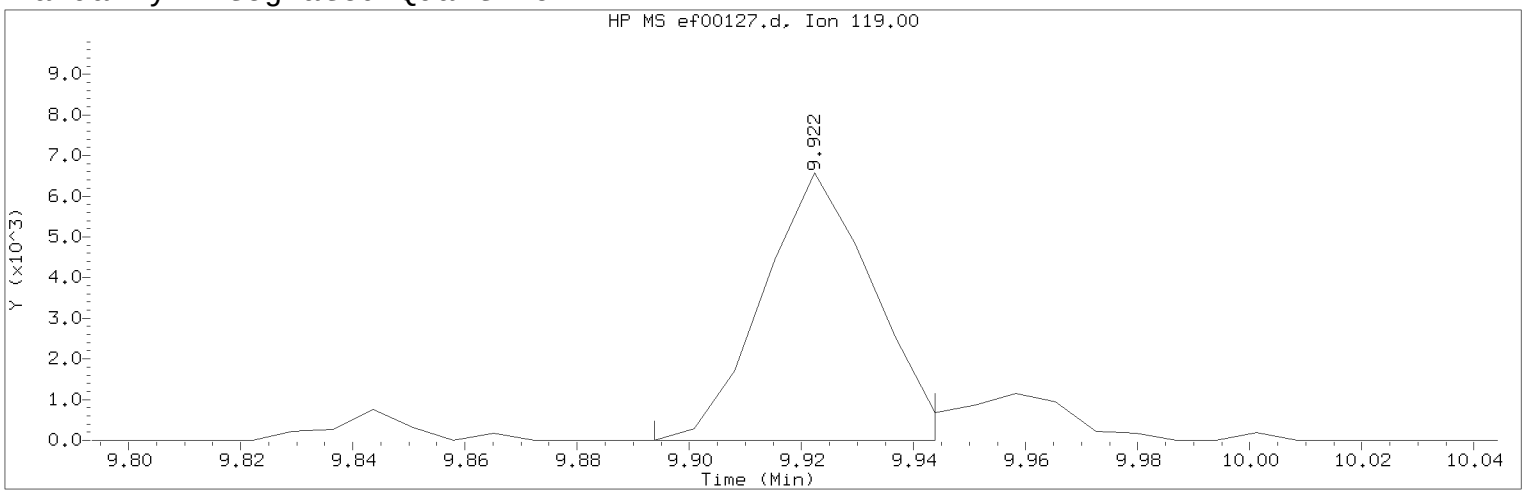
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 21973
Concentration (ppb(v)) : 0.2807
Integration start scan : 1326 Integration stop scan: 1346
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:06.
Target 3.5 esignature used.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:06 jbs01304

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

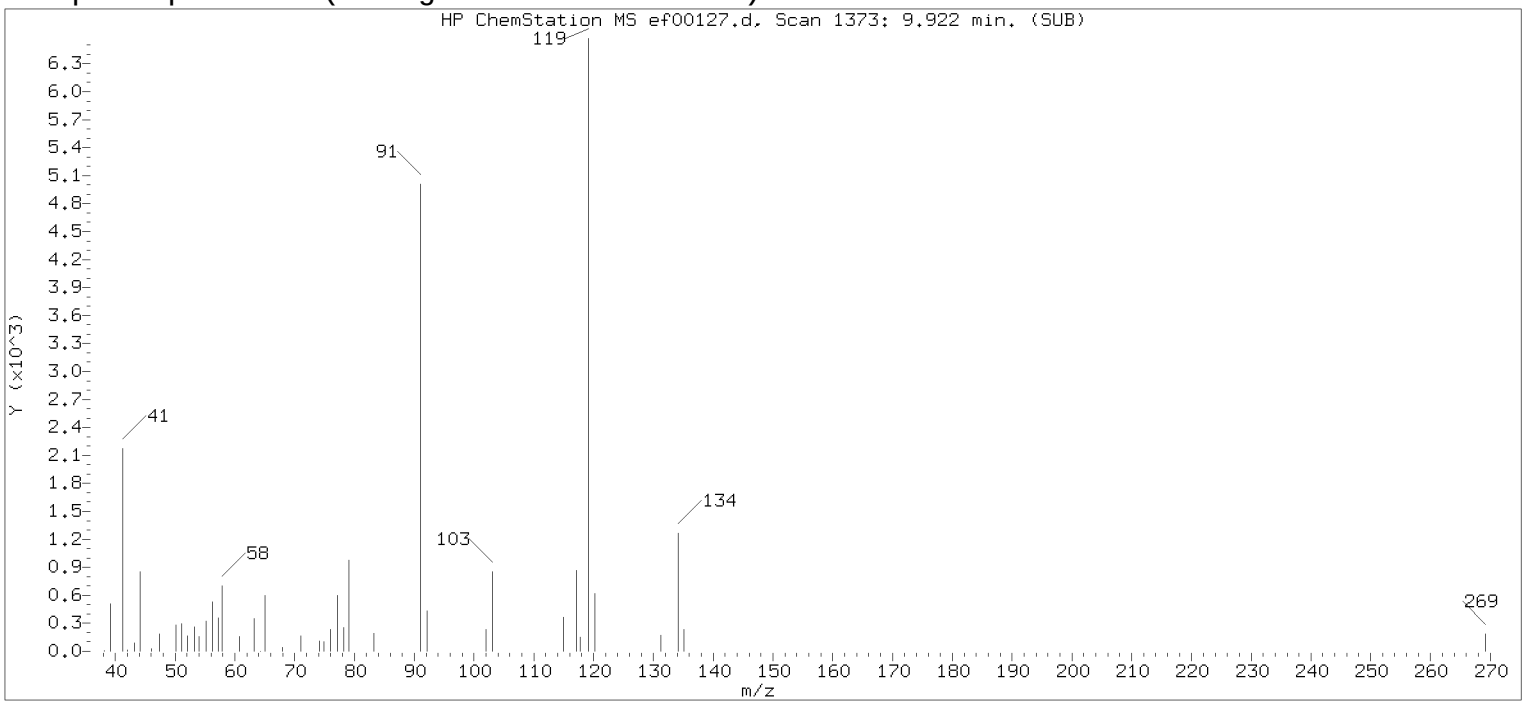
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 9053M
Concentration (ppb(v)) : 0.1273
Integration start scan : 1368 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

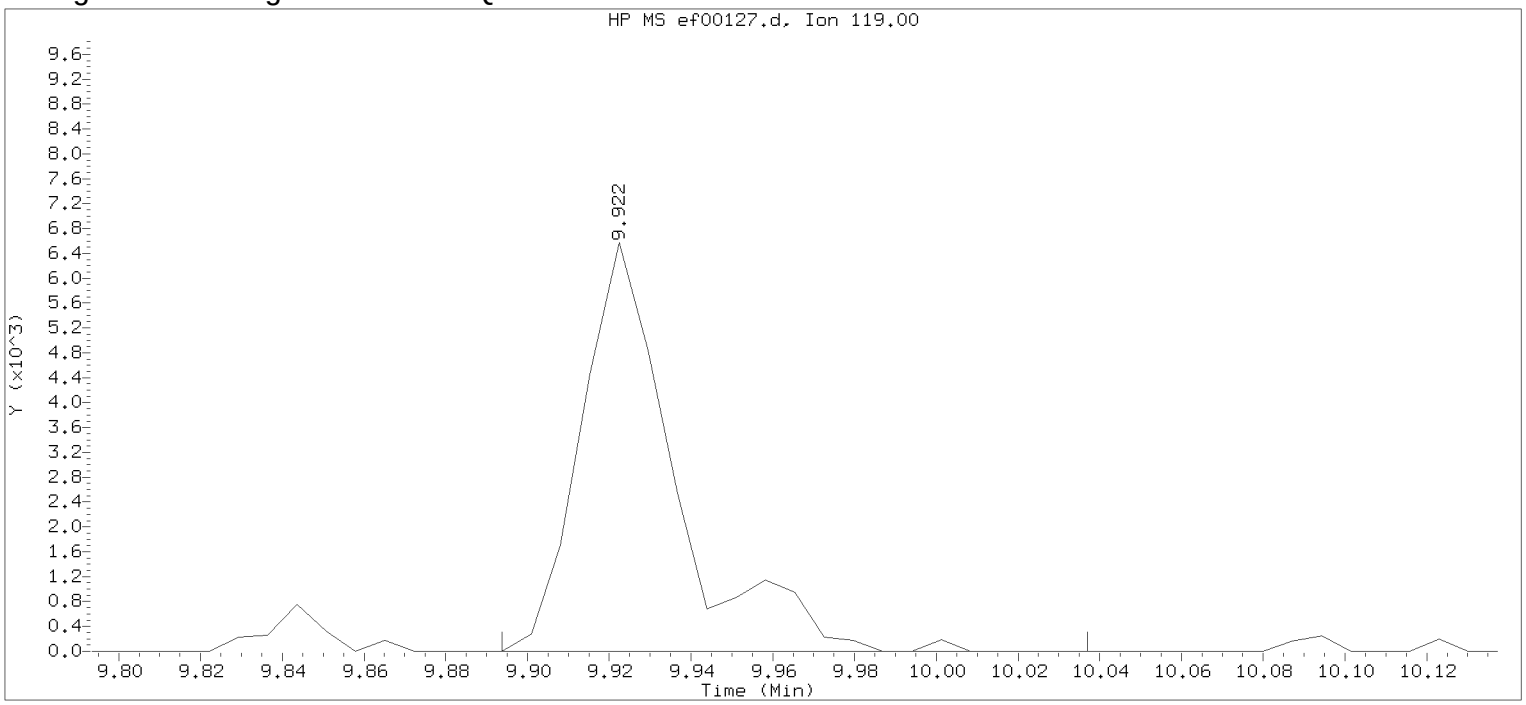
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:08.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

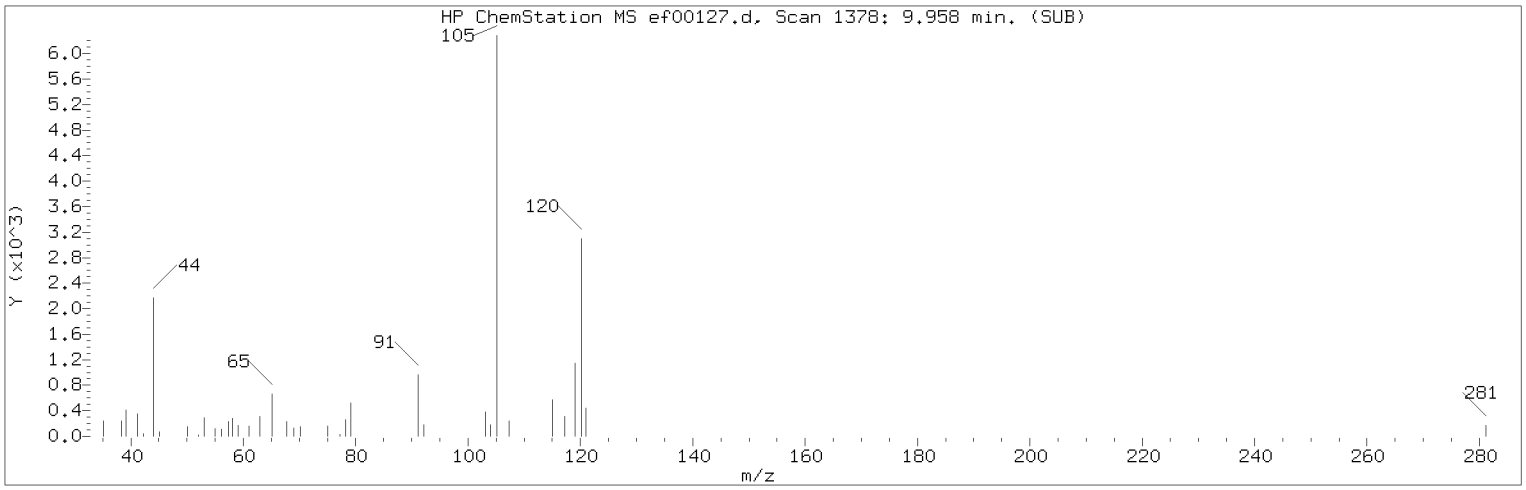
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 02:44 Unknown

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

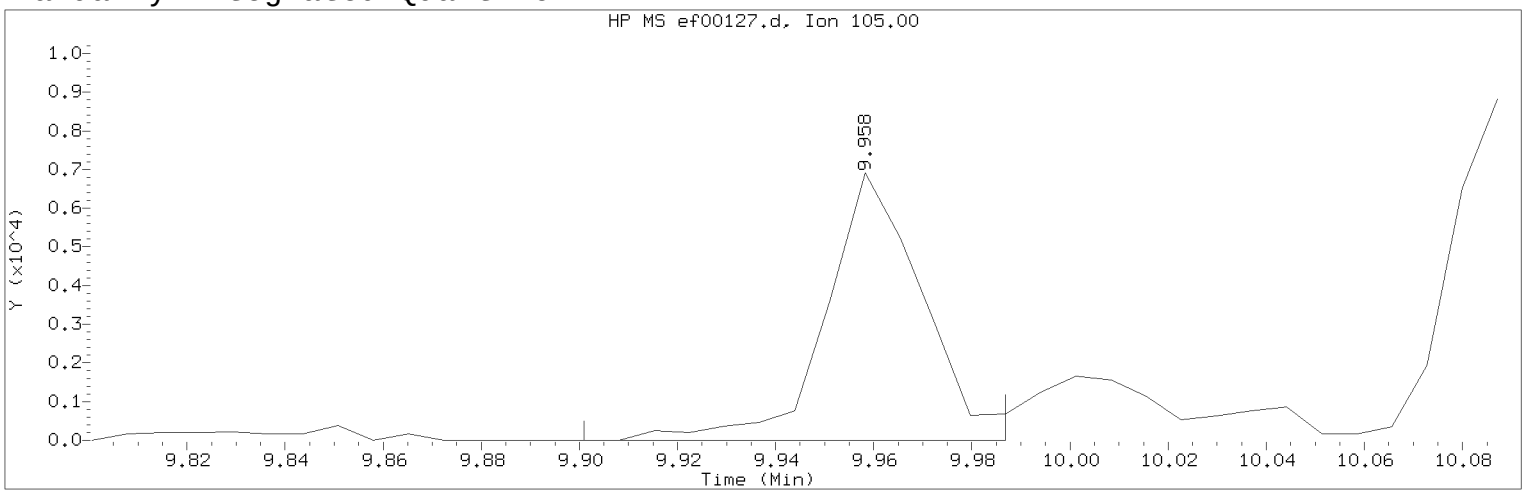
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 10580
Concentration (ppb(v)) : 0.1488
Integration start scan : 1368 Integration stop scan: 1388
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:06.
Target 3.5 esignature used. EDI Page 1364 of 1687

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:06 jbs01304

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

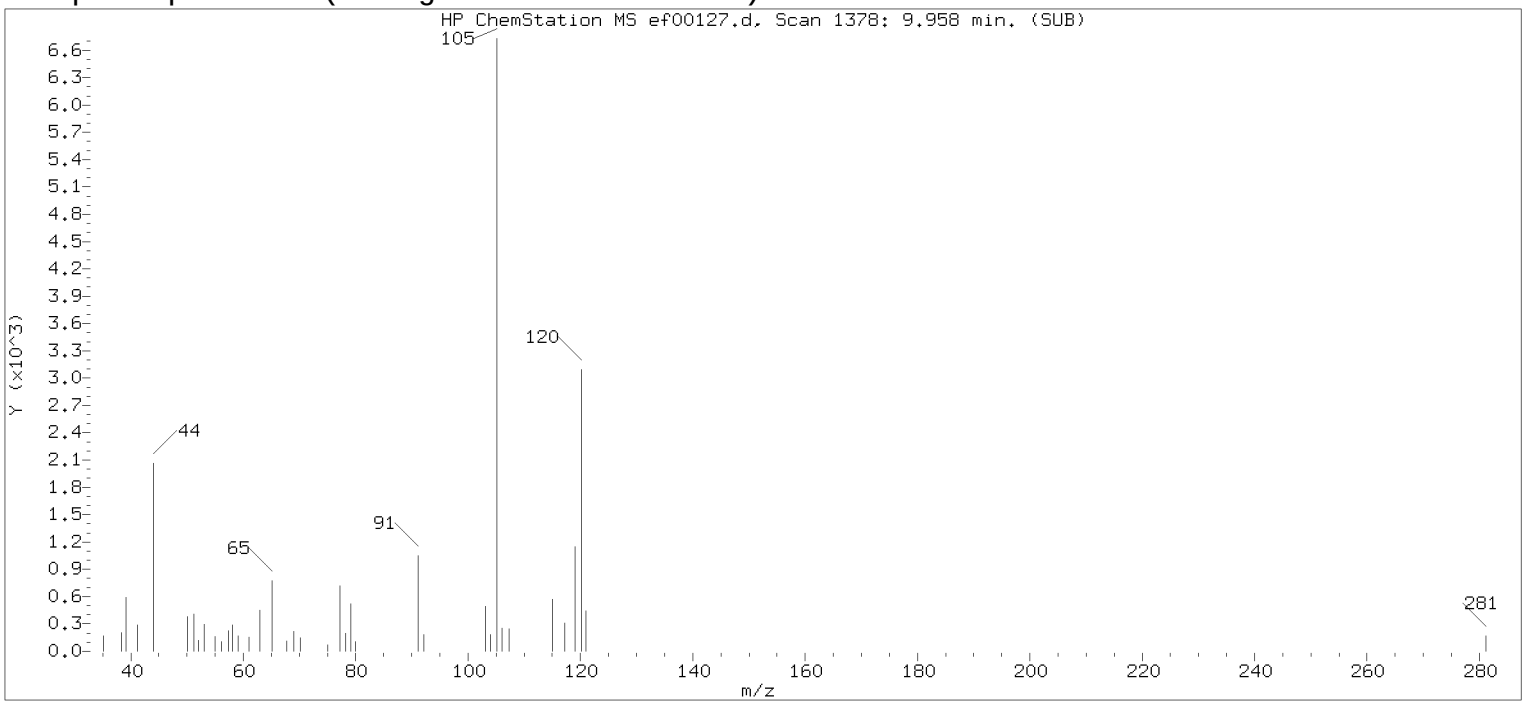
Compound Number : 90
Compound Name : 1,2,4-Trimethylbenzene
Scan Number : 1378
Retention Time (minutes): 9.958
Quant Ion : 105.00
Area (flag) : 9503M
Concentration (ppb(v)) : 0.1237
Integration start scan : 1369 Integration stop scan: 1381
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

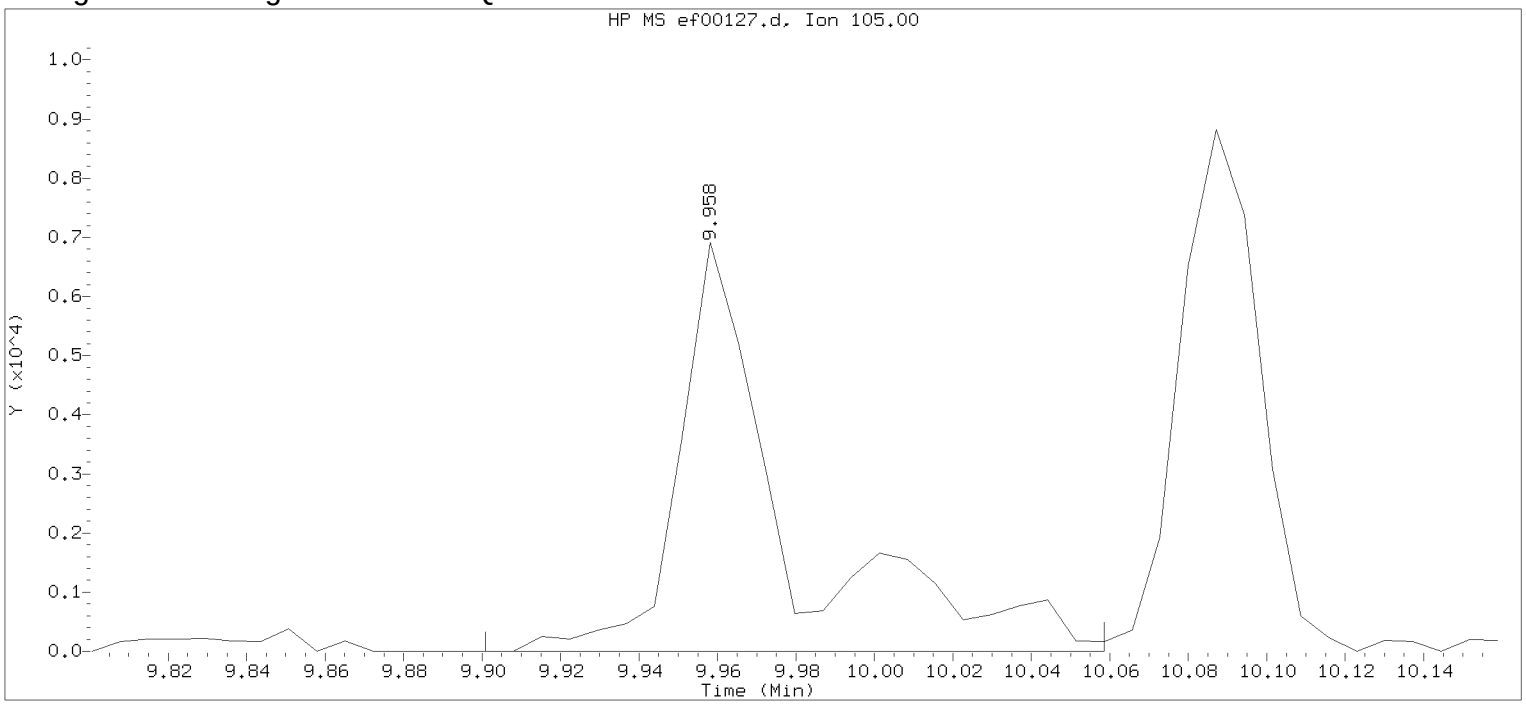
Analyst responsible for change: Digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:08.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

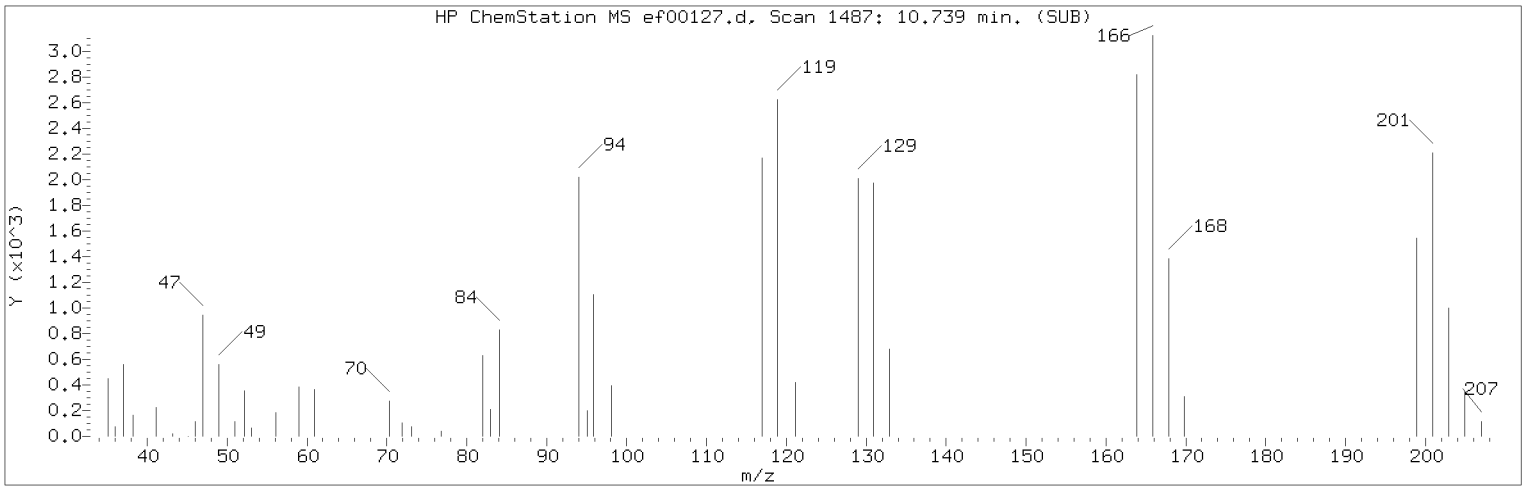
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 02:44 Unknown

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

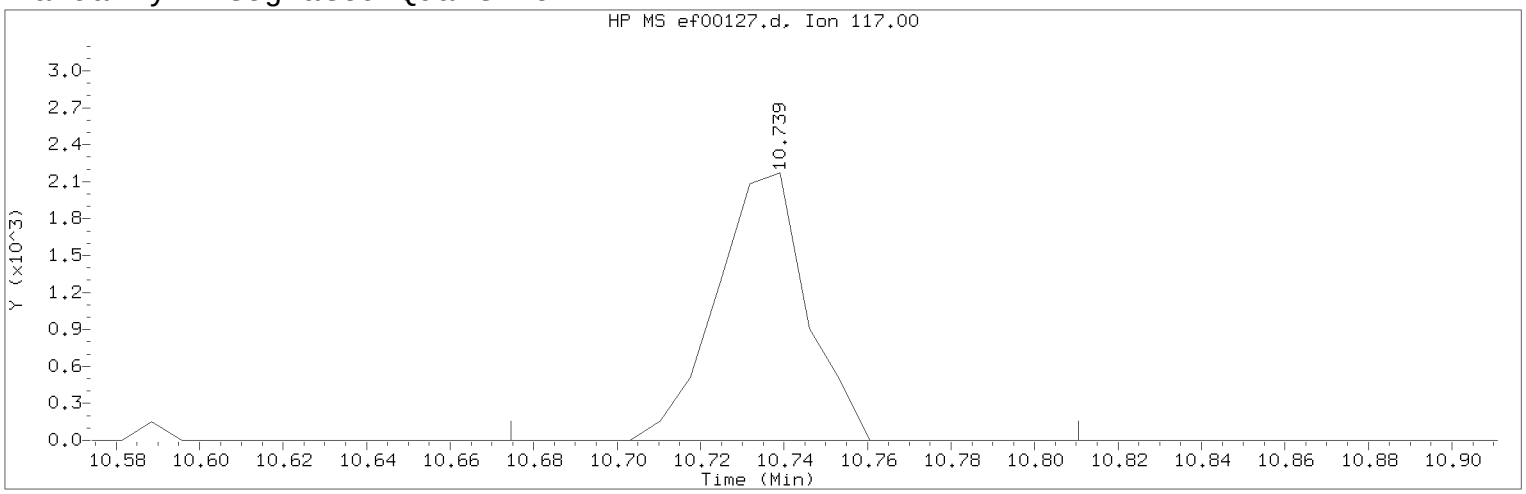
Compound Number : 90
Compound Name : 1,2,4-Trimethylbenzene
Scan Number : 1378
Retention Time (minutes): 9.958
Quant Ion : 105.00
Area : 13226
Concentration (ppb(v)) : 0.1731
Integration start scan : 1369 Integration stop scan: 1391
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:06.
Target 3.5 esignature used. GLED1 Page 1368 of 1687

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:06 jbs01304

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

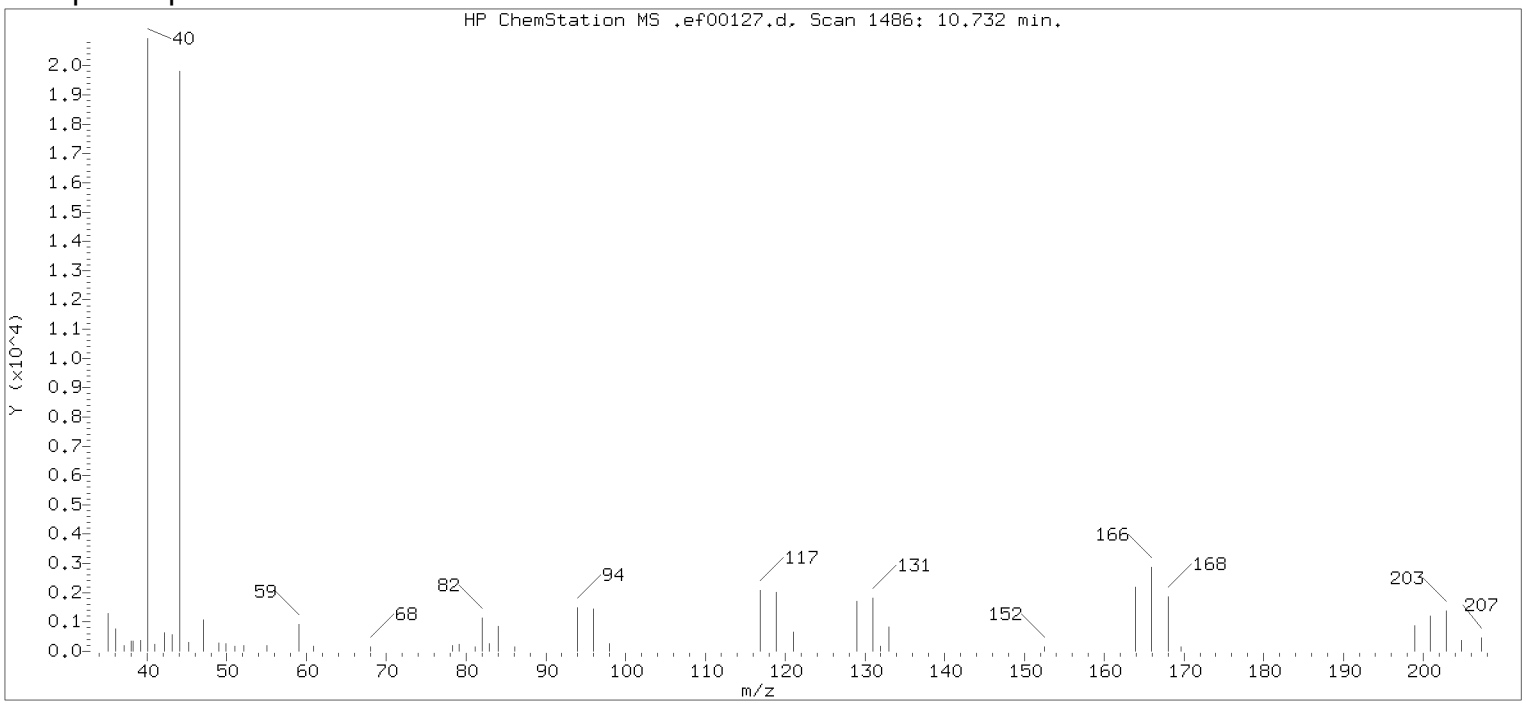
Compound Number : 98
Compound Name : Hexachloroethane
Scan Number : 1487
Retention Time (minutes): 10.739
Quant Ion : 117.00
Area (flag) : 3265M
Concentration (ppb(v)) : 0.1415
Integration start scan : 1477 Integration stop scan: 1496
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

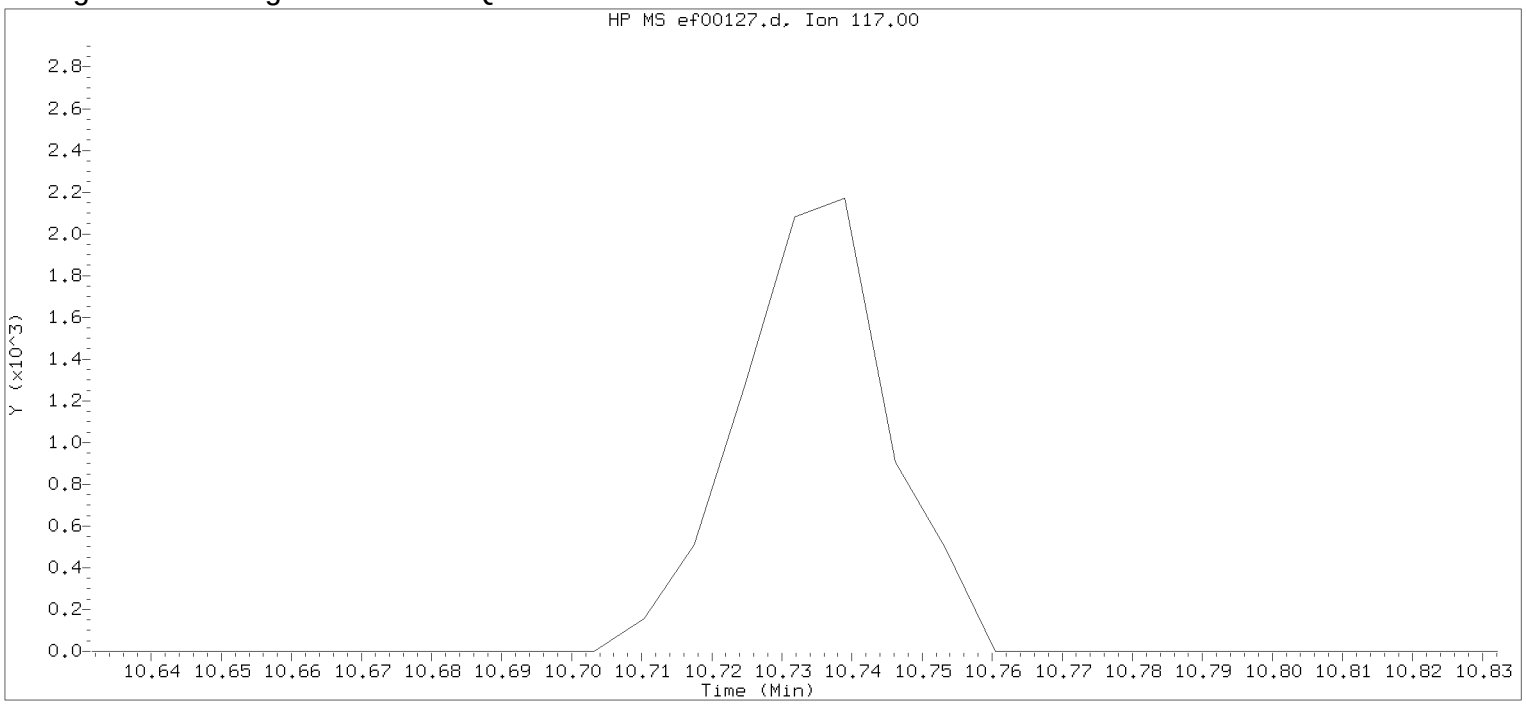
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:08.
PARALLAX ID: jbs01304

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

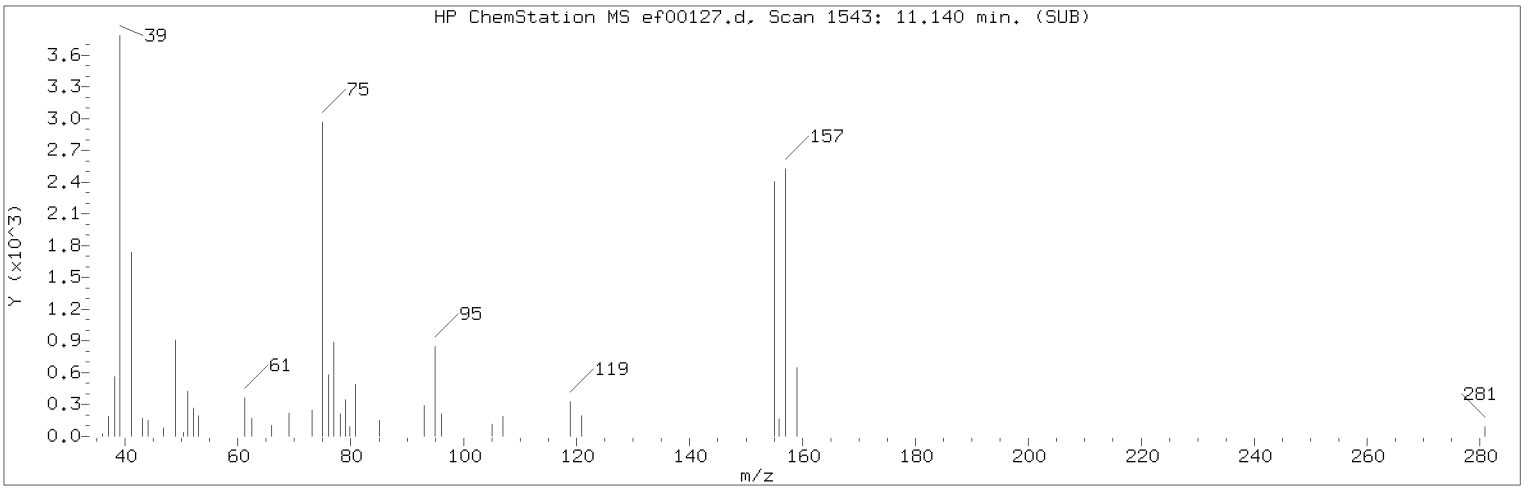
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 02:44 Unknown

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

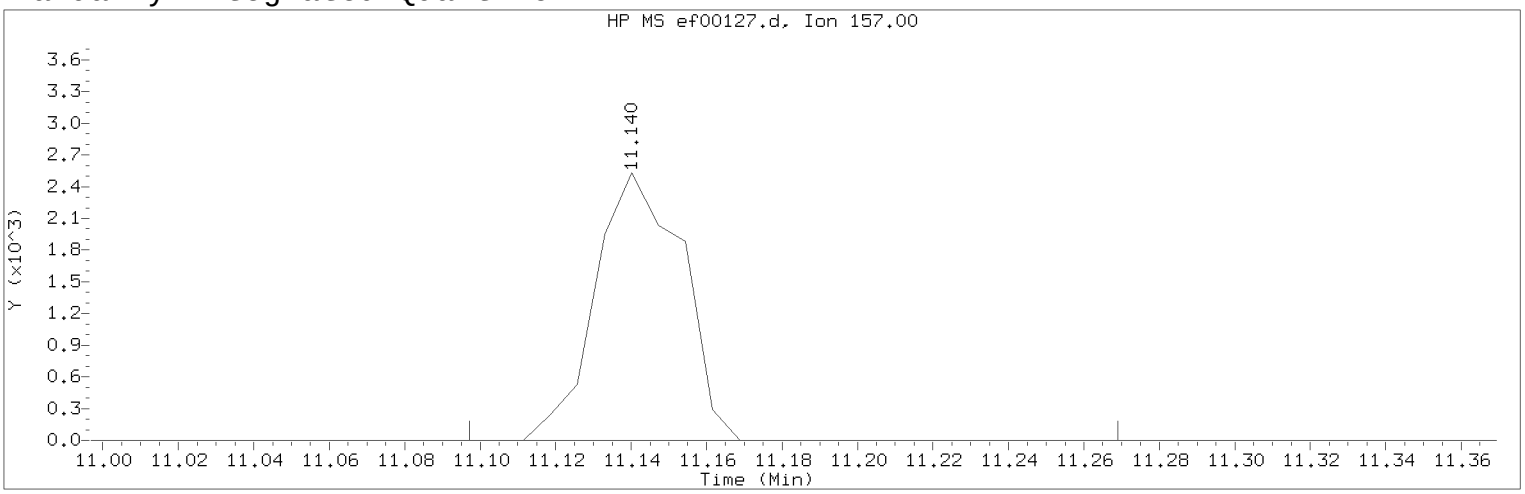
Compound Number : 98
Compound Name : Hexachloroethane
Expected RT (minutes) : 10.732
Quant Ion : 117.00

Digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 11-JUN-2018 13:09
Date, time and analyst ID of latest file update: 11-Jun-2018 15:06 jbs01304

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

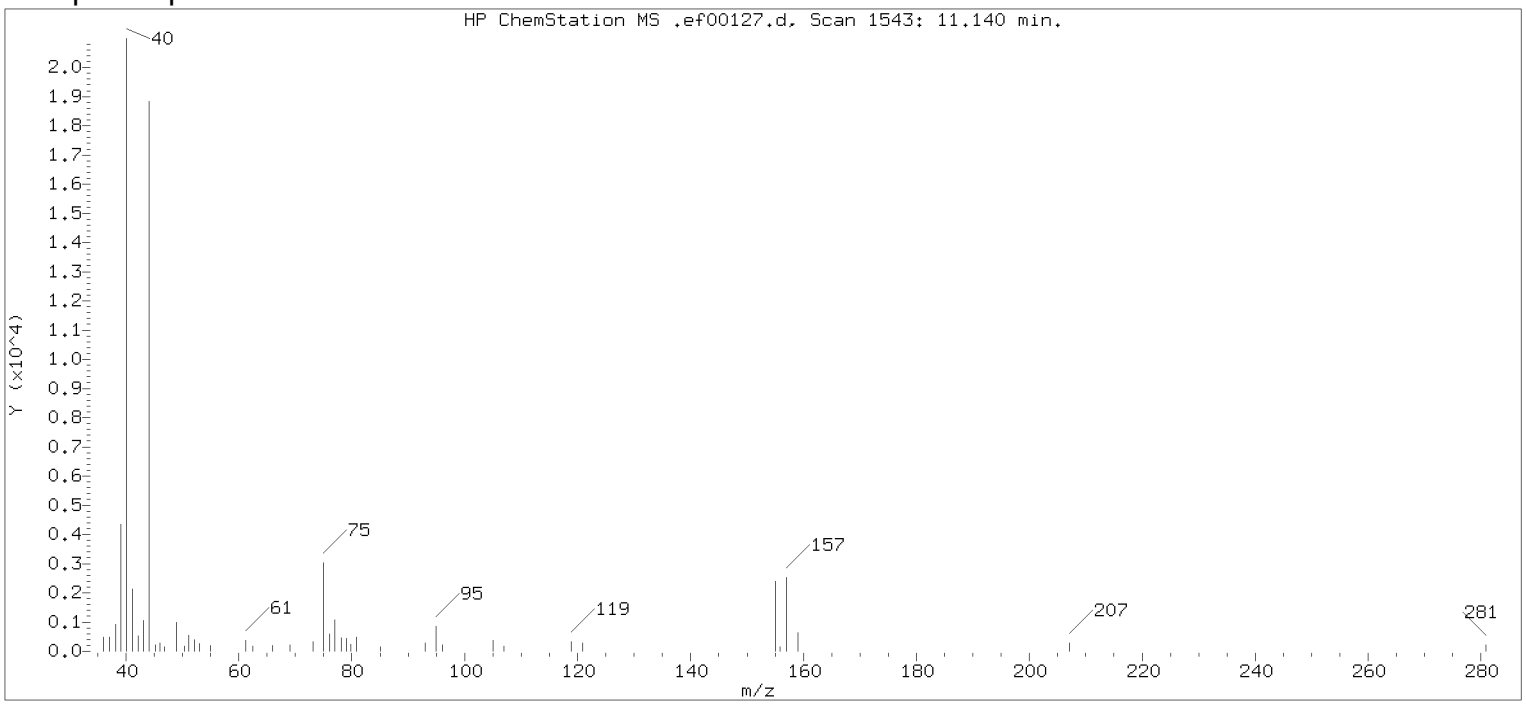
Compound Number : 99
Compound Name : 1,2-Dibromo-3-chloropropane
Scan Number : 1543
Retention Time (minutes): 11.140
Quant Ion : 157.00
Area (flag) : 4066M
Concentration (ppb(v)) : 0.1583
Integration start scan : 1536 Integration stop scan: 1560
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

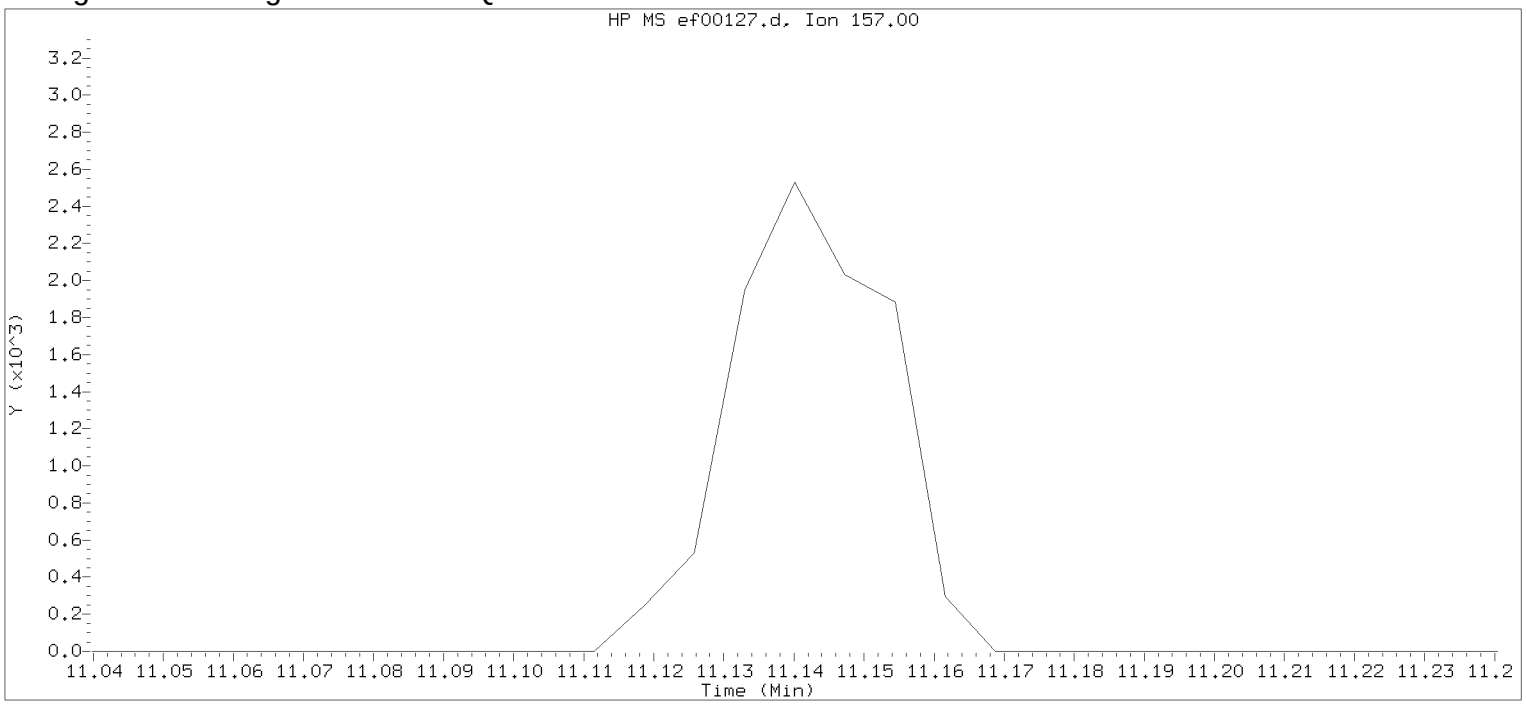
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:08.
PARALLAX ID: jbs01304

Sample Spectrum



Original Integration of Quant Ion



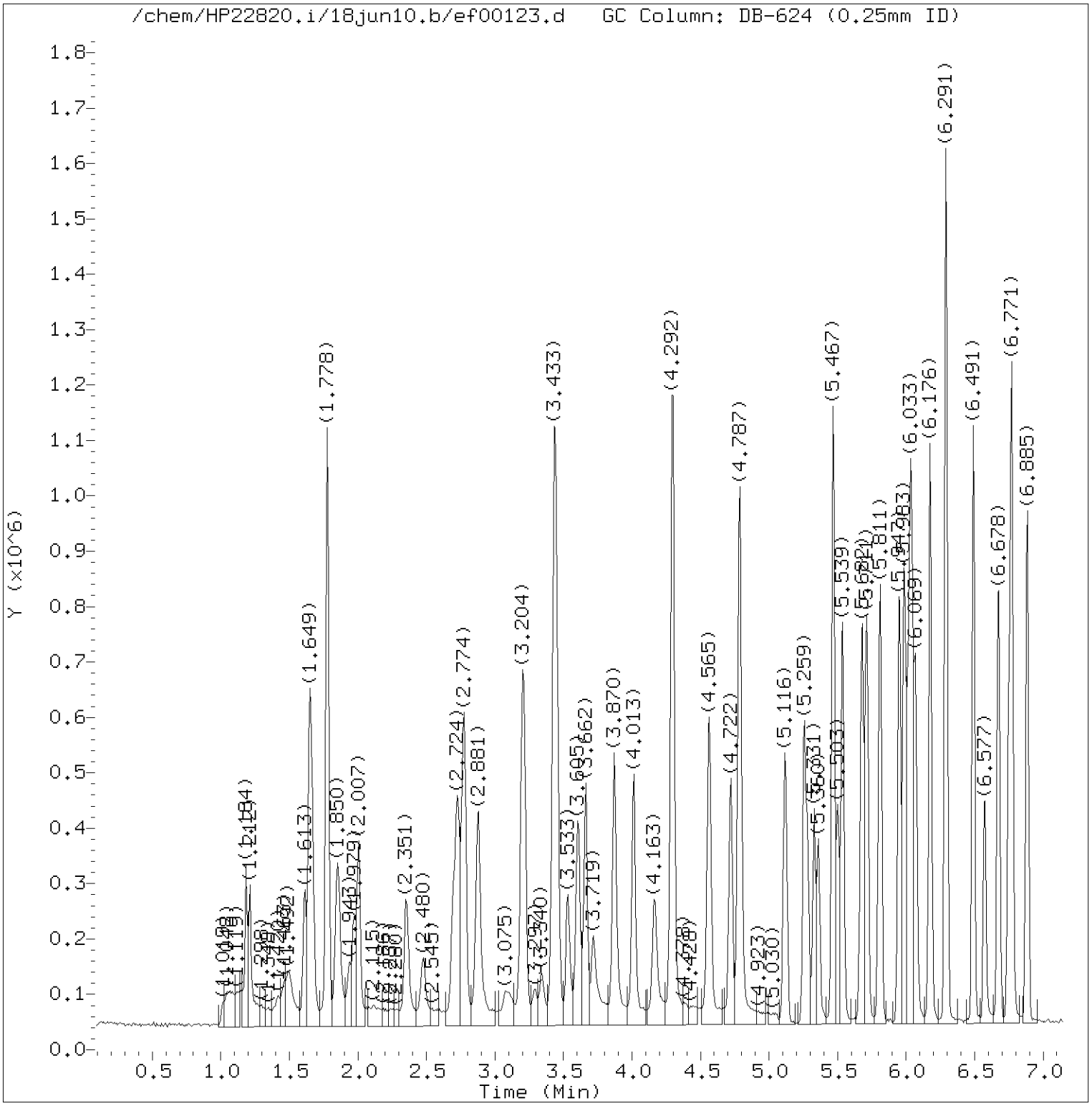
Data File: /chem/HP22820.i/18jun10.b/ef00127.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 02:25 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 02:44 Unknown

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

Compound Number : 99
Compound Name : 1,2-Dibromo-3-chloropropane
Expected RT (minutes) : 11.140
Quant Ion : 157.00

Digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:06.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

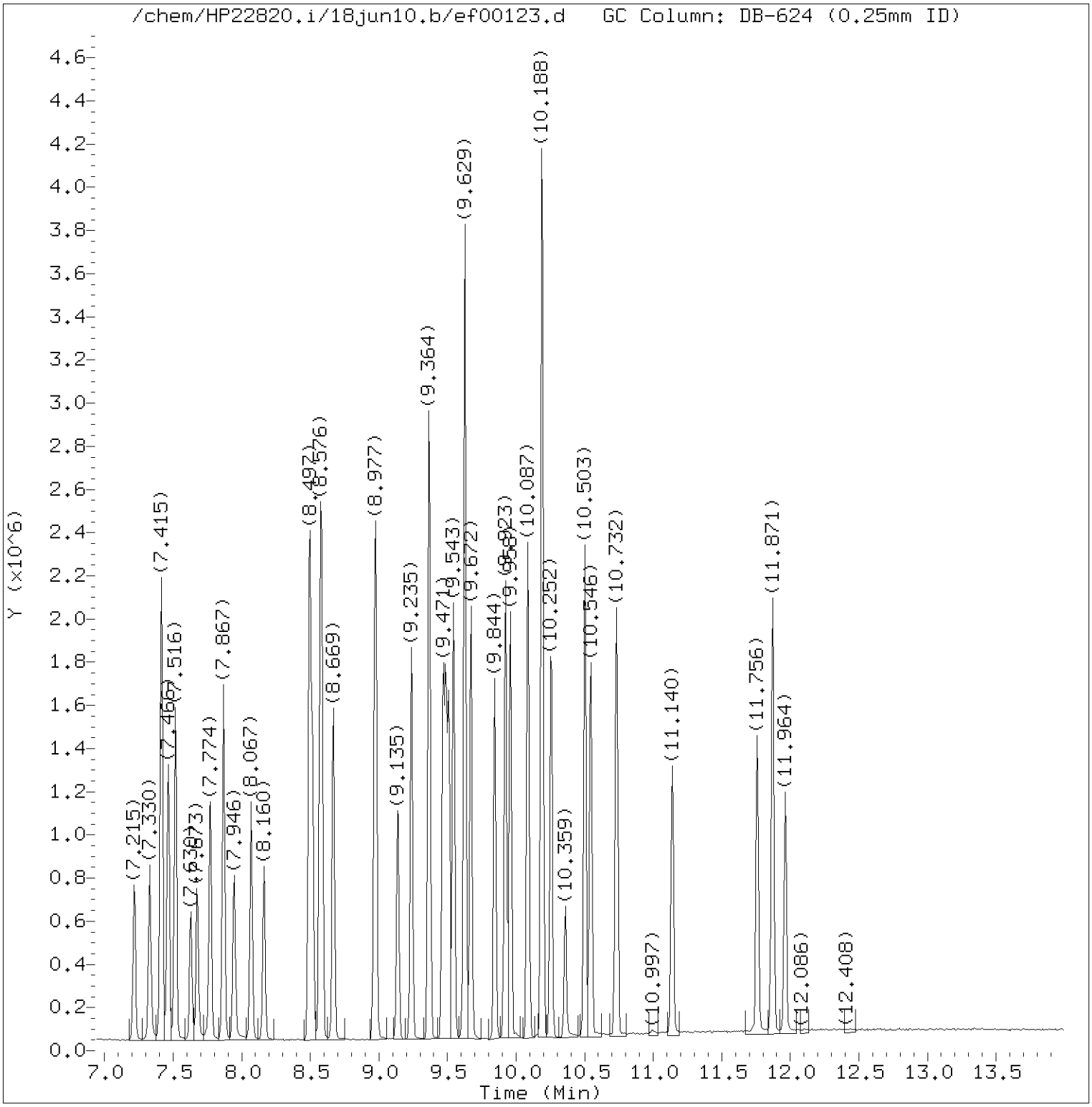
Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00123.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 00:21 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 12:25 jeb07445

Sample Name: LCSE04 Lab Sample ID: LCSE04

Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00123.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 00:21 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 12:25 jeb07445

Sample Name: LCSE04 Lab Sample ID: LCSE04

Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00123.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 00:21 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 12:25 jeb07445

Sample Name: LCSE04 Lab Sample ID: LCSE04

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.613	41	132761	9.744
2) Dichlorodifluoromethane	(1)	1.649	85	498238	10.440
3) Chlorodifluoromethane	(1)	1.671	51	331419	10.953
4) Freon 114	(1)	1.778	85	524417	10.239
5) Chloromethane	(1)	1.850	50	202218	10.525
6) Vinyl Chloride	(1)	1.972	62	193941	10.560
7) 1,3-Butadiene	(1)	2.007	54	128148	9.700
8) Bromomethane	(1)	2.351	94	165749	10.600
9) Chloroethane	(1)	2.480	64	107758	10.528
10) Bromoethene	(1)	2.695	106	164167	10.304
11) Dichlorofluoromethane	(1)	2.731	67	452386	11.112
12) Trichlorofluoromethane	(1)	2.774	101	513688	10.072
13) Pentane	(1)	2.881	43	280565	9.595
14) Ethanol	(1)	3.075	45	61347	9.617
15) Freon123a	(1)	3.204	67	434574	11.495
16) Acrolein	(1)	3.340	56	72071	10.640
17) 1,1-Dichloroethene	(1)	3.433	61	294060	10.522
18) Freon 113	(1)	3.447	103	275762	9.581
19) Acetone	(1)	3.533	43	297771	10.649
20) Methyl Iodide	(1)	3.605	142	452003	9.893
21) Carbon Disulfide	(1)	3.662	76	544371	10.407
22) Isopropanol	(1)	3.719	45	221702	9.371
24) 3-Chloropropene	(1)	3.870	76	82858	11.632
23) Acetonitrile	(1)	3.877	40	128285	10.343
25) Methylene Chloride	(1)	4.013	84	183859	11.838
26) tert-Butyl Alcohol	(1)	4.163	59	233048	8.817
28) trans-1,2-Dichloroethene	(1)	4.292	61	272433	10.575
27) Acrylonitrile	(1)	4.300	53	169629	10.999
29) Methyl t-Butyl Ether	(1)	4.300	73	394947	8.973
30) Hexane	(1)	4.565	57	248532	9.457
31) 1,1-Dichloroethane	(1)	4.722	63	355729	10.081
32) Vinyl Acetate	(1)	4.779	86	38555	10.322
33) Di-Isopropyl Ether	(1)	4.787	45	564269	9.908
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	313660	8.158
35) cis-1,2-Dichloroethene	(1)	5.252	61	242588	10.061
37) 2-Butanone	(1)	5.281	72	89257	9.815
38) Ethyl Acetate	(1)	5.331	70	40471	9.084
39) Methyl Acrylate	(1)	5.360	55	301320	10.193

Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00123.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 00:21 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 12:25 jeb07445

Sample Name: LCSE04 Lab Sample ID: LCSE04

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	288303	10.000
41) Tetrahydrofuran	(1)	5.503	42	198689	9.936
42) Chloroform	(1)	5.539	83	424364	10.125
43) 1,1,1-Trichloroethane	(1)	5.675	97	372555	9.635
44) Cyclohexane	(1)	5.711	56	272999	9.868
45) Carbon Tetrachloride	(1)	5.811	117	379069	10.017
46) Benzene	(2)	5.983	78	594393	10.078
47) 1,2-Dichloroethane	(2)	6.011	62	293607	10.623
48) Isooctane	(2)	6.033	57	832567	10.372
49) Tert-Amyl Methyl Ether	(2)	6.069	73	321923	8.608
50) Heptane	(2)	6.176	43	315566	10.156
51)*1,4-Difluorobenzene	(2)	6.291	114	962674	10.000
52) Trichloroethene	(2)	6.491	130	260827	10.110
53) Ethyl Acrylate	(2)	6.577	55	344506	9.508
36) 1,2-Dichloroethene (total)	(1)		61	515021	20.636
54) 1,2-Dichloropropane	(2)	6.670	63	228230	10.126
57) Methyl Methacrylate	(2)	6.749	69	179631	9.499
55) Dibromomethane	(2)	6.771	174	241103	10.187
56) 1,4-Dioxane	(2)	6.778	88	139608	10.316
58) Bromodichloromethane	(2)	6.885	83	440806	9.986
59) cis-1,3-Dichloropropene	(2)	7.215	75	298202	9.281
60) 4-Methyl-2-Pentanone	(2)	7.330	43	432785	9.852
61) Toluene	(3)	7.466	91	710208	10.207
62) Octane	(3)	7.516	43	452182	10.500
63) trans-1,3-Dichloropropene	(3)	7.630	75	230496	9.060
65) Ethyl Methacrylate	(3)	7.673	69	284114	9.559
66) 1,1,2-Trichloroethane	(3)	7.774	97	270166	10.249
67) Tetrachloroethene	(3)	7.867	166	345950	9.749
68) 2-Hexanone	(3)	7.946	43	403533	10.156
69) Dibromochloromethane	(3)	8.067	127	325510	10.287
70) 1,2-Dibromoethane	(3)	8.160	107	399619	10.246
71)*Chlorobenzene-d5	(3)	8.497	117	968567	10.000
72) Chlorobenzene	(3)	8.519	112	587655	9.992
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	296705	10.372
74) Ethylbenzene	(3)	8.583	91	898604	10.272
75) m/p-Xylene	(3)	8.669	91	677350	10.140
76) o-Xylene	(3)	8.970	91	685472	10.441
78) Styrene	(3)	8.977	104	543667	10.937

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00123.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 00:21 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 12:25 jeb07445

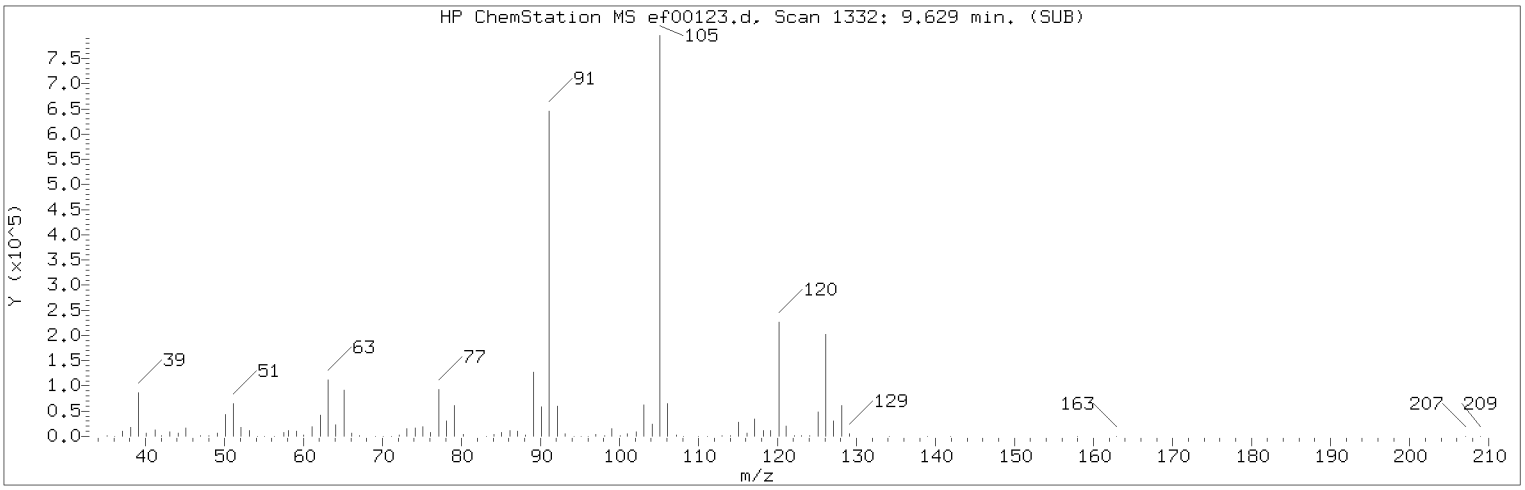
Sample Name: LCSE04 Lab Sample ID: LCSE04

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	388547	10.224
80) Cumene	(3)	9.235	105	918563	10.493
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	649196	10.622
81) Bromobenzene	(3)	9.486	156	334202	10.002
83) 1,2,3-Trichloropropane	(3)	9.507	110	184111	10.552
84) n-Propylbenzene	(3)	9.543	120	272241	10.491
86) 4-Ethyltoluene	(3)	9.629	105	1024944M	11.054
85) 2-Chlorotoluene	(3)	9.629	126	269683	10.889
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	846022M	11.186
88) Alpha Methyl Styrene	(3)	9.844	118	378575	10.859
89) tert-Butylbenzene	(3)	9.923	119	772194M	11.254
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	842323	11.357
91) sec-Butylbenzene	(3)	10.087	105	1197777	11.278
92) 1,3-Dichlorobenzene	(3)	10.188	146	609622	10.648
94) p-Isopropyltoluene	(3)	10.188	119	979306	11.529
93) 1,4-Dichlorobenzene	(3)	10.259	146	585884	10.342
95) Benzyl Chloride	(3)	10.359	91	329449	8.649
97) n-Butylbenzene	(3)	10.503	91	945588	11.339
96) 1,2-Dichlorobenzene	(3)	10.546	146	557768	10.476
98) Hexachloroethane	(3)	10.732	117	250586	11.251
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	249684	10.071
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	326183	9.457
101) Hexachlorobutadiene	(3)	11.871	225	302984	10.567
102) Naphthalene	(3)	11.964	128	678551	10.167
64) 1,3-Dichloropropene (total)	(3)		75	528698	18.341
77) Xylene (total)	(3)		91	1362822	20.580

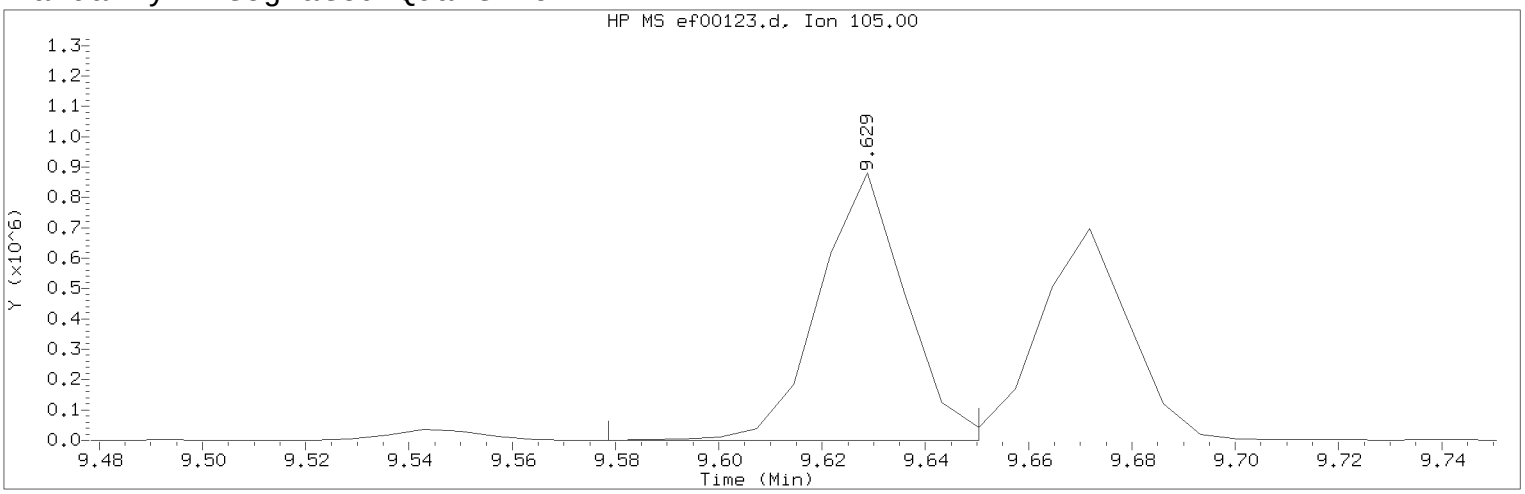
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00123.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 00:21 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 12:25 jeb07445

Sample Name: LCSE04 Lab Sample ID: LCSE04

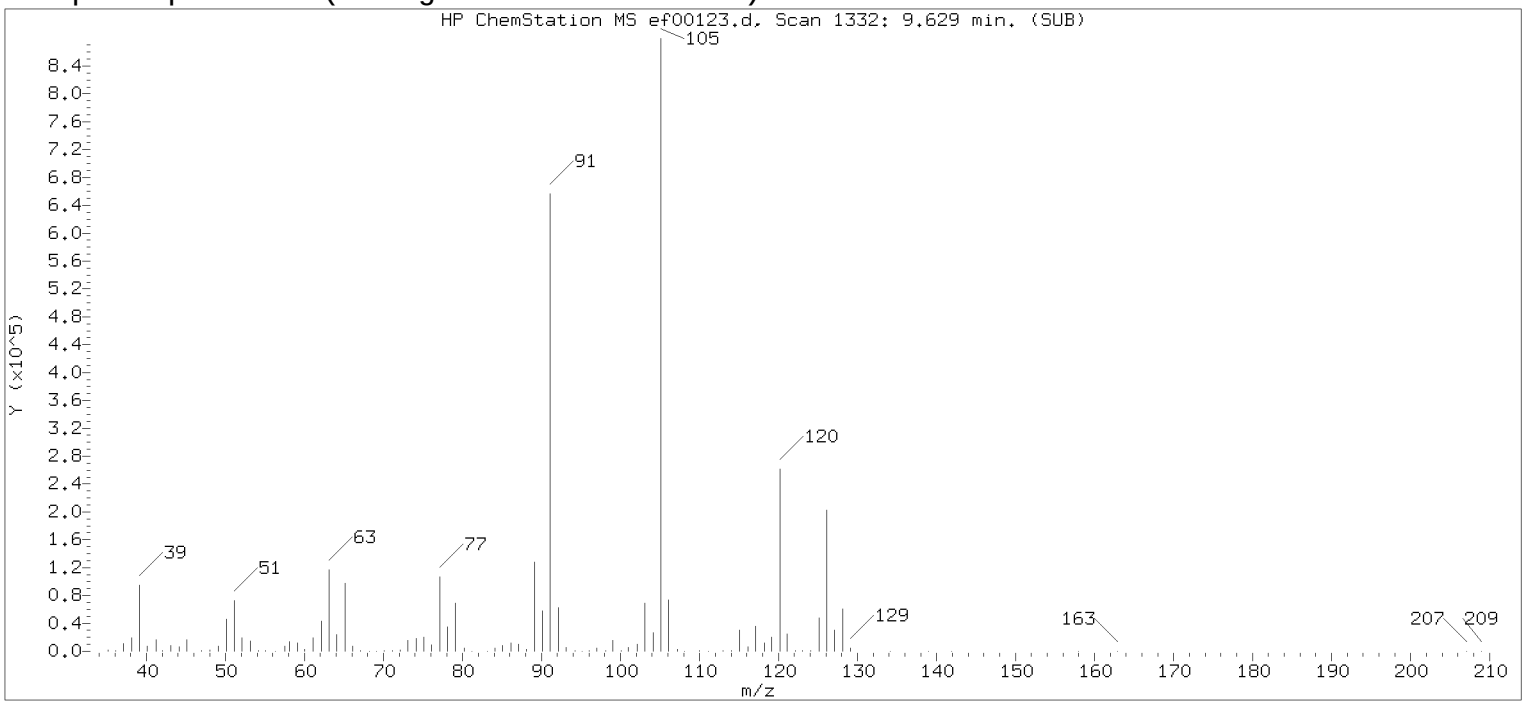
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 1024944M
Concentration (ppb(v)) : 11.0540
Integration start scan : 1324 Integration stop scan: 1334
Y at integration start : 250 Y at integration end: 250

Reason for manual integration: improper integration

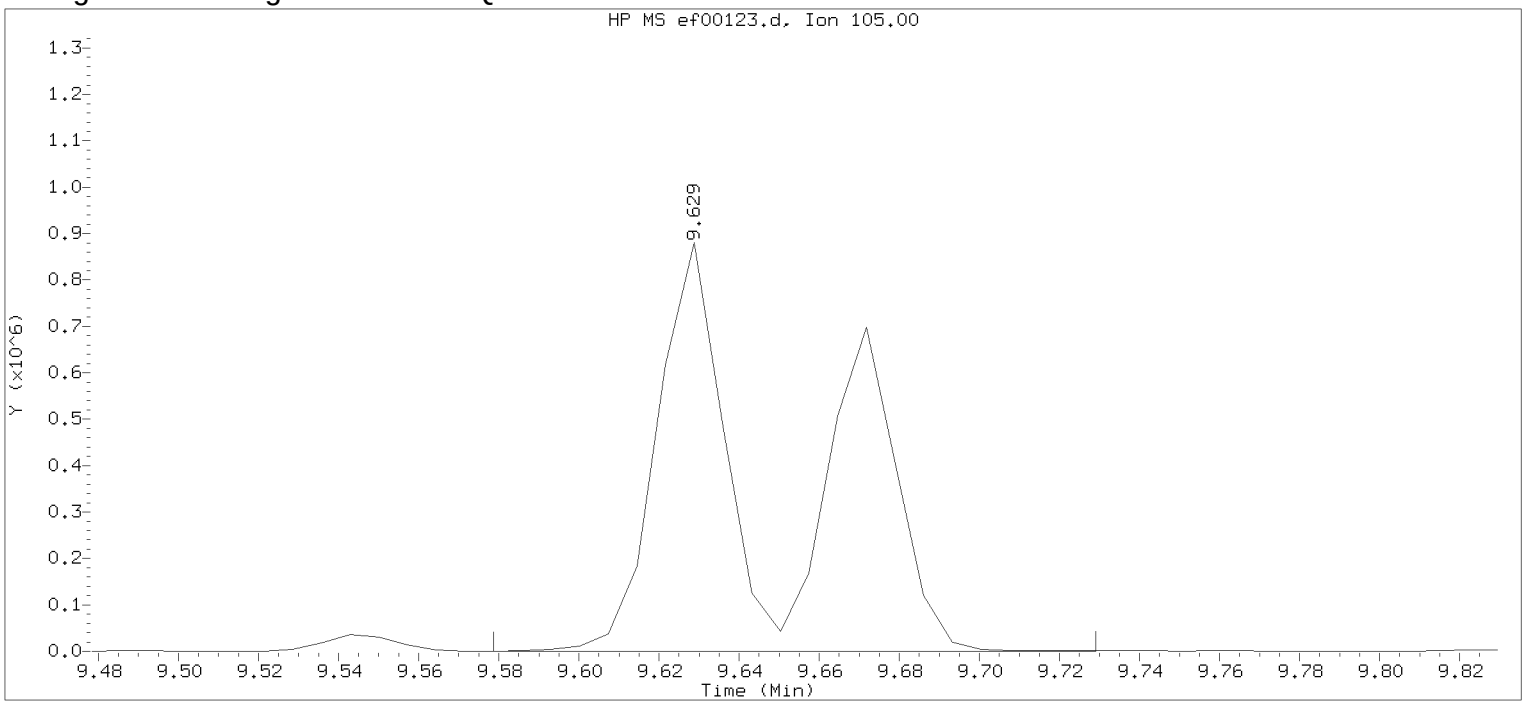
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:04.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00123.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 00:21 Analyst ID: jeb07445

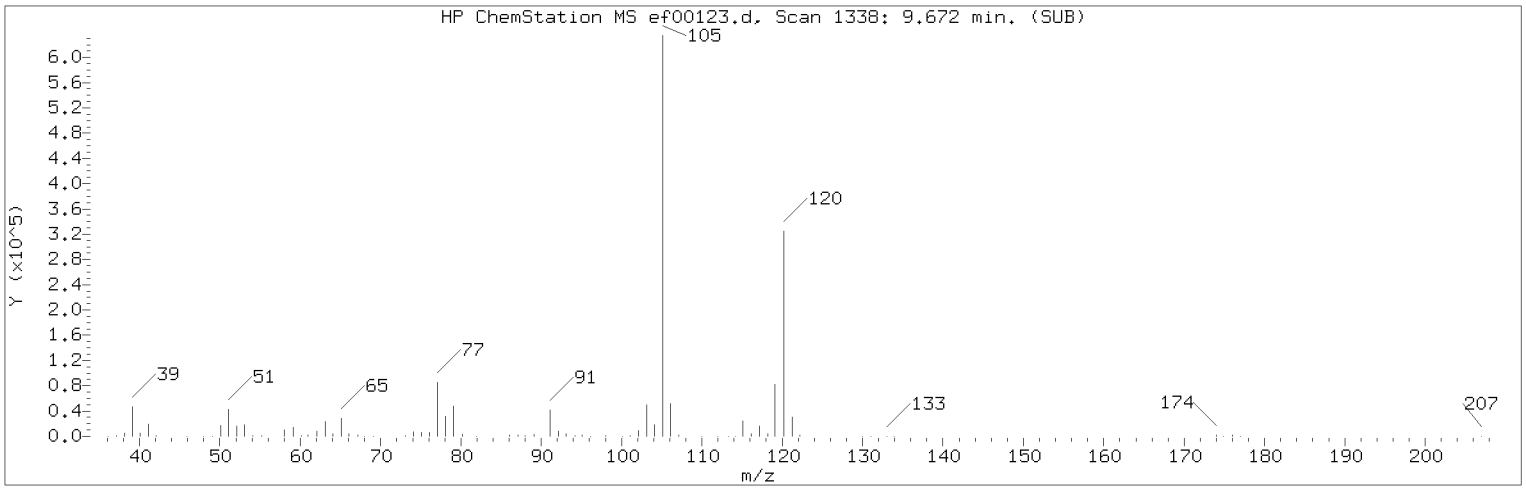
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 00:39 Unknown

Sample Name: LCSE04 Lab Sample ID: LCSE04

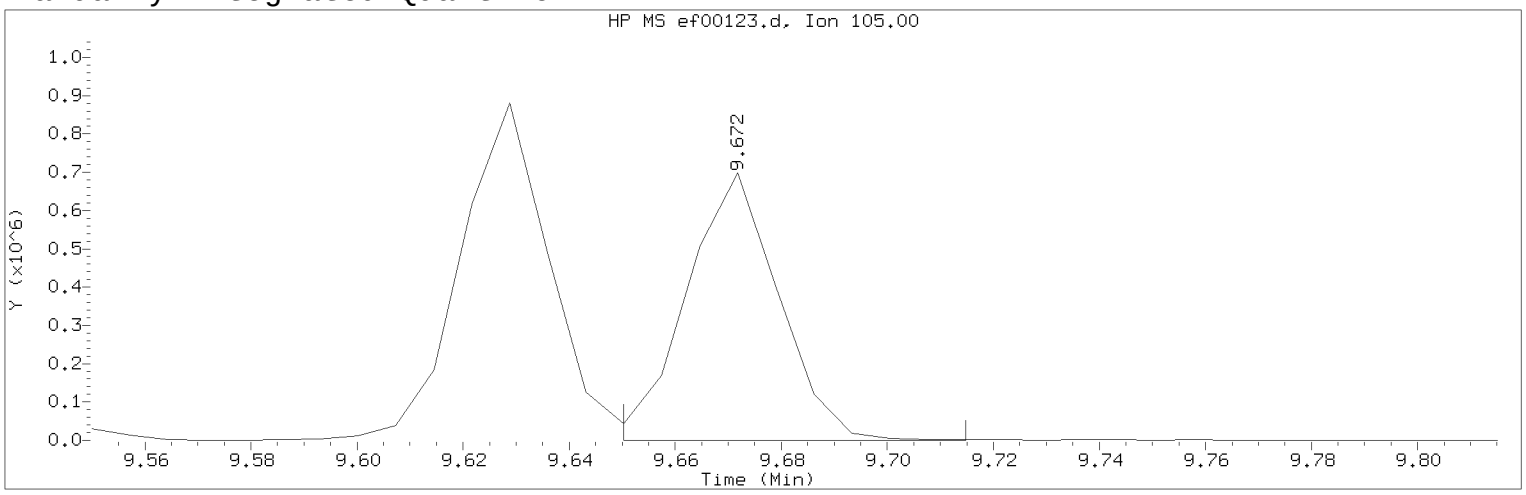
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 1851978
Concentration (ppb(v)) : 20.0866
Integration start scan : 1324 Integration stop scan: 1345
Y at integration start : 250 Y at integration end: 250

Digitally signed by Jacob E. Bailey on 06/11/2018 at 12:26.
Target 3.5 esignature used.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00123.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 00:21 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 12:25 jeb07445

Sample Name: LCSE04 Lab Sample ID: LCSE04

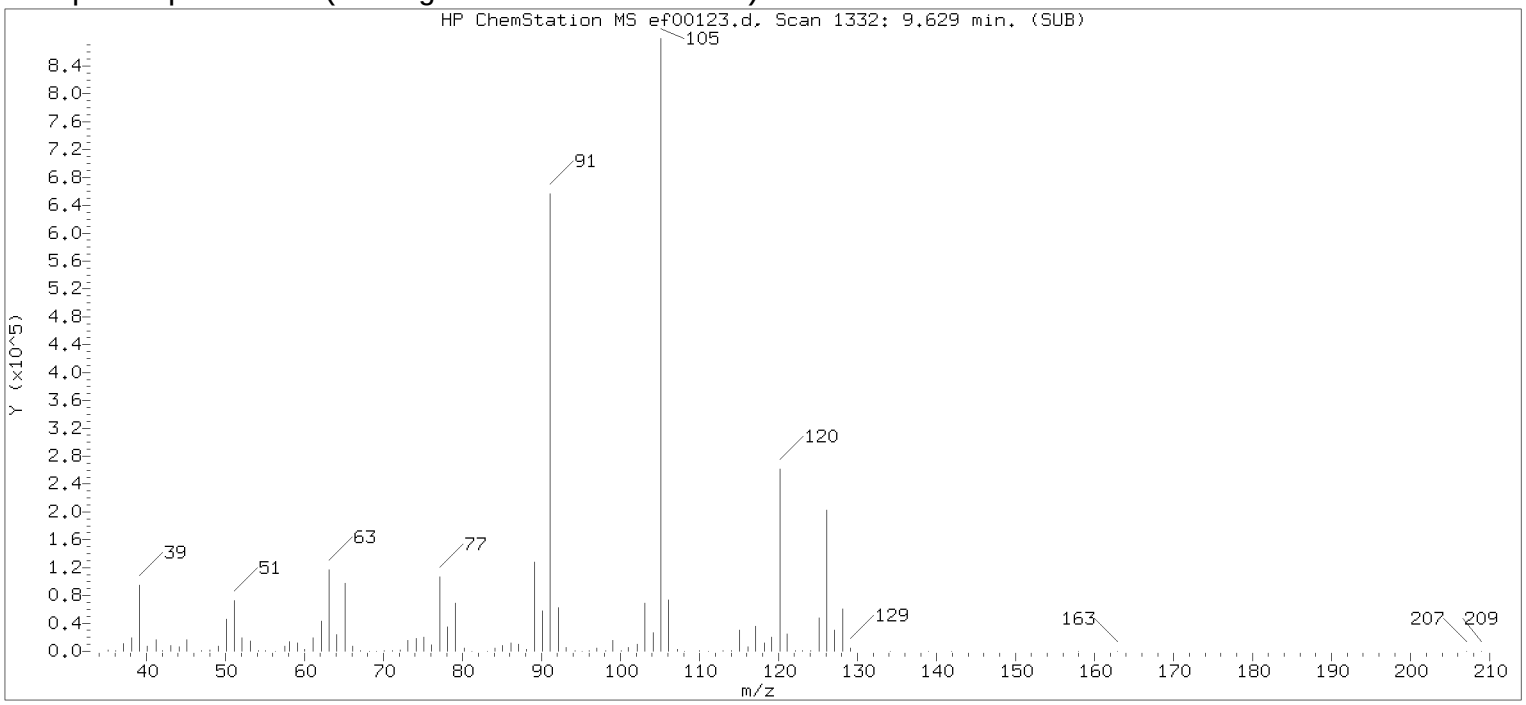
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 846022M
Concentration (ppb(v)) : 11.1863
Integration start scan : 1334 Integration stop scan: 1343
Y at integration start : 6 Y at integration end: 6

Reason for manual integration: improper integration

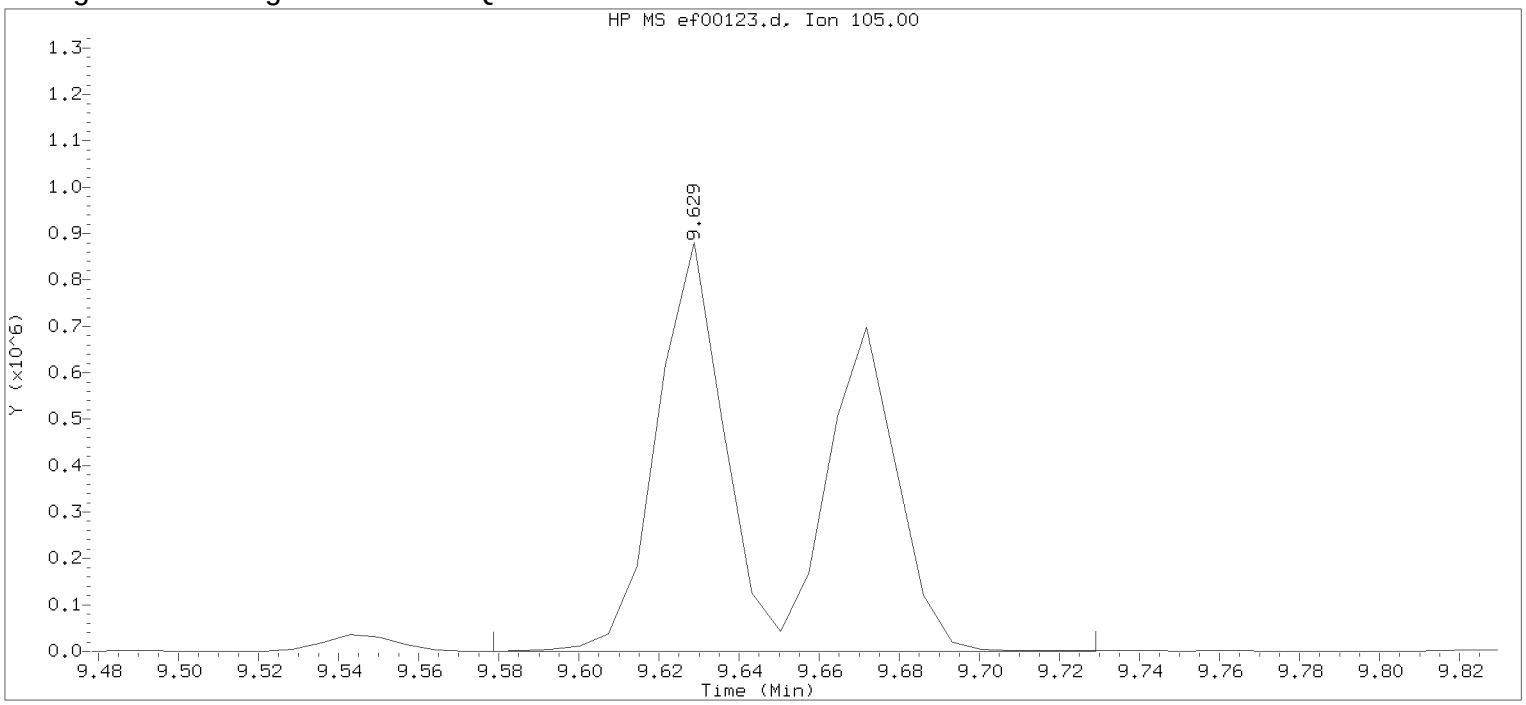
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:04.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00123.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 00:21 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 00:39 Unknown

Sample Name: LCSE04 Lab Sample ID: LCSE04

Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 1851184
Concentration (ppb(v)) : 24.5010
Integration start scan : 1324 Integration stop scan: 1345
Y at integration start : 338 Y at integration end: 338

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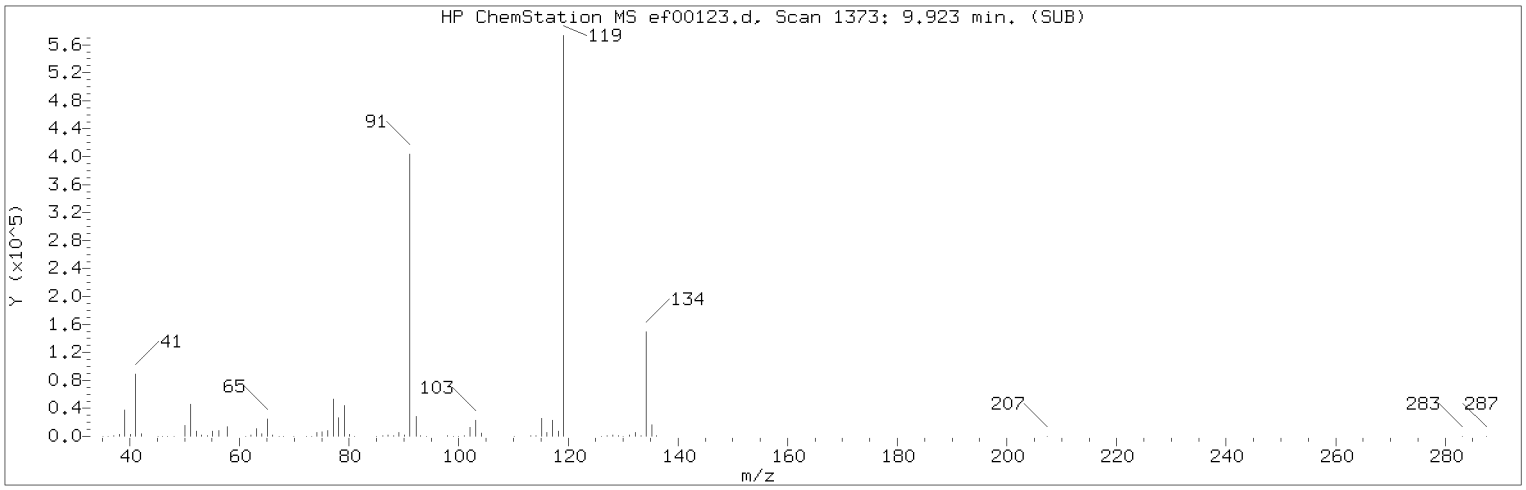
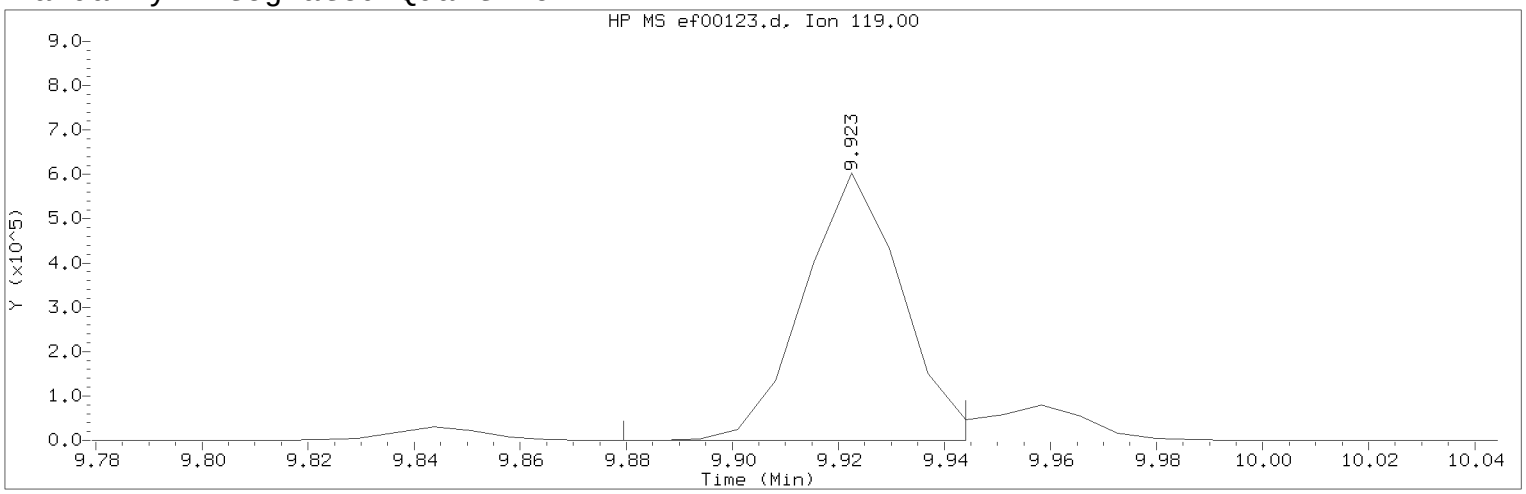
Target 3.5 esignature used. LED1 Page 1485

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00123.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 00:21 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 12:25 jeb07445

Sample Name: LCSE04 Lab Sample ID: LCSE04

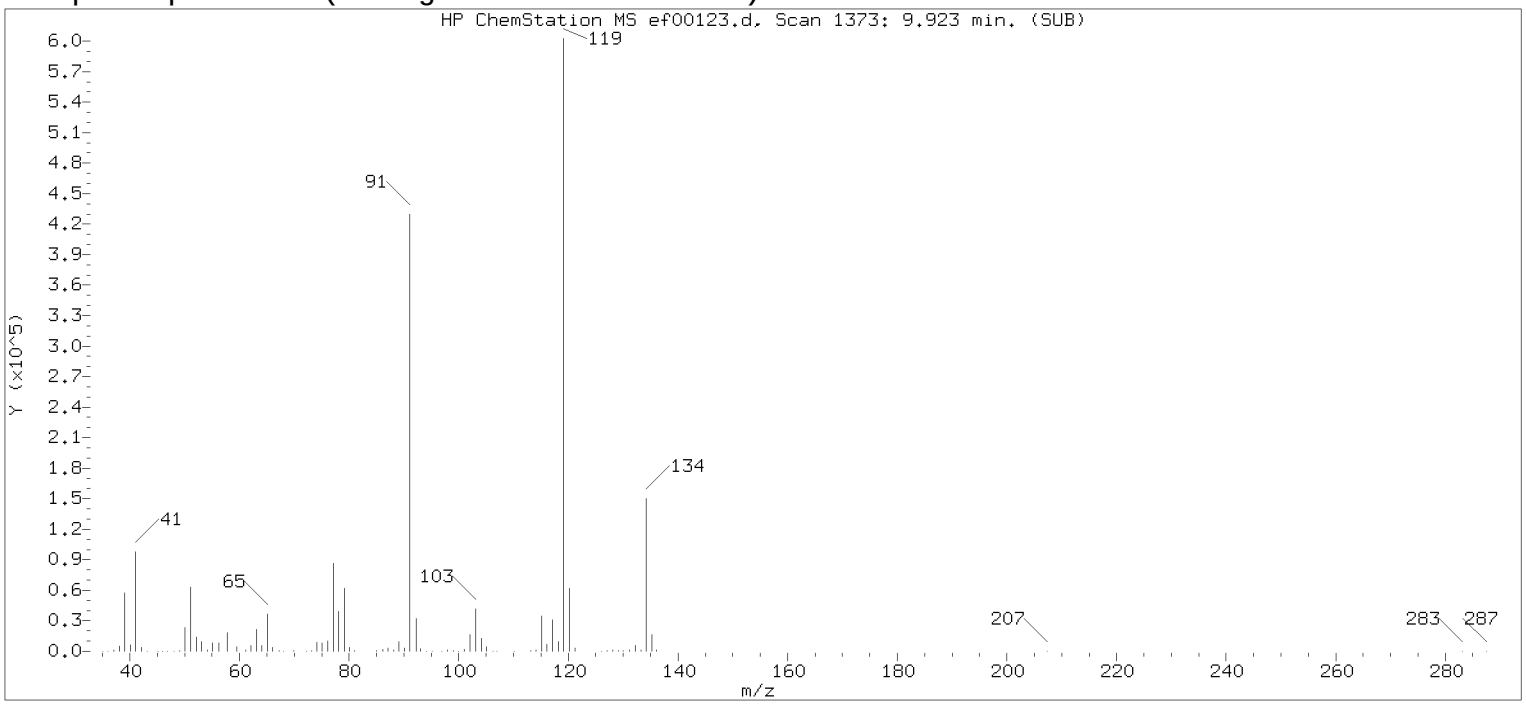
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.923
Quant Ion : 119.00
Area (flag) : 772194M
Concentration (ppb(v)) : 11.2539
Integration start scan : 1366 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

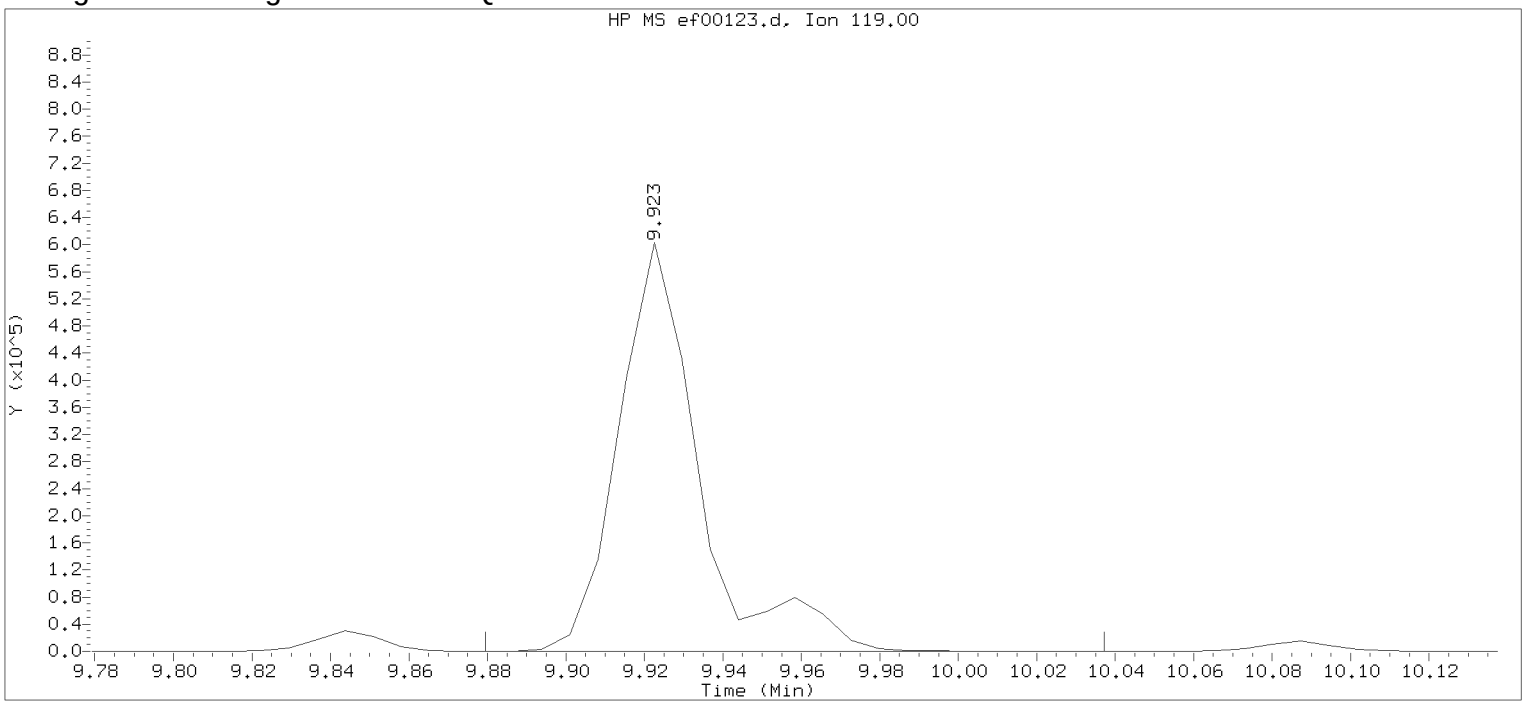
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:26.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:04.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



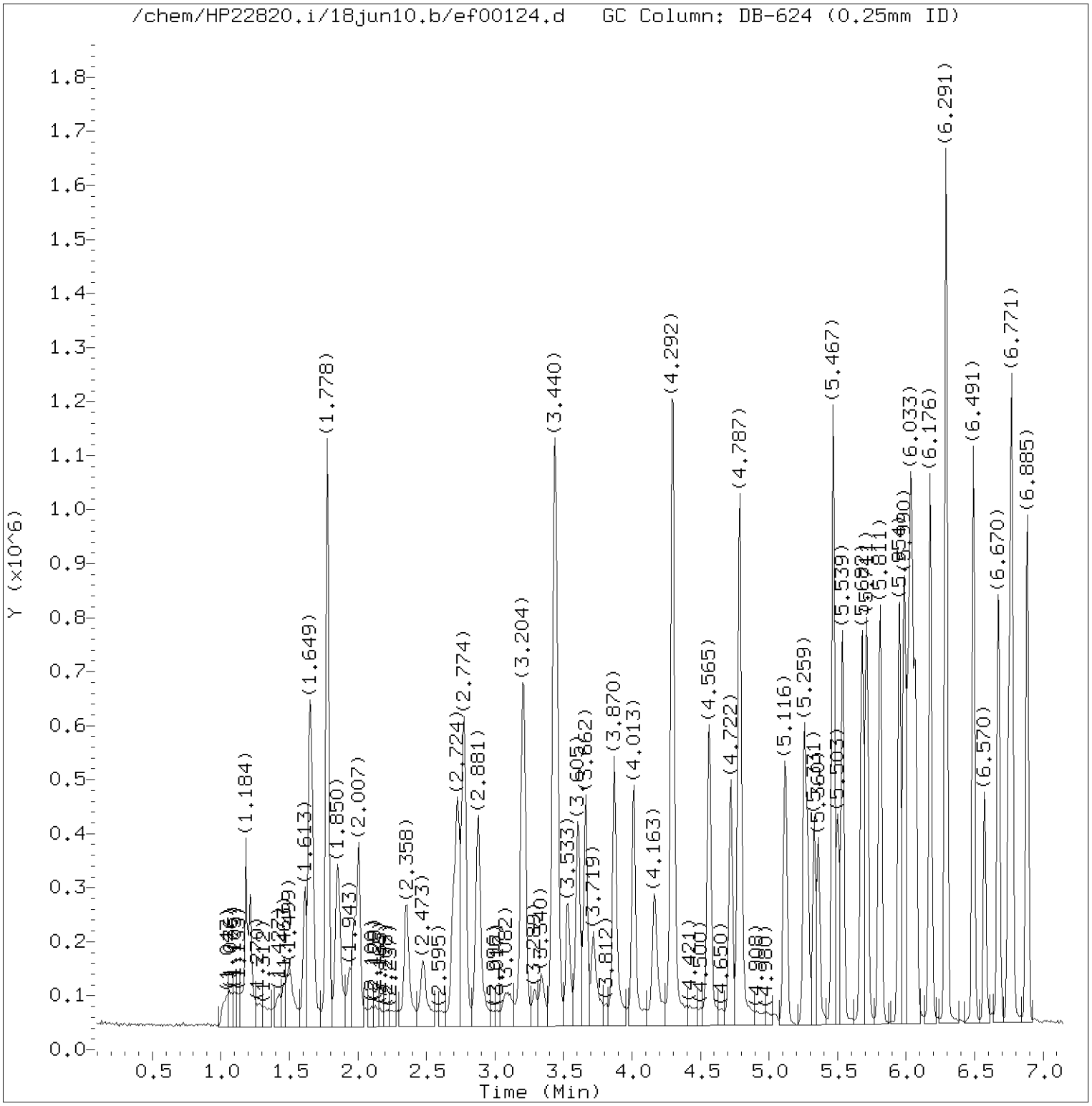
Data File: /chem/HP22820.i/18jun10.b/ef00123.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 00:21 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 00:39 Unknown

Sample Name: LCSE04 Lab Sample ID: LCSE04

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.923
Quant Ion : 119.00
Area : 865347
Concentration (ppb(v)) : 12.6115
Integration start scan : 1366 Integration stop scan: 1388
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/11/2018 at 12:26.
Target 3.5 esignature used.



Total Ion Chromatogram (TIC)

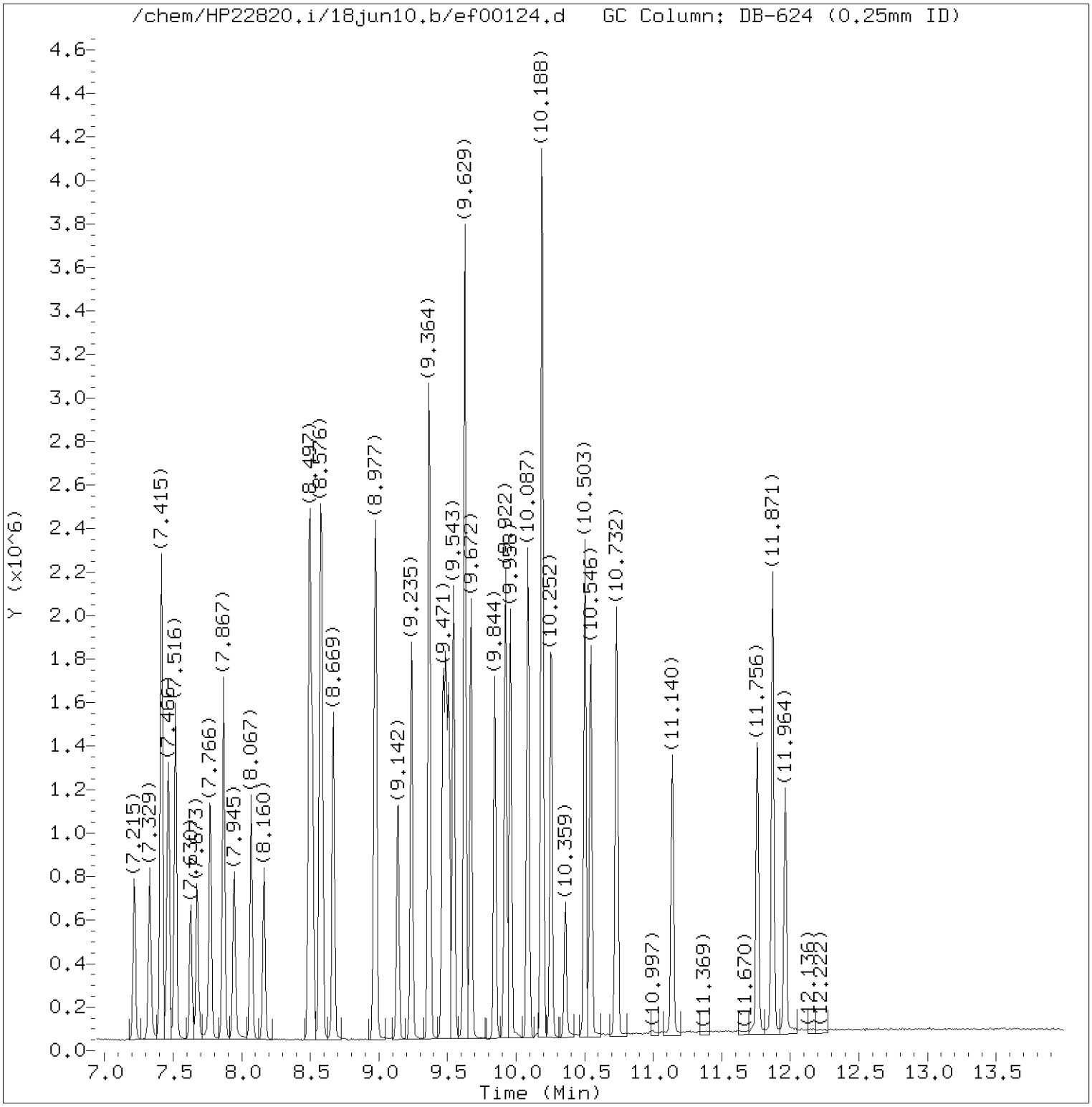
Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00124.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 00:53 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 12:26 jeb07445

Sample Name: LCSDE04 Lab Sample ID: LCSDE04

Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:27.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00124.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 00:53 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 12:26 jeb07445

Sample Name: LCSDE04 Lab Sample ID: LCSDE04

Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:27.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00124.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 00:53 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 12:26 jeb07445

Sample Name: LCSDE04 Lab Sample ID: LCSDE04

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.613	41	136604	9.961
2) Dichlorodifluoromethane	(1)	1.649	85	504785	10.509
3) Chlorodifluoromethane	(1)	1.671	51	325838	10.699
4) Freon 114	(1)	1.778	85	521453	10.115
5) Chloromethane	(1)	1.850	50	204533	10.578
6) Vinyl Chloride	(1)	1.979	62	192609	10.420
7) 1,3-Butadiene	(1)	2.007	54	132424	9.959
8) Bromomethane	(1)	2.358	94	169495	10.770
9) Chloroethane	(1)	2.473	64	107929	10.478
10) Bromoethene	(1)	2.695	106	165805	10.340
11) Dichlorofluoromethane	(1)	2.724	67	456941	11.152
12) Trichlorofluoromethane	(1)	2.774	101	517609	10.084
13) Pentane	(1)	2.881	43	280846	9.543
14) Ethanol	(1)	3.075	45	66786	10.403
15) Freon123a	(1)	3.204	67	431747	11.347
16) Acrolein	(1)	3.340	56	70943	10.406
17) 1,1-Dichloroethene	(1)	3.426	61	295574	10.508
18) Freon 113	(1)	3.447	103	276902	9.559
19) Acetone	(1)	3.533	43	292889	10.408
20) Methyl Iodide	(1)	3.605	142	454835	9.892
21) Carbon Disulfide	(1)	3.662	76	544261	10.338
22) Isopropanol	(1)	3.719	45	216970	9.112
24) 3-Chloropropene	(1)	3.870	76	83867	11.699
23) Acetonitrile	(1)	3.877	40	132812	10.639
25) Methylene Chloride	(1)	4.013	84	179103	11.458
26) tert-Butyl Alcohol	(1)	4.163	59	244382	9.187
28) trans-1,2-Dichloroethene	(1)	4.292	61	271966	10.489
29) Methyl t-Butyl Ether	(1)	4.292	73	397982	8.984
27) Acrylonitrile	(1)	4.299	53	167098	10.766
30) Hexane	(1)	4.565	57	251785	9.520
31) 1,1-Dichloroethane	(1)	4.722	63	362089	10.196
32) Vinyl Acetate	(1)	4.787	86	37577	9.996
33) Di-Isopropyl Ether	(1)	4.787	45	569035	9.928
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	321655	8.312
35) cis-1,2-Dichloroethene	(1)	5.259	61	247430	10.196
37) 2-Butanone	(1)	5.281	72	91254	9.970
38) Ethyl Acetate	(1)	5.331	70	39100	8.720
39) Methyl Acrylate	(1)	5.360	55	304619	10.239

Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:27.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00124.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 00:53 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 12:26 jeb07445

Sample Name: LCSDE04 Lab Sample ID: LCSDE04

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	290163	10.000
41) Tetrahydrofuran	(1)	5.503	42	195924	9.735
42) Chloroform	(1)	5.539	83	432687	10.258
43) 1,1,1-Trichloroethane	(1)	5.682	97	373406	9.595
44) Cyclohexane	(1)	5.711	56	277288	9.959
45) Carbon Tetrachloride	(1)	5.811	117	383533	10.070
46) Benzene	(2)	5.983	78	597822	9.905
47) 1,2-Dichloroethane	(2)	6.011	62	294896	10.425
48) Isooctane	(2)	6.033	57	854464	10.402
49) Tert-Amyl Methyl Ether	(2)	6.069	73	329276	8.603
50) Heptane	(2)	6.176	43	307261	9.663
51)*1,4-Difluorobenzene	(2)	6.291	114	985189	10.000
52) Trichloroethene	(2)	6.491	130	257893	9.768
53) Ethyl Acrylate	(2)	6.570	55	352237	9.499
36) 1,2-Dichloroethene (total)	(1)		61	519396	20.685
54) 1,2-Dichloropropane	(2)	6.678	63	237476	10.295
57) Methyl Methacrylate	(2)	6.749	69	183216	9.467
55) Dibromomethane	(2)	6.771	174	246804	10.190
56) 1,4-Dioxane	(2)	6.778	88	140913	10.174
58) Bromodichloromethane	(2)	6.885	83	446457	9.883
59) cis-1,3-Dichloropropene	(2)	7.215	75	300606	9.142
60) 4-Methyl-2-Pentanone	(2)	7.329	43	436551	9.711
61) Toluene	(3)	7.466	91	710610	10.084
62) Octane	(3)	7.516	43	448942	10.293
63) trans-1,3-Dichloropropene	(3)	7.630	75	236214	9.167
65) Ethyl Methacrylate	(3)	7.673	69	288906	9.597
66) 1,1,2-Trichloroethane	(3)	7.774	97	271311	10.163
67) Tetrachloroethene	(3)	7.867	166	345730	9.620
68) 2-Hexanone	(3)	7.945	43	397096M	9.868
69) Dibromochloromethane	(3)	8.067	127	328938	10.264
70) 1,2-Dibromoethane	(3)	8.160	107	396450	10.036
71)*Chlorobenzene-d5	(3)	8.497	117	980982	10.000
72) Chlorobenzene	(3)	8.519	112	586940	9.854
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	296452	10.232
74) Ethylbenzene	(3)	8.583	91	891991	10.067
75) m/p-Xylene	(3)	8.669	91	683524	10.103
76) o-Xylene	(3)	8.970	91	679521	10.219
78) Styrene	(3)	8.977	104	539766	10.721

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

Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:27.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun10.b/ef00124.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 00:53 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 12:26 jeb07445

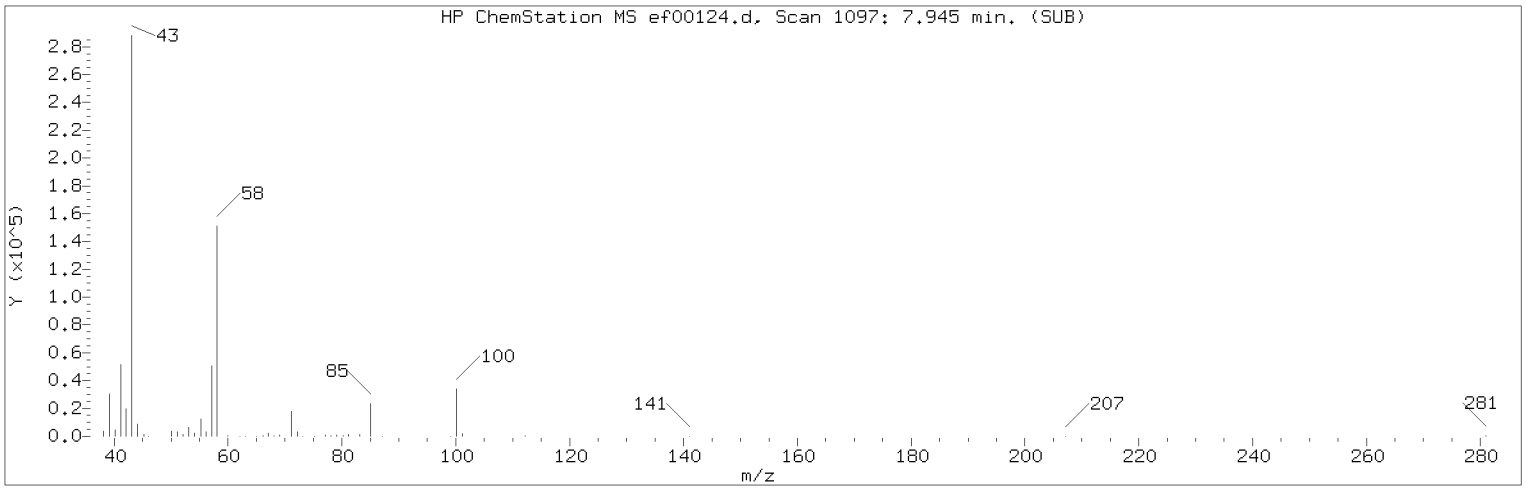
Sample Name: LCSDE04 Lab Sample ID: LCSDE04

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	391521	10.172
80) Cumene	(3)	9.235	105	938972	10.590
82) 1,1,2,2-Tetrachloroethane	(3)	9.464	83	646772	10.449
81) Bromobenzene	(3)	9.493	156	338363	9.999
83) 1,2,3-Trichloropropane	(3)	9.514	110	181850	10.291
84) n-Propylbenzene	(3)	9.543	120	272971	10.386
85) 2-Chlorotoluene	(3)	9.622	126	264633	10.550
86) 4-Ethyltoluene	(3)	9.629	105	1038864M	11.062
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	834568M	10.895
88) Alpha Methyl Styrene	(3)	9.844	118	379258	10.741
89) tert-Butylbenzene	(3)	9.922	119	775408M	11.158
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	850494	11.322
91) sec-Butylbenzene	(3)	10.087	105	1198125	11.138
92) 1,3-Dichlorobenzene	(3)	10.188	146	603778	10.413
94) p-Isopropyltoluene	(3)	10.188	119	979557	11.386
93) 1,4-Dichlorobenzene	(3)	10.259	146	598058	10.423
95) Benzyl Chloride	(3)	10.359	91	346577	8.984
97) n-Butylbenzene	(3)	10.503	91	934676	11.066
96) 1,2-Dichlorobenzene	(3)	10.546	146	551352	10.225
98) Hexachloroethane	(3)	10.732	117	254990	11.304
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	257001	10.235
100) 1,2,4-Trichlorobenzene	(3)	11.763	180	337711	9.667
101) Hexachlorobutadiene	(3)	11.871	225	308176	10.612
102) Naphthalene	(3)	11.964	128	708381	10.480
64) 1,3-Dichloropropene (total)	(3)		75	536820	18.309
77) Xylene (total)	(3)		91	1363045	20.322

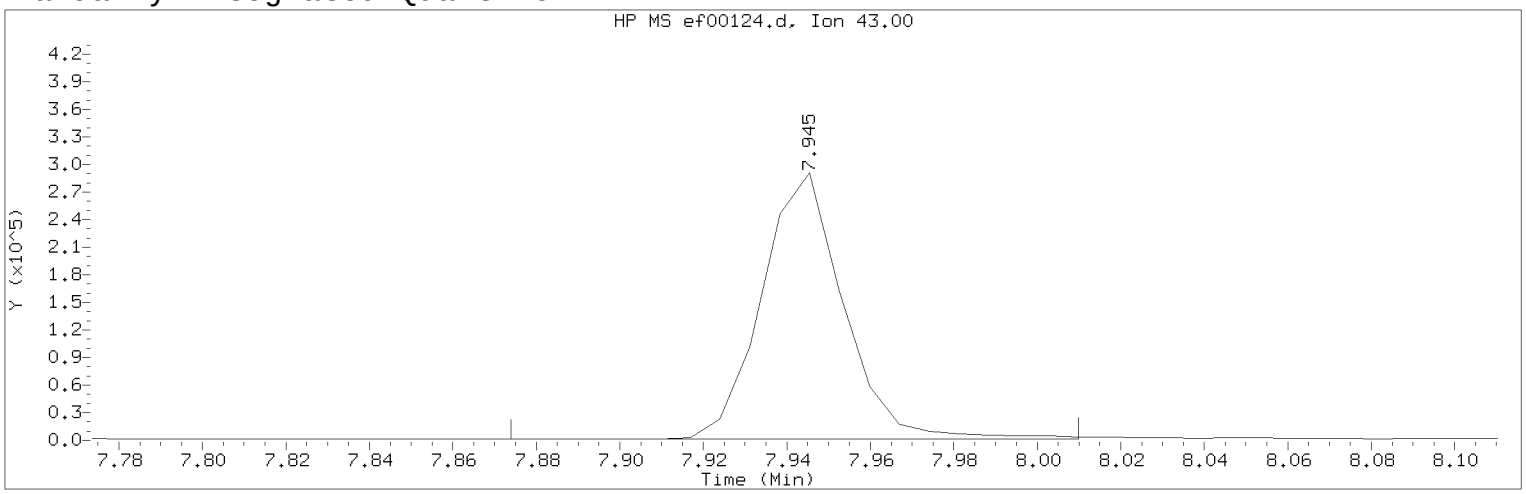
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:27.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00124.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 00:53 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 12:26 jeb07445

Sample Name: LCSDE04 Lab Sample ID: LCSDE04

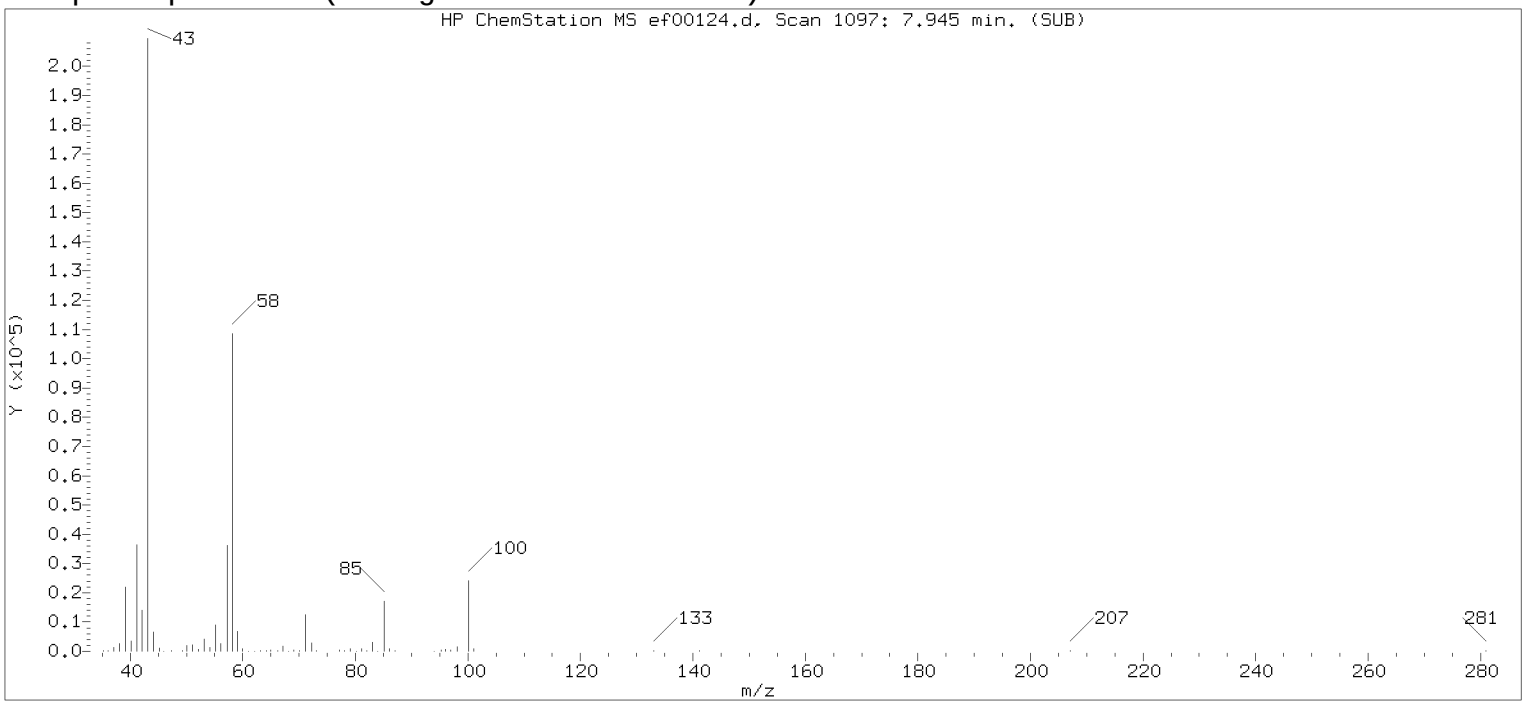
Compound Number : 68
Compound Name : 2-Hexanone
Scan Number : 1097
Retention Time (minutes): 7.945
Quant Ion : 43.00
Area (flag) : 397096M
Concentration (ppb(v)) : 9.8677
Integration start scan : 1086 Integration stop scan: 1105
Y at integration start : 1097 Y at integration end: 1100

Reason for manual integration: improper integration

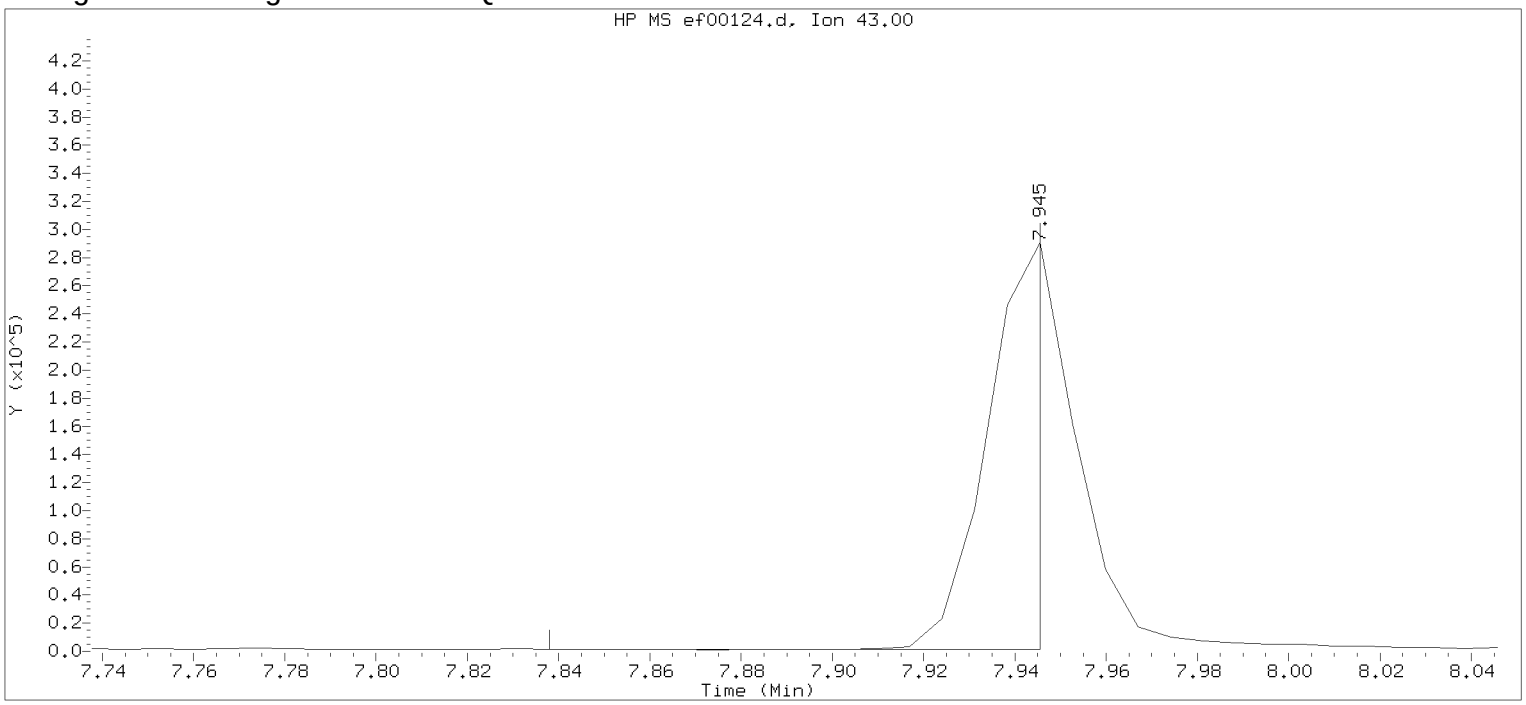
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:27.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:04.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00124.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 00:53 Analyst ID: jeb07445

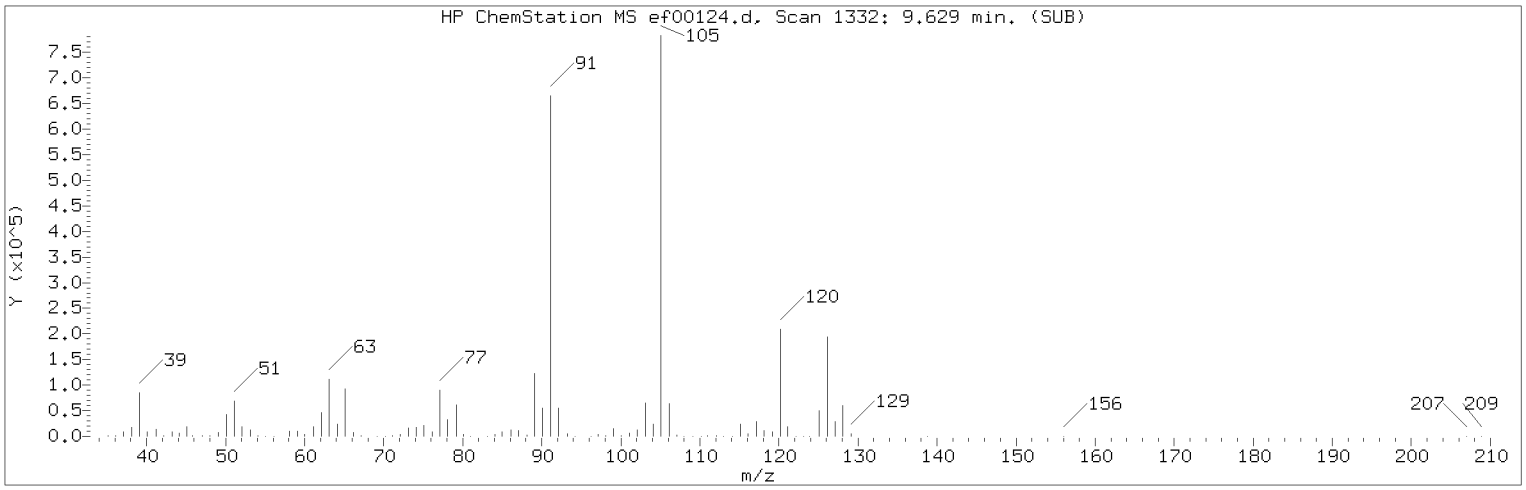
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 01:11 Unknown

Sample Name: LCSDE04 Lab Sample ID: LCSDE04

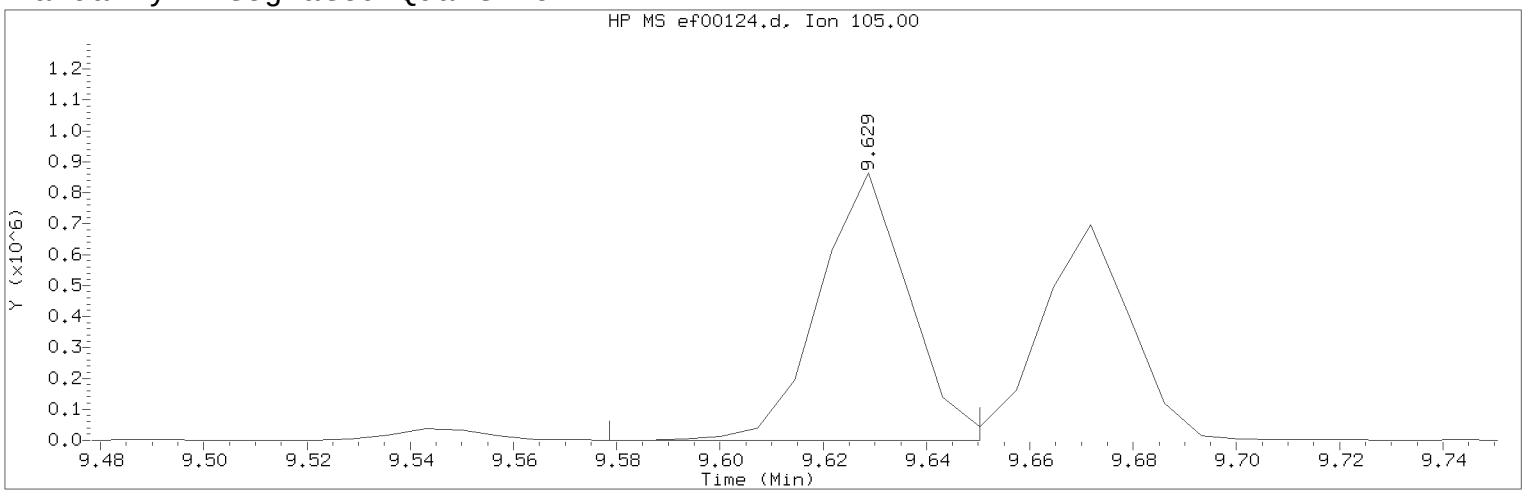
Compound Number : 68
Compound Name : 2-Hexanone
Scan Number : 1097
Retention Time (minutes): 7.945
Quant Ion : 43.00
Area : 221914
Concentration (ppb(v)) : 5.5621
Integration start scan : 1081 Integration stop scan: 1096
Y at integration start : 1152 Y at integration end: 1152

Digitally signed by Jacob E. Bailey on 06/11/2018 at 12:27.
Target 3.5 esignature used. LCSDE01 Page 1495

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00124.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 00:53 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 12:26 jeb07445

Sample Name: LCSDE04 Lab Sample ID: LCSDE04

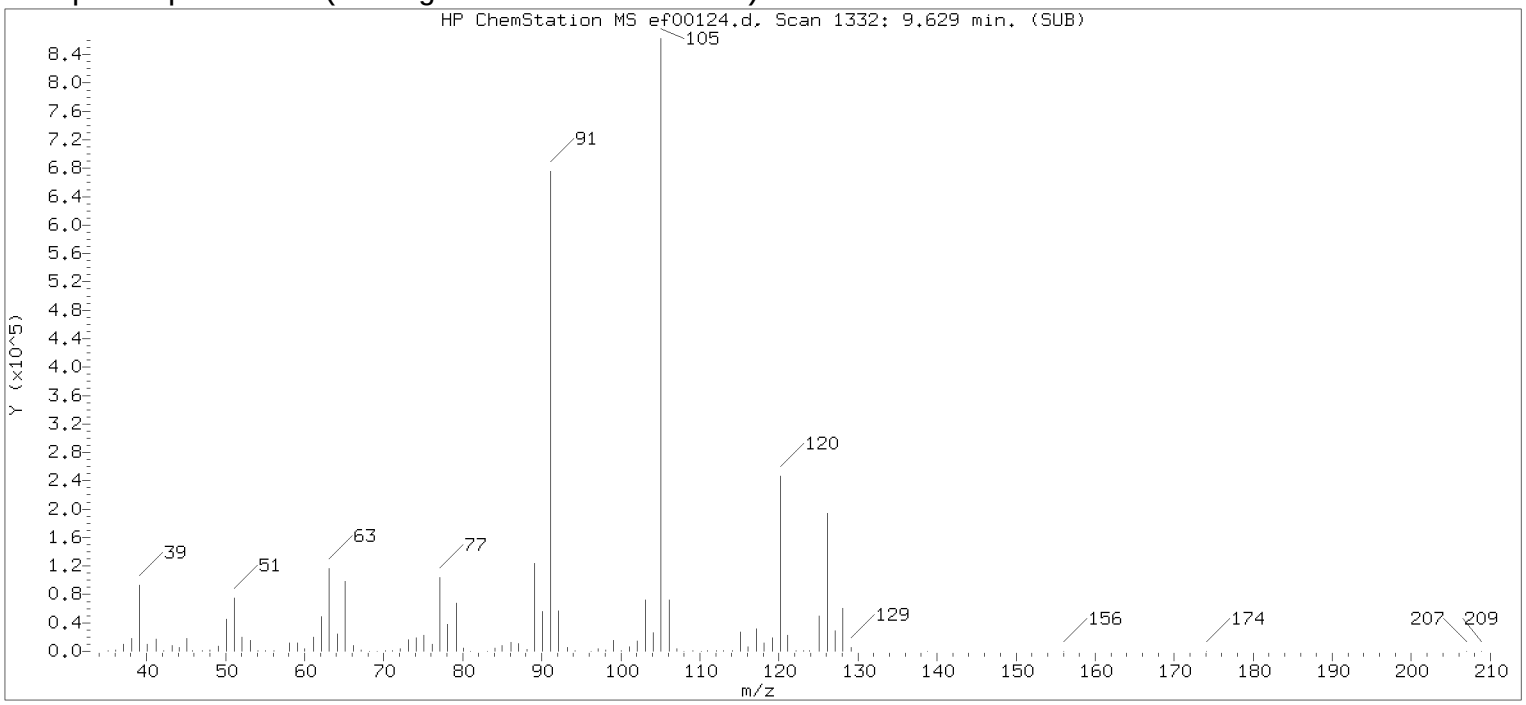
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 1038864M
Concentration (ppb(v)) : 11.0624
Integration start scan : 1324 Integration stop scan: 1334
Y at integration start : 160 Y at integration end: 160

Reason for manual integration: improper integration

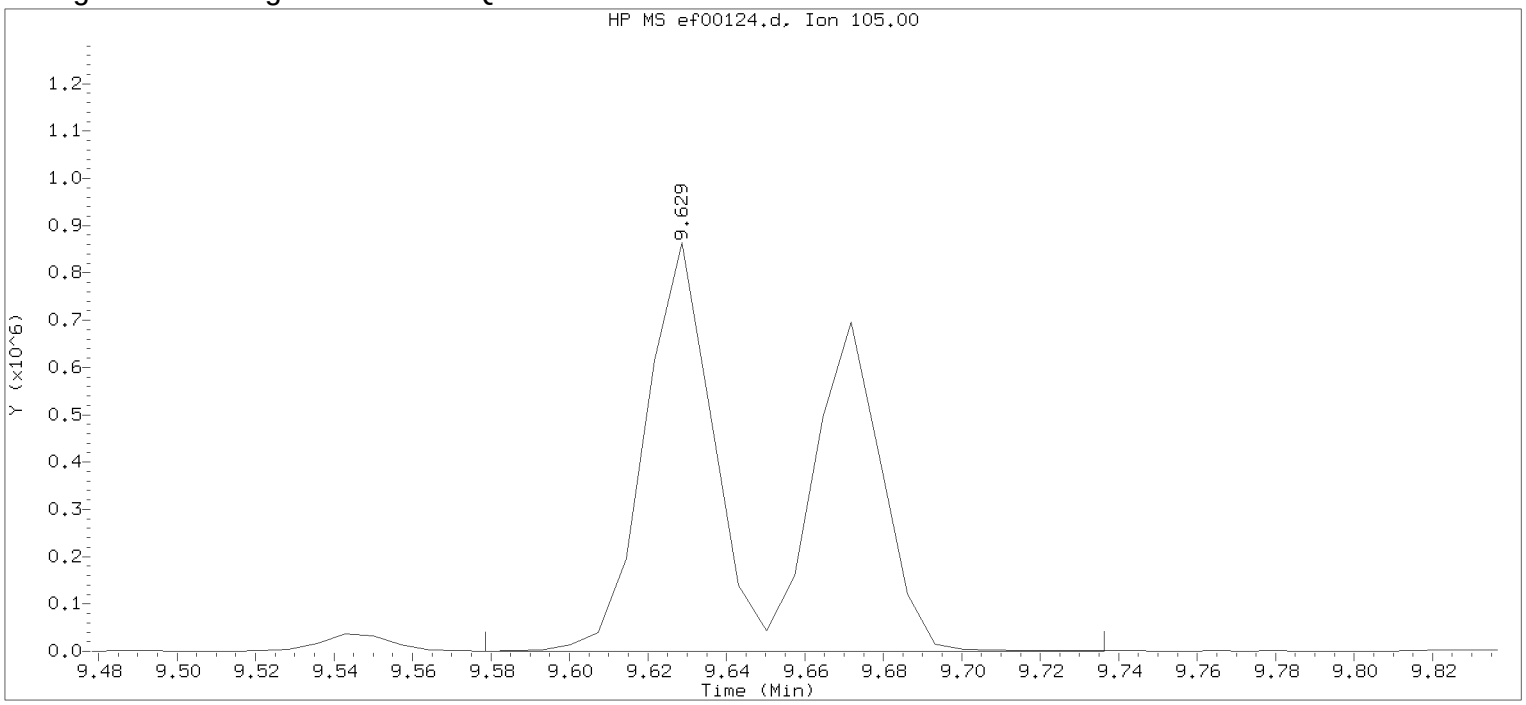
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:27.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:04.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00124.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 00:53 Analyst ID: jeb07445

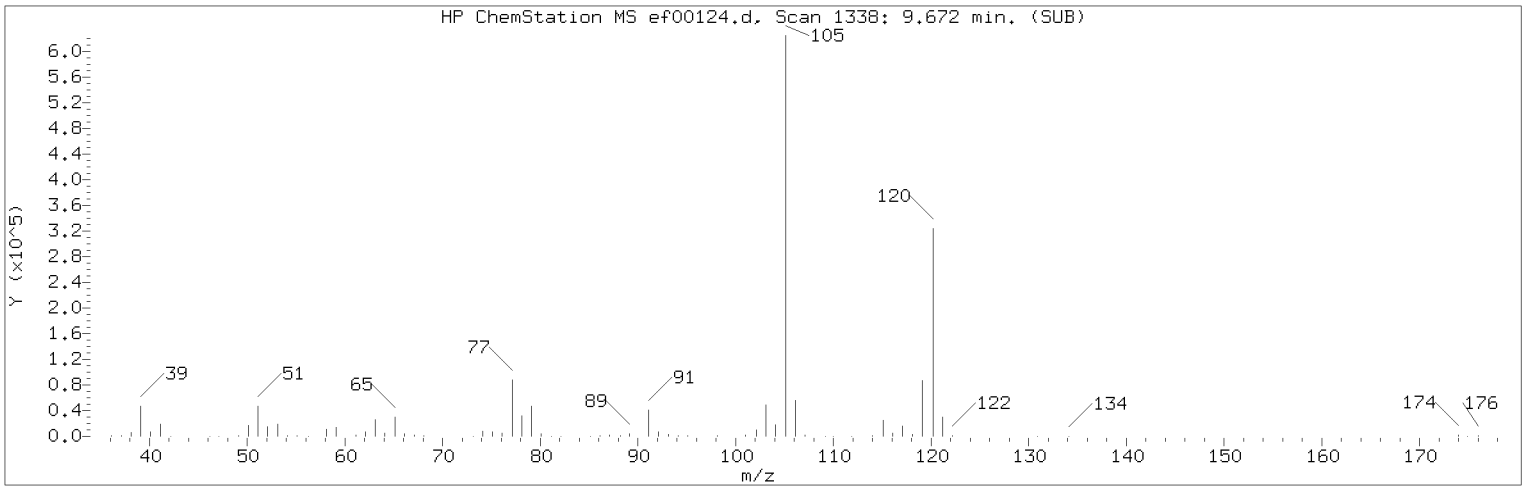
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 01:11 Unknown

Sample Name: LCSDE04 Lab Sample ID: LCSDE04

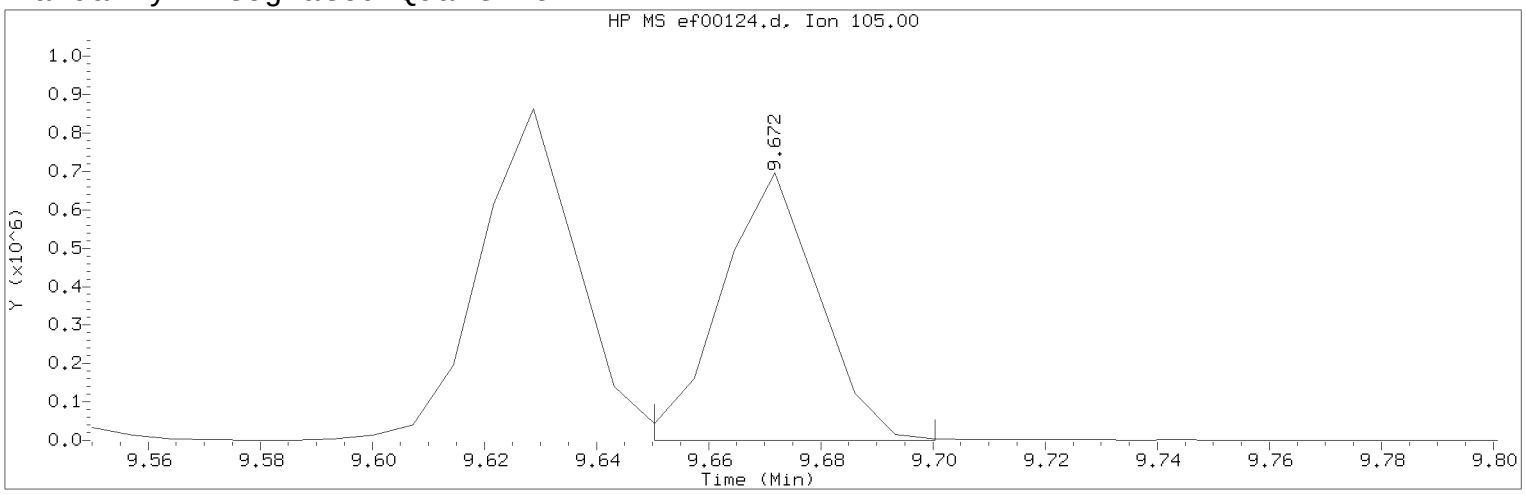
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 1859271
Concentration (ppb(v)) : 19.9105
Integration start scan : 1324 Integration stop scan: 1346
Y at integration start : 160 Y at integration end: 160

Digitally signed by Jacob E. Bailey on 06/11/2018 at 12:27.
Target 3.5 esignature used. GLED1 Page 1492 of 1687

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00124.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 00:53 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 12:26 jeb07445

Sample Name: LCSDE04 Lab Sample ID: LCSDE04

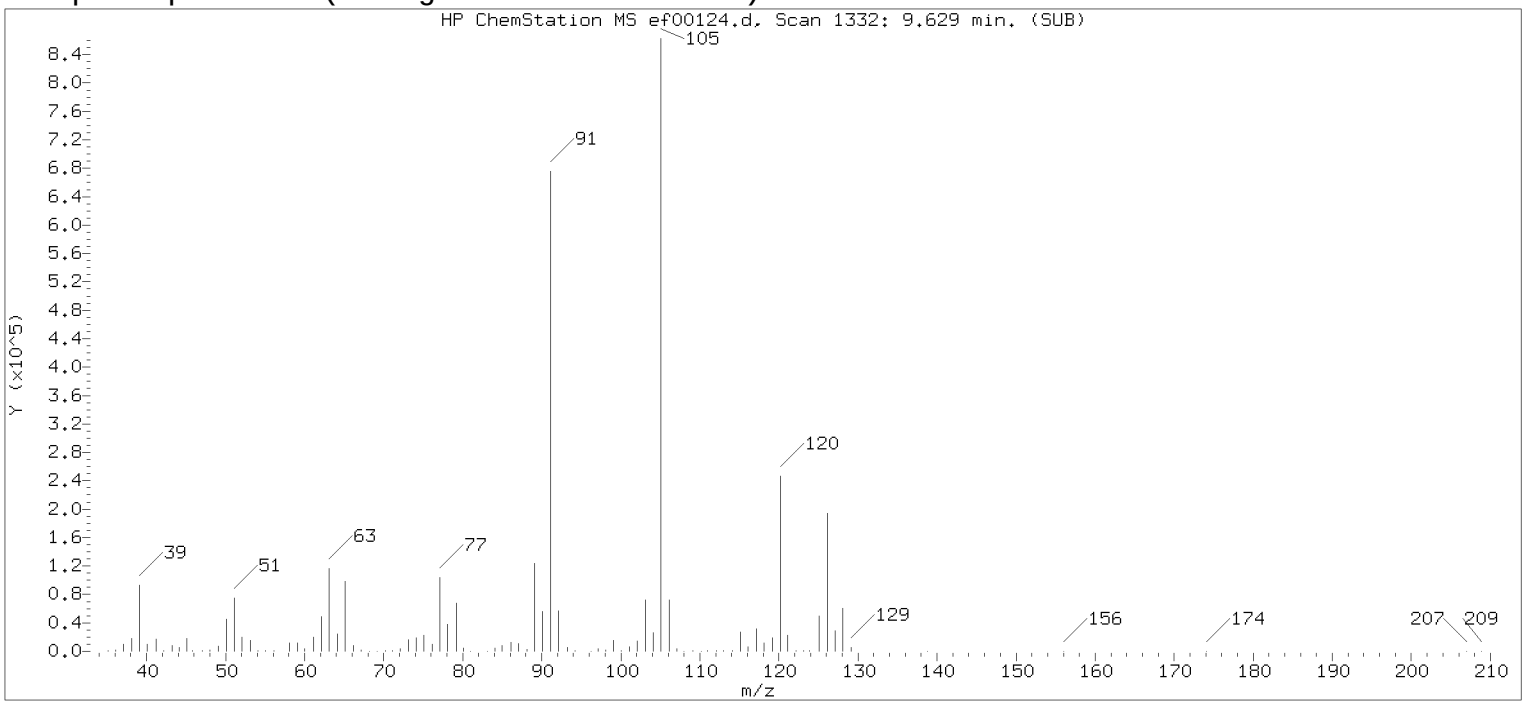
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 834568M
Concentration (ppb(v)) : 10.8952
Integration start scan : 1334 Integration stop scan: 1341
Y at integration start : 681 Y at integration end: 681

Reason for manual integration: improper integration

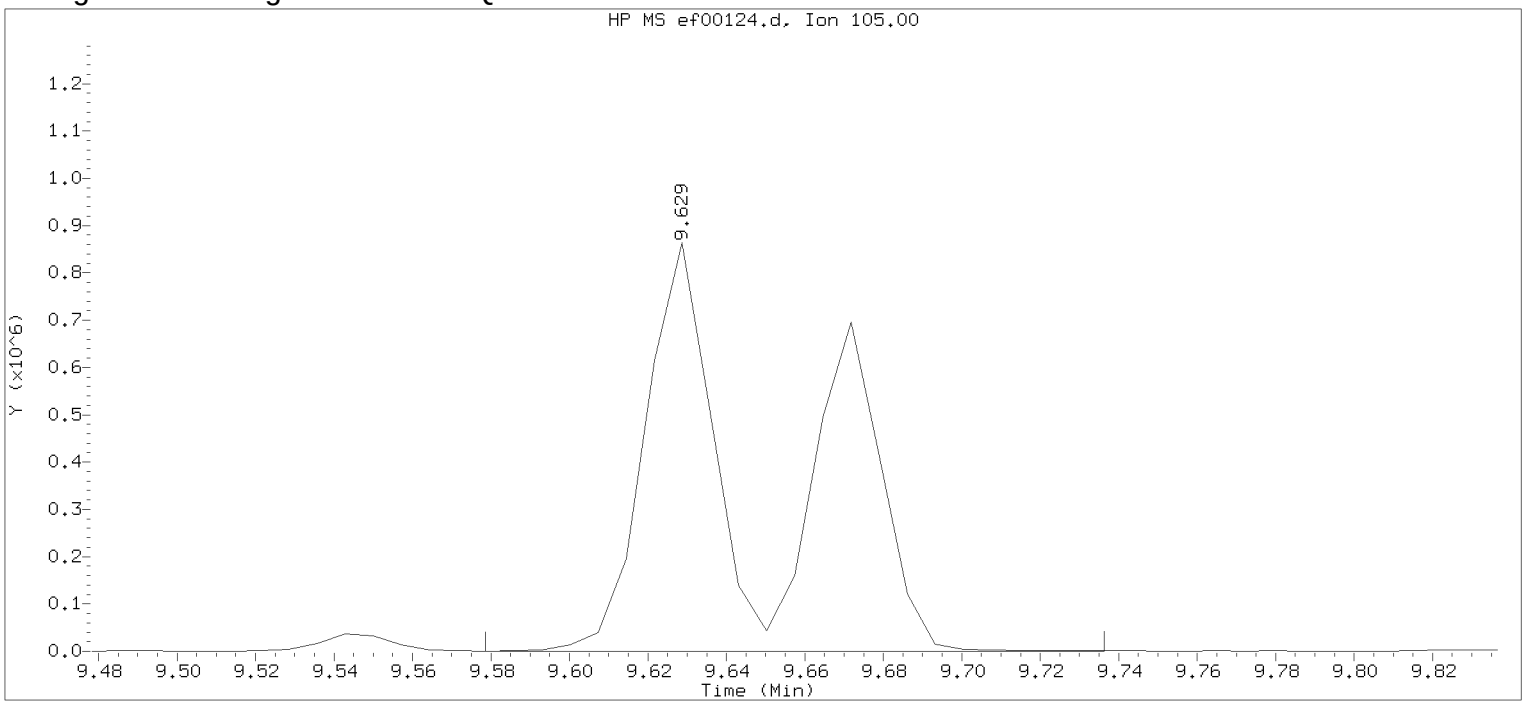
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:27.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:04.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00124.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 00:53 Analyst ID: jeb07445

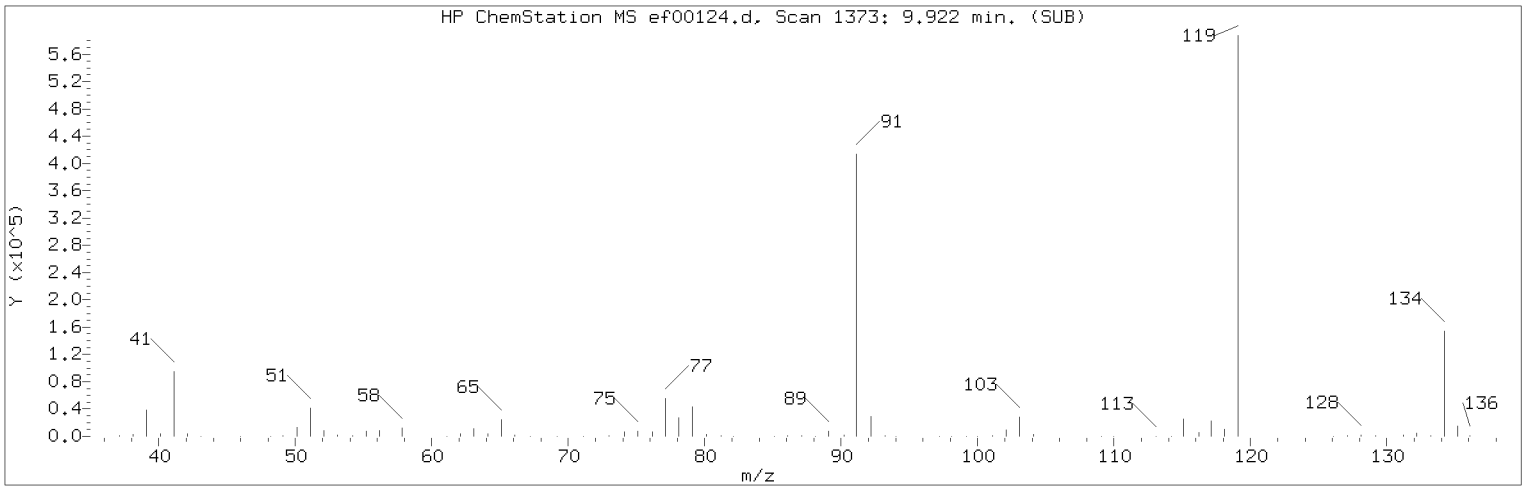
Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 01:11 Unknown

Sample Name: LCSDE04 Lab Sample ID: LCSDE04

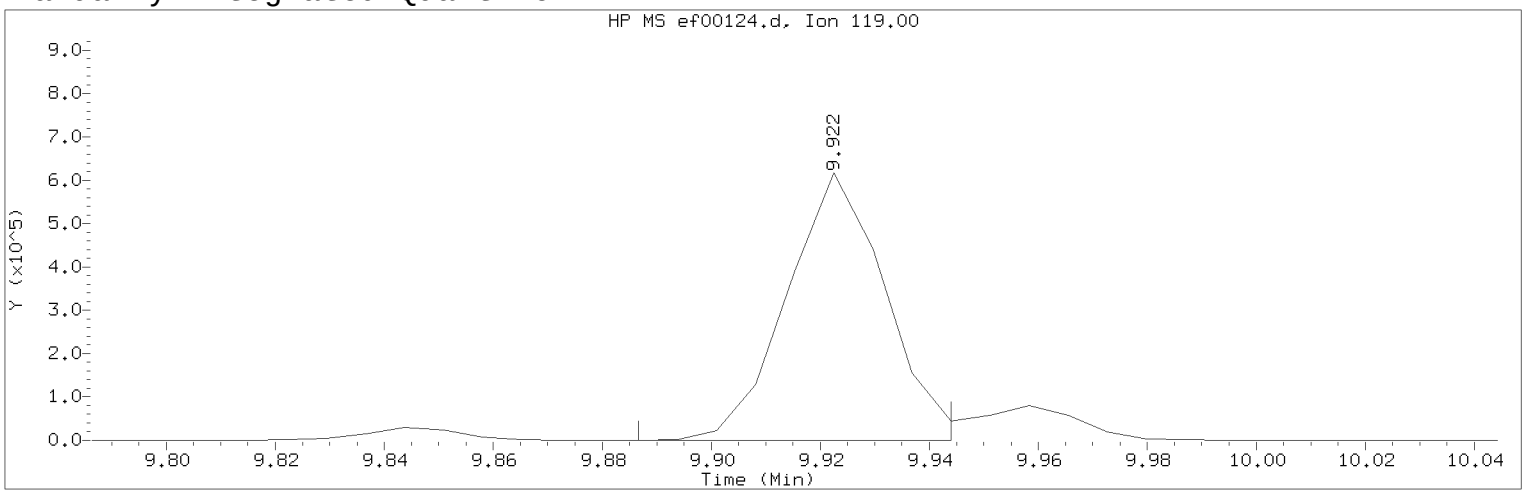
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 1857268
Concentration (ppb(v)) : 24.2704
Integration start scan : 1324 Integration stop scan: 1346
Y at integration start : 361 Y at integration end: 361

Digitally signed by Jacob E. Bailey on 06/11/2018 at 12:27.
Target 3.5 esignature used.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00124.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 00:53 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 12:26 jeb07445

Sample Name: LCSDE04 Lab Sample ID: LCSDE04

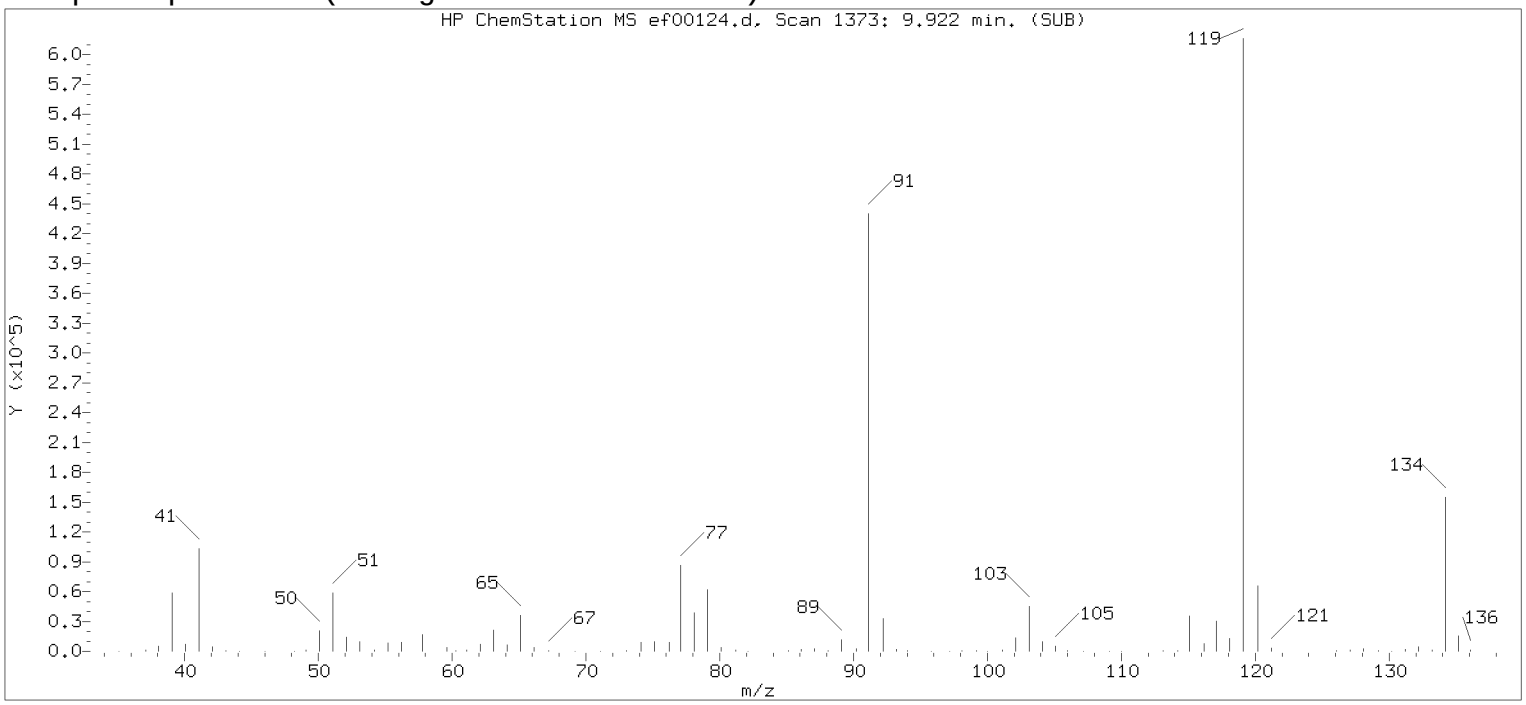
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 775408M
Concentration (ppb(v)) : 11.1578
Integration start scan : 1367 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

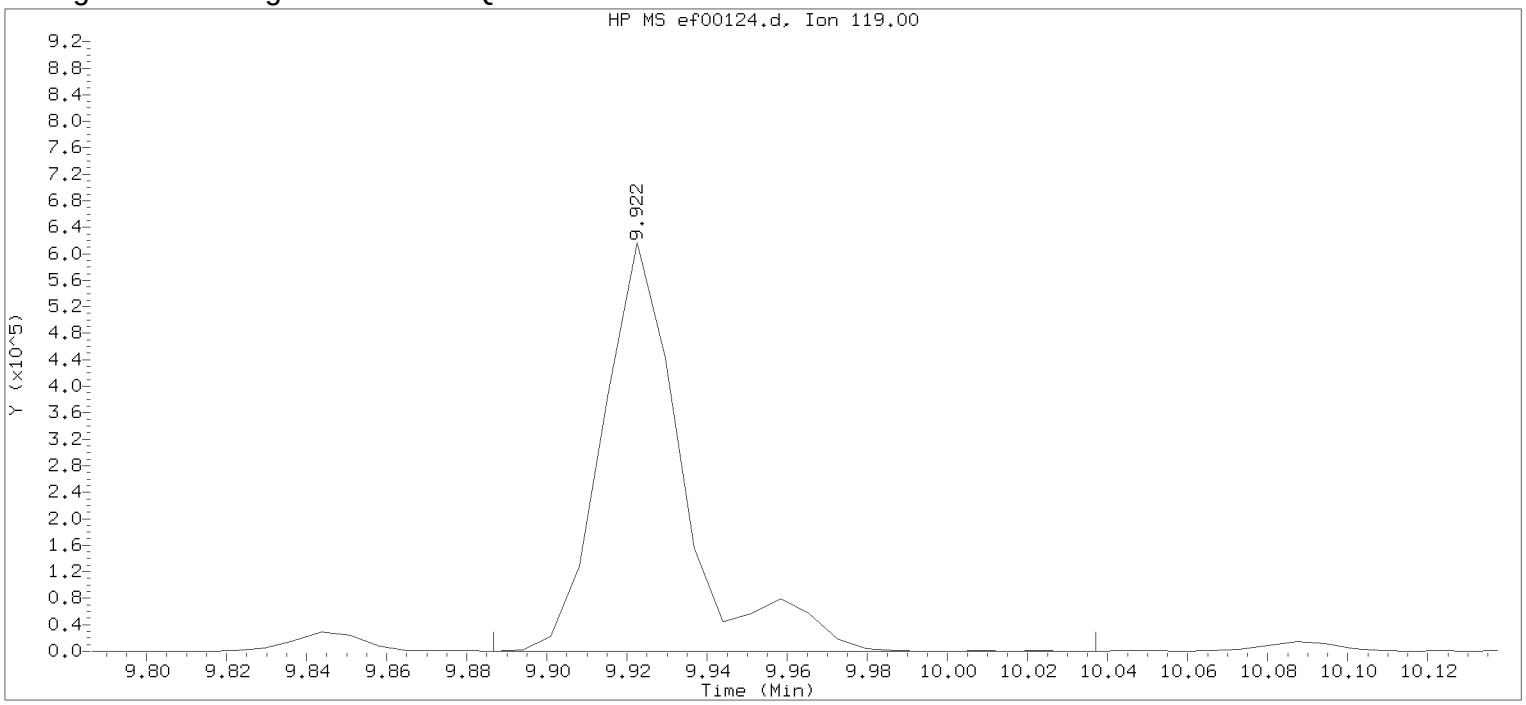
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/11/2018 at 12:27.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 15:04.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun10.b/ef00124.d Instrument ID: HP22820.i
Injection date and time: 11-JUN-2018 00:53 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun10.b/to-15.m Sublist used: all
Calibration date and time: 10-JUN-2018 20:53
Date, time and analyst ID of latest file update: 11-Jun-2018 01:11 Unknown

Sample Name: LCSDE04 Lab Sample ID: LCSDE04

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 870022
Concentration (ppb(v)) : 12.5192
Integration start scan : 1367 Integration stop scan: 1388
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/11/2018 at 12:27.
Target 3.5 esignature used.

Lancaster Laboratories
Volatiles in Air
Runlog for Agilent GC/MS System HP22820 **HP #05**

Data Directory Path is - D:\data\18jun14\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
jeb07445	EF00170.D	50NGBFB	06/14/2018	12:23		
jeb07445	EF00171.D	VSTD010	06/14/2018	13:17		
jeb07445	EF00172.D	VBLKE07	06/14/2018	14:13	E1816530AA	
jeb07445	EF00173.D	LCSE07	06/14/2018	14:56	E1816530AA	
jeb07445	EF00174.D	LCSDE07	06/14/2018	15:29	E1816530AA	
jeb07445	EF00175.D	9657811	06/14/2018	17:00	E1816530AA	
jeb07445	EF00176.D	9657811DL	06/14/2018	17:33	E1816530AA	
jeb07445	EF00177.D	9657812	06/14/2018	18:15	E1816530AA	
jeb07445	EF00178.D	9657812DL	06/14/2018	18:39	E1816530AA	
jeb07445	EF00179.D	9659022	06/14/2018	19:39	E1816530AA	
jeb07445	EF00180.D	9659022DL	06/14/2018	20:03	E1816530AA	
jeb07445	EF00181.D	9659023	06/14/2018	20:45	E1816530AA	
jeb07445	EF00182.D	9659023DL	06/14/2018	21:09	E1816530AA	
jeb07445	EF00183.D	9659024	06/14/2018	21:52	E1816530AA	
jeb07445	EF00184.D	9659024DL	06/14/2018	22:15	E1816530AA	
jeb07445	EF00185.D	9659025	06/14/2018	22:58	E1816530AA	
jeb07445	EF00186.D	9659025DL	06/14/2018	23:21	E1816530AA	
jeb07445	EF00187.D	9657811	06/15/2018	00:04	E1816530AA	
jeb07445	EF00188.D	VBLKE07	06/15/2018	00:36	E1816530AA	
jeb07445	EF00189.D	cc509	06/15/2018	01:09	E1816530AA	

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKE07
Canister ID:	N/A	Lab File ID:	ef00172.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/14/2018
Injection Volume:	200 cc	Analyzed Time:	14:13
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
115-07-1	Propene	0.50	U
75-71-8	Dichlorodifluoromethane	0.20	U
75-45-6	Chlorodifluoromethane	0.20	U
76-14-2	Freon 114	0.20	U
74-87-3	Chloromethane	0.20	U
75-01-4	Vinyl Chloride	0.20	U
106-99-0	1,3-Butadiene	0.40	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.20	U
593-60-2	Bromoethene	0.40	U
75-43-4	Dichlorofluoromethane	0.20	U
75-69-4	Trichlorofluoromethane	0.20	U
109-66-0	Pentane	0.50	U
64-17-5	Ethanol	0.50	U
107-02-8	Acrolein	1.0	U
75-35-4	1,1-Dichloroethene	0.20	U
76-13-1	Freon 113	0.50	U
67-64-1	Acetone	0.50	U
74-88-4	Methyl Iodide	0.20	U
75-15-0	Carbon Disulfide	0.50	U
67-63-0	Isopropanol	0.50	U
75-05-8	Acetonitrile	0.50	U
107-05-1	3-Chloropropene	0.20	U
75-09-2	Methylene Chloride	0.20	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKE07
Canister ID:	N/A	Lab File ID:	ef00172.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/14/2018
Injection Volume:	200 cc	Analyzed Time:	14:13
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-65-0	tert-Butyl Alcohol	0.50	U
107-13-1	Acrylonitrile	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.20	U
1634-04-4	Methyl t-Butyl Ether	0.20	U
110-54-3	Hexane	0.20	U
75-34-3	1,1-Dichloroethane	0.20	U
108-05-4	Vinyl Acetate	1.0	U
108-20-3	Di-Isopropyl Ether	0.20	U
637-92-3	Ethyl Tert-Butyl Ether	0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	U
540-59-0	1,2-Dichloroethene (total)	0.20	U
78-93-3	2-Butanone	0.50	U
141-78-6	Ethyl Acetate	0.50	U
96-33-3	Methyl Acrylate	0.20	U
109-99-9	Tetrahydrofuran	0.50	U
67-66-3	Chloroform	0.20	U
71-55-6	1,1,1-Trichloroethane	0.20	U
110-82-7	Cyclohexane	0.20	U
56-23-5	Carbon Tetrachloride	0.20	U
71-43-2	Benzene	0.20	U
107-06-2	1,2-Dichloroethane	0.20	U
540-84-1	Isooctane	0.20	U
994-05-8	Tert-Amyl Methyl Ether	0.20	U
142-82-5	Heptane	0.50	U

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKE07
Canister ID:	N/A	Lab File ID:	ef00172.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/14/2018
Injection Volume:	200 cc	Analyzed Time:	14:13
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
79-01-6	Trichloroethene	0.20	U
140-88-5	Ethyl Acrylate	0.20	U
78-87-5	1,2-Dichloropropane	0.20	U
74-95-3	Dibromomethane	0.20	U
123-91-1	1,4-Dioxane	0.50	U
80-62-6	Methyl Methacrylate	0.20	U
75-27-4	Bromodichloromethane	0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	U
108-10-1	4-Methyl-2-Pentanone	0.50	U
108-88-3	Toluene	0.20	U
111-65-9	Octane	0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	U
542-75-6	1,3-Dichloropropene (total)	0.20	U
97-63-2	Ethyl Methacrylate	0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	U
127-18-4	Tetrachloroethene	0.20	U
591-78-6	2-Hexanone	0.50	U
124-48-1	Dibromochloromethane	0.20	U
106-93-4	1,2-Dibromoethane	0.20	U
108-90-7	Chlorobenzene	0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	U
100-41-4	Ethylbenzene	0.20	U
179601-23-1	m/p-Xylene	0.20	U
95-47-6	o-Xylene	0.20	U

Abbreviations:
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J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKE07
Canister ID:	N/A	Lab File ID:	ef00172.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/14/2018
Injection Volume:	200 cc	Analyzed Time:	14:13
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
1330-20-7	Xylene (total)	0.20	U
100-42-5	Styrene	0.20	U
75-25-2	Bromoform	0.20	U
98-82-8	Cumene	0.20	U
108-86-1	Bromobenzene	0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U
96-18-4	1,2,3-Trichloropropane	0.20	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.20	U
622-96-8	4-Ethyltoluene	0.20	U
108-67-8	1,3,5-Trimethylbenzene	0.20	U
98-83-9	Alpha Methyl Styrene	0.20	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.20	U
135-98-8	sec-Butylbenzene	0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	U
99-87-6	p-Isopropyltoluene	0.20	U
100-44-7	Benzyl Chloride	0.50	U
95-50-1	1,2-Dichlorobenzene	0.20	U
104-51-8	n-Butylbenzene	0.20	U
67-72-1	Hexachloroethane	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKE07
Canister ID:	N/A	Lab File ID:	ef00172.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/14/2018
Injection Volume:	200 cc	Analyzed Time:	14:13
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
87-68-3	Hexachlorobutadiene	0.40	U
91-20-3	Naphthalene	0.40	U

Abbreviations:
U = The compound is less than the limit being reported.
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D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 LCS File ID: ef00173.d LCSD File ID: ef00174.d

Batch: E1816530AA LCS Injected: 06/14/2018 LCSD Injected: 06/14/2018

Method: EPA TO-15 LCS Client ID: LCSE07 LCSD Client ID: LCSDE07

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	10.00	9.49	9.20	95	92	78-126	3	25	YES
Dichlorodifluoromethane	10.00	10.96	10.40	110	104	74-133	5	25	YES
Chlorodifluoromethane	10.00	10.87	10.17	109	102	70-138	7	25	YES
Freon 114	10.00	10.49	9.96	105	100	66-126	5	25	YES
Chloromethane	10.00	11.48	10.66	115	107	65-140	7	25	YES
Vinyl Chloride	10.00	10.32	10.06	103	101	75-130	3	25	YES
1,3-Butadiene	10.00	9.35	8.97	93	90	72-122	4	25	YES
Bromomethane	10.00	11.26	10.72	113	107	71-133	5	25	YES
Chloroethane	10.00	10.33	9.82	103	98	76-129	5	25	YES
Bromoethene	10.00	8.98	8.88	90	89	77-123	1	25	YES
Dichlorofluoromethane	10.00	11.08	10.52	111	105	75-137	5	25	YES
Trichlorofluoromethane	10.00	10.33	9.81	103	98	73-132	5	25	YES
Pentane	10.00	8.83	8.89	88	89	69-125	1	25	YES
Ethanol	10.00	9.38	9.12	94	91	56-149	3	25	YES
Acrolein	10.00	8.78	8.20	88	82	54-132	7	25	YES
1,1-Dichloroethene	10.00	9.87	9.66	99	97	70-129	2	25	YES
Freon 113	10.00	9.73	9.32	97	93	66-119	4	25	YES
Acetone	10.00	10.79	10.01	108	100	71-136	7	25	YES
Methyl Iodide	10.00	8.62	8.23	86	82	72-127	5	25	YES
Carbon Disulfide	10.00	11.08	10.50	111	105	72-128	5	25	YES
Isopropanol	10.00	8.40	8.01	84	80	69-160	5	25	YES
Acetonitrile	10.00	12.09	10.70	121	107	56-136	12	25	YES
3-Chloropropene	10.00	9.93	9.71	99	97	67-141	2	25	YES
Methylene Chloride	10.00	11.62	11.29	116	113	69-128	3	25	YES
tert-Butyl Alcohol	10.00	8.21	7.95	82	79	71-154	3	25	YES
Acrylonitrile	10.00	10.60	10.06	106	101	68-135	5	25	YES
trans-1,2-Dichloroethene	10.00	10.55	10.19	106	102	77-128	3	25	YES
Methyl t-Butyl Ether	10.00	7.85	7.53	78	75	71-119	4	25	YES
Hexane	10.00	8.07	7.75	81	78	70-118	4	25	YES
1,1-Dichloroethane	10.00	10.43	9.92	104	99	74-129	5	25	YES
Vinyl Acetate	10.00	9.02	8.59	90	86	75-161	5	25	YES
Di-Isopropyl Ether	10.00	8.95	8.59	90	86	71-122	4	25	YES
Ethyl Tert-Butyl Ether	10.00	7.31	7.24	73	72	68-121	1	25	YES
cis-1,2-Dichloroethene	10.00	9.58	9.12	96	91	76-126	5	25	YES
2-Butanone	10.00	8.99	8.31	90	83	75-126	8	25	YES
Ethyl Acetate	10.00	9.17	7.98	92	80	73-124	14	25	YES

COMMENTS:
Applies to Sample(s): 9657811-9657812, 96590229659025

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 LCS File ID: ef00173.d LCSD File ID: ef00174.d

Batch: E1816530AA LCS Injected: 06/14/2018 LCSD Injected: 06/14/2018

Method: EPA TO-15 LCS Client ID: LCSE07 LCSD Client ID: LCSDE07

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	10.00	9.23	9.33	92	93	75-125	1	25	YES
Tetrahydrofuran	10.00	8.63	8.42	86	84	67-127	2	25	YES
Chloroform	10.00	10.58	10.20	106	102	75-127	4	25	YES
1,1,1-Trichloroethane	10.00	9.66	9.38	97	94	74-122	3	25	YES
Cyclohexane	10.00	8.41	8.15	84	82	70-118	3	25	YES
Carbon Tetrachloride	10.00	10.05	9.66	100	97	72-127	4	25	YES
Benzene	10.00	10.11	9.43	101	94	76-123	7	25	YES
1,2-Dichloroethane	10.00	11.43	10.58	114	106	72-138	8	25	YES
Isooctane	10.00	10.06	9.59	101	96	74-127	5	25	YES
Tert-Amyl Methyl Ether	10.00	8.63	8.10	86	81	78-124	6	25	YES
Heptane	10.00	9.64	9.11	96	91	74-122	6	25	YES
Trichloroethene	10.00	9.45	8.67	95	87	76-118	9	25	YES
Ethyl Acrylate	10.00	8.53	8.06	85	81	71-126	6	25	YES
1,2-Dichloropropane	10.00	10.65	9.79	106	98	75-127	8	25	YES
Dibromomethane	10.00	10.33	9.82	103	98	76-124	5	25	YES
1,4-Dioxane	10.00	9.62	9.04	96	90	76-124	6	25	YES
Methyl Methacrylate	10.00	8.47	8.26	85	83	73-117	3	25	YES
Bromodichloromethane	10.00	10.87	10.31	109	103	75-134	5	25	YES
cis-1,3-Dichloropropene	10.00	8.91	8.48	89	85	51-120	5	25	YES
4-Methyl-2-Pentanone	10.00	9.17	8.79	92	88	79-131	4	25	YES
Toluene	10.00	9.77	9.30	98	93	78-119	5	25	YES
Octane	10.00	10.48	9.68	105	97	73-122	8	25	YES
trans-1,3-Dichloropropene	10.00	9.53	9.29	95	93	76-131	3	25	YES
Ethyl Methacrylate	10.00	8.86	8.38	89	84	69-137	6	25	YES
1,1,2-Trichloroethane	10.00	10.80	10.07	108	101	76-127	7	25	YES
Tetrachloroethene	10.00	9.84	9.12	98	91	68-123	8	25	YES
2-Hexanone	10.00	9.65	9.28	97	93	74-134	4	25	YES
Dibromochloromethane	10.00	11.14	10.24	111	102	74-131	8	25	YES
1,2-Dibromoethane	10.00	10.51	9.76	105	98	73-121	7	25	YES
Chlorobenzene	10.00	9.99	9.27	100	93	76-117	7	25	YES
1,1,1,2-Tetrachloroethane	10.00	10.91	10.23	109	102	73-137	6	25	YES
Ethylbenzene	10.00	9.39	8.89	94	89	77-117	5	25	YES
m/p-Xylene	10.00	9.31	8.79	93	88	78-119	6	25	YES
o-Xylene	10.00	9.08	8.72	91	87	78-121	4	25	YES
Xylene (total)	20.00	18.39	17.51	92	88	79-120	5	25	YES
Styrene	10.00	9.67	9.27	97	93	77-143	4	25	YES

COMMENTS:
Applies to Sample(s): 9657811-9657812, 96590229659025

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 LCS File ID: ef00173.d LCSD File ID: ef00174.d

Batch: E1816530AA LCS Injected: 06/14/2018 LCSD Injected: 06/14/2018

Method: EPA TO-15 LCS Client ID: LCSE07 LCSD Client ID: LCSDE07

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	10.98	10.12	110	101	58-144	8	25	YES
Cumene	10.00	8.99	8.56	90	86	80-133	5	25	YES
Bromobenzene	10.00	9.78	9.12	98	91	74-118	7	25	YES
1,1,2,2-Tetrachloroethane	10.00	11.41	10.64	114	106	72-133	7	25	YES
1,2,3-Trichloropropane	10.00	10.94	10.38	109	104	71-127	5	25	YES
n-Propylbenzene	10.00	9.68	8.97	97	90	73-120	8	25	YES
2-Chlorotoluene	10.00	10.39	9.85	104	99	74-123	5	25	YES
4-Ethyltoluene	10.00	10.45	9.74	105	97	73-130	7	25	YES
1,3,5-Trimethylbenzene	10.00	10.24	9.68	102	97	72-130	6	25	YES
Alpha Methyl Styrene	10.00	8.92	8.54	89	85	71-138	4	25	YES
tert-Butylbenzene	10.00	10.01	9.75	100	98	78-138	3	25	YES
1,2,4-Trimethylbenzene	10.00	10.42	10.05	104	100	70-138	4	25	YES
sec-Butylbenzene	10.00	9.95	9.61	99	96	79-139	3	25	YES
1,3-Dichlorobenzene	10.00	10.59	10.03	106	100	75-129	6	25	YES
1,4-Dichlorobenzene	10.00	10.12	9.66	101	97	74-123	5	25	YES
p-Isopropyltoluene	10.00	10.01	9.59	100	96	75-145	4	25	YES
Benzyl Chloride	10.00	8.94	8.57	89	86	49-163	4	25	YES
1,2-Dichlorobenzene	10.00	10.62	9.85	106	99	71-126	7	25	YES
n-Butylbenzene	10.00	9.94	9.56	99	96	72-143	4	25	YES
Hexachloroethane	10.00	11.60	11.08	116	111	59-135	5	25	YES
1,2-Dibromo-3-chloropropane	10.00	10.02	9.69	100	97	52-156	3	25	YES
1,2,4-Trichlorobenzene	10.00	7.62	7.92	76	79	45-156	4	25	YES
Hexachlorobutadiene	10.00	9.27	9.13	93	91	49-154	2	25	YES
Naphthalene	10.00	7.59	7.94	76	79	39-152	5	25	YES

COMMENTS:
Applies to Sample(s): 9657811-9657812, 96590229659025

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FORM 04
VOLATILE ORGANICS IN AIR
METHOD BLANK SUMMARY

SDG No.:

Lab Sample ID: VBLKE07 Analyzed Date: 06/14/2018

Lab File ID: ef00172.d Analyzed Time: 14:13

Instrument ID: 22820

THIS BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS AND LCSD:

LAB SAMPLE ID	LAB FILE ID	CANISTER ID	DATE ANALYZED	TIME ANALYZED
LCSE07	ef00173.d	N/A	06/14/2018	14:56
LCSDE07	ef00174.d	N/A	06/14/2018	15:29
9657811	ef00175.d	1095	06/14/2018	17:00
9657811DL	ef00176.d	1095	06/14/2018	17:33
9657812	ef00177.d	1302	06/14/2018	18:15
9657812DL	ef00178.d	1302	06/14/2018	18:39
9659022	ef00179.d	1163	06/14/2018	19:39
9659022DL	ef00180.d	1163	06/14/2018	20:03
9659023	ef00181.d	1331	06/14/2018	20:45
9659024	ef00183.d	1310	06/14/2018	21:52
9659025	ef00185.d	1165	06/14/2018	22:58
9659025DL	ef00186.d	1165	06/14/2018	23:21
9657811	ef00187.d	1095	06/15/2018	00:04
cc509	ef00189.d	509	06/15/2018	01:09

COMMENTS:

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

SDG No.:

Lab File ID: ef00170.d

BFB Injection Date: 06/14/2018

Instrument ID: 22820

BFB Injection Time: 12:23

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0% - 40.0% of mass 95	21.31
75	30.0% - 66.0% of mass 95	53.74
95	Base peak, 100% relative abundance	100.00
96	5.0% - 9.0% of mass 95	6.75
173	< 2.0% of mass 174	0.50 (0.68)
174	> 50.0% of mass 95	73.29
175	4.0% - 9.0% of mass 174	5.17 (7.05)
176	93.0% - 101.0% of mass 174	70.91 (96.75)
177	5.0% - 9.0% of mass 176	4.48 (6.32)

THIS CHECK APPLIES TO THE FOLLOWING:

LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD010	ef00171.d	06/14/2018	13:17
VBLKE07	ef00172.d	06/14/2018	14:13
LCSE07	ef00173.d	06/14/2018	14:56
LCSDE07	ef00174.d	06/14/2018	15:29
9657811	ef00175.d	06/14/2018	17:00
9657811DL	ef00176.d	06/14/2018	17:33
9657812	ef00177.d	06/14/2018	18:15
9657812DL	ef00178.d	06/14/2018	18:39
9659022	ef00179.d	06/14/2018	19:39
9659022DL	ef00180.d	06/14/2018	20:03
9659023	ef00181.d	06/14/2018	20:45
9659024	ef00183.d	06/14/2018	21:52
9659025	ef00185.d	06/14/2018	22:58
9659025DL	ef00186.d	06/14/2018	23:21
9657811	ef00187.d	06/15/2018	00:04
cc509	ef00189.d	06/15/2018	01:09

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: ef00171.d

Calibration Date: 06/14/2018

Instrument ID: 22820

Calibration Time: 13:17

Init. Calib. Date(s): 06/10/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
Propene	0.473	0.414	8.764	10	-12
Dichlorodifluoromethane	1.655	1.689	10.200	10	2
Chlorodifluoromethane	1.050	1.117	10.640	10	6
Freon 114	1.777	1.753	9.865	10	-1
Chloromethane	0.666	0.700	10.502	10	5
Vinyl Chloride	0.637	0.628	9.859	10	-1
1,3-Butadiene	0.458	0.397	8.669	10	-13
Bromomethane	0.542	0.568	10.467	10	5
Chloroethane	0.355	0.362	10.192	10	2
Bromoethene	0.553	0.488	8.828	10	-12
Dichlorofluoromethane	1.412	1.510	10.690	10	7
Trichlorofluoromethane	1.769	1.707	9.648	10	-4
Pentane	1.014	0.834	8.226	10	-18
Ethanol	0.221	0.207	9.336	10	-7
Freon123a	1.311	1.305	11.045	11.1	0
Acrolein	0.235	0.216	9.200	10	-8
1,1-Dichloroethene	0.969	0.929	9.586	10	-4
Freon 113	0.998	0.919	9.210	10	-8
Acetone	0.970	0.976	10.065	10	1
Methyl Iodide	1.585	1.308	8.256	10	-17
Carbon Disulfide	1.814	1.824	10.051	10	1
Isopropanol	0.821	0.674	8.211	10	-18
Acetonitrile	0.430	0.421	9.783	10	-2
3-Chloropropene	0.247	0.215	9.645	11.1	-13
Methylene Chloride	0.539	0.539	11.103	11.1	0
tert-Butyl Alcohol	0.917	0.661	8.006	11.1	-28
Acrylonitrile	0.535	0.525	9.820	10	-2
trans-1,2-Dichloroethene	0.894	0.845	9.457	10	-5
Methyl t-Butyl Ether	1.527	1.172	7.674	10	-23
Hexane	0.912	0.715	7.845	10	-22
1,1-Dichloroethane	1.224	1.172	9.579	10	-4
Vinyl Acetate	0.130	0.106	9.158	11.2	-18
Di-Isopropyl Ether	1.975	1.696	8.586	10	-14
Ethyl Tert-Butyl Ether	1.334	0.953	7.145	10	-29
cis-1,2-Dichloroethene	0.836	0.733	8.761	10	-12
2-Butanone	0.315	0.278	8.817	10	-12
Ethyl Acetate	0.155	0.129	8.357	10	-16
Methyl Acrylate	1.025	0.928	9.053	10	-9
Tetrahydrofuran	0.694	0.570	8.216	10	-18

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: ef00171.d

Calibration Date: 06/14/2018

Instrument ID: 22820

Calibration Time: 13:17

Init. Calib. Date(s): 06/10/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
Chloroform	1.454	1.440	9.904	10	-1
1,1,1-Trichloroethane	1.341	1.239	9.235	10	-8
Cyclohexane	0.960	0.791	8.243	10	-18
Carbon Tetrachloride	1.313	1.262	9.617	10	-4
Benzene	0.613	0.589	9.608	10	-4
1,2-Dichloroethane	0.287	0.314	10.930	10	9
Isooctane	0.834	0.793	9.514	10	-5
Tert-Amyl Methyl Ether	0.388	0.326	8.385	10	-16
Heptane	0.323	0.294	9.122	10	-9
Trichloroethene	0.268	0.252	9.422	10	-6
Ethyl Acrylate	0.376	0.316	8.392	10	-16
1,2-Dichloropropane	0.234	0.238	10.155	10	2
Dibromomethane	0.246	0.242	9.834	10	-2
1,4-Dioxane	0.141	0.129	9.211	10	-8
Methyl Methacrylate	0.196	0.167	8.477	10	-15
Bromodichloromethane	0.459	0.468	10.214	10	2
cis-1,3-Dichloropropene	0.334	0.290	8.702	10	-13
4-Methyl-2-Pentanone	0.456	0.406	8.891	10	-11
Toluene	0.718	0.679	9.445	10	-6
Octane	0.445	0.440	9.889	10	-1
trans-1,3-Dichloropropene	0.263	0.247	9.402	10	-6
Ethyl Methacrylate	0.307	0.260	8.477	10	-15
1,1,2-Trichloroethane	0.272	0.283	10.400	10	4
Tetrachloroethene	0.366	0.338	9.215	10	-8
2-Hexanone	0.410	0.397	9.668	10	-3
Dibromochloromethane	0.327	0.336	10.272	10	3
1,2-Dibromoethane	0.403	0.404	10.022	10	0
Chlorobenzene	0.607	0.566	9.327	10	-7
1,1,1,2-Tetrachloroethane	0.295	0.308	10.417	10	4
Ethylbenzene	0.903	0.819	9.071	10	-9
m/p-Xylene	0.690	0.613	8.887	10	-11
o-Xylene	0.678	0.597	8.804	10	-12
Styrene	0.513	0.494	9.617	10	-4
Bromoform	0.392	0.393	10.004	10	0
Cumene	0.904	0.812	8.987	10	-10
Bromobenzene	0.345	0.318	9.218	10	-8
1,1,2,2-Tetrachloroethane	0.631	0.661	10.478	10	5
1,2,3-Trichloropropane	0.180	0.190	10.568	10	6
n-Propylbenzene	0.268	0.251	9.379	10	-6

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: ef00171.d

Calibration Date: 06/14/2018

Instrument ID: 22820

Calibration Time: 13:17

Init. Calib. Date(s): 06/10/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
2-Chlorotoluene	0.256	0.260	10.149	10	1
4-Ethyltoluene	0.957	0.956	9.991	10	0
1,3,5-Trimethylbenzene	0.781	0.777	9.954	10	0
Alpha Methyl Styrene	0.360	0.316	8.790	10	-12
tert-Butylbenzene	0.708	0.725	10.231	10	2
1,2,4-Trimethylbenzene	0.766	0.797	10.407	10	4
sec-Butylbenzene	1.097	1.103	10.063	10	1
1,3-Dichlorobenzene	0.591	0.601	10.166	10	2
1,4-Dichlorobenzene	0.585	0.564	9.650	10	-3
p-Isopropyltoluene	0.877	0.882	10.057	10	1
Benzyl Chloride	0.393	0.370	9.412	10	-6
1,2-Dichlorobenzene	0.550	0.546	9.927	10	-1
n-Butylbenzene	0.861	0.843	9.794	10	-2
Hexachloroethane	0.230	0.266	11.557	10	16
1,2-Dibromo-3-chloropropane	0.256	0.235	9.165	10	-8
1,2,4-Trichlorobenzene	0.356	0.257	7.230	10	-28
Hexachlorobutadiene	0.296	0.272	9.199	10	-8
Naphthalene	0.689	0.500	7.253	10	-27

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

Continuing Calibration
Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP22820.i/18jun10.b/ef00111.d
/chem/HP22820.i/18jun10.b/ef00112.d
/chem/HP22820.i/18jun10.b/ef00113.d
/chem/HP22820.i/18jun10.b/ef00114.d
/chem/HP22820.i/18jun10.b/ef00116.d
/chem/HP22820.i/18jun10.b/ef00117.d

** ICAL Area and RT are the average from the above standards.

Current Continuing Calibration Standard:

/chem/HP22820.i/18jun14.b/ef00171.d

Area Summary

File ID:

Internal Standard Name	ef00171.d	ICAL Area	Low Limit	High Limit	In Spec
Bromochloromethane	412353	324192	194515	453869	Yes
1,4-Difluorobenzene	1286724	1109540	665724	1553356	Yes
Chlorobenzene-d5	1289790	1128840	677304	1580376	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

RT Summary

File ID:

Internal Standard Name	ef00171.d	ICAL RT	In Spec
Bromochloromethane	5.467	5.467	Yes
1,4-Difluorobenzene	6.291	6.291	Yes
Chlorobenzene-d5	8.497	8.493	Yes

A "No" indicates the retention time is greater than 30 seconds from the RT of the referenced ICAL average.

Comments:_____

_____

Report generated on 06/14/2018 at 13:38

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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: 06/14/2018

Lab File ID: ef00171.d Analyzed Time: 13:17

Instrument ID: 22820

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	R.T.	Area	R.T.	Area	R.T.
24 HOUR STANDARD	412353	5.47	1286724	6.29	1289790	8.50
UPPER LIMIT	577294	5.80	1801414	6.62	1805706	8.83
LOWER LIMIT	247412	5.14	772034	5.96	773874	8.17
LAB SAMPLE ID						
VBLKE07	368012	5.47	1022495	6.29	1147191	8.50
LCSE07	369536	5.47	1157691	6.29	1146156	8.50
LCSDE07	386830	5.47	1237476	6.29	1227701	8.50
9657811	353953	5.47	1082794	6.30	1193140	8.50
9657811DL	349631	5.47	956270	6.29	1081494	8.50
9657812	347866	5.47	976022	6.29	1146334	8.50
9657812DL	352158	5.47	943021	6.29	1080724	8.49
9659022	348926	5.47	1006802	6.30	1128438	8.50
9659022DL	318412	5.47	824036	6.29	975503	8.49
9659023	325252	5.47	946022	6.30	1073726	8.50
9659024	327995	5.47	944547	6.30	1086628	8.50
9659025	332628	5.47	950710	6.30	1039777	8.50
9659025DL	321369	5.47	847894	6.29	981553	8.50
9657811	330538	5.47	887450	6.29	1047106	8.50
cc509	315669	5.47	792284	6.29	911870	8.50

* = 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.

Data File: /chem/HP22820.i/18jun14.b/ef00170.d

Date : 14-JUN-2018 12:23

Client ID: 50NGBFB

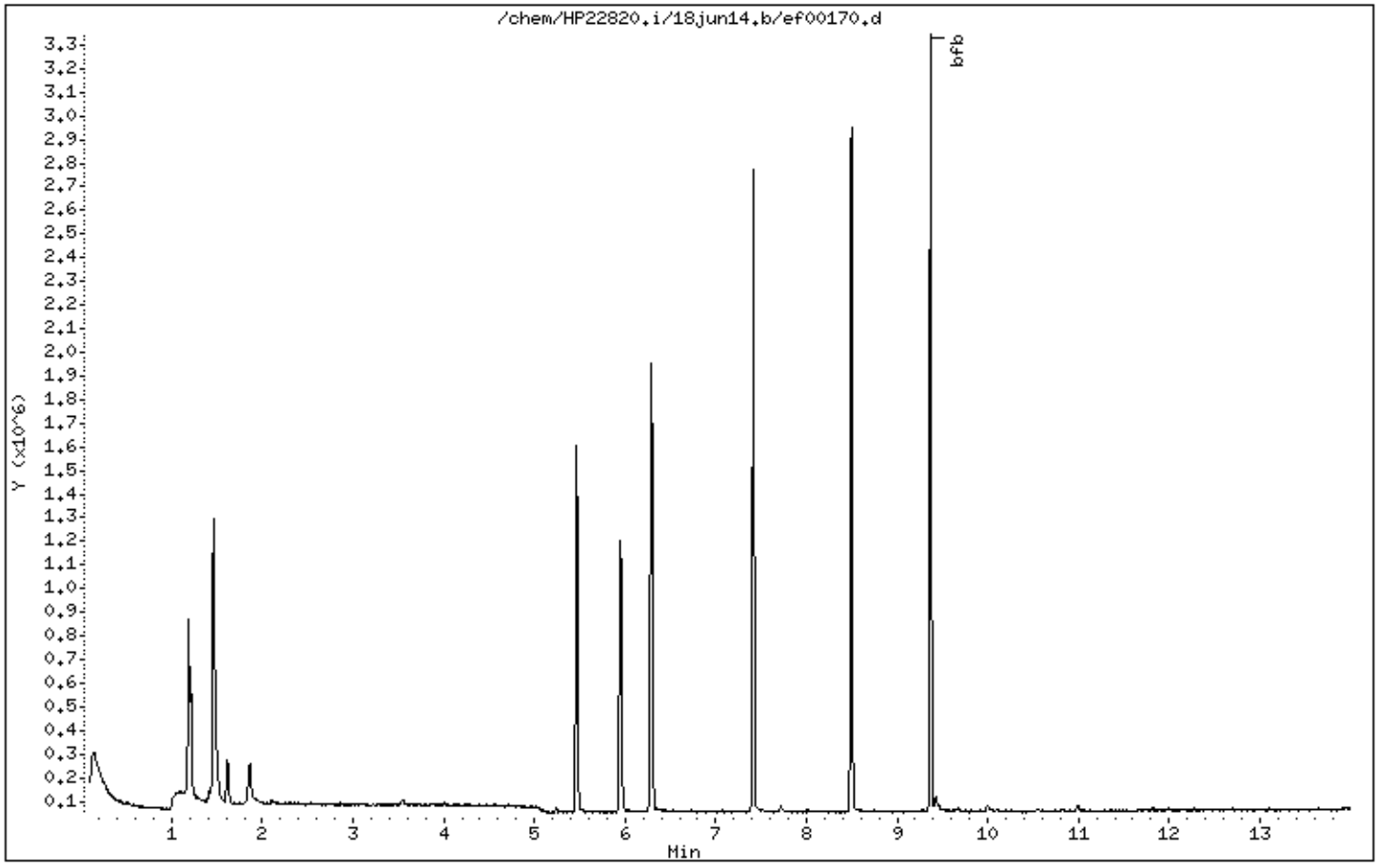
Instrument: HP22820.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25



Digitally signed by Jacob E. Bailey on 06/14/2018 at 15:24.
Target 3.5 esignature user ID: jeb07445

Data File: /chem/HP22820.i/18jun14.b/ef00170.d

Date : 14-JUN-2018 12:23

Client ID: 50NGBFB

Instrument: HP22820.i

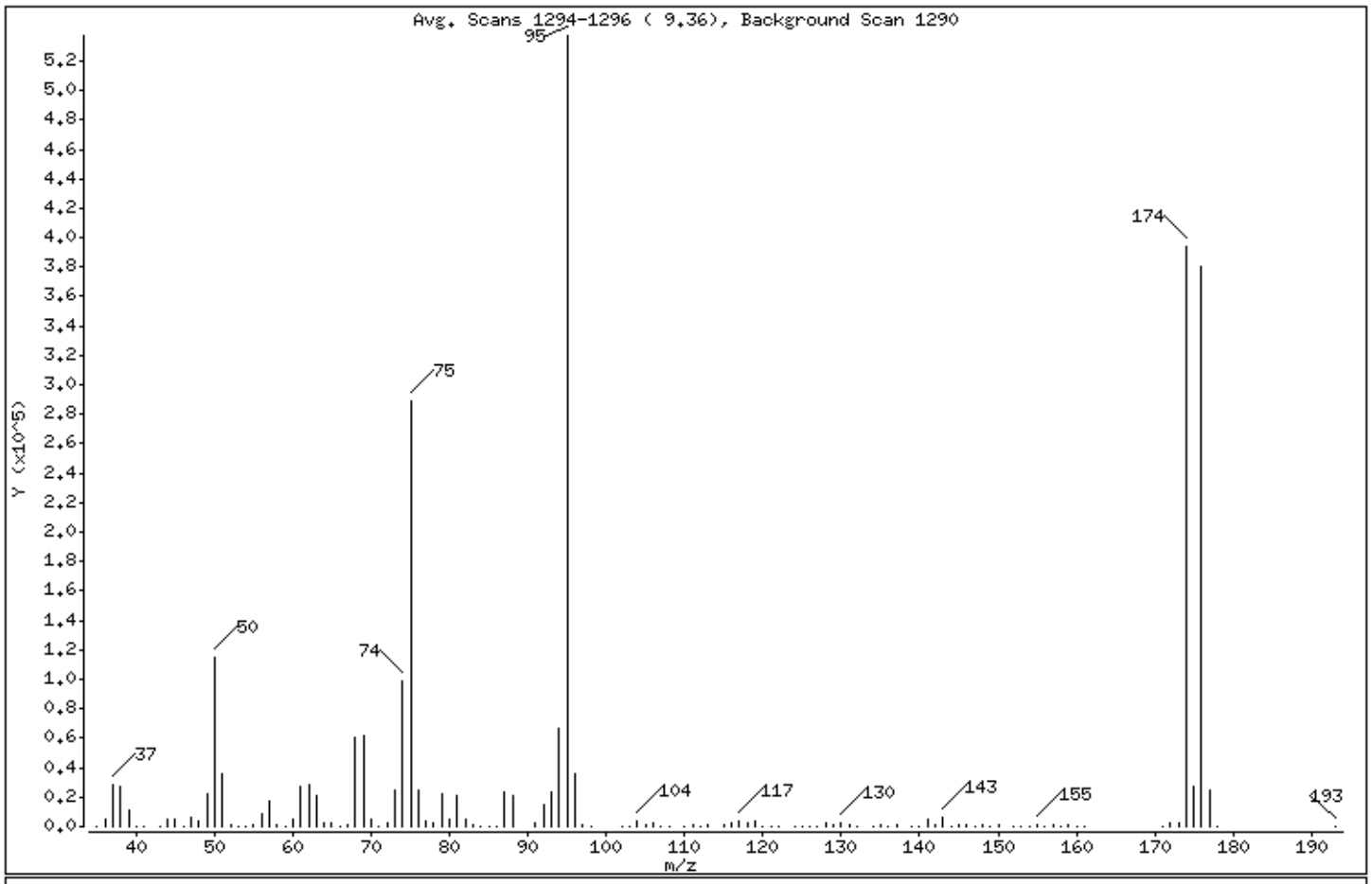
Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	21.31
75	30.00 - 66.00% of mass 95	53.74
96	5.00 - 9.00% of mass 95	6.75
173	Less than 2.00% of mass 174	0.50 (0.68)
174	50.00 - 120.00% of mass 95	73.29
175	4.00 - 9.00% of mass 174	5.17 (7.05)
176	93.00 - 101.00% of mass 174	70.91 (96.75)
177	5.00 - 9.00% of mass 176	4.48 (6.32)

Digitally signed by Jacob E. Bailey on 06/14/2018 at 15:24.
Target 3.5 esignature user ID: jeb07445

Date : 14-JUN-2018 12:23

Client ID: 50NGBFB Instrument: HP22820.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624 Column diameter: 0.25

Data File: ef00170.d
Spectrum: Avg. Scans 1294-1296 (9.36), Background Scan 1290
Location of Maximum: 95.00
Number of points: 124

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	67	68.00	60128	105.00	941	142.00	820
36.00	4853	69.00	61984	106.00	2688	143.00	6191
37.00	28984	70.00	4626	107.00	465	144.00	513
38.00	26920	71.00	88	108.00	184	145.00	1071
39.00	10836	72.00	3023	110.00	350	146.00	985
40.00	192	73.00	24584	111.00	682	147.00	268
41.00	116	74.00	99272	112.00	435	148.00	987
43.00	172	75.00	288704	113.00	625	149.00	494
44.00	4546	76.00	24512	115.00	655	150.00	768
45.00	5063	77.00	3260	116.00	2304	152.00	273
46.00	474	78.00	1995	117.00	3933	153.00	411
47.00	6542	79.00	22616	118.00	2352	154.00	200
48.00	3089	80.00	5532	119.00	3325	155.00	1136
49.00	22832	81.00	21560	120.00	68	156.00	200
50.00	114496	82.00	4611	121.00	89	157.00	987
51.00	35496	83.00	719	122.00	58	158.00	111
52.00	1838	84.00	142	124.00	289	159.00	846
53.00	568	85.00	84	125.00	364	160.00	76
54.00	261	86.00	438	126.00	395	161.00	388
55.00	1230	87.00	23496	127.00	150	171.00	130
56.00	8401	88.00	20712	128.00	1889	172.00	2375
57.00	16720	91.00	2150	129.00	1007	173.00	2679
58.00	946	92.00	15437	130.00	2044	174.00	393728
59.00	101	93.00	23032	131.00	758	175.00	27752
60.00	5397	94.00	66688	132.00	60	176.00	380928
61.00	27040	95.00	537216	134.00	88	177.00	24088
62.00	28056	96.00	36280	135.00	1249	178.00	585
63.00	21296	97.00	984	136.00	68	193.00	69
64.00	2530	98.00	130	137.00	1282		
65.00	2102	102.00	52	139.00	270		
66.00	300	103.00	335	140.00	303		
67.00	1705	104.00	3220	141.00	5488		

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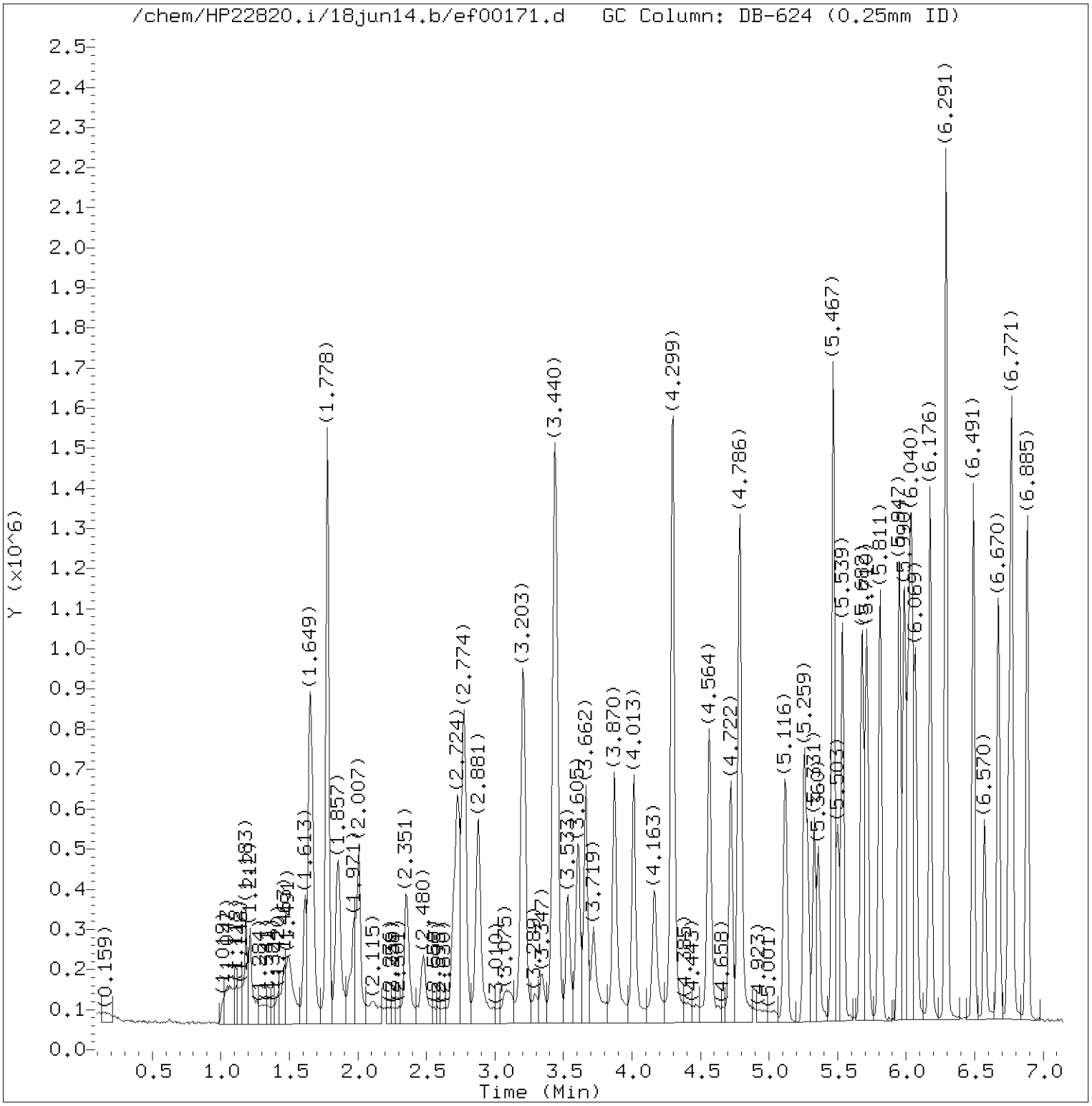
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

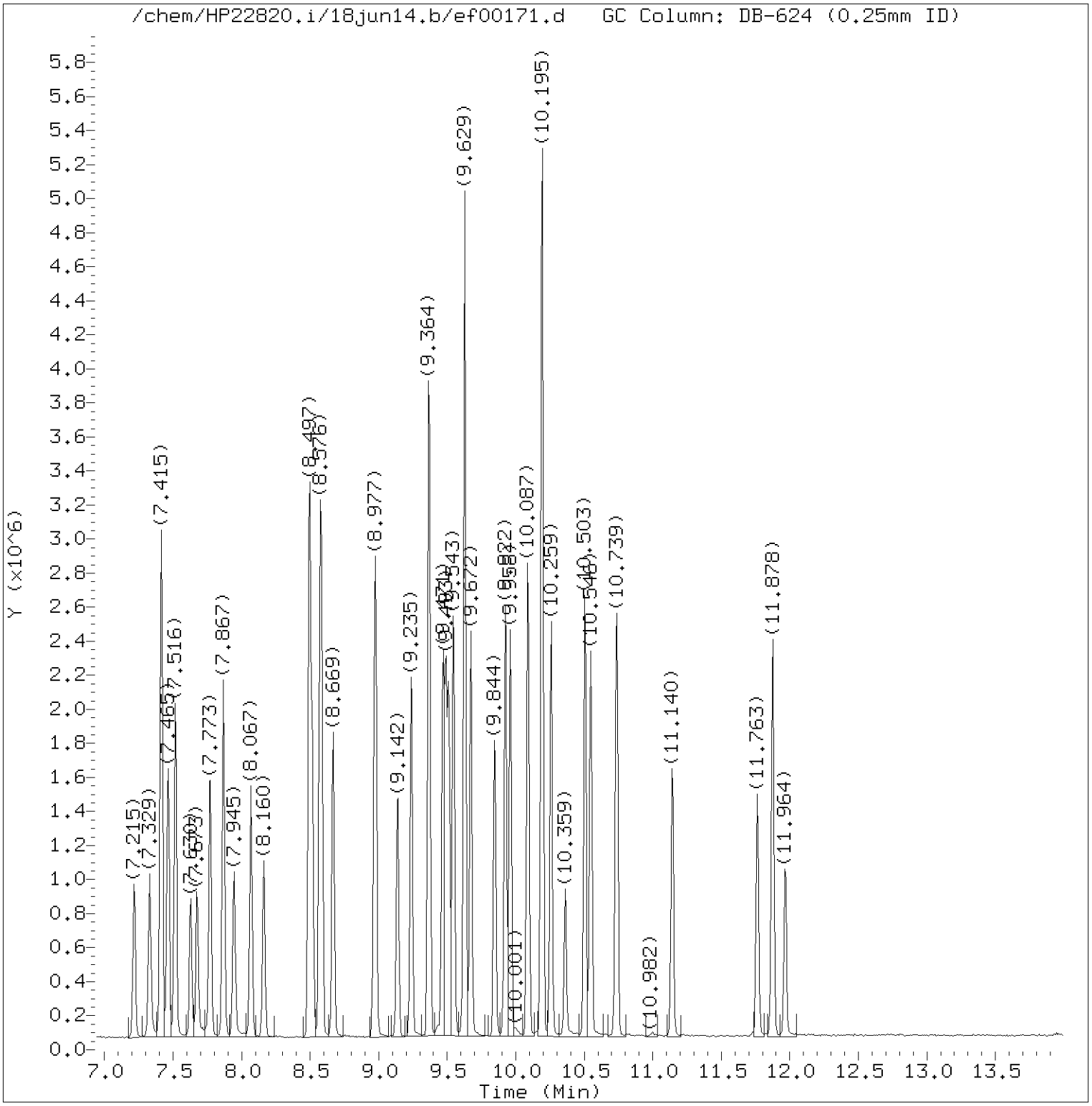
Target Revision 3.5

Data File: /chem/HP22820.i/18jun14.b/ef00171.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 13:17 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 13:39 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:23.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun14.b/ef00171.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 13:17 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 13:39 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:23.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun14.b/ef00171.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 13:17 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 13:39 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.613	41	170798	8.764
2) Dichlorodifluoromethane	(1)	1.649	85	696283	10.200
3) Chlorodifluoromethane	(1)	1.671	51	460499	10.640
4) Freon 114	(1)	1.778	85	722676	9.865
5) Chloromethane	(1)	1.850	50	288588	10.502
6) Vinyl Chloride	(1)	1.971	62	258974	9.859
7) 1,3-Butadiene	(1)	2.007	54	163809	8.669
8) Bromomethane	(1)	2.351	94	234078	10.467
9) Chloroethane	(1)	2.480	64	149204	10.192
10) Bromoethene	(1)	2.695	106	201183	8.828
11) Dichlorofluoromethane	(1)	2.731	67	622510	10.690
12) Trichlorofluoromethane	(1)	2.774	101	703751	9.648
13) Pentane	(1)	2.874	43	344044	8.226
14) Ethanol	(1)	3.082	45	85172	9.336
15) Freon123a	(1)	3.203	67	597229	11.045
16) Acrolein	(1)	3.340	56	89133	9.200
17) 1,1-Dichloroethene	(1)	3.433	61	383174	9.586
18) Freon 113	(1)	3.447	103	379158	9.210
19) Acetone	(1)	3.533	43	402527	10.065
20) Methyl Iodide	(1)	3.605	142	539476	8.256
21) Carbon Disulfide	(1)	3.662	76	751961	10.051
22) Isopropanol	(1)	3.719	45	277849	8.211
24) 3-Chloropropene	(1)	3.870	76	98258	9.645
23) Acetonitrile	(1)	3.877	40	173559	9.783
25) Methylene Chloride	(1)	4.013	84	246643	11.103
26) tert-Butyl Alcohol	(1)	4.163	59	302659	8.006
28) trans-1,2-Dichloroethene	(1)	4.292	61	348450	9.457
27) Acrylonitrile	(1)	4.299	53	216603	9.820
29) Methyl t-Butyl Ether	(1)	4.299	73	483119	7.674
30) Hexane	(1)	4.564	57	294854	7.845
31) 1,1-Dichloroethane	(1)	4.722	63	483465	9.579
32) Vinyl Acetate	(1)	4.786	86	48927	9.158
33) Di-Isopropyl Ether	(1)	4.786	45	699363	8.586
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	392949	7.145
35) cis-1,2-Dichloroethene	(1)	5.259	61	302160	8.761
37) 2-Butanone	(1)	5.281	72	114687	8.817
38) Ethyl Acetate	(1)	5.331	70	53253	8.357
39) Methyl Acrylate	(1)	5.360	55	382751	9.053

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on 06/14/2018 at 15:23.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun14.b/ef00171.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 13:17 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 13:39 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	412353	10.000
41) Tetrahydrofuran	(1)	5.503	42	234973	8.216
42) Chloroform	(1)	5.539	83	593679	9.904
43) 1,1,1-Trichloroethane	(1)	5.675	97	510718	9.235
44) Cyclohexane	(1)	5.710	56	326147	8.243
45) Carbon Tetrachloride	(1)	5.811	117	520502	9.617
46) Benzene	(2)	5.983	78	757416	9.608
47) 1,2-Dichloroethane	(2)	6.011	62	403780	10.930
48) Isooctane	(2)	6.033	57	1020688	9.514
49) Tert-Amyl Methyl Ether	(2)	6.069	73	419152	8.385
50) Heptane	(2)	6.176	43	378865	9.122
51)*1,4-Difluorobenzene	(2)	6.291	114	1286724	10.000
52) Trichloroethene	(2)	6.491	130	324876	9.422
53) Ethyl Acrylate	(2)	6.570	55	406448	8.392
36) 1,2-Dichloroethene (total)	(1)		61	650610	18.218
54) 1,2-Dichloropropane	(2)	6.670	63	305932	10.155
57) Methyl Methacrylate	(2)	6.749	69	214271	8.477
55) Dibromomethane	(2)	6.771	174	311078	9.834
56) 1,4-Dioxane	(2)	6.778	88	166610	9.211
58) Bromodichloromethane	(2)	6.885	83	602642	10.214
59) cis-1,3-Dichloropropene	(2)	7.215	75	373734	8.702
60) 4-Methyl-2-Pentanone	(2)	7.329	43	522037	8.891
61) Toluene	(3)	7.465	91	875168	9.445
62) Octane	(3)	7.516	43	567102	9.889
63) trans-1,3-Dichloropropene	(3)	7.630	75	318535	9.402
65) Ethyl Methacrylate	(3)	7.673	69	335513	8.477
66) 1,1,2-Trichloroethane	(3)	7.773	97	365046	10.400
67) Tetrachloroethene	(3)	7.867	166	435413	9.215
68) 2-Hexanone	(3)	7.945	43	511557	9.668
69) Dibromochloromethane	(3)	8.067	127	432825	10.272
70) 1,2-Dibromoethane	(3)	8.160	107	520531	10.022
71)*Chlorobenzene-d5	(3)	8.497	117	1289790	10.000
72) Chlorobenzene	(3)	8.518	112	730398	9.327
73) 1,1,1,2-Tetrachloroethane	(3)	8.576	131	396828	10.417
74) Ethylbenzene	(3)	8.583	91	1056769	9.071
75) m/p-Xylene	(3)	8.669	91	790559	8.887
76) o-Xylene	(3)	8.970	91	769710	8.804
78) Styrene	(3)	8.977	104	636617	9.617

* = Compound is an internal standard.

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on 06/14/2018 at 15:23.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun14.b/ef00171.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 13:17 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 13:39 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	506276	10.004
80) Cumene	(3)	9.235	105	1047672	8.987
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	852720	10.478
81) Bromobenzene	(3)	9.493	156	410135	9.218
83) 1,2,3-Trichloropropane	(3)	9.514	110	245546	10.568
84) n-Propylbenzene	(3)	9.550	120	324094	9.379
86) 4-Ethyltoluene	(3)	9.629	105	1233667M	9.991
85) 2-Chlorotoluene	(3)	9.629	126	334717	10.149
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	1002512M	9.954
88) Alpha Methyl Styrene	(3)	9.844	118	408076	8.790
89) tert-Butylbenzene	(3)	9.922	119	934836M	10.231
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	1027854	10.407
91) sec-Butylbenzene	(3)	10.087	105	1423269	10.063
92) 1,3-Dichlorobenzene	(3)	10.195	146	775022	10.166
94) p-Isopropyltoluene	(3)	10.195	119	1137582	10.057
93) 1,4-Dichlorobenzene	(3)	10.259	146	727988	9.650
95) Benzyl Chloride	(3)	10.359	91	477420	9.412
97) n-Butylbenzene	(3)	10.503	91	1087688	9.794
96) 1,2-Dichlorobenzene	(3)	10.546	146	703834	9.927
98) Hexachloroethane	(3)	10.739	117	342784	11.557
99) 1,2-Dibromo-3-chloropropane	(3)	11.147	157	302570	9.165
100) 1,2,4-Trichlorobenzene	(3)	11.763	180	332071	7.230
101) Hexachlorobutadiene	(3)	11.878	225	351233	9.199
102) Naphthalene	(3)	11.964	128	644590	7.253
64) 1,3-Dichloropropene (total)	(3)		75	692269	18.194
77) Xylene (total)	(3)		91	1560269	17.692

M = Compound was manually integrated.

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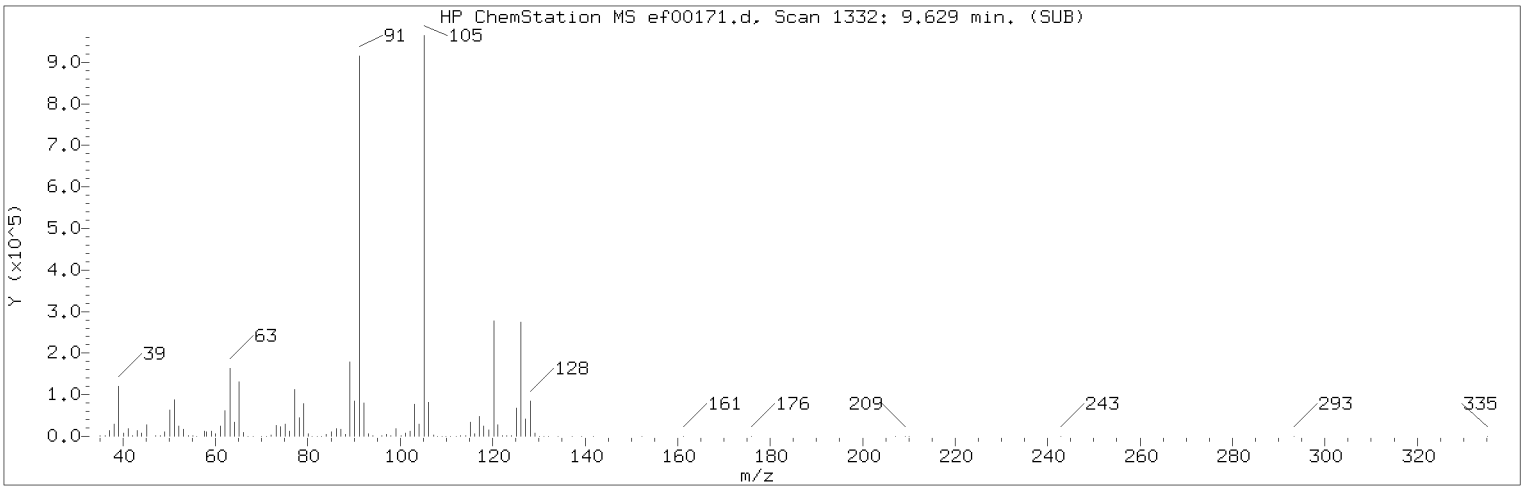
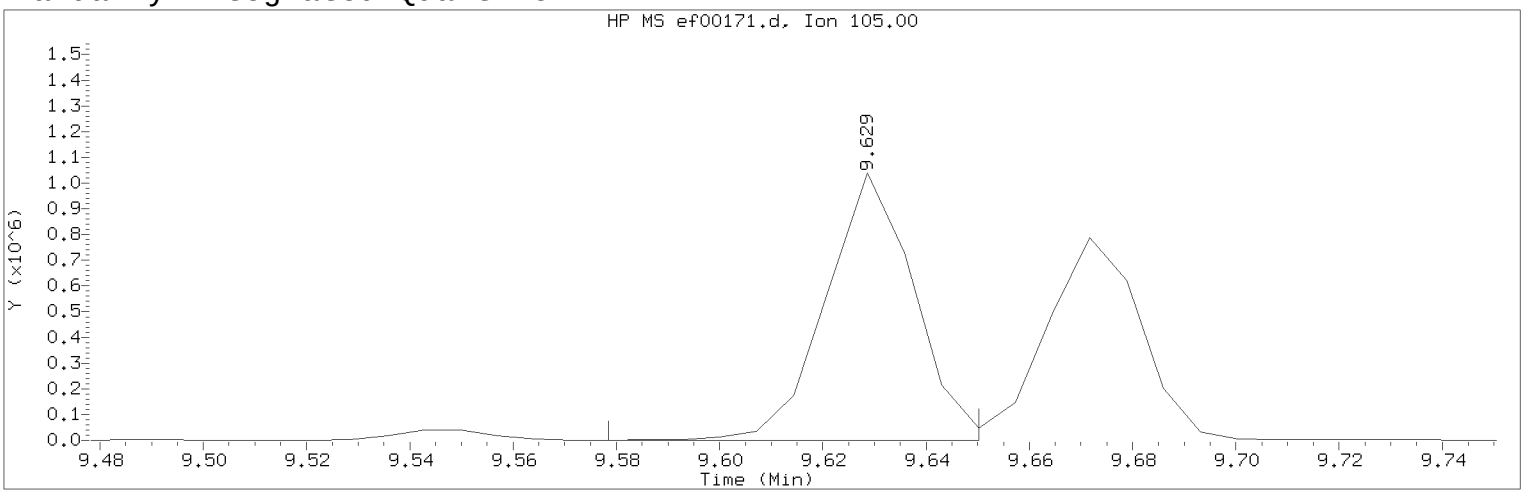
on 06/14/2018 at 15:23.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun14.b/ef00171.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 13:17 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 13:39 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

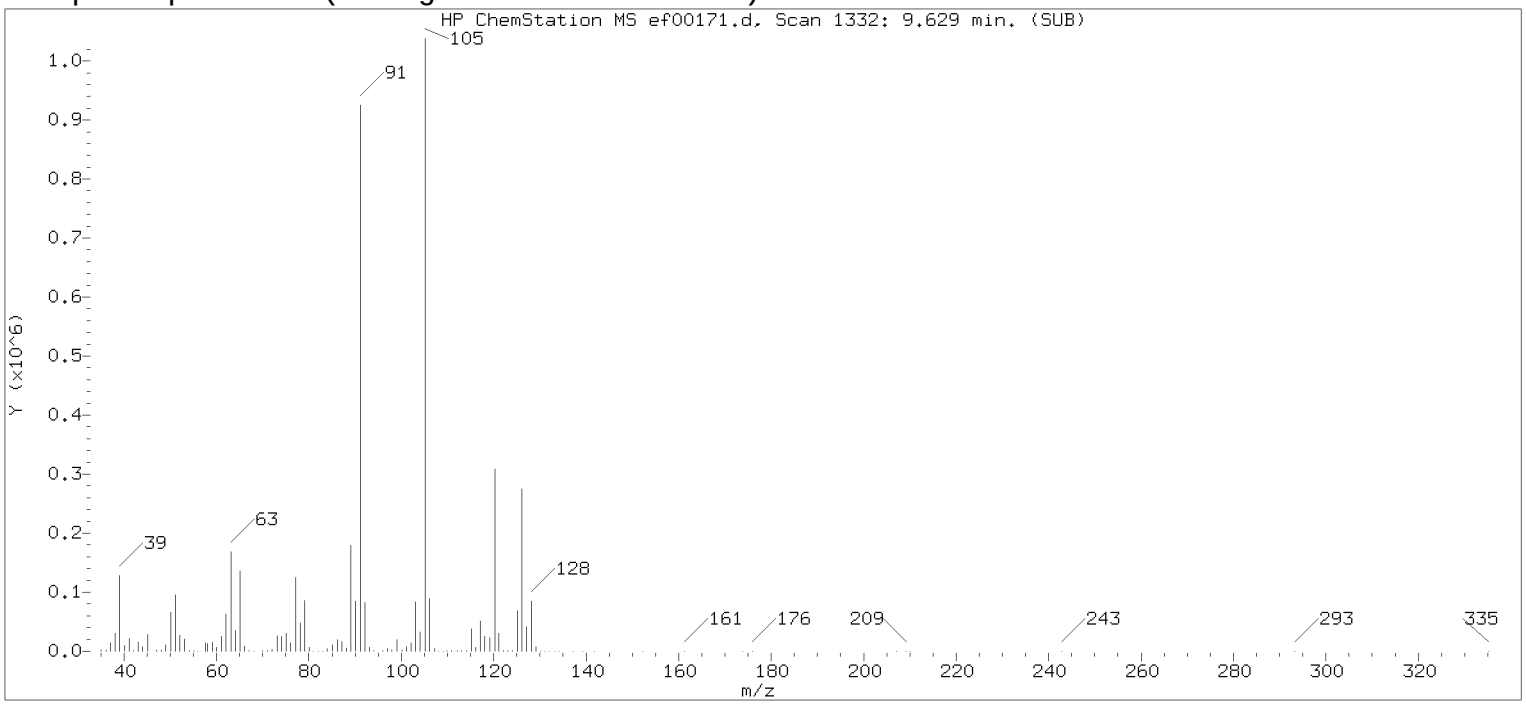
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 1233667M
Concentration (ppb(v)) : 9.9915
Integration start scan : 1324 Integration stop scan: 1334
Y at integration start : 257 Y at integration end: 257

Reason for manual integration: improper integration

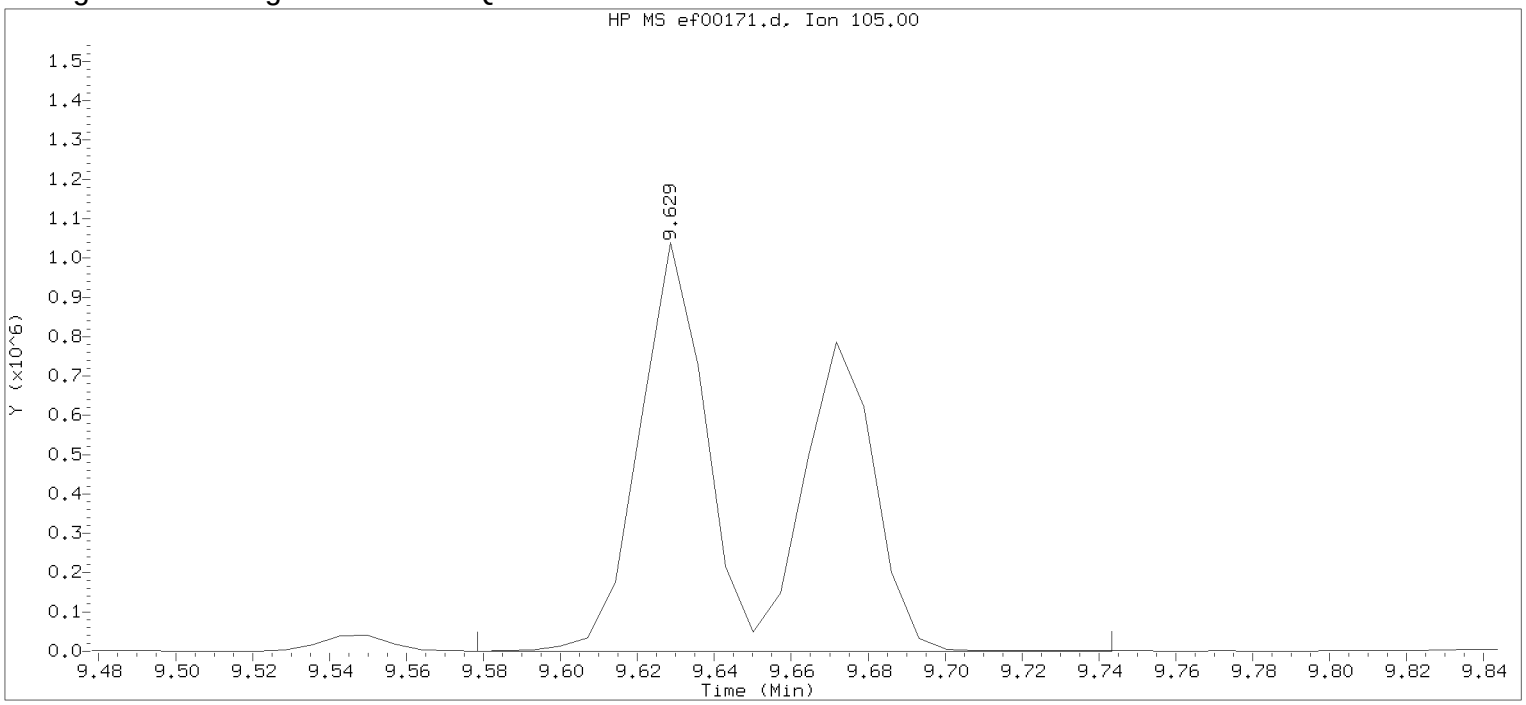
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:23.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 14:49.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun14.b/ef00171.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 13:17 Analyst ID: jeb07445

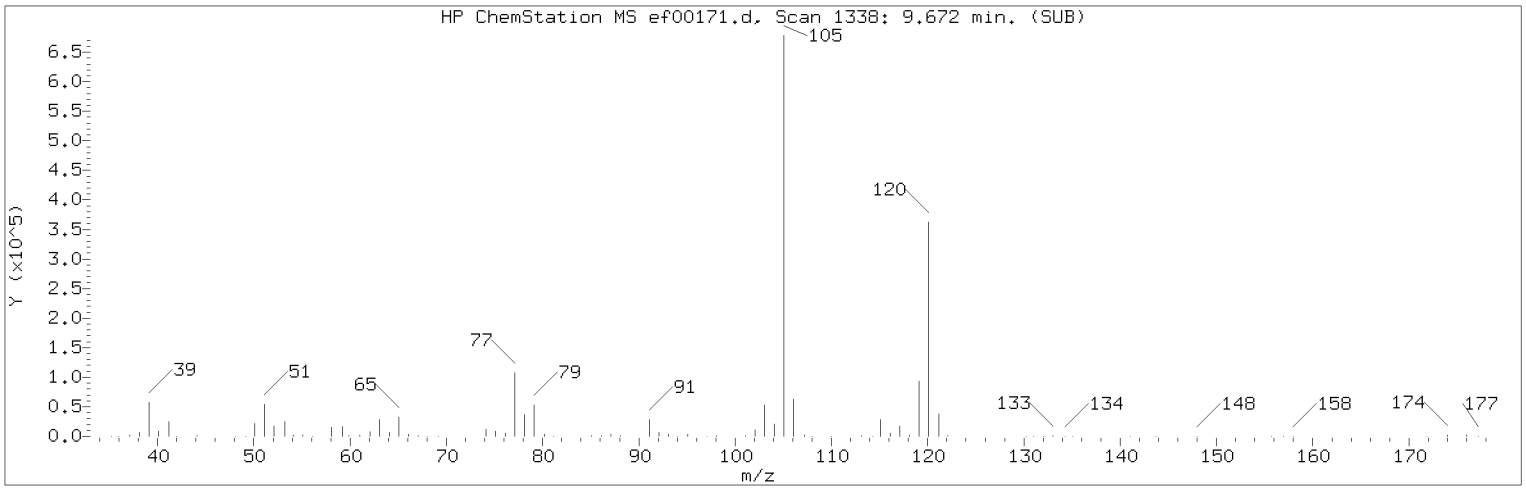
Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 14-Jun-2018 13:35 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

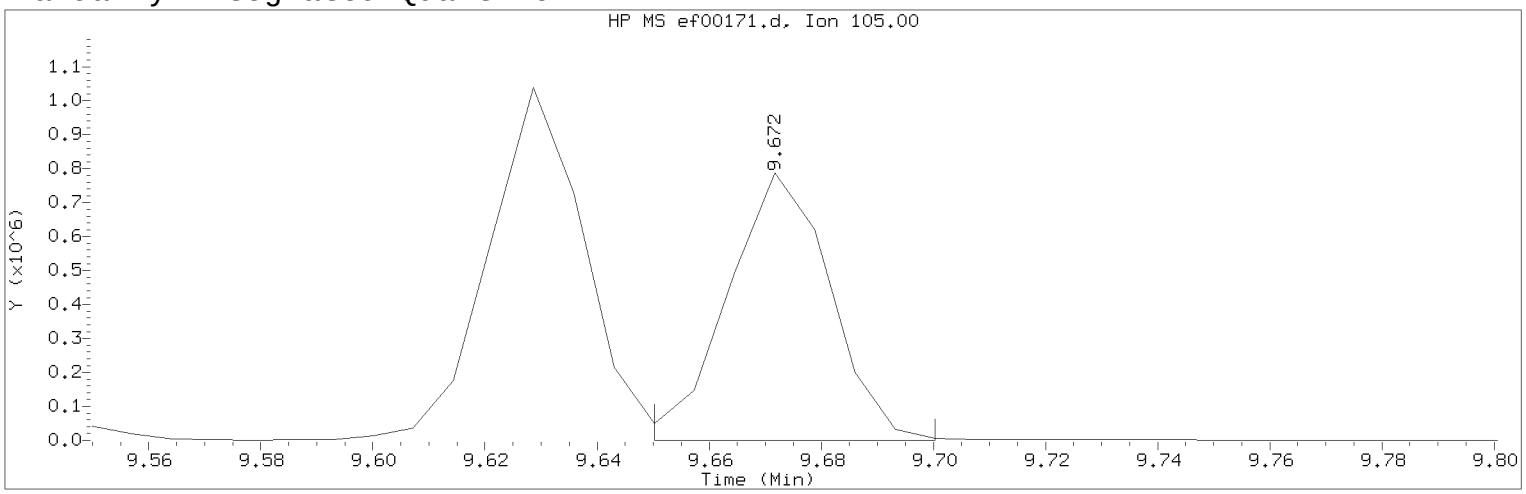
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 2219507
Concentration (ppb(v)) : 10.4579
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 257 Y at integration end: 257

Digitally signed by Jacob E. Bailey on 06/14/2018 at 15:23.
Target 3.5 esignature used.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun14.b/ef00171.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 13:17 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 13:39 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

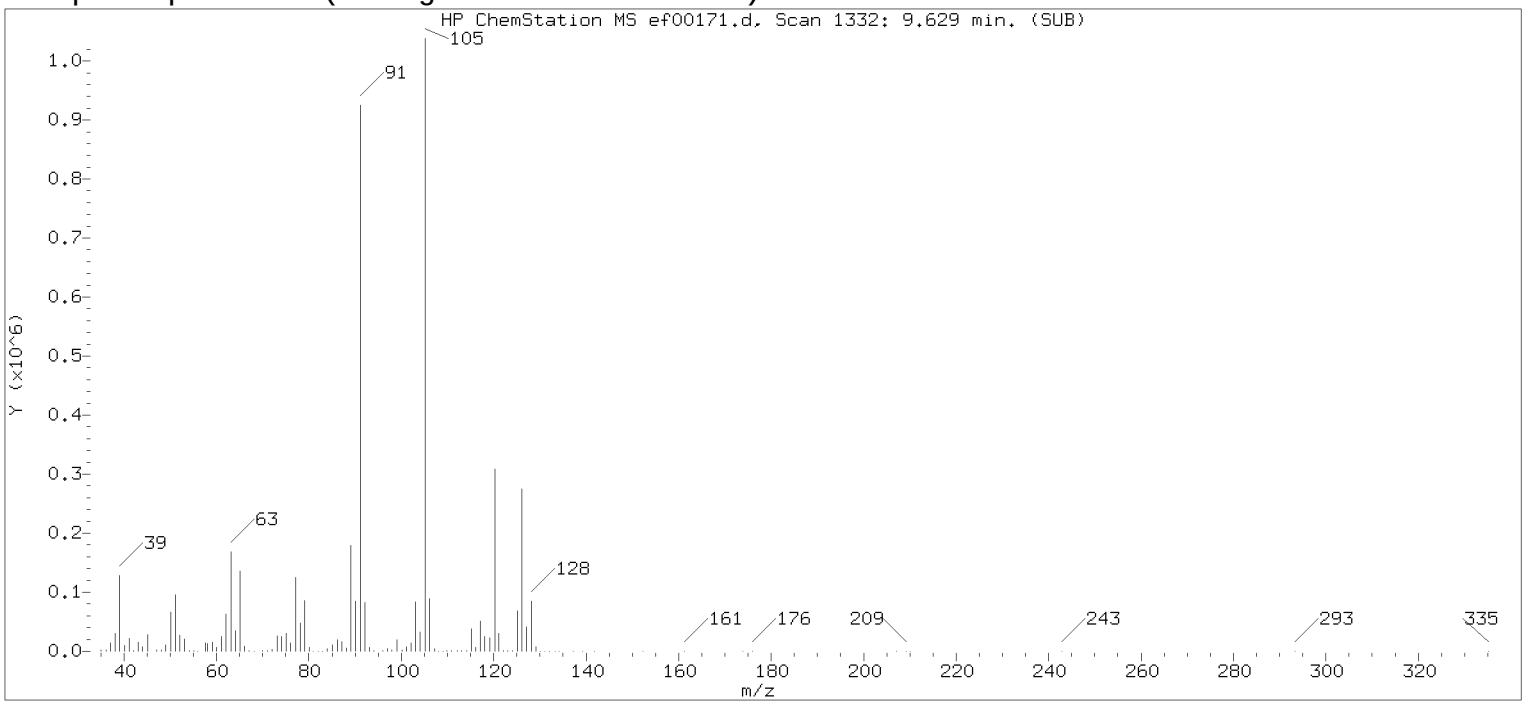
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 1002512M
Concentration (ppb(v)) : 9.9541
Integration start scan : 1334 Integration stop scan: 1341
Y at integration start : 449 Y at integration end: 449

Reason for manual integration: improper integration

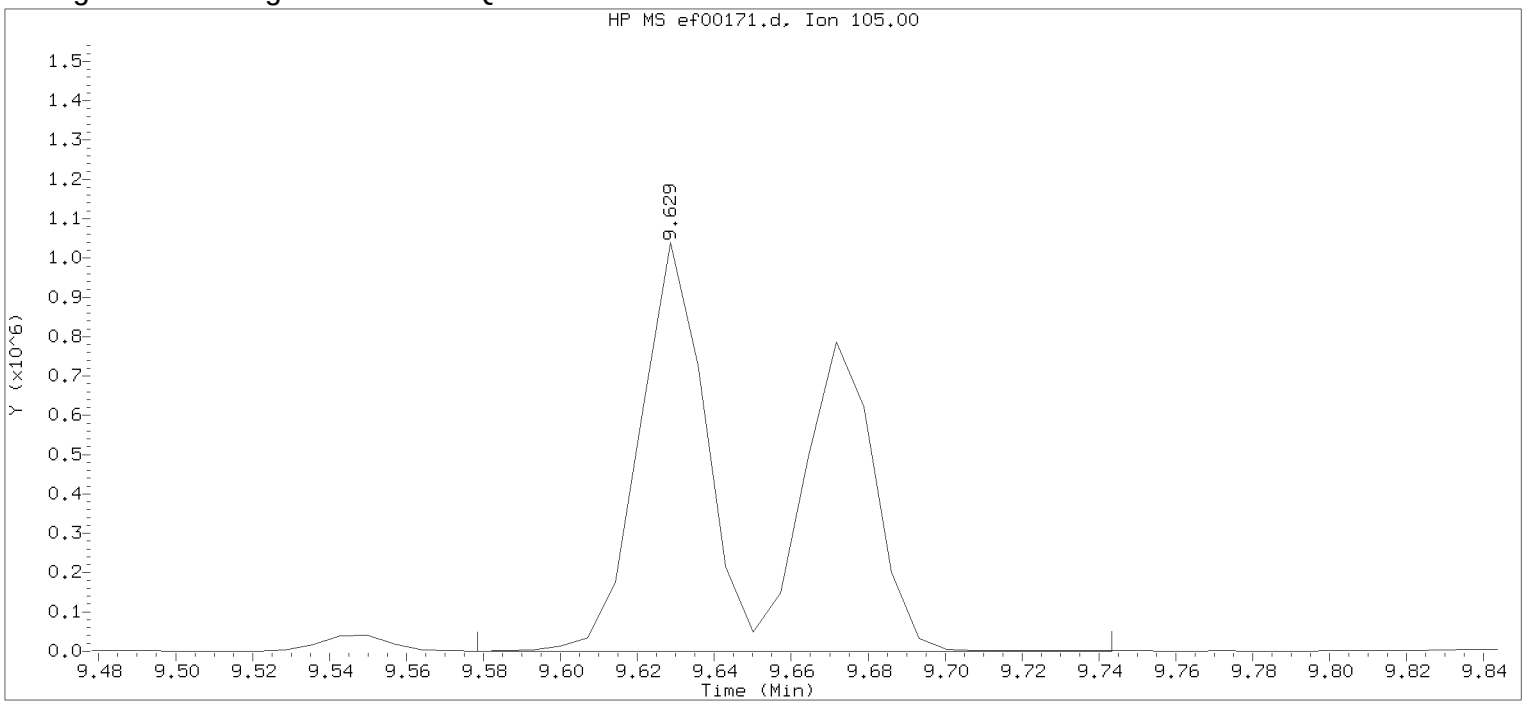
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:23.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 14:49.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun14.b/ef00171.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 13:17 Analyst ID: jeb07445

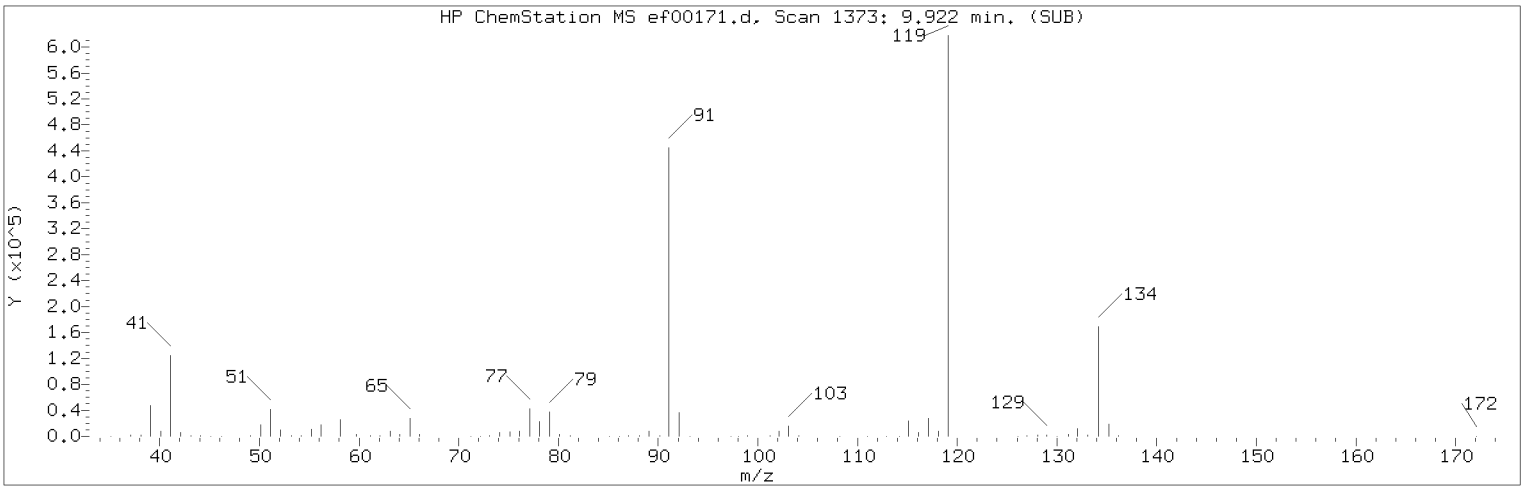
Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 14-Jun-2018 13:35 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

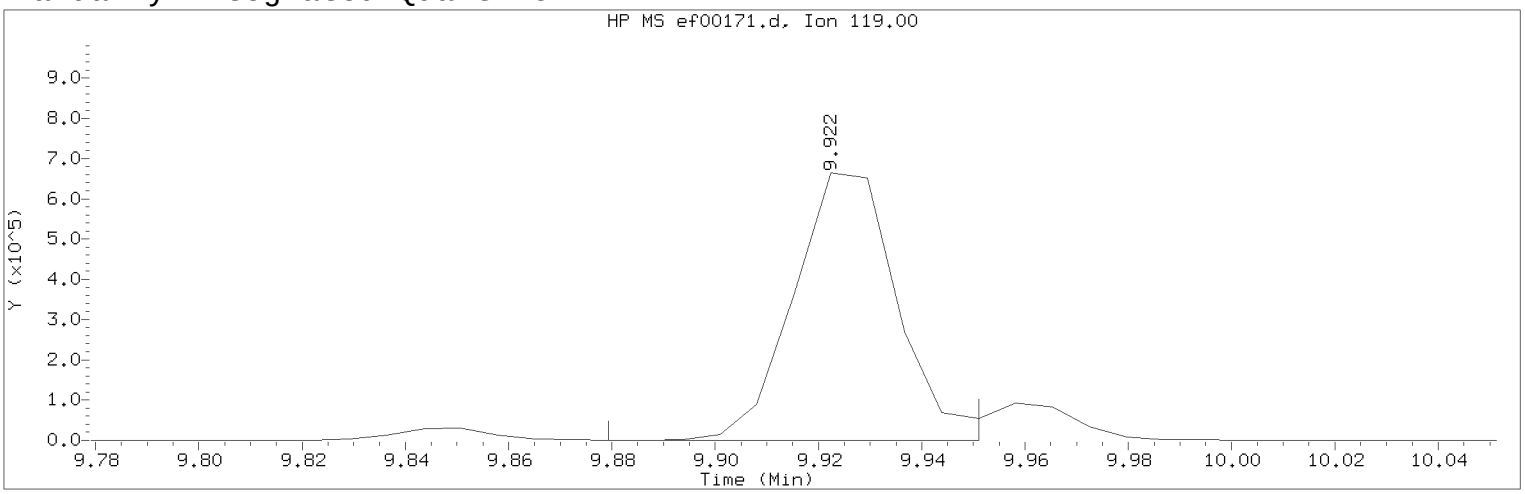
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 2218119
Concentration (ppb(v)) : 12.5884
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 385 Y at integration end: 385

Digitally signed by Jacob E. Bailey on 06/14/2018 at 15:23.
Target 3.5 esignature used. GLED1 Page 1424 of 1687

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun14.b/ef00171.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 13:17 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 13:39 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

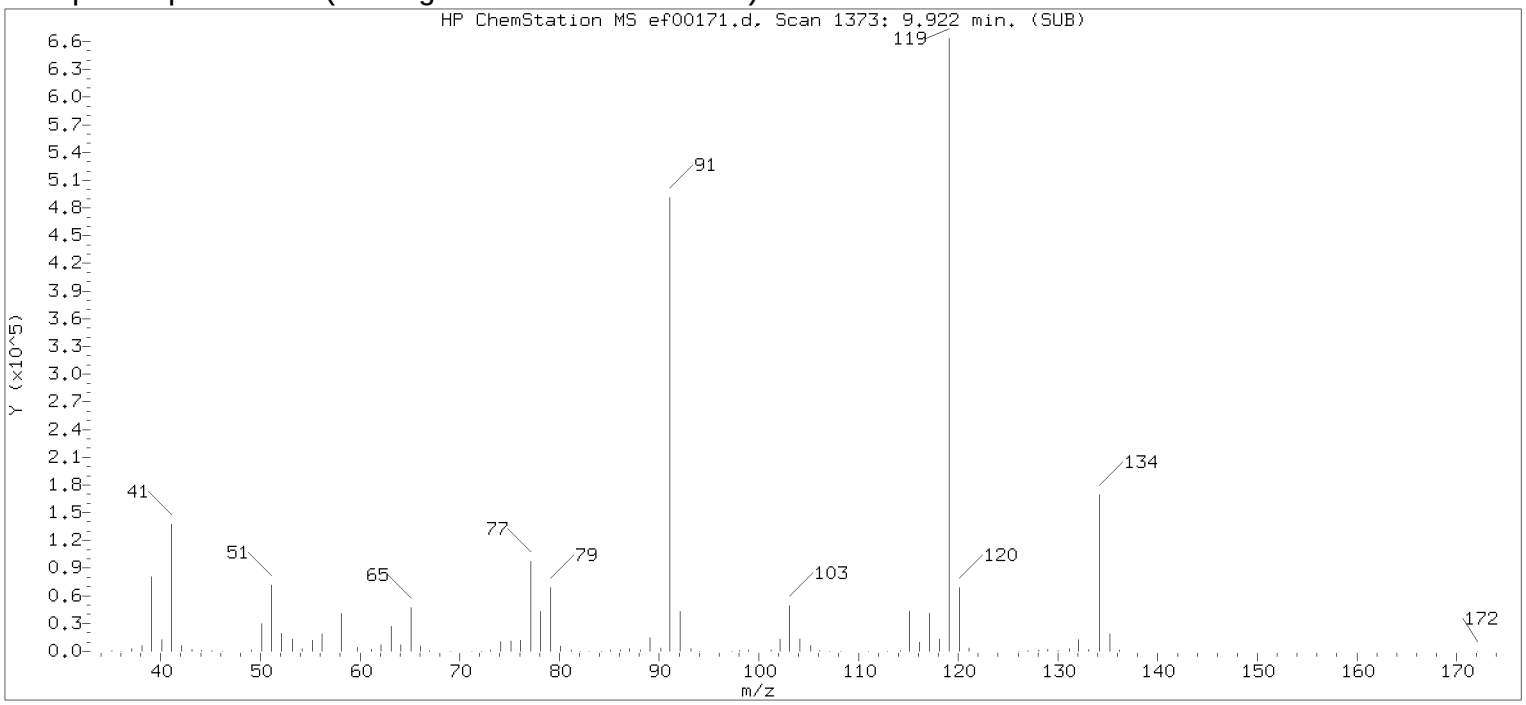
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 934836M
Concentration (ppb(v)) : 10.2311
Integration start scan : 1366 Integration stop scan: 1376
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

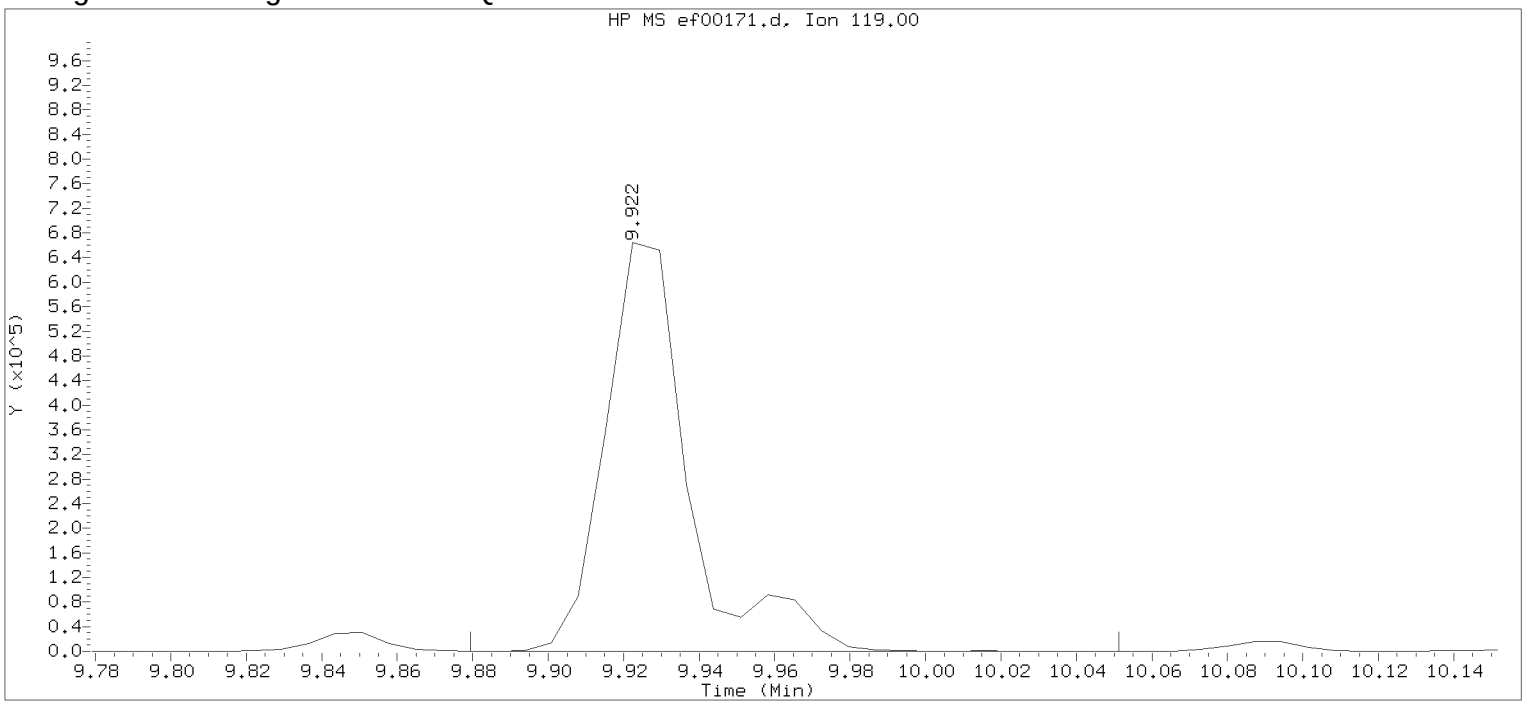
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:23.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 14:49.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun14.b/ef00171.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 13:17 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 14-Jun-2018 13:35 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 1030437
Concentration (ppb(v)) : 6.3528
Integration start scan : 1366 Integration stop scan: 1390
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/14/2018 at 15:23.
Target 3.5 esignature used.

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun14.b/ef00172.d Injection date and time: **14-JUN-2018 14:13**
Data file Sample Info. Line: VBLKE07;200;E1816530AA;VBLKE07;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1816530AA**
Date, time and analyst ID of latest file update: 14-Jun-2018 14:33 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun14.b/ef00172.d**

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 14-JUN-2018 13:39
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun14.b/ef00171.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	5.467(0.000)	751	130	368012 (-11)	10.00		247412 - 577294
51) 1,4-Difluorobenzene	6.291(0.000)	866	114	1022495 (-21)	10.00		772035 - 1801413
71) Chlorobenzene-d5	8.497(0.000)	1174	117	1147191 (-11)	10.00		773874 - 1805706

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)			Not Detected					0.5	1
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)			Not Detected					0.2	1
7) 1,3-Butadiene	(1)			Not Detected					0.4	2
8) Bromomethane	(1)			Not Detected					0.5	1
9) Chloroethane	(1)			Not Detected					0.2	1
10) Bromoethene	(1)			Not Detected					0.4	2
11) Dichlorofluoromethane	(1)			Not Detected					0.2	1
12) Trichlorofluoromethane	(1)			Not Detected					0.2	1
13) Pentane	(1)			Not Detected					0.5	1
14) Ethanol	(1)			Not Detected					0.5	2
15) Freon123a	(1)			Not Detected					0.2	1
16) Acrolein	(1)			Not Detected					1	2
17) 1,1-Dichloroethene	(1)			Not Detected					0.2	1
18) Freon 113	(1)			Not Detected					0.5	2
19) Acetone	(1)			Not Detected					0.5	2
20) Methyl Iodide	(1)			Not Detected					0.2	1
21) Carbon Disulfide	(1)			Not Detected					0.5	1
22) Isopropanol	(1)			Not Detected					0.5	2
23) Acetonitrile	(1)			Not Detected					0.5	2
24) 3-Chloropropene	(1)			Not Detected					0.2	1
25) Methylene Chloride	(1)			Not Detected					0.2	1
26) tert-Butyl Alcohol	(1)			Not Detected					0.5	1
27) Acrylonitrile	(1)			Not Detected					0.5	2
28) trans-1,2-Dichloroethene	(1)			Not Detected					0.2	1
29) Methyl t-Butyl Ether	(1)			Not Detected					0.2	1
30) Hexane	(1)			Not Detected					0.2	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.2	1
32) Vinyl Acetate	(1)			Not Detected					1	1
33) Di-Isopropyl Ether	(1)			Not Detected					0.2	1
34) Ethyl Tert-Butyl Ether	(1)			Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.2	1
36) 1,2-Dichloroethene (total)	(1)			Not Detected					0.2	1
37) 2-Butanone	(1)			Not Detected					0.5	2
38) Ethyl Acetate	(1)			Not Detected					0.5	1
39) Methyl Acrylate	(1)			Not Detected					0.2	1
41) Tetrahydrofuran	(1)			Not Detected					0.5	1
42) Chloroform	(1)			Not Detected					0.2	1
43) 1,1,1-Trichloroethane	(1)			Not Detected					0.2	1
44) Cyclohexane	(1)			Not Detected					0.2	1

Digitally signed by Jacob E. Bailey on 06/14/2018 at 15:24. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun14.b/ef00172.d Injection date and time: **14-JUN-2018 14:13**
Data file Sample Info. Line: VBLKE07;200;E1816530AA;VBLKE07;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1816530AA**
Date, time and analyst ID of latest file update: 14-Jun-2018 14:33 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun14.b/ef00172.d**

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 14-JUN-2018 13:39
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun14.b/ef00171.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
45) Carbon Tetrachloride	(1)				Not Detected					0.2	1
46) Benzene	(2)				Not Detected					0.2	1
47) 1,2-Dichloroethane	(2)				Not Detected					0.2	1
48) Isooctane	(2)				Not Detected					0.2	1
49) Tert-Amyl Methyl Ether	(2)				Not Detected					0.2	1
50) Heptane	(2)				Not Detected					0.5	1
52) Trichloroethene	(2)				Not Detected					0.2	1
53) Ethyl Acrylate	(2)				Not Detected					0.2	1
54) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
55) Dibromomethane	(2)				Not Detected					0.2	1
56) 1,4-Dioxane	(2)				Not Detected					0.5	1
57) Methyl Methacrylate	(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)				Not Detected					0.2	1
62) Octane	(3)				Not Detected					0.2	1
63) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
64) 1,3-Dichloropropene (total)	(3)				Not Detected					0.2	1
65) Ethyl Methacrylate	(3)				Not Detected					0.2	1
66) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
67) Tetrachloroethene	(3)				Not Detected					0.2	1
68) 2-Hexanone	(3)				Not Detected					0.5	2
69) Dibromochloromethane	(3)				Not Detected					0.2	1
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)				Not Detected					0.2	1
75) m/p-Xylene	(3)				Not Detected					0.2	1
76) o-Xylene	(3)				Not Detected					0.2	1
77) Xylene (total)	(3)				Not Detected					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
84) n-Propylbenzene	(3)				Not Detected					0.5	1
85) 2-Chlorotoluene	(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
88) Alpha Methyl Styrene	(3)				Not Detected					0.2	1
89) tert-Butylbenzene	(3)				Not Detected					0.5	1
90) 1,2,4-Trimethylbenzene	(3)				Not Detected					0.2	1
91) sec-Butylbenzene	(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
94) p-Isopropyltoluene	(3)				Not Detected					0.2	1
95) Benzyl Chloride	(3)				Not Detected					0.5	1
96) 1,2-Dichlorobenzene	(3)				Not Detected					0.2	1
97) n-Butylbenzene	(3)				Not Detected					0.2	1
98) Hexachloroethane	(3)				Not Detected					0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)				Not Detected					0.2	1
100) 1,2,4-Trichlorobenzene	(3)				Not Detected					0.5	2

Digitally signed by Jacob E. Bailey on 06/14/2018 at 15:24. Target 3.5 esignature user ID: jeb07445

Data file: /chem/HP22820.i/18jun14.b/ef00172.d Injection date and time: **14-JUN-2018 14:13**
Data file Sample Info. Line: VBLKE07;200;E1816530AA;VBLKE07;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1816530AA**
Date, time and analyst ID of latest file update: 14-Jun-2018 14:33 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun14.b/ef00172.d**

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 14-JUN-2018 13:39
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun14.b/ef00171.d**

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

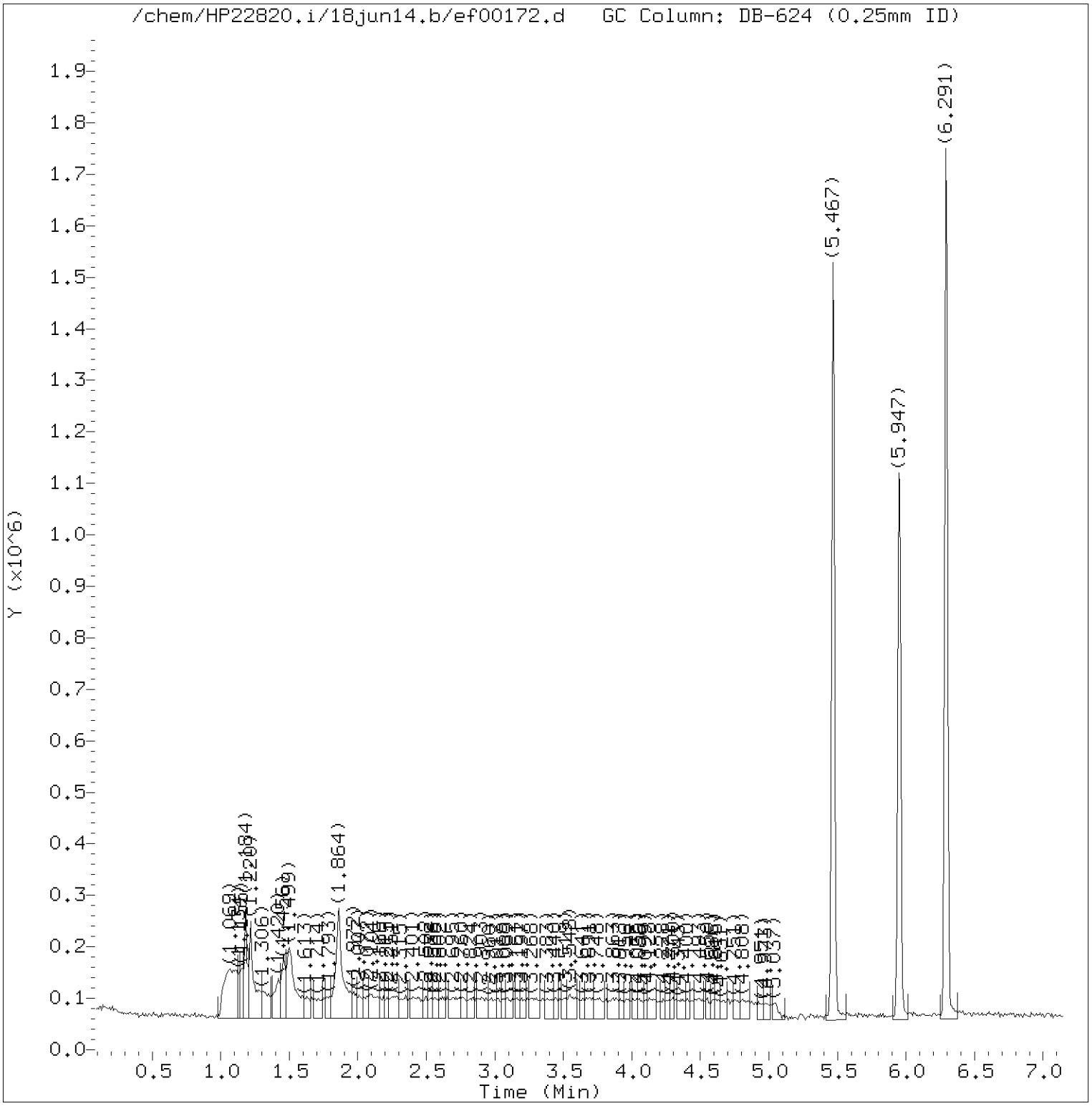
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
101) Hexachlorobutadiene	(3)				Not Detected					0.4	2
102) Naphthalene	(3)				Not Detected					0.4	1

Total number of targets = 99

Digitally signed by Jacob E. Bailey on 06/14/2018 at 15:24. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 14:49. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

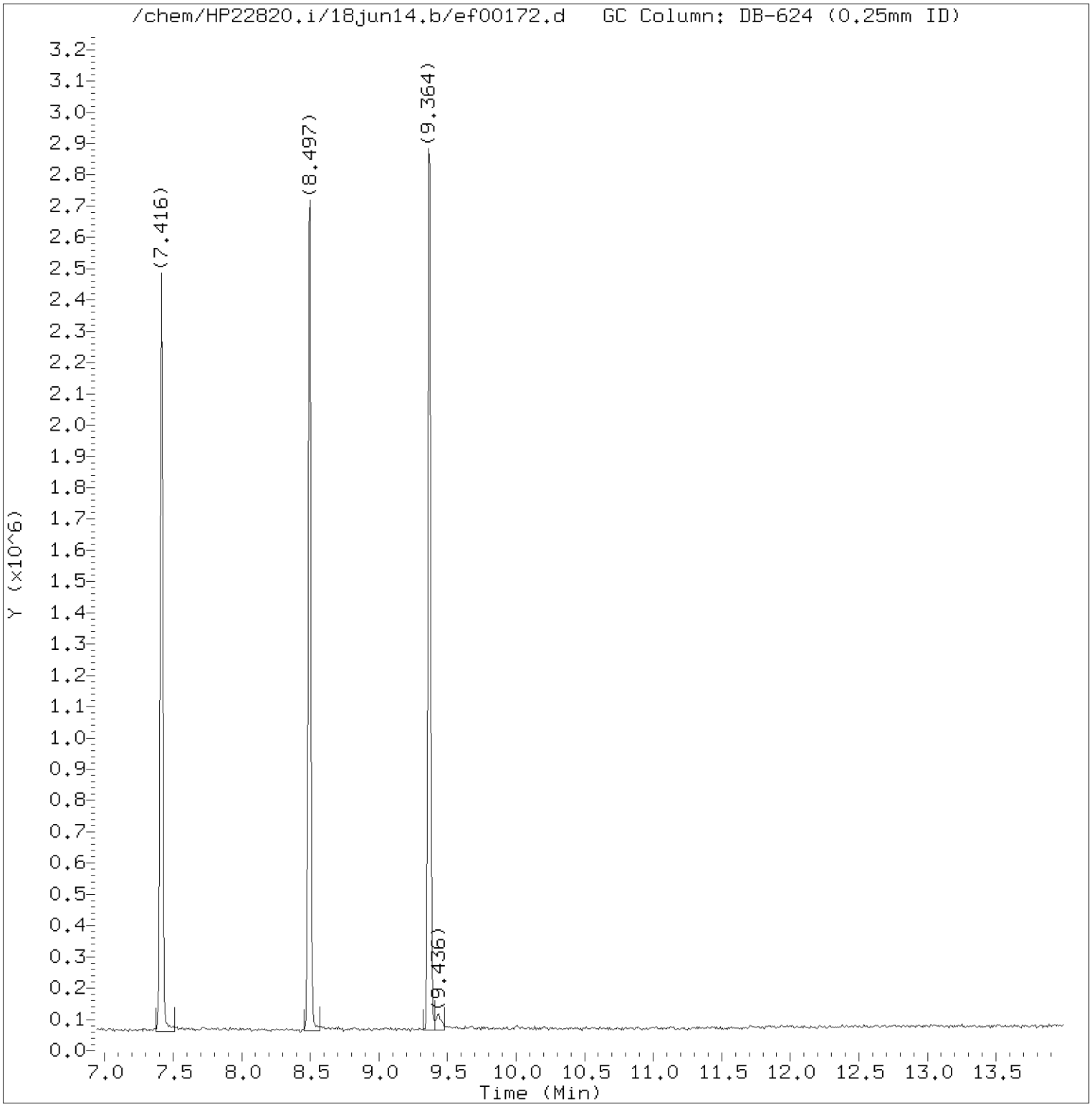
Target Revision 3.5

Data File: /chem/HP22820.i/18jun14.b/ef00172.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 14:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 14:33 jeb07445

Sample Name: VBLKE07 Lab Sample ID: VBLKE07

Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:24.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun14.b/ef00172.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 14:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 14:33 jeb07445

Sample Name: VBLKE07 Lab Sample ID: VBLKE07

Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:24.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun14.b/ef00172.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 14:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 14:33 jeb07445

Sample Name: VBLKE07 Lab Sample ID: VBLKE07

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	368012	10.000
51)*1,4-Difluorobenzene	(2)	6.291	114	1022495	10.000
71)*Chlorobenzene-d5	(3)	8.497	117	1147191	10.000

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:24.
Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun14.b/ef00173.d Injection date and time: **14-JUN-2018 14:56**
Data file Sample Info. Line: LCSE07;200;E1816530AA;LCSE07;0;3;LCS; Instrument ID: **HP22820.i** Batch: **E1816530AA**
Date, time and analyst ID of latest file update: 14-Jun-2018 15:22 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun14.b/ef00172.d**

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 14-JUN-2018 13:39
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun14.b/ef00171.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	5.467(0.000)	751	130	369536 (-10)	10.00		247412 - 577294
51) 1,4-Difluorobenzene	6.291(0.000)	866	114	1157691 (-10)	10.00		772035 - 1801413
71) Chlorobenzene-d5	8.497(0.000)	1174	117	1146156 (-11)	10.00		773874 - 1805706

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)	1.613(-0.000)	41	165695	9.488	9.49			0.5	1
2) Dichlorodifluoromethane	(1)	1.649(-0.000)	85	670384	10.959	10.96			0.2	1
3) Chlorodifluoromethane	(1)	1.671(-0.000)	51	421523	10.868	10.87			0.2	1
4) Freon 114	(1)	1.778(-0.000)	85	688988	10.495	10.49			0.2	1
5) Chloromethane	(1)	1.850(-0.000)	50	282605	11.476	11.48			0.2	1
6) Vinyl Chloride	(1)	1.971(-0.000)	62	243029	10.323	10.32			0.2	1
7) 1,3-Butadiene	(1)	2.007(-0.000)	54	158258	9.346	9.35			0.4	2
8) Bromomethane	(1)	2.351(-0.000)	94	225596	11.256	11.26			0.5	1
9) Chloroethane	(1)	2.473(0.001)	64	135530	10.331	10.33			0.2	1
10) Bromoethene	(1)	2.695(-0.000)	106	183317	8.976	8.98			0.4	2
11) Dichlorofluoromethane	(1)	2.731(-0.000)	67	578017	11.076	11.08			0.2	1
12) Trichlorofluoromethane	(1)	2.774(-0.000)	101	675314	10.331	10.33			0.2	1
13) Pentane	(1)	2.881(-0.001)	43	330927	8.830	8.83			0.5	1
14) Ethanol	(1)	3.082(-0.000)	45	76726	9.384	9.38			0.5	2
15) Freon123a	(1)	3.211(-0.001)	67	554664	11.447	11.45			0.2	1
16) Acrolein	(1)	3.340(-0.000)	56	76270	8.785	8.78			1	2
17) 1,1-Dichloroethene	(1)	3.433(-0.000)	61	353415	9.866	9.87			0.2	1
18) Freon 113	(1)	3.447(-0.000)	103	359033	9.732	9.73			0.5	2
19) Acetone	(1)	3.533(-0.000)	43	386731	10.790	10.79			0.5	2
20) Methyl Iodide	(1)	3.605(-0.000)	142	504914	8.622	8.62			0.2	1
21) Carbon Disulfide	(1)	3.662(-0.000)	76	743152	11.084	11.08			0.5	1
22) Isopropanol	(1)	3.719(-0.000)	45	254778	8.402	8.40			0.5	2
23) Acetonitrile	(1)	3.877(-0.000)	40	192158	12.087	12.09			0.5	2
24) 3-Chloropropene	(1)	3.870(-0.000)	76	90655	9.929	9.93			0.2	1
25) Methylene Chloride	(1)	4.013(-0.000)	84	231243	11.616	11.62			0.2	1
26) tert-Butyl Alcohol	(1)	4.163(-0.000)	59	278067	8.208	8.21			0.5	1
27) Acrylonitrile	(1)	4.299(-0.000)	53	209468	10.597	10.60			0.5	2
28) trans-1,2-Dichloroethene	(1)	4.292(-0.000)	61	348402	10.551	10.55			0.2	1
29) Methyl t-Butyl Ether	(1)	4.299(-0.000)	73	442694	7.847	7.85			0.2	1
30) Hexane	(1)	4.564(-0.000)	57	271755	8.068	8.07			0.2	1
31) 1,1-Dichloroethane	(1)	4.722(-0.000)	63	471875	10.433	10.43			0.2	1
32) Vinyl Acetate	(1)	4.786(-0.000)	86	43172	9.017	9.02			1	1
33) Di-Isopropyl Ether	(1)	4.786(-0.000)	45	653505	8.953	8.95			0.2	1
34) Ethyl Tert-Butyl Ether	(1)	5.116(-0.000)	59	360180	7.308	7.31			0.2	1
35) cis-1,2-Dichloroethene	(1)	5.259(-0.000)	61	295964	9.576	9.58			0.2	1
36) 1,2-Dichloroethene (total)	(1)		61	644366	20.127	20.13			0.2	1
37) 2-Butanone	(1)	5.281(-0.000)	72	104843	8.994	8.99			0.5	2
38) Ethyl Acetate	(1)	5.331(-0.000)	70	52370	9.171	9.17			0.5	1
39) Methyl Acrylate	(1)	5.360(-0.000)	55	349761	9.231	9.23			0.2	1
41) Tetrahydrofuran	(1)	5.503(0.000)	42	221160	8.629	8.63			0.5	1
42) Chloroform	(1)	5.539(0.000)	83	568443	10.581	10.58			0.2	1
43) 1,1,1-Trichloroethane	(1)	5.682(-0.001)	97	478623	9.657	9.66			0.2	1
44) Cyclohexane	(1)	5.711(-0.000)	56	298301	8.413	8.41			0.2	1

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun14.b/ef00173.d Injection date and time: **14-JUN-2018 14:56**
Data file Sample Info. Line: LCSE07;200;E1816530AA;LCSE07;0;3;LCS; Instrument ID: **HP22820.i** Batch: **E1816530AA**
Date, time and analyst ID of latest file update: 14-Jun-2018 15:22 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun14.b/ef00172.d**

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 14-JUN-2018 13:39
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun14.b/ef00171.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
45) Carbon Tetrachloride	(1)	5.811(-0.000)	117	487445	10.049	10.05			0.2	1
46) Benzene	(2)	5.990(-0.001)	78	716995	10.109	10.11			0.2	1
47) 1,2-Dichloroethane	(2)	6.011(-0.000)	62	380011	11.433	11.43			0.2	1
48) Isooctane	(2)	6.040(-0.001)	57	971430	10.064	10.06			0.2	1
49) Tert-Amyl Methyl Ether	(2)	6.069(-0.000)	73	387922	8.625	8.63			0.2	1
50) Heptane	(2)	6.176(-0.000)	43	360236	9.640	9.64			0.5	1
52) Trichloroethene	(2)	6.491(0.000)	130	293307	9.454	9.45			0.2	1
53) Ethyl Acrylate	(2)	6.570(-0.000)	55	371545	8.526	8.53			0.2	1
54) 1,2-Dichloropropane	(2)	6.678(-0.001)	63	288579	10.646	10.65			0.2	1
55) Dibromomethane	(2)	6.771(-0.000)	174	293991	10.329	10.33			0.2	1
56) 1,4-Dioxane	(2)	6.778(0.000)	88	156616	9.623	9.62			0.5	1
57) Methyl Methacrylate	(2)	6.749(0.000)	69	192589	8.469	8.47			0.2	1
58) Bromodichloromethane	(2)	6.885(0.000)	83	576995	10.869	10.87			0.2	1
59) cis-1,3-Dichloropropene	(2)	7.215(0.000)	75	344311	8.911	8.91			0.2	1
60) 4-Methyl-2-Pentanone	(2)	7.329(-0.000)	43	484394	9.170	9.17			0.5	2
61) Toluene	(3)	7.466(-0.000)	91	804060	9.765	9.77			0.2	1
62) Octane	(3)	7.516(-0.000)	43	533865	10.476	10.48			0.2	1
63) trans-1,3-Dichloropropene	(3)	7.630(-0.000)	75	286949	9.531	9.53			0.2	1
64) 1,3-Dichloropropene (total)	(3)		75	631260	18.442	18.44			0.2	1
65) Ethyl Methacrylate	(3)	7.673(-0.000)	69	311481	8.856	8.86			0.2	1
66) 1,1,2-Trichloroethane	(3)	7.766(0.000)	97	336756	10.796	10.80			0.2	1
67) Tetrachloroethene	(3)	7.867(-0.000)	166	413337	9.844	9.84			0.2	1
68) 2-Hexanone	(3)	7.945(-0.000)	43	453949	9.655	9.65			0.5	2
69) Dibromochloromethane	(3)	8.067(-0.000)	127	417148	11.141	11.14			0.2	1
70) 1,2-Dibromoethane	(3)	8.160(-0.000)	107	484957	10.507	10.51			0.2	1
72) Chlorobenzene	(3)	8.511(0.000)	112	694904	9.985	9.99			0.2	1
73) 1,1,1,2-Tetrachloroethane	(3)	8.569(0.000)	131	369422	10.913	10.91			0.2	1
74) Ethylbenzene	(3)	8.583(0.000)	91	971595	9.385	9.39			0.2	1
75) m/p-Xylene	(3)	8.669(0.000)	91	736298	9.314	9.31			0.2	1
76) o-Xylene	(3)	8.970(-0.000)	91	705171	9.076	9.08			0.2	1
77) Xylene (total)	(3)		91	1441469	18.391	18.39			0.2	1
78) Styrene	(3)	8.977(-0.000)	104	569116	9.675	9.67			0.2	1
79) Bromoform	(3)	9.134(0.000)	173	493927	10.983	10.98			0.2	1
80) Cumene	(3)	9.235(-0.000)	105	931493	8.992	8.99			0.2	1
81) Bromobenzene	(3)	9.493(-0.000)	156	386820	9.783	9.78			0.2	1
82) 1,1,2,2-Tetrachloroethane	(3)	9.464(0.000)	83	825311	11.412	11.41			0.2	1
83) 1,2,3-Trichloropropane	(3)	9.507(0.000)	110	225883	10.940	10.94			0.2	1
84) n-Propylbenzene	(3)	9.543(0.000)	120	297140	9.677	9.68			0.5	1
85) 2-Chlorotoluene	(3)	9.629(-0.000)	126	304529	10.391	10.39			0.2	1
86) 4-Ethyltoluene	(3)	9.629(-0.000)	105	1147127M	10.455	10.45			0.2	1
87) 1,3,5-Trimethylbenzene	(3)	9.672(0.000)	105	916111M	10.236	10.24			0.2	1
88) Alpha Methyl Styrene	(3)	9.844(0.000)	118	368028	8.921	8.92			0.2	1
89) tert-Butylbenzene	(3)	9.922(-0.000)	119	812658M	10.009	10.01			0.5	1
90) 1,2,4-Trimethylbenzene	(3)	9.958(-0.000)	105	914604	10.421	10.42			0.2	1
91) sec-Butylbenzene	(3)	10.087(-0.000)	105	1250016	9.946	9.95			0.2	1
92) 1,3-Dichlorobenzene	(3)	10.188(0.000)	146	717665	10.593	10.59			0.2	1
93) 1,4-Dichlorobenzene	(3)	10.252(0.000)	146	678630	10.123	10.12			0.2	1
94) p-Isopropyltoluene	(3)	10.188(0.000)	119	1005808	10.006	10.01			0.2	1
95) Benzyl Chloride	(3)	10.359(0.000)	91	402830	8.937	8.94			0.5	1
96) 1,2-Dichlorobenzene	(3)	10.546(0.000)	146	668930	10.618	10.62			0.2	1
97) n-Butylbenzene	(3)	10.503(0.000)	91	980883M	9.940	9.94			0.2	1
98) Hexachloroethane	(3)	10.732(0.000)	117	305835	11.604	11.60			0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)	11.140(0.000)	157	293873	10.017	10.02			0.2	1
100) 1,2,4-Trichlorobenzene	(3)	11.756(0.000)	180	311040	7.621	7.62			0.5	2

M = Compound was manually integrated.

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Data file: /chem/HP22820.i/18jun14.b/ef00173.d Injection date and time: **14-JUN-2018 14:56**
Data file Sample Info. Line: LCSE07;200;E1816530AA;LCSE07;0;3;LCS; Instrument ID: **HP22820.i** Batch: **E1816530AA**
Date, time and analyst ID of latest file update: 14-Jun-2018 15:22 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun14.b/ef00172.d**

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 14-JUN-2018 13:39
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun14.b/ef00171.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
101) Hexachlorobutadiene	(3)	11.871(0.000)	225	314610	9.272	9.27			0.4	2
102) Naphthalene	(3)	11.964(0.000)	128	599051	7.585	7.59			0.4	1

Total number of targets = 99

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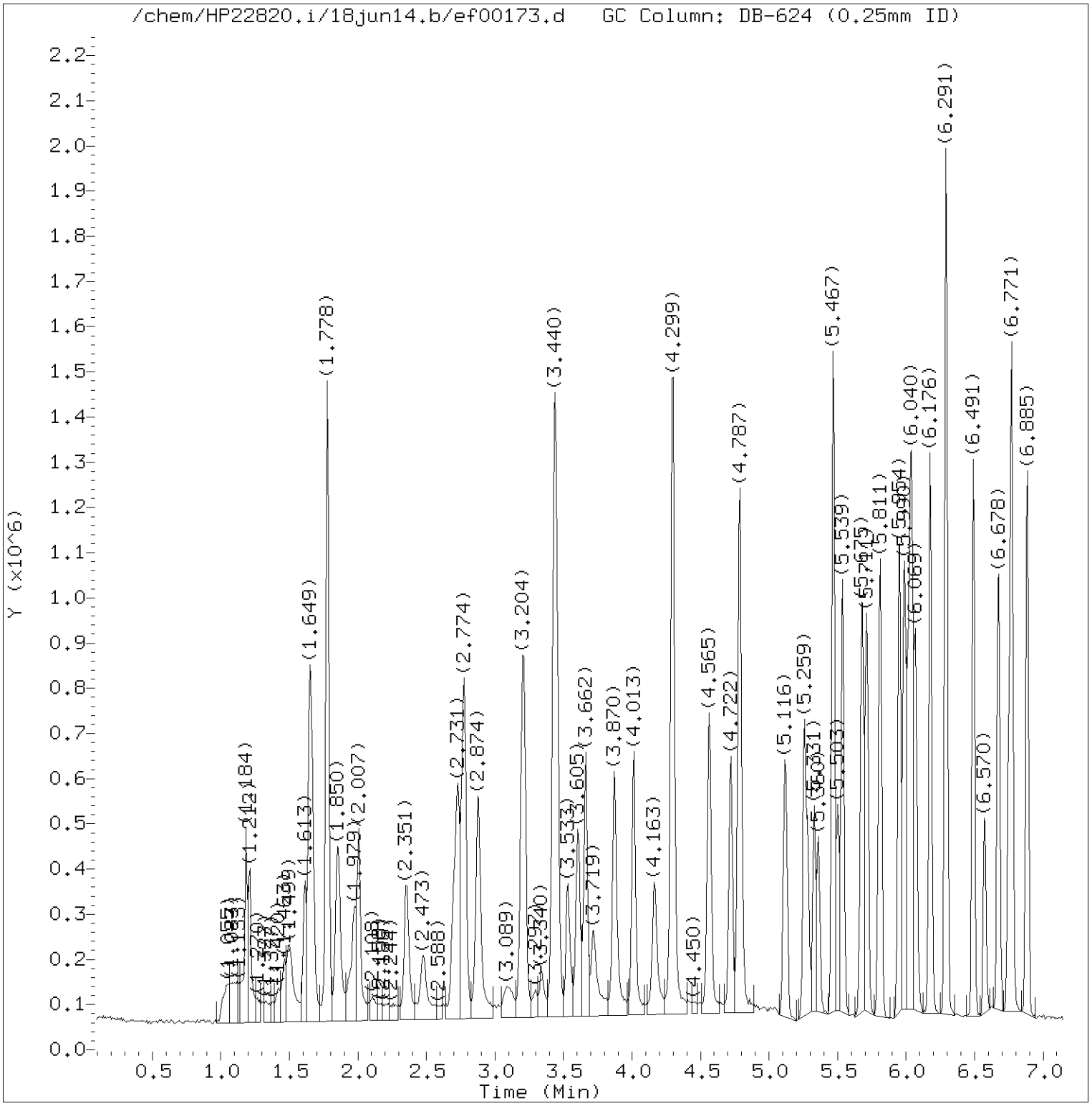
Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 14:49. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

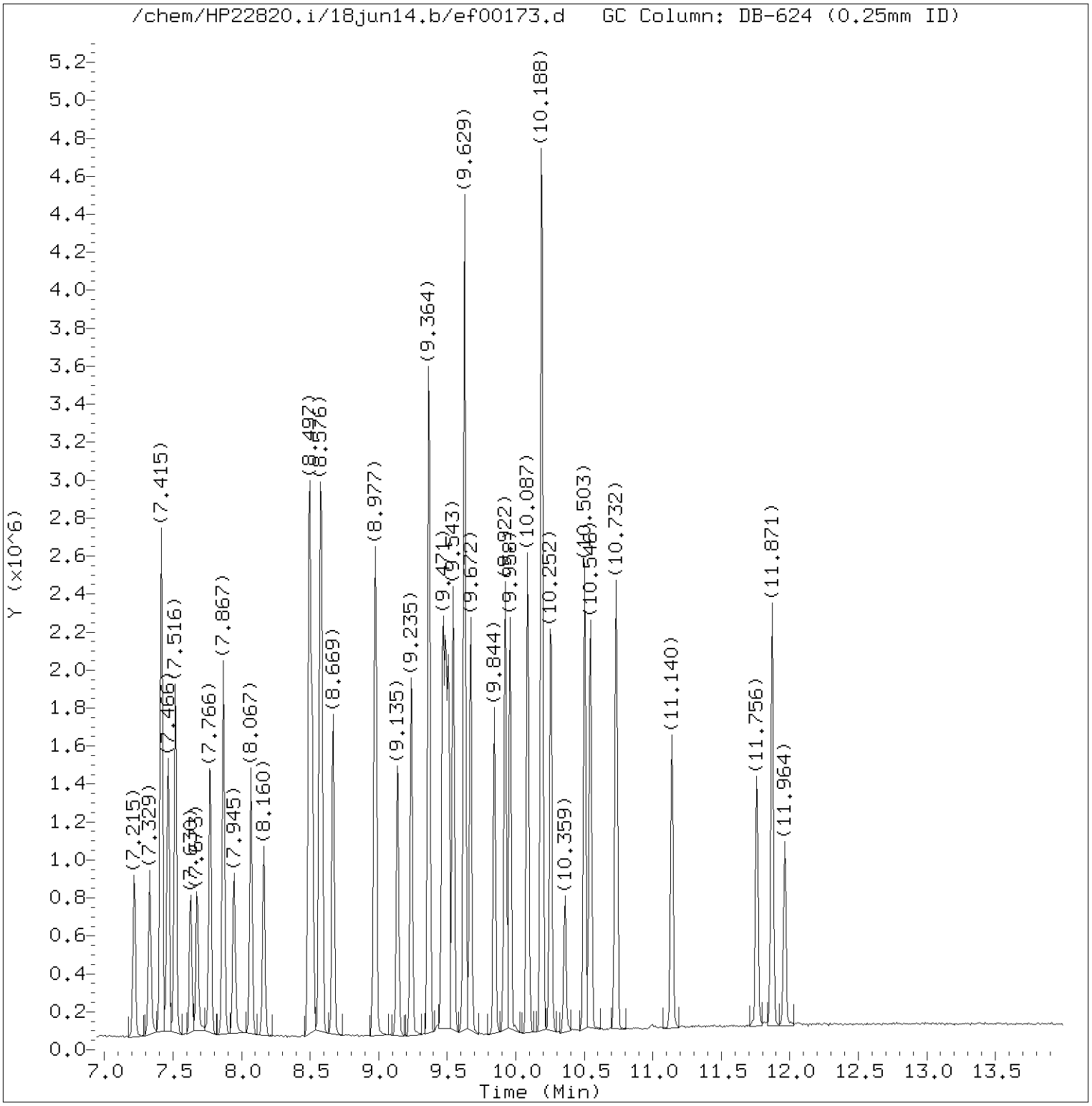
Target Revision 3.5

Data File: /chem/HP22820.i/18jun14.b/ef00173.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 14:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 15:22 jeb07445

Sample Name: LCSE07 Lab Sample ID: LCSE07

Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:24.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun14.b/ef00173.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 14:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 15:22 jeb07445

Sample Name: LCSE07 Lab Sample ID: LCSE07

Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:24.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun14.b/ef00173.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 14:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 15:22 jeb07445

Sample Name: LCSE07 Lab Sample ID: LCSE07

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.613	41	165695	9.488
2) Dichlorodifluoromethane	(1)	1.649	85	670384	10.959
3) Chlorodifluoromethane	(1)	1.671	51	421523	10.868
4) Freon 114	(1)	1.778	85	688988	10.495
5) Chloromethane	(1)	1.850	50	282605	11.476
6) Vinyl Chloride	(1)	1.971	62	243029	10.323
7) 1,3-Butadiene	(1)	2.007	54	158258	9.346
8) Bromomethane	(1)	2.351	94	225596	11.256
9) Chloroethane	(1)	2.473	64	135530	10.331
10) Bromoethene	(1)	2.695	106	183317	8.976
11) Dichlorofluoromethane	(1)	2.731	67	578017	11.076
12) Trichlorofluoromethane	(1)	2.774	101	675314	10.331
13) Pentane	(1)	2.881	43	330927	8.830
14) Ethanol	(1)	3.082	45	76726	9.384
15) Freon123a	(1)	3.211	67	554664	11.447
16) Acrolein	(1)	3.340	56	76270	8.785
17) 1,1-Dichloroethene	(1)	3.433	61	353415	9.866
18) Freon 113	(1)	3.447	103	359033	9.732
19) Acetone	(1)	3.533	43	386731	10.790
20) Methyl Iodide	(1)	3.605	142	504914	8.622
21) Carbon Disulfide	(1)	3.662	76	743152	11.084
22) Isopropanol	(1)	3.719	45	254778	8.402
24) 3-Chloropropene	(1)	3.870	76	90655	9.929
23) Acetonitrile	(1)	3.877	40	192158	12.087
25) Methylene Chloride	(1)	4.013	84	231243	11.616
26) tert-Butyl Alcohol	(1)	4.163	59	278067	8.208
28) trans-1,2-Dichloroethene	(1)	4.292	61	348402	10.551
27) Acrylonitrile	(1)	4.299	53	209468	10.597
29) Methyl t-Butyl Ether	(1)	4.299	73	442694	7.847
30) Hexane	(1)	4.565	57	271755	8.068
31) 1,1-Dichloroethane	(1)	4.722	63	471875	10.433
32) Vinyl Acetate	(1)	4.787	86	43172	9.017
33) Di-Isopropyl Ether	(1)	4.787	45	653505	8.953
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	360180	7.308
35) cis-1,2-Dichloroethene	(1)	5.259	61	295964	9.576
37) 2-Butanone	(1)	5.281	72	104843	8.994
38) Ethyl Acetate	(1)	5.331	70	52370	9.171
39) Methyl Acrylate	(1)	5.360	55	349761	9.231

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on 06/14/2018 at 15:24.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun14.b/ef00173.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 14:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 15:22 jeb07445

Sample Name: LCSE07 Lab Sample ID: LCSE07

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	369536	10.000
41) Tetrahydrofuran	(1)	5.503	42	221160	8.629
42) Chloroform	(1)	5.539	83	568443	10.581
43) 1,1,1-Trichloroethane	(1)	5.682	97	478623	9.657
44) Cyclohexane	(1)	5.711	56	298301	8.413
45) Carbon Tetrachloride	(1)	5.811	117	487445	10.049
46) Benzene	(2)	5.990	78	716995	10.109
47) 1,2-Dichloroethane	(2)	6.011	62	380011	11.433
48) Isooctane	(2)	6.040	57	971430	10.064
49) Tert-Amyl Methyl Ether	(2)	6.069	73	387922	8.625
50) Heptane	(2)	6.176	43	360236	9.640
51)*1,4-Difluorobenzene	(2)	6.291	114	1157691	10.000
52) Trichloroethene	(2)	6.491	130	293307	9.454
53) Ethyl Acrylate	(2)	6.570	55	371545	8.526
36) 1,2-Dichloroethene (total)	(1)		61	644366	20.127
54) 1,2-Dichloropropane	(2)	6.678	63	288579	10.646
57) Methyl Methacrylate	(2)	6.749	69	192589	8.469
55) Dibromomethane	(2)	6.771	174	293991	10.329
56) 1,4-Dioxane	(2)	6.778	88	156616	9.623
58) Bromodichloromethane	(2)	6.885	83	576995	10.869
59) cis-1,3-Dichloropropene	(2)	7.215	75	344311	8.911
60) 4-Methyl-2-Pentanone	(2)	7.329	43	484394	9.170
61) Toluene	(3)	7.466	91	804060	9.765
62) Octane	(3)	7.516	43	533865	10.476
63) trans-1,3-Dichloropropene	(3)	7.630	75	286949	9.531
65) Ethyl Methacrylate	(3)	7.673	69	311481	8.856
66) 1,1,2-Trichloroethane	(3)	7.766	97	336756	10.796
67) Tetrachloroethene	(3)	7.867	166	413337	9.844
68) 2-Hexanone	(3)	7.945	43	453949	9.655
69) Dibromochloromethane	(3)	8.067	127	417148	11.141
70) 1,2-Dibromoethane	(3)	8.160	107	484957	10.507
71)*Chlorobenzene-d5	(3)	8.497	117	1146156	10.000
72) Chlorobenzene	(3)	8.511	112	694904	9.985
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	369422	10.913
74) Ethylbenzene	(3)	8.583	91	971595	9.385
75) m/p-Xylene	(3)	8.669	91	736298	9.314
76) o-Xylene	(3)	8.970	91	705171	9.076
78) Styrene	(3)	8.977	104	569116	9.675

* = Compound is an internal standard.

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on 06/14/2018 at 15:24.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun14.b/ef00173.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 14:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 15:22 jeb07445

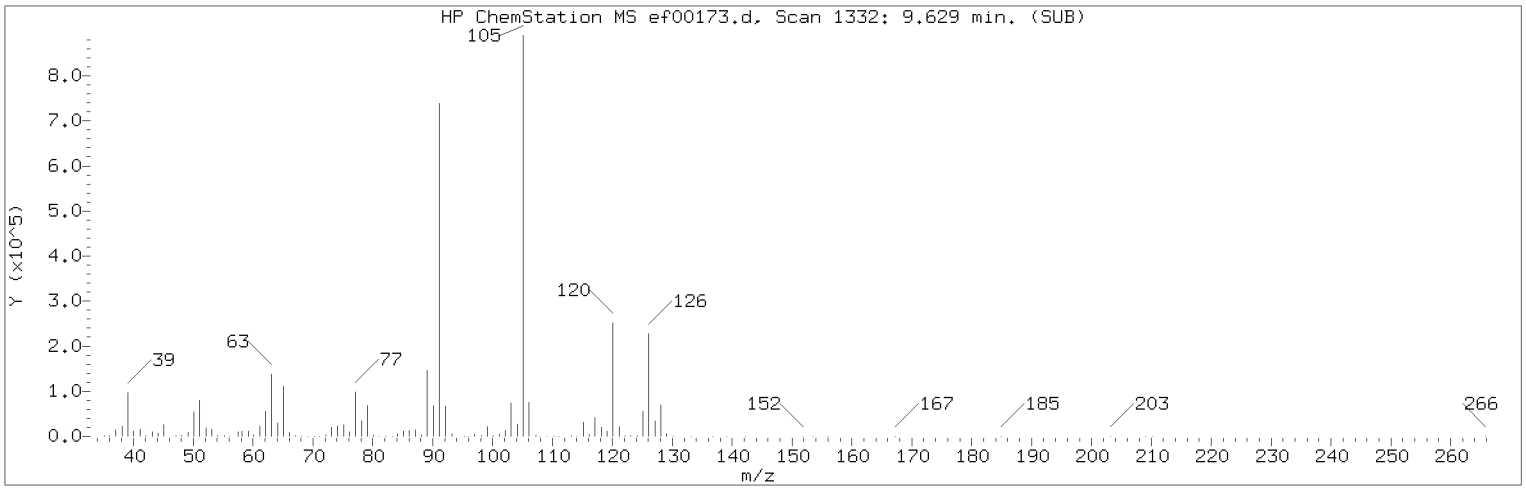
Sample Name: LCSE07 Lab Sample ID: LCSE07

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.135	173	493927	10.983
80) Cumene	(3)	9.235	105	931493	8.992
82) 1,1,2,2-Tetrachloroethane	(3)	9.464	83	825311	11.412
81) Bromobenzene	(3)	9.493	156	386820	9.783
83) 1,2,3-Trichloropropane	(3)	9.507	110	225883	10.940
84) n-Propylbenzene	(3)	9.543	120	297140	9.677
86) 4-Ethyltoluene	(3)	9.629	105	1147127M	10.455
85) 2-Chlorotoluene	(3)	9.629	126	304529	10.391
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	916111M	10.236
88) Alpha Methyl Styrene	(3)	9.844	118	368028	8.921
89) tert-Butylbenzene	(3)	9.922	119	812658M	10.009
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	914604	10.421
91) sec-Butylbenzene	(3)	10.087	105	1250016	9.946
92) 1,3-Dichlorobenzene	(3)	10.188	146	717665	10.593
94) p-Isopropyltoluene	(3)	10.188	119	1005808	10.006
93) 1,4-Dichlorobenzene	(3)	10.252	146	678630	10.123
95) Benzyl Chloride	(3)	10.359	91	402830	8.937
97) n-Butylbenzene	(3)	10.503	91	980883M	9.940
96) 1,2-Dichlorobenzene	(3)	10.546	146	668930	10.618
98) Hexachloroethane	(3)	10.732	117	305835	11.604
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	293873	10.017
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	311040	7.621
101) Hexachlorobutadiene	(3)	11.871	225	314610	9.272
102) Naphthalene	(3)	11.964	128	599051	7.585
64) 1,3-Dichloropropene (total)	(3)		75	631260	18.442
77) Xylene (total)	(3)		91	1441469	18.391

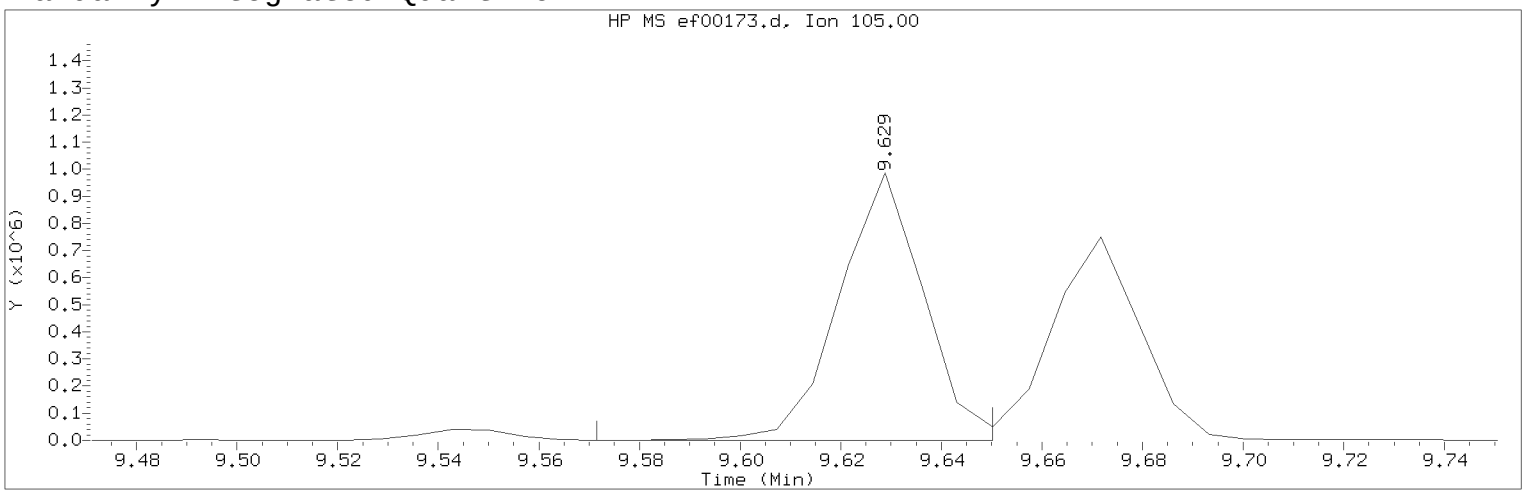
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:24.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun14.b/ef00173.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 14:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 15:22 jeb07445

Sample Name: LCSE07 Lab Sample ID: LCSE07

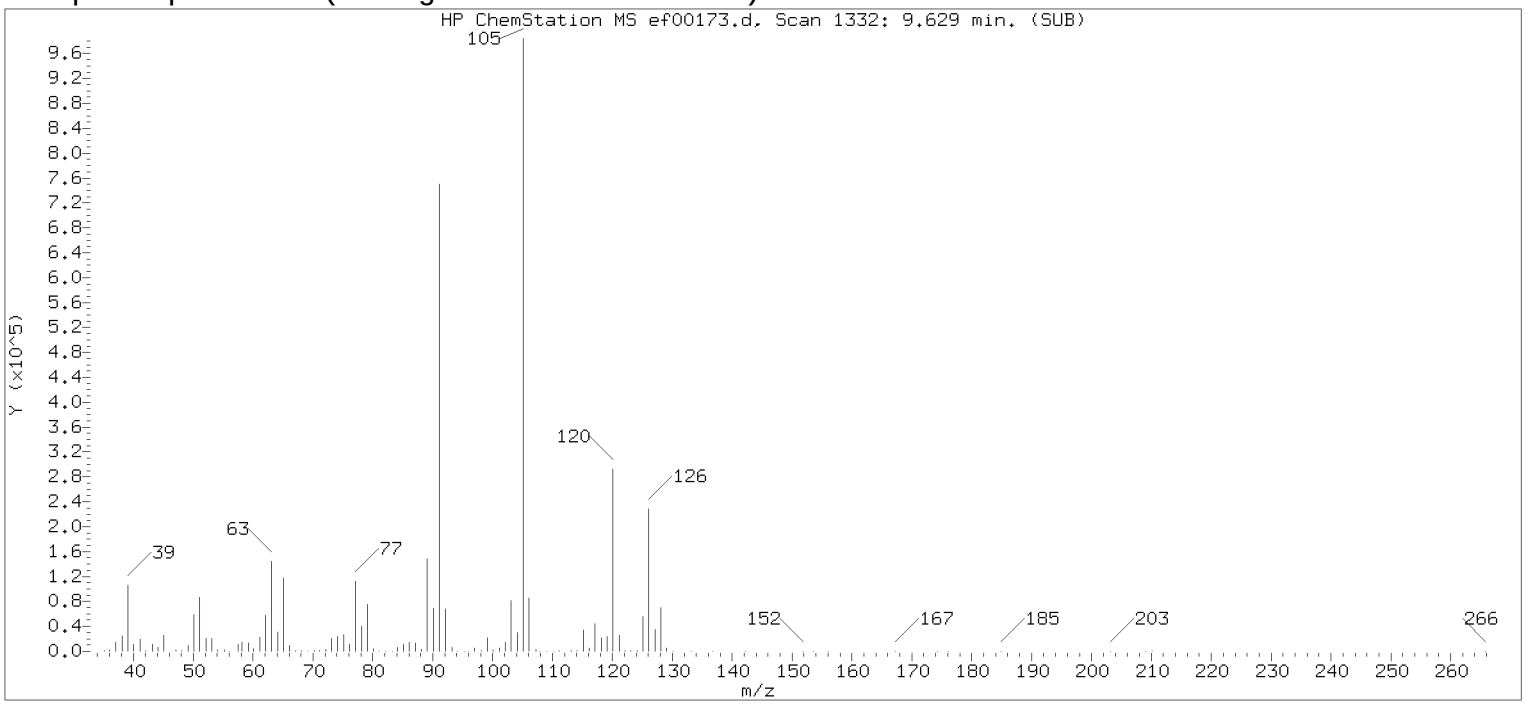
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 1147127M
Concentration (ppb(v)) : 10.4549
Integration start scan : 1323 Integration stop scan: 1334
Y at integration start : 338 Y at integration end: 338

Reason for manual integration: improper integration

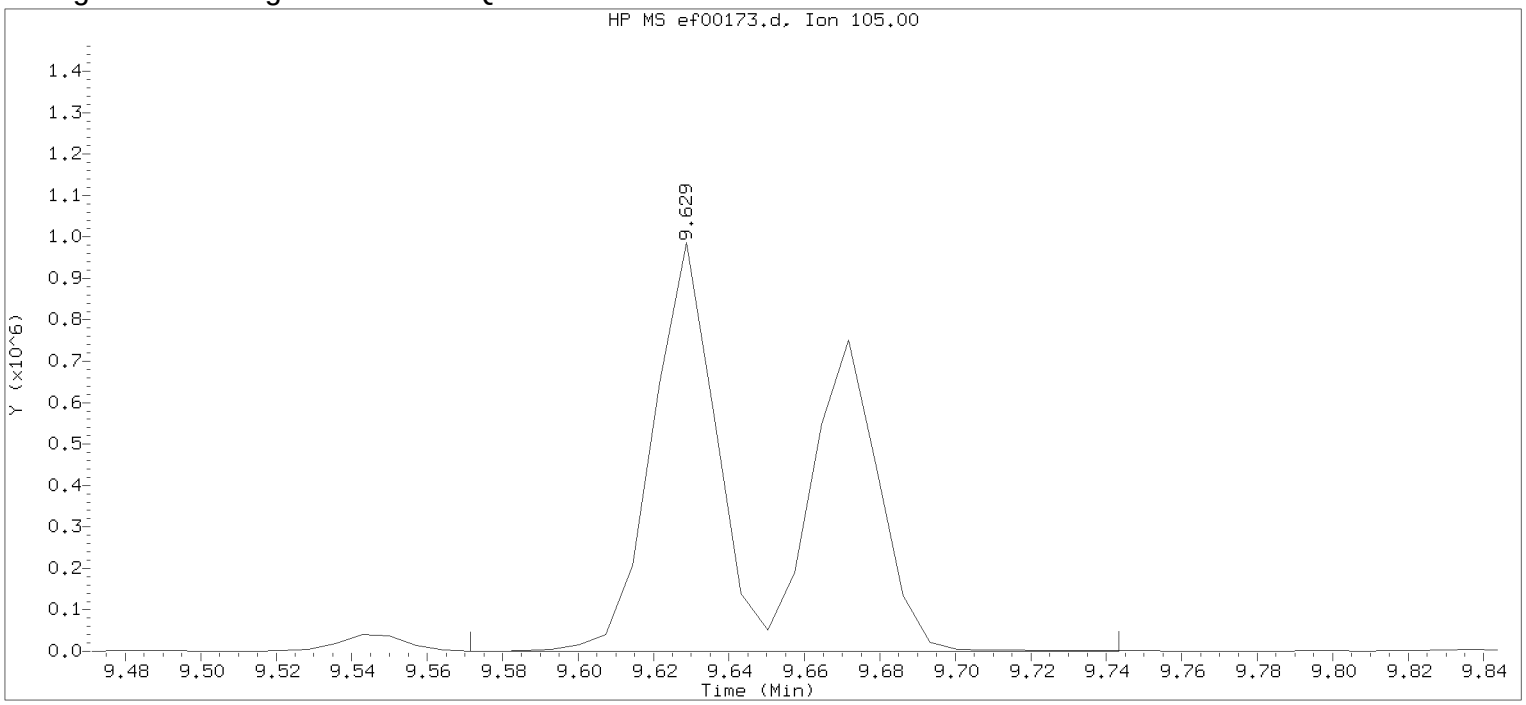
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:24.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 14:49.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun14.b/ef00173.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 14:56 Analyst ID: jeb07445

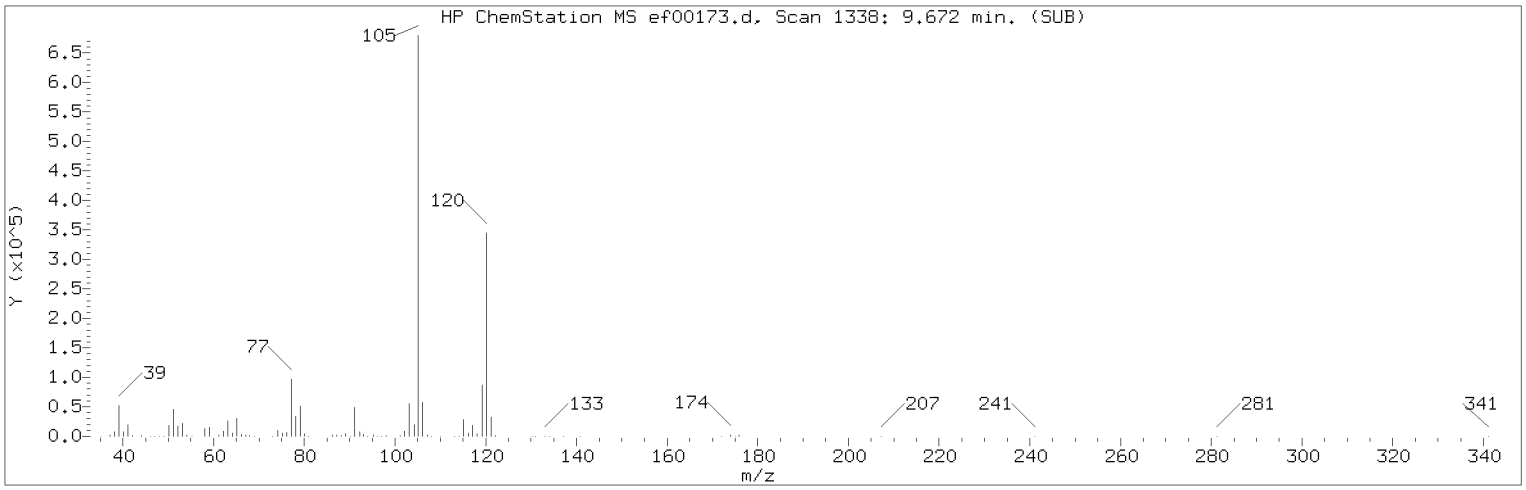
Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 15:15 Unknown

Sample Name: LCSE07 Lab Sample ID: LCSE07

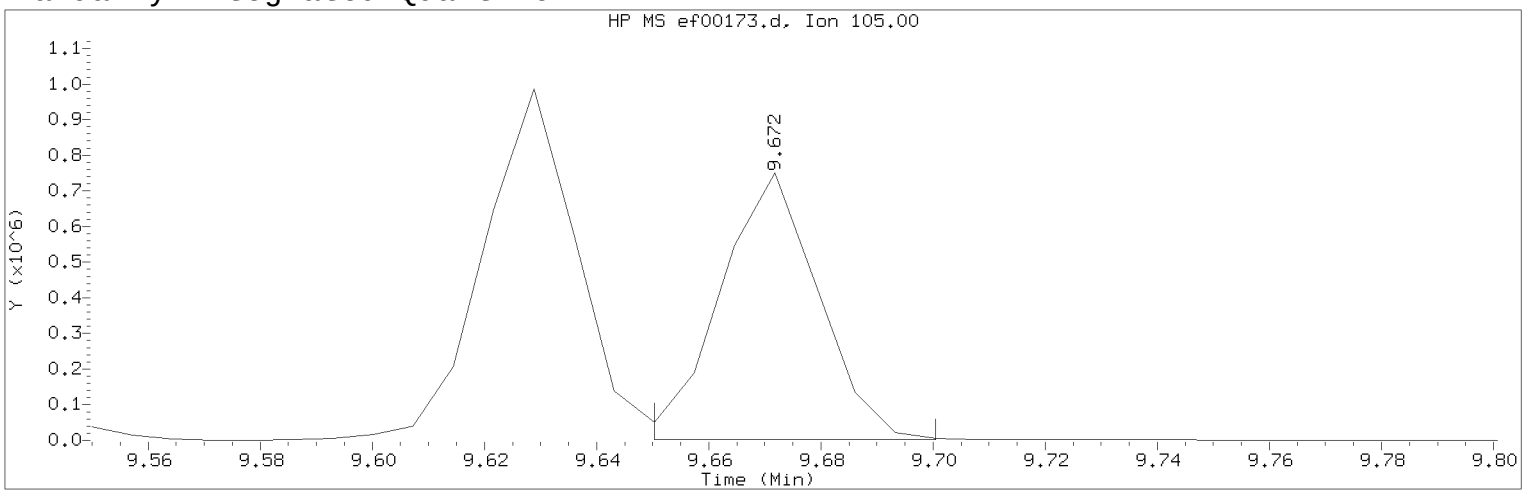
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 2049994
Concentration (ppb(v)) : 18.6835
Integration start scan : 1323 Integration stop scan: 1347
Y at integration start : 338 Y at integration end: 338

Digitally signed by Jacob E. Bailey on 06/14/2018 at 15:24.
Target 3.5 esignature used.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun14.b/ef00173.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 14:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 15:22 jeb07445

Sample Name: LCSE07 Lab Sample ID: LCSE07

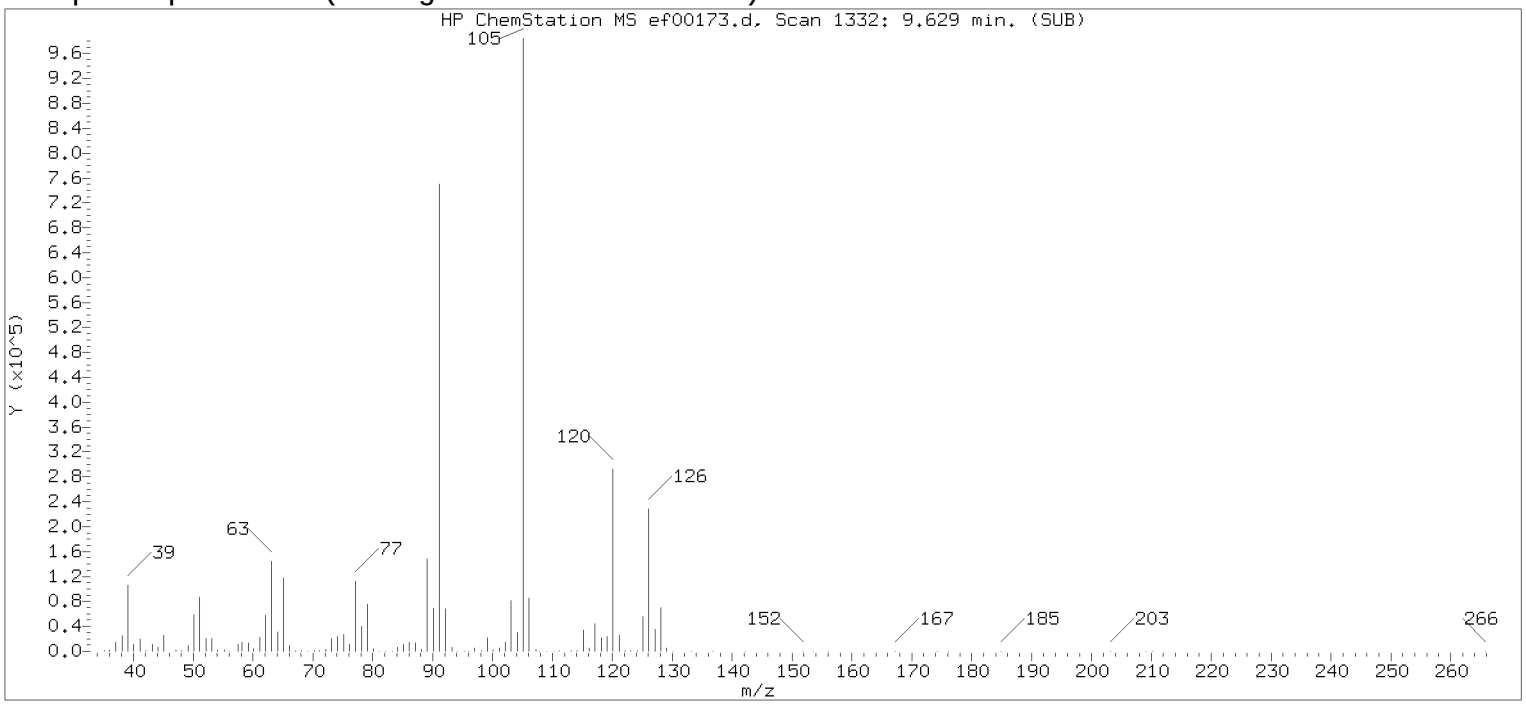
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 916111M
Concentration (ppb(v)) : 10.2362
Integration start scan : 1334 Integration stop scan: 1341
Y at integration start : 1807 Y at integration end: 1807

Reason for manual integration: improper integration

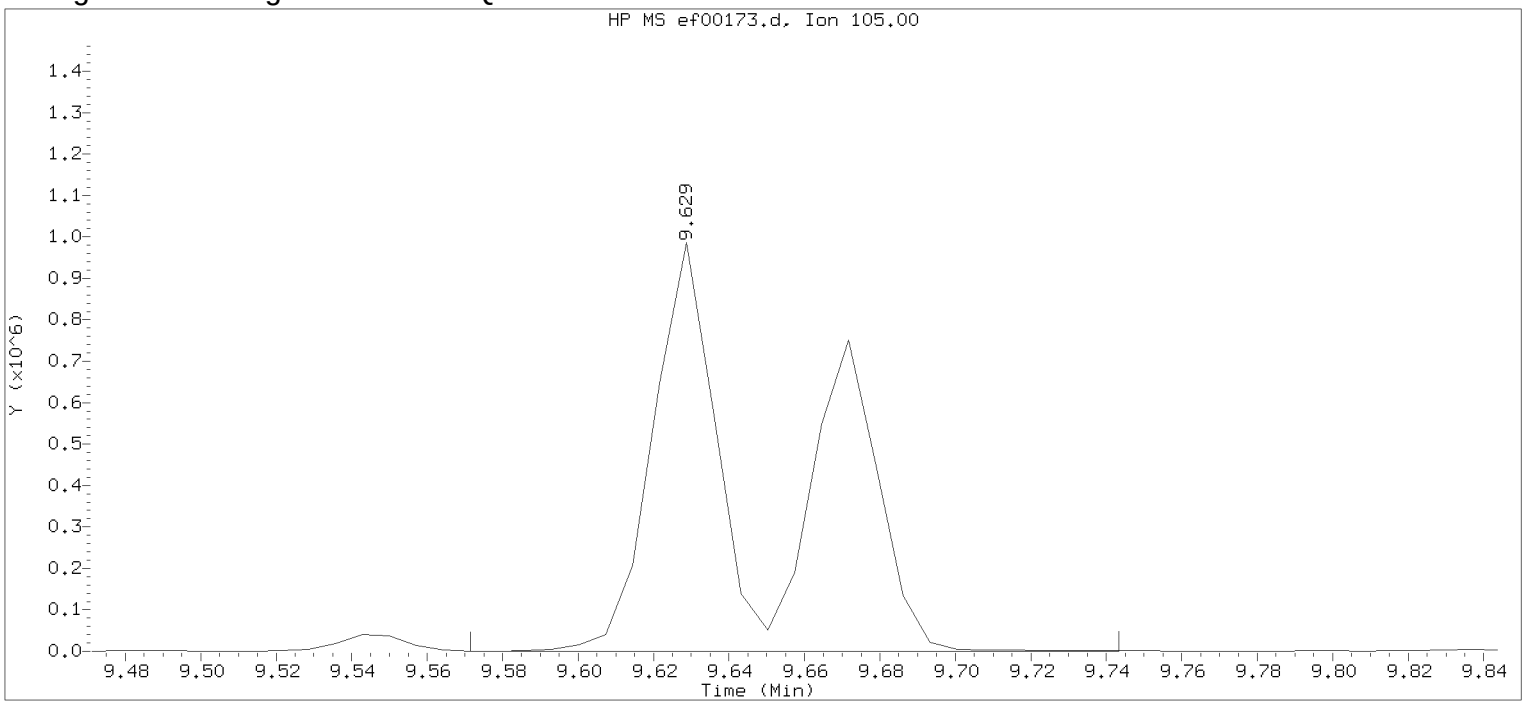
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:24.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 14:49.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun14.b/ef00173.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 14:56 Analyst ID: jeb07445

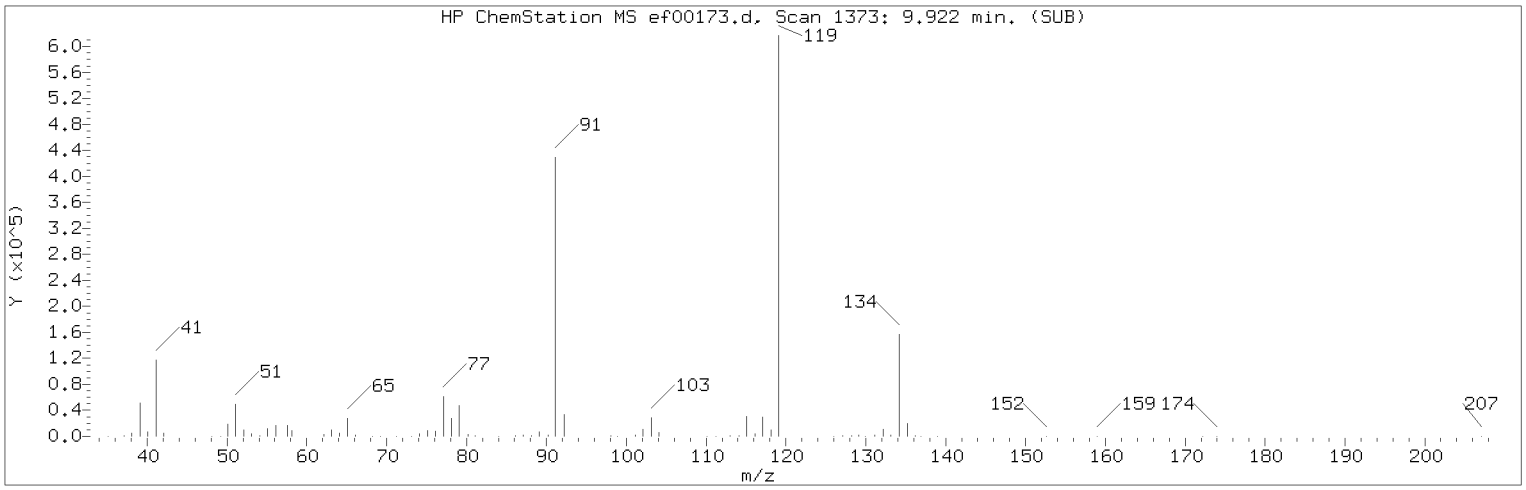
Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 15:15 Unknown

Sample Name: LCSE07 Lab Sample ID: LCSE07

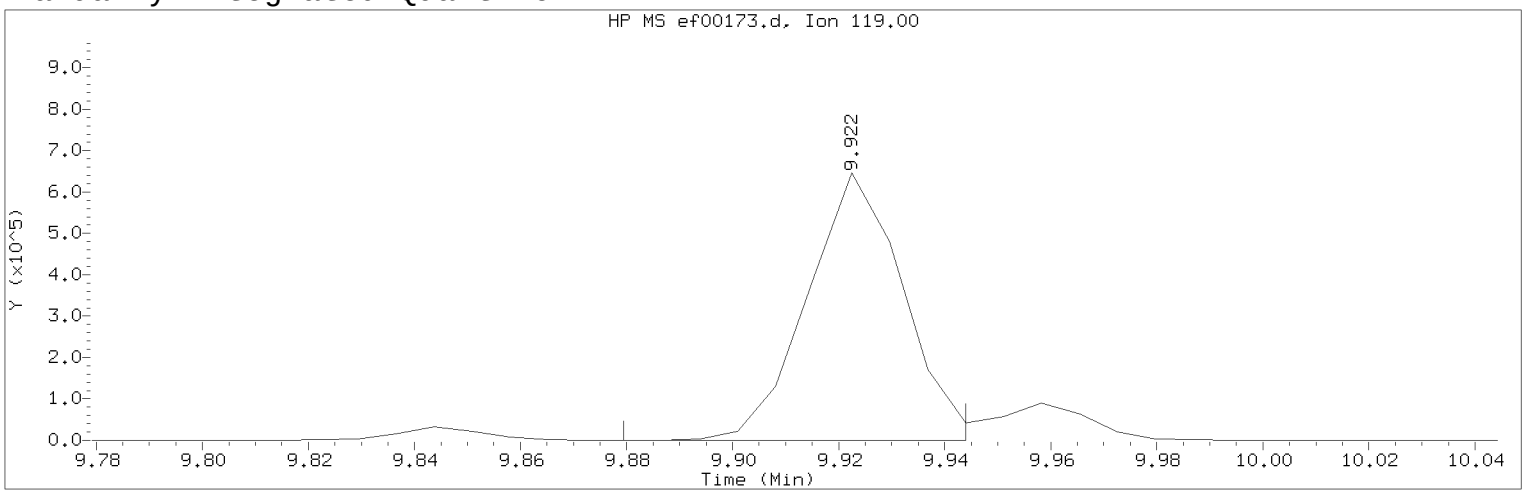
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 2049365
Concentration (ppb(v)) : 22.8986
Integration start scan : 1323 Integration stop scan: 1347
Y at integration start : 399 Y at integration end: 399

Digitally signed by Jacob E. Bailey on 06/14/2018 at 15:24.
Target 3.5 esignature used.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun14.b/ef00173.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 14:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 15:22 jeb07445

Sample Name: LCSE07 Lab Sample ID: LCSE07

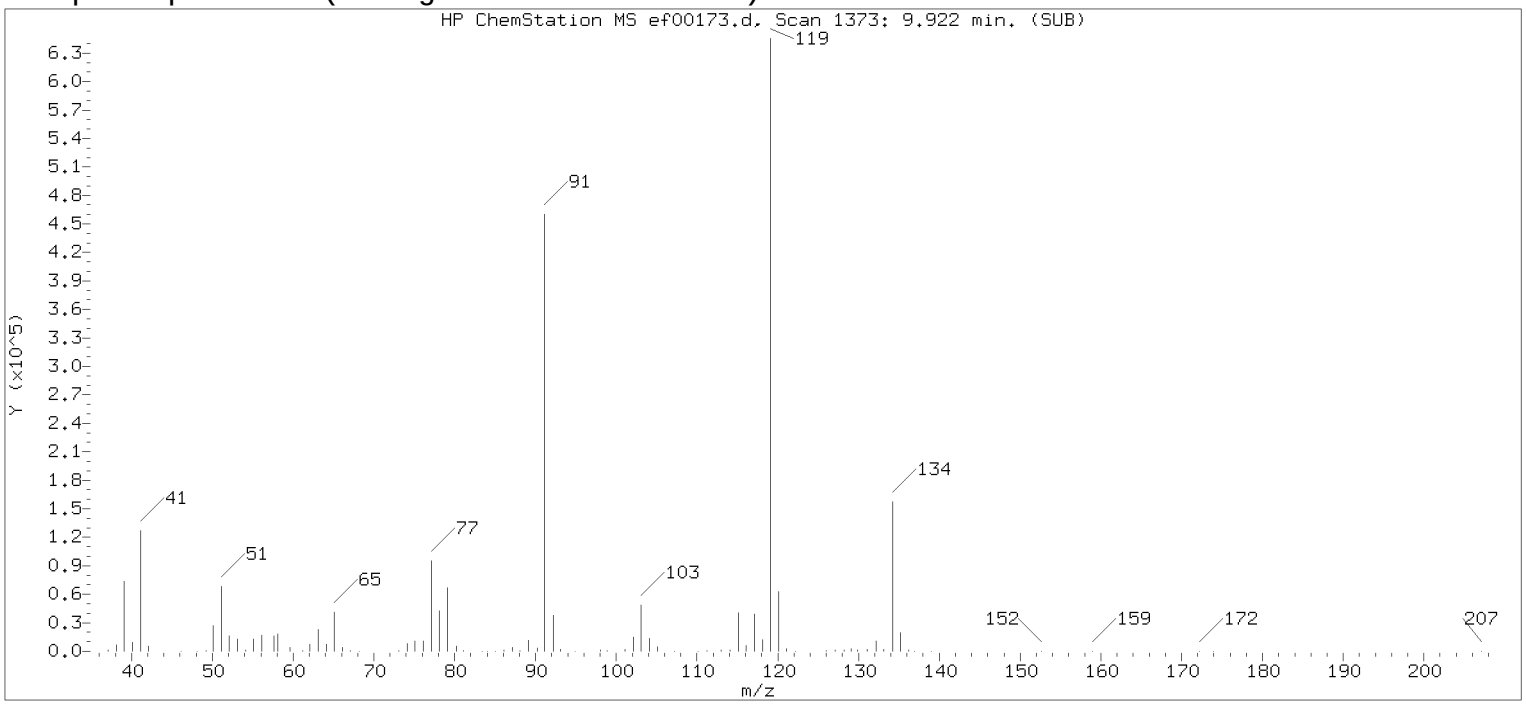
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 812658M
Concentration (ppb(v)) : 10.0086
Integration start scan : 1366 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

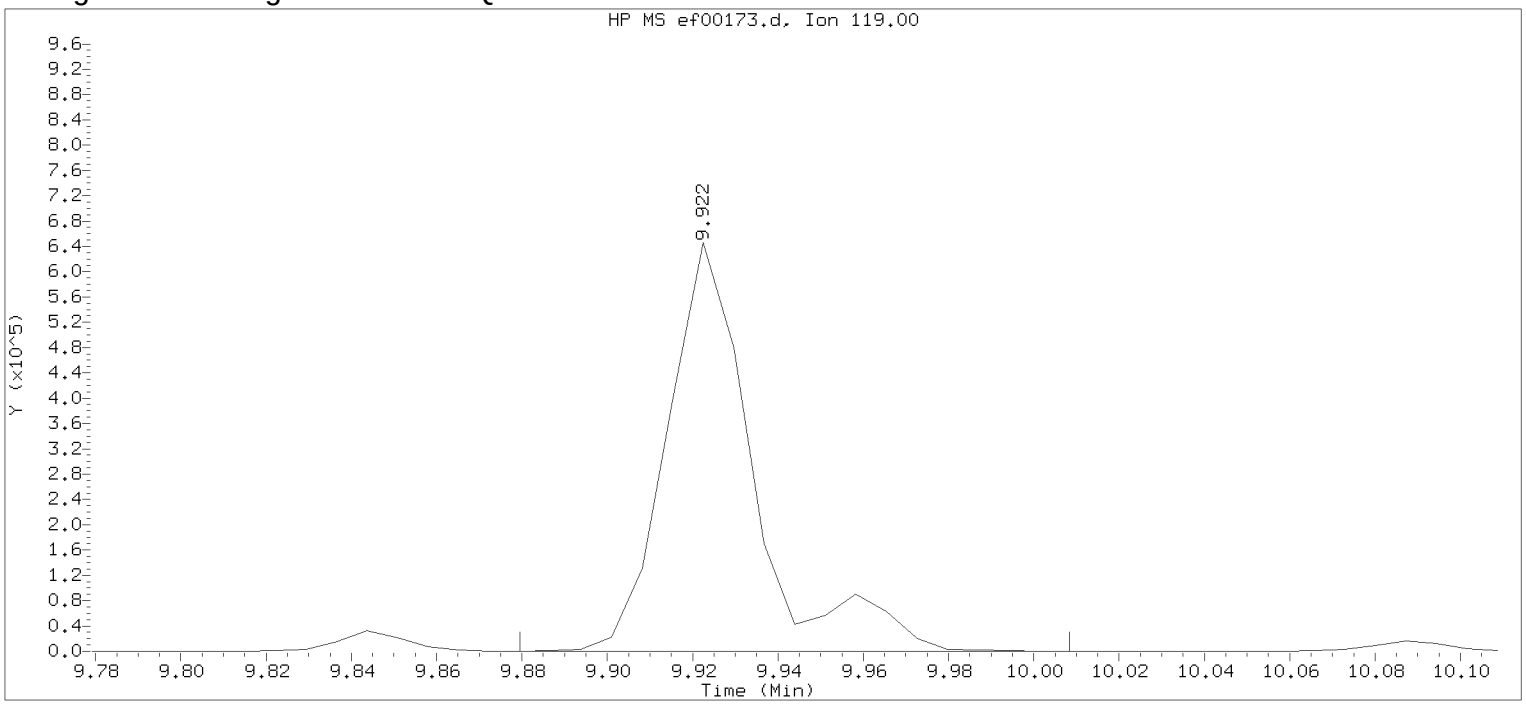
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:24.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 14:49.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun14.b/ef00173.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 14:56 Analyst ID: jeb07445

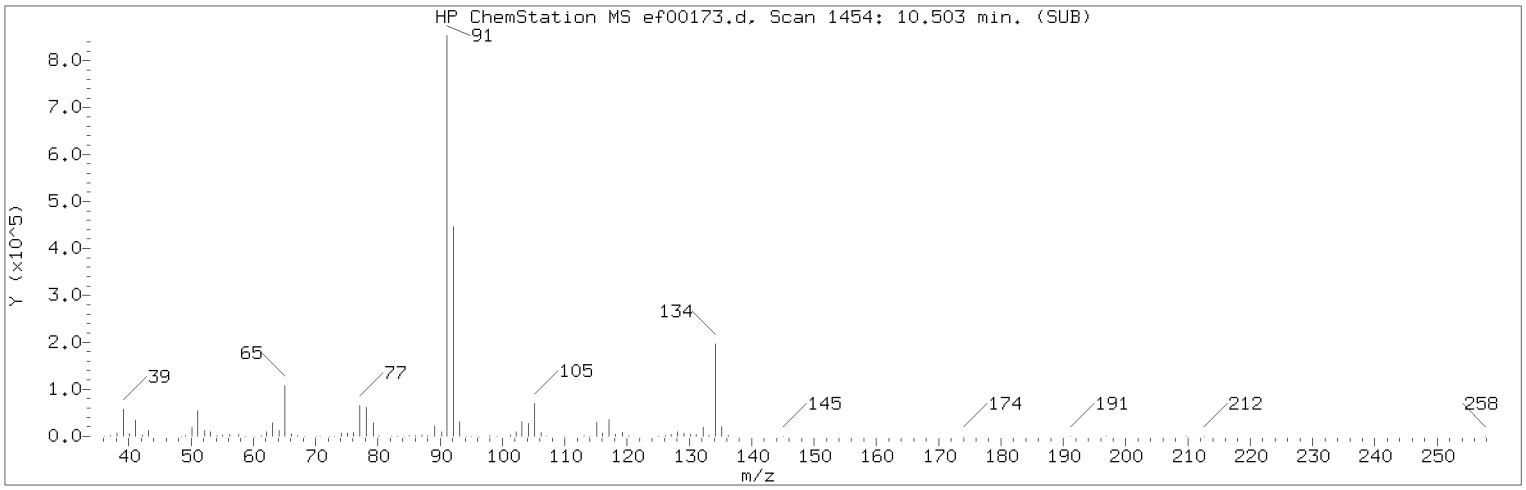
Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 15:15 Unknown

Sample Name: LCSE07 Lab Sample ID: LCSE07

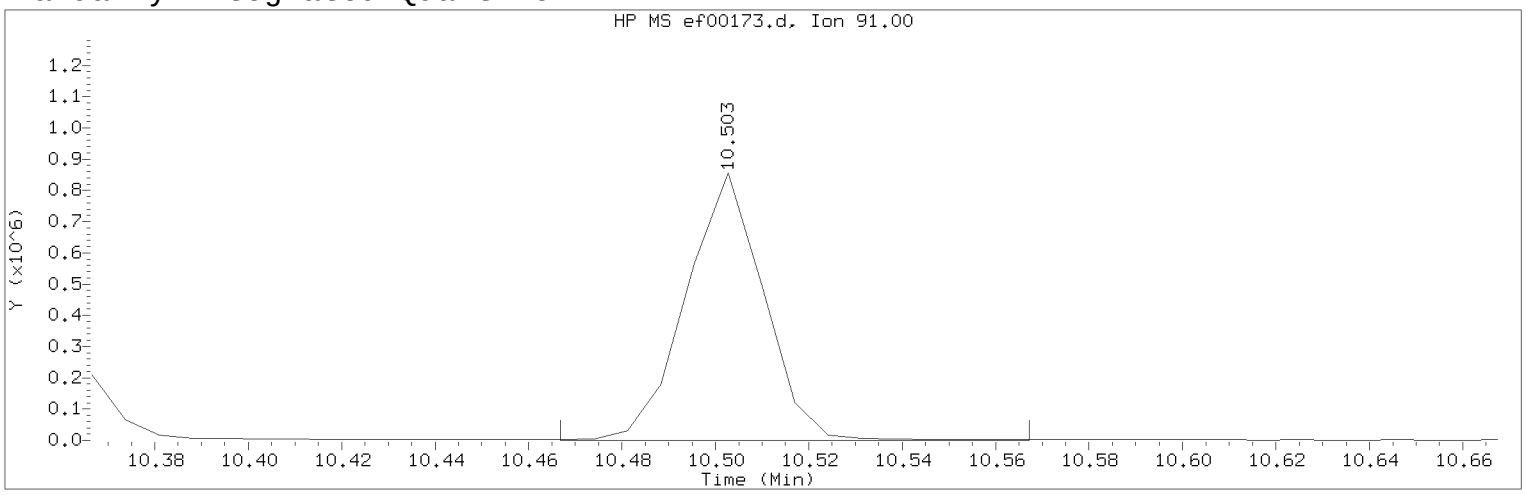
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 914355
Concentration (ppb(v)) : 11.2610
Integration start scan : 1366 Integration stop scan: 1384
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/14/2018 at 15:24.
Target 3.5 esignature used.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun14.b/ef00173.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 14:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 15:22 jeb07445

Sample Name: LCSE07 Lab Sample ID: LCSE07

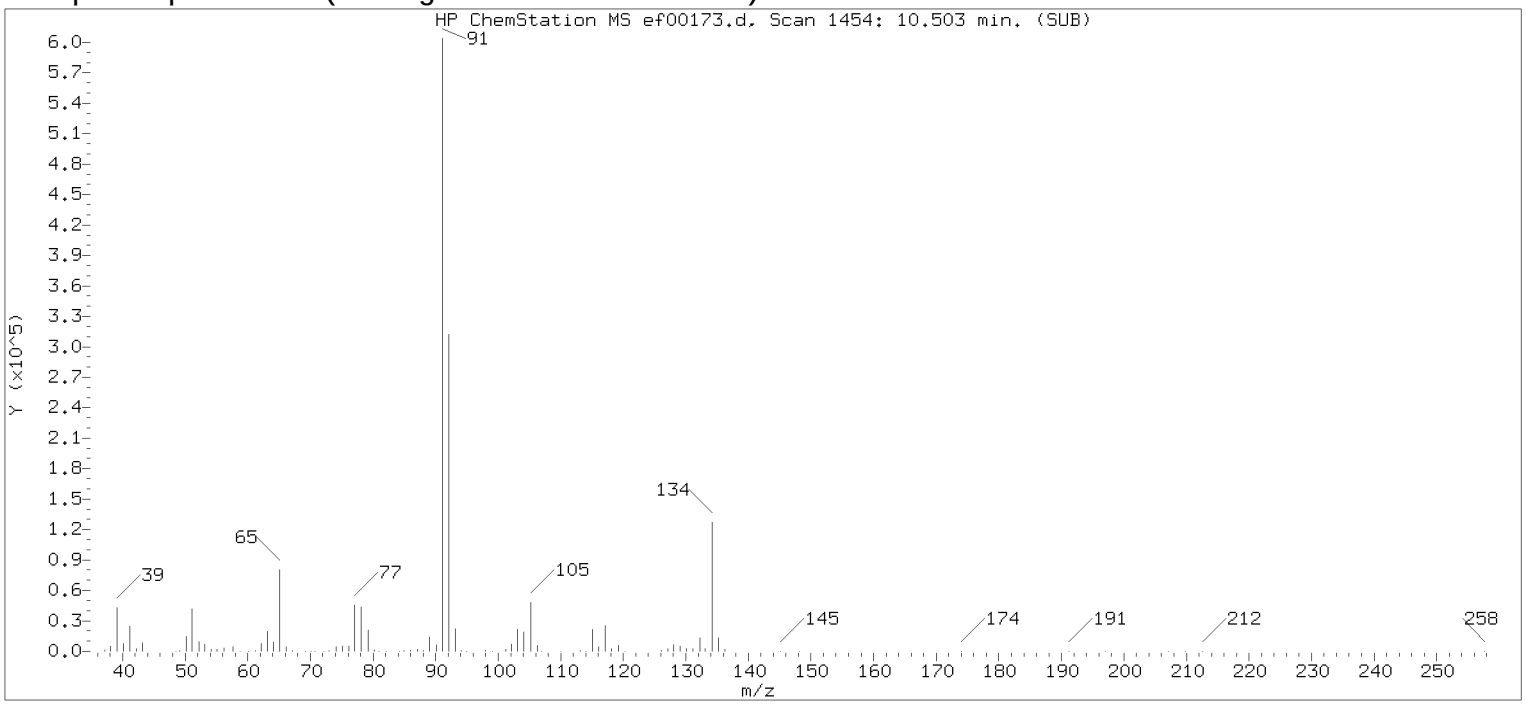
Compound Number : 97
Compound Name : n-Butylbenzene
Scan Number : 1454
Retention Time (minutes): 10.503
Quant Ion : 91.00
Area (flag) : 980883M
Concentration (ppb(v)) : 9.9396
Integration start scan : 1448 Integration stop scan: 1462
Y at integration start : 784 Y at integration end: 784

Reason for manual integration: improper integration

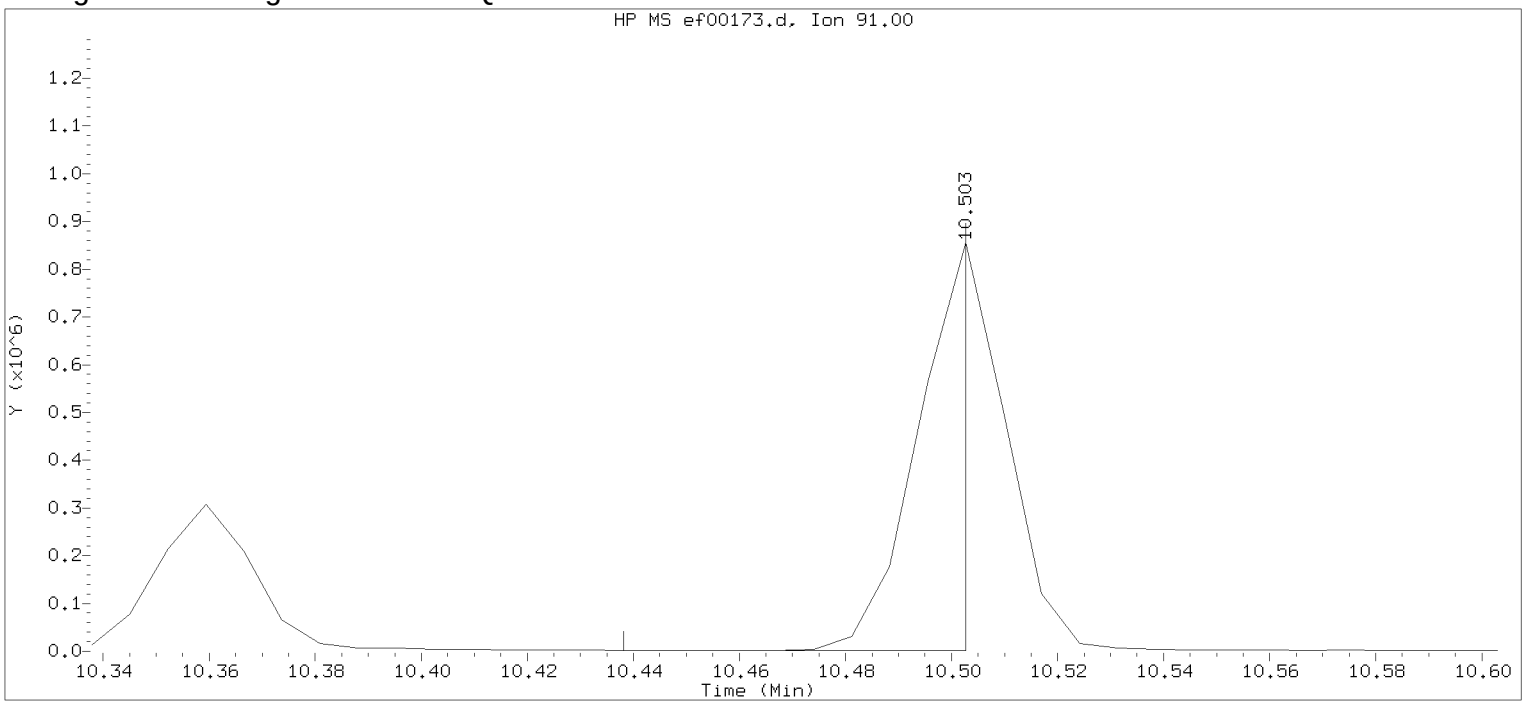
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:24.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 14:49.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun14.b/ef00173.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 14:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 15:15 Unknown

Sample Name: LCSE07 Lab Sample ID: LCSE07

Compound Number : 97
Compound Name : n-Butylbenzene
Scan Number : 1454
Retention Time (minutes): 10.503
Quant Ion : 91.00
Area : 516276
Concentration (ppb(v)) : 5.2316
Integration start scan : 1444 Integration stop scan: 1453
Y at integration start : 1277 Y at integration end: 1277

Digitally signed by Jacob E. Bailey on 06/14/2018 at 15:24.
Target 3.5 esignature used.

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun14.b/ef00174.d Injection date and time: **14-JUN-2018 15:29**
Data file Sample Info. Line: LCSDE07;200;E1816530AA;LCSDE07;0;3;LCSD; Instrument ID: **HP22820.i** Batch: **E1816530AA**
Date, time and analyst ID of latest file update: 14-Jun-2018 15:52 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun14.b/ef00172.d**

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 14-JUN-2018 13:39
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun14.b/ef00171.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	5.467(0.000)	751	130	386830 (-6)	10.00		247412 - 577294
51) 1,4-Difluorobenzene	6.291(0.000)	866	114	1237476 (-4)	10.00		772035 - 1801413
71) Chlorobenzene-d5	8.497(0.000)	1174	117	1227701 (-5)	10.00		773874 - 1805706

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)	1.613(-0.000)	41	168266	9.204	9.20			0.5	1
2) Dichlorodifluoromethane	(1)	1.649(-0.000)	85	665651	10.395	10.40			0.2	1
3) Chlorodifluoromethane	(1)	1.671(-0.000)	51	412945	10.171	10.17			0.2	1
4) Freon 114	(1)	1.778(-0.000)	85	684449	9.959	9.96			0.2	1
5) Chloromethane	(1)	1.850(-0.000)	50	274807	10.660	10.66			0.2	1
6) Vinyl Chloride	(1)	1.971(-0.000)	62	247816	10.056	10.06			0.2	1
7) 1,3-Butadiene	(1)	2.007(-0.000)	54	158941	8.966	8.97			0.4	2
8) Bromomethane	(1)	2.358(-0.001)	94	224937	10.722	10.72			0.5	1
9) Chloroethane	(1)	2.480(-0.000)	64	134870	9.821	9.82			0.2	1
10) Bromoethene	(1)	2.695(-0.000)	106	189900	8.883	8.88			0.4	2
11) Dichlorofluoromethane	(1)	2.731(-0.000)	67	574684	10.520	10.52			0.2	1
12) Trichlorofluoromethane	(1)	2.774(-0.000)	101	671614	9.815	9.81			0.2	1
13) Pentane	(1)	2.881(-0.001)	43	348937	8.894	8.89			0.5	1
14) Ethanol	(1)	3.082(-0.000)	45	78095	9.125	9.12			0.5	2
15) Freon123a	(1)	3.203(-0.000)	67	550788	10.859	10.86			0.2	1
16) Acrolein	(1)	3.340(-0.000)	56	74548	8.202	8.20			1	2
17) 1,1-Dichloroethene	(1)	3.433(-0.000)	61	362082	9.656	9.66			0.2	1
18) Freon 113	(1)	3.447(-0.000)	103	359995	9.322	9.32			0.5	2
19) Acetone	(1)	3.533(-0.000)	43	375717	10.015	10.01			0.5	2
20) Methyl Iodide	(1)	3.605(-0.000)	142	504240	8.226	8.23			0.2	1
21) Carbon Disulfide	(1)	3.662(0.000)	76	736718	10.497	10.50			0.5	1
22) Isopropanol	(1)	3.719(-0.000)	45	254324	8.012	8.01			0.5	2
23) Acetonitrile	(1)	3.877(-0.000)	40	178115	10.703	10.70			0.5	2
24) 3-Chloropropene	(1)	3.870(-0.000)	76	92835	9.713	9.71			0.2	1
25) Methylene Chloride	(1)	4.013(-0.000)	84	235265	11.289	11.29			0.2	1
26) tert-Butyl Alcohol	(1)	4.163(-0.000)	59	281822	7.947	7.95			0.5	1
27) Acrylonitrile	(1)	4.299(-0.000)	53	208090	10.056	10.06			0.5	2
28) trans-1,2-Dichloroethene	(1)	4.292(0.000)	61	352289	10.192	10.19			0.2	1
29) Methyl t-Butyl Ether	(1)	4.299(-0.000)	73	444468	7.526	7.53			0.2	1
30) Hexane	(1)	4.564(-0.000)	57	273431	7.755	7.75			0.2	1
31) 1,1-Dichloroethane	(1)	4.722(-0.000)	63	469660	9.920	9.92			0.2	1
32) Vinyl Acetate	(1)	4.786(-0.000)	86	43049	8.590	8.59			1	1
33) Di-Isopropyl Ether	(1)	4.786(-0.000)	45	656757	8.595	8.59			0.2	1
34) Ethyl Tert-Butyl Ether	(1)	5.116(-0.000)	59	373741	7.244	7.24			0.2	1
35) cis-1,2-Dichloroethene	(1)	5.259(-0.000)	61	294967	9.117	9.12			0.2	1
36) 1,2-Dichloroethene (total)	(1)		61	647256	19.309	19.31			0.2	1
37) 2-Butanone	(1)	5.281(-0.000)	72	101429	8.312	8.31			0.5	2
38) Ethyl Acetate	(1)	5.331(-0.000)	70	47702	7.980	7.98			0.5	1
39) Methyl Acrylate	(1)	5.360(-0.000)	55	370143	9.332	9.33			0.2	1
41) Tetrahydrofuran	(1)	5.503(0.000)	42	225989	8.423	8.42			0.5	1
42) Chloroform	(1)	5.539(0.000)	83	573627	10.201	10.20			0.2	1
43) 1,1,1-Trichloroethane	(1)	5.682(-0.001)	97	486739	9.382	9.38			0.2	1
44) Cyclohexane	(1)	5.710(0.000)	56	302690	8.155	8.15			0.2	1

Digitally signed by Jacob E. Bailey on 06/14/2018 at 15:53. Target 3.5 esignature user ID: jeb07445

Data file: /chem/HP22820.i/18jun14.b/ef00174.d Injection date and time: **14-JUN-2018 15:29**
Data file Sample Info. Line: LCSDE07;200;E1816530AA;LCSDE07;0;3;LCSD; Instrument ID: **HP22820.i** Batch: **E1816530AA**
Date, time and analyst ID of latest file update: 14-Jun-2018 15:52 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun14.b/ef00172.d**

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 14-JUN-2018 13:39
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun14.b/ef00171.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
45) Carbon Tetrachloride	(1)	5.811(0.000)	117	490305	9.656	9.66			0.2	1
46) Benzene	(2)	5.990(-0.001)	78	715035	9.431	9.43			0.2	1
47) 1,2-Dichloroethane	(2)	6.011(-0.000)	62	375742	10.575	10.58			0.2	1
48) Isooctane	(2)	6.033(0.000)	57	989986	9.595	9.59			0.2	1
49) Tert-Amyl Methyl Ether	(2)	6.069(0.000)	73	389583	8.104	8.10			0.2	1
50) Heptane	(2)	6.176(-0.000)	43	363755	9.107	9.11			0.5	1
52) Trichloroethene	(2)	6.491(0.000)	130	287552	8.671	8.67			0.2	1
53) Ethyl Acrylate	(2)	6.570(0.000)	55	375609	8.064	8.06			0.2	1
54) 1,2-Dichloropropane	(2)	6.670(0.000)	63	283547	9.786	9.79			0.2	1
55) Dibromomethane	(2)	6.771(0.000)	174	298857	9.823	9.82			0.2	1
56) 1,4-Dioxane	(2)	6.778(0.000)	88	157347	9.045	9.04			0.5	1
57) Methyl Methacrylate	(2)	6.749(0.000)	69	200735	8.258	8.26			0.2	1
58) Bromodichloromethane	(2)	6.885(0.000)	83	585125	10.311	10.31			0.2	1
59) cis-1,3-Dichloropropene	(2)	7.215(0.000)	75	350097	8.476	8.48			0.2	1
60) 4-Methyl-2-Pentanone	(2)	7.329(0.000)	43	496409	8.791	8.79			0.5	2
61) Toluene	(3)	7.466(-0.000)	91	819922	9.297	9.30			0.2	1
62) Octane	(3)	7.516(0.000)	43	528147	9.676	9.68			0.2	1
63) trans-1,3-Dichloropropene	(3)	7.630(-0.000)	75	299722	9.294	9.29			0.2	1
64) 1,3-Dichloropropene (total)	(3)		75	649819	17.771	17.77			0.2	1
65) Ethyl Methacrylate	(3)	7.673(-0.000)	69	315732	8.380	8.38			0.2	1
66) 1,1,2-Trichloroethane	(3)	7.766(0.000)	97	336286	10.065	10.07			0.2	1
67) Tetrachloroethene	(3)	7.867(-0.000)	166	410055	9.117	9.12			0.2	1
68) 2-Hexanone	(3)	7.945(-0.000)	43	467209	9.277	9.28			0.5	2
69) Dibromochloromethane	(3)	8.067(-0.000)	127	410556	10.236	10.24			0.2	1
70) 1,2-Dibromoethane	(3)	8.160(-0.000)	107	482528	9.760	9.76			0.2	1
72) Chlorobenzene	(3)	8.518(0.000)	112	691116	9.271	9.27			0.2	1
73) 1,1,1,2-Tetrachloroethane	(3)	8.569(0.000)	131	370928	10.229	10.23			0.2	1
74) Ethylbenzene	(3)	8.583(0.000)	91	986315	8.895	8.89			0.2	1
75) m/p-Xylene	(3)	8.669(0.000)	91	744237	8.790	8.79			0.2	1
76) o-Xylene	(3)	8.970(0.000)	91	725400	8.717	8.72			0.2	1
77) Xylene (total)	(3)		91	1469637	17.506	17.51			0.2	1
78) Styrene	(3)	8.977(0.000)	104	583828	9.266	9.27			0.2	1
79) Bromoform	(3)	9.134(0.000)	173	487490	10.120	10.12			0.2	1
80) Cumene	(3)	9.235(0.000)	105	950194	8.563	8.56			0.2	1
81) Bromobenzene	(3)	9.493(0.000)	156	386189	9.119	9.12			0.2	1
82) 1,1,2,2-Tetrachloroethane	(3)	9.471(0.000)	83	823893	10.635	10.64			0.2	1
83) 1,2,3-Trichloropropane	(3)	9.514(0.000)	110	229561	10.380	10.38			0.2	1
84) n-Propylbenzene	(3)	9.550(0.000)	120	294947	8.967	8.97			0.5	1
85) 2-Chlorotoluene	(3)	9.629(0.000)	126	309240	9.851	9.85			0.2	1
86) 4-Ethyltoluene	(3)	9.629(0.000)	105	1144344M	9.737	9.74			0.2	1
87) 1,3,5-Trimethylbenzene	(3)	9.672(0.000)	105	927654M	9.677	9.68			0.2	1
88) Alpha Methyl Styrene	(3)	9.844(0.000)	118	377307	8.538	8.54			0.2	1
89) tert-Butylbenzene	(3)	9.922(0.000)	119	848112M	9.751	9.75			0.5	1
90) 1,2,4-Trimethylbenzene	(3)	9.958(0.000)	105	944647	10.048	10.05			0.2	1
91) sec-Butylbenzene	(3)	10.087(0.000)	105	1293236	9.606	9.61			0.2	1
92) 1,3-Dichlorobenzene	(3)	10.195(0.000)	146	727534	10.026	10.03			0.2	1
93) 1,4-Dichlorobenzene	(3)	10.259(0.000)	146	693372	9.656	9.66			0.2	1
94) p-Isopropyltoluene	(3)	10.195(0.000)	119	1032560	9.590	9.59			0.2	1
95) Benzyl Chloride	(3)	10.359(0.000)	91	413617	8.567	8.57			0.5	1
96) 1,2-Dichlorobenzene	(3)	10.546(0.000)	146	664746	9.850	9.85			0.2	1
97) n-Butylbenzene	(3)	10.503(0.000)	91	1010207	9.557	9.56			0.2	1
98) Hexachloroethane	(3)	10.732(0.000)	117	312776	11.079	11.08			0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)	11.140(0.000)	157	304468	9.689	9.69			0.2	1
100) 1,2,4-Trichlorobenzene	(3)	11.763(0.000)	180	346088	7.916	7.92			0.5	2

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey on 06/14/2018 at 15:53. Target 3.5 esignature user ID: jeb07445

Data file: /chem/HP22820.i/18jun14.b/ef00174.d Injection date and time: **14-JUN-2018 15:29**
Data file Sample Info. Line: LCSDE07;200;E1816530AA;LCSDE07;0;3;LCSD; Instrument ID: **HP22820.i** Batch: **E1816530AA**
Date, time and analyst ID of latest file update: 14-Jun-2018 15:52 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun14.b/ef00172.d**

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 14-JUN-2018 13:39
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun14.b/ef00171.d**

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

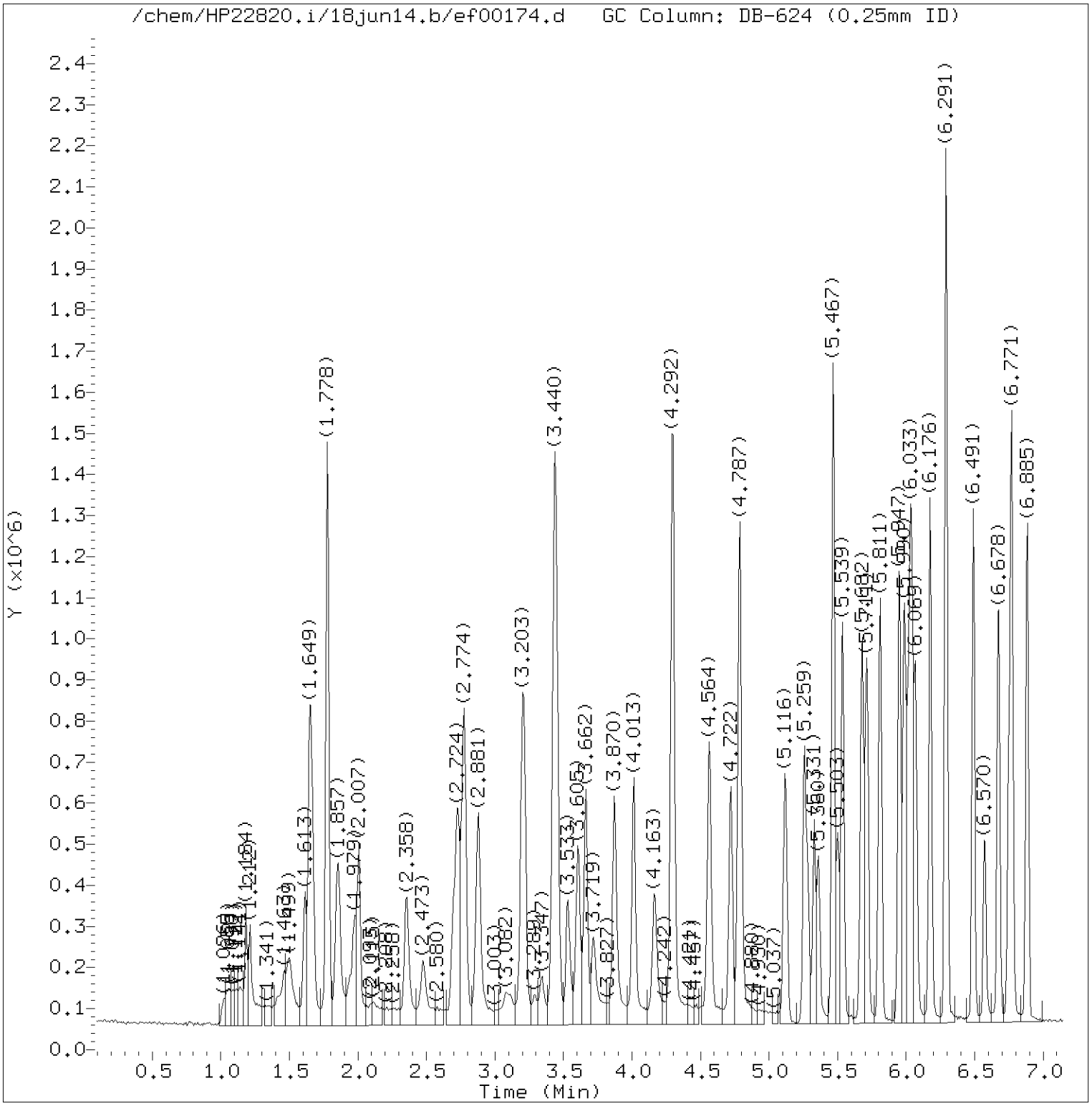
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
101) Hexachlorobutadiene	(3)	11.878(0.000)	225	331917	9.133	9.13			0.4	2
102) Naphthalene	(3)	11.964(0.000)	128	671481	7.938	7.94			0.4	1

Total number of targets = 99

Digitally signed by Jacob E. Bailey on 06/14/2018 at 15:53. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 14:49. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

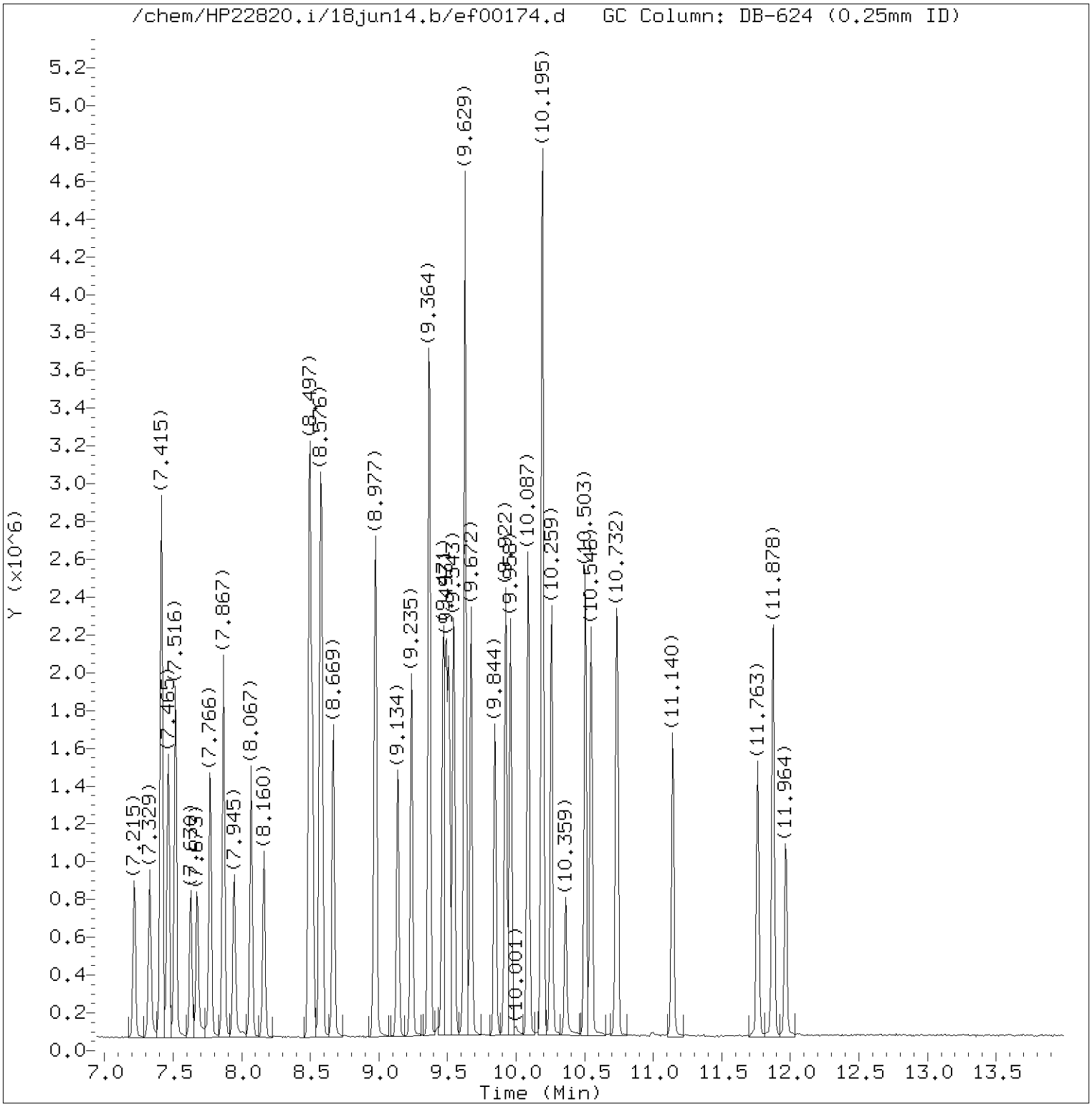
Target Revision 3.5

Data File: /chem/HP22820.i/18jun14.b/ef00174.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 15:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 15:52 jeb07445

Sample Name: LCSDE07 Lab Sample ID: LCSDE07

Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:53.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun14.b/ef00174.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 15:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 15:52 jeb07445

Sample Name: LCSDE07 Lab Sample ID: LCSDE07

Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:53.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun14.b/ef00174.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 15:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 15:52 jeb07445

Sample Name: LCSDE07 Lab Sample ID: LCSDE07

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.613	41	168266	9.204
2) Dichlorodifluoromethane	(1)	1.649	85	665651	10.395
3) Chlorodifluoromethane	(1)	1.671	51	412945	10.171
4) Freon 114	(1)	1.778	85	684449	9.959
5) Chloromethane	(1)	1.850	50	274807	10.660
6) Vinyl Chloride	(1)	1.971	62	247816	10.056
7) 1,3-Butadiene	(1)	2.007	54	158941	8.966
8) Bromomethane	(1)	2.358	94	224937	10.722
9) Chloroethane	(1)	2.480	64	134870	9.821
10) Bromoethene	(1)	2.695	106	189900	8.883
11) Dichlorofluoromethane	(1)	2.731	67	574684	10.520
12) Trichlorofluoromethane	(1)	2.774	101	671614	9.815
13) Pentane	(1)	2.881	43	348937	8.894
14) Ethanol	(1)	3.082	45	78095	9.125
15) Freon123a	(1)	3.203	67	550788	10.859
16) Acrolein	(1)	3.340	56	74548	8.202
17) 1,1-Dichloroethene	(1)	3.433	61	362082	9.656
18) Freon 113	(1)	3.447	103	359995	9.322
19) Acetone	(1)	3.533	43	375717	10.015
20) Methyl Iodide	(1)	3.605	142	504240	8.226
21) Carbon Disulfide	(1)	3.662	76	736718	10.497
22) Isopropanol	(1)	3.719	45	254324	8.012
24) 3-Chloropropene	(1)	3.870	76	92835	9.713
23) Acetonitrile	(1)	3.877	40	178115	10.703
25) Methylene Chloride	(1)	4.013	84	235265	11.289
26) tert-Butyl Alcohol	(1)	4.163	59	281822	7.947
28) trans-1,2-Dichloroethene	(1)	4.292	61	352289	10.192
27) Acrylonitrile	(1)	4.299	53	208090	10.056
29) Methyl t-Butyl Ether	(1)	4.299	73	444468	7.526
30) Hexane	(1)	4.564	57	273431	7.755
31) 1,1-Dichloroethane	(1)	4.722	63	469660	9.920
32) Vinyl Acetate	(1)	4.787	86	43049	8.590
33) Di-Isopropyl Ether	(1)	4.787	45	656757	8.595
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	373741	7.244
35) cis-1,2-Dichloroethene	(1)	5.259	61	294967	9.117
37) 2-Butanone	(1)	5.281	72	101429	8.312
38) Ethyl Acetate	(1)	5.331	70	47702	7.980
39) Methyl Acrylate	(1)	5.360	55	370143	9.332

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on 06/14/2018 at 15:53.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun14.b/ef00174.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 15:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 15:52 jeb07445

Sample Name: LCSDE07 Lab Sample ID: LCSDE07

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	386830	10.000
41) Tetrahydrofuran	(1)	5.503	42	225989	8.423
42) Chloroform	(1)	5.539	83	573627	10.201
43) 1,1,1-Trichloroethane	(1)	5.682	97	486739	9.382
44) Cyclohexane	(1)	5.711	56	302690	8.155
45) Carbon Tetrachloride	(1)	5.811	117	490305	9.656
46) Benzene	(2)	5.990	78	715035	9.431
47) 1,2-Dichloroethane	(2)	6.011	62	375742	10.575
48) Isooctane	(2)	6.033	57	989986	9.595
49) Tert-Amyl Methyl Ether	(2)	6.069	73	389583	8.104
50) Heptane	(2)	6.176	43	363755	9.107
51)*1,4-Difluorobenzene	(2)	6.291	114	1237476	10.000
52) Trichloroethene	(2)	6.491	130	287552	8.671
53) Ethyl Acrylate	(2)	6.570	55	375609	8.064
36) 1,2-Dichloroethene (total)	(1)		61	647256	19.309
54) 1,2-Dichloropropane	(2)	6.670	63	283547	9.786
57) Methyl Methacrylate	(2)	6.749	69	200735	8.258
55) Dibromomethane	(2)	6.771	174	298857	9.823
56) 1,4-Dioxane	(2)	6.778	88	157347	9.045
58) Bromodichloromethane	(2)	6.885	83	585125	10.311
59) cis-1,3-Dichloropropene	(2)	7.215	75	350097	8.476
60) 4-Methyl-2-Pentanone	(2)	7.329	43	496409	8.791
61) Toluene	(3)	7.465	91	819922	9.297
62) Octane	(3)	7.516	43	528147	9.676
63) trans-1,3-Dichloropropene	(3)	7.630	75	299722	9.294
65) Ethyl Methacrylate	(3)	7.673	69	315732	8.380
66) 1,1,2-Trichloroethane	(3)	7.766	97	336286	10.065
67) Tetrachloroethene	(3)	7.867	166	410055	9.117
68) 2-Hexanone	(3)	7.945	43	467209	9.277
69) Dibromochloromethane	(3)	8.067	127	410556	10.236
70) 1,2-Dibromoethane	(3)	8.160	107	482528	9.760
71)*Chlorobenzene-d5	(3)	8.497	117	1227701	10.000
72) Chlorobenzene	(3)	8.518	112	691116	9.271
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	370928	10.229
74) Ethylbenzene	(3)	8.583	91	986315	8.895
75) m/p-Xylene	(3)	8.669	91	744237	8.790
76) o-Xylene	(3)	8.970	91	725400	8.717
78) Styrene	(3)	8.977	104	583828	9.266

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:53.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun14.b/ef00174.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 15:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 15:52 jeb07445

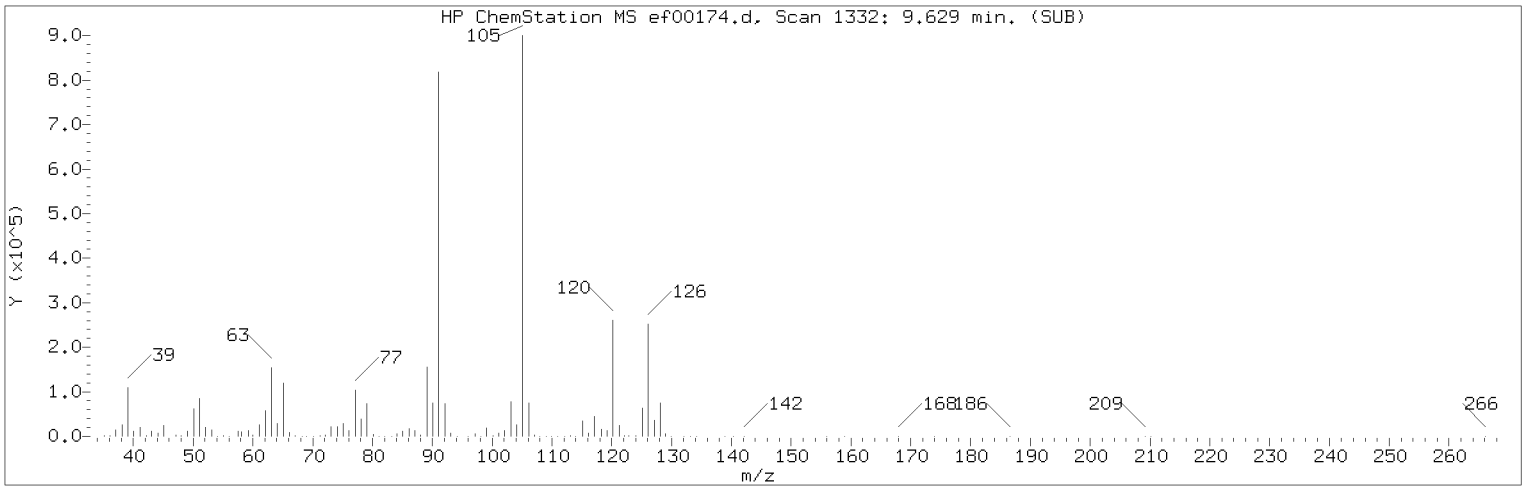
Sample Name: LCSDE07 Lab Sample ID: LCSDE07

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.134	173	487490	10.120
80) Cumene	(3)	9.235	105	950194	8.563
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	823893	10.635
81) Bromobenzene	(3)	9.493	156	386189	9.119
83) 1,2,3-Trichloropropane	(3)	9.514	110	229561	10.380
84) n-Propylbenzene	(3)	9.550	120	294947	8.967
86) 4-Ethyltoluene	(3)	9.629	105	1144344M	9.737
85) 2-Chlorotoluene	(3)	9.629	126	309240	9.851
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	927654M	9.677
88) Alpha Methyl Styrene	(3)	9.844	118	377307	8.538
89) tert-Butylbenzene	(3)	9.922	119	848112M	9.751
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	944647	10.048
91) sec-Butylbenzene	(3)	10.087	105	1293236	9.606
92) 1,3-Dichlorobenzene	(3)	10.195	146	727534	10.026
94) p-Isopropyltoluene	(3)	10.195	119	1032560	9.590
93) 1,4-Dichlorobenzene	(3)	10.259	146	693372	9.656
95) Benzyl Chloride	(3)	10.359	91	413617	8.567
97) n-Butylbenzene	(3)	10.503	91	1010207	9.557
96) 1,2-Dichlorobenzene	(3)	10.546	146	664746	9.850
98) Hexachloroethane	(3)	10.732	117	312776	11.079
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	304468	9.689
100) 1,2,4-Trichlorobenzene	(3)	11.763	180	346088	7.916
101) Hexachlorobutadiene	(3)	11.878	225	331917	9.133
102) Naphthalene	(3)	11.964	128	671481	7.938
64) 1,3-Dichloropropene (total)	(3)		75	649819	17.771
77) Xylene (total)	(3)		91	1469637	17.506

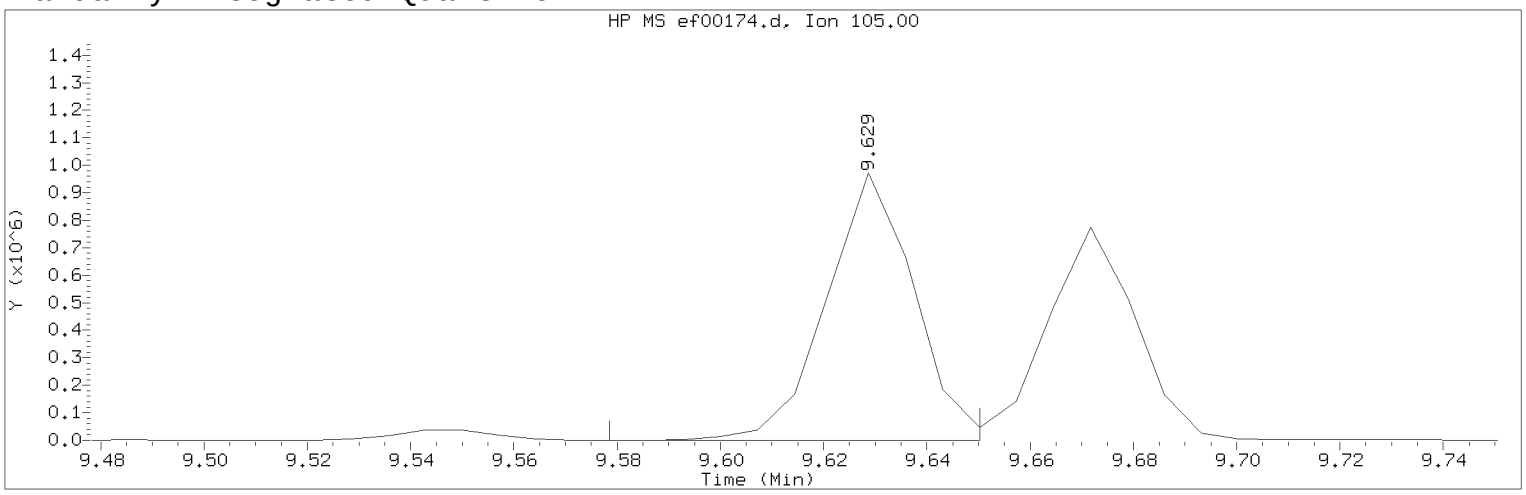
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:53.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun14.b/ef00174.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 15:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 15:52 jeb07445

Sample Name: LCSDE07 Lab Sample ID: LCSDE07

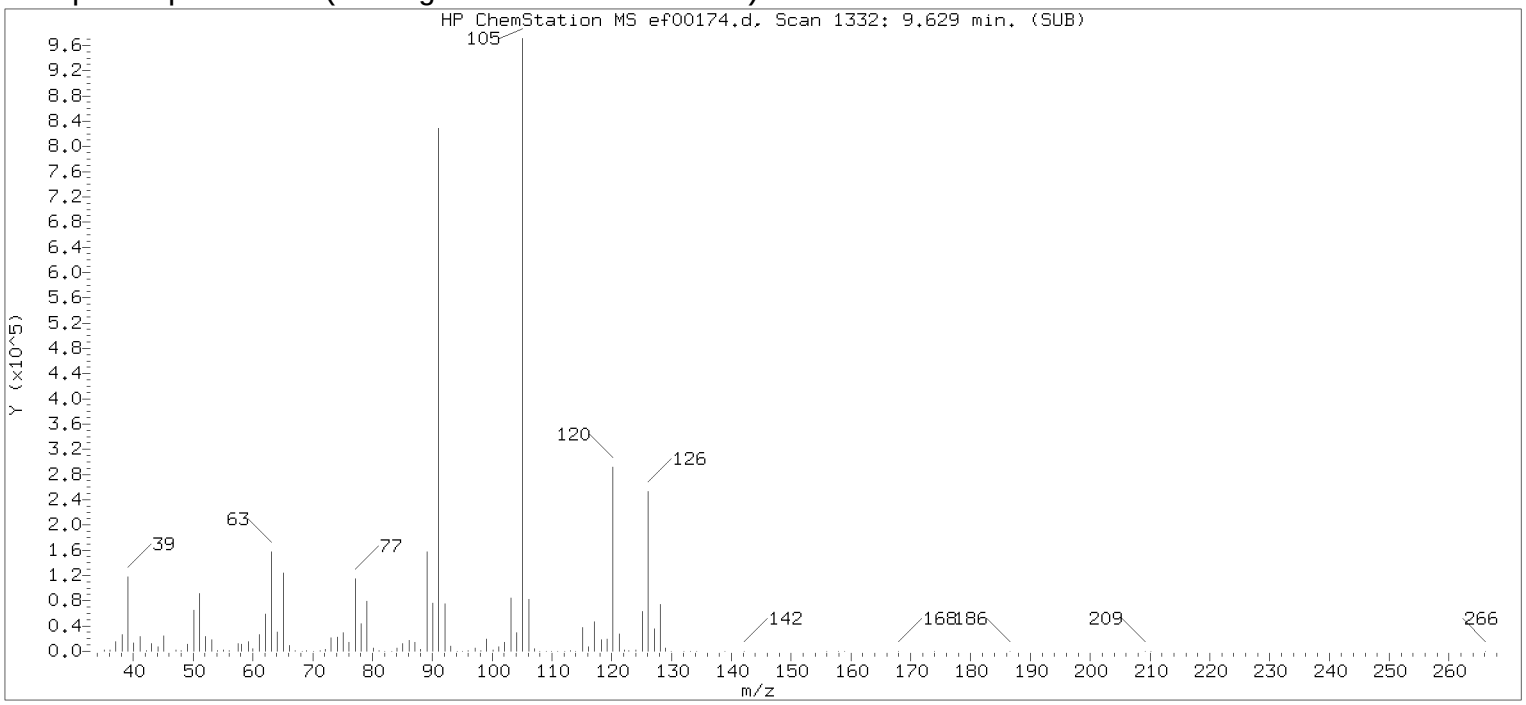
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 1144344M
Concentration (ppb(v)) : 9.7368
Integration start scan : 1324 Integration stop scan: 1334
Y at integration start : 415 Y at integration end: 415

Reason for manual integration: improper integration

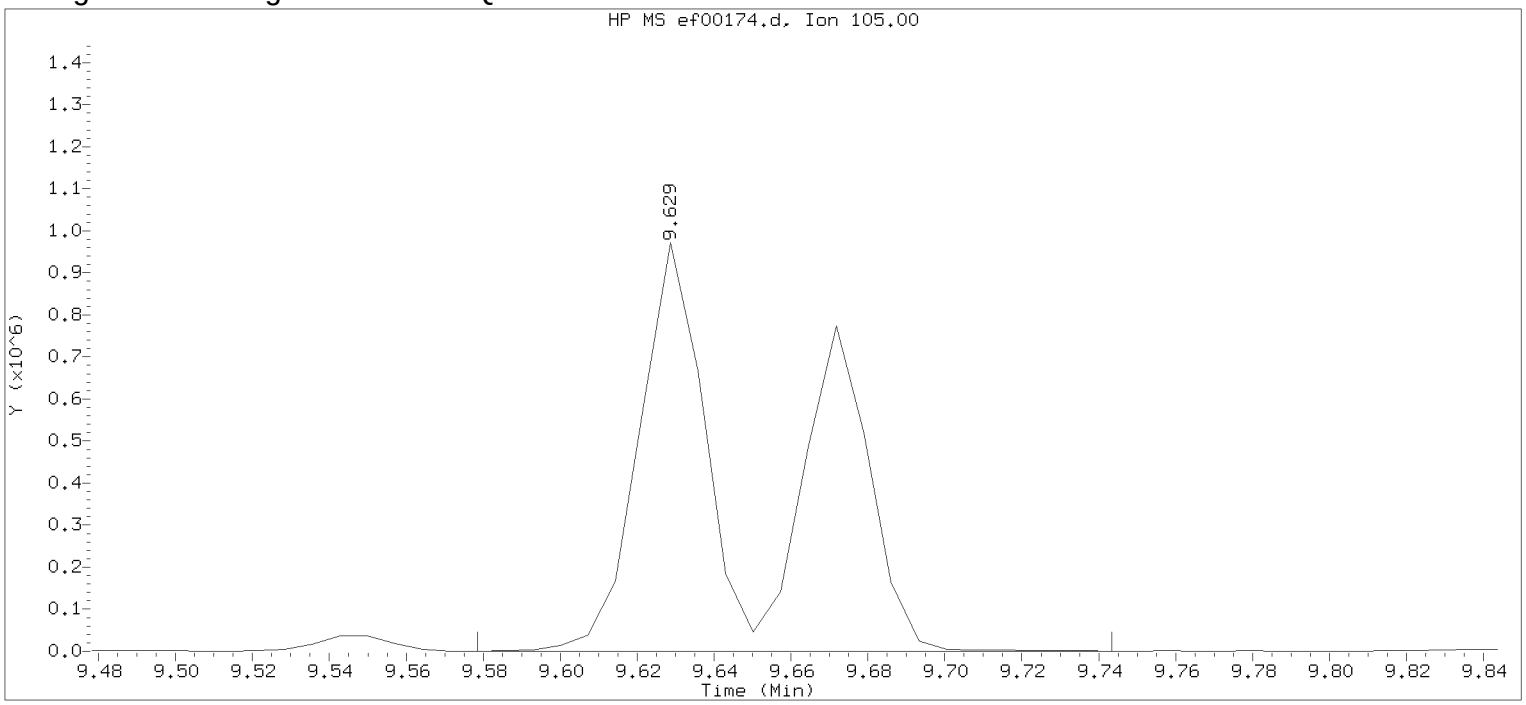
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:53.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 14:49.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun14.b/ef00174.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 15:29 Analyst ID: jeb07445

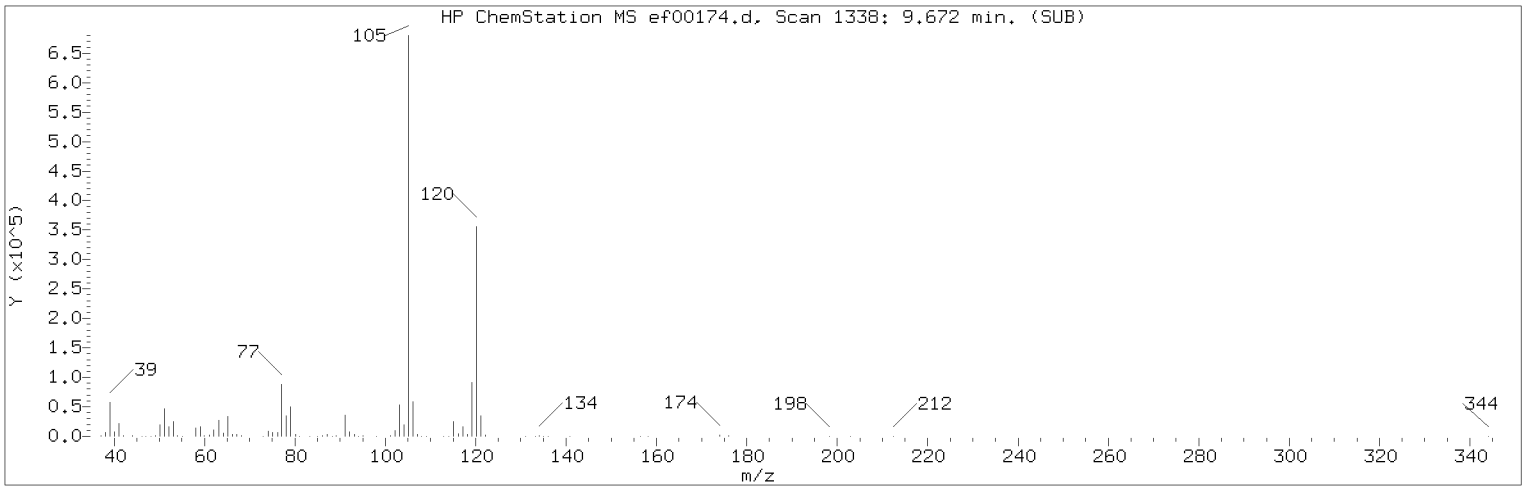
Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 15:48 Unknown

Sample Name: LCSDE07 Lab Sample ID: LCSDE07

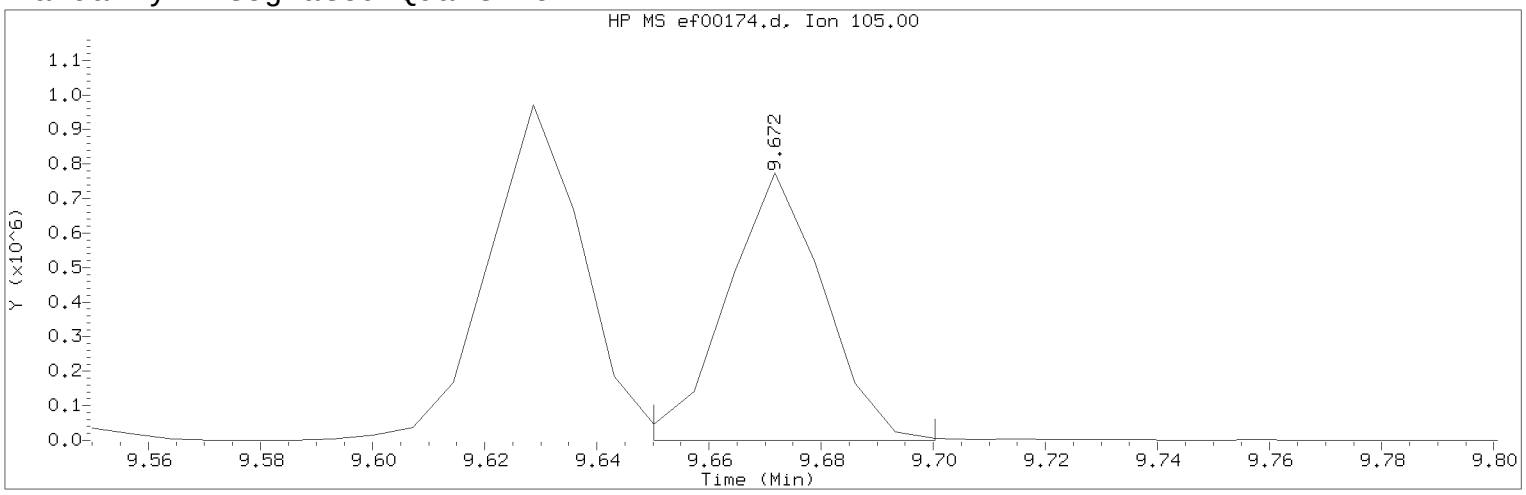
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 2055734
Concentration (ppb(v)) : 17.4914
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 415 Y at integration end: 415

Digitally signed by Jacob E. Bailey on 06/14/2018 at 15:53.
Target 3.5 esignature used. LCSDE07 Page 1458 of 1687

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun14.b/ef00174.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 15:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 15:52 jeb07445

Sample Name: LCSDE07 Lab Sample ID: LCSDE07

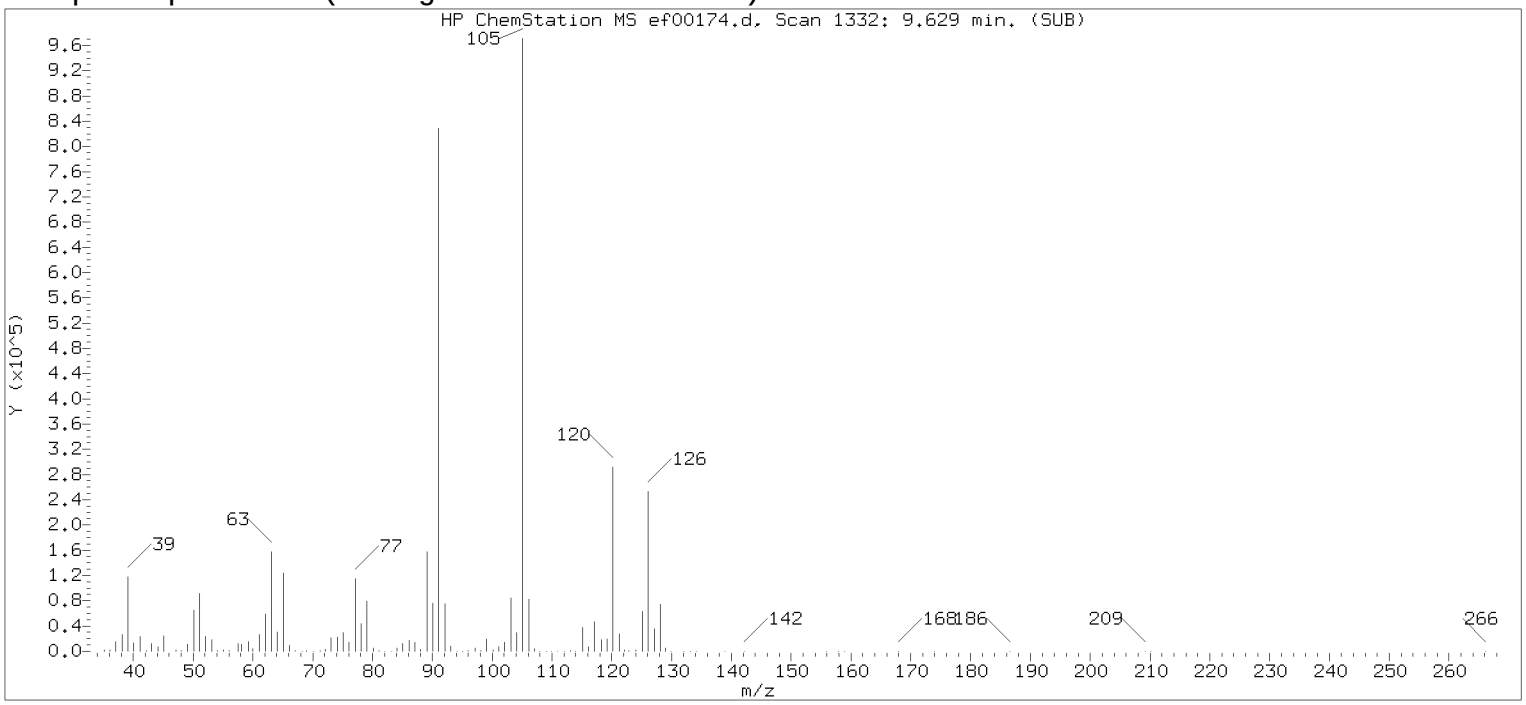
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 927654M
Concentration (ppb(v)) : 9.6767
Integration start scan : 1334 Integration stop scan: 1341
Y at integration start : 317 Y at integration end: 317

Reason for manual integration: improper integration

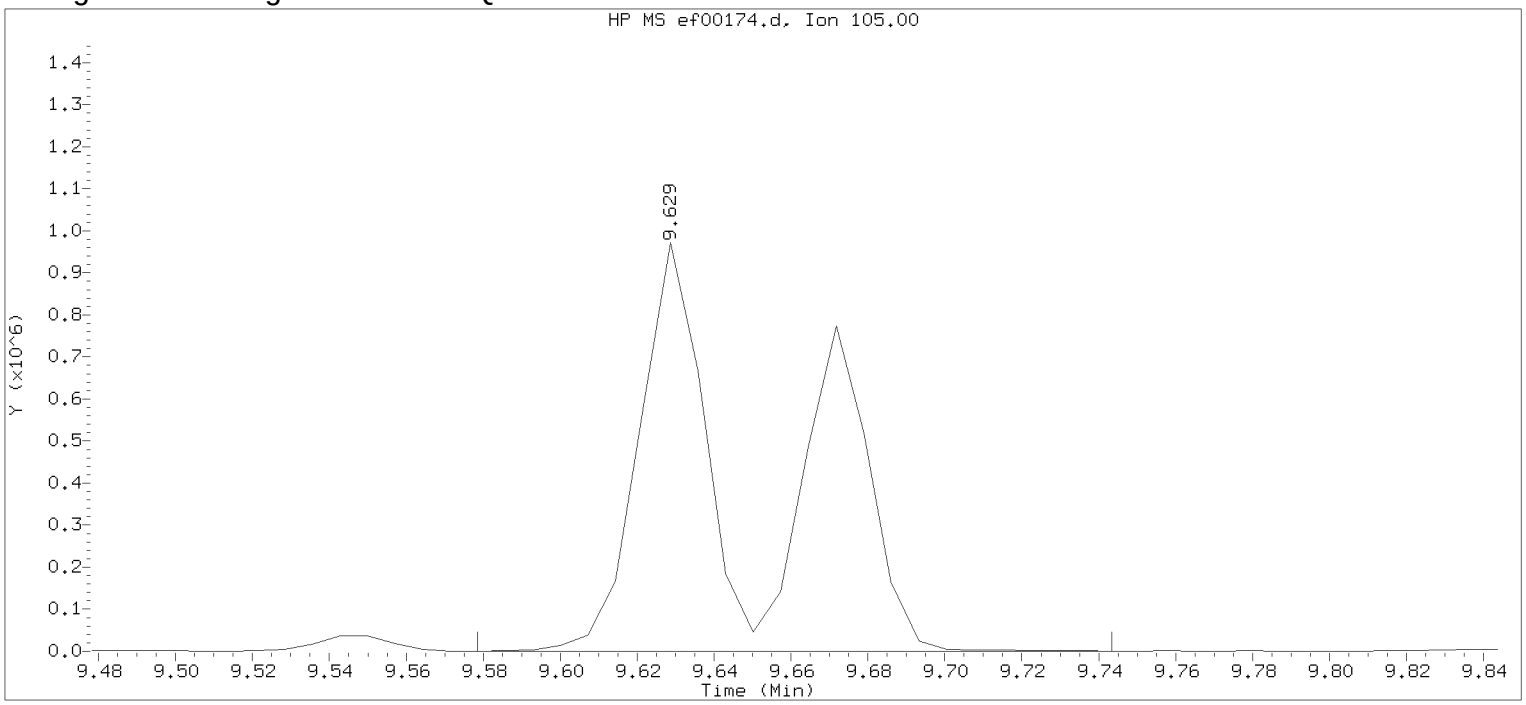
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:53.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 14:49.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun14.b/ef00174.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 15:29 Analyst ID: jeb07445

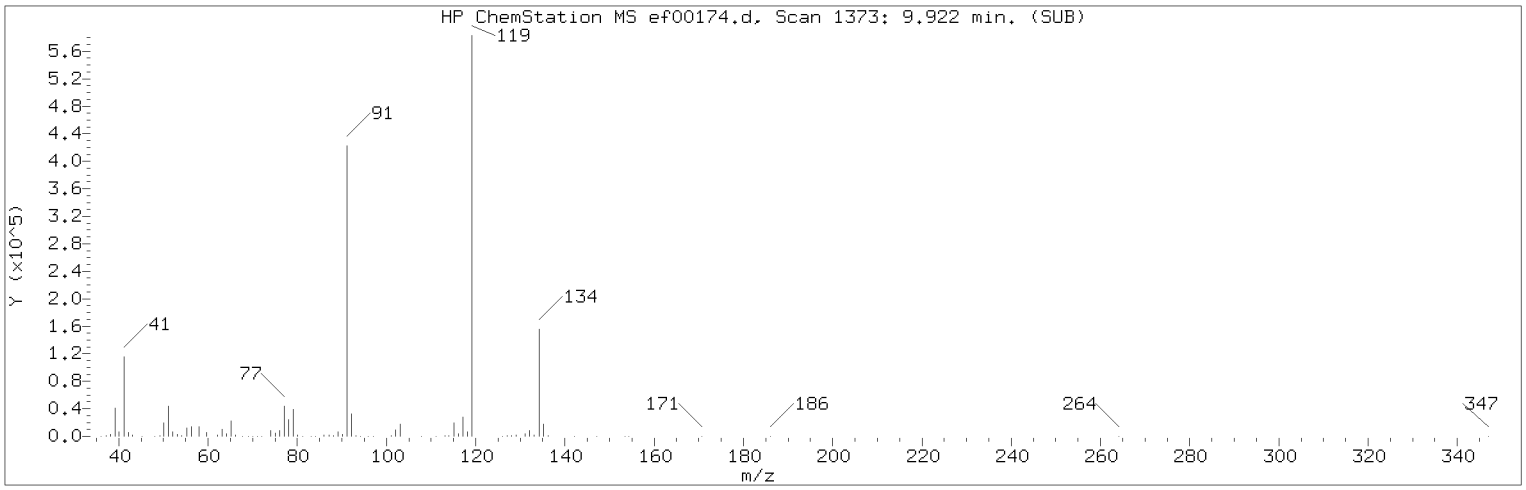
Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 15:48 Unknown

Sample Name: LCSDE07 Lab Sample ID: LCSDE07

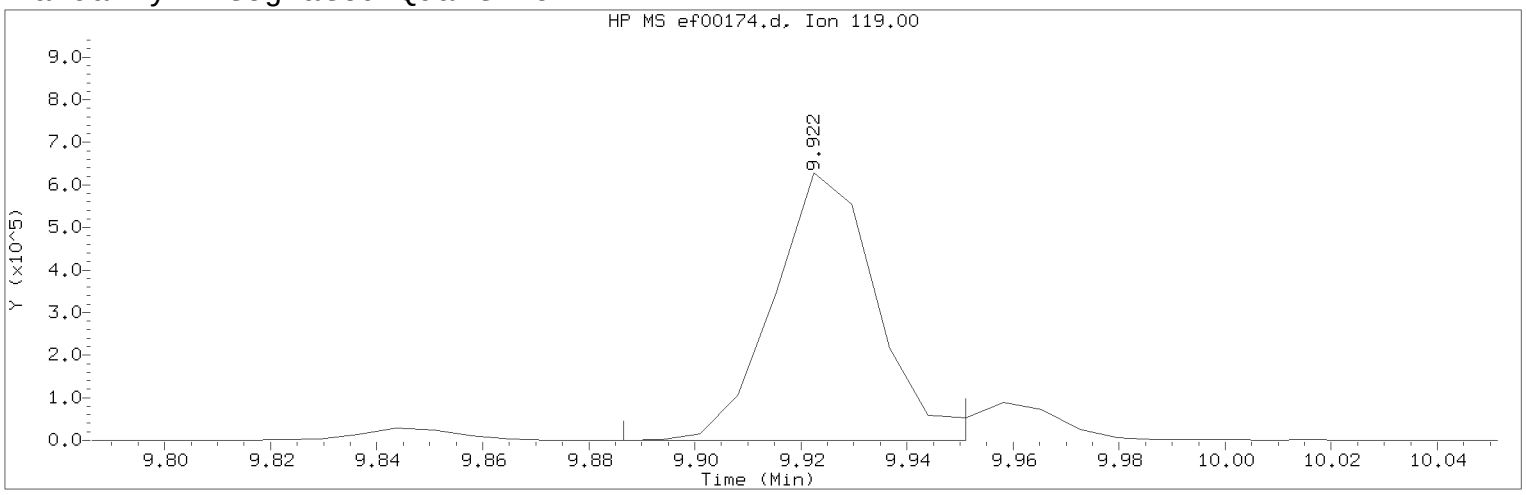
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 2055615
Concentration (ppb(v)) : 21.4428
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 427 Y at integration end: 427

Digitally signed by Jacob E. Bailey on 06/14/2018 at 15:53.
Target 3.5 esignature used.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun14.b/ef00174.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 15:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 15:52 jeb07445

Sample Name: LCSDE07 Lab Sample ID: LCSDE07

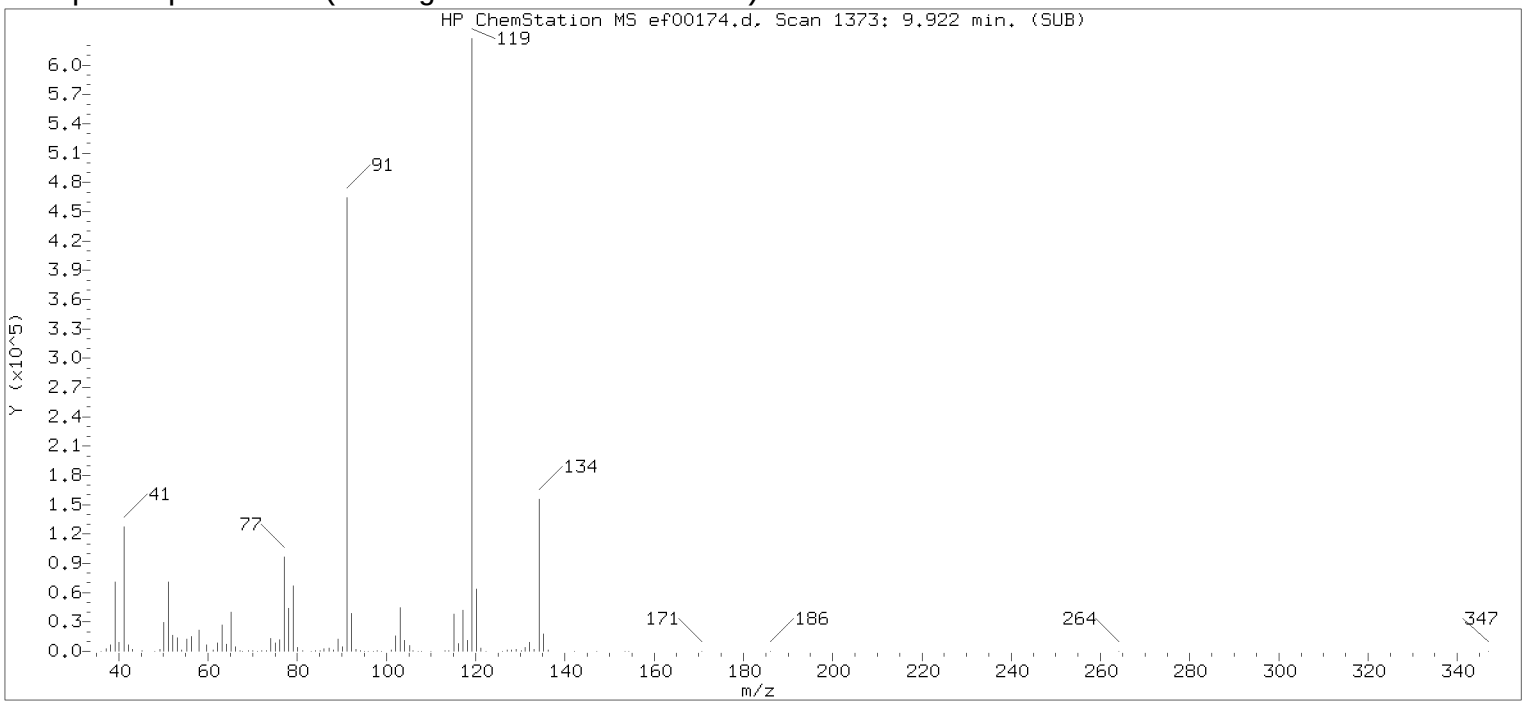
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 848112M
Concentration (ppb(v)) : 9.7514
Integration start scan : 1367 Integration stop scan: 1376
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

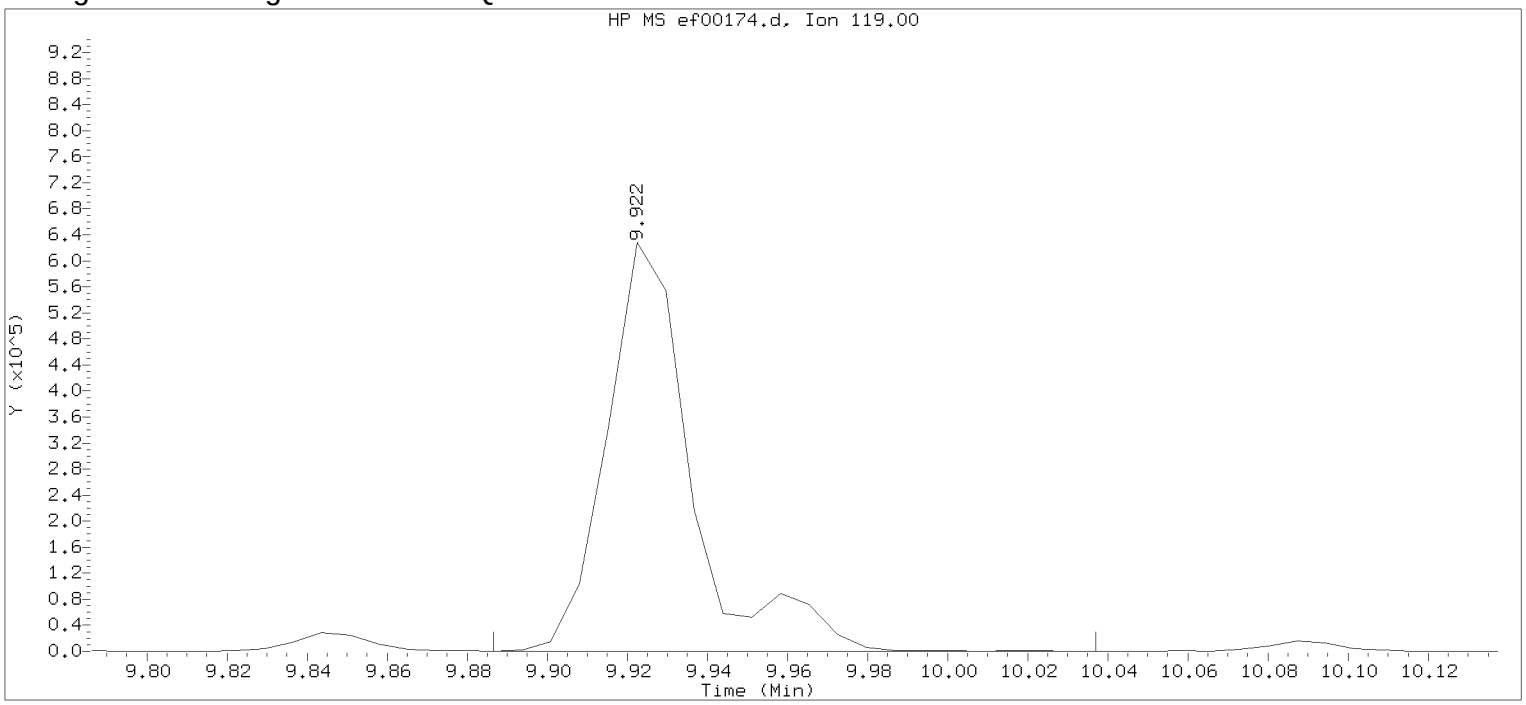
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:53.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 14:49.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun14.b/ef00174.d Instrument ID: HP22820.i
Injection date and time: 14-JUN-2018 15:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 14-Jun-2018 15:48 Unknown

Sample Name: LCSDE07 Lab Sample ID: LCSDE07

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 933122
Concentration (ppb(v)) : 10.7289
Integration start scan : 1367 Integration stop scan: 1388
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/14/2018 at 15:53.
Target 3.5 esignature used.

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

Data file: /chem/HP22820.i/18jun14.b/ef00189.d Injection date and time: **15-JUN-2018 01:09**
Data file Sample Info. Line: cc509;200;E1816530AA;cc509;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1816530AA**
Date, time and analyst ID of latest file update: 15-Jun-2018 12:06 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun14.b/ef00172.d**

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 14-JUN-2018 13:39
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun14.b/ef00171.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	5.467(0.000)	751	130	315669 (-23)	10.00		247412 - 577294
51) 1,4-Difluorobenzene	6.291(0.000)	866	114	792284 (-38)	10.00		772035 - 1801413
71) Chlorobenzene-d5	8.497(0.000)	1174	117	911870 (-29)	10.00		773874 - 1805706

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)			Not Detected					0.5	1
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)			Not Detected					0.2	1
7) 1,3-Butadiene	(1)			Not Detected					0.4	2
8) Bromomethane	(1)			Not Detected					0.5	1
9) Chloroethane	(1)			Not Detected					0.2	1
10) Bromoethene	(1)			Not Detected					0.4	2
11) Dichlorofluoromethane	(1)			Not Detected					0.2	1
12) Trichlorofluoromethane	(1)			Not Detected					0.2	1
13) Pentane	(1)			Not Detected					0.5	1
14) Ethanol	(1)			Not Detected					0.5	2
15) Freon123a	(1)			Not Detected					0.2	1
16) Acrolein	(1)			Not Detected					1	2
17) 1,1-Dichloroethene	(1)			Not Detected					0.2	1
18) Freon 113	(1)			Not Detected					0.5	2
19) Acetone	(1)	3.533(0.000)	43	22738	0.743	0.74		J	0.5	2
20) Methyl Iodide	(1)			Not Detected					0.2	1
21) Carbon Disulfide	(1)			Not Detected					0.5	1
22) Isopropanol	(1)			Not Detected					0.5	2
23) Acetonitrile	(1)			Not Detected					0.5	2
24) 3-Chloropropene	(1)			Not Detected					0.2	1
25) Methylene Chloride	(1)			Not Detected					0.2	1
26) tert-Butyl Alcohol	(1)			Not Detected					0.5	1
27) Acrylonitrile	(1)			Not Detected					0.5	2
28) trans-1,2-Dichloroethene	(1)			Not Detected					0.2	1
29) Methyl t-Butyl Ether	(1)			Not Detected					0.2	1
30) Hexane	(1)			Not Detected					0.2	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.2	1
32) Vinyl Acetate	(1)			Not Detected					1	1
33) Di-Isopropyl Ether	(1)			Not Detected					0.2	1
34) Ethyl Tert-Butyl Ether	(1)			Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.2	1
36) 1,2-Dichloroethene (total)	(1)			Not Detected					0.2	1
37) 2-Butanone	(1)			Not Detected					0.5	2
38) Ethyl Acetate	(1)			Not Detected					0.5	1
39) Methyl Acrylate	(1)			Not Detected					0.2	1
41) Tetrahydrofuran	(1)			Not Detected					0.5	1
42) Chloroform	(1)			Not Detected					0.2	1
43) 1,1,1-Trichloroethane	(1)			Not Detected					0.2	1
44) Cyclohexane	(1)			Not Detected					0.2	1

Digitally signed by Jacob E. Bailey on 06/15/2018 at 12:06. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun14.b/ef00189.d Injection date and time: **15-JUN-2018 01:09**
Data file Sample Info. Line: cc509;200;E1816530AA;cc509;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1816530AA**
Date, time and analyst ID of latest file update: 15-Jun-2018 12:06 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun14.b/ef00172.d**

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 14-JUN-2018 13:39
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun14.b/ef00171.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
45) Carbon Tetrachloride	(1)				Not Detected					0.2	1
46) Benzene	(2)				Not Detected					0.2	1
47) 1,2-Dichloroethane	(2)				Not Detected					0.2	1
48) Isooctane	(2)				Not Detected					0.2	1
49) Tert-Amyl Methyl Ether	(2)				Not Detected					0.2	1
50) Heptane	(2)				Not Detected					0.5	1
52) Trichloroethene	(2)				Not Detected					0.2	1
53) Ethyl Acrylate	(2)				Not Detected					0.2	1
54) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
55) Dibromomethane	(2)				Not Detected					0.2	1
56) 1,4-Dioxane	(2)				Not Detected					0.5	1
57) Methyl Methacrylate	(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)				Not Detected					0.2	1
62) Octane	(3)				Not Detected					0.2	1
63) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
64) 1,3-Dichloropropene (total)	(3)				Not Detected					0.2	1
65) Ethyl Methacrylate	(3)				Not Detected					0.2	1
66) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
67) Tetrachloroethene	(3)				Not Detected					0.2	1
68) 2-Hexanone	(3)				Not Detected					0.5	2
69) Dibromochloromethane	(3)				Not Detected					0.2	1
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)				Not Detected					0.2	1
75) m/p-Xylene	(3)				Not Detected					0.2	1
76) o-Xylene	(3)				Not Detected					0.2	1
77) Xylene (total)	(3)				Not Detected					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
84) n-Propylbenzene	(3)				Not Detected					0.5	1
85) 2-Chlorotoluene	(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
88) Alpha Methyl Styrene	(3)				Not Detected					0.2	1
89) tert-Butylbenzene	(3)				Not Detected					0.5	1
90) 1,2,4-Trimethylbenzene	(3)				Not Detected					0.2	1
91) sec-Butylbenzene	(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
94) p-Isopropyltoluene	(3)				Not Detected					0.2	1
95) Benzyl Chloride	(3)				Not Detected					0.5	1
96) 1,2-Dichlorobenzene	(3)				Not Detected					0.2	1
97) n-Butylbenzene	(3)				Not Detected					0.2	1
98) Hexachloroethane	(3)				Not Detected					0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)				Not Detected					0.2	1
100) 1,2,4-Trichlorobenzene	(3)				Not Detected					0.5	2

Digitally signed by Jacob E. Bailey on 06/15/2018 at 12:06. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun14.b/ef00189.d Injection date and time: **15-JUN-2018 01:09**
Data file Sample Info. Line: cc509;200;E1816530AA;cc509;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1816530AA**
Date, time and analyst ID of latest file update: 15-Jun-2018 12:06 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun14.b/ef00172.d**

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 14-JUN-2018 13:39
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun14.b/ef00171.d**

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

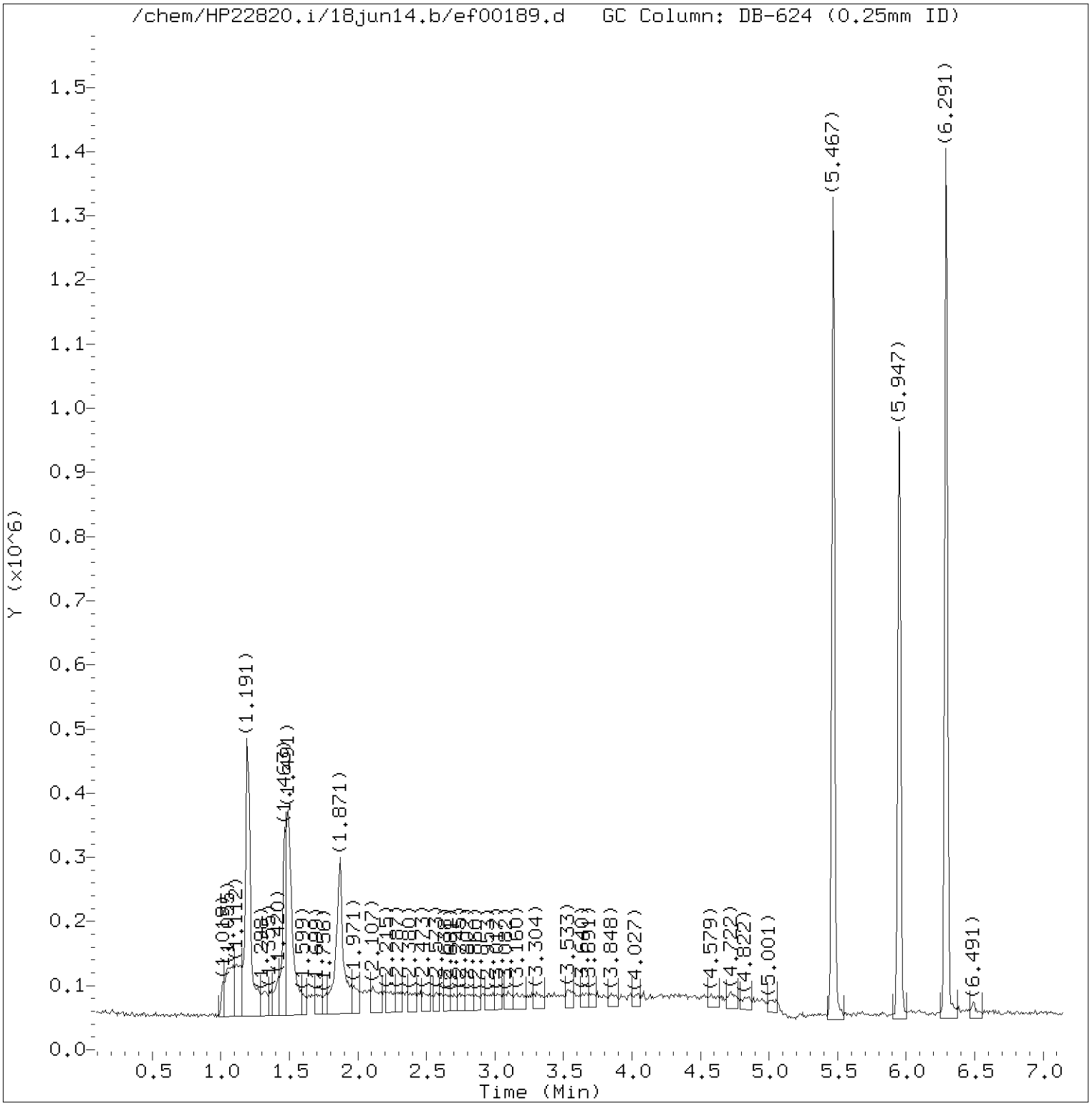
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
101) Hexachlorobutadiene	(3)				Not Detected					0.4	2
102) Naphthalene	(3)				Not Detected					0.4	1

Total number of targets = 99

Digitally signed by Jacob E. Bailey on 06/15/2018 at 12:06. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 15:06. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

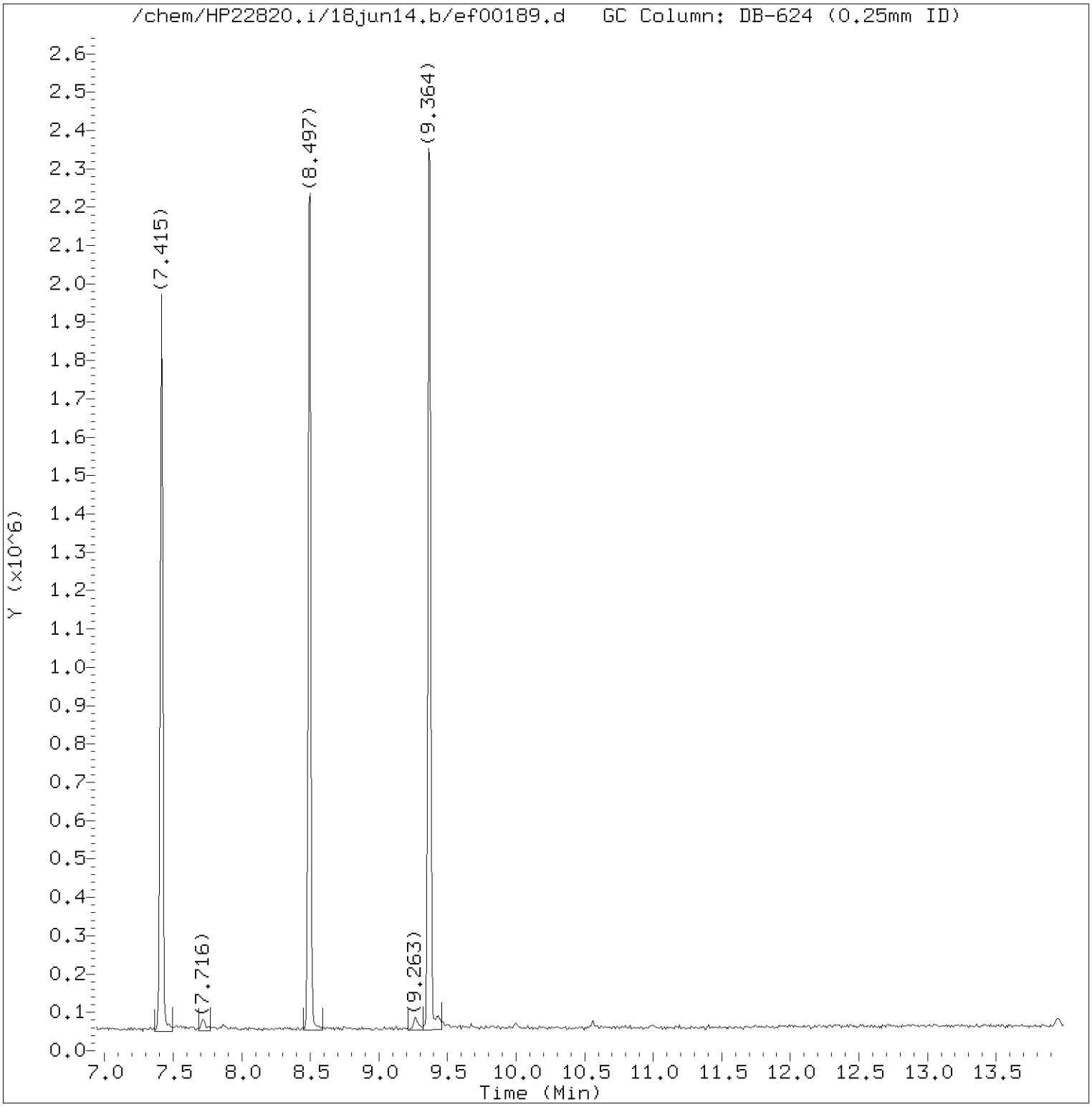
Target Revision 3.5

Data File: /chem/HP22820.i/18jun14.b/ef00189.d Instrument ID: HP22820.i
Injection date and time: 15-JUN-2018 01:09 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 15-Jun-2018 12:06 jeb07445

Sample Name: cc509 Lab Sample ID: cc509

Digitally signed by Jacob E. Bailey
on 06/15/2018 at 12:06.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun14.b/ef00189.d Instrument ID: HP22820.i
Injection date and time: 15-JUN-2018 01:09 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 15-Jun-2018 12:06 jeb07445

Sample Name: cc509 Lab Sample ID: cc509

Digitally signed by Jacob E. Bailey
on 06/15/2018 at 12:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun14.b/ef00189.d Instrument ID: HP22820.i
Injection date and time: 15-JUN-2018 01:09 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 15-Jun-2018 12:06 jeb07445

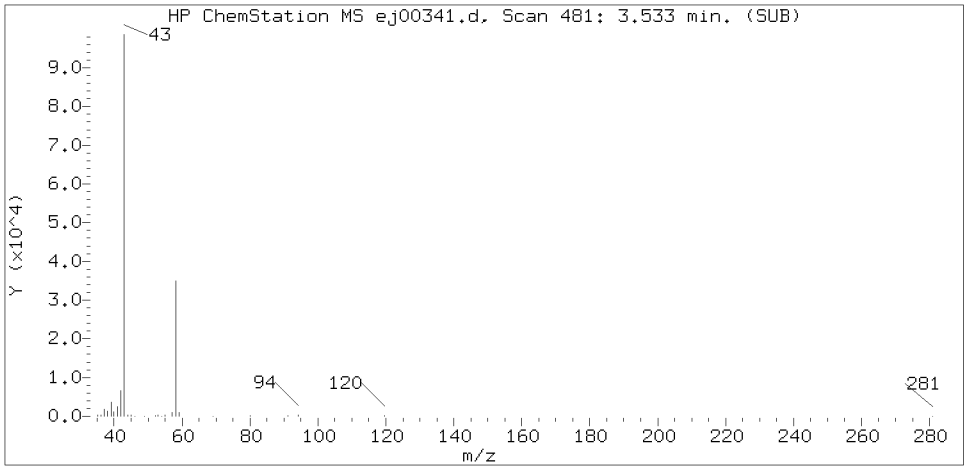
Sample Name: cc509 Lab Sample ID: cc509

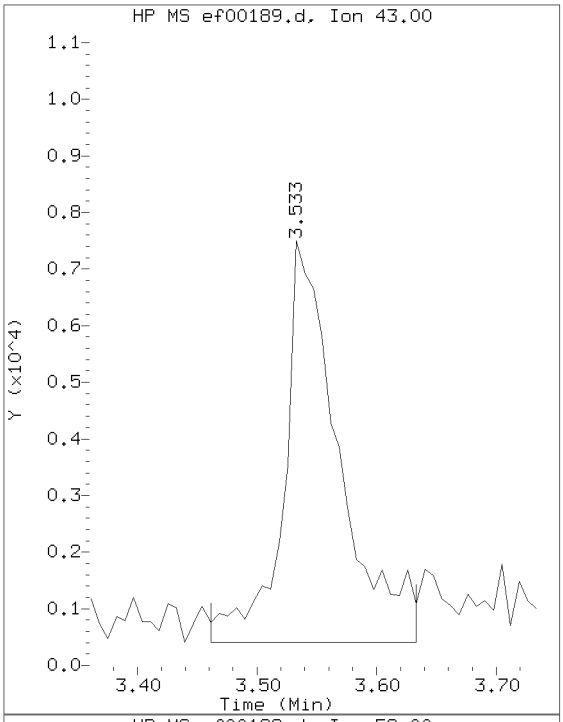
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
19) Acetone	(1)	3.533	43	22738	0.743
40)*Bromochloromethane	(1)	5.467	130	315669	10.000
51)*1,4-Difluorobenzene	(2)	6.291	114	792284	10.000
71)*Chlorobenzene-d5	(3)	8.497	117	911870	10.000

* = Compound is an internal standard.

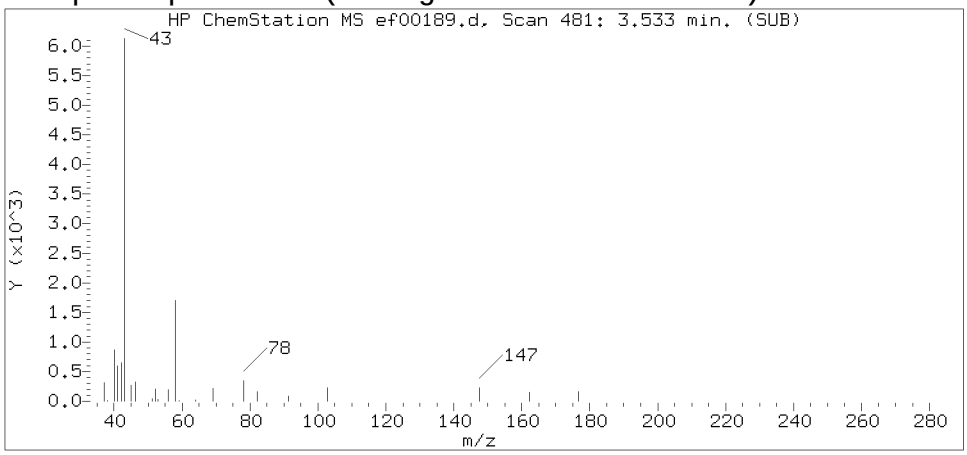
Digitally signed by Jacob E. Bailey
on 06/15/2018 at 12:06.
Target 3.5 esignature user ID: jeb07445

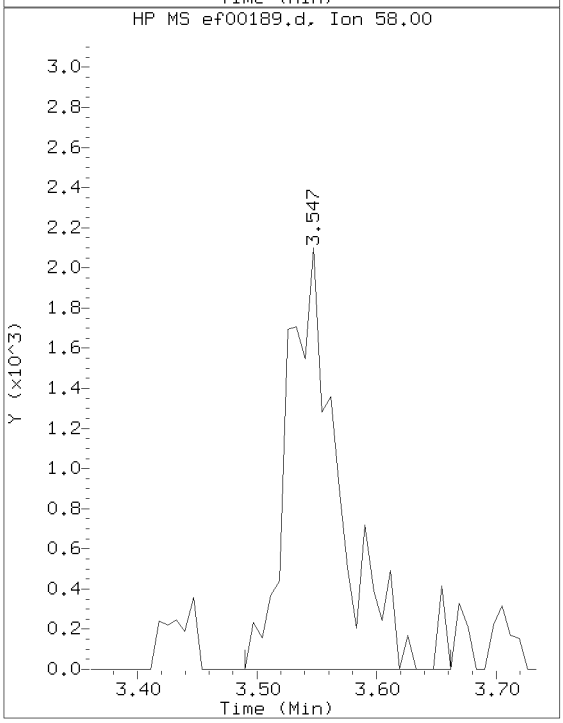
Reference Standard Spectrum for Acetone



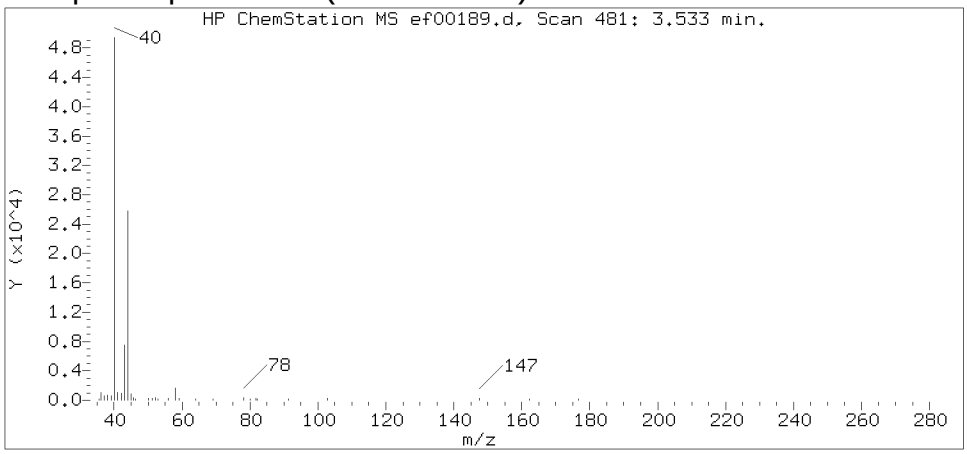


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP22820.i/18jun14.b/ef00189.d Instrument ID: HP22820.i
Injection date and time: 15-JUN-2018 01:09 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun14.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 13:39
Date, time and analyst ID of latest file update: 15-Jun-2018 12:06 jeb07445

Sample Name: cc509 Lab Sample ID: cc509

Compound Number : 19
Compound Name : Acetone
Scan Number : 481
Retention Time (minutes): 3.533
Relative Retention Time : 0.00000
Quant Ion : 43.00
Area (flag) : 22738
Concentration (ppb(v)) : 0.7427

Digitally signed by Jacob E. Bailey on 06/15/2018 at 12:06.
Target 3.5 esignature user ID: jeb07445

Lancaster Laboratories
Volatiles in Air
Runlog for Agilent GC/MS System HP22820 **HP #05**

Data Directory Path is - D:\data\18jun18\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
jeb07445	EF00210.D	50NGBFB	06/18/2018	12:51		
jeb07445	EF00211.D	VSTD010	06/18/2018	13:56		
jeb07445	EF00212.D	VBLKE09	06/18/2018	14:42	E1816930AA	
jeb07445	EF00213.D	LCSE09	06/18/2018	15:27	E1816930AA	
jeb07445	EF00214.D	LCSDE09	06/18/2018	16:00	E1816930AA	
jeb07445	EF00215.D	cc911	06/18/2018	16:37	E1816930AA	
jeb07445	EF00216.D	cc921	06/18/2018	17:09	E1816930AA	
jeb07445	EF00217.D	fc1	06/18/2018	17:47	E1816930AA	
jeb07445	EF00218.D	fc2	06/18/2018	18:20	E1816930AA	
jeb07445	EF00219.D	9662719	06/18/2018	19:04	E1816930AA	100
jeb07445	EF00220.D	9662720	06/18/2018	19:46	E1816930AA	
jeb07445	EF00221.D	9662720	06/18/2018	20:29	E1816930AA	
jeb07445	EF00222.D	9662721	06/18/2018	20:54	E1816930AA	100
jeb07445	EF00223.D	9662722	06/18/2018	21:17	E1816930AA	
jeb07445	EF00224.D	9662723	06/18/2018	21:40	E1816930AA	
jeb07445	EF00225.D	VBLKE09	06/18/2018	22:13	E1816930AA	
jeb07445	EF00226.D	cc894	06/18/2018	22:45	E1816930AA	
jeb07445	EF00227.D	cc1453	06/18/2018	23:18	E1816930AA	
jeb07445	EF00228.D	9662722DL	06/19/2018	08:48	E1816930AA	100
jeb07445	EF00229.D	9662723DL	06/19/2018	09:31	E1816930AA	100

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKE09
Canister ID:	N/A	Lab File ID:	ef00212.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/18/2018
Injection Volume:	200 cc	Analyzed Time:	14:42
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
115-07-1	Propene	0.50	U
75-71-8	Dichlorodifluoromethane	0.20	U
75-45-6	Chlorodifluoromethane	0.20	U
76-14-2	Freon 114	0.20	U
74-87-3	Chloromethane	0.20	U
75-01-4	Vinyl Chloride	0.20	U
106-99-0	1,3-Butadiene	0.40	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.20	U
593-60-2	Bromoethene	0.40	U
75-43-4	Dichlorofluoromethane	0.20	U
75-69-4	Trichlorofluoromethane	0.20	U
109-66-0	Pentane	0.50	U
64-17-5	Ethanol	0.50	U
107-02-8	Acrolein	1.0	U
75-35-4	1,1-Dichloroethene	0.20	U
76-13-1	Freon 113	0.50	U
67-64-1	Acetone	0.50	U
74-88-4	Methyl Iodide	0.20	U
75-15-0	Carbon Disulfide	0.50	U
67-63-0	Isopropanol	0.50	U
75-05-8	Acetonitrile	0.50	U
107-05-1	3-Chloropropene	0.20	U
75-09-2	Methylene Chloride	0.20	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKE09
Canister ID:	N/A	Lab File ID:	ef00212.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/18/2018
Injection Volume:	200 cc	Analyzed Time:	14:42
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-65-0	tert-Butyl Alcohol	0.50	U
107-13-1	Acrylonitrile	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.20	U
1634-04-4	Methyl t-Butyl Ether	0.20	U
110-54-3	Hexane	0.20	U
75-34-3	1,1-Dichloroethane	0.20	U
108-05-4	Vinyl Acetate	1.0	U
108-20-3	Di-Isopropyl Ether	0.20	U
637-92-3	Ethyl Tert-Butyl Ether	0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	U
540-59-0	1,2-Dichloroethene (total)	0.20	U
78-93-3	2-Butanone	0.50	U
141-78-6	Ethyl Acetate	0.50	U
96-33-3	Methyl Acrylate	0.20	U
109-99-9	Tetrahydrofuran	0.50	U
67-66-3	Chloroform	0.20	U
71-55-6	1,1,1-Trichloroethane	0.20	U
110-82-7	Cyclohexane	0.20	U
56-23-5	Carbon Tetrachloride	0.20	U
71-43-2	Benzene	0.20	U
107-06-2	1,2-Dichloroethane	0.20	U
540-84-1	Isooctane	0.20	U
994-05-8	Tert-Amyl Methyl Ether	0.20	U
142-82-5	Heptane	0.50	U

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKE09
Canister ID:	N/A	Lab File ID:	ef00212.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/18/2018
Injection Volume:	200 cc	Analyzed Time:	14:42
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
79-01-6	Trichloroethene	0.20	U
140-88-5	Ethyl Acrylate	0.20	U
78-87-5	1,2-Dichloropropane	0.20	U
74-95-3	Dibromomethane	0.20	U
123-91-1	1,4-Dioxane	0.50	U
80-62-6	Methyl Methacrylate	0.20	U
75-27-4	Bromodichloromethane	0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	U
108-10-1	4-Methyl-2-Pentanone	0.50	U
108-88-3	Toluene	0.20	U
111-65-9	Octane	0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	U
542-75-6	1,3-Dichloropropene (total)	0.20	U
97-63-2	Ethyl Methacrylate	0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	U
127-18-4	Tetrachloroethene	0.20	U
591-78-6	2-Hexanone	0.50	U
124-48-1	Dibromochloromethane	0.20	U
106-93-4	1,2-Dibromoethane	0.20	U
108-90-7	Chlorobenzene	0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	U
100-41-4	Ethylbenzene	0.20	U
179601-23-1	m/p-Xylene	0.20	U
95-47-6	o-Xylene	0.20	U

Abbreviations:
U = The compound is less than the limit being reported.
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D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKE09
Canister ID:	N/A	Lab File ID:	ef00212.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/18/2018
Injection Volume:	200 cc	Analyzed Time:	14:42
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
1330-20-7	Xylene (total)	0.20	U
100-42-5	Styrene	0.20	U
75-25-2	Bromoform	0.20	U
98-82-8	Cumene	0.20	U
108-86-1	Bromobenzene	0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U
96-18-4	1,2,3-Trichloropropane	0.20	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.20	U
622-96-8	4-Ethyltoluene	0.20	U
108-67-8	1,3,5-Trimethylbenzene	0.20	U
98-83-9	Alpha Methyl Styrene	0.20	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.20	U
135-98-8	sec-Butylbenzene	0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	U
99-87-6	p-Isopropyltoluene	0.20	U
100-44-7	Benzyl Chloride	0.50	U
95-50-1	1,2-Dichlorobenzene	0.20	U
104-51-8	n-Butylbenzene	0.20	U
67-72-1	Hexachloroethane	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

Abbreviations:
U = The compound is less than the limit being reported.
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E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKE09
Canister ID:	N/A	Lab File ID:	ef00212.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/18/2018
Injection Volume:	200 cc	Analyzed Time:	14:42
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
87-68-3	Hexachlorobutadiene	0.40	U
91-20-3	Naphthalene	0.40	U

Abbreviations:
U = The compound is less than the limit being reported.
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E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 LCS File ID: ef00213.d LCSD File ID: ef00214.d

Batch: E1816930AA LCS Injected: 06/18/2018 LCSD Injected: 06/18/2018

Method: EPA TO-15 LCS Client ID: LCSE09 LCSD Client ID: LCSDE09

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	10.00	9.34	9.07	93	91	78-126	3	25	YES
Dichlorodifluoromethane	10.00	10.98	10.38	110	104	74-133	6	25	YES
Chlorodifluoromethane	10.00	11.48	11.06	115	111	70-138	4	25	YES
Freon 114	10.00	10.69	10.35	107	104	66-126	3	25	YES
Chloromethane	10.00	11.78	11.18	118	112	65-140	5	25	YES
Vinyl Chloride	10.00	10.41	9.84	104	98	75-130	6	25	YES
1,3-Butadiene	10.00	8.54	8.59	85	86	72-122	1	25	YES
Bromomethane	10.00	11.33	10.86	113	109	71-133	4	25	YES
Chloroethane	10.00	10.91	10.45	109	105	76-129	4	25	YES
Bromoethene	10.00	9.22	9.09	92	91	77-123	1	25	YES
Dichlorofluoromethane	10.00	11.57	11.11	116	111	75-137	4	25	YES
Trichlorofluoromethane	10.00	10.48	9.91	105	99	73-132	6	25	YES
Pentane	10.00	8.28	8.24	83	82	69-125	1	25	YES
Ethanol	10.00	9.95	9.84	100	98	56-149	1	25	YES
Acrolein	10.00	8.98	8.84	90	88	54-132	1	25	YES
1,1-Dichloroethene	10.00	9.81	9.51	98	95	70-129	3	25	YES
Freon 113	10.00	9.88	9.26	99	93	66-119	7	25	YES
Acetone	10.00	11.13	10.48	111	105	71-136	6	25	YES
Methyl Iodide	10.00	8.34	8.11	83	81	72-127	3	25	YES
Carbon Disulfide	10.00	10.91	10.28	109	103	72-128	6	25	YES
Isopropanol	10.00	8.91	8.44	89	84	69-160	5	25	YES
Acetonitrile	10.00	10.35	12.00	103	120	56-136	15	25	YES
3-Chloropropene	10.00	10.75	10.09	107	101	67-141	6	25	YES
Methylene Chloride	10.00	12.10	11.55	121	116	69-128	5	25	YES
tert-Butyl Alcohol	10.00	8.28	8.11	83	81	71-154	2	25	YES
Acrylonitrile	10.00	10.82	10.45	108	104	68-135	4	25	YES
trans-1,2-Dichloroethene	10.00	10.40	9.89	104	99	77-128	5	25	YES
Methyl t-Butyl Ether	10.00	7.79	7.60	78	76	71-119	3	25	YES
Hexane	10.00	7.85	7.72	79	77	70-118	2	25	YES
1,1-Dichloroethane	10.00	10.50	10.00	105	100	74-129	5	25	YES
Vinyl Acetate	10.00	9.36	8.49	94	85	75-161	10	25	YES
Di-Isopropyl Ether	10.00	8.86	8.52	89	85	71-122	4	25	YES
Ethyl Tert-Butyl Ether	10.00	7.20	7.18	72	72	68-121	0	25	YES
cis-1,2-Dichloroethene	10.00	9.22	9.18	92	92	76-126	0	25	YES
2-Butanone	10.00	9.64	8.78	96	88	75-126	9	25	YES
Ethyl Acetate	10.00	8.41	8.51	84	85	73-124	1	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 LCS File ID: ef00213.d LCSD File ID: ef00214.d

Batch: E1816930AA LCS Injected: 06/18/2018 LCSD Injected: 06/18/2018

Method: EPA TO-15 LCS Client ID: LCSE09 LCSD Client ID: LCSDE09

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	10.00	9.28	9.22	93	92	75-125	1	25	YES
Tetrahydrofuran	10.00	8.62	8.49	86	85	67-127	2	25	YES
Chloroform	10.00	10.74	10.27	107	103	75-127	4	25	YES
1,1,1-Trichloroethane	10.00	10.15	9.80	101	98	74-122	4	25	YES
Cyclohexane	10.00	8.20	8.10	82	81	70-118	1	25	YES
Carbon Tetrachloride	10.00	10.79	10.15	108	101	72-127	6	25	YES
Benzene	10.00	10.45	10.01	104	100	76-123	4	25	YES
1,2-Dichloroethane	10.00	11.95	11.62	120	116	72-138	3	25	YES
Isooctane	10.00	10.36	9.96	104	100	74-127	4	25	YES
Tert-Amyl Methyl Ether	10.00	9.06	8.76	91	88	78-124	3	25	YES
Heptane	10.00	9.76	9.52	98	95	74-122	2	25	YES
Trichloroethene	10.00	10.35	9.77	104	98	76-118	6	25	YES
Ethyl Acrylate	10.00	9.05	8.69	90	87	71-126	4	25	YES
1,2-Dichloropropane	10.00	11.33	10.83	113	108	75-127	4	25	YES
Dibromomethane	10.00	11.24	10.61	112	106	76-124	6	25	YES
1,4-Dioxane	10.00	9.86	9.79	99	98	76-124	1	25	YES
Methyl Methacrylate	10.00	8.69	8.45	87	84	73-117	3	25	YES
Bromodichloromethane	10.00	11.63	11.07	116	111	75-134	5	25	YES
cis-1,3-Dichloropropene	10.00	9.30	8.88	93	89	51-120	5	25	YES
4-Methyl-2-Pentanone	10.00	9.83	9.47	98	95	79-131	4	25	YES
Toluene	10.00	10.30	9.80	103	98	78-119	5	25	YES
Octane	10.00	10.45	10.22	105	102	73-122	2	25	YES
trans-1,3-Dichloropropene	10.00	10.32	10.19	103	102	76-131	1	25	YES
Ethyl Methacrylate	10.00	9.07	8.75	91	87	69-137	4	25	YES
1,1,2-Trichloroethane	10.00	11.43	11.09	114	111	76-127	3	25	YES
Tetrachloroethene	10.00	9.94	9.74	99	97	68-123	2	25	YES
2-Hexanone	10.00	10.46	10.06	105	101	74-134	4	25	YES
Dibromochloromethane	10.00	11.69	11.17	117	112	74-131	5	25	YES
1,2-Dibromoethane	10.00	10.95	10.58	110	106	73-121	3	25	YES
Chlorobenzene	10.00	9.91	10.00	99	100	76-117	1	25	YES
1,1,1,2-Tetrachloroethane	10.00	11.76	11.44	118	114	73-137	3	25	YES
Ethylbenzene	10.00	9.63	9.39	96	94	77-117	2	25	YES
m/p-Xylene	10.00	9.50	9.11	95	91	78-119	4	25	YES
o-Xylene	10.00	9.24	9.04	92	90	78-121	2	25	YES
Xylene (total)	20.00	18.74	18.15	94	91	79-120	3	25	YES
Styrene	10.00	9.99	9.98	100	100	77-143	0	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 LCS File ID: ef00213.d LCSD File ID: ef00214.d

Batch: E1816930AA LCS Injected: 06/18/2018 LCSD Injected: 06/18/2018

Method: EPA TO-15 LCS Client ID: LCSE09 LCSD Client ID: LCSDE09

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	11.36	10.88	114	109	58-144	4	25	YES
Cumene	10.00	9.38	9.30	94	93	80-133	1	25	YES
Bromobenzene	10.00	10.01	9.73	100	97	74-118	3	25	YES
1,1,2,2-Tetrachloroethane	10.00	11.83	11.15	118	111	72-133	6	25	YES
1,2,3-Trichloropropane	10.00	11.49	11.22	115	112	71-127	2	25	YES
n-Propylbenzene	10.00	10.00	9.71	100	97	73-120	3	25	YES
2-Chlorotoluene	10.00	11.13	11.00	111	110	74-123	1	25	YES
4-Ethyltoluene	10.00	10.73	10.68	107	107	73-130	0	25	YES
1,3,5-Trimethylbenzene	10.00	10.88	10.84	109	108	72-130	0	25	YES
Alpha Methyl Styrene	10.00	9.16	9.01	92	90	71-138	2	25	YES
tert-Butylbenzene	10.00	10.81	10.39	108	104	78-138	4	25	YES
1,2,4-Trimethylbenzene	10.00	11.34	10.91	113	109	70-138	4	25	YES
sec-Butylbenzene	10.00	10.70	10.52	107	105	79-139	2	25	YES
1,3-Dichlorobenzene	10.00	11.01	11.00	110	110	75-129	0	25	YES
1,4-Dichlorobenzene	10.00	10.60	10.47	106	105	74-123	1	25	YES
p-Isopropyltoluene	10.00	10.77	10.72	108	107	75-145	0	25	YES
Benzyl Chloride	10.00	9.93	9.77	99	98	49-163	2	25	YES
1,2-Dichlorobenzene	10.00	10.76	10.65	108	106	71-126	1	25	YES
n-Butylbenzene	10.00	10.52	10.55	105	105	72-143	0	25	YES
Hexachloroethane	10.00	13.35	13.03	133	130	59-135	2	25	YES
1,2-Dibromo-3-chloropropane	10.00	10.12	9.96	101	100	52-156	2	25	YES
1,2,4-Trichlorobenzene	10.00	7.46	8.24	75	82	45-156	10	25	YES
Hexachlorobutadiene	10.00	9.66	10.19	97	102	49-154	5	25	YES
Naphthalene	10.00	7.59	8.21	76	82	39-152	8	25	YES

COMMENTS:

_____

_____

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FORM 04
VOLATILE ORGANICS IN AIR
METHOD BLANK SUMMARY

SDG No.:

Lab Sample ID: VBLKE09 Analyzed Date: 06/18/2018

Lab File ID: ef00212.d Analyzed Time: 14:42

Instrument ID: 22820

THIS BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS AND LCSD:

LAB SAMPLE ID	LAB FILE ID	CANISTER ID	DATE ANALYZED	TIME ANALYZED
LCSE09	ef00213.d	N/A	06/18/2018	15:27
LCSDE09	ef00214.d	N/A	06/18/2018	16:00
cc911	ef00215.d	911	06/18/2018	16:37
cc921	ef00216.d	921	06/18/2018	17:09
9662719	ef00219.d	1136	06/18/2018	19:04
9662720	ef00220.d	1196	06/18/2018	19:46
9662720	ef00221.d	1196	06/18/2018	20:29
9662721	ef00222.d	1243	06/18/2018	20:54
9662722	ef00223.d	1285	06/18/2018	21:17
9662723	ef00224.d	1359	06/18/2018	21:40
cc894	ef00226.d	894	06/18/2018	22:45
cc1453	ef00227.d	1453	06/18/2018	23:18
9662722DL	ef00228.d	1285	06/19/2018	08:48
9662723DL	ef00229.d	1359	06/19/2018	09:31

COMMENTS:

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

SDG No.:

Lab File ID: ef00210.d

BFB Injection Date: 06/18/2018

Instrument ID: 22820

BFB Injection Time: 12:51

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0% - 40.0% of mass 95	21.05
75	30.0% - 66.0% of mass 95	52.97
95	Base peak, 100% relative abundance	100.00
96	5.0% - 9.0% of mass 95	6.57
173	< 2.0% of mass 174	0.58 (0.82)
174	> 50.0% of mass 95	71.19
175	4.0% - 9.0% of mass 174	4.76 (6.69)
176	93.0% - 101.0% of mass 174	70.06 (98.42)
177	5.0% - 9.0% of mass 176	4.49 (6.41)

THIS CHECK APPLIES TO THE FOLLOWING:

LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD010	ef00211.d	06/18/2018	13:56
VBLKE09	ef00212.d	06/18/2018	14:42
LCSE09	ef00213.d	06/18/2018	15:27
LCSDE09	ef00214.d	06/18/2018	16:00
cc911	ef00215.d	06/18/2018	16:37
cc921	ef00216.d	06/18/2018	17:09
9662719	ef00219.d	06/18/2018	19:04
9662720	ef00220.d	06/18/2018	19:46
9662720	ef00221.d	06/18/2018	20:29
9662721	ef00222.d	06/18/2018	20:54
9662722	ef00223.d	06/18/2018	21:17
9662723	ef00224.d	06/18/2018	21:40
cc894	ef00226.d	06/18/2018	22:45
cc1453	ef00227.d	06/18/2018	23:18
9662722DL	ef00228.d	06/19/2018	08:48
9662723DL	ef00229.d	06/19/2018	09:31

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: ef00211.d

Calibration Date: 06/18/2018

Instrument ID: 22820

Calibration Time: 13:56

Init. Calib. Date(s): 06/10/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
Propene	0.473	0.440	9.311	10	-7
Dichlorodifluoromethane	1.655	1.753	10.588	10	6
Chlorodifluoromethane	1.050	1.150	10.952	10	10
Freon 114	1.777	1.851	10.421	10	4
Chloromethane	0.666	0.734	11.016	10	10
Vinyl Chloride	0.637	0.627	9.846	10	-2
1,3-Butadiene	0.458	0.412	8.995	10	-10
Bromomethane	0.542	0.596	10.985	10	10
Chloroethane	0.355	0.358	10.074	10	1
Bromoethene	0.553	0.468	8.468	10	-15
Dichlorofluoromethane	1.412	1.533	10.859	10	9
Trichlorofluoromethane	1.769	1.803	10.193	10	2
Pentane	1.014	0.858	8.464	10	-15
Ethanol	0.221	0.195	8.832	10	-12
Freon123a	1.311	1.326	11.225	11.1	1
Acrolein	0.235	0.189	8.053	10	-19
1,1-Dichloroethene	0.969	0.921	9.497	10	-5
Freon 113	0.998	0.940	9.414	10	-6
Acetone	0.970	1.051	10.838	10	8
Methyl Iodide	1.585	1.271	8.022	10	-20
Carbon Disulfide	1.814	1.975	10.888	10	9
Isopropanol	0.821	0.688	8.389	10	-16
Acetonitrile	0.430	0.428	9.953	10	0
3-Chloropropene	0.247	0.210	9.430	11.1	-15
Methylene Chloride	0.539	0.567	11.676	11.1	5
tert-Butyl Alcohol	0.917	0.686	8.301	11.1	-25
Acrylonitrile	0.535	0.548	10.245	10	2
trans-1,2-Dichloroethene	0.894	0.899	10.062	10	1
Methyl t-Butyl Ether	1.527	1.156	7.574	10	-24
Hexane	0.912	0.687	7.541	10	-25
1,1-Dichloroethane	1.224	1.245	10.174	10	2
Vinyl Acetate	0.130	0.103	8.881	11.2	-21
Di-Isopropyl Ether	1.975	1.685	8.529	10	-15
Ethyl Tert-Butyl Ether	1.334	0.967	7.248	10	-28
cis-1,2-Dichloroethene	0.836	0.771	9.222	10	-8
2-Butanone	0.315	0.290	9.203	10	-8
Ethyl Acetate	0.155	0.131	8.472	10	-15
Methyl Acrylate	1.025	0.924	9.012	10	-10
Tetrahydrofuran	0.694	0.561	8.091	10	-19

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: ef00211.d

Calibration Date: 06/18/2018

Instrument ID: 22820

Calibration Time: 13:56

Init. Calib. Date(s): 06/10/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
Chloroform	1.454	1.508	10.372	10	4
1,1,1-Trichloroethane	1.341	1.290	9.620	10	-4
Cyclohexane	0.960	0.758	7.903	10	-21
Carbon Tetrachloride	1.313	1.338	10.195	10	2
Benzene	0.613	0.607	9.905	10	-1
1,2-Dichloroethane	0.287	0.325	11.322	10	13
Isooctane	0.834	0.826	9.908	10	-1
Tert-Amyl Methyl Ether	0.388	0.348	8.949	10	-11
Heptane	0.323	0.300	9.300	10	-7
Trichloroethene	0.268	0.253	9.424	10	-6
Ethyl Acrylate	0.376	0.312	8.292	10	-17
1,2-Dichloropropane	0.234	0.253	10.788	10	8
Dibromomethane	0.246	0.262	10.654	10	7
1,4-Dioxane	0.141	0.135	9.620	10	-4
Methyl Methacrylate	0.196	0.167	8.490	10	-15
Bromodichloromethane	0.459	0.522	11.373	10	14
cis-1,3-Dichloropropene	0.334	0.298	8.939	10	-11
4-Methyl-2-Pentanone	0.456	0.424	9.284	10	-7
Toluene	0.718	0.695	9.673	10	-3
Octane	0.445	0.444	9.995	10	0
trans-1,3-Dichloropropene	0.263	0.273	10.397	10	4
Ethyl Methacrylate	0.307	0.271	8.815	10	-12
1,1,2-Trichloroethane	0.272	0.299	10.984	10	10
Tetrachloroethene	0.366	0.360	9.828	10	-2
2-Hexanone	0.410	0.394	9.594	10	-4
Dibromochloromethane	0.327	0.367	11.226	10	12
1,2-Dibromoethane	0.403	0.425	10.553	10	6
Chlorobenzene	0.607	0.584	9.614	10	-4
1,1,1,2-Tetrachloroethane	0.295	0.328	11.093	10	11
Ethylbenzene	0.903	0.833	9.218	10	-8
m/p-Xylene	0.690	0.620	8.990	10	-10
o-Xylene	0.678	0.578	8.521	10	-15
Styrene	0.513	0.469	9.146	10	-9
Bromoform	0.392	0.435	11.080	10	11
Cumene	0.904	0.779	8.618	10	-14
Bromobenzene	0.345	0.328	9.509	10	-5
1,1,2,2-Tetrachloroethane	0.631	0.713	11.302	10	13
1,2,3-Trichloropropane	0.180	0.198	10.996	10	10
n-Propylbenzene	0.268	0.250	9.326	10	-7

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: ef00211.d

Calibration Date: 06/18/2018

Instrument ID: 22820

Calibration Time: 13:56

Init. Calib. Date(s): 06/10/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
2-Chlorotoluene	0.256	0.264	10.312	10	3
4-Ethyltoluene	0.957	0.948	9.905	10	-1
1,3,5-Trimethylbenzene	0.781	0.774	9.911	10	-1
Alpha Methyl Styrene	0.360	0.295	8.191	10	-18
tert-Butylbenzene	0.708	0.704	9.945	10	-1
1,2,4-Trimethylbenzene	0.766	0.778	10.162	10	2
sec-Butylbenzene	1.097	1.052	9.597	10	-4
1,3-Dichlorobenzene	0.591	0.618	10.462	10	5
1,4-Dichlorobenzene	0.585	0.583	9.969	10	0
p-Isopropyltoluene	0.877	0.836	9.534	10	-5
Benzyl Chloride	0.393	0.399	10.145	10	1
1,2-Dichlorobenzene	0.550	0.575	10.455	10	5
n-Butylbenzene	0.861	0.824	9.565	10	-4
Hexachloroethane	0.230	0.279	12.122	10	21
1,2-Dibromo-3-chloropropane	0.256	0.250	9.773	10	-2
1,2,4-Trichlorobenzene	0.356	0.257	7.214	10	-28
Hexachlorobutadiene	0.296	0.266	8.999	10	-10
Naphthalene	0.689	0.493	7.158	10	-28

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

Continuing Calibration
Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP22820.i/18jun10.b/ef00111.d
/chem/HP22820.i/18jun10.b/ef00112.d
/chem/HP22820.i/18jun10.b/ef00113.d
/chem/HP22820.i/18jun10.b/ef00114.d
/chem/HP22820.i/18jun10.b/ef00116.d
/chem/HP22820.i/18jun10.b/ef00117.d

** ICAL Area and RT are the average from the above standards.

Current Continuing Calibration Standard:

/chem/HP22820.i/18jun18.b/ef00211.d

Area Summary

File ID:

Internal Standard Name	ef00211.d	ICAL Area	Low Limit	High Limit	In Spec
Bromochloromethane	424215	324192	194515	453869	Yes
1,4-Difluorobenzene	1288396	1109540	665724	1553356	Yes
Chlorobenzene-d5	1286129	1128840	677304	1580376	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

RT Summary

File ID:

Internal Standard Name	ef00211.d	ICAL RT	In Spec
Bromochloromethane	5.467	5.467	Yes
1,4-Difluorobenzene	6.291	6.291	Yes
Chlorobenzene-d5	8.497	8.493	Yes

A "No" indicates the retention time is greater than 30 seconds from the RT of the referenced ICAL average.

Comments:_____

_____

Page 1 of 1

Report generated on 06/18/2018 at 14:16

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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: 06/18/2018

Lab File ID: ef00211.d Analyzed Time: 13:56

Instrument ID: 22820

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	R.T.	Area	R.T.	Area	R.T.
24 HOUR STANDARD	424215	5.47	1288396	6.29	1286129	8.50
UPPER LIMIT	593901	5.80	1803754	6.62	1800581	8.83
LOWER LIMIT	254529	5.14	773038	5.96	771677	8.17
LAB SAMPLE ID						
VBLKE09	392360	5.47	1065802	6.29	1166404	8.50
LCSE09	393442	5.47	1191474	6.29	1199347	8.50
LCSDE09	411233	5.47	1254386	6.29	1249620	8.50
cc911	399795	5.47	1105689	6.29	1218197	8.50
cc921	357109	5.47	930616	6.29	1036686	8.50
9662719	350089	5.47	933417	6.30	1137289	8.50
9662720	351452	5.47	960576	6.30	1098867	8.50
9662720	366954	5.47	981682	6.30	1113451	8.50
9662721	373268	5.47	935345	6.29	1110168	8.49
9662722	335981	5.47	839214	6.29	1024667	8.50
9662723	339893	5.47	862703	6.29	1026343	8.50
cc894	348984	5.47	878713	6.29	1014906	8.50
cc1453	355998	5.47	863509	6.29	1005210	8.50
9662722DL	353658	5.47	919003	6.30	1121674	8.50
9662723DL	360039	5.47	991040	6.30	1181797	8.50

* = 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.

Data File: /chem/HP22820.i/18jun18.b/ef00210.d

Date : 18-JUN-2018 12:51

Client ID: 50NGBFB

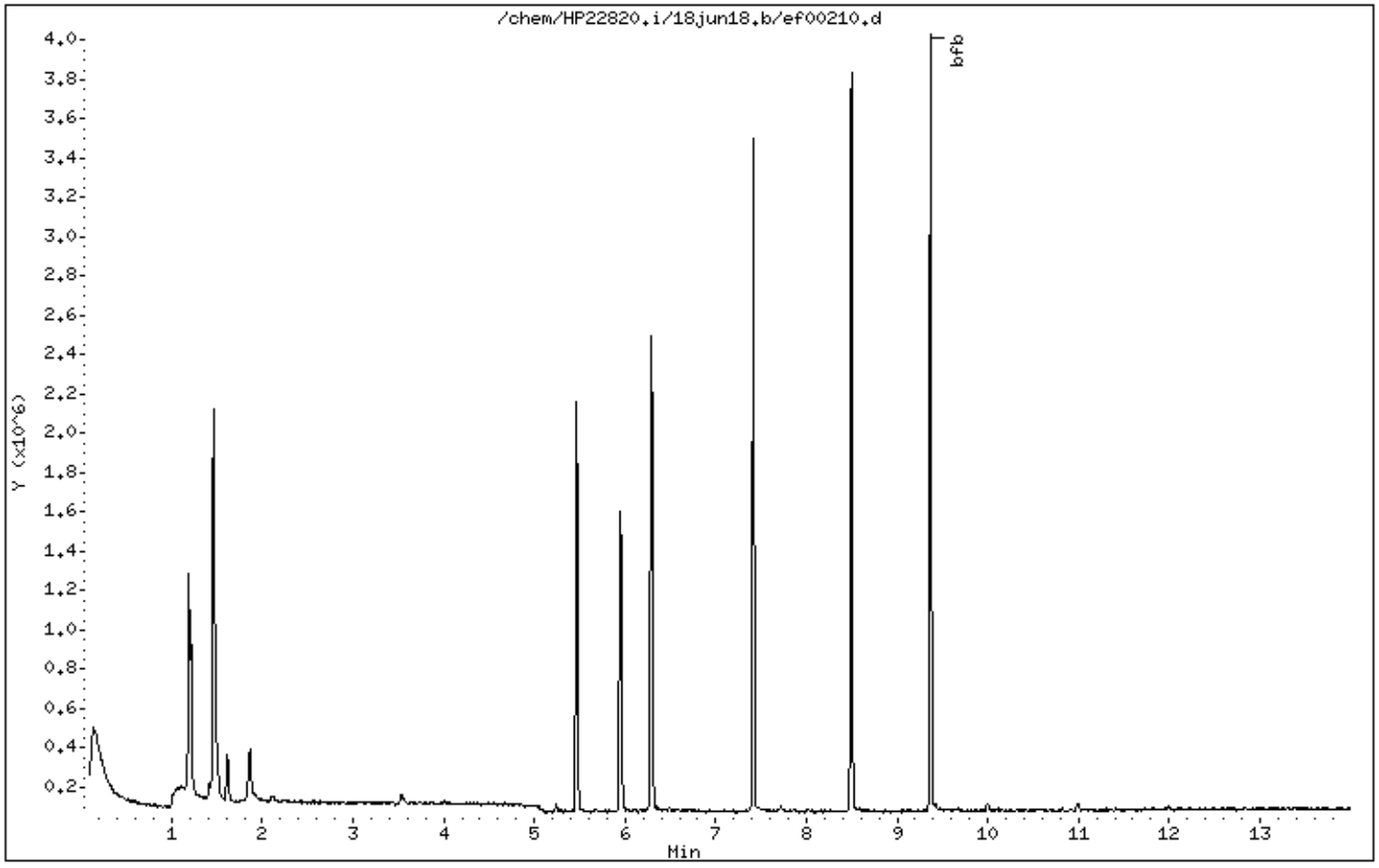
Instrument: HP22820.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25



Digitally signed by Jacob E. Bailey on 06/18/2018 at 15:10.
Target 3.5 esignature user ID: jeb07445

Data File: /chem/HP22820.i/18jun18.b/ef00210.d

Date : 18-JUN-2018 12:51

Client ID: 50NGBFB

Instrument: HP22820.i

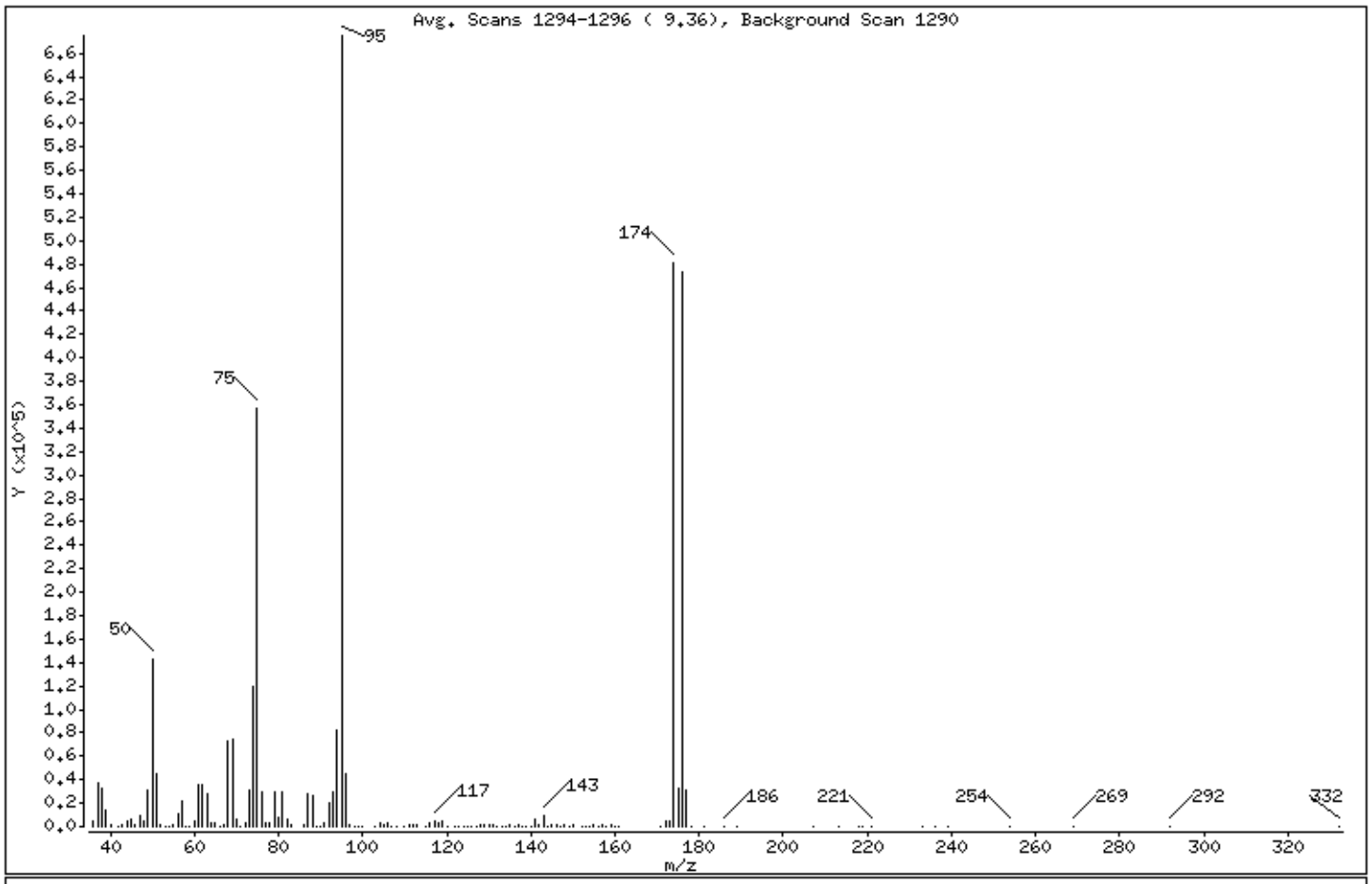
Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	21.05
75	30.00 - 66.00% of mass 95	52.97
96	5.00 - 9.00% of mass 95	6.57
173	Less than 2.00% of mass 174	0.58 (0.82)
174	50.00 - 120.00% of mass 95	71.19
175	4.00 - 9.00% of mass 174	4.76 (6.69)
176	93.00 - 101.00% of mass 174	70.06 (98.42)
177	5.00 - 9.00% of mass 176	4.49 (6.41)

Digitally signed by Jacob E. Bailey on 06/18/2018 at 15:10.
Target 3.5 esignature user ID: jeb07445

Date : 18-JUN-2018 12:51

Client ID: 50NGBFB Instrument: HP22820.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624 Column diameter: 0.25

Data File: ef00210.d
Spectrum: Avg. Scans 1294-1296 (9.36), Background Scan 1290
Location of Maximum: 95.00
Number of points: 140

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	5363	73.00	31480	115.00	744	153.00	594
37.00	37584	74.00	119448	116.00	2399	154.00	419
38.00	32376	75.00	357504	117.00	4924	155.00	1236
39.00	14397	76.00	29592	118.00	3168	156.00	494
40.00	1373	77.00	3628	119.00	4292	157.00	1122
42.00	161	78.00	3000	120.00	198	158.00	127
43.00	840	79.00	28888	122.00	137	159.00	809
44.00	3925	80.00	7356	123.00	170	160.00	68
45.00	6697	81.00	29544	124.00	537	161.00	743
46.00	1410	82.00	6016	125.00	72	171.00	300
47.00	9605	83.00	815	126.00	252	172.00	4206
48.00	4129	86.00	820	127.00	411	173.00	3936
49.00	30320	87.00	27560	128.00	2306	174.00	480512
50.00	142080	88.00	26320	129.00	1354	175.00	32136
51.00	45064	89.00	115	130.00	2249	176.00	472896
52.00	1570	90.00	165	131.00	1131	177.00	30328
53.00	499	91.00	3259	132.00	137	178.00	670
54.00	256	92.00	19984	133.00	65	181.00	50
55.00	2214	93.00	29632	134.00	220	186.00	70
56.00	10979	94.00	81848	135.00	1509	189.00	64
57.00	21536	95.00	674944	136.00	181	207.00	56
58.00	741	96.00	44352	137.00	1254	213.00	55
59.00	249	97.00	1212	138.00	61	218.00	76
60.00	5309	98.00	140	139.00	405	219.00	80
61.00	35728	99.00	129	140.00	570	221.00	84
62.00	35144	100.00	140	141.00	6469	233.00	56
63.00	28696	103.00	474	142.00	1019	236.00	55
64.00	3495	104.00	3432	143.00	8570	239.00	54
65.00	3166	105.00	1472	144.00	436	254.00	91
66.00	736	106.00	3234	145.00	1428	269.00	89
67.00	1777	107.00	723	146.00	1099	292.00	64
68.00	72696	108.00	509	147.00	501	332.00	51
69.00	74496	110.00	390	148.00	1376		
70.00	5720	111.00	975	149.00	271		
71.00	407	112.00	1148	150.00	793		

Digitally signed by Jacob E. Bailey on 06/18/2018 at 15:10.
Target 3.5 esignature user ID: jeb07445

Date : 18-JUN-2018 12:51

Client ID: 50NGBFB Instrument: HP22820.i

Sample Info: 50NGBFB;;;BFB;0;;;

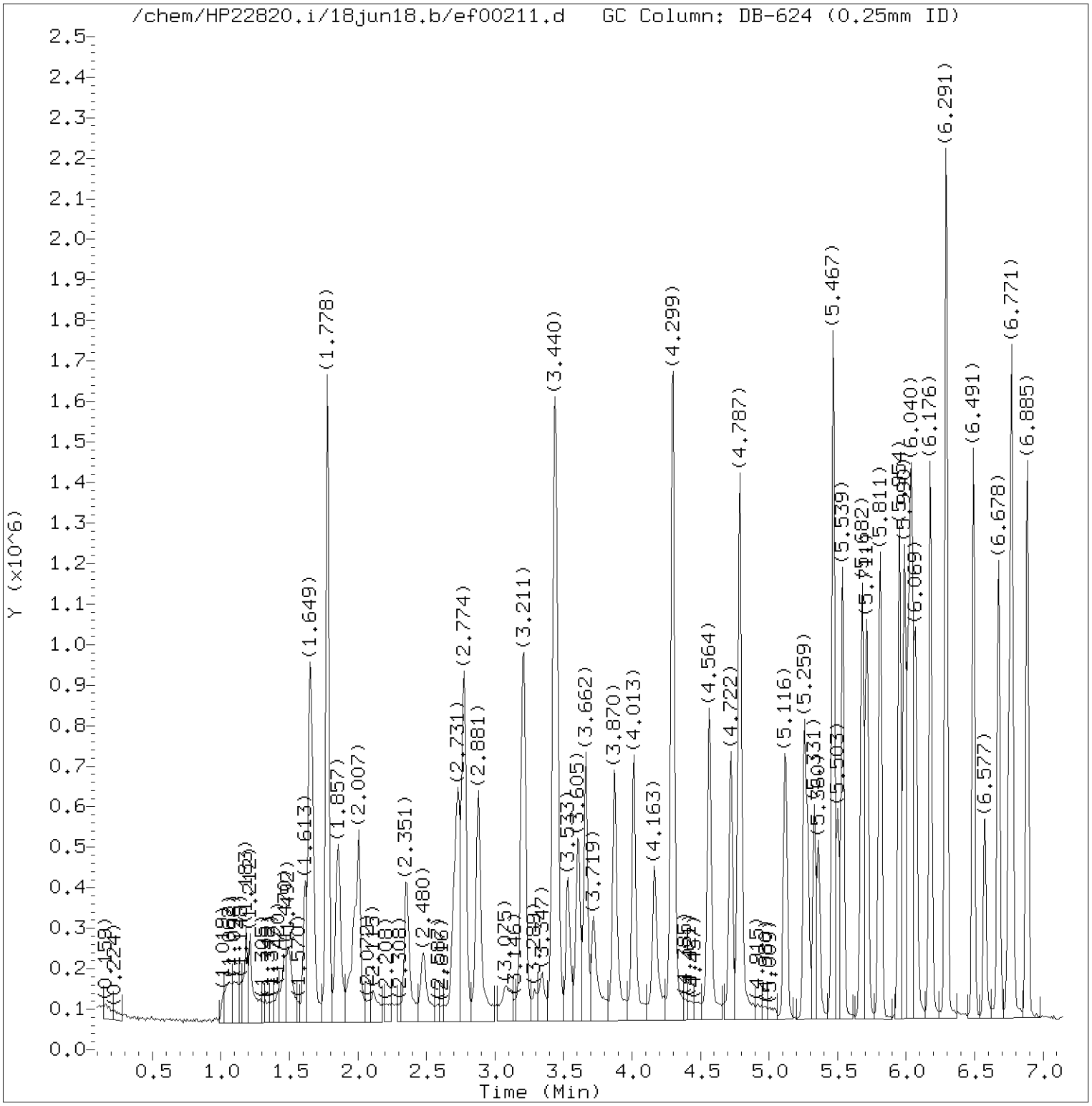
Operator: jeb07445

Column phase: DB-624 Column diameter: 0.25

Data File: ef00210.d
Spectrum: Avg. Scans 1294-1296 (9.36), Background Scan 1290
Location of Maximum: 95.00
Number of points: 140

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	3517	113.00	896	152.00	251		

Digitally signed by Jacob E. Bailey on 06/18/2018 at 15:10.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

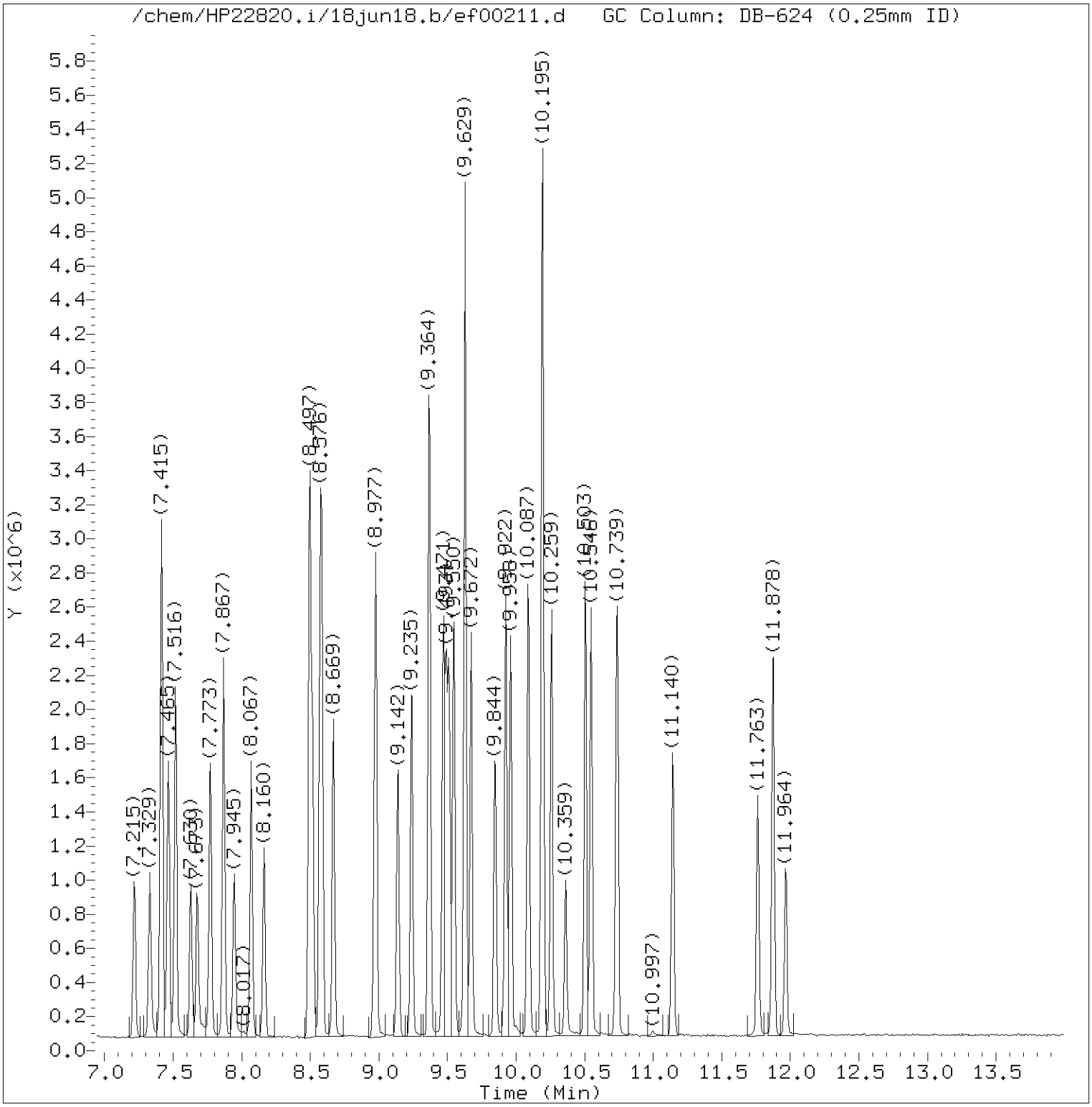
Target Revision 3.5

Data File: /chem/HP22820.i/18jun18.b/ef00211.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 13:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 14:17 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 06/18/2018 at 15:10.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun18.b/ef00211.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 13:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 14:17 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 06/18/2018 at 15:10.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun18.b/ef00211.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 13:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 14:17 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.613	41	186681	9.311
2) Dichlorodifluoromethane	(1)	1.649	85	743548	10.588
3) Chlorodifluoromethane	(1)	1.671	51	487637	10.952
4) Freon 114	(1)	1.778	85	785378	10.421
5) Chloromethane	(1)	1.850	50	311406	11.016
6) Vinyl Chloride	(1)	1.979	62	266082	9.846
7) 1,3-Butadiene	(1)	2.007	54	174851	8.995
8) Bromomethane	(1)	2.351	94	252735	10.985
9) Chloroethane	(1)	2.480	64	151720	10.074
10) Bromoethene	(1)	2.695	106	198521	8.468
11) Dichlorofluoromethane	(1)	2.731	67	650497	10.859
12) Trichlorofluoromethane	(1)	2.774	101	764904	10.193
13) Pentane	(1)	2.881	43	364163	8.464
14) Ethanol	(1)	3.075	45	82897	8.832
15) Freon123a	(1)	3.211	67	624393	11.225
16) Acrolein	(1)	3.340	56	80269	8.053
17) 1,1-Dichloroethene	(1)	3.433	61	390525	9.497
18) Freon 113	(1)	3.440	103	398704	9.414
19) Acetone	(1)	3.533	43	445929	10.838
20) Methyl Iodide	(1)	3.605	142	539291	8.022
21) Carbon Disulfide	(1)	3.662	76	837967	10.888
22) Isopropanol	(1)	3.719	45	292020	8.389
24) 3-Chloropropene	(1)	3.870	76	98837	9.430
23) Acetonitrile	(1)	3.877	40	181653	9.953
25) Methylene Chloride	(1)	4.013	84	266849	11.676
26) tert-Butyl Alcohol	(1)	4.163	59	322832	8.301
28) trans-1,2-Dichloroethene	(1)	4.292	61	381414	10.062
27) Acrylonitrile	(1)	4.299	53	232473	10.245
29) Methyl t-Butyl Ether	(1)	4.299	73	490539	7.574
30) Hexane	(1)	4.564	57	291585	7.541
31) 1,1-Dichloroethane	(1)	4.722	63	528259	10.174
32) Vinyl Acetate	(1)	4.787	86	48809	8.881
33) Di-Isopropyl Ether	(1)	4.787	45	714669	8.529
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	410066	7.248
35) cis-1,2-Dichloroethene	(1)	5.259	61	327189	9.222
37) 2-Butanone	(1)	5.281	72	123150	9.203
38) Ethyl Acetate	(1)	5.324	70	55536	8.472
39) Methyl Acrylate	(1)	5.360	55	391995	9.012

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on 06/18/2018 at 15:10.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun18.b/ef00211.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 13:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 14:17 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	424215	10.000
41) Tetrahydrofuran	(1)	5.503	42	238059	8.091
42) Chloroform	(1)	5.539	83	639656	10.372
43) 1,1,1-Trichloroethane	(1)	5.682	97	547364	9.620
44) Cyclohexane	(1)	5.711	56	321692	7.903
45) Carbon Tetrachloride	(1)	5.811	117	567707	10.195
46) Benzene	(2)	5.990	78	781844	9.905
47) 1,2-Dichloroethane	(2)	6.011	62	418832	11.322
48) Isooctane	(2)	6.040	57	1064369	9.908
49) Tert-Amyl Methyl Ether	(2)	6.069	73	447915	8.949
50) Heptane	(2)	6.176	43	386763	9.300
51)*1,4-Difluorobenzene	(2)	6.291	114	1288396	10.000
52) Trichloroethene	(2)	6.491	130	325374	9.424
53) Ethyl Acrylate	(2)	6.570	55	402143	8.292
36) 1,2-Dichloroethene (total)	(1)		61	708603	19.284
54) 1,2-Dichloropropane	(2)	6.678	63	325430	10.788
57) Methyl Methacrylate	(2)	6.749	69	214858	8.490
55) Dibromomethane	(2)	6.771	174	337463	10.654
56) 1,4-Dioxane	(2)	6.778	88	174230	9.620
58) Bromodichloromethane	(2)	6.885	83	671912	11.373
59) cis-1,3-Dichloropropene	(2)	7.215	75	384404	8.939
60) 4-Methyl-2-Pentanone	(2)	7.329	43	545817	9.284
61) Toluene	(3)	7.465	91	893749	9.673
62) Octane	(3)	7.516	43	571537	9.995
63) trans-1,3-Dichloropropene	(3)	7.630	75	351242	10.397
65) Ethyl Methacrylate	(3)	7.673	69	347899	8.815
66) 1,1,2-Trichloroethane	(3)	7.773	97	384443	10.984
67) Tetrachloroethene	(3)	7.867	166	463060	9.828
68) 2-Hexanone	(3)	7.945	43	506196	9.594
69) Dibromochloromethane	(3)	8.067	127	471693	11.226
70) 1,2-Dibromoethane	(3)	8.160	107	546564	10.553
71)*Chlorobenzene-d5	(3)	8.497	117	1286129	10.000
72) Chlorobenzene	(3)	8.518	112	750772	9.614
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	421369	11.093
74) Ethylbenzene	(3)	8.583	91	1070802	9.218
75) m/p-Xylene	(3)	8.669	91	797479	8.990
76) o-Xylene	(3)	8.970	91	742872	8.521
78) Styrene	(3)	8.977	104	603738	9.146

* = Compound is an internal standard.

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on 06/18/2018 at 15:10.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun18.b/ef00211.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 13:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 14:17 jeb07445

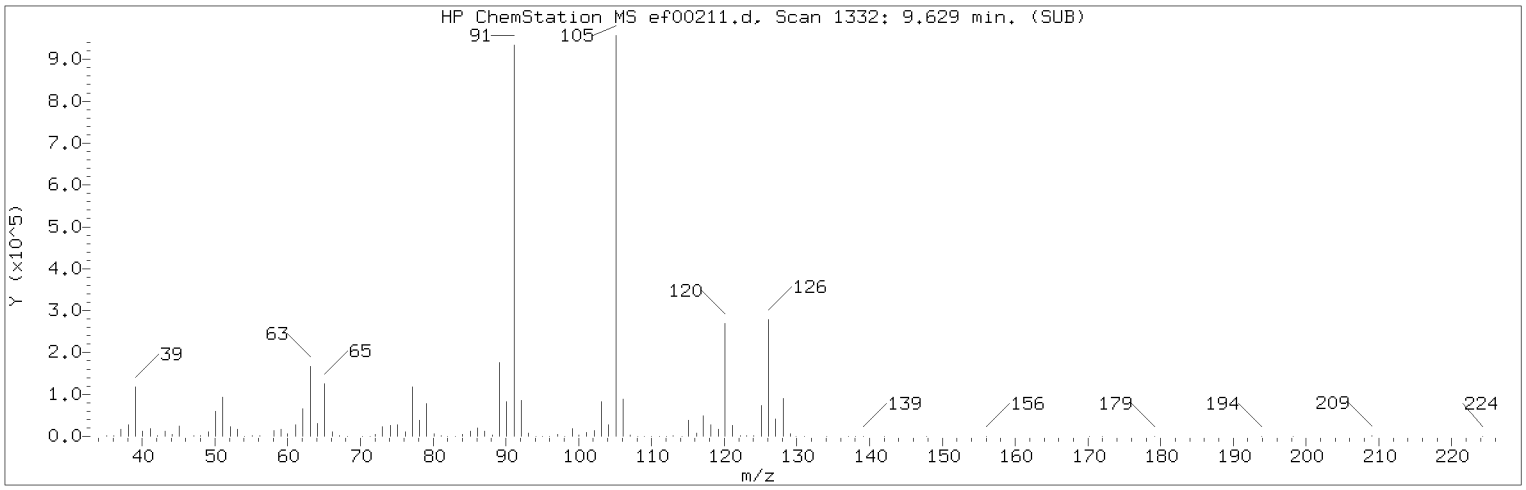
Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	559140	11.080
80) Cumene	(3)	9.242	105	1001775	8.618
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	917190	11.302
81) Bromobenzene	(3)	9.493	156	421873	9.509
83) 1,2,3-Trichloropropane	(3)	9.514	110	254758	10.996
84) n-Propylbenzene	(3)	9.550	120	321341	9.326
86) 4-Ethyltoluene	(3)	9.629	105	1219459M	9.905
85) 2-Chlorotoluene	(3)	9.629	126	339132	10.312
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	995355M	9.911
88) Alpha Methyl Styrene	(3)	9.851	118	379195	8.191
89) tert-Butylbenzene	(3)	9.922	119	906073M	9.945
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	1000772	10.162
91) sec-Butylbenzene	(3)	10.087	105	1353445	9.597
92) 1,3-Dichlorobenzene	(3)	10.195	146	795317	10.462
94) p-Isopropyltoluene	(3)	10.195	119	1075398	9.534
93) 1,4-Dichlorobenzene	(3)	10.259	146	749908	9.969
95) Benzyl Chloride	(3)	10.359	91	513109	10.145
97) n-Butylbenzene	(3)	10.503	91	1059234	9.565
96) 1,2-Dichlorobenzene	(3)	10.546	146	739139	10.455
98) Hexachloroethane	(3)	10.739	117	358521	12.122
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	321725	9.773
100) 1,2,4-Trichlorobenzene	(3)	11.763	180	330425	7.214
101) Hexachlorobutadiene	(3)	11.878	225	342639	8.999
102) Naphthalene	(3)	11.964	128	634328	7.158
64) 1,3-Dichloropropene (total)	(3)		75	735646	19.389
77) Xylene (total)	(3)		91	1540351	17.516

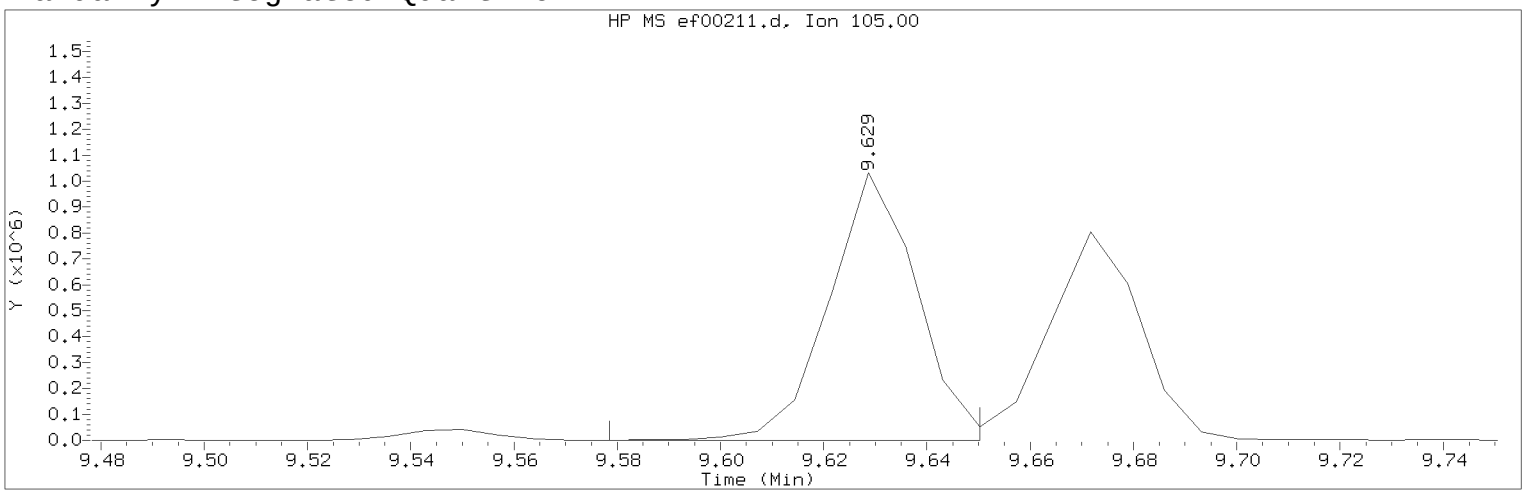
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/18/2018 at 15:10.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun18.b/ef00211.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 13:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 14:17 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

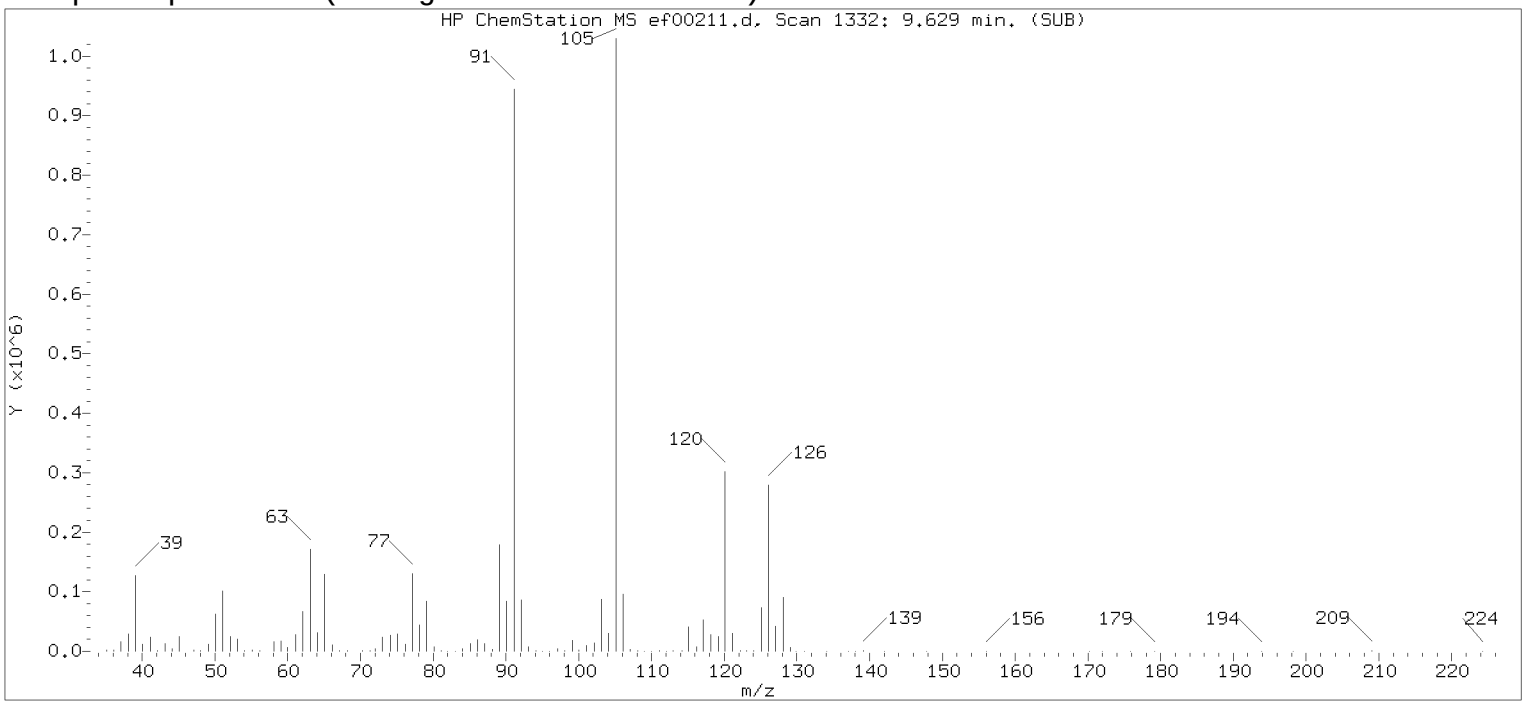
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 1219459M
Concentration (ppb(v)) : 9.9045
Integration start scan : 1324 Integration stop scan: 1334
Y at integration start : 553 Y at integration end: 553

Reason for manual integration: improper integration

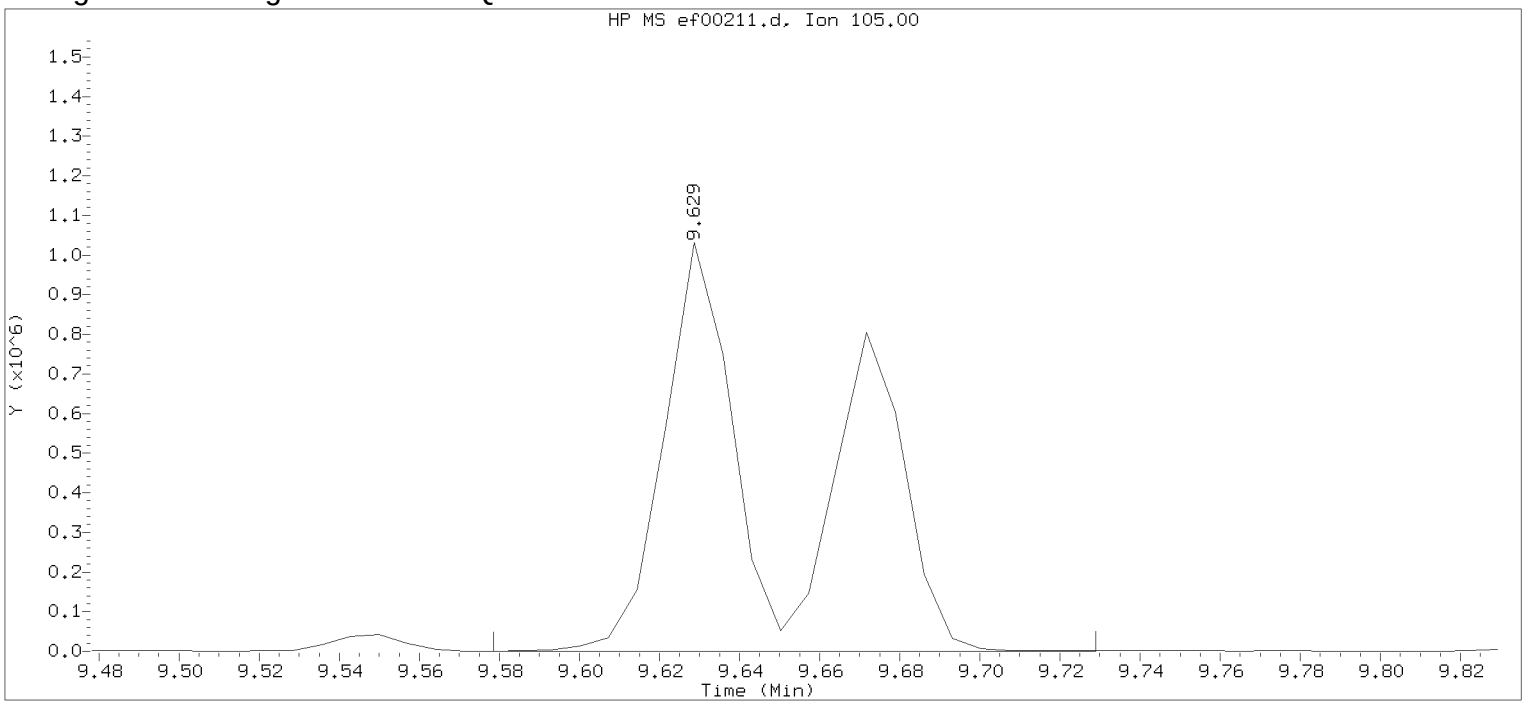
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/18/2018 at 15:10.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/19/2018 at 15:58.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



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Injection date and time: 18-JUN-2018 13:56 Analyst ID: jeb07445

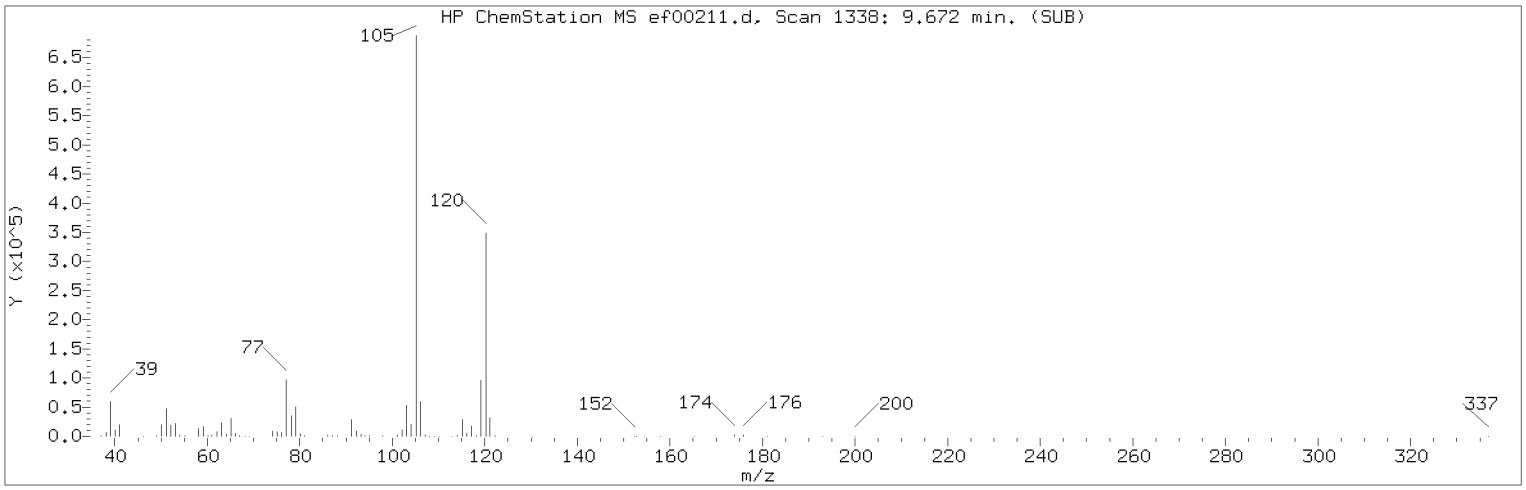
Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 18-Jun-2018 14:15 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

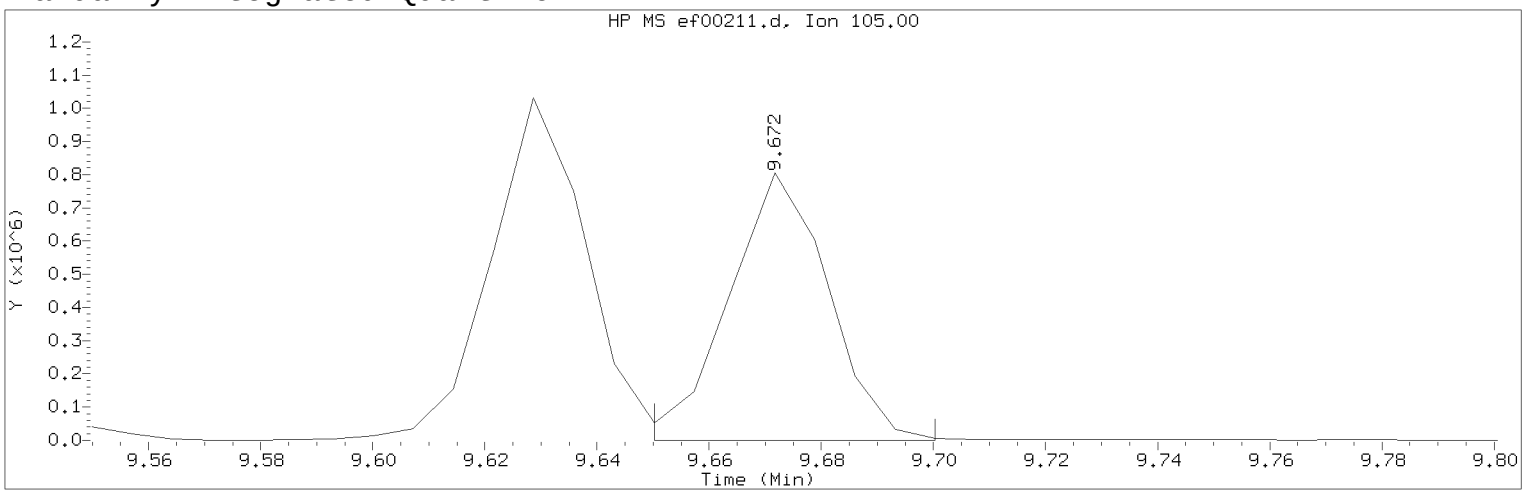
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 2194744
Concentration (ppb(v)) : 10.3706
Integration start scan : 1324 Integration stop scan: 1345
Y at integration start : 553 Y at integration end: 553

Digitally signed by Jacob E. Bailey on 06/18/2018 at 15:10.
Target 3.5 esignature used.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun18.b/ef00211.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 13:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 14:17 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

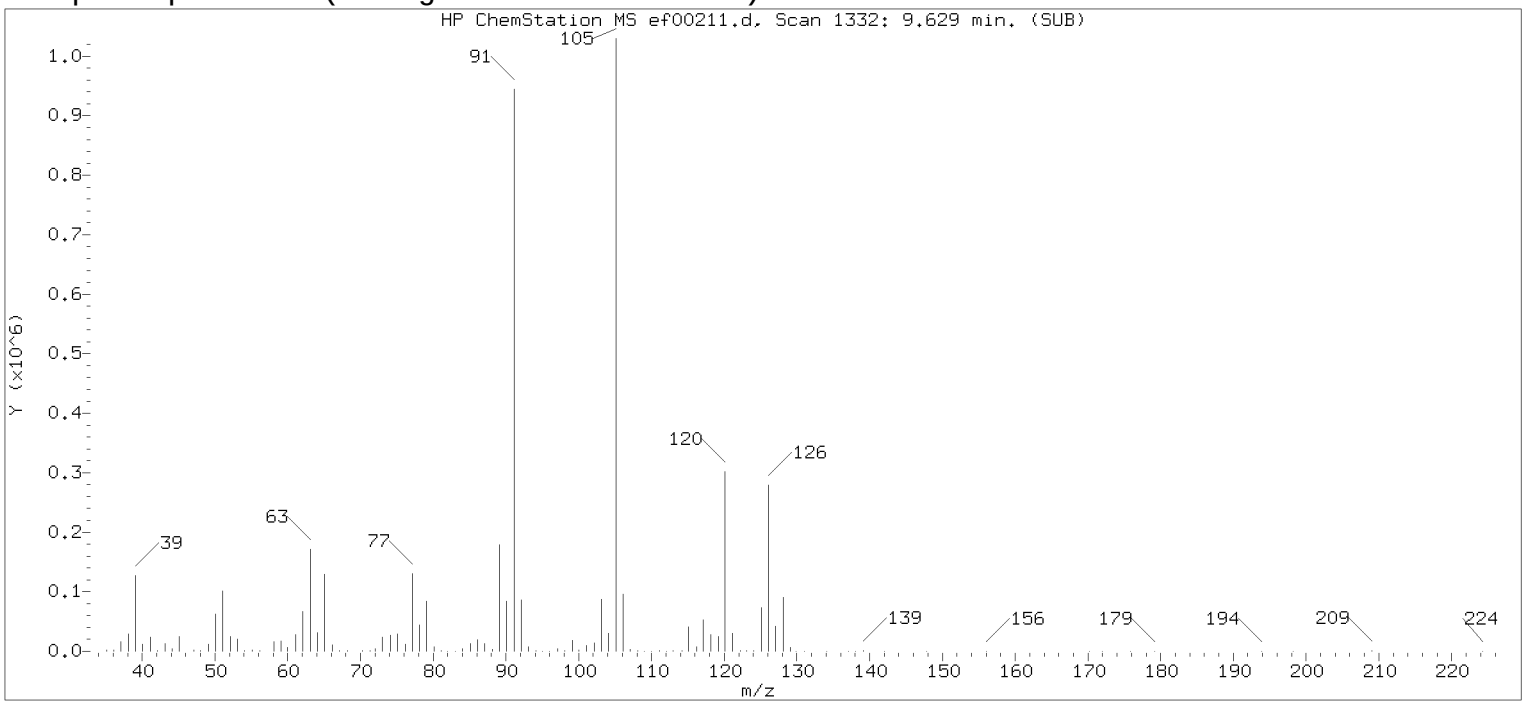
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 995355M
Concentration (ppb(v)) : 9.9112
Integration start scan : 1334 Integration stop scan: 1341
Y at integration start : 522 Y at integration end: 522

Reason for manual integration: improper integration

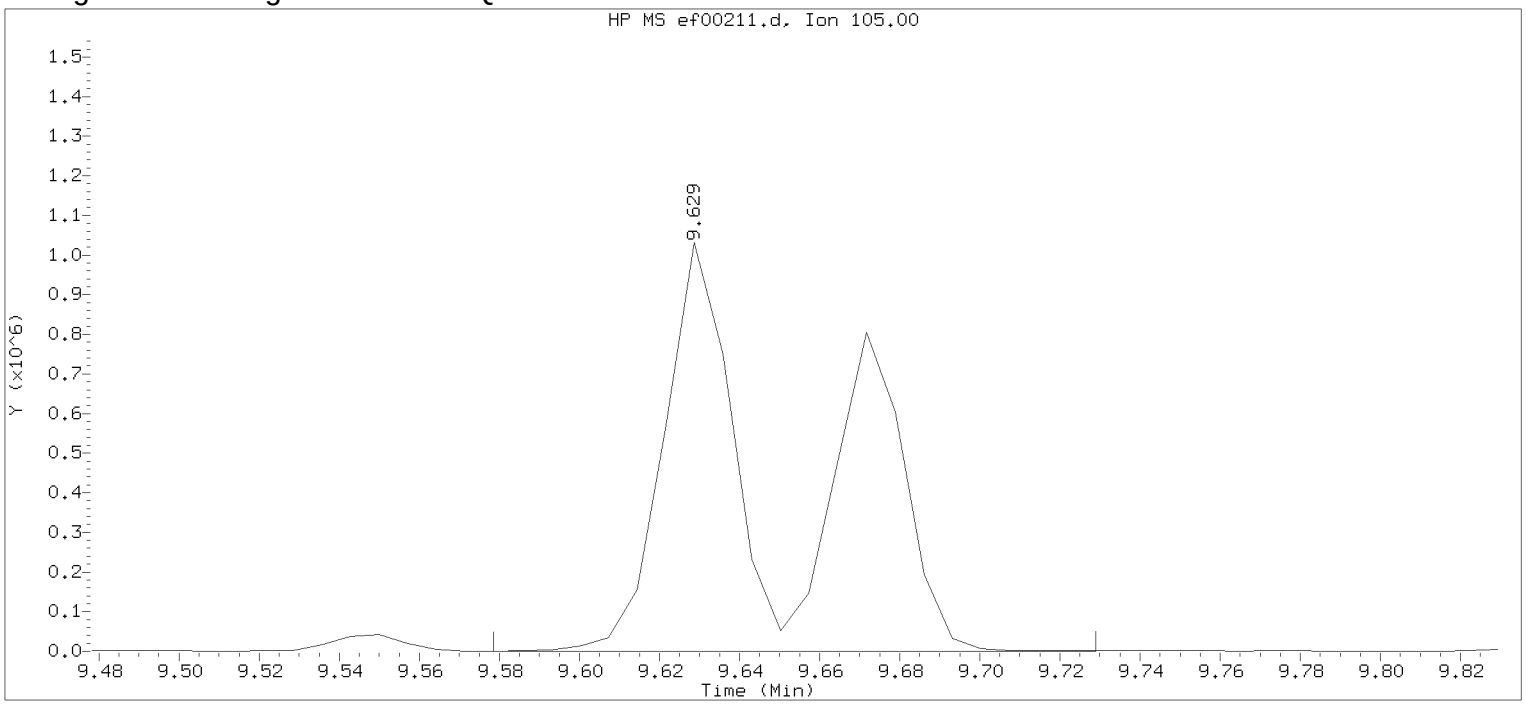
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/18/2018 at 15:10.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/19/2018 at 15:58.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun18.b/ef00211.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 13:56 Analyst ID: jeb07445

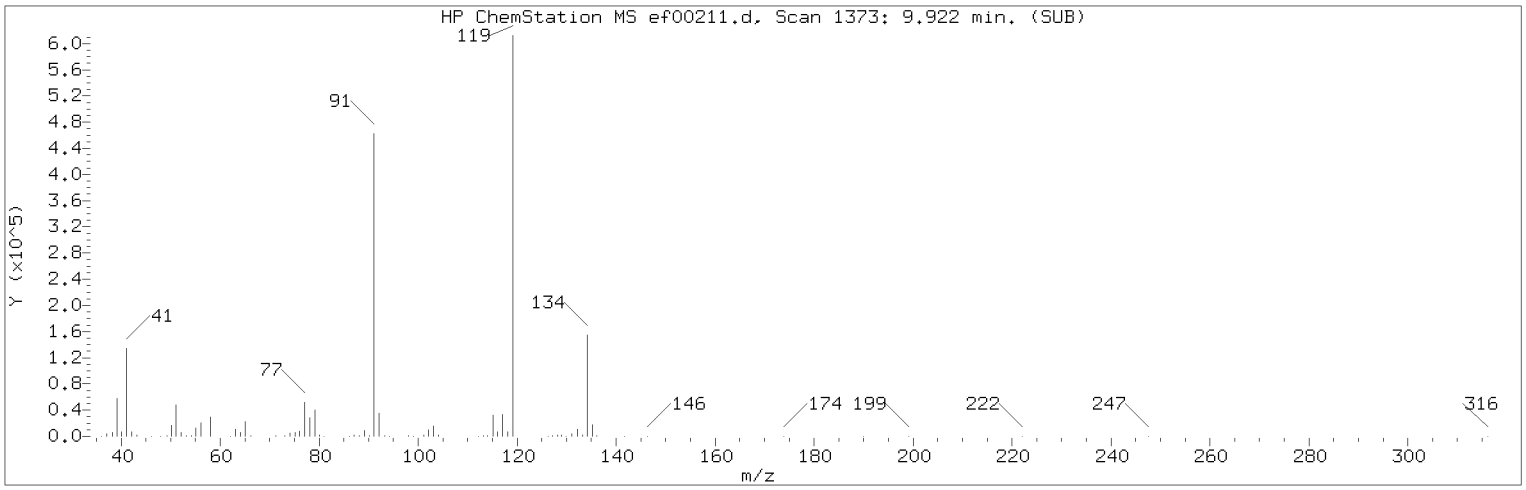
Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 18-Jun-2018 14:15 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

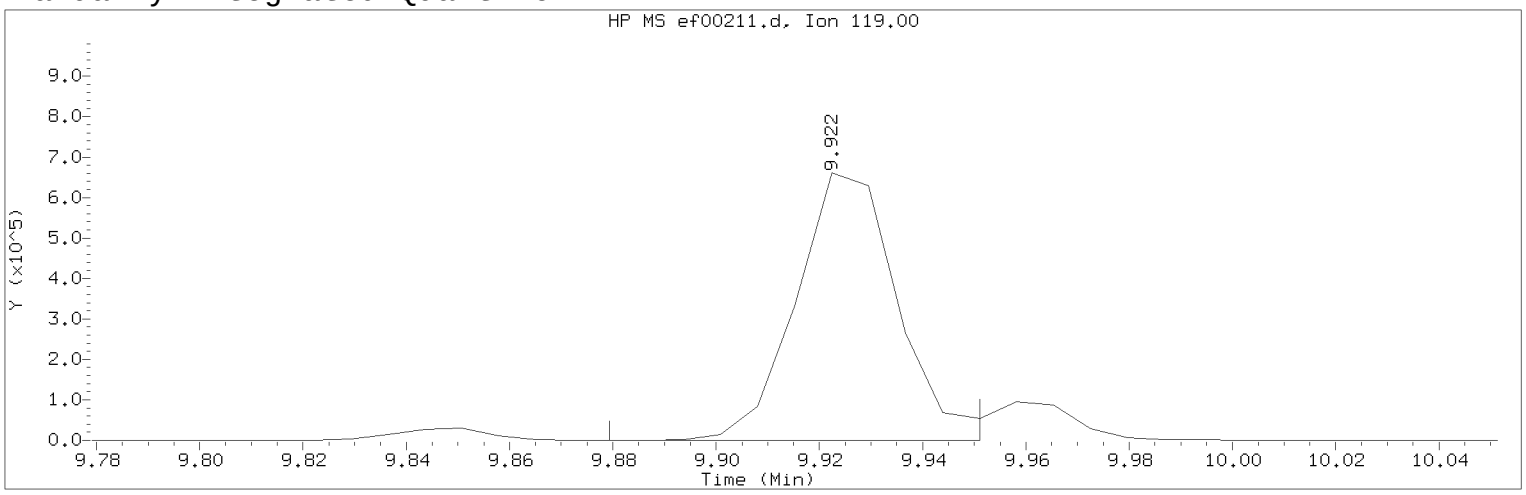
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 2196490
Concentration (ppb(v)) : 12.5012
Integration start scan : 1324 Integration stop scan: 1345
Y at integration start : 346 Y at integration end: 346

Digitally signed by Jacob E. Bailey on 06/18/2018 at 15:10.
Target 3.5 esignature used. GLED Page 1498 of 1687

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun18.b/ef00211.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 13:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 14:17 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

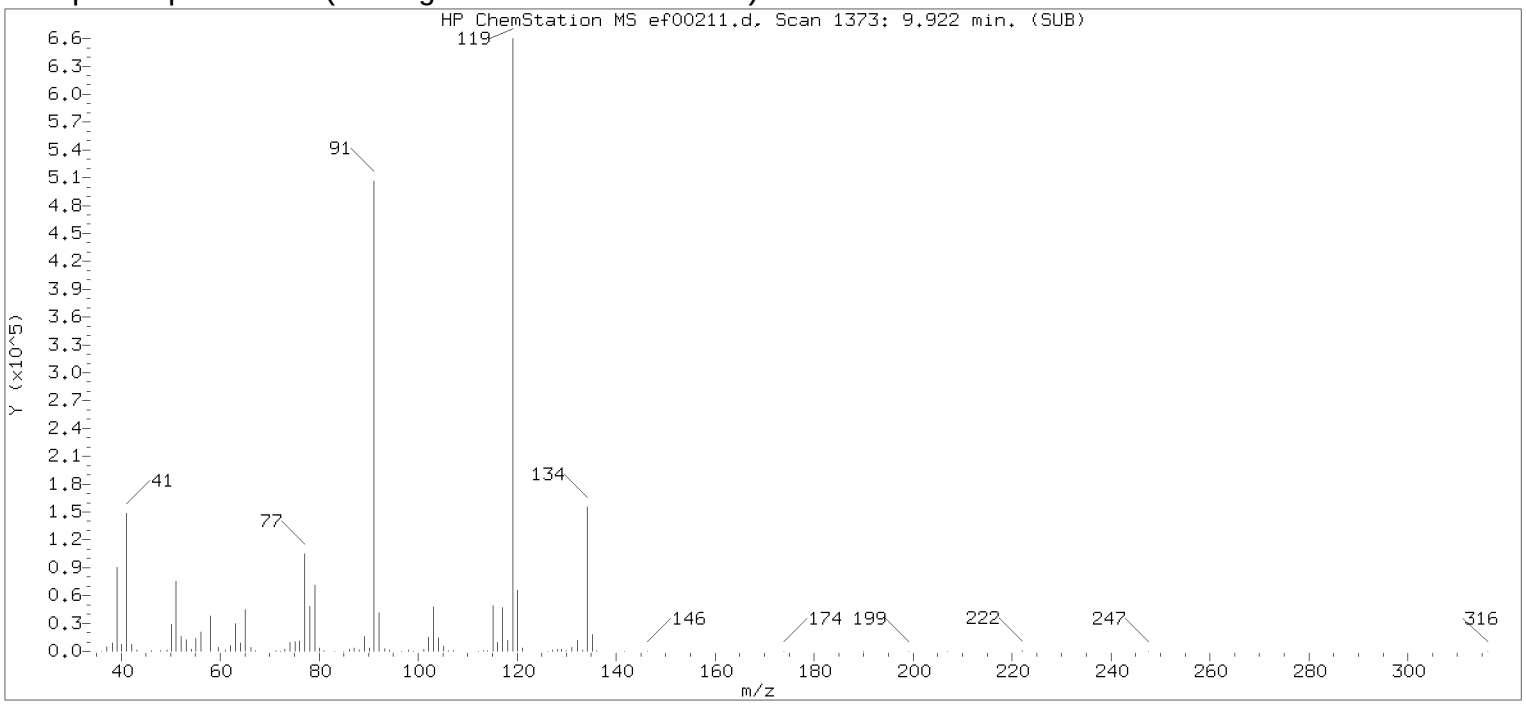
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 906073M
Concentration (ppb(v)) : 9.9446
Integration start scan : 1366 Integration stop scan: 1376
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

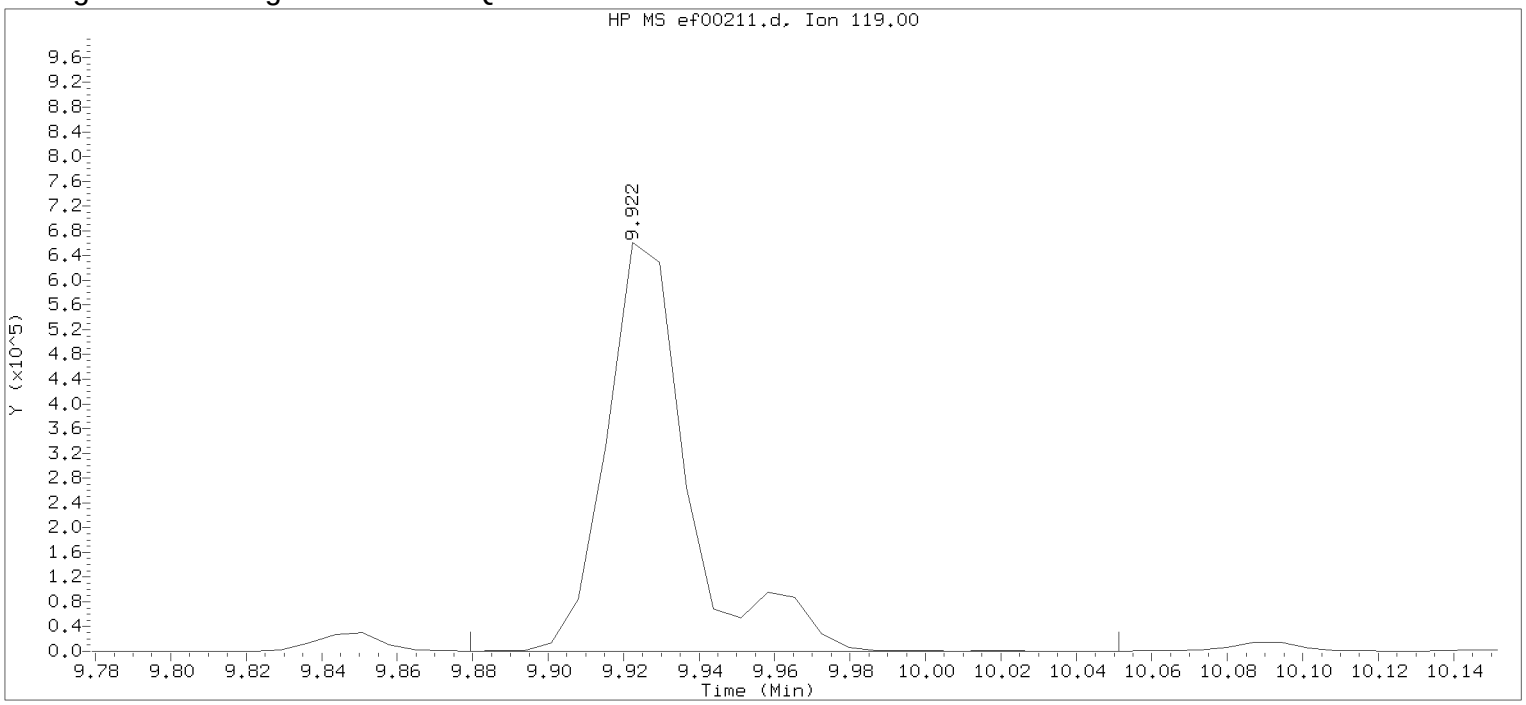
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/18/2018 at 15:10.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/19/2018 at 15:58.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun18.b/ef00211.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 13:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 18-Jun-2018 14:15 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 1002176
Concentration (ppb(v)) : 6.1961
Integration start scan : 1366 Integration stop scan: 1390
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/18/2018 at 15:10.
Target 3.5 esignature used for this page

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun18.b/ef00212.d Injection date and time: **18-JUN-2018 14:42**
Data file Sample Info. Line: VBLKE09;200;E1816930AA;VBLKE09;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1816930AA**
Date, time and analyst ID of latest file update: 18-Jun-2018 15:03 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun18.b/ef00212.d**

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 18-JUN-2018 14:17
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun18.b/ef00211.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	5.467(0.000)	751	130	392360 (-8)	10.00		254529 - 593901
51) 1,4-Difluorobenzene	6.291(0.000)	866	114	1065802 (-17)	10.00		773038 - 1803754
71) Chlorobenzene-d5	8.497(0.000)	1174	117	1166404 (-9)	10.00		771678 - 1800580

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)			Not Detected					0.5	1
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)			Not Detected					0.2	1
7) 1,3-Butadiene	(1)			Not Detected					0.4	2
8) Bromomethane	(1)			Not Detected					0.5	1
9) Chloroethane	(1)			Not Detected					0.2	1
10) Bromoethene	(1)			Not Detected					0.4	2
11) Dichlorofluoromethane	(1)			Not Detected					0.2	1
12) Trichlorofluoromethane	(1)			Not Detected					0.2	1
13) Pentane	(1)			Not Detected					0.5	1
14) Ethanol	(1)			Not Detected					0.5	2
15) Freon123a	(1)			Not Detected					0.2	1
16) Acrolein	(1)			Not Detected					1	2
17) 1,1-Dichloroethene	(1)			Not Detected					0.2	1
18) Freon 113	(1)			Not Detected					0.5	2
19) Acetone	(1)			Not Detected					0.5	2
20) Methyl Iodide	(1)			Not Detected					0.2	1
21) Carbon Disulfide	(1)			Not Detected					0.5	1
22) Isopropanol	(1)			Not Detected					0.5	2
23) Acetonitrile	(1)			Not Detected					0.5	2
24) 3-Chloropropene	(1)			Not Detected					0.2	1
25) Methylene Chloride	(1)			Not Detected					0.2	1
26) tert-Butyl Alcohol	(1)			Not Detected					0.5	1
27) Acrylonitrile	(1)			Not Detected					0.5	2
28) trans-1,2-Dichloroethene	(1)			Not Detected					0.2	1
29) Methyl t-Butyl Ether	(1)			Not Detected					0.2	1
30) Hexane	(1)			Not Detected					0.2	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.2	1
32) Vinyl Acetate	(1)			Not Detected					1	1
33) Di-Isopropyl Ether	(1)			Not Detected					0.2	1
34) Ethyl Tert-Butyl Ether	(1)			Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.2	1
36) 1,2-Dichloroethene (total)	(1)			Not Detected					0.2	1
37) 2-Butanone	(1)			Not Detected					0.5	2
38) Ethyl Acetate	(1)			Not Detected					0.5	1
39) Methyl Acrylate	(1)			Not Detected					0.2	1
41) Tetrahydrofuran	(1)			Not Detected					0.5	1
42) Chloroform	(1)			Not Detected					0.2	1
43) 1,1,1-Trichloroethane	(1)			Not Detected					0.2	1
44) Cyclohexane	(1)			Not Detected					0.2	1

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun18.b/ef00212.d Injection date and time: **18-JUN-2018 14:42**
Data file Sample Info. Line: VBLKE09;200;E1816930AA;VBLKE09;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1816930AA**
Date, time and analyst ID of latest file update: 18-Jun-2018 15:03 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun18.b/ef00212.d**

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 18-JUN-2018 14:17
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun18.b/ef00211.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
45) Carbon Tetrachloride	(1)				Not Detected					0.2	1
46) Benzene	(2)				Not Detected					0.2	1
47) 1,2-Dichloroethane	(2)				Not Detected					0.2	1
48) Isooctane	(2)				Not Detected					0.2	1
49) Tert-Amyl Methyl Ether	(2)				Not Detected					0.2	1
50) Heptane	(2)				Not Detected					0.5	1
52) Trichloroethene	(2)				Not Detected					0.2	1
53) Ethyl Acrylate	(2)				Not Detected					0.2	1
54) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
55) Dibromomethane	(2)				Not Detected					0.2	1
56) 1,4-Dioxane	(2)				Not Detected					0.5	1
57) Methyl Methacrylate	(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)				Not Detected					0.2	1
62) Octane	(3)				Not Detected					0.2	1
63) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
64) 1,3-Dichloropropene (total)	(3)				Not Detected					0.2	1
65) Ethyl Methacrylate	(3)				Not Detected					0.2	1
66) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
67) Tetrachloroethene	(3)				Not Detected					0.2	1
68) 2-Hexanone	(3)				Not Detected					0.5	2
69) Dibromochloromethane	(3)				Not Detected					0.2	1
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)				Not Detected					0.2	1
75) m/p-Xylene	(3)				Not Detected					0.2	1
76) o-Xylene	(3)				Not Detected					0.2	1
77) Xylene (total)	(3)				Not Detected					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
84) n-Propylbenzene	(3)				Not Detected					0.5	1
85) 2-Chlorotoluene	(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
88) Alpha Methyl Styrene	(3)				Not Detected					0.2	1
89) tert-Butylbenzene	(3)				Not Detected					0.5	1
90) 1,2,4-Trimethylbenzene	(3)				Not Detected					0.2	1
91) sec-Butylbenzene	(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
94) p-Isopropyltoluene	(3)				Not Detected					0.2	1
95) Benzyl Chloride	(3)				Not Detected					0.5	1
96) 1,2-Dichlorobenzene	(3)				Not Detected					0.2	1
97) n-Butylbenzene	(3)				Not Detected					0.2	1
98) Hexachloroethane	(3)				Not Detected					0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)				Not Detected					0.2	1
100) 1,2,4-Trichlorobenzene	(3)				Not Detected					0.5	2

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Data file: /chem/HP22820.i/18jun18.b/ef00212.d Injection date and time: **18-JUN-2018 14:42**
Data file Sample Info. Line: VBLKE09;200;E1816930AA;VBLKE09;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1816930AA**
Date, time and analyst ID of latest file update: 18-Jun-2018 15:03 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun18.b/ef00212.d**

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 18-JUN-2018 14:17
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun18.b/ef00211.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
101) Hexachlorobutadiene	(3)				Not Detected					0.4	2
102) Naphthalene	(3)				Not Detected					0.4	1

Total number of targets = 99

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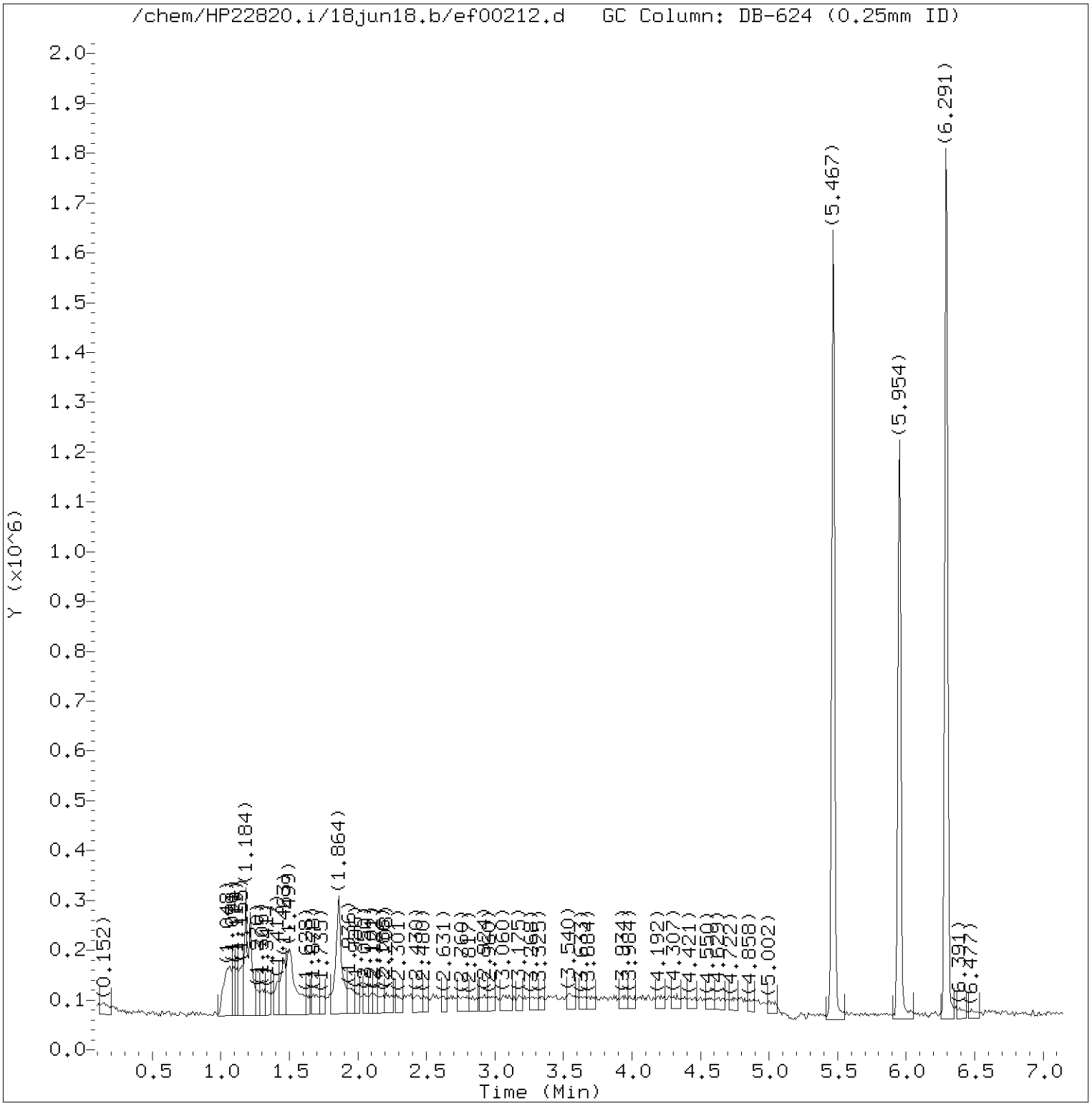
Secondary review performed and digitally signed by Jeffrey B. Smith on 06/19/2018 at 15:58. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun18.b/ef00212.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 14:42 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 15:03 jeb07445

Sample Name: VBLKE09 Lab Sample ID: VBLKE09

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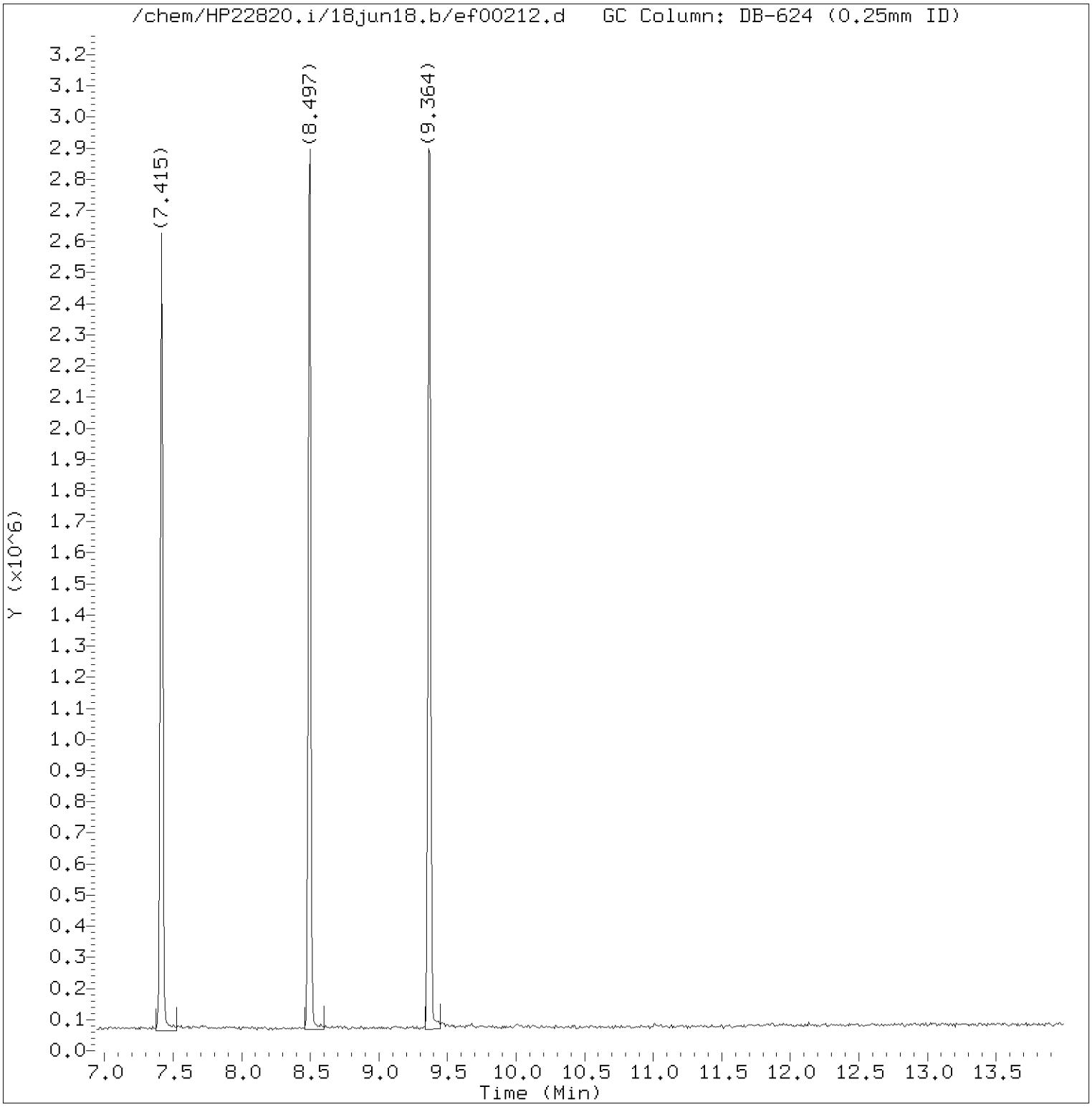
on 06/18/2018 at 15:10.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun18.b/ef00212.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 14:42 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 15:03 jeb07445

Sample Name: VBLKE09 Lab Sample ID: VBLKE09

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on 06/18/2018 at 15:10.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun18.b/ef00212.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 14:42 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 15:03 jeb07445

Sample Name: VBLKE09 Lab Sample ID: VBLKE09

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	392360	10.000
51)*1,4-Difluorobenzene	(2)	6.291	114	1065802	10.000
71)*Chlorobenzene-d5	(3)	8.497	117	1166404	10.000

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/18/2018 at 15:10.
Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun18.b/ef00213.d Injection date and time: **18-JUN-2018 15:27**
Data file Sample Info. Line: LCSE09;200;E1816930AA;LCSE09;0;3;LCS; Instrument ID: **HP22820.i** Batch: **E1816930AA**
Date, time and analyst ID of latest file update: 18-Jun-2018 16:18 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun18.b/ef00212.d**

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 18-JUN-2018 14:17
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun18.b/ef00211.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	5.467(0.000)	751	130	393442 (-7)	10.00		254529 - 593901
51) 1,4-Difluorobenzene	6.291(0.000)	866	114	1191474 (-8)	10.00		773038 - 1803754
71) Chlorobenzene-d5	8.497(0.000)	1174	117	1199347 (-7)	10.00		771678 - 1800580

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)	1.613(-0.000)	41	173660	9.339	9.34			0.5	1
2) Dichlorodifluoromethane	(1)	1.649(-0.000)	85	715269	10.982	10.98			0.2	1
3) Chlorodifluoromethane	(1)	1.670(-0.000)	51	474026	11.479	11.48			0.2	1
4) Freon 114	(1)	1.778(-0.000)	85	747231	10.690	10.69			0.2	1
5) Chloromethane	(1)	1.850(-0.000)	50	308743	11.776	11.78			0.2	1
6) Vinyl Chloride	(1)	1.979(-0.000)	62	261041	10.415	10.41			0.2	1
7) 1,3-Butadiene	(1)	2.007(-0.000)	54	153977	8.540	8.54			0.4	2
8) Bromomethane	(1)	2.351(-0.000)	94	241788	11.331	11.33			0.5	1
9) Chloroethane	(1)	2.480(-0.000)	64	152426	10.913	10.91			0.2	1
10) Bromoethene	(1)	2.695(-0.000)	106	200517	9.222	9.22			0.4	2
11) Dichlorofluoromethane	(1)	2.731(-0.000)	67	642571	11.565	11.57			0.2	1
12) Trichlorofluoromethane	(1)	2.774(-0.000)	101	729428	10.481	10.48			0.2	1
13) Pentane	(1)	2.881(-0.000)	43	330477	8.282	8.28			0.5	1
14) Ethanol	(1)	3.082(-0.001)	45	86617	9.950	9.95			0.5	2
15) Freon123a	(1)	3.203(0.001)	67	623515	12.086	12.09			0.2	1
16) Acrolein	(1)	3.340(-0.000)	56	82995	8.978	8.98			1	2
17) 1,1-Dichloroethene	(1)	3.433(-0.000)	61	374182	9.811	9.81			0.2	1
18) Freon 113	(1)	3.447(-0.001)	103	388252	9.884	9.88			0.5	2
19) Acetone	(1)	3.533(-0.000)	43	424823	11.133	11.13			0.5	2
20) Methyl Iodide	(1)	3.612(-0.001)	142	519948	8.339	8.34			0.2	1
21) Carbon Disulfide	(1)	3.662(-0.000)	76	778805	10.910	10.91			0.5	1
22) Isopropanol	(1)	3.719(-0.000)	45	287714	8.912	8.91			0.5	2
23) Acetonitrile	(1)	3.877(-0.000)	40	175123	10.346	10.35			0.5	2
24) 3-Chloropropene	(1)	3.870(-0.000)	76	104488	10.749	10.75			0.2	1
25) Methylene Chloride	(1)	4.013(-0.000)	84	256525	12.103	12.10			0.2	1
26) tert-Butyl Alcohol	(1)	4.163(-0.000)	59	298732	8.282	8.28			0.5	1
27) Acrylonitrile	(1)	4.299(-0.000)	53	227774	10.823	10.82			0.5	2
28) trans-1,2-Dichloroethene	(1)	4.292(-0.000)	61	365775	10.404	10.40			0.2	1
29) Methyl t-Butyl Ether	(1)	4.299(-0.000)	73	467820	7.788	7.79			0.2	1
30) Hexane	(1)	4.564(-0.000)	57	281549	7.851	7.85			0.2	1
31) 1,1-Dichloroethane	(1)	4.722(-0.000)	63	505640	10.500	10.50			0.2	1
32) Vinyl Acetate	(1)	4.786(-0.000)	86	47691	9.356	9.36			1	1
33) Di-Isopropyl Ether	(1)	4.786(-0.000)	45	688645	8.861	8.86			0.2	1
34) Ethyl Tert-Butyl Ether	(1)	5.116(-0.000)	59	377949	7.203	7.20			0.2	1
35) cis-1,2-Dichloroethene	(1)	5.259(-0.000)	61	303392	9.220	9.22			0.2	1
36) 1,2-Dichloroethene (total)	(1)		61	669167	19.624	19.62			0.2	1
37) 2-Butanone	(1)	5.281(-0.000)	72	119636	9.640	9.64			0.5	2
38) Ethyl Acetate	(1)	5.331(-0.001)	70	51124	8.409	8.41			0.5	1
39) Methyl Acrylate	(1)	5.360(-0.000)	55	374241	9.277	9.28			0.2	1
41) Tetrahydrofuran	(1)	5.503(0.000)	42	235302	8.623	8.62			0.5	1
42) Chloroform	(1)	5.539(0.000)	83	614074	10.736	10.74			0.2	1
43) 1,1,1-Trichloroethane	(1)	5.682(0.000)	97	535552	10.149	10.15			0.2	1
44) Cyclohexane	(1)	5.710(0.000)	56	309687	8.203	8.20			0.2	1

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Data file: /chem/HP22820.i/18jun18.b/ef00213.d Injection date and time: **18-JUN-2018 15:27**
Data file Sample Info. Line: LCSE09;200;E1816930AA;LCSE09;0;3;LCS; Instrument ID: **HP22820.i** Batch: **E1816930AA**
Date, time and analyst ID of latest file update: 18-Jun-2018 16:18 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun18.b/ef00212.d**

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 18-JUN-2018 14:17
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun18.b/ef00211.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
45) Carbon Tetrachloride	(1)	5.811(0.000)	117	557114	10.788	10.79			0.2	1
46) Benzene	(2)	5.990(-0.000)	78	762729	10.449	10.45			0.2	1
47) 1,2-Dichloroethane	(2)	6.011(-0.000)	62	408957	11.955	11.95			0.2	1
48) Isooctane	(2)	6.040(-0.000)	57	1029191	10.360	10.36			0.2	1
49) Tert-Amyl Methyl Ether	(2)	6.069(-0.000)	73	419436	9.062	9.06			0.2	1
50) Heptane	(2)	6.176(-0.000)	43	375381	9.761	9.76			0.5	1
52) Trichloroethene	(2)	6.491(0.000)	130	330537	10.352	10.35			0.2	1
53) Ethyl Acrylate	(2)	6.577(-0.001)	55	405727	9.047	9.05			0.2	1
54) 1,2-Dichloropropane	(2)	6.678(0.000)	63	316048	11.329	11.33			0.2	1
55) Dibromomethane	(2)	6.771(0.000)	174	329153	11.237	11.24			0.2	1
56) 1,4-Dioxane	(2)	6.778(0.000)	88	165217	9.864	9.86			0.5	1
57) Methyl Methacrylate	(2)	6.749(0.000)	69	203442	8.692	8.69			0.2	1
58) Bromodichloromethane	(2)	6.885(0.000)	83	635286	11.628	11.63			0.2	1
59) cis-1,3-Dichloropropene	(2)	7.215(0.000)	75	369879	9.301	9.30			0.2	1
60) 4-Methyl-2-Pentanone	(2)	7.329(0.000)	43	534458	9.830	9.83			0.5	2
61) Toluene	(3)	7.465(-0.000)	91	887352	10.299	10.30			0.2	1
62) Octane	(3)	7.516(-0.000)	43	557253	10.450	10.45			0.2	1
63) trans-1,3-Dichloropropene	(3)	7.630(-0.000)	75	325111	10.320	10.32			0.2	1
64) 1,3-Dichloropropene (total)	(3)		75	694990	19.621	19.62			0.2	1
65) Ethyl Methacrylate	(3)	7.673(-0.000)	69	333814	9.070	9.07			0.2	1
66) 1,1,2-Trichloroethane	(3)	7.774(-0.000)	97	373146	11.432	11.43			0.2	1
67) Tetrachloroethene	(3)	7.867(-0.000)	166	436787	9.941	9.94			0.2	1
68) 2-Hexanone	(3)	7.945(-0.000)	43	514466	10.457	10.46			0.5	2
69) Dibromochloromethane	(3)	8.067(-0.000)	127	457894	11.687	11.69			0.2	1
70) 1,2-Dibromoethane	(3)	8.160(-0.000)	107	528904	10.951	10.95			0.2	1
72) Chlorobenzene	(3)	8.518(0.000)	112	722026	9.915	9.91			0.2	1
73) 1,1,1,2-Tetrachloroethane	(3)	8.569(0.000)	131	416577	11.760	11.76			0.2	1
74) Ethylbenzene	(3)	8.583(0.000)	91	1042808	9.626	9.63			0.2	1
75) m/p-Xylene	(3)	8.669(0.000)	91	785464	9.496	9.50			0.2	1
76) o-Xylene	(3)	8.970(0.000)	91	751594	9.245	9.24			0.2	1
77) Xylene (total)	(3)		91	1537058	18.741	18.74			0.2	1
78) Styrene	(3)	8.977(0.000)	104	614870	9.989	9.99			0.2	1
79) Bromoform	(3)	9.142(0.000)	173	534583	11.360	11.36			0.2	1
80) Cumene	(3)	9.242(0.000)	105	1016989	9.382	9.38			0.2	1
81) Bromobenzene	(3)	9.493(-0.000)	156	414285	10.013	10.01			0.2	1
82) 1,1,2,2-Tetrachloroethane	(3)	9.471(0.000)	83	895361	11.831	11.83			0.2	1
83) 1,2,3-Trichloropropane	(3)	9.514(0.000)	110	248315	11.493	11.49			0.2	1
84) n-Propylbenzene	(3)	9.543(0.000)	120	321266	9.998	10.00			0.5	1
85) 2-Chlorotoluene	(3)	9.629(0.000)	126	341297	11.129	11.13			0.2	1
86) 4-Ethyltoluene	(3)	9.629(0.000)	105	1231803M	10.729	10.73			0.2	1
87) 1,3,5-Trimethylbenzene	(3)	9.672(0.000)	105	1018489M	10.875	10.88			0.2	1
88) Alpha Methyl Styrene	(3)	9.844(0.000)	118	395230	9.155	9.16			0.2	1
89) tert-Butylbenzene	(3)	9.922(0.000)	119	918471M	10.810	10.81			0.5	1
90) 1,2,4-Trimethylbenzene	(3)	9.958(0.000)	105	1041847	11.344	11.34			0.2	1
91) sec-Butylbenzene	(3)	10.087(0.000)	105	1407460	10.702	10.70			0.2	1
92) 1,3-Dichlorobenzene	(3)	10.187(0.000)	146	780402	11.009	11.01			0.2	1
93) 1,4-Dichlorobenzene	(3)	10.259(0.000)	146	743650	10.601	10.60			0.2	1
94) p-Isopropyltoluene	(3)	10.187(0.000)	119	1132819	10.770	10.77			0.2	1
95) Benzyl Chloride	(3)	10.359(0.000)	91	468397	9.931	9.93			0.5	1
96) 1,2-Dichlorobenzene	(3)	10.546(-0.000)	146	709286	10.759	10.76			0.2	1
97) n-Butylbenzene	(3)	10.503(0.000)	91	1086671	10.523	10.52			0.2	1
98) Hexachloroethane	(3)	10.732(0.000)	117	368138	13.348	13.35			0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)	11.140(0.000)	157	310610	10.118	10.12			0.2	1
100) 1,2,4-Trichlorobenzene	(3)	11.763(-0.000)	180	318781	7.464	7.46			0.5	2

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey on 06/18/2018 at 16:19. Target 3.5 esignature user ID: jeb07445

Data file: /chem/HP22820.i/18jun18.b/ef00213.d Injection date and time: **18-JUN-2018 15:27**
Data file Sample Info. Line: LCSE09;200;E1816930AA;LCSE09;0;3;LCS; Instrument ID: **HP22820.i** Batch: **E1816930AA**
Date, time and analyst ID of latest file update: 18-Jun-2018 16:18 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun18.b/ef00212.d**

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 18-JUN-2018 14:17
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun18.b/ef00211.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
101) Hexachlorobutadiene	(3)	11.871(0.000)	225	342929	9.659	9.66			0.4	2
102) Naphthalene	(3)	11.964(0.000)	128	627250	7.590	7.59			0.4	1

Total number of targets = 99

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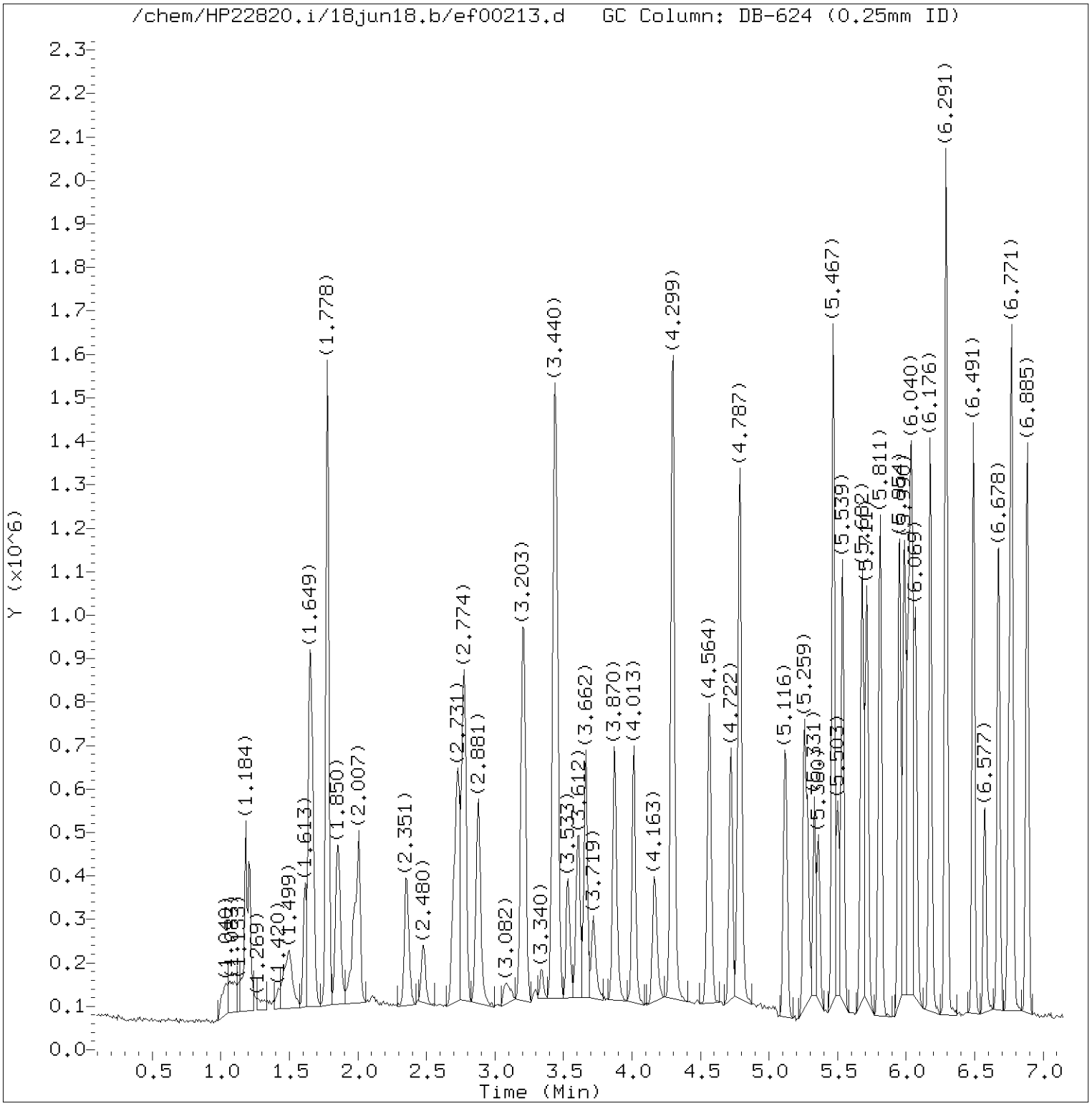
Secondary review performed and digitally signed by Jeffrey B. Smith on 06/19/2018 at 15:58. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

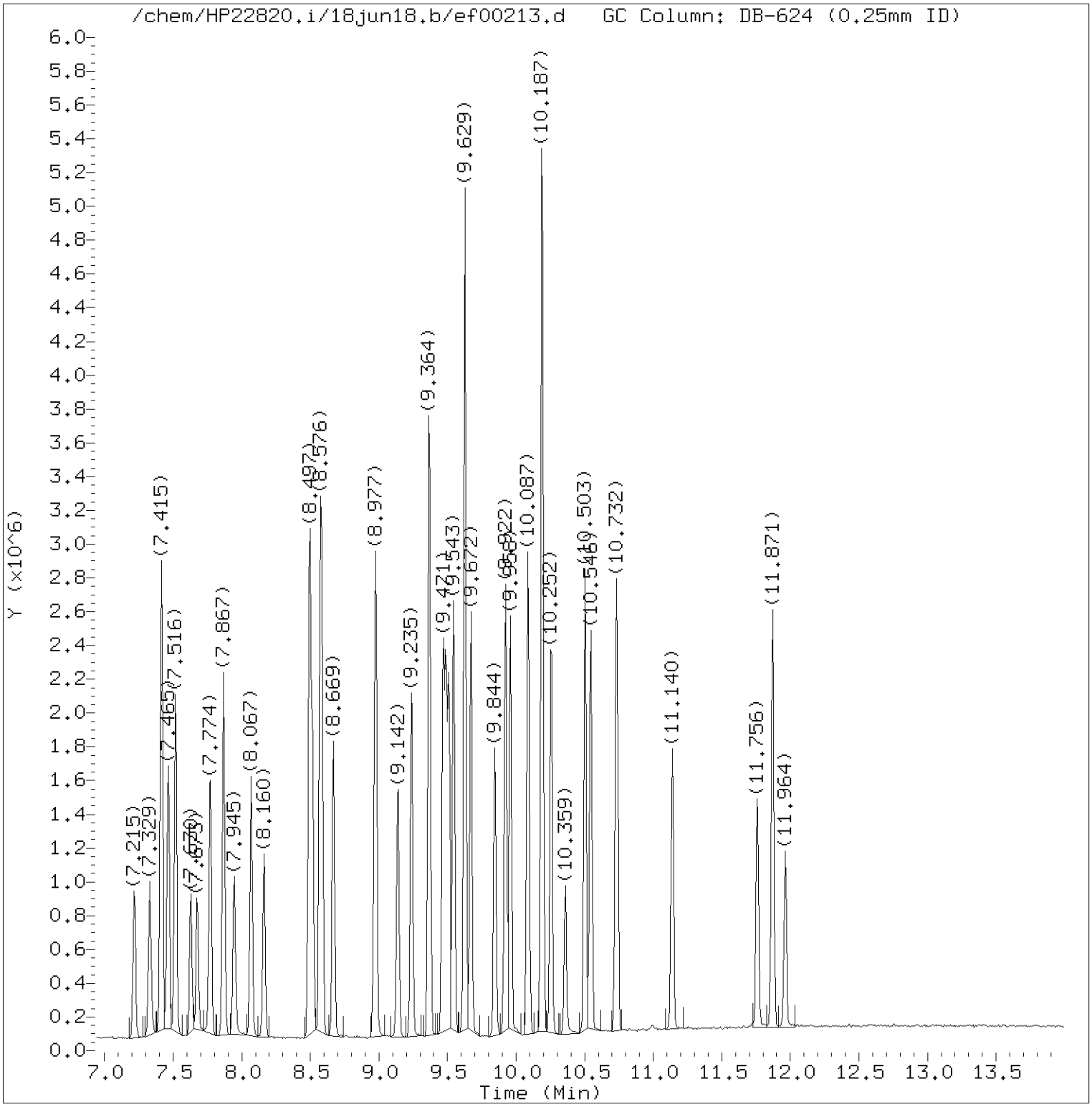
Target Revision 3.5

Data File: /chem/HP22820.i/18jun18.b/ef00213.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 15:27 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 16:18 jeb07445

Sample Name: LCSE09 Lab Sample ID: LCSE09

Digitally signed by Jacob E. Bailey
on 06/18/2018 at 16:18.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun18.b/ef00213.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 15:27 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 16:18 jeb07445

Sample Name: LCSE09 Lab Sample ID: LCSE09

Digitally signed by Jacob E. Bailey
on 06/18/2018 at 16:19.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun18.b/ef00213.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 15:27 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 16:18 jeb07445

Sample Name: LCSE09 Lab Sample ID: LCSE09

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.613	41	173660	9.339
2) Dichlorodifluoromethane	(1)	1.649	85	715269	10.982
3) Chlorodifluoromethane	(1)	1.671	51	474026	11.479
4) Freon 114	(1)	1.778	85	747231	10.690
5) Chloromethane	(1)	1.850	50	308743	11.776
6) Vinyl Chloride	(1)	1.979	62	261041	10.415
7) 1,3-Butadiene	(1)	2.007	54	153977	8.540
8) Bromomethane	(1)	2.351	94	241788	11.331
9) Chloroethane	(1)	2.480	64	152426	10.913
10) Bromoethene	(1)	2.695	106	200517	9.222
11) Dichlorofluoromethane	(1)	2.731	67	642571	11.565
12) Trichlorofluoromethane	(1)	2.774	101	729428	10.481
13) Pentane	(1)	2.881	43	330477	8.282
14) Ethanol	(1)	3.082	45	86617	9.950
15) Freon123a	(1)	3.203	67	623515	12.086
16) Acrolein	(1)	3.340	56	82995	8.978
17) 1,1-Dichloroethene	(1)	3.433	61	374182	9.811
18) Freon 113	(1)	3.447	103	388252	9.884
19) Acetone	(1)	3.533	43	424823	11.133
20) Methyl Iodide	(1)	3.612	142	519948	8.339
21) Carbon Disulfide	(1)	3.662	76	778805	10.910
22) Isopropanol	(1)	3.719	45	287714	8.912
24) 3-Chloropropene	(1)	3.870	76	104488	10.749
23) Acetonitrile	(1)	3.877	40	175123	10.346
25) Methylene Chloride	(1)	4.013	84	256525	12.103
26) tert-Butyl Alcohol	(1)	4.163	59	298732	8.282
28) trans-1,2-Dichloroethene	(1)	4.292	61	365775	10.404
27) Acrylonitrile	(1)	4.299	53	227774	10.823
29) Methyl t-Butyl Ether	(1)	4.299	73	467820	7.788
30) Hexane	(1)	4.564	57	281549	7.851
31) 1,1-Dichloroethane	(1)	4.722	63	505640	10.500
32) Vinyl Acetate	(1)	4.787	86	47691	9.356
33) Di-Isopropyl Ether	(1)	4.787	45	688645	8.861
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	377949	7.203
35) cis-1,2-Dichloroethene	(1)	5.259	61	303392	9.220
37) 2-Butanone	(1)	5.281	72	119636	9.640
38) Ethyl Acetate	(1)	5.331	70	51124	8.409
39) Methyl Acrylate	(1)	5.360	55	374241	9.277

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on 06/18/2018 at 16:19.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun18.b/ef00213.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 15:27 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 16:18 jeb07445

Sample Name: LCSE09 Lab Sample ID: LCSE09

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	393442	10.000
41) Tetrahydrofuran	(1)	5.503	42	235302	8.623
42) Chloroform	(1)	5.539	83	614074	10.736
43) 1,1,1-Trichloroethane	(1)	5.682	97	535552	10.149
44) Cyclohexane	(1)	5.711	56	309687	8.203
45) Carbon Tetrachloride	(1)	5.811	117	557114	10.788
46) Benzene	(2)	5.990	78	762729	10.449
47) 1,2-Dichloroethane	(2)	6.011	62	408957	11.955
48) Isooctane	(2)	6.040	57	1029191	10.360
49) Tert-Amyl Methyl Ether	(2)	6.069	73	419436	9.062
50) Heptane	(2)	6.176	43	375381	9.761
51)*1,4-Difluorobenzene	(2)	6.291	114	1191474	10.000
52) Trichloroethene	(2)	6.491	130	330537	10.352
53) Ethyl Acrylate	(2)	6.577	55	405727	9.047
36) 1,2-Dichloroethene (total)	(1)		61	669167	19.624
54) 1,2-Dichloropropane	(2)	6.678	63	316048	11.329
57) Methyl Methacrylate	(2)	6.749	69	203442	8.692
55) Dibromomethane	(2)	6.771	174	329153	11.237
56) 1,4-Dioxane	(2)	6.778	88	165217	9.864
58) Bromodichloromethane	(2)	6.885	83	635286	11.628
59) cis-1,3-Dichloropropene	(2)	7.215	75	369879	9.301
60) 4-Methyl-2-Pentanone	(2)	7.329	43	534458	9.830
61) Toluene	(3)	7.465	91	887352	10.299
62) Octane	(3)	7.516	43	557253	10.450
63) trans-1,3-Dichloropropene	(3)	7.630	75	325111	10.320
65) Ethyl Methacrylate	(3)	7.673	69	333814	9.070
66) 1,1,2-Trichloroethane	(3)	7.774	97	373146	11.432
67) Tetrachloroethene	(3)	7.867	166	436787	9.941
68) 2-Hexanone	(3)	7.945	43	514466	10.457
69) Dibromochloromethane	(3)	8.067	127	457894	11.687
70) 1,2-Dibromoethane	(3)	8.160	107	528904	10.951
71)*Chlorobenzene-d5	(3)	8.497	117	1199347	10.000
72) Chlorobenzene	(3)	8.518	112	722026	9.915
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	416577	11.760
74) Ethylbenzene	(3)	8.583	91	1042808	9.626
75) m/p-Xylene	(3)	8.669	91	785464	9.496
76) o-Xylene	(3)	8.970	91	751594	9.245
78) Styrene	(3)	8.977	104	614870	9.989

* = Compound is an internal standard.

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on 06/18/2018 at 16:19.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun18.b/ef00213.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 15:27 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 16:18 jeb07445

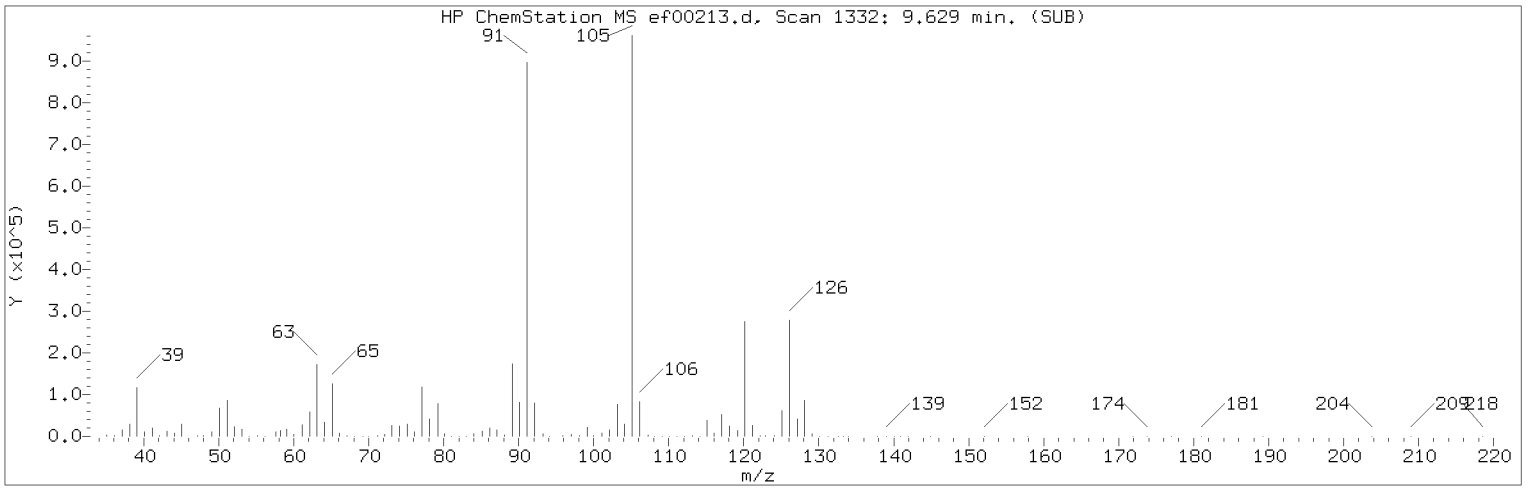
Sample Name: LCSE09 Lab Sample ID: LCSE09

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	534583	11.360
80) Cumene	(3)	9.242	105	1016989	9.382
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	895361	11.831
81) Bromobenzene	(3)	9.493	156	414285	10.013
83) 1,2,3-Trichloropropane	(3)	9.514	110	248315	11.493
84) n-Propylbenzene	(3)	9.543	120	321266	9.998
86) 4-Ethyltoluene	(3)	9.629	105	1231803M	10.729
85) 2-Chlorotoluene	(3)	9.629	126	341297	11.129
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	1018489M	10.875
88) Alpha Methyl Styrene	(3)	9.844	118	395230	9.155
89) tert-Butylbenzene	(3)	9.922	119	918471M	10.810
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	1041847	11.344
91) sec-Butylbenzene	(3)	10.087	105	1407460	10.702
92) 1,3-Dichlorobenzene	(3)	10.187	146	780402	11.009
94) p-Isopropyltoluene	(3)	10.187	119	1132819	10.770
93) 1,4-Dichlorobenzene	(3)	10.259	146	743650	10.601
95) Benzyl Chloride	(3)	10.359	91	468397	9.931
97) n-Butylbenzene	(3)	10.503	91	1086671	10.523
96) 1,2-Dichlorobenzene	(3)	10.546	146	709286	10.759
98) Hexachloroethane	(3)	10.732	117	368138	13.348
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	310610	10.118
100) 1,2,4-Trichlorobenzene	(3)	11.763	180	318781	7.464
101) Hexachlorobutadiene	(3)	11.871	225	342929	9.659
102) Naphthalene	(3)	11.964	128	627250	7.590
64) 1,3-Dichloropropene (total)	(3)		75	694990	19.621
77) Xylene (total)	(3)		91	1537058	18.741

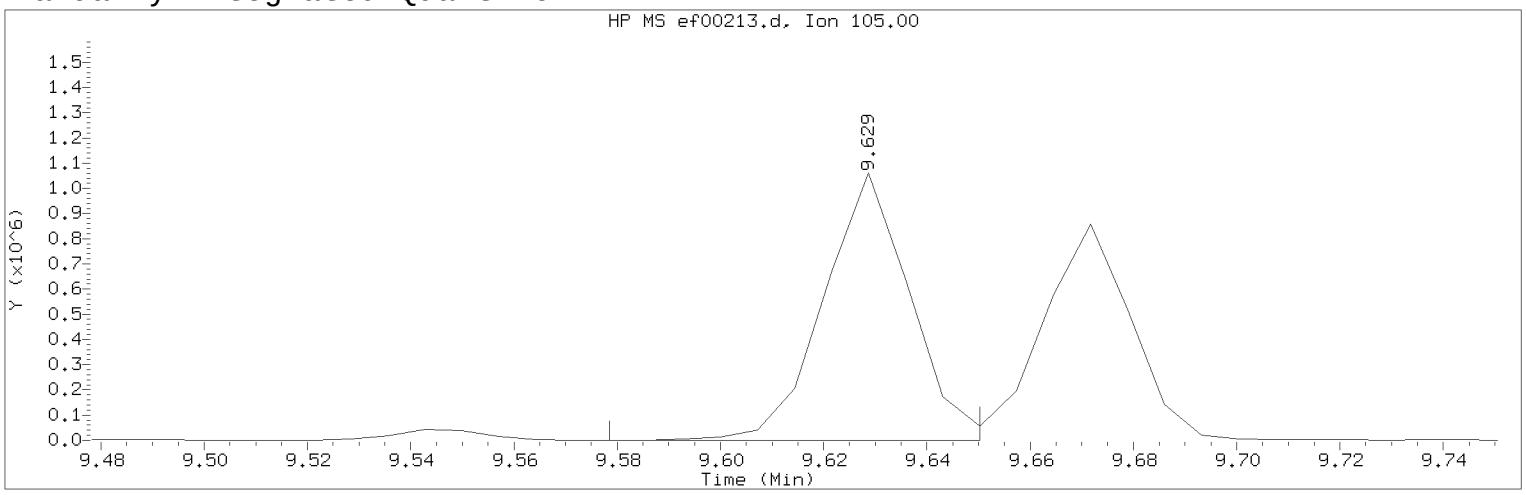
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/18/2018 at 16:19.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun18.b/ef00213.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 15:27 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 16:18 jeb07445

Sample Name: LCSE09 Lab Sample ID: LCSE09

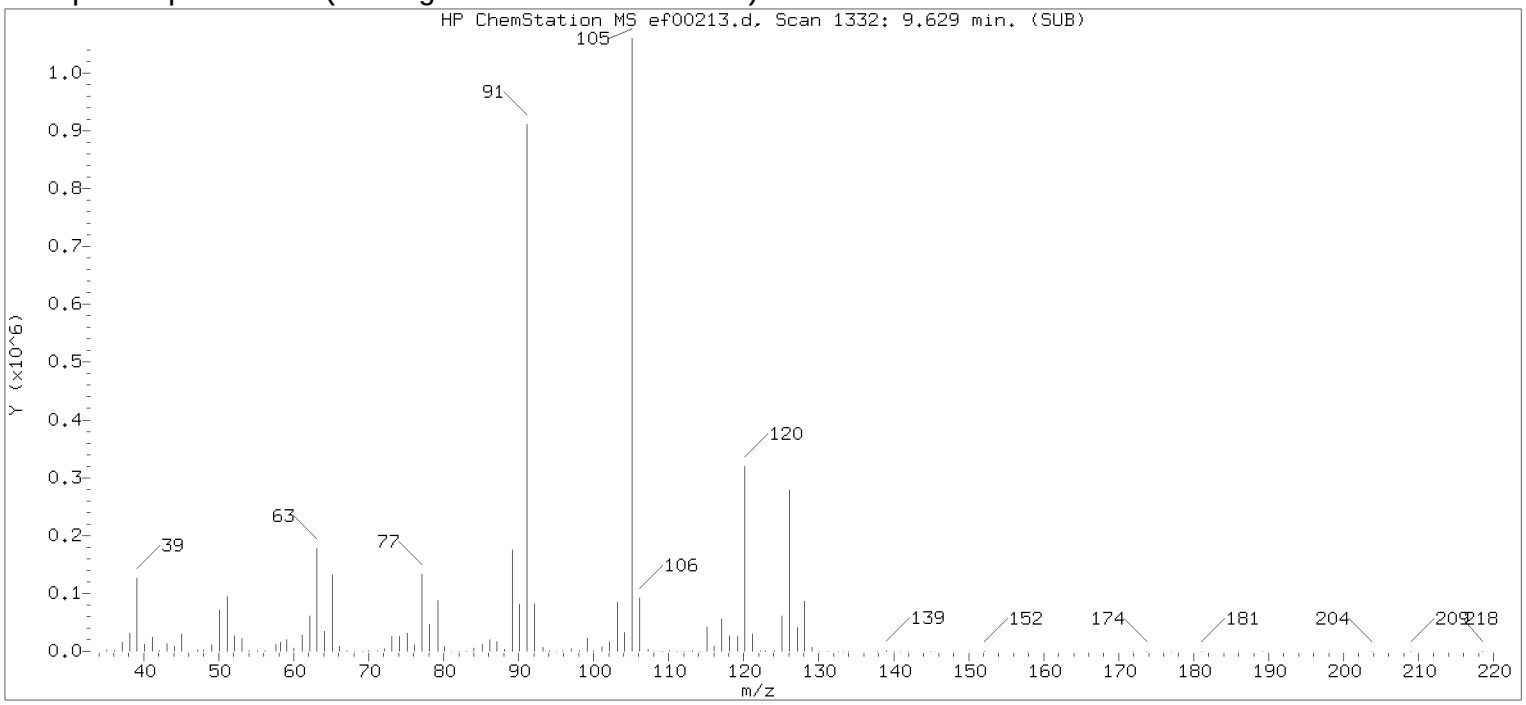
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 1231803M
Concentration (ppb(v)) : 10.7287
Integration start scan : 1324 Integration stop scan: 1334
Y at integration start : 338 Y at integration end: 338

Reason for manual integration: improper integration

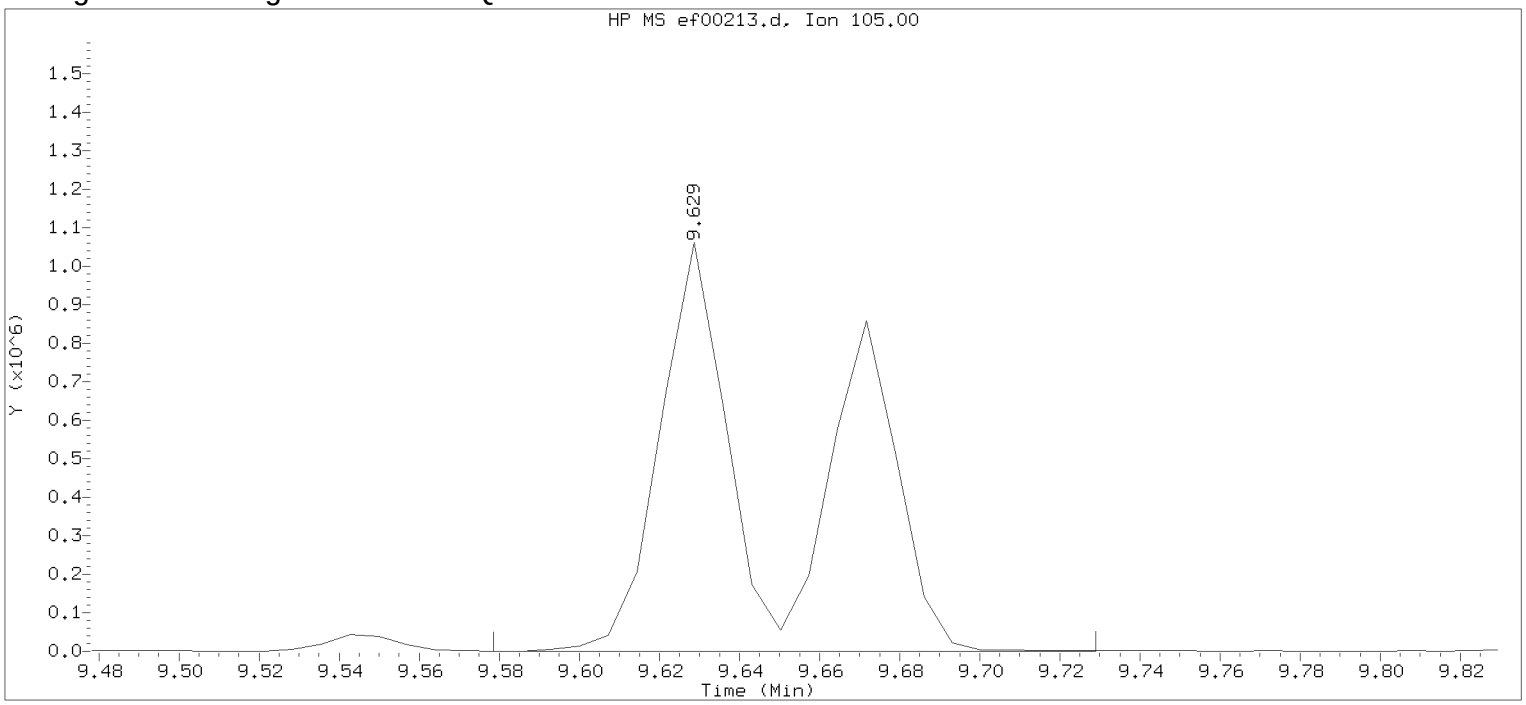
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/18/2018 at 16:19.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/19/2018 at 15:58.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun18.b/ef00213.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 15:27 Analyst ID: jeb07445

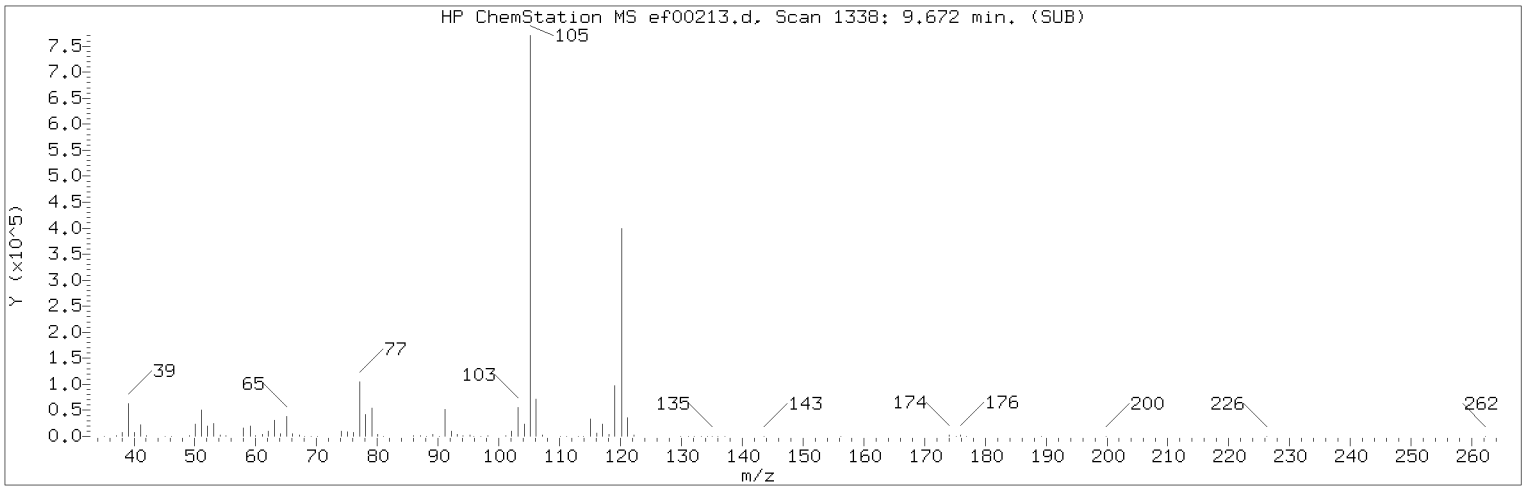
Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 15:46 Unknown

Sample Name: LCSE09 Lab Sample ID: LCSE09

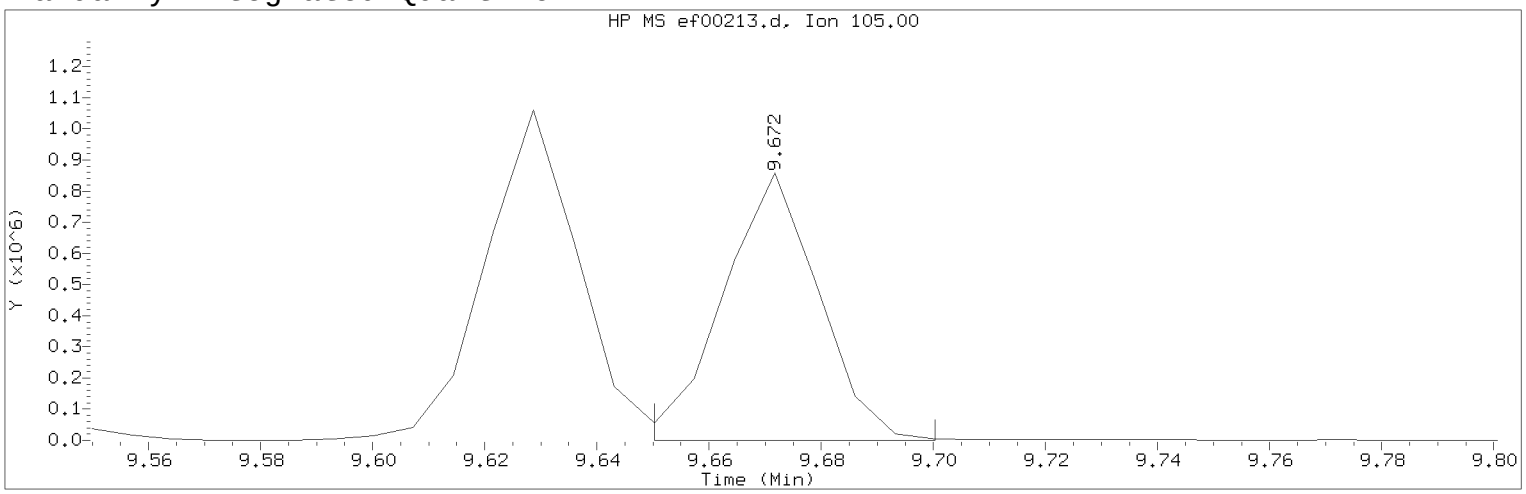
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 2229495
Concentration (ppb(v)) : 19.4183
Integration start scan : 1324 Integration stop scan: 1345
Y at integration start : 338 Y at integration end: 338

Digitally signed by Jacob E. Bailey on 06/18/2018 at 16:19.
Target 3.5 esignature used for this page.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun18.b/ef00213.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 15:27 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 16:18 jeb07445

Sample Name: LCSE09 Lab Sample ID: LCSE09

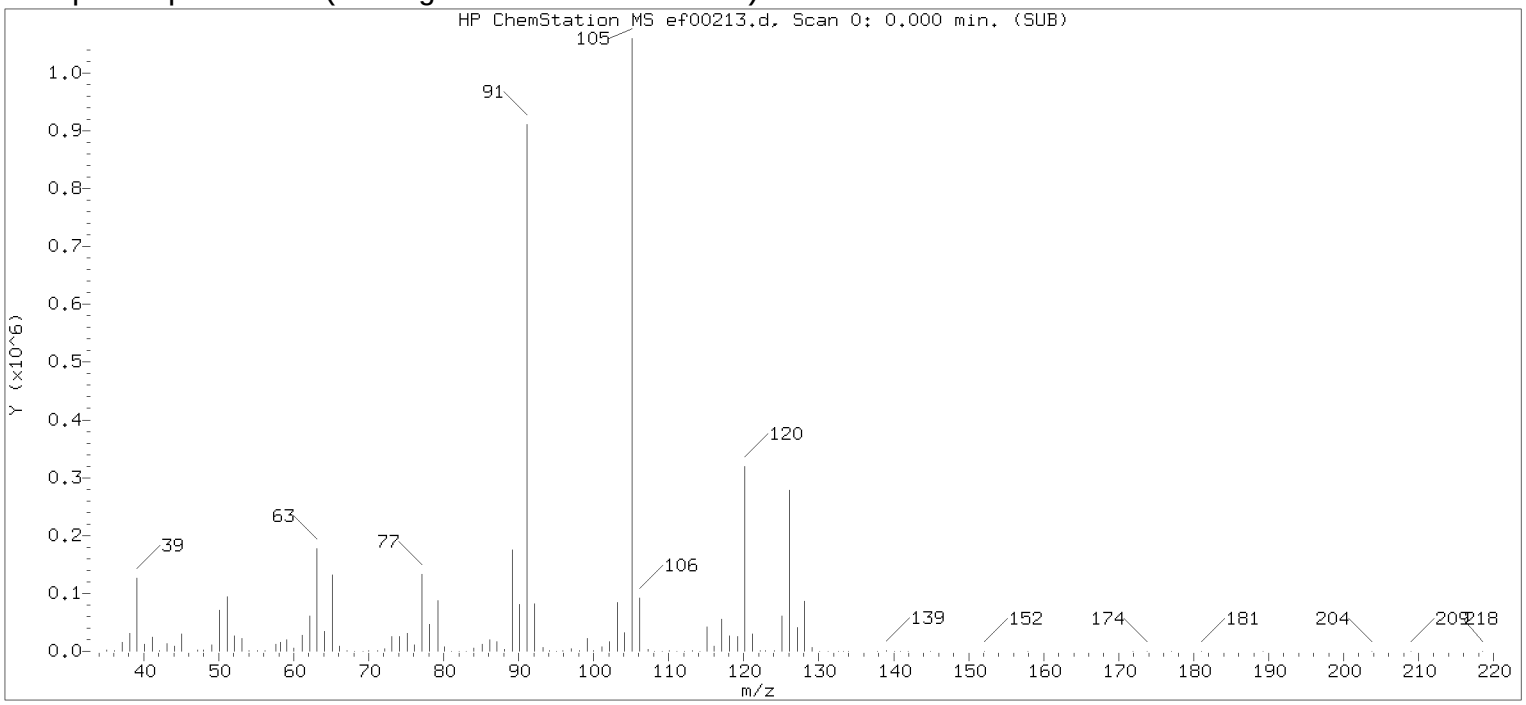
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 1018489M
Concentration (ppb(v)) : 10.8754
Integration start scan : 1334 Integration stop scan: 1341
Y at integration start : 501 Y at integration end: 501

Reason for manual integration: improper integration

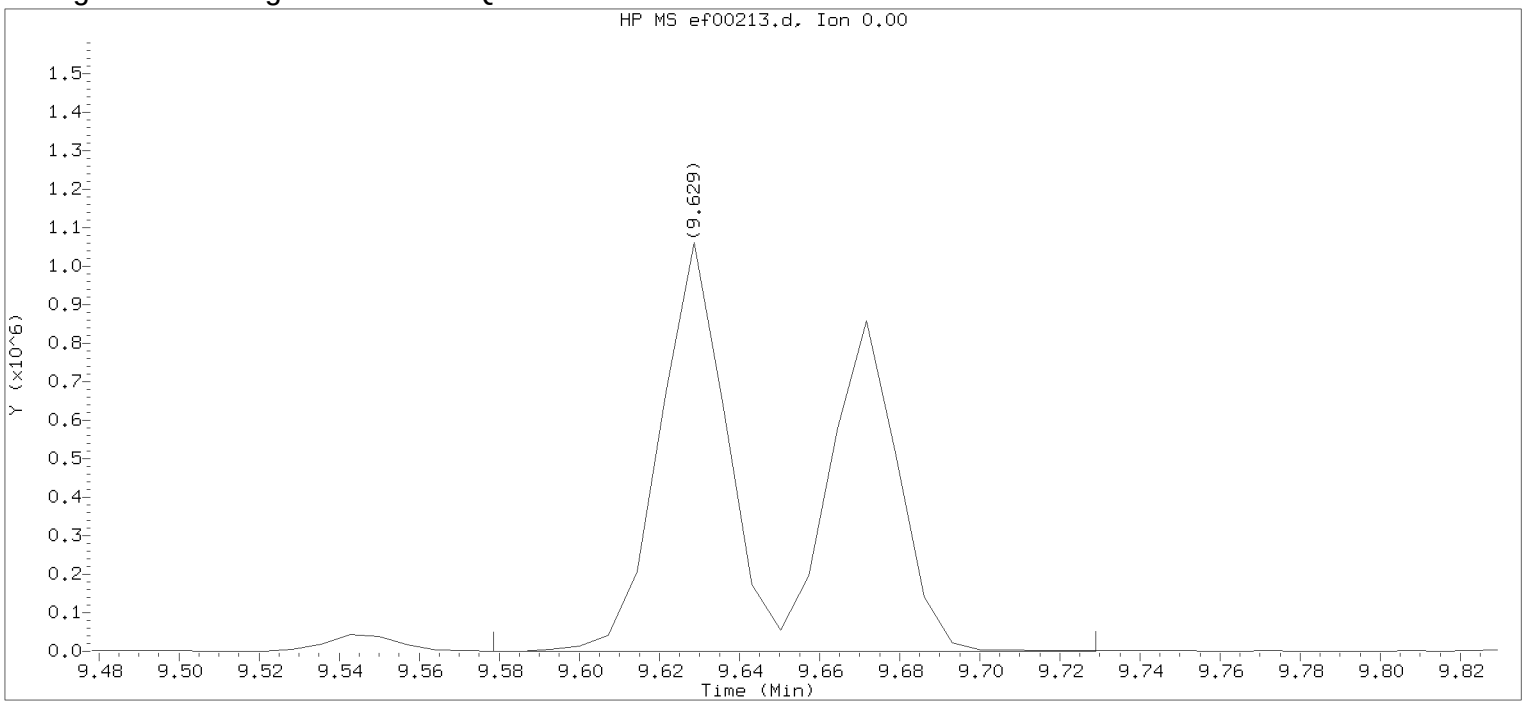
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/18/2018 at 16:19.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/19/2018 at 15:58.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun18.b/ef00213.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 15:27 Analyst ID: jeb07445

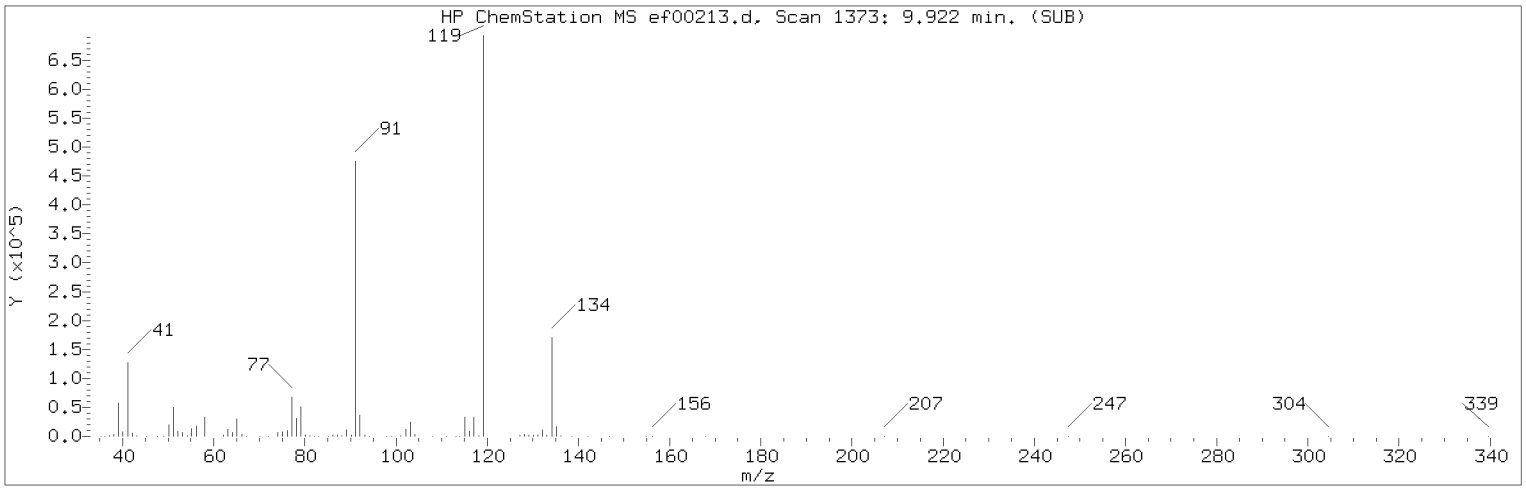
Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 15:46 Unknown

Sample Name: LCSE09 Lab Sample ID: LCSE09

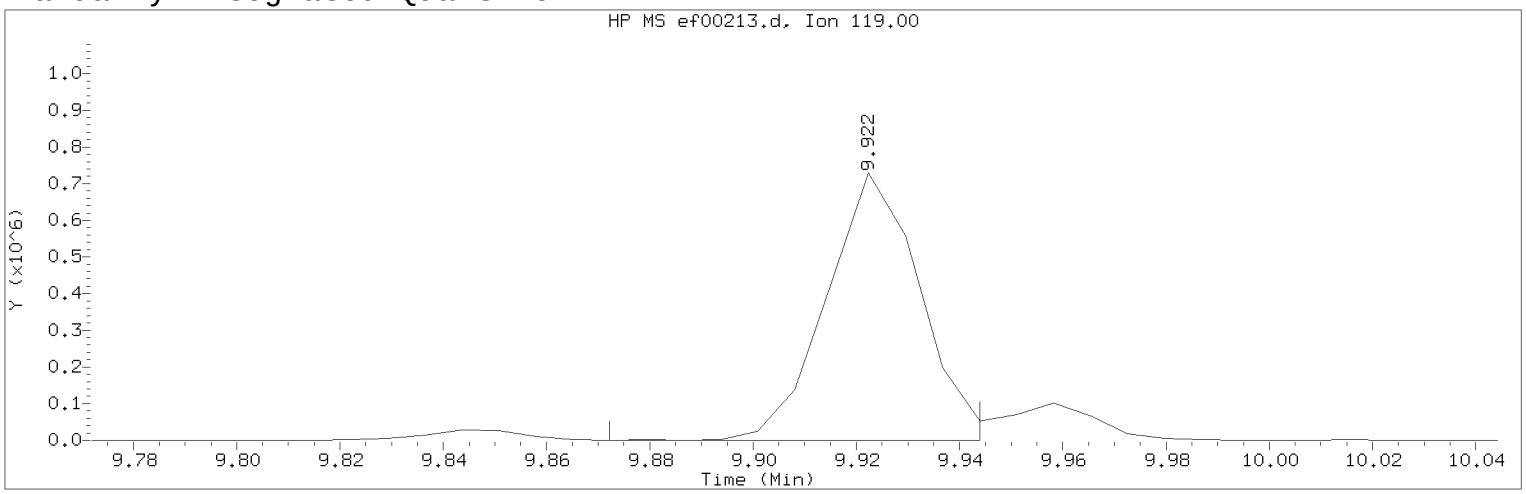
Compound Number : 0
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 0
Retention Time (minutes): 0.000
Quant Ion : 0.00
Area : 0
Concentration (ppb(v)) : 0.0000
Integration start scan : 0 Integration stop scan: 0
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/18/2018 at 16:19.
Target 3.5 esignature used. LED1 Page 1448 of 1687

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun18.b/ef00213.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 15:27 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 16:18 jeb07445

Sample Name: LCSE09 Lab Sample ID: LCSE09

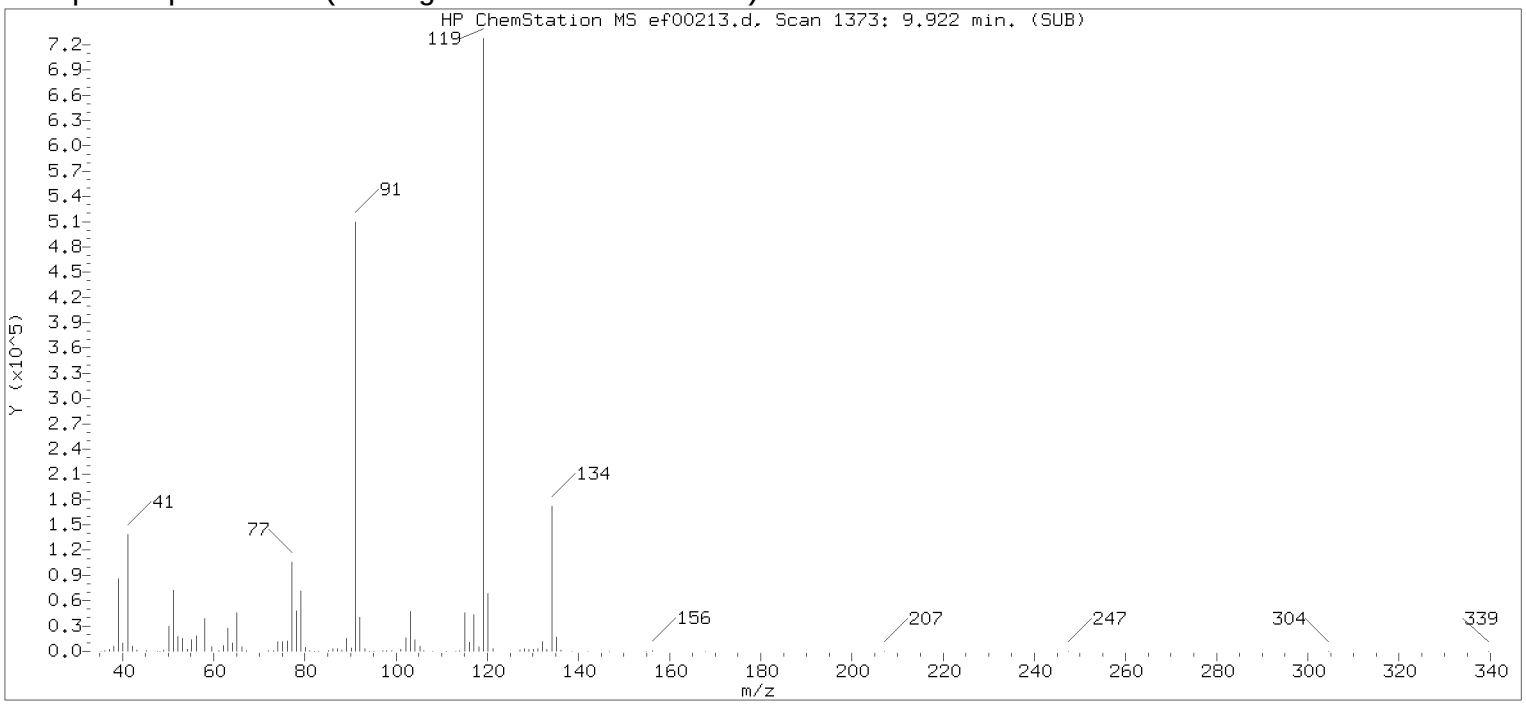
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 918471M
Concentration (ppb(v)) : 10.8101
Integration start scan : 1365 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

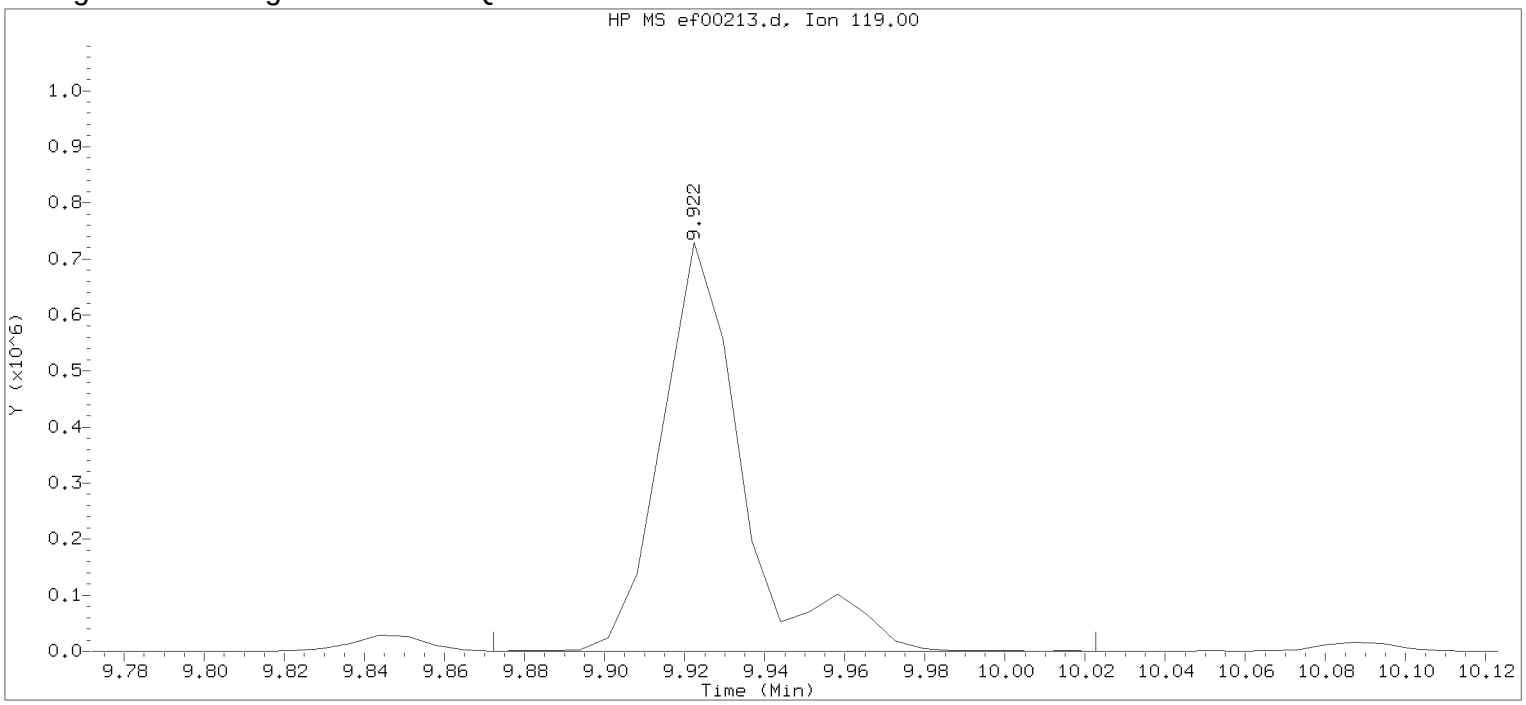
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/18/2018 at 16:19.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/19/2018 at 15:58.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun18.b/ef00213.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 15:27 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 15:46 Unknown

Sample Name: LCSE09 Lab Sample ID: LCSE09

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 1031907
Concentration (ppb(v)) : 12.1452
Integration start scan : 1365 Integration stop scan: 1386
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/18/2018 at 16:19.
Target 3.5 esignature used for this page

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun18.b/ef00214.d Injection date and time: **18-JUN-2018 16:00**
Data file Sample Info. Line: LCSDE09;200;E1816930AA;LCSDE09;0;3;LCSD; Instrument ID: **HP22820.i** Batch: **E1816930AA**
Date, time and analyst ID of latest file update: 18-Jun-2018 16:20 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun18.b/ef00212.d**

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 18-JUN-2018 14:17
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun18.b/ef00211.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	5.467(0.000)	751	130	411233 (-3)	10.00		254529 - 593901
51) 1,4-Difluorobenzene	6.291(0.000)	866	114	1254386 (-3)	10.00		773038 - 1803754
71) Chlorobenzene-d5	8.497(0.000)	1174	117	1249620 (-3)	10.00		771678 - 1800580

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)	1.613(0.000)	41	176288	9.071	9.07			0.5	1
2) Dichlorodifluoromethane	(1)	1.649(0.000)	85	706398	10.377	10.38			0.2	1
3) Chlorodifluoromethane	(1)	1.670(0.000)	51	477365	11.060	11.06			0.2	1
4) Freon 114	(1)	1.778(0.000)	85	756337	10.352	10.35			0.2	1
5) Chloromethane	(1)	1.850(0.000)	50	306260	11.176	11.18			0.2	1
6) Vinyl Chloride	(1)	1.971(0.001)	62	257900	9.844	9.84			0.2	1
7) 1,3-Butadiene	(1)	2.007(0.000)	54	161936	8.593	8.59			0.4	2
8) Bromomethane	(1)	2.351(0.000)	94	242157	10.857	10.86			0.5	1
9) Chloroethane	(1)	2.473(0.001)	64	152615	10.454	10.45			0.2	1
10) Bromoethene	(1)	2.695(0.000)	106	206694	9.095	9.09			0.4	2
11) Dichlorofluoromethane	(1)	2.731(0.000)	67	645140	11.109	11.11			0.2	1
12) Trichlorofluoromethane	(1)	2.774(0.000)	101	720650	9.906	9.91			0.2	1
13) Pentane	(1)	2.881(0.000)	43	343594	8.238	8.24			0.5	1
14) Ethanol	(1)	3.082(-0.001)	45	89544	9.841	9.84			0.5	2
15) Freon123a	(1)	3.203(0.001)	67	618180	11.464	11.46			0.2	1
16) Acrolein	(1)	3.347(-0.001)	56	85460	8.845	8.84			1	2
17) 1,1-Dichloroethene	(1)	3.433(0.000)	61	379047	9.509	9.51			0.2	1
18) Freon 113	(1)	3.447(-0.001)	103	380025	9.256	9.26			0.5	2
19) Acetone	(1)	3.533(0.000)	43	418109	10.483	10.48			0.5	2
20) Methyl Iodide	(1)	3.604(0.000)	142	528274	8.106	8.11			0.2	1
21) Carbon Disulfide	(1)	3.662(0.000)	76	766854	10.278	10.28			0.5	1
22) Isopropanol	(1)	3.719(0.000)	45	284849	8.441	8.44			0.5	2
23) Acetonitrile	(1)	3.877(0.000)	40	212228	11.996	12.00			0.5	2
24) 3-Chloropropene	(1)	3.870(-0.000)	76	102506	10.089	10.09			0.2	1
25) Methylene Chloride	(1)	4.013(0.000)	84	255890	11.550	11.55			0.2	1
26) tert-Butyl Alcohol	(1)	4.163(-0.000)	59	305592	8.106	8.11			0.5	1
27) Acrylonitrile	(1)	4.299(0.000)	53	229839	10.448	10.45			0.5	2
28) trans-1,2-Dichloroethene	(1)	4.292(0.000)	61	363440	9.890	9.89			0.2	1
29) Methyl t-Butyl Ether	(1)	4.299(0.000)	73	476880	7.595	7.60			0.2	1
30) Hexane	(1)	4.564(0.000)	57	289557	7.725	7.72			0.2	1
31) 1,1-Dichloroethane	(1)	4.722(-0.000)	63	503231	9.998	10.00			0.2	1
32) Vinyl Acetate	(1)	4.786(0.000)	86	45254	8.494	8.49			1	1
33) Di-Isopropyl Ether	(1)	4.786(0.000)	45	692046	8.519	8.52			0.2	1
34) Ethyl Tert-Butyl Ether	(1)	5.116(-0.000)	59	393720	7.179	7.18			0.2	1
35) cis-1,2-Dichloroethene	(1)	5.259(0.000)	61	315606	9.176	9.18			0.2	1
36) 1,2-Dichloroethene (total)	(1)		61	679046	19.067	19.07			0.2	1
37) 2-Butanone	(1)	5.281(-0.000)	72	113924	8.782	8.78			0.5	2
38) Ethyl Acetate	(1)	5.331(-0.001)	70	54076	8.509	8.51			0.5	1
39) Methyl Acrylate	(1)	5.359(0.000)	55	388934	9.224	9.22			0.2	1
41) Tetrahydrofuran	(1)	5.503(-0.000)	42	242101	8.488	8.49			0.5	1
42) Chloroform	(1)	5.538(-0.000)	83	613871	10.268	10.27			0.2	1
43) 1,1,1-Trichloroethane	(1)	5.682(-0.000)	97	540510	9.800	9.80			0.2	1
44) Cyclohexane	(1)	5.710(-0.000)	56	319635	8.100	8.10			0.2	1

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Data file: /chem/HP22820.i/18jun18.b/ef00214.d Injection date and time: **18-JUN-2018 16:00**
Data file Sample Info. Line: LCSDE09;200;E1816930AA;LCSDE09;0;3;LCSD; Instrument ID: **HP22820.i** Batch: **E1816930AA**
Date, time and analyst ID of latest file update: 18-Jun-2018 16:20 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun18.b/ef00212.d**

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 18-JUN-2018 14:17
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun18.b/ef00211.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
45) Carbon Tetrachloride	(1)	5.811(-0.000)	117	547876	10.150	10.15			0.2	1
46) Benzene	(2)	5.983(0.001)	78	768927	10.006	10.01			0.2	1
47) 1,2-Dichloroethane	(2)	6.011(0.000)	62	418452	11.619	11.62			0.2	1
48) Isooctane	(2)	6.040(-0.000)	57	1041791	9.961	9.96			0.2	1
49) Tert-Amyl Methyl Ether	(2)	6.069(0.000)	73	426679	8.756	8.76			0.2	1
50) Heptane	(2)	6.176(0.000)	43	385531	9.522	9.52			0.5	1
52) Trichloroethene	(2)	6.491(-0.000)	130	328413	9.770	9.77			0.2	1
53) Ethyl Acrylate	(2)	6.577(-0.001)	55	410393	8.692	8.69			0.2	1
54) 1,2-Dichloropropane	(2)	6.677(-0.000)	63	318101	10.831	10.83			0.2	1
55) Dibromomethane	(2)	6.771(-0.000)	174	327164	10.609	10.61			0.2	1
56) 1,4-Dioxane	(2)	6.778(-0.000)	88	172571	9.786	9.79			0.5	1
57) Methyl Methacrylate	(2)	6.749(-0.000)	69	208189	8.449	8.45			0.2	1
58) Bromodichloromethane	(2)	6.885(-0.000)	83	636686	11.069	11.07			0.2	1
59) cis-1,3-Dichloropropene	(2)	7.215(-0.000)	75	371790	8.880	8.88			0.2	1
60) 4-Methyl-2-Pentanone	(2)	7.329(-0.000)	43	542282	9.474	9.47			0.5	2
61) Toluene	(3)	7.465(0.000)	91	879424	9.796	9.80			0.2	1
62) Octane	(3)	7.516(0.000)	43	568017	10.224	10.22			0.2	1
63) trans-1,3-Dichloropropene	(3)	7.630(0.000)	75	334453	10.189	10.19			0.2	1
64) 1,3-Dichloropropene (total)	(3)		75	706243	19.070	19.07			0.2	1
65) Ethyl Methacrylate	(3)	7.673(0.000)	69	335483M	8.749	8.75			0.2	1
66) 1,1,2-Trichloroethane	(3)	7.773(0.000)	97	377053	11.087	11.09			0.2	1
67) Tetrachloroethene	(3)	7.866(0.000)	166	446127	9.745	9.74			0.2	1
68) 2-Hexanone	(3)	7.945(0.000)	43	515757	10.061	10.06			0.5	2
69) Dibromochloromethane	(3)	8.067(0.000)	127	455913	11.168	11.17			0.2	1
70) 1,2-Dibromoethane	(3)	8.160(0.000)	107	532599	10.584	10.58			0.2	1
72) Chlorobenzene	(3)	8.518(-0.000)	112	758670	9.999	10.00			0.2	1
73) 1,1,1,2-Tetrachloroethane	(3)	8.568(-0.000)	131	422273	11.441	11.44			0.2	1
74) Ethylbenzene	(3)	8.583(-0.000)	91	1059828	9.390	9.39			0.2	1
75) m/p-Xylene	(3)	8.669(-0.000)	91	785487	9.114	9.11			0.2	1
76) o-Xylene	(3)	8.970(-0.000)	91	765536	9.038	9.04			0.2	1
77) Xylene (total)	(3)		91	1551023	18.152	18.15			0.2	1
78) Styrene	(3)	8.977(-0.000)	104	640142	9.981	9.98			0.2	1
79) Bromoform	(3)	9.142(-0.000)	173	533558	10.882	10.88			0.2	1
80) Cumene	(3)	9.242(-0.000)	105	1049993	9.297	9.30			0.2	1
81) Bromobenzene	(3)	9.492(-0.000)	156	419288	9.727	9.73			0.2	1
82) 1,1,2,2-Tetrachloroethane	(3)	9.471(-0.000)	83	879169	11.150	11.15			0.2	1
83) 1,2,3-Trichloropropane	(3)	9.514(-0.000)	110	252510	11.217	11.22			0.2	1
84) n-Propylbenzene	(3)	9.550(-0.000)	120	325015	9.708	9.71			0.5	1
85) 2-Chlorotoluene	(3)	9.629(-0.000)	126	351540	11.002	11.00			0.2	1
86) 4-Ethyltoluene	(3)	9.629(-0.000)	105	1278146M	10.684	10.68			0.2	1
87) 1,3,5-Trimethylbenzene	(3)	9.672(-0.000)	105	1058071M	10.844	10.84			0.2	1
88) Alpha Methyl Styrene	(3)	9.844(0.000)	118	405122	9.007	9.01			0.2	1
89) tert-Butylbenzene	(3)	9.922(-0.000)	119	919613M	10.388	10.39			0.5	1
90) 1,2,4-Trimethylbenzene	(3)	9.958(-0.000)	105	1044167	10.912	10.91			0.2	1
91) sec-Butylbenzene	(3)	10.087(-0.000)	105	1441323	10.519	10.52			0.2	1
92) 1,3-Dichlorobenzene	(3)	10.194(-0.000)	146	812393	10.999	11.00			0.2	1
93) 1,4-Dichlorobenzene	(3)	10.259(-0.000)	146	764901	10.465	10.47			0.2	1
94) p-Isopropyltoluene	(3)	10.194(-0.000)	119	1174921	10.721	10.72			0.2	1
95) Benzyl Chloride	(3)	10.359(-0.000)	91	480310	9.774	9.77			0.5	1
96) 1,2-Dichlorobenzene	(3)	10.546(-0.000)	146	731291	10.646	10.65			0.2	1
97) n-Butylbenzene	(3)	10.502(-0.000)	91	1134914	10.548	10.55			0.2	1
98) Hexachloroethane	(3)	10.739(-0.000)	117	374529	13.034	13.03			0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)	11.140(-0.000)	157	318506	9.958	9.96			0.2	1
100) 1,2,4-Trichlorobenzene	(3)	11.763(-0.000)	180	366694	8.240	8.24			0.5	2

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey on 06/18/2018 at 16:21. Target 3.5 esignature user ID: jeb07445

Data file: /chem/HP22820.i/18jun18.b/ef00214.d Injection date and time: **18-JUN-2018 16:00**
Data file Sample Info. Line: LCSDE09;200;E1816930AA;LCSDE09;0;3;LCSD; Instrument ID: **HP22820.i** Batch: **E1816930AA**
Date, time and analyst ID of latest file update: 18-Jun-2018 16:20 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun18.b/ef00212.d**

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 18-JUN-2018 14:17
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun18.b/ef00211.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
101) Hexachlorobutadiene	(3)	11.878(-0.000)	225	376977	10.191	10.19			0.4	2
102) Naphthalene	(3)	11.964(-0.000)	128	706558	8.206	8.21			0.4	1

Total number of targets = 99

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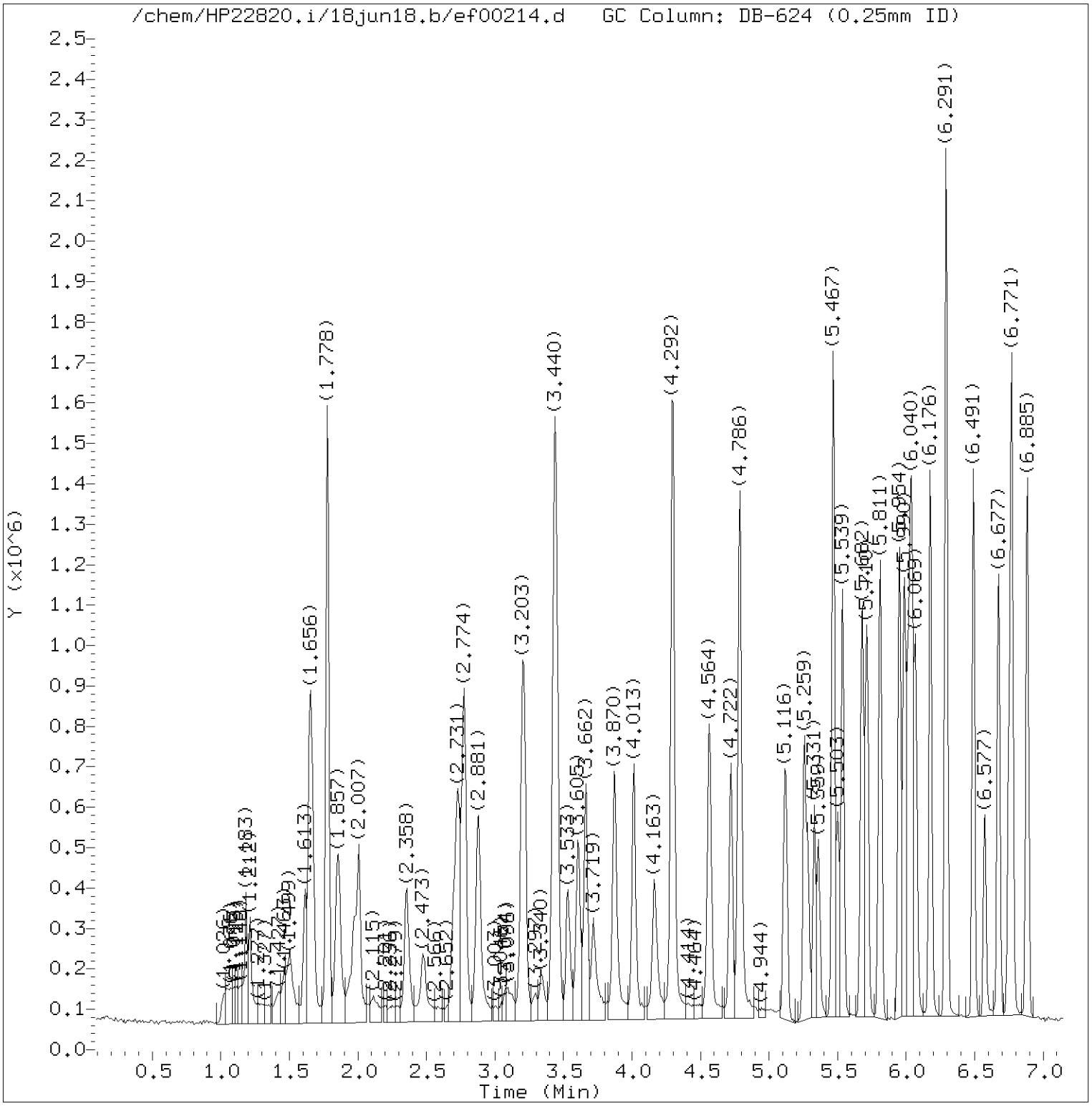
Secondary review performed and digitally signed by Jeffrey B. Smith on 06/19/2018 at 15:58. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

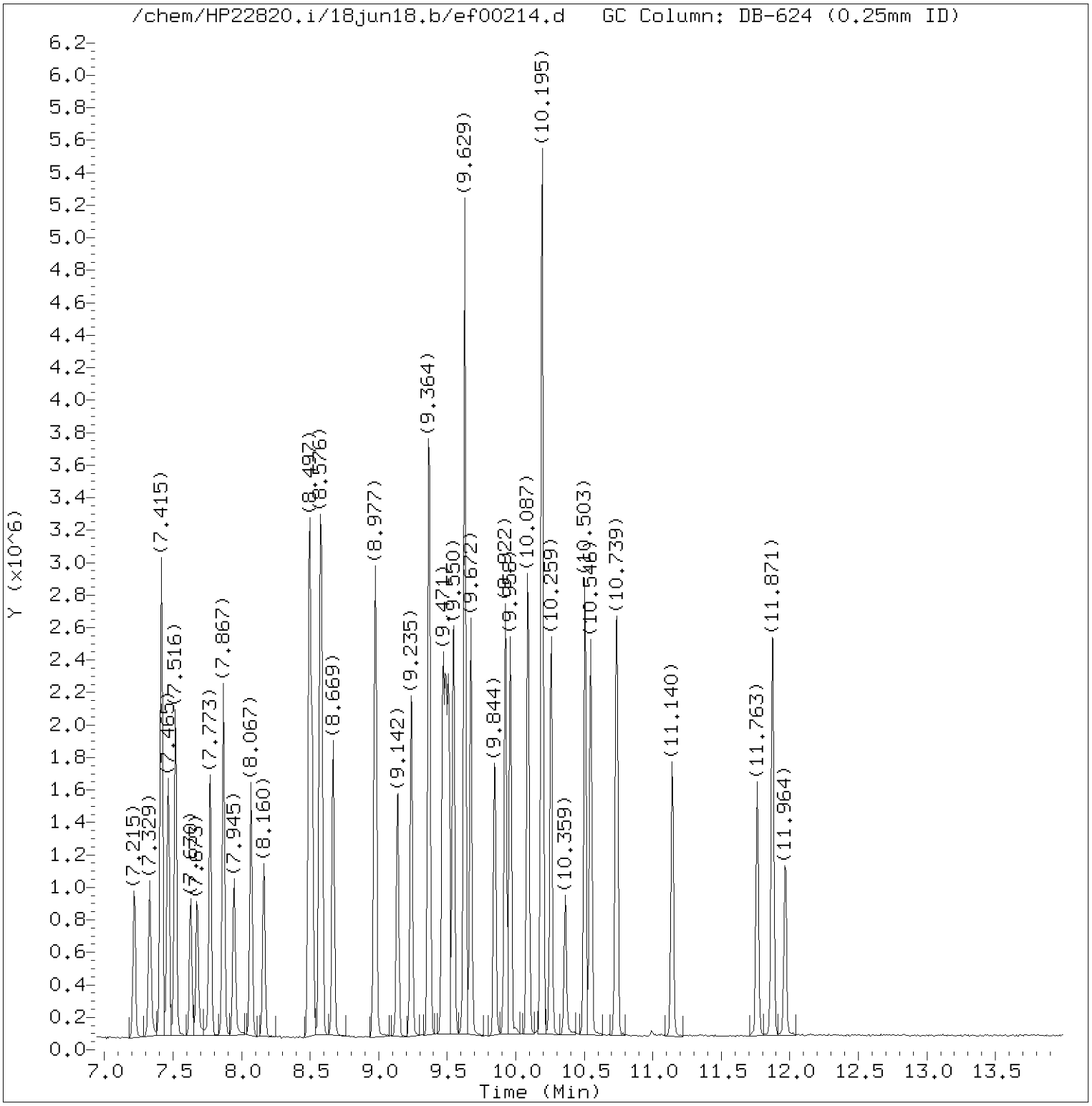
Target Revision 3.5

Data File: /chem/HP22820.i/18jun18.b/ef00214.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 16:00 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 16:20 jeb07445

Sample Name: LCSDE09 Lab Sample ID: LCSDE09

Digitally signed by Jacob E. Bailey
on 06/18/2018 at 16:21.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun18.b/ef00214.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 16:00 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 16:20 jeb07445

Sample Name: LCSDE09 Lab Sample ID: LCSDE09

Digitally signed by Jacob E. Bailey
on 06/18/2018 at 16:21.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun18.b/ef00214.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 16:00 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 16:20 jeb07445

Sample Name: LCSDE09 Lab Sample ID: LCSDE09

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.613	41	176288	9.071
2) Dichlorodifluoromethane	(1)	1.649	85	706398	10.377
3) Chlorodifluoromethane	(1)	1.671	51	477365	11.060
4) Freon 114	(1)	1.778	85	756337	10.352
5) Chloromethane	(1)	1.850	50	306260	11.176
6) Vinyl Chloride	(1)	1.971	62	257900	9.844
7) 1,3-Butadiene	(1)	2.007	54	161936	8.593
8) Bromomethane	(1)	2.351	94	242157	10.857
9) Chloroethane	(1)	2.473	64	152615	10.454
10) Bromoethene	(1)	2.695	106	206694	9.095
11) Dichlorofluoromethane	(1)	2.731	67	645140	11.109
12) Trichlorofluoromethane	(1)	2.774	101	720650	9.906
13) Pentane	(1)	2.881	43	343594	8.238
14) Ethanol	(1)	3.082	45	89544	9.841
15) Freon123a	(1)	3.203	67	618180	11.464
16) Acrolein	(1)	3.347	56	85460	8.845
17) 1,1-Dichloroethene	(1)	3.433	61	379047	9.509
18) Freon 113	(1)	3.447	103	380025	9.256
19) Acetone	(1)	3.533	43	418109	10.483
20) Methyl Iodide	(1)	3.605	142	528274	8.106
21) Carbon Disulfide	(1)	3.662	76	766854	10.278
22) Isopropanol	(1)	3.719	45	284849	8.441
24) 3-Chloropropene	(1)	3.870	76	102506	10.089
23) Acetonitrile	(1)	3.877	40	212228	11.996
25) Methylene Chloride	(1)	4.013	84	255890	11.550
26) tert-Butyl Alcohol	(1)	4.163	59	305592	8.106
28) trans-1,2-Dichloroethene	(1)	4.292	61	363440	9.890
27) Acrylonitrile	(1)	4.299	53	229839	10.448
29) Methyl t-Butyl Ether	(1)	4.299	73	476880	7.595
30) Hexane	(1)	4.564	57	289557	7.725
31) 1,1-Dichloroethane	(1)	4.722	63	503231	9.998
32) Vinyl Acetate	(1)	4.786	86	45254	8.494
33) Di-Isopropyl Ether	(1)	4.786	45	692046	8.519
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	393720	7.179
35) cis-1,2-Dichloroethene	(1)	5.259	61	315606	9.176
37) 2-Butanone	(1)	5.281	72	113924	8.782
38) Ethyl Acetate	(1)	5.331	70	54076	8.509
39) Methyl Acrylate	(1)	5.359	55	388934	9.224

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on 06/18/2018 at 16:21.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun18.b/ef00214.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 16:00 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 16:20 jeb07445

Sample Name: LCSDE09 Lab Sample ID: LCSDE09

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	411233	10.000
41) Tetrahydrofuran	(1)	5.503	42	242101	8.488
42) Chloroform	(1)	5.539	83	613871	10.268
43) 1,1,1-Trichloroethane	(1)	5.682	97	540510	9.800
44) Cyclohexane	(1)	5.710	56	319635	8.100
45) Carbon Tetrachloride	(1)	5.811	117	547876	10.150
46) Benzene	(2)	5.983	78	768927	10.006
47) 1,2-Dichloroethane	(2)	6.011	62	418452	11.619
48) Isooctane	(2)	6.040	57	1041791	9.961
49) Tert-Amyl Methyl Ether	(2)	6.069	73	426679	8.756
50) Heptane	(2)	6.176	43	385531	9.522
51)*1,4-Difluorobenzene	(2)	6.291	114	1254386	10.000
52) Trichloroethene	(2)	6.491	130	328413	9.770
53) Ethyl Acrylate	(2)	6.577	55	410393	8.692
36) 1,2-Dichloroethene (total)	(1)		61	679046	19.067
54) 1,2-Dichloropropane	(2)	6.677	63	318101	10.831
57) Methyl Methacrylate	(2)	6.749	69	208189	8.449
55) Dibromomethane	(2)	6.771	174	327164	10.609
56) 1,4-Dioxane	(2)	6.778	88	172571	9.786
58) Bromodichloromethane	(2)	6.885	83	636686	11.069
59) cis-1,3-Dichloropropene	(2)	7.215	75	371790	8.880
60) 4-Methyl-2-Pentanone	(2)	7.329	43	542282	9.474
61) Toluene	(3)	7.465	91	879424	9.796
62) Octane	(3)	7.516	43	568017	10.224
63) trans-1,3-Dichloropropene	(3)	7.630	75	334453	10.189
65) Ethyl Methacrylate	(3)	7.673	69	335483M	8.749
66) 1,1,2-Trichloroethane	(3)	7.773	97	377053	11.087
67) Tetrachloroethene	(3)	7.867	166	446127	9.745
68) 2-Hexanone	(3)	7.945	43	515757	10.061
69) Dibromochloromethane	(3)	8.067	127	455913	11.168
70) 1,2-Dibromoethane	(3)	8.160	107	532599	10.584
71)*Chlorobenzene-d5	(3)	8.497	117	1249620	10.000
72) Chlorobenzene	(3)	8.518	112	758670	9.999
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	422273	11.441
74) Ethylbenzene	(3)	8.583	91	1059828	9.390
75) m/p-Xylene	(3)	8.669	91	785487	9.114
76) o-Xylene	(3)	8.970	91	765536	9.038
78) Styrene	(3)	8.977	104	640142	9.981

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

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on 06/18/2018 at 16:21.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun18.b/ef00214.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 16:00 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 16:20 jeb07445

Sample Name: LCSDE09 Lab Sample ID: LCSDE09

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	533558	10.882
80) Cumene	(3)	9.242	105	1049993	9.297
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	879169	11.150
81) Bromobenzene	(3)	9.493	156	419288	9.727
83) 1,2,3-Trichloropropane	(3)	9.514	110	252510	11.217
84) n-Propylbenzene	(3)	9.550	120	325015	9.708
86) 4-Ethyltoluene	(3)	9.629	105	1278146M	10.684
85) 2-Chlorotoluene	(3)	9.629	126	351540	11.002
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	1058071M	10.844
88) Alpha Methyl Styrene	(3)	9.844	118	405122	9.007
89) tert-Butylbenzene	(3)	9.922	119	919613M	10.388
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	1044167	10.912
91) sec-Butylbenzene	(3)	10.087	105	1441323	10.519
92) 1,3-Dichlorobenzene	(3)	10.195	146	812393	10.999
94) p-Isopropyltoluene	(3)	10.195	119	1174921	10.721
93) 1,4-Dichlorobenzene	(3)	10.259	146	764901	10.465
95) Benzyl Chloride	(3)	10.359	91	480310	9.774
97) n-Butylbenzene	(3)	10.503	91	1134914	10.548
96) 1,2-Dichlorobenzene	(3)	10.546	146	731291	10.646
98) Hexachloroethane	(3)	10.739	117	374529	13.034
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	318506	9.958
100) 1,2,4-Trichlorobenzene	(3)	11.763	180	366694	8.240
101) Hexachlorobutadiene	(3)	11.878	225	376977	10.191
102) Naphthalene	(3)	11.964	128	706558	8.206
64) 1,3-Dichloropropene (total)	(3)		75	706243	19.070
77) Xylene (total)	(3)		91	1551023	18.152

M = Compound was manually integrated.

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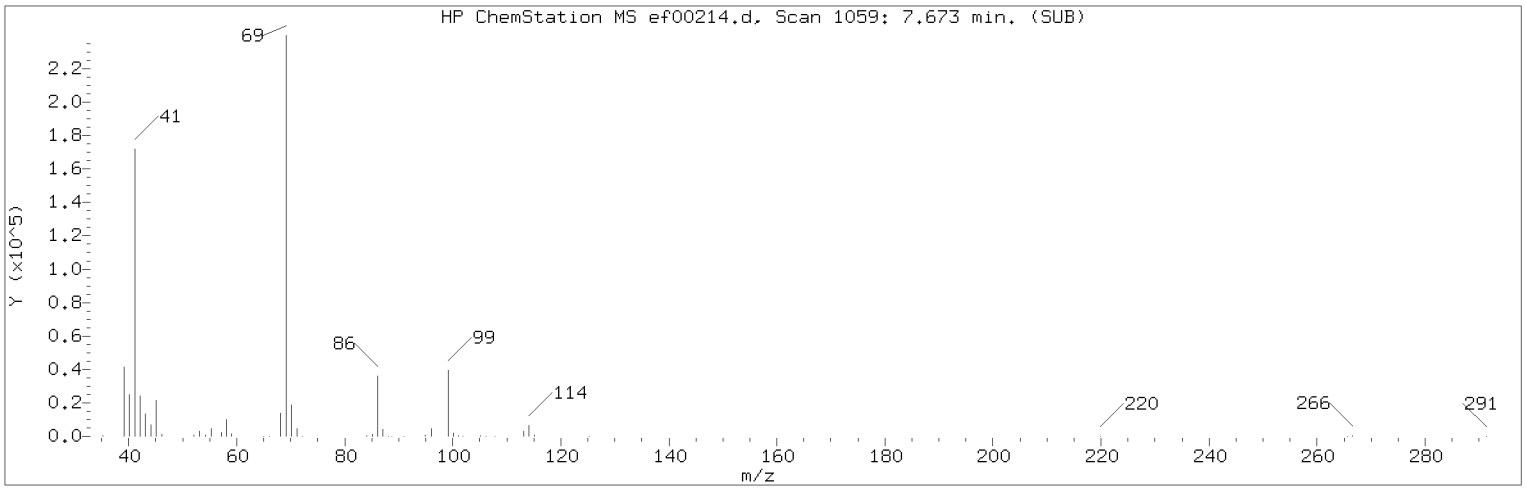
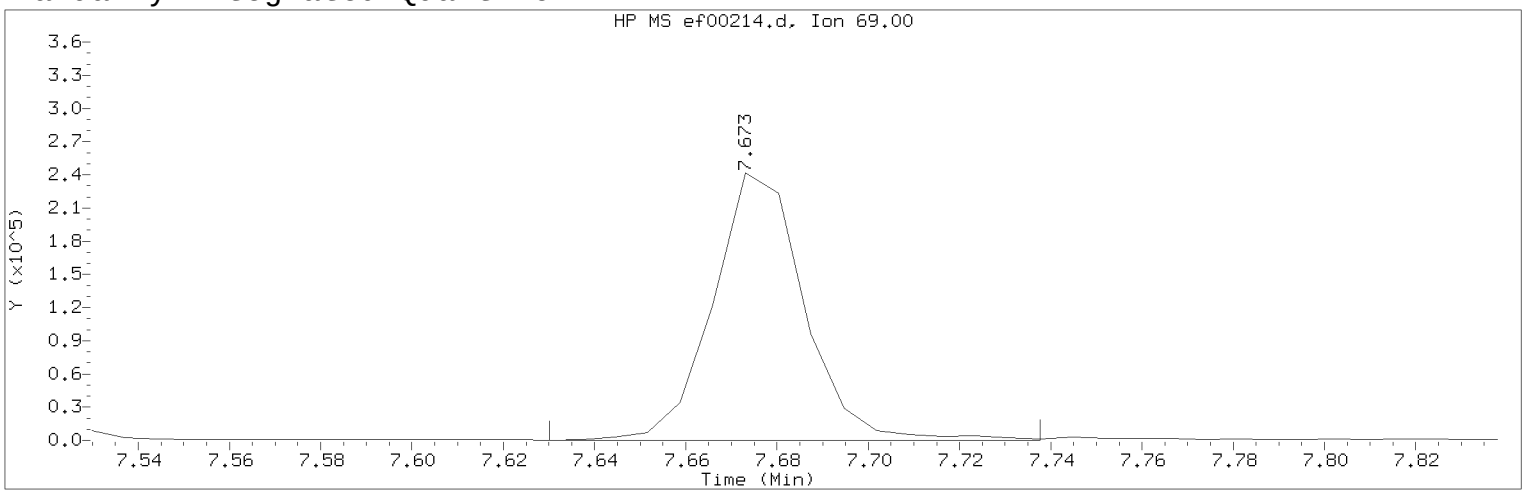
on 06/18/2018 at 16:21.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun18.b/ef00214.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 16:00 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 16:20 jeb07445

Sample Name: LCSDE09 Lab Sample ID: LCSDE09

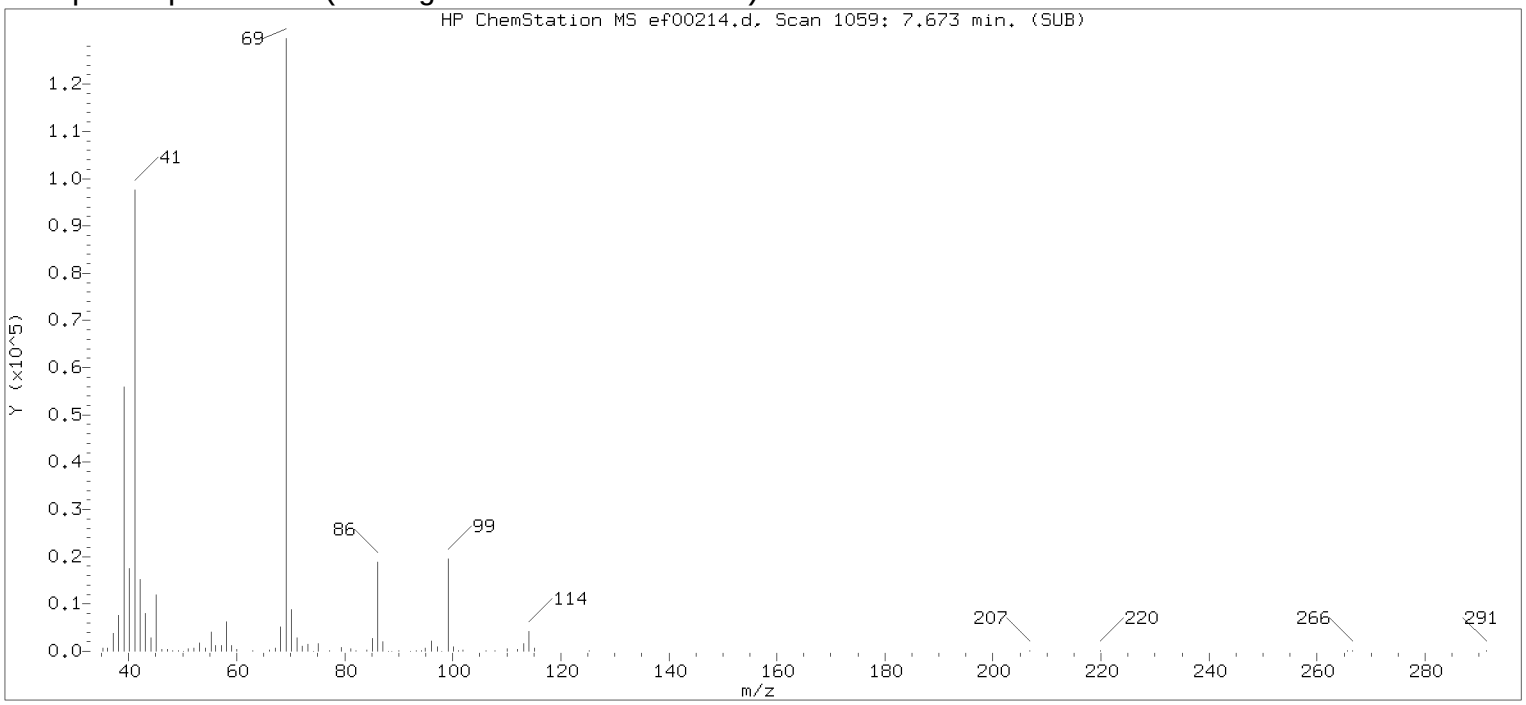
Compound Number : 65
Compound Name : Ethyl Methacrylate
Scan Number : 1059
Retention Time (minutes): 7.673
Quant Ion : 69.00
Area (flag) : 335483M
Concentration (ppb(v)) : 8.7486
Integration start scan : 1052 Integration stop scan: 1067
Y at integration start : 75 Y at integration end: 75

Reason for manual integration: improper integration

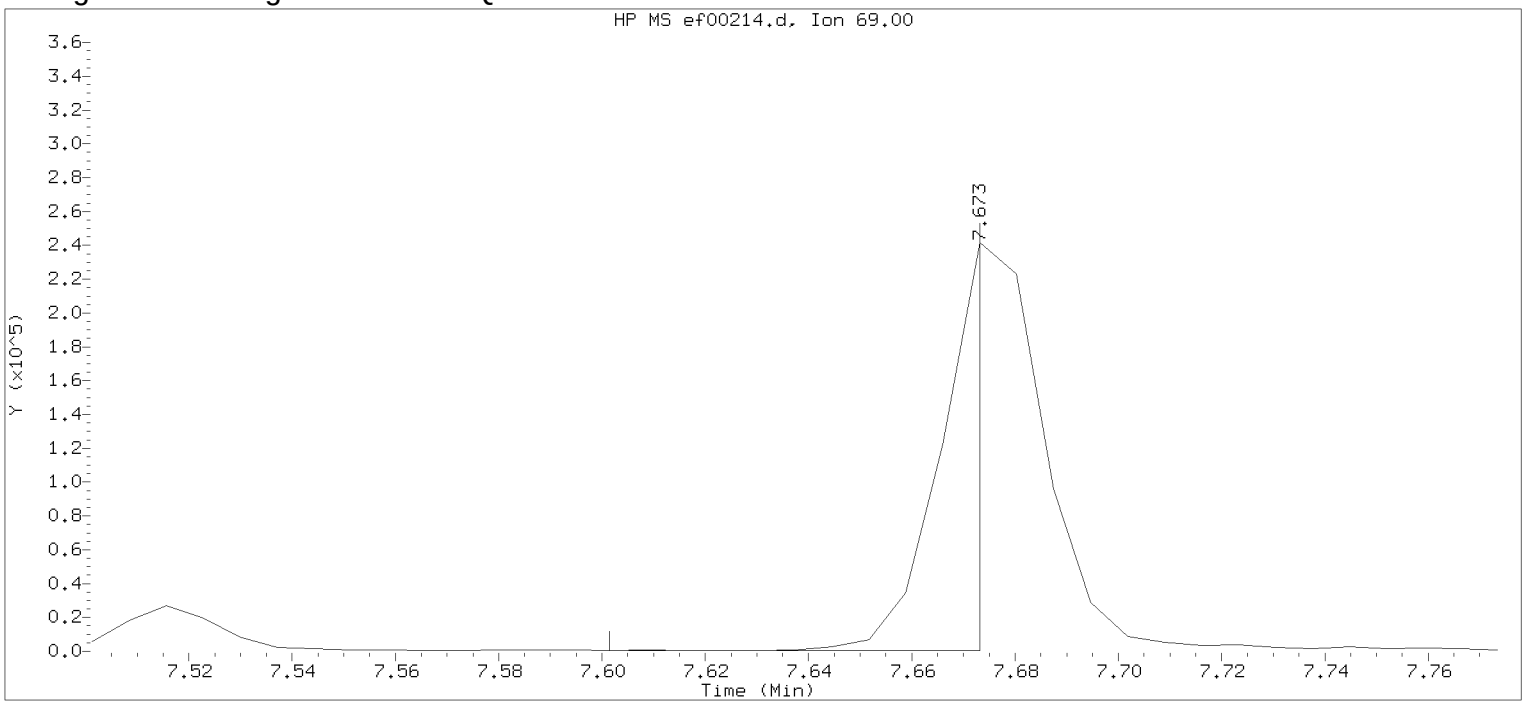
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/18/2018 at 16:21.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/19/2018 at 15:58.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun18.b/ef00214.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 16:00 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 16:19 Unknown

Sample Name: LCSDE09 Lab Sample ID: LCSDE09

Compound Number : 65
Compound Name : Ethyl Methacrylate
Scan Number : 1059
Retention Time (minutes): 7.673
Quant Ion : 69.00
Area : 123154
Concentration (ppb(v)) : 3.2116
Integration start scan : 1048 Integration stop scan: 1058
Y at integration start : 312 Y at integration end: 312

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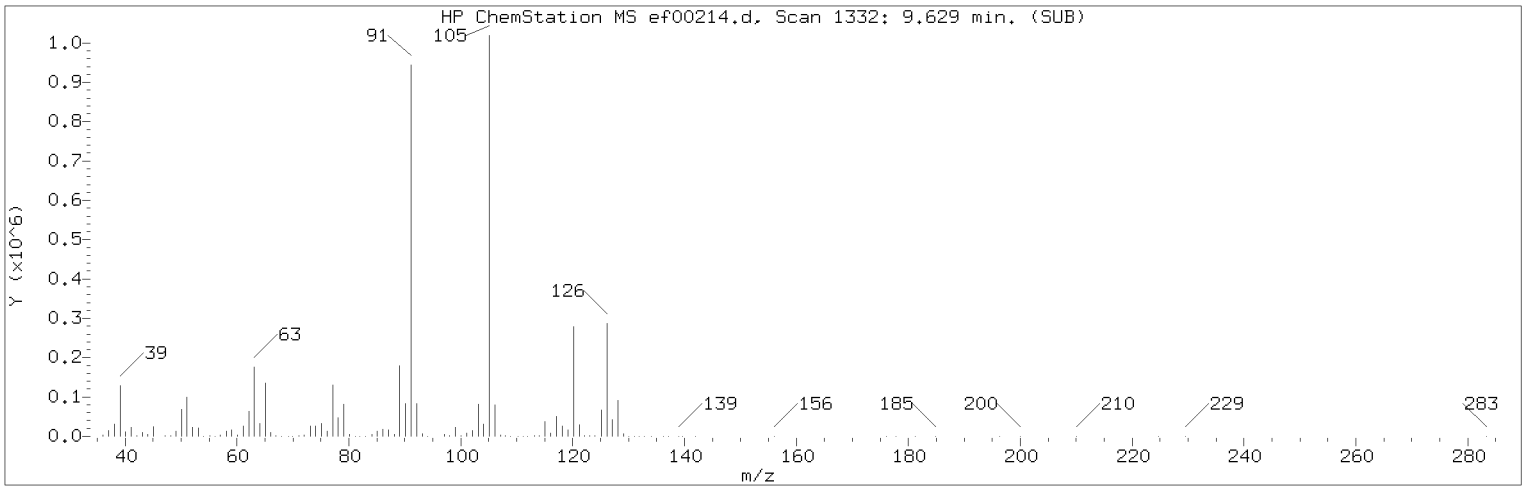
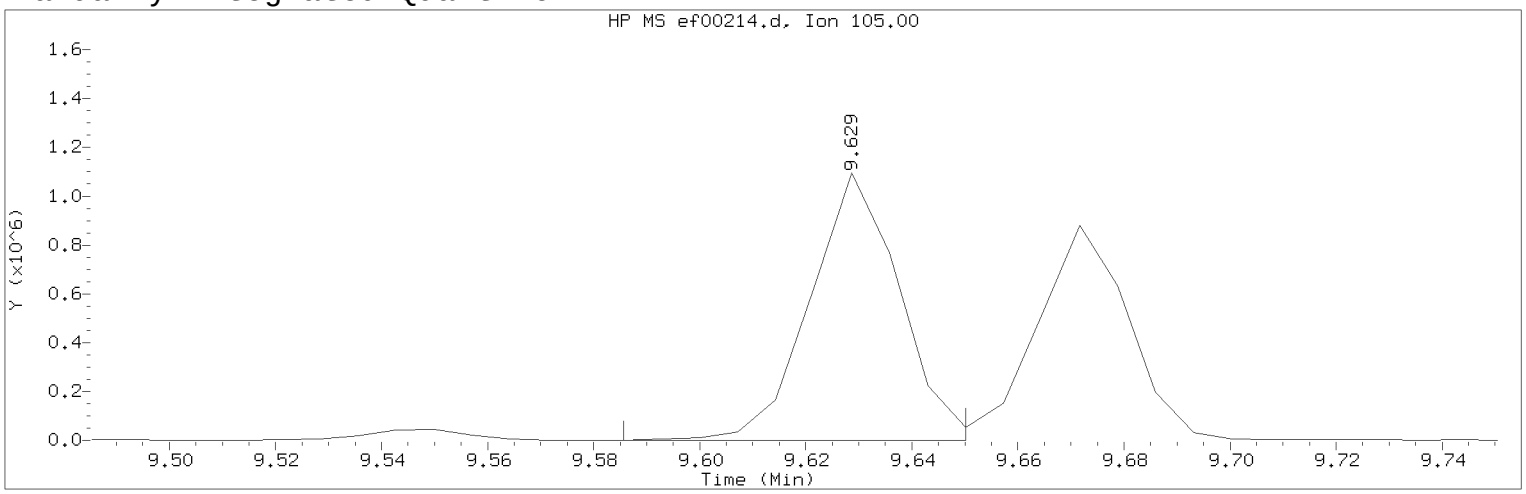
Target 3.5 esignature used. LED1 Page 1435

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun18.b/ef00214.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 16:00 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 16:20 jeb07445

Sample Name: LCSDE09 Lab Sample ID: LCSDE09

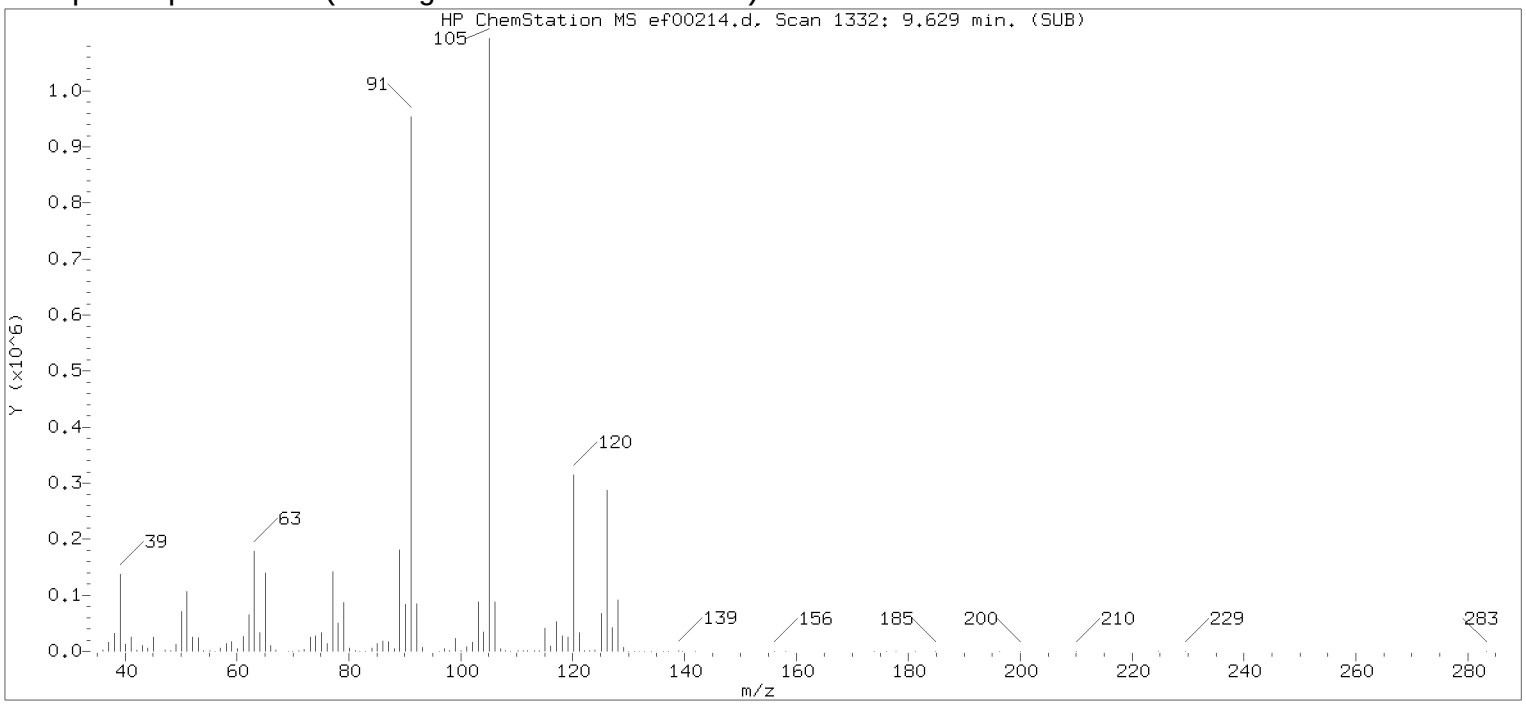
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 1278146M
Concentration (ppb(v)) : 10.6845
Integration start scan : 1325 Integration stop scan: 1334
Y at integration start : 497 Y at integration end: 497

Reason for manual integration: improper integration

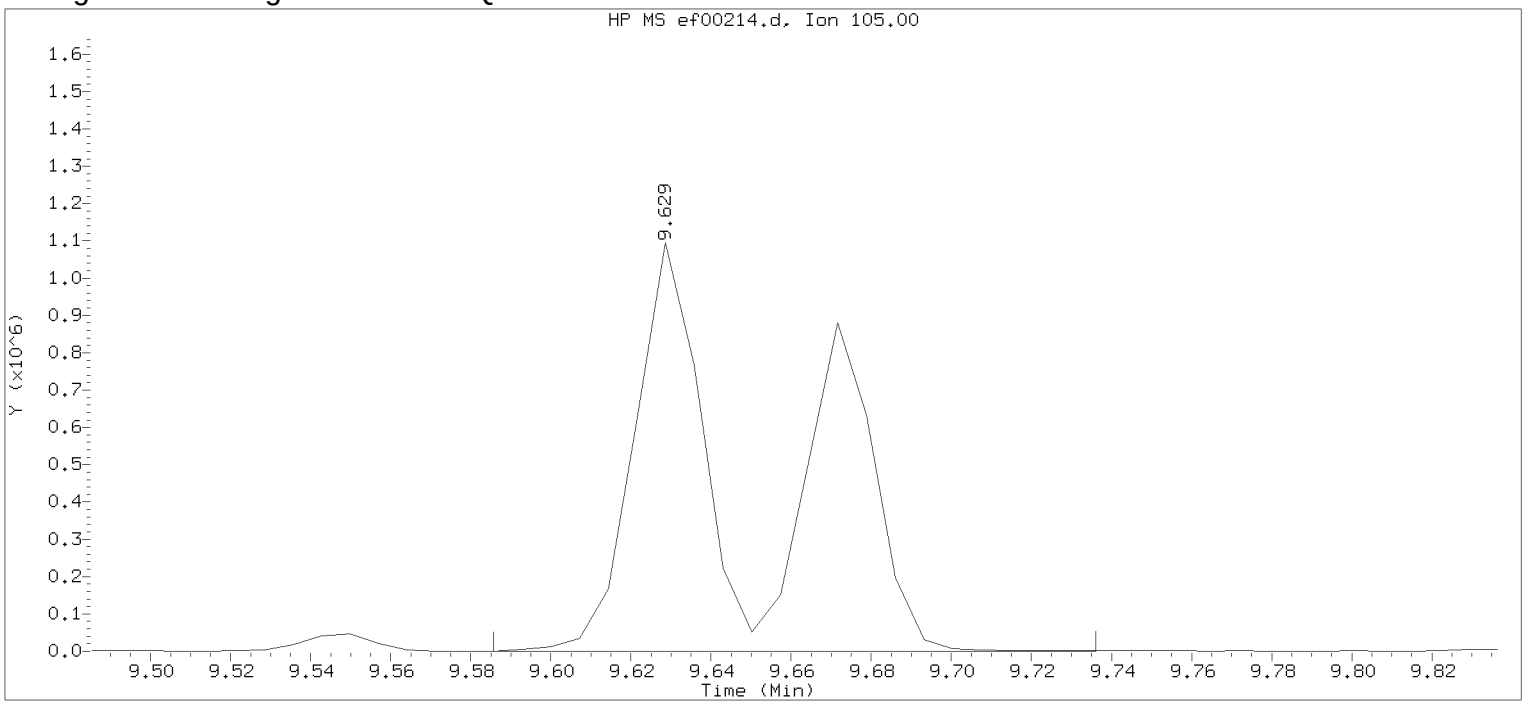
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/18/2018 at 16:21.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/19/2018 at 15:58.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun18.b/ef00214.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 16:00 Analyst ID: jeb07445

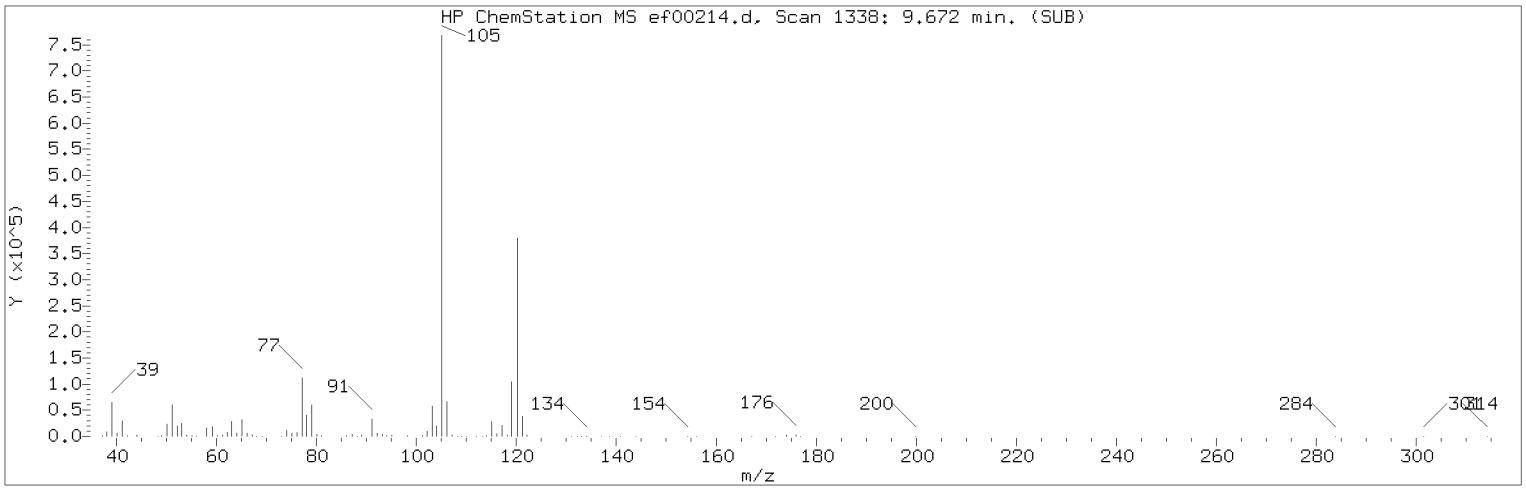
Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 16:19 Unknown

Sample Name: LCSDE09 Lab Sample ID: LCSDE09

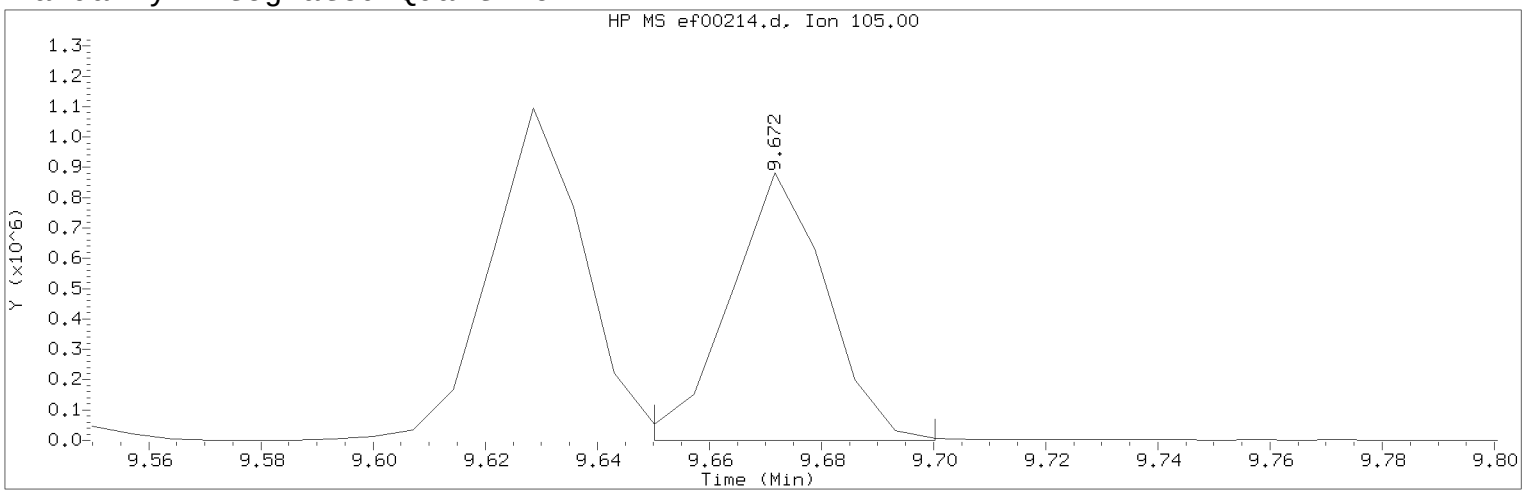
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 2316731
Concentration (ppb(v)) : 19.3664
Integration start scan : 1325 Integration stop scan: 1346
Y at integration start : 497 Y at integration end: 497

Digitally signed by Jacob E. Bailey on 06/18/2018 at 16:21.
Target 3.5 esignature used. LED1 Page 1482

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun18.b/ef00214.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 16:00 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 16:20 jeb07445

Sample Name: LCSDE09 Lab Sample ID: LCSDE09

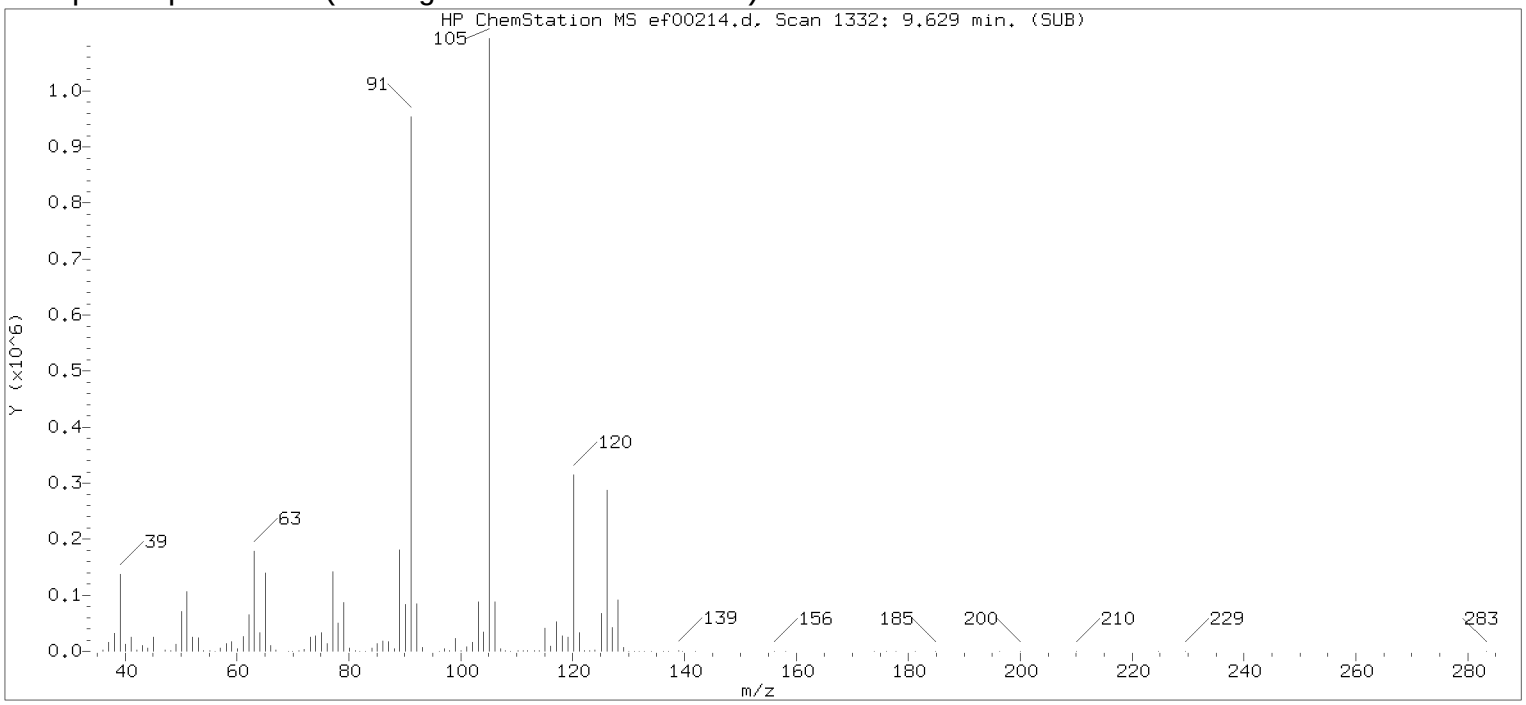
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 1058071M
Concentration (ppb(v)) : 10.8435
Integration start scan : 1334 Integration stop scan: 1341
Y at integration start : 259 Y at integration end: 259

Reason for manual integration: improper integration

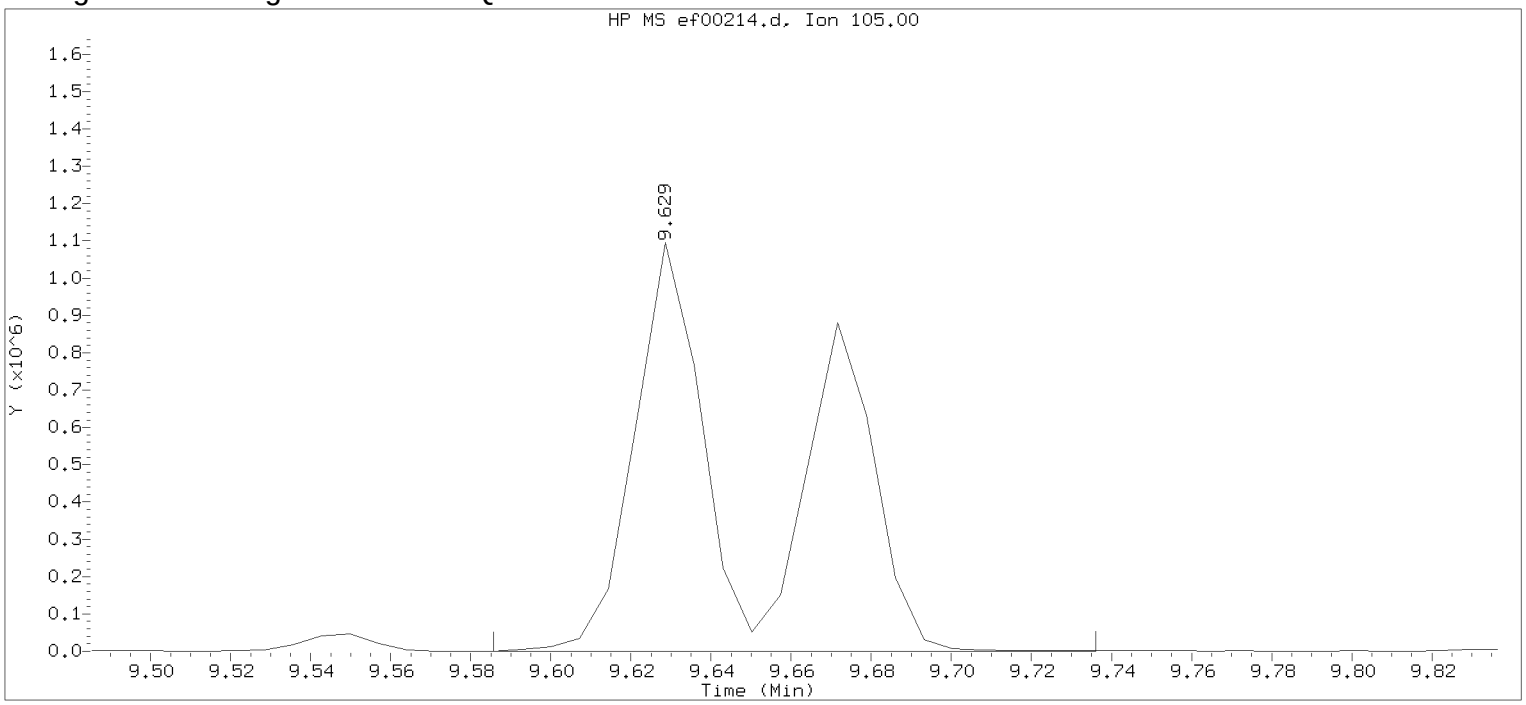
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/18/2018 at 16:21.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/19/2018 at 15:58.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun18.b/ef00214.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 16:00 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 16:19 Unknown

Sample Name: LCSDE09 Lab Sample ID: LCSDE09

Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 2316731
Concentration (ppb(v)) : 23.7427
Integration start scan : 1325 Integration stop scan: 1346
Y at integration start : 497 Y at integration end: 497

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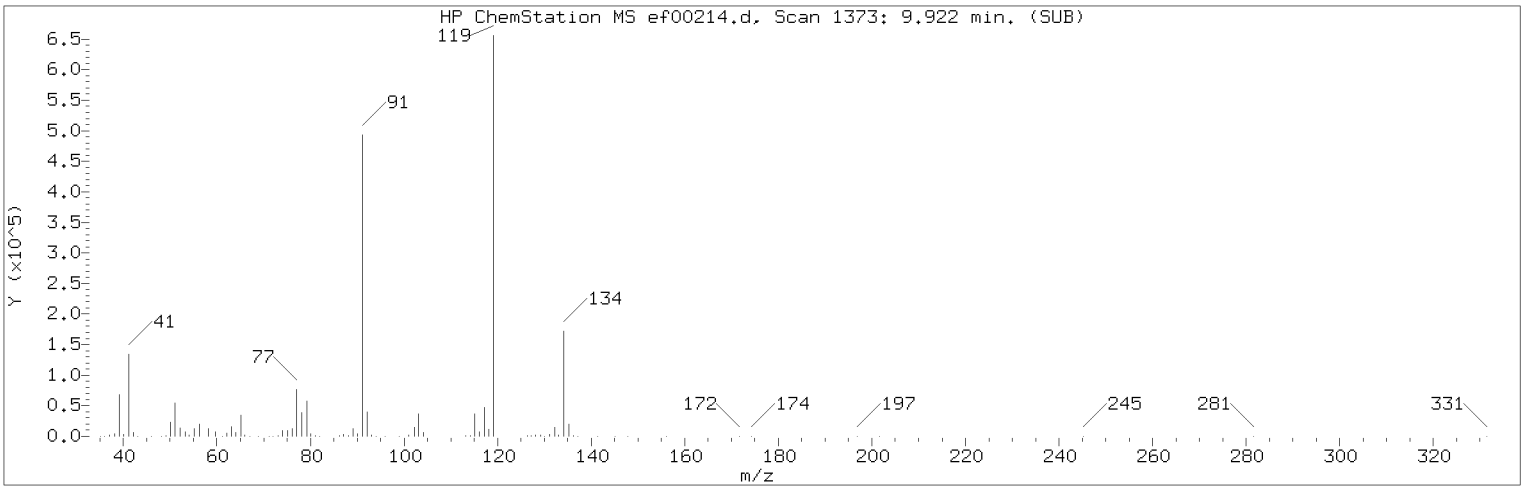
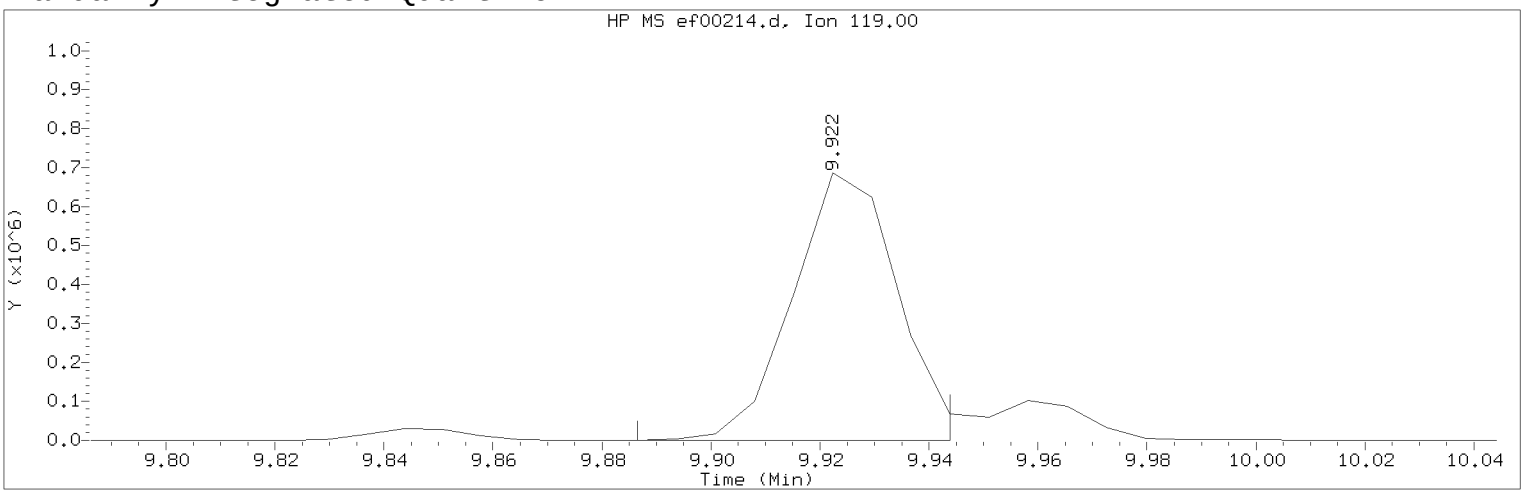
Target 3.5 esignature used. GLED1 Page 1434 of 1687

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun18.b/ef00214.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 16:00 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 16:20 jeb07445

Sample Name: LCSDE09 Lab Sample ID: LCSDE09

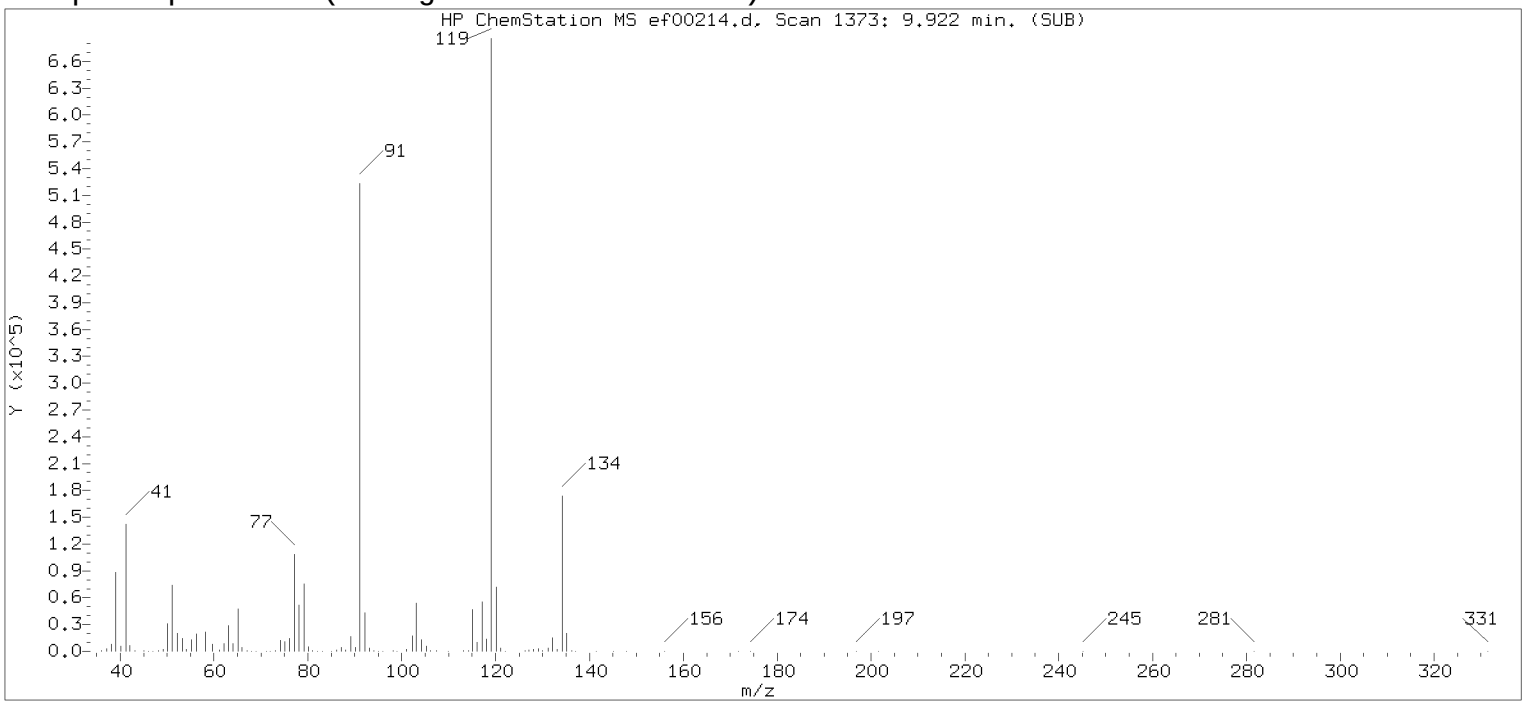
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 919613M
Concentration (ppb(v)) : 10.3881
Integration start scan : 1367 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

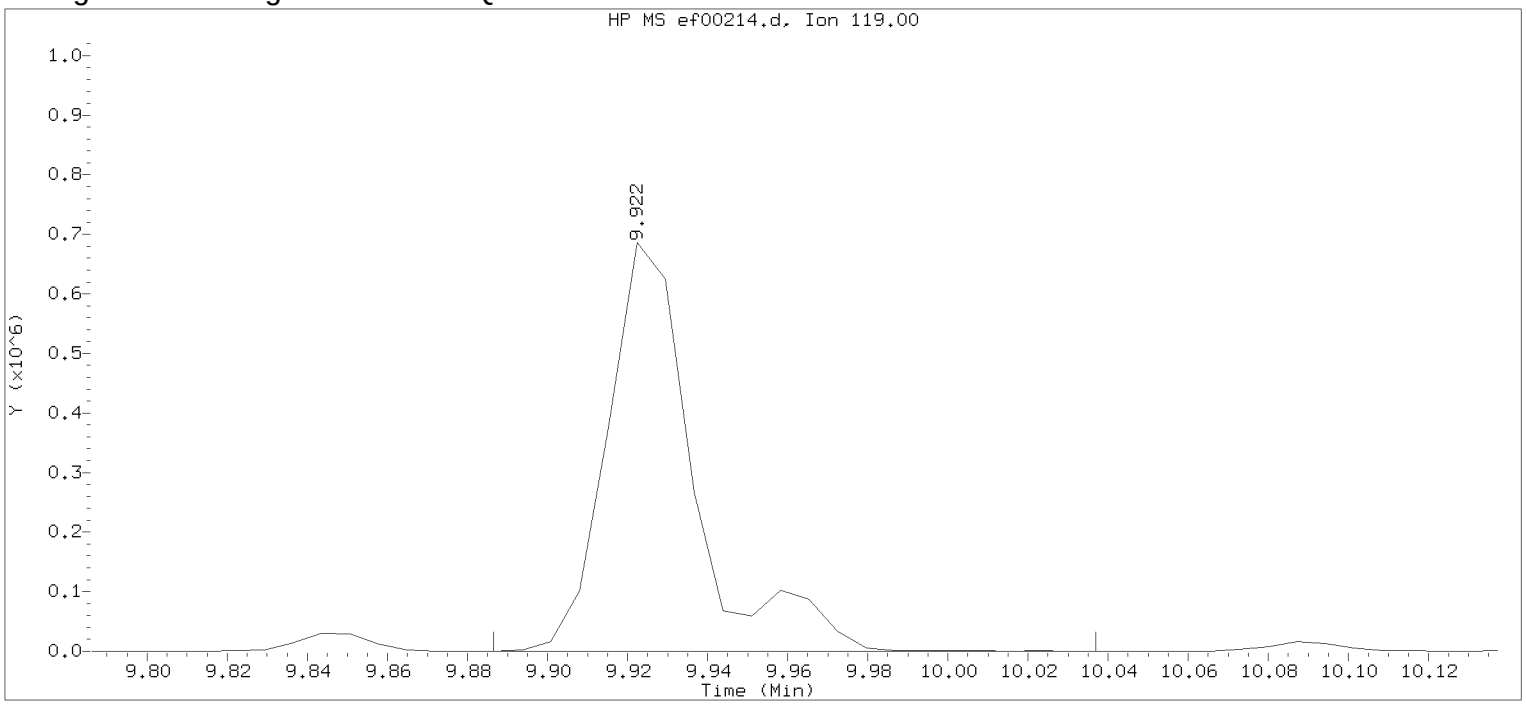
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/18/2018 at 16:21.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/19/2018 at 15:58.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun18.b/ef00214.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 16:00 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 14:17
Date, time and analyst ID of latest file update: 18-Jun-2018 16:19 Unknown

Sample Name: LCSDE09 Lab Sample ID: LCSDE09

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 1045847
Concentration (ppb(v)) : 11.8140
Integration start scan : 1367 Integration stop scan: 1388
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/18/2018 at 16:21.
Target 3.5 esignature used. LED1 Page 1445

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

Data file: /chem/HP22820.i/18jun18.b/ef00226.d Injection date and time: **18-JUN-2018 22:45**
Data file Sample Info. Line: cc894;200;E1816930AA;cc894;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1816930AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 12:29 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun18.b/ef00212.d**

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 18-JUN-2018 19:24
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun18.b/ef00211.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	5.467(0.000)	751	130	348984 (-18)	10.00		254529 - 593901
51) 1,4-Difluorobenzene	6.291(0.000)	866	114	878713 (-32)	10.00		773038 - 1803754
71) Chlorobenzene-d5	8.497(0.000)	1174	117	1014906 (-21)	10.00		771678 - 1800580

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)			Not Detected					0.5	1
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)			Not Detected					0.2	1
7) 1,3-Butadiene	(1)			Not Detected					0.4	2
8) Bromomethane	(1)			Not Detected					0.5	1
9) Chloroethane	(1)			Not Detected					0.2	1
10) Bromoethene	(1)			Not Detected					0.4	2
11) Dichlorofluoromethane	(1)			Not Detected					0.2	1
12) Trichlorofluoromethane	(1)			Not Detected					0.2	1
13) Pentane	(1)			Not Detected					0.5	1
14) Ethanol	(1)			Not Detected					0.5	2
15) Freon123a	(1)			Not Detected					0.2	1
16) Acrolein	(1)			Not Detected					1	2
17) 1,1-Dichloroethene	(1)			Not Detected					0.2	1
18) Freon 113	(1)			Not Detected					0.5	2
19) Acetone	(1)	3.540(-0.001)	43	46020	1.360	1.36		J	0.5	2
20) Methyl Iodide	(1)			Not Detected					0.2	1
21) Carbon Disulfide	(1)			Not Detected					0.5	1
22) Isopropanol	(1)			Not Detected					0.5	2
23) Acetonitrile	(1)			Not Detected					0.5	2
24) 3-Chloropropene	(1)			Not Detected					0.2	1
25) Methylene Chloride	(1)			Not Detected					0.2	1
26) tert-Butyl Alcohol	(1)			Not Detected					0.5	1
27) Acrylonitrile	(1)			Not Detected					0.5	2
28) trans-1,2-Dichloroethene	(1)			Not Detected					0.2	1
29) Methyl t-Butyl Ether	(1)			Not Detected					0.2	1
30) Hexane	(1)			Not Detected					0.2	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.2	1
32) Vinyl Acetate	(1)			Not Detected					1	1
33) Di-Isopropyl Ether	(1)			Not Detected					0.2	1
34) Ethyl Tert-Butyl Ether	(1)			Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.2	1
36) 1,2-Dichloroethene (total)	(1)			Not Detected					0.2	1
37) 2-Butanone	(1)			Not Detected					0.5	2
38) Ethyl Acetate	(1)			Not Detected					0.5	1
39) Methyl Acrylate	(1)			Not Detected					0.2	1
41) Tetrahydrofuran	(1)			Not Detected					0.5	1
42) Chloroform	(1)			Not Detected					0.2	1
43) 1,1,1-Trichloroethane	(1)			Not Detected					0.2	1
44) Cyclohexane	(1)			Not Detected					0.2	1

Digitally signed by Jacob E. Bailey on 06/19/2018 at 12:30. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun18.b/ef00226.d Injection date and time: **18-JUN-2018 22:45**
Data file Sample Info. Line: cc894;200;E1816930AA;cc894;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1816930AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 12:29 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun18.b/ef00212.d**

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 18-JUN-2018 19:24
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun18.b/ef00211.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
45) Carbon Tetrachloride	(1)				Not Detected					0.2	1
46) Benzene	(2)				Not Detected					0.2	1
47) 1,2-Dichloroethane	(2)				Not Detected					0.2	1
48) Isooctane	(2)				Not Detected					0.2	1
49) Tert-Amyl Methyl Ether	(2)				Not Detected					0.2	1
50) Heptane	(2)				Not Detected					0.5	1
52) Trichloroethene	(2)				Not Detected					0.2	1
53) Ethyl Acrylate	(2)				Not Detected					0.2	1
54) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
55) Dibromomethane	(2)				Not Detected					0.2	1
56) 1,4-Dioxane	(2)				Not Detected					0.5	1
57) Methyl Methacrylate	(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)				Not Detected					0.2	1
62) Octane	(3)				Not Detected					0.2	1
63) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
64) 1,3-Dichloropropene (total)	(3)				Not Detected					0.2	1
65) Ethyl Methacrylate	(3)				Not Detected					0.2	1
66) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
67) Tetrachloroethene	(3)				Not Detected					0.2	1
68) 2-Hexanone	(3)				Not Detected					0.5	2
69) Dibromochloromethane	(3)				Not Detected					0.2	1
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)				Not Detected					0.2	1
75) m/p-Xylene	(3)				Not Detected					0.2	1
76) o-Xylene	(3)				Not Detected					0.2	1
77) Xylene (total)	(3)				Not Detected					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
84) n-Propylbenzene	(3)				Not Detected					0.5	1
85) 2-Chlorotoluene	(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
88) Alpha Methyl Styrene	(3)				Not Detected					0.2	1
89) tert-Butylbenzene	(3)				Not Detected					0.5	1
90) 1,2,4-Trimethylbenzene	(3)				Not Detected					0.2	1
91) sec-Butylbenzene	(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
94) p-Isopropyltoluene	(3)				Not Detected					0.2	1
95) Benzyl Chloride	(3)				Not Detected					0.5	1
96) 1,2-Dichlorobenzene	(3)				Not Detected					0.2	1
97) n-Butylbenzene	(3)				Not Detected					0.2	1
98) Hexachloroethane	(3)				Not Detected					0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)				Not Detected					0.2	1
100) 1,2,4-Trichlorobenzene	(3)				Not Detected					0.5	2

Digitally signed by Jacob E. Bailey on 06/19/2018 at 12:30. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun18.b/ef00226.d Injection date and time: **18-JUN-2018 22:45**
Data file Sample Info. Line: cc894;200;E1816930AA;cc894;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1816930AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 12:29 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun18.b/ef00212.d**

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 18-JUN-2018 19:24
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun18.b/ef00211.d**

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

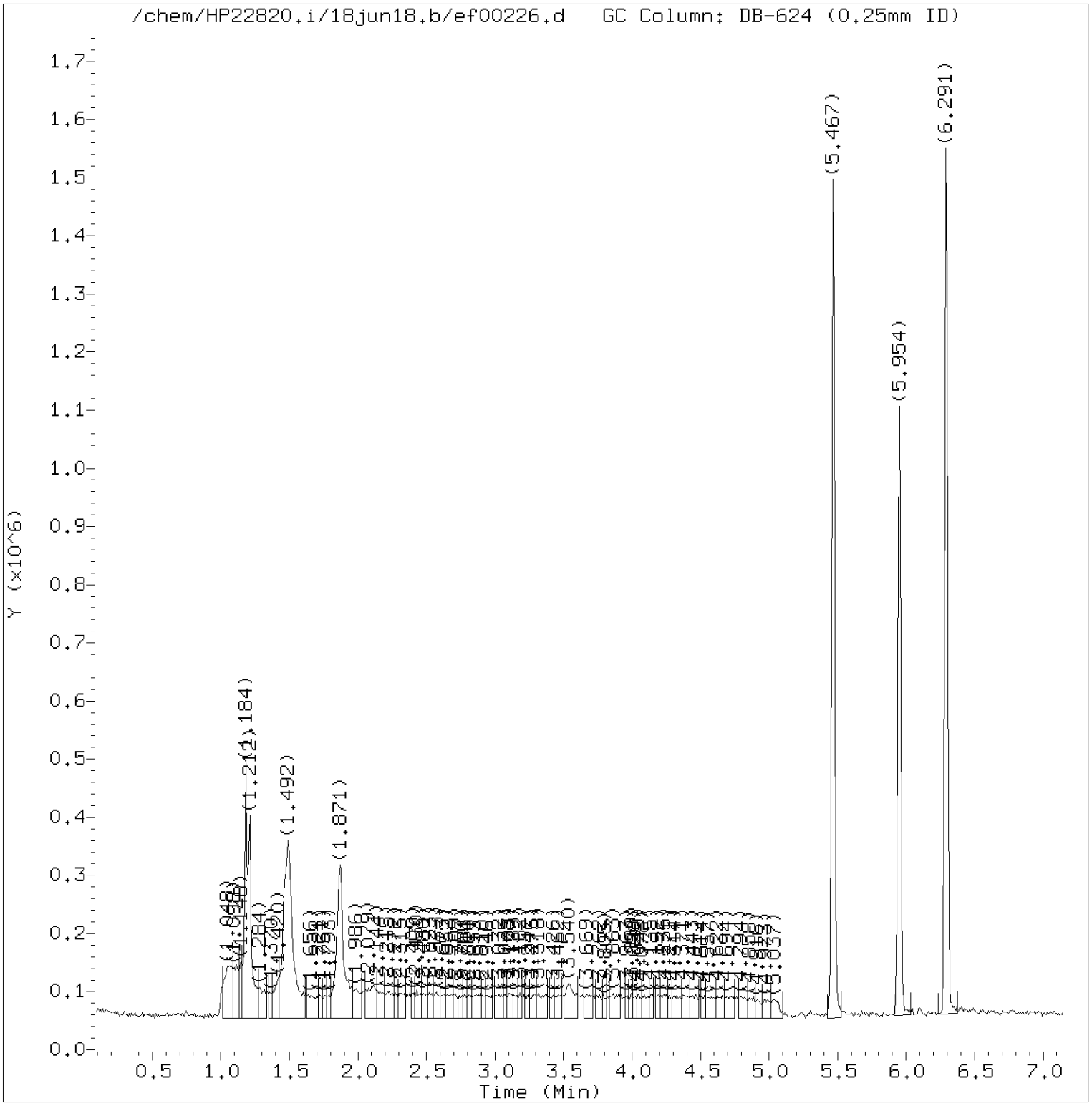
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
101) Hexachlorobutadiene	(3)				Not Detected					0.4	2
102) Naphthalene	(3)				Not Detected					0.4	1

Total number of targets = 99

Digitally signed by Jacob E. Bailey on 06/19/2018 at 12:30. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/19/2018 at 16:03. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

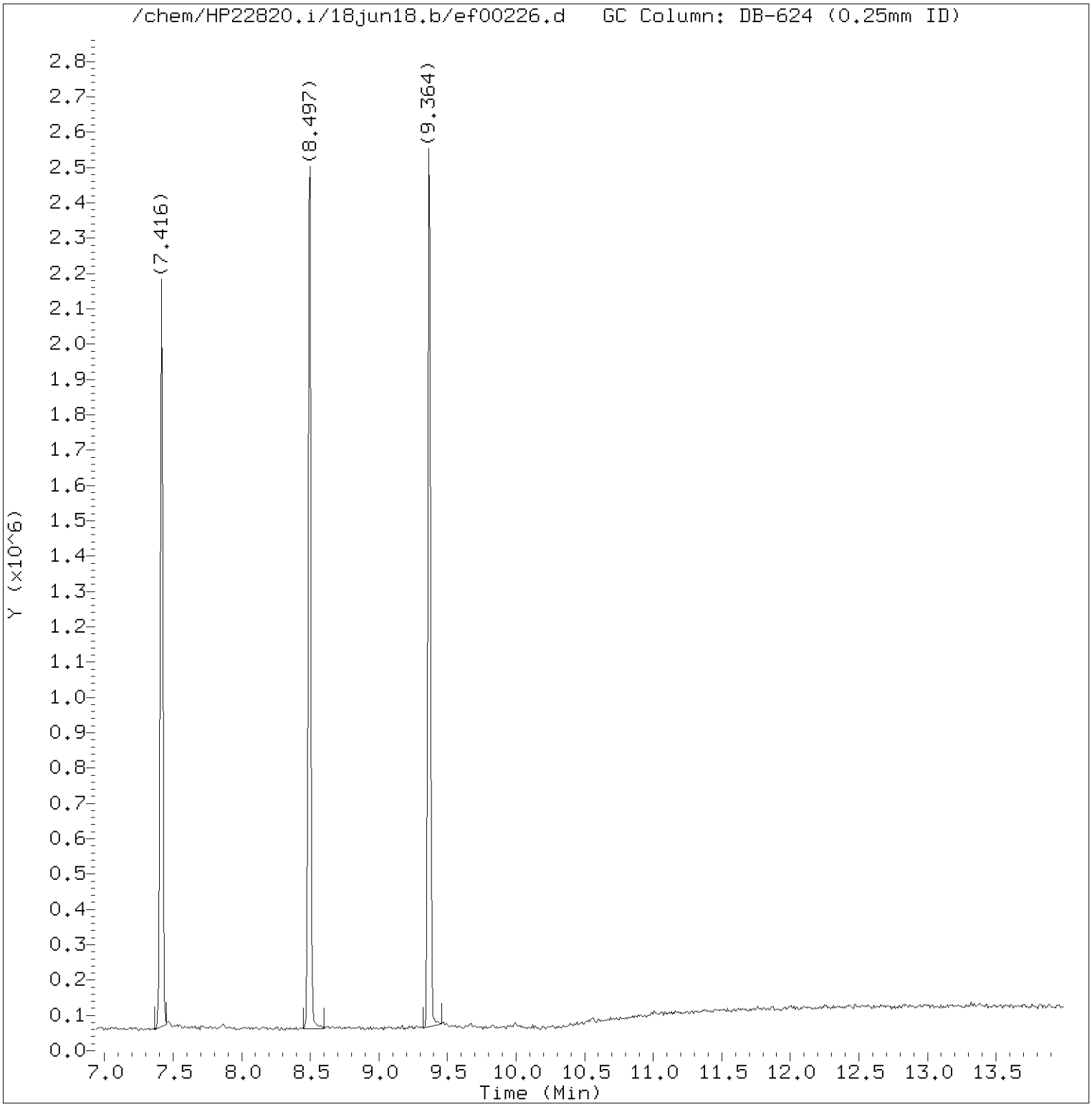
Target Revision 3.5

Data File: /chem/HP22820.i/18jun18.b/ef00226.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 22:45 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 19:24
Date, time and analyst ID of latest file update: 19-Jun-2018 12:29 jeb07445

Sample Name: cc894 Lab Sample ID: cc894

Digitally signed by Jacob E. Bailey
on 06/19/2018 at 12:30.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun18.b/ef00226.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 22:45 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 19:24
Date, time and analyst ID of latest file update: 19-Jun-2018 12:29 jeb07445

Sample Name: cc894 Lab Sample ID: cc894

Digitally signed by Jacob E. Bailey
on 06/19/2018 at 12:30.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun18.b/ef00226.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 22:45 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 19:24
Date, time and analyst ID of latest file update: 19-Jun-2018 12:29 jeb07445

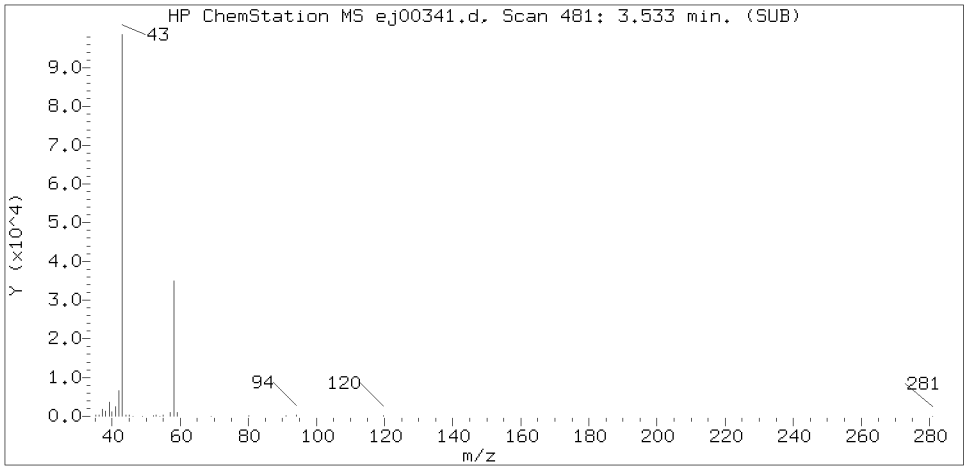
Sample Name: cc894 Lab Sample ID: cc894

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
19) Acetone	(1)	3.540	43	46020	1.360
40)*Bromochloromethane	(1)	5.467	130	348984	10.000
51)*1,4-Difluorobenzene	(2)	6.291	114	878713	10.000
71)*Chlorobenzene-d5	(3)	8.497	117	1014906	10.000

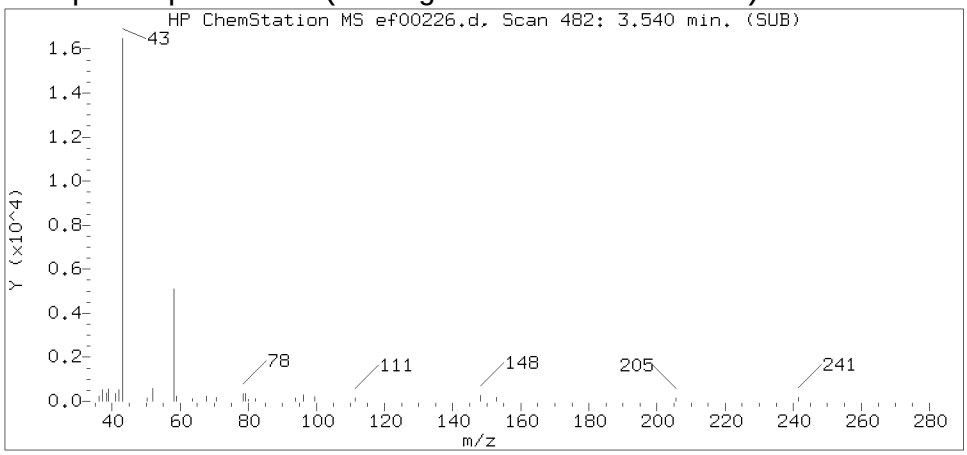
* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/19/2018 at 12:30.
Target 3.5 esignature user ID: jeb07445

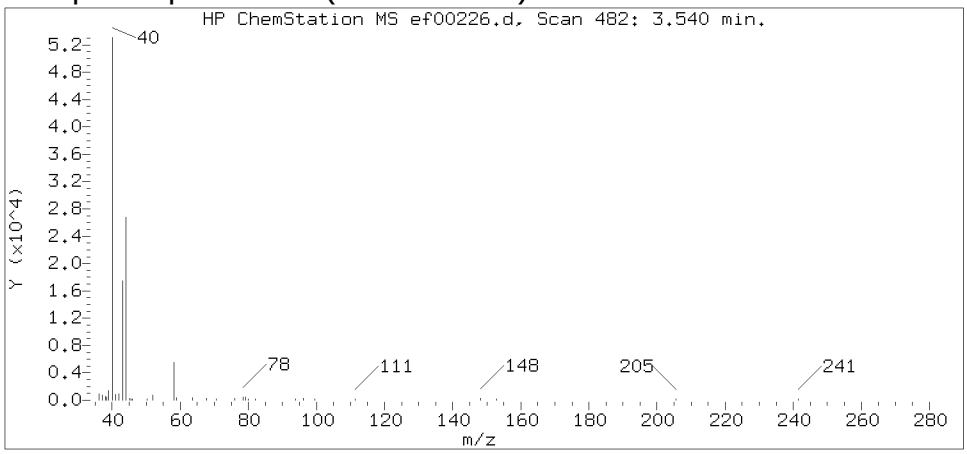
Reference Standard Spectrum for Acetone

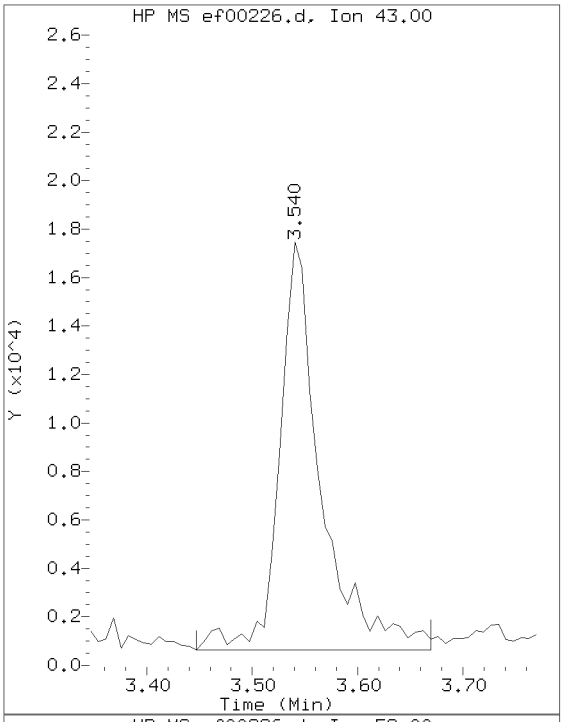


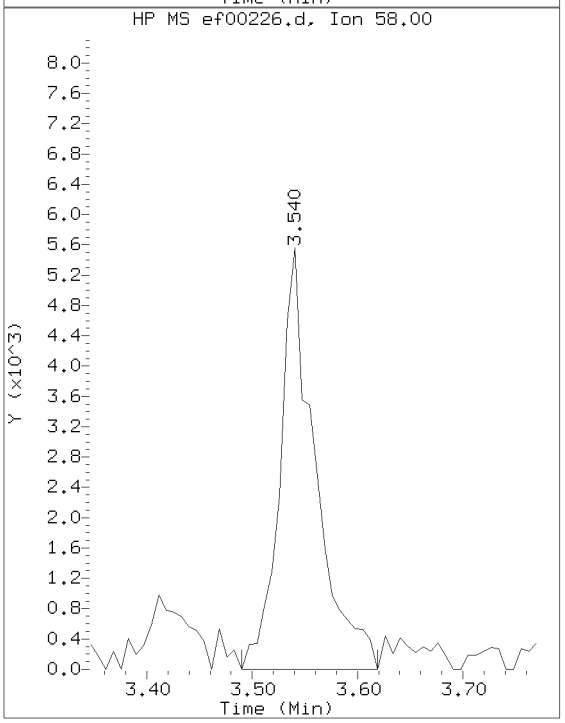
Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)







Data File: /chem/HP22820.i/18jun18.b/ef00226.d Instrument ID: HP22820.i
Injection date and time: 18-JUN-2018 22:45 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 19:24
Date, time and analyst ID of latest file update: 19-Jun-2018 12:29 jeb07445

Sample Name: cc894 Lab Sample ID: cc894

Compound Number : 19
Compound Name : Acetone
Scan Number : 482
Retention Time (minutes): 3.540
Relative Retention Time :-0.00132
Quant Ion : 43.00
Area (flag) : 46020
Concentration (ppb(v)) : 1.3597

Digitally signed by Jacob E. Bailey on 06/19/2018 at 12:30.
Target 3.5 esignature user ID: jeb07445

Lancaster Laboratories
Volatiles in Air
Runlog for Agilent GC/MS System HP22820 **HP #05**

Data Directory Path is - D:\data\18jun19\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
jeb07445	EF00230.D	50NGBFB	06/19/2018	13:14		
jeb07445	EF00231.D	VSTD010	06/19/2018	14:13		
jeb07445	EF00232.D	VSTD010	06/19/2018	14:58		
jeb07445	EF00233.D	VBLKE10	06/19/2018	15:44	E1817030AA	
jeb07445	EF00234.D	LCSE10	06/19/2018	16:29	E1817030AA	
jeb07445	EF00235.D	LCSDE10	06/19/2018	17:01	E1817030AA	
jeb07445	EF00236.D	fc1	06/19/2018	17:42	E1817030AA	
jeb07445	EF00237.D	fc2	06/19/2018	18:18	E1817030AA	
jeb07445	EF00238.D	fc3	06/19/2018	18:51	E1817030AA	
jeb07445	EF00239.D	fc4	06/19/2018	19:26	E1817030AA	
jeb07445	EF00240.D	cc851	06/19/2018	20:05	E1817030AA	
jeb07445	EF00241.D	cc1157	06/19/2018	20:37	E1817030AA	
jeb07445	EF00242.D	cc1178	06/19/2018	21:10	E1817030AA	

eurofins | Lancaster Laboratories Environmental

FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKE10
Canister ID:	N/A	Lab File ID:	ef00233.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/19/2018
Injection Volume:	200 cc	Analyzed Time:	15:44
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
115-07-1	Propene	0.50	U
75-71-8	Dichlorodifluoromethane	0.20	U
75-45-6	Chlorodifluoromethane	0.20	U
76-14-2	Freon 114	0.20	U
74-87-3	Chloromethane	0.20	U
75-01-4	Vinyl Chloride	0.20	U
106-99-0	1,3-Butadiene	0.40	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.20	U
593-60-2	Bromoethene	0.40	U
75-43-4	Dichlorofluoromethane	0.20	U
75-69-4	Trichlorofluoromethane	0.20	U
109-66-0	Pentane	0.50	U
64-17-5	Ethanol	0.50	U
107-02-8	Acrolein	1.0	U
75-35-4	1,1-Dichloroethene	0.20	U
76-13-1	Freon 113	0.50	U
67-64-1	Acetone	0.50	U
74-88-4	Methyl Iodide	0.20	U
75-15-0	Carbon Disulfide	0.50	U
67-63-0	Isopropanol	0.50	U
75-05-8	Acetonitrile	0.50	U
107-05-1	3-Chloropropene	0.20	U
75-09-2	Methylene Chloride	0.20	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKE10
Canister ID:	N/A	Lab File ID:	ef00233.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/19/2018
Injection Volume:	200 cc	Analyzed Time:	15:44
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-65-0	tert-Butyl Alcohol	0.50	U
107-13-1	Acrylonitrile	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.20	U
1634-04-4	Methyl t-Butyl Ether	0.20	U
110-54-3	Hexane	0.20	U
75-34-3	1,1-Dichloroethane	0.20	U
108-05-4	Vinyl Acetate	1.0	U
108-20-3	Di-Isopropyl Ether	0.20	U
637-92-3	Ethyl Tert-Butyl Ether	0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	U
540-59-0	1,2-Dichloroethene (total)	0.20	U
78-93-3	2-Butanone	0.50	U
141-78-6	Ethyl Acetate	0.50	U
96-33-3	Methyl Acrylate	0.20	U
109-99-9	Tetrahydrofuran	0.50	U
67-66-3	Chloroform	0.20	U
71-55-6	1,1,1-Trichloroethane	0.20	U
110-82-7	Cyclohexane	0.20	U
56-23-5	Carbon Tetrachloride	0.20	U
71-43-2	Benzene	0.20	U
107-06-2	1,2-Dichloroethane	0.20	U
540-84-1	Isooctane	0.20	U
994-05-8	Tert-Amyl Methyl Ether	0.20	U
142-82-5	Heptane	0.50	U

Abbreviations:
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D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKE10
Canister ID:	N/A	Lab File ID:	ef00233.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/19/2018
Injection Volume:	200 cc	Analyzed Time:	15:44
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
79-01-6	Trichloroethene	0.20	U
140-88-5	Ethyl Acrylate	0.20	U
78-87-5	1,2-Dichloropropane	0.20	U
74-95-3	Dibromomethane	0.20	U
123-91-1	1,4-Dioxane	0.50	U
80-62-6	Methyl Methacrylate	0.20	U
75-27-4	Bromodichloromethane	0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	U
108-10-1	4-Methyl-2-Pentanone	0.50	U
108-88-3	Toluene	0.20	U
111-65-9	Octane	0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	U
542-75-6	1,3-Dichloropropene (total)	0.20	U
97-63-2	Ethyl Methacrylate	0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	U
127-18-4	Tetrachloroethene	0.20	U
591-78-6	2-Hexanone	0.50	U
124-48-1	Dibromochloromethane	0.20	U
106-93-4	1,2-Dibromoethane	0.20	U
108-90-7	Chlorobenzene	0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	U
100-41-4	Ethylbenzene	0.20	U
179601-23-1	m/p-Xylene	0.20	U
95-47-6	o-Xylene	0.20	U

Abbreviations:
U = The compound is less than the limit being reported.
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E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKE10
Canister ID:	N/A	Lab File ID:	ef00233.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/19/2018
Injection Volume:	200 cc	Analyzed Time:	15:44
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
1330-20-7	Xylene (total)	0.20	U
100-42-5	Styrene	0.20	U
75-25-2	Bromoform	0.20	U
98-82-8	Cumene	0.20	U
108-86-1	Bromobenzene	0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U
96-18-4	1,2,3-Trichloropropane	0.20	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.20	U
622-96-8	4-Ethyltoluene	0.20	U
108-67-8	1,3,5-Trimethylbenzene	0.20	U
98-83-9	Alpha Methyl Styrene	0.20	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.20	U
135-98-8	sec-Butylbenzene	0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	U
99-87-6	p-Isopropyltoluene	0.20	U
100-44-7	Benzyl Chloride	0.50	U
95-50-1	1,2-Dichlorobenzene	0.20	U
104-51-8	n-Butylbenzene	0.20	U
67-72-1	Hexachloroethane	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

Abbreviations:
U = The compound is less than the limit being reported.
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E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKE10
Canister ID:	N/A	Lab File ID:	ef00233.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/19/2018
Injection Volume:	200 cc	Analyzed Time:	15:44
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
87-68-3	Hexachlorobutadiene	0.40	U
91-20-3	Naphthalene	0.40	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 LCS File ID: ef00234.d LCSD File ID: ef00235.d

Batch: E1817030AA LCS Injected: 06/19/2018 LCSD Injected: 06/19/2018

Method: EPA TO-15 LCS Client ID: LCSE10 LCSD Client ID: LCSDE10

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	10.00	9.21	9.71	92	97	78-126	5	25	YES
Dichlorodifluoromethane	10.00	10.83	11.49	108	115	74-133	6	25	YES
Chlorodifluoromethane	10.00	11.49	12.08	115	121	70-138	5	25	YES
Freon 114	10.00	10.47	11.11	105	111	66-126	6	25	YES
Chloromethane	10.00	11.71	12.26	117	123	65-140	5	25	YES
Vinyl Chloride	10.00	10.20	10.90	102	109	75-130	7	25	YES
1,3-Butadiene	10.00	8.58	9.26	86	93	72-122	8	25	YES
Bromomethane	10.00	11.36	11.97	114	120	71-133	5	25	YES
Chloroethane	10.00	10.79	11.06	108	111	76-129	2	25	YES
Bromoethene	10.00	8.53	9.67	85	97	77-123	13	25	YES
Dichlorofluoromethane	10.00	11.55	12.07	116	121	75-137	4	25	YES
Trichlorofluoromethane	10.00	10.22	10.81	102	108	73-132	6	25	YES
Pentane	10.00	7.94	8.72	79	87	69-125	9	25	YES
Ethanol	10.00	9.37	10.54	94	105	56-149	12	25	YES
Acrolein	10.00	8.86	9.64	89	96	54-132	8	25	YES
1,1-Dichloroethene	10.00	9.44	10.32	94	103	70-129	9	25	YES
Freon 113	10.00	9.64	10.07	96	101	66-119	4	25	YES
Acetone	10.00	10.84	11.66	108	117	71-136	7	25	YES
Methyl Iodide	10.00	8.01	8.64	80	86	72-127	8	25	YES
Carbon Disulfide	10.00	10.71	11.18	107	112	72-128	4	25	YES
Isopropanol	10.00	8.14	8.98	81	90	69-160	10	25	YES
Acetonitrile	10.00	10.45	10.99	104	110	56-136	5	25	YES
3-Chloropropene	10.00	10.16	10.92	102	109	67-141	7	25	YES
Methylene Chloride	10.00	11.67	12.06	117	121	69-128	3	25	YES
tert-Butyl Alcohol	10.00	7.55	8.10	75	81	71-154	7	25	YES
Acrylonitrile	10.00	10.79	11.44	108	114	68-135	6	25	YES
trans-1,2-Dichloroethene	10.00	10.12	10.88	101	109	77-128	7	25	YES
Methyl t-Butyl Ether	10.00	7.36	7.90	74	79	71-119	7	25	YES
Hexane	10.00	7.79	8.27	78	83	70-118	6	25	YES
1,1-Dichloroethane	10.00	10.26	10.96	103	110	74-129	7	25	YES
Vinyl Acetate	10.00	8.61	8.89	86	89	75-161	3	25	YES
Di-Isopropyl Ether	10.00	8.53	9.25	85	92	71-122	8	25	YES
Ethyl Tert-Butyl Ether	10.00	6.57	7.18	66*	72	68-121	9	25	NO
cis-1,2-Dichloroethene	10.00	9.27	9.59	93	96	76-126	3	25	YES
2-Butanone	10.00	9.21	9.83	92	98	75-126	7	25	YES
Ethyl Acetate	10.00	8.83	8.66	88	87	73-124	2	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 LCS File ID: ef00234.d LCSD File ID: ef00235.d

Batch: E1817030AA LCS Injected: 06/19/2018 LCSD Injected: 06/19/2018

Method: EPA TO-15 LCS Client ID: LCSE10 LCSD Client ID: LCSDE10

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	10.00	8.96	9.82	90	98	75-125	9	25	YES
Tetrahydrofuran	10.00	8.45	8.96	85	90	67-127	6	25	YES
Chloroform	10.00	10.59	11.17	106	112	75-127	5	25	YES
1,1,1-Trichloroethane	10.00	9.90	10.36	99	104	74-122	5	25	YES
Cyclohexane	10.00	8.16	8.75	82	88	70-118	7	25	YES
Carbon Tetrachloride	10.00	10.47	11.07	105	111	72-127	5	25	YES
Benzene	10.00	10.21	11.09	102	111	76-123	8	25	YES
1,2-Dichloroethane	10.00	11.63	13.05	116	130	72-138	12	25	YES
Isooctane	10.00	9.98	10.85	100	109	74-127	8	25	YES
Tert-Amyl Methyl Ether	10.00	8.43	9.14	84	91	78-124	8	25	YES
Heptane	10.00	9.72	10.61	97	106	74-122	9	25	YES
Trichloroethene	10.00	9.69	10.47	97	105	76-118	8	25	YES
Ethyl Acrylate	10.00	8.45	9.38	84	94	71-126	10	25	YES
1,2-Dichloropropane	10.00	11.21	12.17	112	122	75-127	8	25	YES
Dibromomethane	10.00	10.56	11.63	106	116	76-124	10	25	YES
1,4-Dioxane	10.00	9.69	10.58	97	106	76-124	9	25	YES
Methyl Methacrylate	10.00	8.35	9.39	84	94	73-117	12	25	YES
Bromodichloromethane	10.00	11.33	12.36	113	124	75-134	9	25	YES
cis-1,3-Dichloropropene	10.00	8.64	9.68	86	97	51-120	11	25	YES
4-Methyl-2-Pentanone	10.00	9.43	10.39	94	104	79-131	10	25	YES
Toluene	10.00	10.10	10.65	101	107	78-119	5	25	YES
Octane	10.00	10.69	10.96	107	110	73-122	2	25	YES
trans-1,3-Dichloropropene	10.00	9.65	10.22	96	102	76-131	6	25	YES
Ethyl Methacrylate	10.00	9.06	9.47	91	95	69-137	4	25	YES
1,1,2-Trichloroethane	10.00	11.46	11.73	115	117	76-127	2	25	YES
Tetrachloroethene	10.00	9.88	10.32	99	103	68-123	4	25	YES
2-Hexanone	10.00	10.28	10.75	103	107	74-134	4	25	YES
Dibromochloromethane	10.00	11.78	12.29	118	123	74-131	4	25	YES
1,2-Dibromoethane	10.00	10.84	11.14	108	111	73-121	3	25	YES
Chlorobenzene	10.00	9.85	10.47	98	105	76-117	6	25	YES
1,1,1,2-Tetrachloroethane	10.00	11.70	12.10	117	121	73-137	3	25	YES
Ethylbenzene	10.00	9.34	9.90	93	99	77-117	6	25	YES
m/p-Xylene	10.00	9.21	9.95	92	99	78-119	8	25	YES
o-Xylene	10.00	8.93	9.68	89	97	78-121	8	25	YES
Xylene (total)	20.00	18.13	19.63	91	98	79-120	8	25	YES
Styrene	10.00	9.82	10.37	98	104	77-143	5	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 LCS File ID: ef00234.d LCSD File ID: ef00235.d

Batch: E1817030AA LCS Injected: 06/19/2018 LCSD Injected: 06/19/2018

Method: EPA TO-15 LCS Client ID: LCSE10 LCSD Client ID: LCSDE10

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	11.29	11.92	113	119	58-144	5	25	YES
Cumene	10.00	9.16	9.60	92	96	80-133	5	25	YES
Bromobenzene	10.00	10.01	10.47	100	105	74-118	4	25	YES
1,1,2,2-Tetrachloroethane	10.00	11.92	12.32	119	123	72-133	3	25	YES
1,2,3-Trichloropropane	10.00	11.85	12.10	118	121	71-127	2	25	YES
n-Propylbenzene	10.00	9.77	10.25	98	103	73-120	5	25	YES
2-Chlorotoluene	10.00	10.88	11.43	109	114	74-123	5	25	YES
4-Ethyltoluene	10.00	10.74	11.27	107	113	73-130	5	25	YES
1,3,5-Trimethylbenzene	10.00	10.75	11.35	107	113	72-130	5	25	YES
Alpha Methyl Styrene	10.00	8.96	9.48	90	95	71-138	6	25	YES
tert-Butylbenzene	10.00	10.58	11.55	106	116	78-138	9	25	YES
1,2,4-Trimethylbenzene	10.00	10.99	11.97	110	120	70-138	9	25	YES
sec-Butylbenzene	10.00	10.61	11.26	106	113	79-139	6	25	YES
1,3-Dichlorobenzene	10.00	11.17	11.74	112	117	75-129	5	25	YES
1,4-Dichlorobenzene	10.00	10.73	11.17	107	112	74-123	4	25	YES
p-Isopropyltoluene	10.00	10.61	11.27	106	113	75-145	6	25	YES
Benzyl Chloride	10.00	8.95	9.63	90	96	49-163	7	25	YES
1,2-Dichlorobenzene	10.00	10.86	11.22	109	112	71-126	3	25	YES
n-Butylbenzene	10.00	10.50	11.45	105	115	72-143	9	25	YES
Hexachloroethane	10.00	13.87	14.53	139*	145*	59-135	5	25	NO
1,2-Dibromo-3-chloropropane	10.00	10.17	10.61	102	106	52-156	4	25	YES
1,2,4-Trichlorobenzene	10.00	7.54	8.43	75	84	45-156	11	25	YES
Hexachlorobutadiene	10.00	9.78	10.84	98	108	49-154	10	25	YES
Naphthalene	10.00	7.35	8.38	73	84	39-152	13	25	YES

COMMENTS:

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FORM 04
VOLATILE ORGANICS IN AIR
METHOD BLANK SUMMARY

SDG No.:

Lab Sample ID: VBLKE10 Analyzed Date: 06/19/2018

Lab File ID: ef00233.d Analyzed Time: 15:44

Instrument ID: 22820

THIS BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS AND LCSD:

LAB SAMPLE ID	LAB FILE ID	CANISTER ID	DATE ANALYZED	TIME ANALYZED
LCSE10	ef00234.d	N/A	06/19/2018	16:29
LCSDE10	ef00235.d	N/A	06/19/2018	17:01
cc851	ef00240.d	851	06/19/2018	20:05
cc1157	ef00241.d	1157	06/19/2018	20:37
cc1178	ef00242.d	1178	06/19/2018	21:10

COMMENTS:

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

SDG No.:

Lab File ID: ef00230.d

BFB Injection Date: 06/19/2018

Instrument ID: 22820

BFB Injection Time: 13:14

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0% - 40.0% of mass 95	20.49
75	30.0% - 66.0% of mass 95	51.69
95	Base peak, 100% relative abundance	100.00
96	5.0% - 9.0% of mass 95	6.65
173	< 2.0% of mass 174	0.59 (0.75)
174	> 50.0% of mass 95	78.27
175	4.0% - 9.0% of mass 174	5.69 (7.26)
176	93.0% - 101.0% of mass 174	77.30 (98.75)
177	5.0% - 9.0% of mass 176	4.79 (6.20)

THIS CHECK APPLIES TO THE FOLLOWING:

LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD010	ef00232.d	06/19/2018	14:58
VBLKE10	ef00233.d	06/19/2018	15:44
LCSE10	ef00234.d	06/19/2018	16:29
LCSDE10	ef00235.d	06/19/2018	17:01
cc851	ef00240.d	06/19/2018	20:05
cc1157	ef00241.d	06/19/2018	20:37
cc1178	ef00242.d	06/19/2018	21:10

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: ef00232.d

Calibration Date: 06/19/2018

Instrument ID: 22820

Calibration Time: 14:58

Init. Calib. Date(s): 06/10/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
Propene	0.473	0.474	10.020	10	0
Dichlorodifluoromethane	1.655	1.901	11.485	10	15
Chlorodifluoromethane	1.050	1.240	11.818	10	18
Freon 114	1.777	1.977	11.128	10	11
Chloromethane	0.666	0.795	11.932	10	19
Vinyl Chloride	0.637	0.688	10.805	10	8
1,3-Butadiene	0.458	0.458	10.000	10	0
Bromomethane	0.542	0.652	12.017	10	20
Chloroethane	0.355	0.387	10.894	10	9
Bromoethene	0.553	0.499	9.020	10	-10
Dichlorofluoromethane	1.412	1.648	11.671	10	17
Trichlorofluoromethane	1.769	1.918	10.841	10	8
Pentane	1.014	0.933	9.198	10	-8
Ethanol	0.221	0.217	9.816	10	-2
Freon123a	1.311	1.447	12.249	11.1	10
Acrolein	0.235	0.206	8.782	10	-12
1,1-Dichloroethene	0.969	0.999	10.310	10	3
Freon 113	0.998	1.012	10.139	10	1
Acetone	0.970	1.115	11.501	10	15
Methyl Iodide	1.585	1.308	8.256	10	-17
Carbon Disulfide	1.814	2.118	11.676	10	17
Isopropanol	0.821	0.733	8.937	10	-11
Acetonitrile	0.430	0.512	11.894	10	19
3-Chloropropene	0.247	0.231	10.364	11.1	-7
Methylene Chloride	0.539	0.596	12.274	11.1	11
tert-Butyl Alcohol	0.917	0.674	8.164	11.1	-26
Acrylonitrile	0.535	0.591	11.053	10	11
trans-1,2-Dichloroethene	0.894	0.981	10.982	10	10
Methyl t-Butyl Ether	1.527	1.196	7.835	10	-22
Hexane	0.912	0.751	8.239	10	-18
1,1-Dichloroethane	1.224	1.351	11.040	10	10
Vinyl Acetate	0.130	0.110	9.492	11.2	-15
Di-Isopropyl Ether	1.975	1.838	9.303	10	-7
Ethyl Tert-Butyl Ether	1.334	0.985	7.387	10	-26
cis-1,2-Dichloroethene	0.836	0.826	9.874	10	-1
2-Butanone	0.315	0.293	9.293	10	-7
Ethyl Acetate	0.155	0.141	9.119	10	-9
Methyl Acrylate	1.025	0.987	9.623	10	-4
Tetrahydrofuran	0.694	0.624	9.001	10	-10

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: ef00232.d

Calibration Date: 06/19/2018

Instrument ID: 22820

Calibration Time: 14:58

Init. Calib. Date(s): 06/10/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
Chloroform	1.454	1.640	11.281	10	13
1,1,1-Trichloroethane	1.341	1.370	10.211	10	2
Cyclohexane	0.960	0.802	8.358	10	-16
Carbon Tetrachloride	1.313	1.449	11.040	10	10
Benzene	0.613	0.671	10.956	10	10
1,2-Dichloroethane	0.287	0.366	12.764	10	28
Isooctane	0.834	0.910	10.919	10	9
Tert-Amyl Methyl Ether	0.388	0.357	9.180	10	-8
Heptane	0.323	0.335	10.390	10	4
Trichloroethene	0.268	0.274	10.208	10	2
Ethyl Acrylate	0.376	0.335	8.911	10	-11
1,2-Dichloropropane	0.234	0.273	11.643	10	16
Dibromomethane	0.246	0.272	11.062	10	11
1,4-Dioxane	0.141	0.142	10.066	10	1
Methyl Methacrylate	0.196	0.177	8.994	10	-10
Bromodichloromethane	0.459	0.549	11.964	10	20
cis-1,3-Dichloropropene	0.334	0.310	9.278	10	-7
4-Methyl-2-Pentanone	0.456	0.436	9.548	10	-5
Toluene	0.718	0.733	10.208	10	2
Octane	0.445	0.467	10.506	10	5
trans-1,3-Dichloropropene	0.263	0.270	10.284	10	3
Ethyl Methacrylate	0.307	0.282	9.178	10	-8
1,1,2-Trichloroethane	0.272	0.321	11.778	10	18
Tetrachloroethene	0.366	0.375	10.247	10	2
2-Hexanone	0.410	0.410	9.988	10	0
Dibromochloromethane	0.327	0.392	12.011	10	20
1,2-Dibromoethane	0.403	0.445	11.062	10	11
Chlorobenzene	0.607	0.619	10.200	10	2
1,1,1,2-Tetrachloroethane	0.295	0.346	11.720	10	17
Ethylbenzene	0.903	0.855	9.469	10	-5
m/p-Xylene	0.690	0.646	9.371	10	-6
o-Xylene	0.678	0.608	8.962	10	-10
Styrene	0.513	0.507	9.873	10	-1
Bromoform	0.392	0.458	11.680	10	17
Cumene	0.904	0.804	8.897	10	-11
Bromobenzene	0.345	0.353	10.222	10	2
1,1,2,2-Tetrachloroethane	0.631	0.770	12.206	10	22
1,2,3-Trichloropropane	0.180	0.213	11.807	10	18
n-Propylbenzene	0.268	0.262	9.794	10	-2

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: ef00232.d

Calibration Date: 06/19/2018

Instrument ID: 22820

Calibration Time: 14:58

Init. Calib. Date(s): 06/10/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
2-Chlorotoluene	0.256	0.281	10.984	10	10
4-Ethyltoluene	0.957	1.014	10.590	10	6
1,3,5-Trimethylbenzene	0.781	0.839	10.742	10	7
Alpha Methyl Styrene	0.360	0.324	9.006	10	-10
tert-Butylbenzene	0.708	0.752	10.620	10	6
1,2,4-Trimethylbenzene	0.766	0.844	11.028	10	10
sec-Butylbenzene	1.097	1.128	10.284	10	3
1,3-Dichlorobenzene	0.591	0.672	11.372	10	14
1,4-Dichlorobenzene	0.585	0.648	11.077	10	11
p-Isopropyltoluene	0.877	0.926	10.556	10	6
Benzyl Chloride	0.393	0.373	9.480	10	-5
1,2-Dichlorobenzene	0.550	0.621	11.292	10	13
n-Butylbenzene	0.861	0.909	10.552	10	6
Hexachloroethane *	0.230	0.315	13.679	10	37 *
1,2-Dibromo-3-chloropropane	0.256	0.276	10.771	10	8
1,2,4-Trichlorobenzene	0.356	0.300	8.421	10	-16
Hexachlorobutadiene	0.296	0.309	10.430	10	4
Naphthalene	0.689	0.593	8.602	10	-14

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

Continuing Calibration
Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP22820.i/18jun10.b/ef00111.d
/chem/HP22820.i/18jun10.b/ef00112.d
/chem/HP22820.i/18jun10.b/ef00113.d
/chem/HP22820.i/18jun10.b/ef00114.d
/chem/HP22820.i/18jun10.b/ef00116.d
/chem/HP22820.i/18jun10.b/ef00117.d

** ICAL Area and RT are the average from the above standards.

Current Continuing Calibration Standard:

/chem/HP22820.i/18jun19.b/ef00232.d

Area Summary

Internal Standard Name	File ID: ef00232.d	ICAL Area	Low Limit	High Limit	In Spec
Bromochloromethane	353607	324192	194515	453869	Yes
1,4-Difluorobenzene	1059377	1109540	665724	1553356	Yes
Chlorobenzene-d5	1066956	1128840	677304	1580376	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

RT Summary

Internal Standard Name	File ID: ef00232.d	ICAL RT	In Spec
Bromochloromethane	5.467	5.467	Yes
1,4-Difluorobenzene	6.291	6.291	Yes
Chlorobenzene-d5	8.497	8.493	Yes

A "No" indicates the retention time is greater than 30 seconds from the RT of the referenced ICAL average.

Comments:_____

_____

Page 1 of 1

Report generated on 06/19/2018 at 15:17

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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: 06/19/2018

Lab File ID: ef00232.d Analyzed Time: 14:58

Instrument ID: 22820

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	R.T.	Area	R.T.	Area	R.T.
24 HOUR STANDARD	353607	5.47	1059377	6.29	1066956	8.50
UPPER LIMIT	495050	5.80	1483128	6.62	1493738	8.83
LOWER LIMIT	212164	5.14	635626	5.96	640174	8.17
LAB SAMPLE ID						
VBLKE10	336346	5.47	867004	6.29	990958	8.50
LCSE10	365918	5.47	1104800	6.29	1082924	8.50
LCSDE10	349910	5.47	1038859	6.29	1057588	8.50
cc851	329832	5.47	820408	6.29	947523	8.50
cc1157	330368	5.47	817413	6.29	946540	8.50
cc1178	316043	5.47	759599	6.29	916761	8.50

* = 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.

Data File: /chem/HP22820.i/18jun19.b/ef00230.d

Date : 19-JUN-2018 13:14

Client ID: 50NGBFB

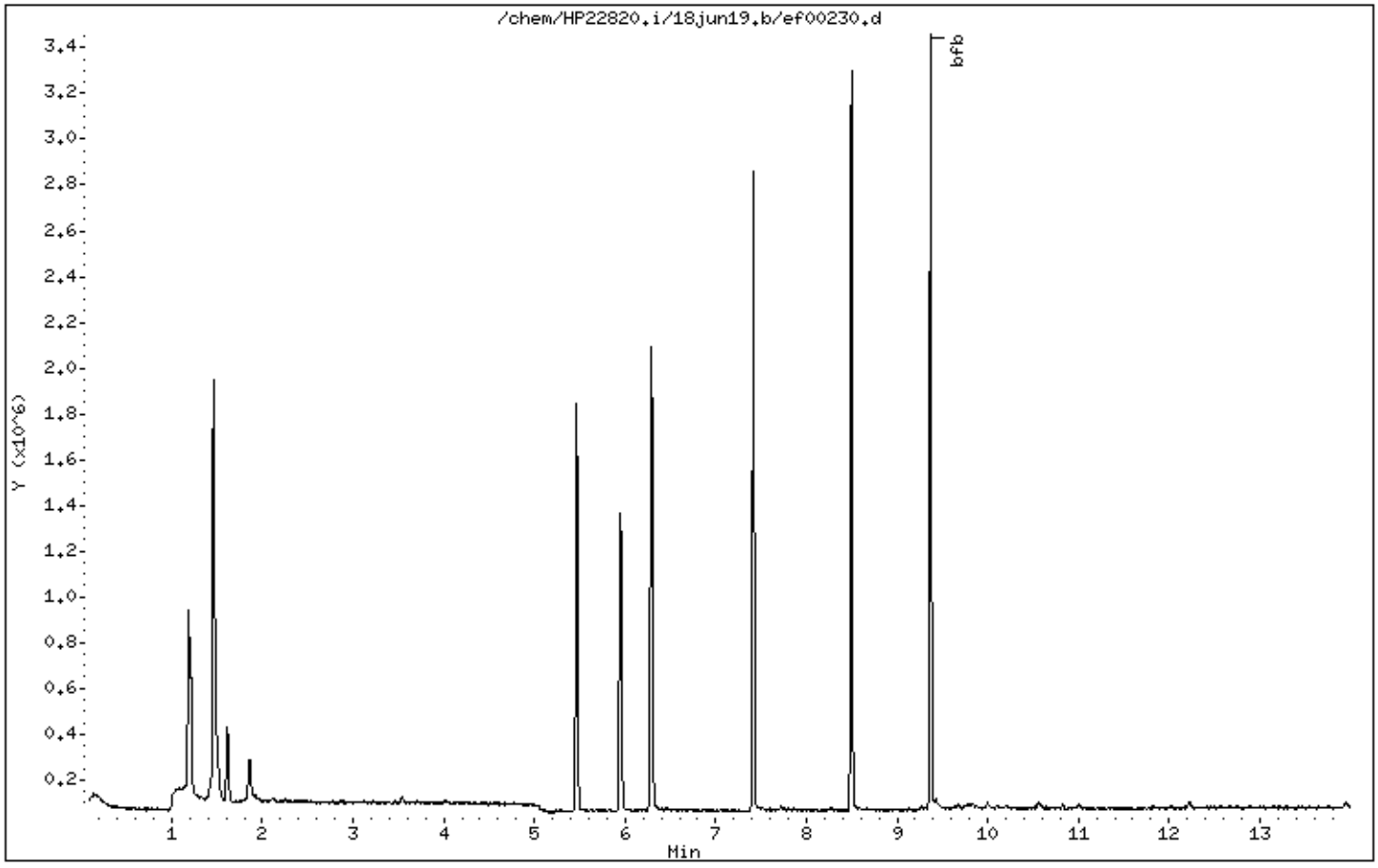
Instrument: HP22820.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25



Digitally signed by Jacob E. Bailey on 06/19/2018 at 16:10.
Target 3.5 esignature user ID: jeb07445

Data File: /chem/HP22820.i/18jun19.b/ef00230.d

Date : 19-JUN-2018 13:14

Client ID: 50NGBFB

Instrument: HP22820.i

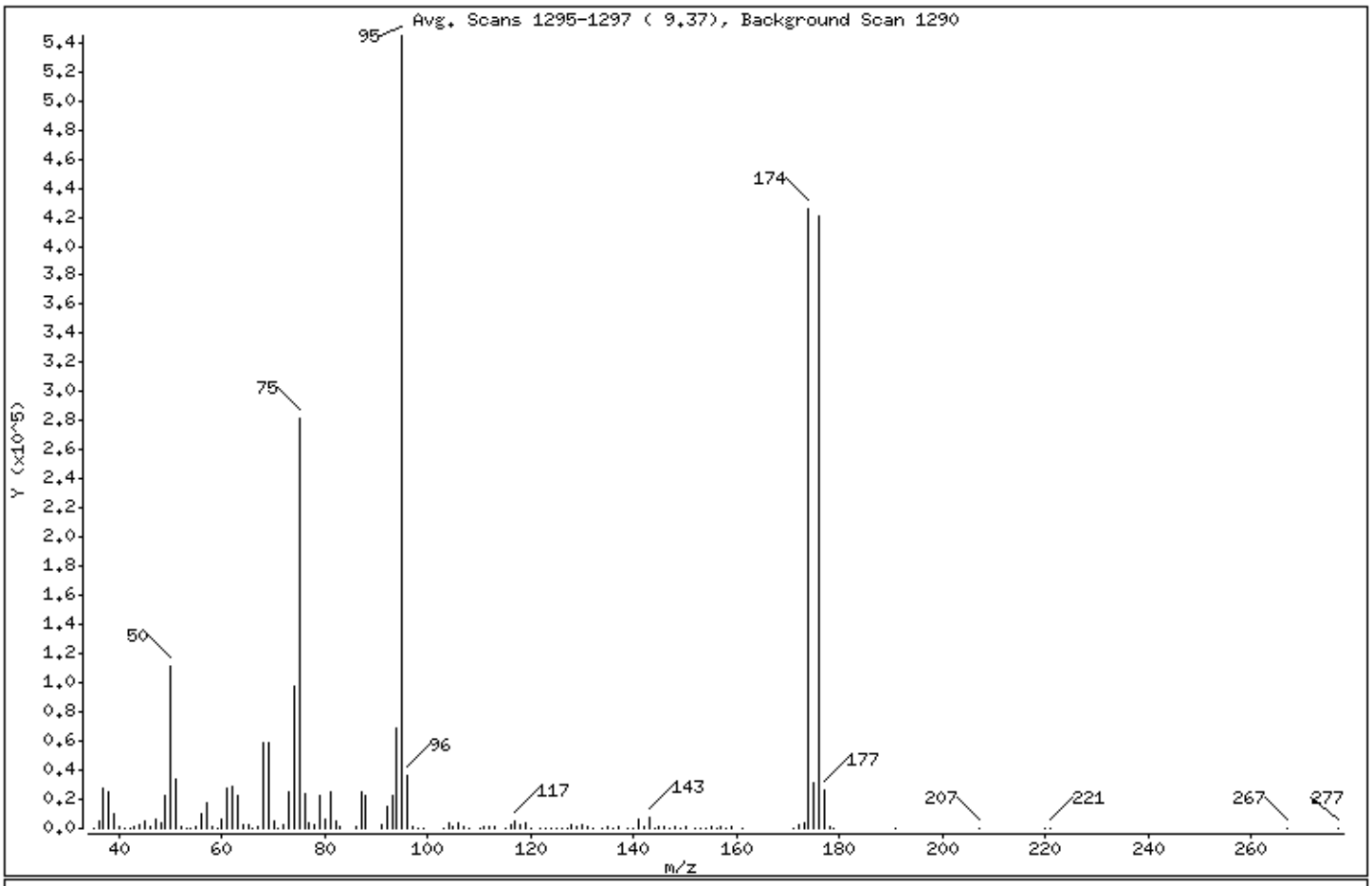
Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	20.49
75	30.00 - 66.00% of mass 95	51.69
96	5.00 - 9.00% of mass 95	6.65
173	Less than 2.00% of mass 174	0.59 (0.75)
174	50.00 - 120.00% of mass 95	78.27
175	4.00 - 9.00% of mass 174	5.69 (7.26)
176	93.00 - 101.00% of mass 174	77.30 (98.75)
177	5.00 - 9.00% of mass 176	4.79 (6.20)

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Target 3.5 esignature user ID: jeb07445

Date : 19-JUN-2018 13:14

Client ID: 50NGBFB Instrument: HP22820.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624 Column diameter: 0.25

Data File: ef00230.d
Spectrum: Avg. Scans 1295-1297 (9.37), Background Scan 1290
Location of Maximum: 95.00
Number of points: 128

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	262	68.00	58560	108.00	572	146.00	1023
36.00	4813	69.00	59368	110.00	626	147.00	545
37.00	27288	70.00	4894	111.00	883	148.00	1296
38.00	25096	71.00	452	112.00	1146	149.00	304
39.00	9893	72.00	2779	113.00	715	150.00	861
40.00	1304	73.00	25216	115.00	514	152.00	489
41.00	584	74.00	97672	116.00	2092	153.00	237
42.00	387	75.00	281536	117.00	4588	154.00	76
43.00	740	76.00	23576	118.00	2513	155.00	985
44.00	3050	77.00	3406	119.00	3766	156.00	395
45.00	4937	78.00	2187	120.00	325	157.00	830
46.00	1101	79.00	23088	122.00	138	158.00	213
47.00	6858	80.00	6653	123.00	321	159.00	786
48.00	3687	81.00	25016	124.00	531	161.00	481
49.00	22960	82.00	4557	125.00	124	171.00	339
50.00	111584	83.00	970	126.00	425	172.00	2611
51.00	33872	86.00	797	127.00	206	173.00	3197
52.00	1790	87.00	24536	128.00	2271	174.00	426304
53.00	163	88.00	22200	129.00	1107	175.00	30968
54.00	229	91.00	2131	130.00	2087	176.00	420992
55.00	1503	92.00	15134	131.00	1003	177.00	26088
56.00	9965	93.00	22952	132.00	104	178.00	682
57.00	17544	94.00	69208	134.00	295	179.00	76
58.00	775	95.00	544640	135.00	816	191.00	52
59.00	161	96.00	36208	136.00	461	207.00	65
60.00	5986	97.00	805	137.00	1233	220.00	52
61.00	28000	98.00	65	139.00	166	221.00	53
62.00	28672	99.00	50	140.00	402	267.00	54
63.00	22704	103.00	523	141.00	6032	277.00	62
64.00	3089	104.00	3141	142.00	751		
65.00	2827	105.00	1138	143.00	7155		
66.00	577	106.00	3464	144.00	578		
67.00	1071	107.00	656	145.00	1262		

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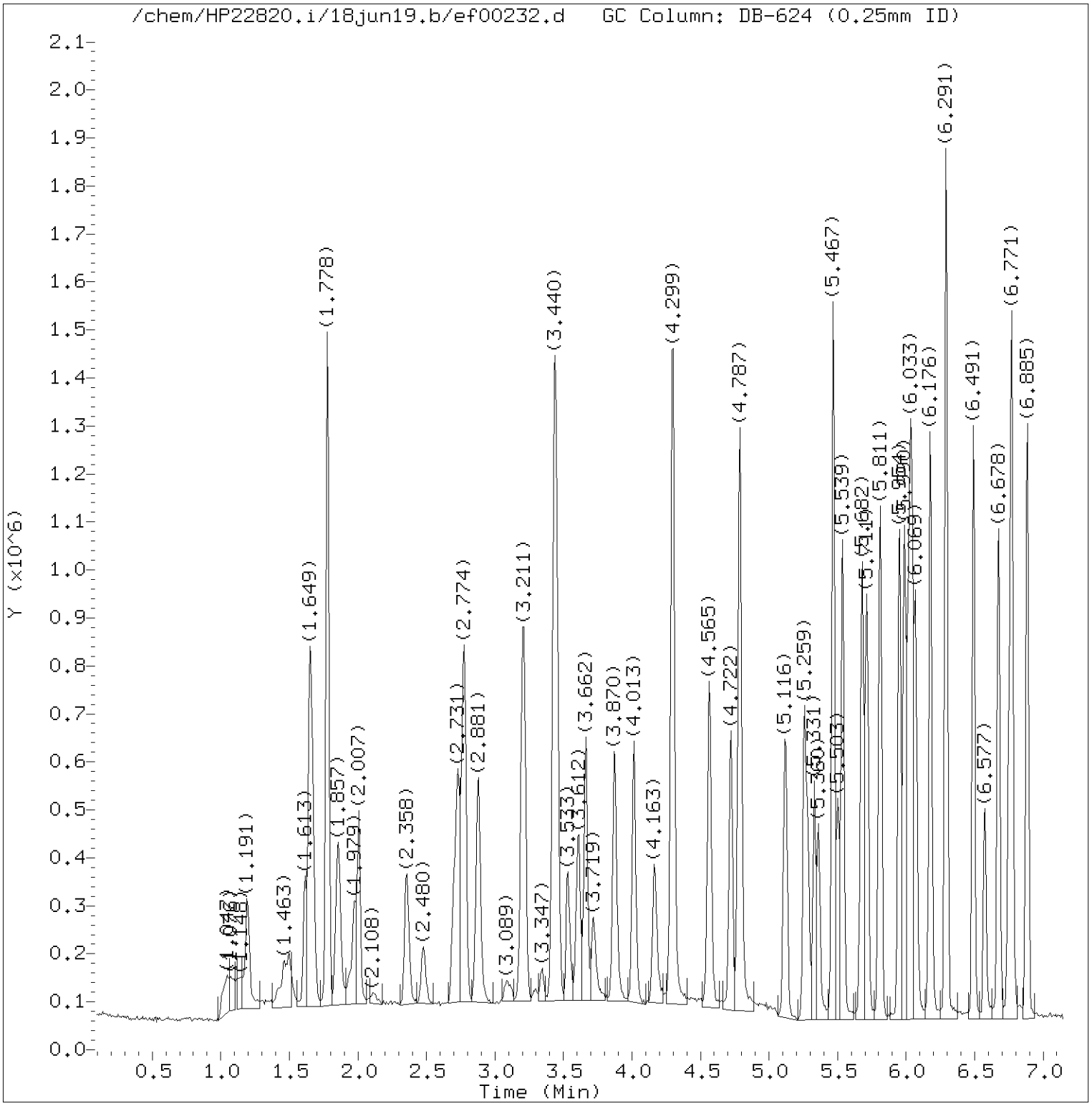
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

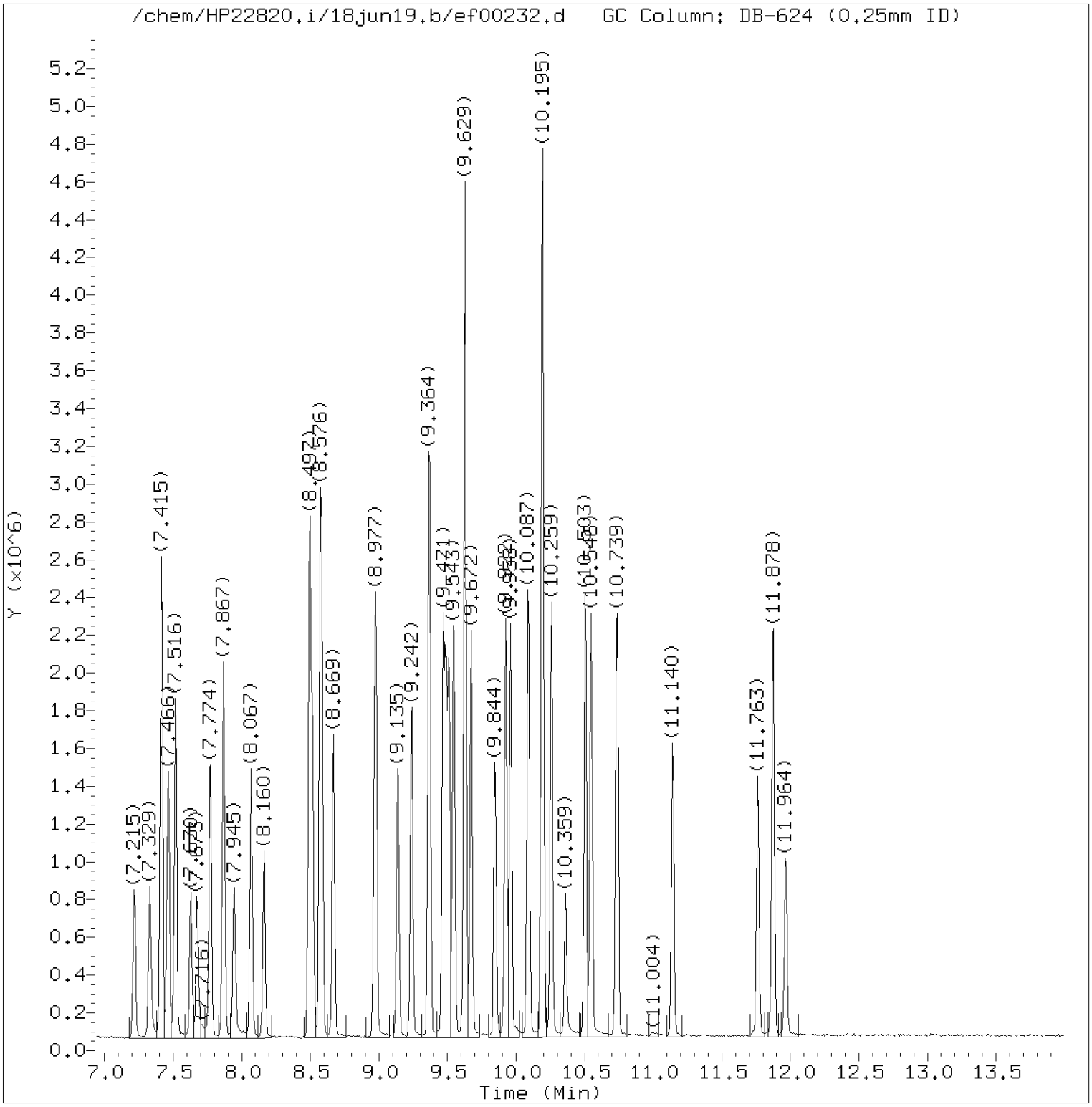
Target Revision 3.5

Data File: /chem/HP22820.i/18jun19.b/ef00232.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 14:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 15:18 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 06/19/2018 at 16:10.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun19.b/ef00232.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 14:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 15:18 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 06/19/2018 at 16:10.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun19.b/ef00232.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 14:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 15:18 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.613	41	167447	10.020
2) Dichlorodifluoromethane	(1)	1.649	85	672288	11.485
3) Chlorodifluoromethane	(1)	1.671	51	438586	11.818
4) Freon 114	(1)	1.778	85	699060	11.128
5) Chloromethane	(1)	1.850	50	281160	11.932
6) Vinyl Chloride	(1)	1.972	62	243402	10.805
7) 1,3-Butadiene	(1)	2.007	54	162044	10.000
8) Bromomethane	(1)	2.358	94	230467	12.017
9) Chloroethane	(1)	2.480	64	136749	10.894
10) Bromoethene	(1)	2.695	106	176275	9.020
11) Dichlorofluoromethane	(1)	2.731	67	582776	11.671
12) Trichlorofluoromethane	(1)	2.774	101	678137	10.841
13) Pentane	(1)	2.881	43	329873	9.198
14) Ethanol	(1)	3.082	45	76797	9.816
15) Freon123a	(1)	3.211	67	567950	12.249
16) Acrolein	(1)	3.347	56	72961	8.782
17) 1,1-Dichloroethene	(1)	3.433	61	353408	10.310
18) Freon 113	(1)	3.447	103	357927	10.139
19) Acetone	(1)	3.533	43	394431	11.501
20) Methyl Iodide	(1)	3.612	142	462613	8.256
21) Carbon Disulfide	(1)	3.662	76	749081	11.676
22) Isopropanol	(1)	3.719	45	259323	8.937
24) 3-Chloropropene	(1)	3.870	76	90547	10.364
23) Acetonitrile	(1)	3.884	40	180938	11.894
25) Methylene Chloride	(1)	4.013	84	233820	12.274
26) tert-Butyl Alcohol	(1)	4.163	59	264669	8.164
28) trans-1,2-Dichloroethene	(1)	4.292	61	347016	10.982
27) Acrylonitrile	(1)	4.299	53	209078	11.053
29) Methyl t-Butyl Ether	(1)	4.299	73	422964	7.835
30) Hexane	(1)	4.565	57	265550	8.239
31) 1,1-Dichloroethane	(1)	4.722	63	477812	11.040
32) Vinyl Acetate	(1)	4.787	86	43487	9.492
33) Di-Isopropyl Ether	(1)	4.787	45	649843	9.303
34) Ethyl Tert-Butyl Ether	(1)	5.123	59	348352	7.387
35) cis-1,2-Dichloroethene	(1)	5.259	61	292029	9.874
37) 2-Butanone	(1)	5.281	72	103654	9.293
38) Ethyl Acetate	(1)	5.331	70	49831	9.119
39) Methyl Acrylate	(1)	5.360	55	348912	9.623

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on 06/19/2018 at 16:10.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun19.b/ef00232.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 14:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 15:18 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	353607	10.000
41) Tetrahydrofuran	(1)	5.503	42	220741	9.001
42) Chloroform	(1)	5.539	83	579899	11.281
43) 1,1,1-Trichloroethane	(1)	5.682	97	484280	10.211
44) Cyclohexane	(1)	5.711	56	283581	8.358
45) Carbon Tetrachloride	(1)	5.811	117	512416	11.040
46) Benzene	(2)	5.990	78	711074	10.956
47) 1,2-Dichloroethane	(2)	6.011	62	388225	12.764
48) Isooctane	(2)	6.033	57	964503	10.919
49) Tert-Amyl Methyl Ether	(2)	6.069	73	377793	9.180
50) Heptane	(2)	6.176	43	355272	10.390
51)*1,4-Difluorobenzene	(2)	6.291	114	1059377	10.000
52) Trichloroethene	(2)	6.491	130	289806	10.208
53) Ethyl Acrylate	(2)	6.570	55	355336	8.911
36) 1,2-Dichloroethene (total)	(1)		61	639045	20.857
54) 1,2-Dichloropropane	(2)	6.678	63	288796	11.643
57) Methyl Methacrylate	(2)	6.749	69	187163	8.994
55) Dibromomethane	(2)	6.771	174	288120	11.062
56) 1,4-Dioxane	(2)	6.778	88	149915	10.066
58) Bromodichloromethane	(2)	6.885	83	581170	11.964
59) cis-1,3-Dichloropropene	(2)	7.215	75	328045	9.278
60) 4-Methyl-2-Pentanone	(2)	7.329	43	461537	9.548
61) Toluene	(3)	7.466	91	782459	10.208
62) Octane	(3)	7.516	43	498371	10.506
63) trans-1,3-Dichloropropene	(3)	7.630	75	288205	10.284
65) Ethyl Methacrylate	(3)	7.673	69	300520	9.178
66) 1,1,2-Trichloroethane	(3)	7.774	97	342006	11.778
67) Tetrachloroethene	(3)	7.867	166	400557	10.247
68) 2-Hexanone	(3)	7.945	43	437167	9.988
69) Dibromochloromethane	(3)	8.067	127	418663	12.011
70) 1,2-Dibromoethane	(3)	8.160	107	475275	11.062
71)*Chlorobenzene-d5	(3)	8.497	117	1066956	10.000
72) Chlorobenzene	(3)	8.519	112	660784	10.200
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	369350	11.720
74) Ethylbenzene	(3)	8.583	91	912548	9.469
75) m/p-Xylene	(3)	8.669	91	689562	9.371
76) o-Xylene	(3)	8.970	91	648177	8.962
78) Styrene	(3)	8.977	104	540657	9.873

* = Compound is an internal standard.

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on 06/19/2018 at 16:10.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun19.b/ef00232.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 14:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 15:18 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	488971	11.680
80) Cumene	(3)	9.242	105	857997	8.897
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	821746	12.206
81) Bromobenzene	(3)	9.493	156	376243	10.222
83) 1,2,3-Trichloropropane	(3)	9.514	110	226936	11.807
84) n-Propylbenzene	(3)	9.550	120	279964	9.794
86) 4-Ethyltoluene	(3)	9.629	105	1081635M	10.590
85) 2-Chlorotoluene	(3)	9.629	126	299668	10.984
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	894925M	10.742
88) Alpha Methyl Styrene	(3)	9.844	118	345876	9.006
89) tert-Butylbenzene	(3)	9.922	119	802706M	10.620
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	901005	11.028
91) sec-Butylbenzene	(3)	10.087	105	1203145	10.284
92) 1,3-Dichlorobenzene	(3)	10.195	146	717182	11.372
94) p-Isopropyltoluene	(3)	10.195	119	987734	10.556
93) 1,4-Dichlorobenzene	(3)	10.259	146	691249	11.077
95) Benzyl Chloride	(3)	10.359	91	397763	9.480
97) n-Butylbenzene	(3)	10.503	91	969358	10.552
96) 1,2-Dichlorobenzene	(3)	10.546	146	662256	11.292
98) Hexachloroethane	(3)	10.739	117	335607	13.679
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	294160	10.771
100) 1,2,4-Trichlorobenzene	(3)	11.763	180	319979	8.421
101) Hexachlorobutadiene	(3)	11.878	225	329437	10.430
102) Naphthalene	(3)	11.964	128	632380	8.602
64) 1,3-Dichloropropene (total)	(3)		75	616250	19.579
77) Xylene (total)	(3)		91	1337739	18.336

M = Compound was manually integrated.

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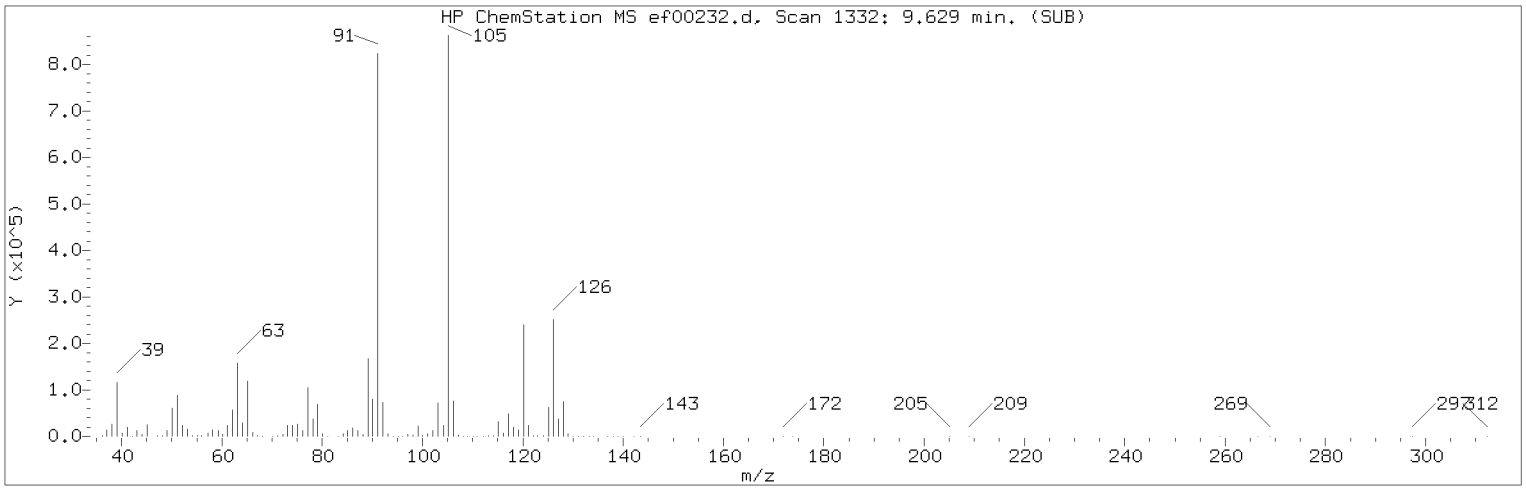
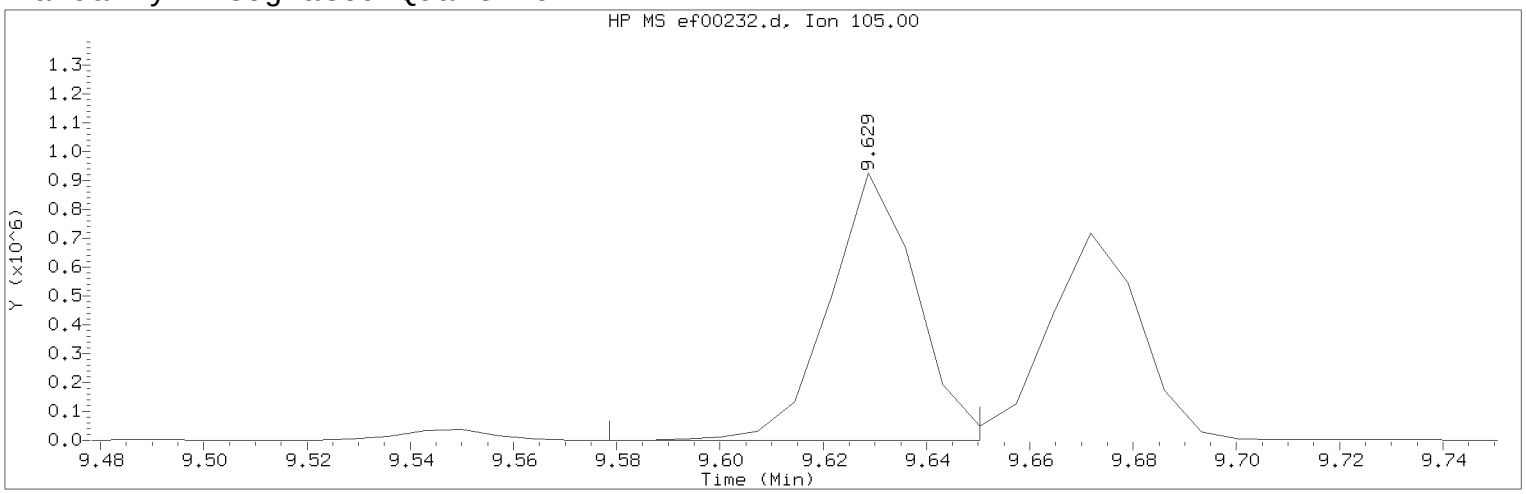
on 06/19/2018 at 16:10.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun19.b/ef00232.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 14:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 15:18 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

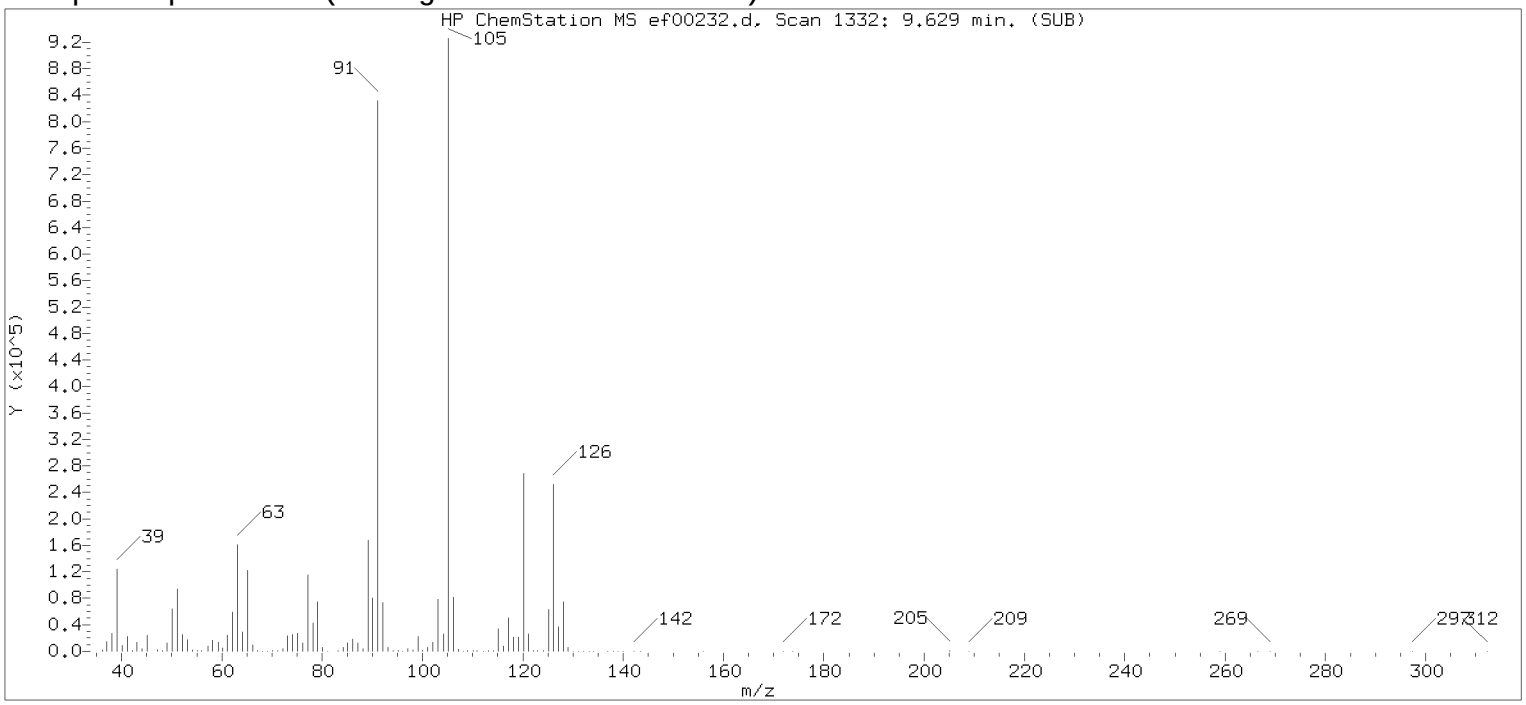
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 1081635M
Concentration (ppb(v)) : 10.5897
Integration start scan : 1324 Integration stop scan: 1334
Y at integration start : 214 Y at integration end: 214

Reason for manual integration: improper integration

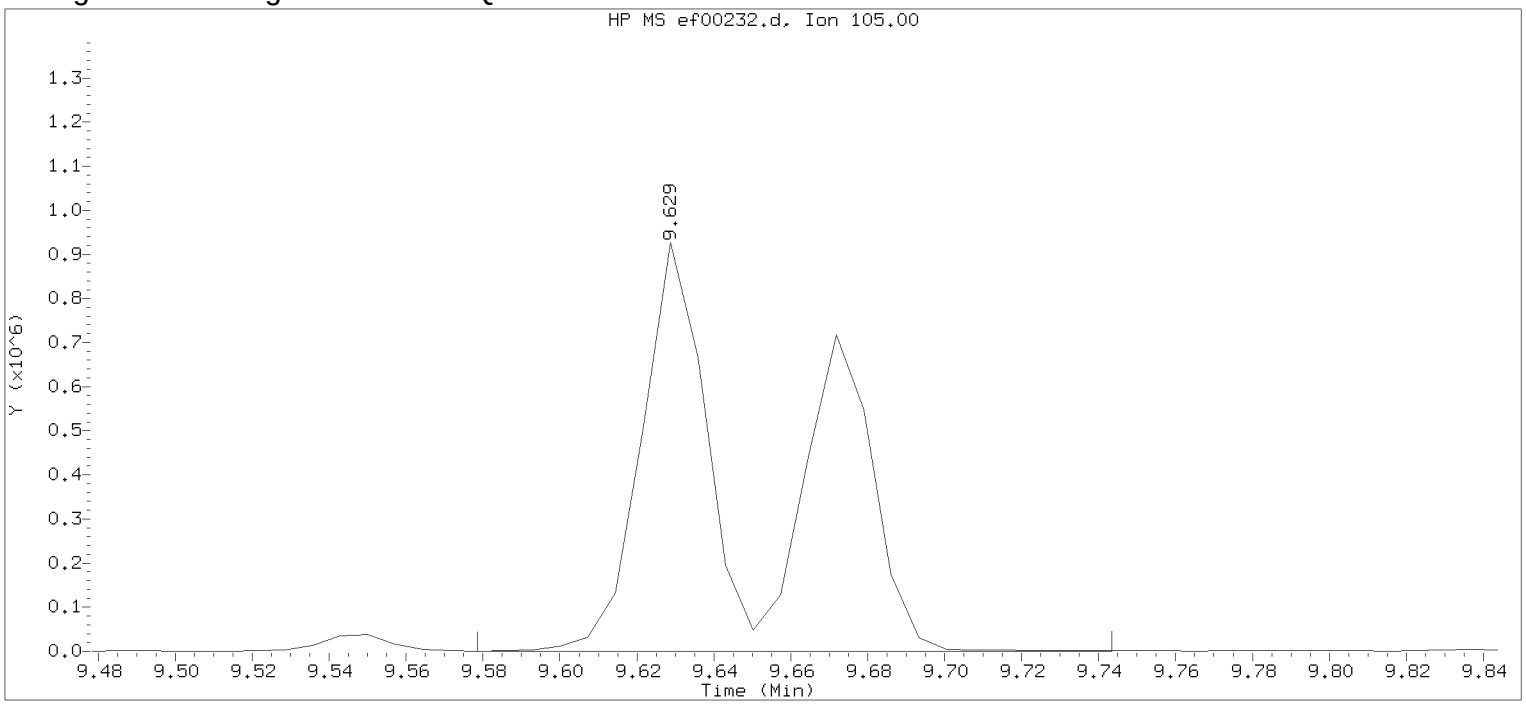
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/19/2018 at 16:10.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/20/2018 at 13:53.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun19.b/ef00232.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 14:58 Analyst ID: jeb07445

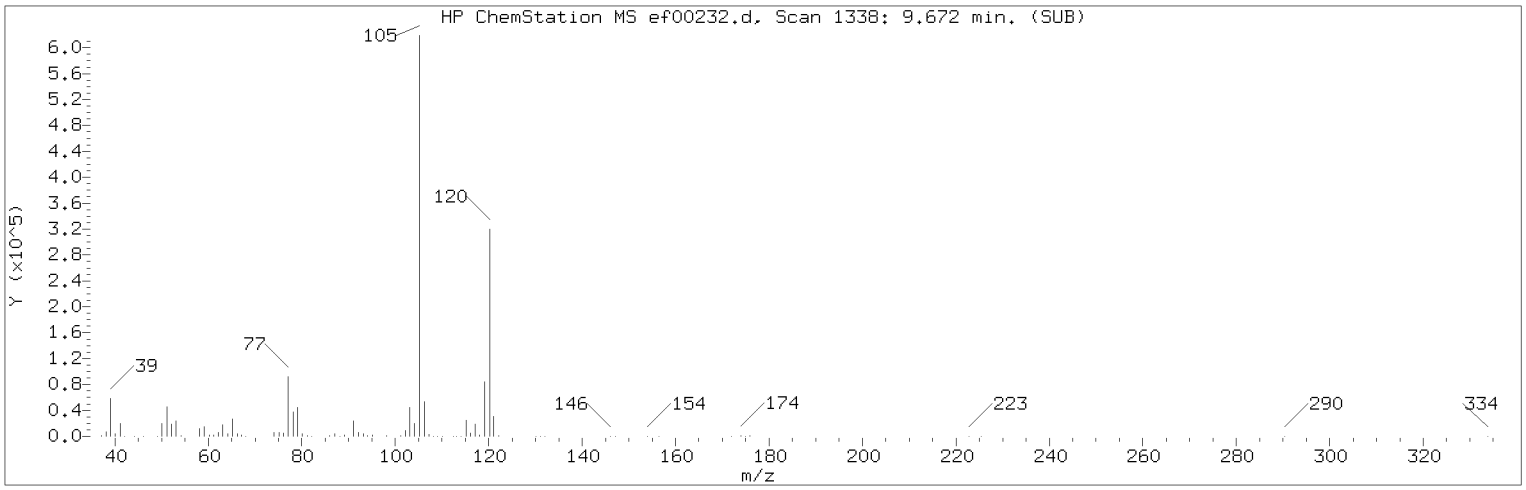
Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 14:34
Date, time and analyst ID of latest file update: 19-Jun-2018 15:16 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

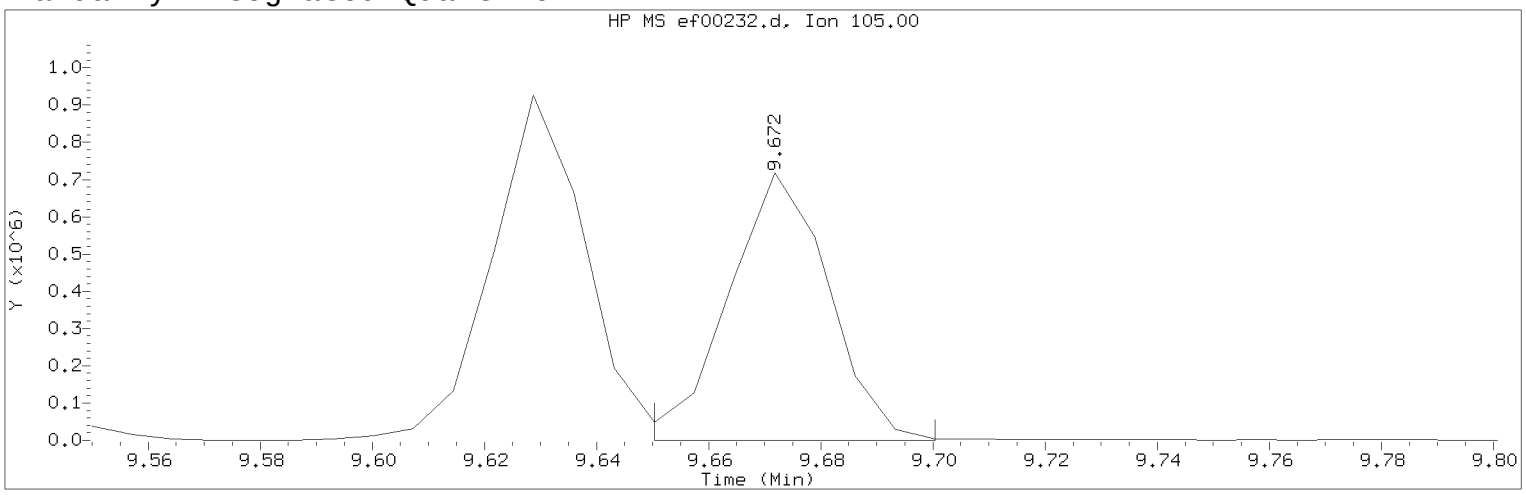
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 1961820
Concentration (ppb(v)) : 19.2072
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 214 Y at integration end: 214

Digitally signed by Jacob E. Bailey on 06/19/2018 at 16:10.
Target 3.5 esignature used.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun19.b/ef00232.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 14:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 15:18 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

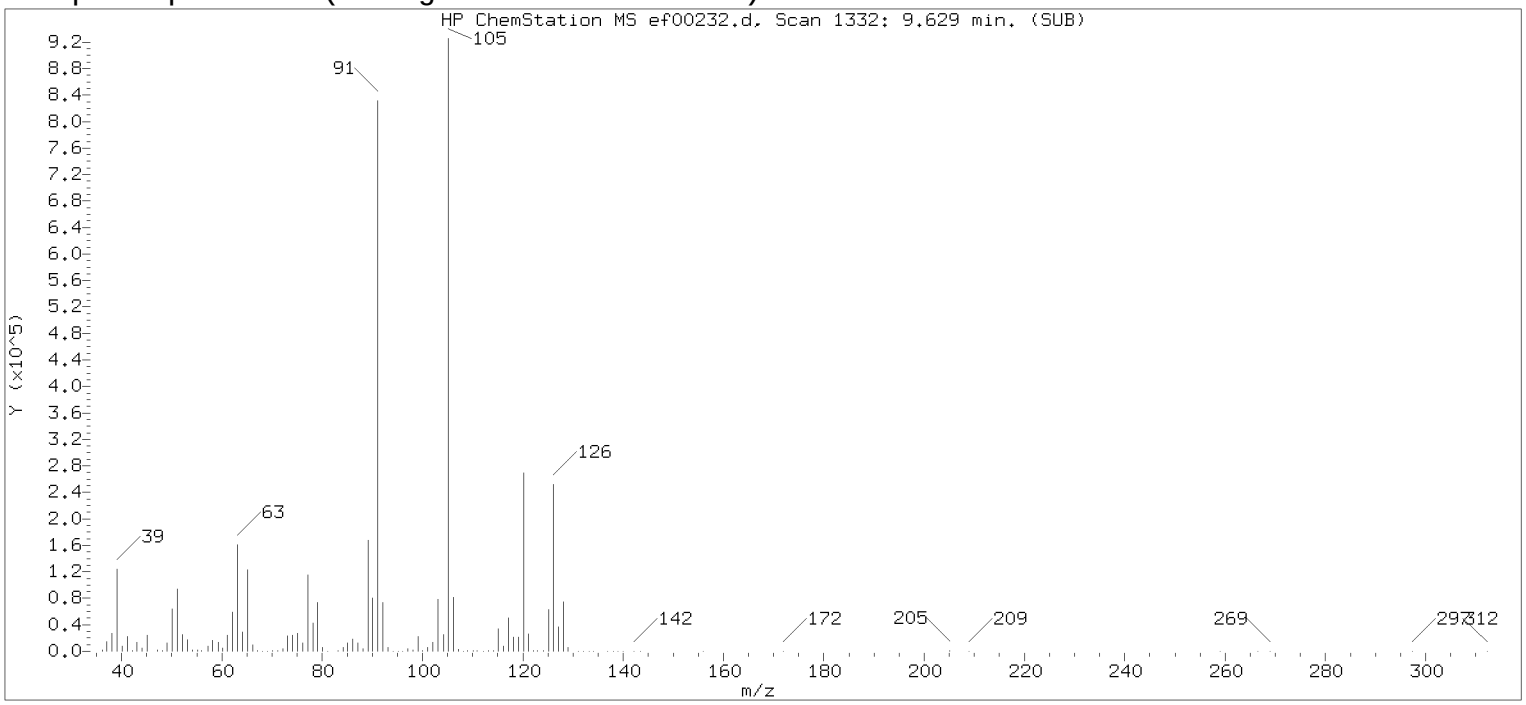
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 894925M
Concentration (ppb(v)) : 10.7417
Integration start scan : 1334 Integration stop scan: 1341
Y at integration start : 841 Y at integration end: 841

Reason for manual integration: improper integration

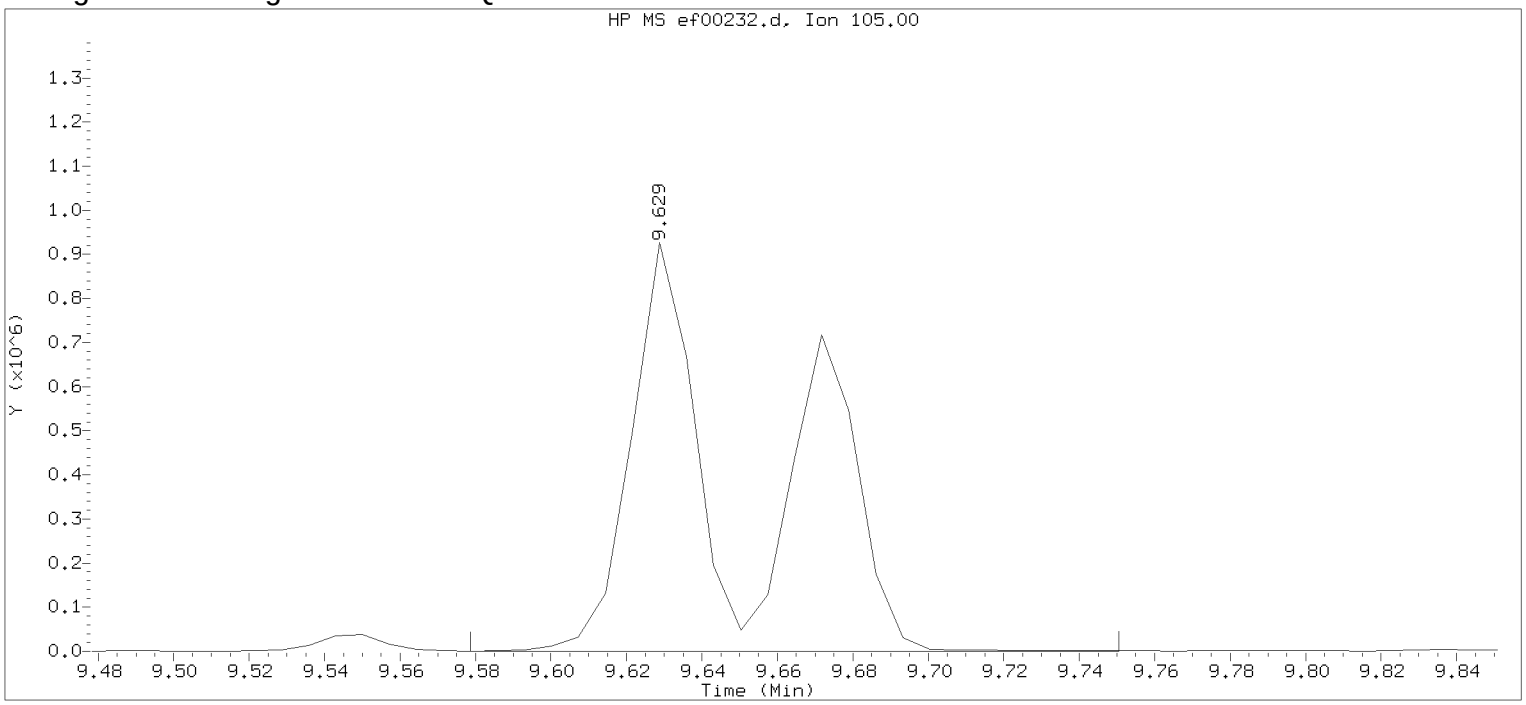
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/19/2018 at 16:10.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/20/2018 at 13:53.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun19.b/ef00232.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 14:58 Analyst ID: jeb07445

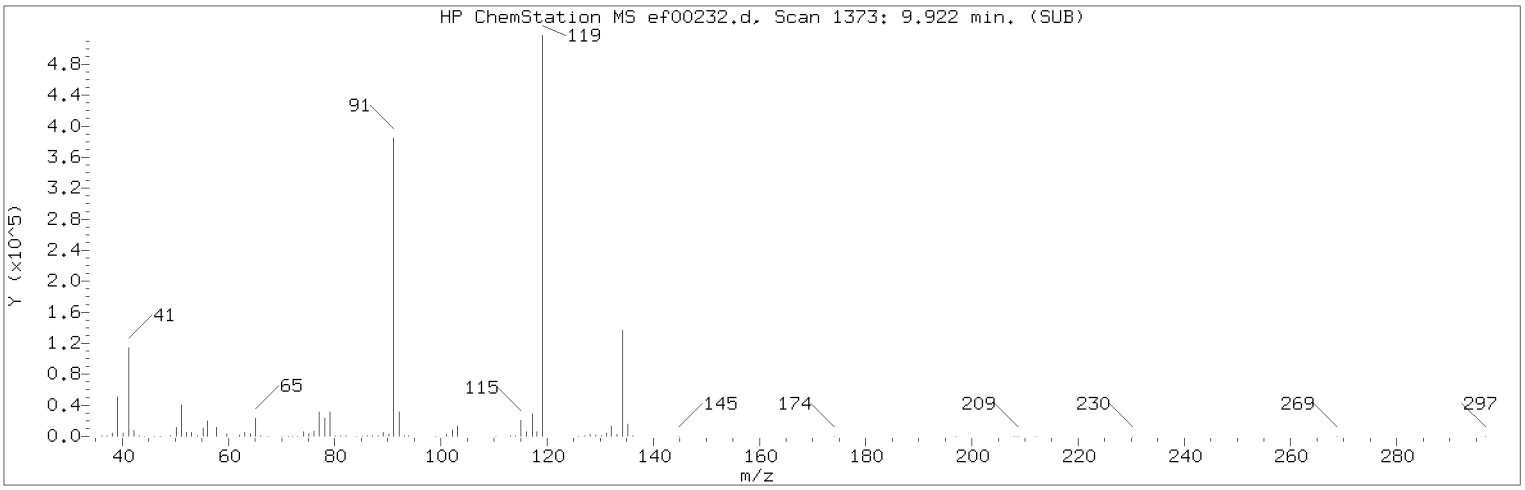
Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 14:34
Date, time and analyst ID of latest file update: 19-Jun-2018 15:16 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

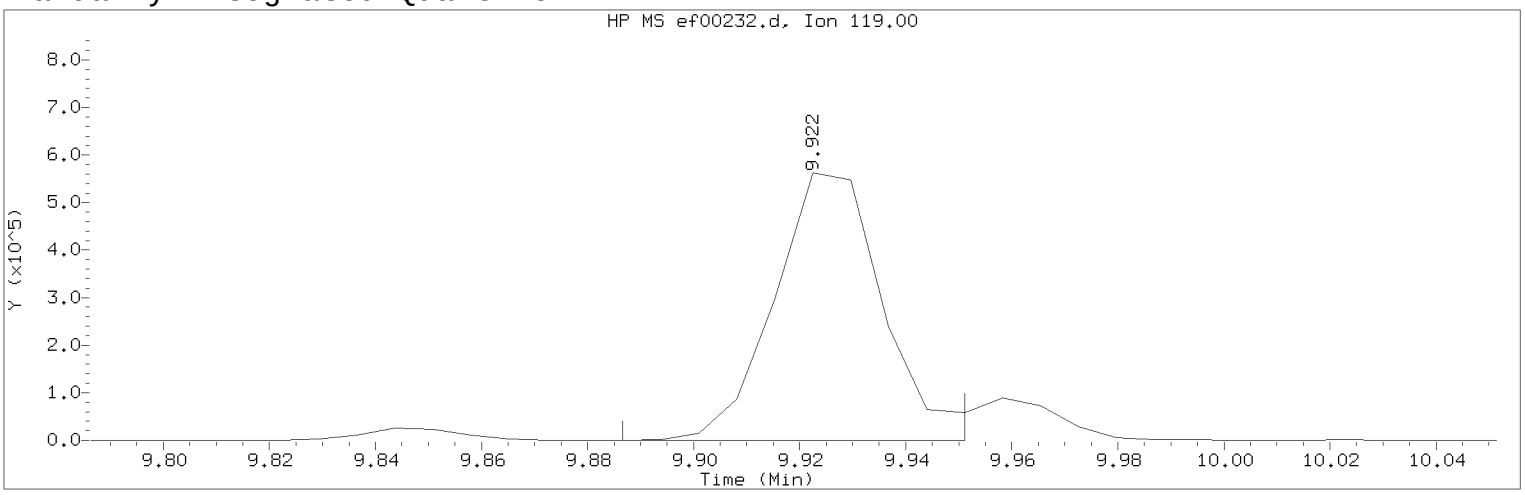
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 1958388
Concentration (ppb(v)) : 23.5063
Integration start scan : 1324 Integration stop scan: 1348
Y at integration start : 577 Y at integration end: 577

Digitally signed by Jacob E. Bailey on 06/19/2018 at 16:10.
Target 3.5 esignature used

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun19.b/ef00232.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 14:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 15:18 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

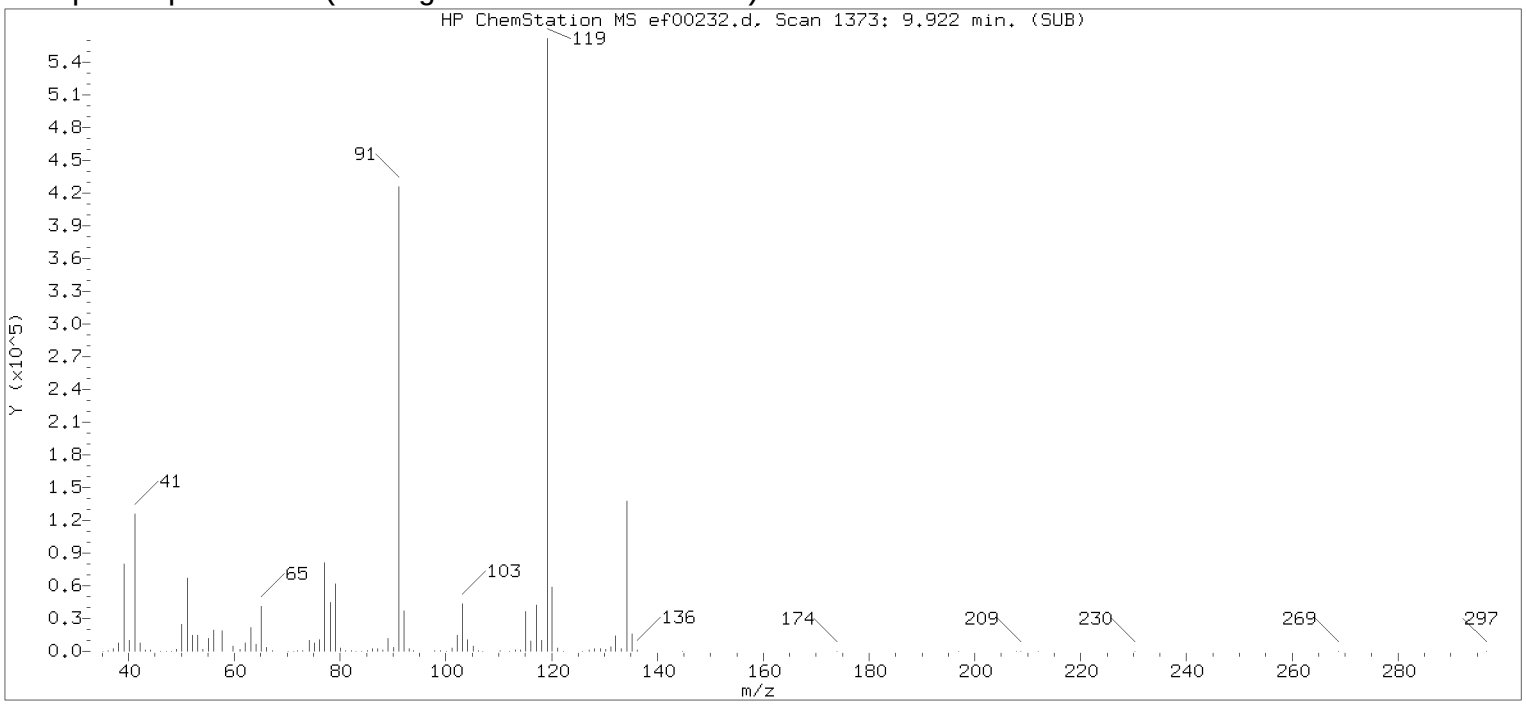
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 802706M
Concentration (ppb(v)) : 10.6198
Integration start scan : 1367 Integration stop scan: 1376
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

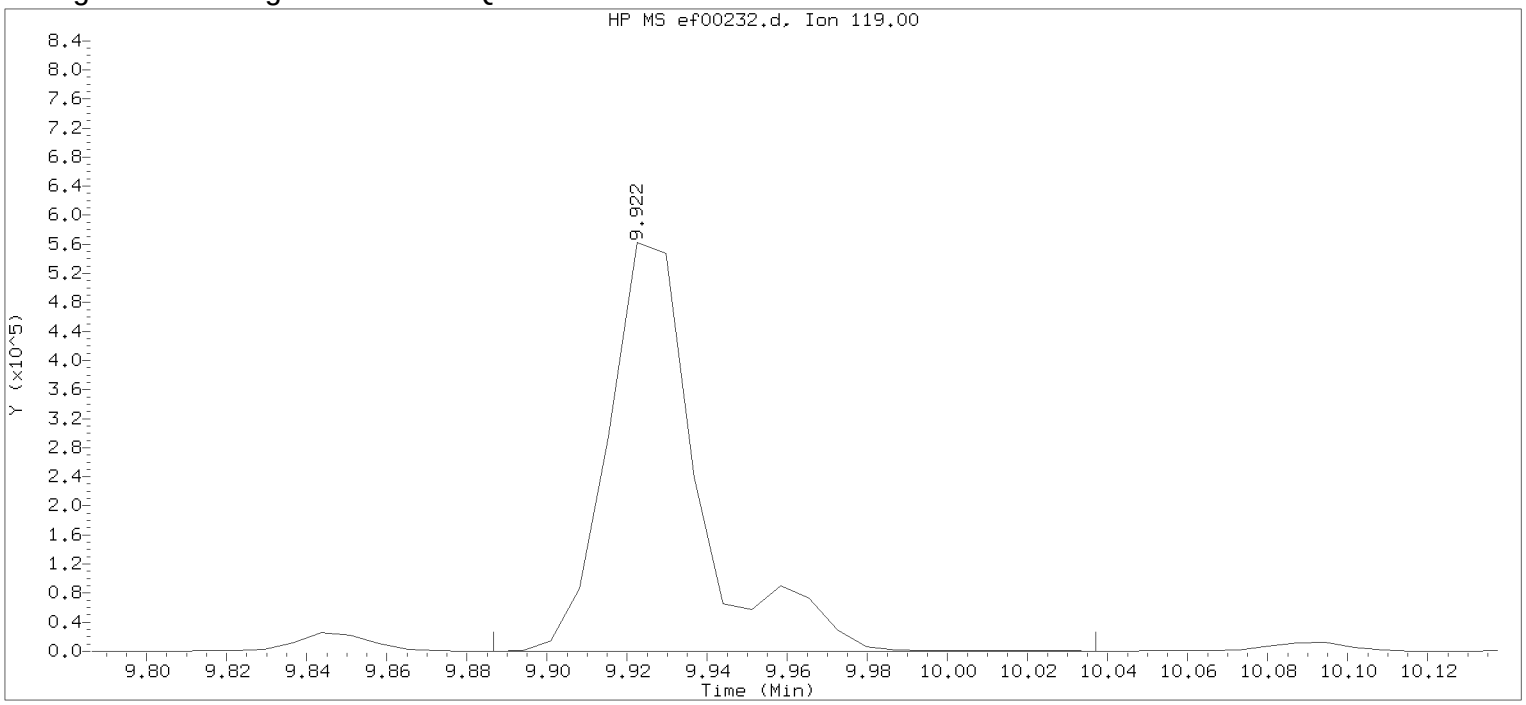
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/19/2018 at 16:10.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/20/2018 at 13:53.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun19.b/ef00232.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 14:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 14:34
Date, time and analyst ID of latest file update: 19-Jun-2018 15:16 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 889841
Concentration (ppb(v)) : 11.7726
Integration start scan : 1367 Integration stop scan: 1388
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/19/2018 at 16:10.
Target 3.5 esignature used.

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun19.b/ef00233.d Injection date and time: **19-JUN-2018 15:44**
Data file Sample Info. Line: VBLKE10;200;E1817030AA;VBLKE10;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1817030AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 16:05 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun19.b/ef00233.d**

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 19-JUN-2018 15:18
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun19.b/ef00232.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	5.467(0.000)	751	130	336346 (-5)	10.00		212165 - 495049
51) 1,4-Difluorobenzene	6.291(0.000)	866	114	867004 (-18)	10.00		635627 - 1483127
71) Chlorobenzene-d5	8.497(0.000)	1174	117	990958 (-7)	10.00		640174 - 1493738

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)			Not Detected					0.5	1
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)			Not Detected					0.2	1
7) 1,3-Butadiene	(1)			Not Detected					0.4	2
8) Bromomethane	(1)			Not Detected					0.5	1
9) Chloroethane	(1)			Not Detected					0.2	1
10) Bromoethene	(1)			Not Detected					0.4	2
11) Dichlorofluoromethane	(1)			Not Detected					0.2	1
12) Trichlorofluoromethane	(1)			Not Detected					0.2	1
13) Pentane	(1)			Not Detected					0.5	1
14) Ethanol	(1)			Not Detected					0.5	2
15) Freon123a	(1)			Not Detected					0.2	1
16) Acrolein	(1)			Not Detected					1	2
17) 1,1-Dichloroethene	(1)			Not Detected					0.2	1
18) Freon 113	(1)			Not Detected					0.5	2
19) Acetone	(1)			Not Detected					0.5	2
20) Methyl Iodide	(1)			Not Detected					0.2	1
21) Carbon Disulfide	(1)			Not Detected					0.5	1
22) Isopropanol	(1)			Not Detected					0.5	2
23) Acetonitrile	(1)			Not Detected					0.5	2
24) 3-Chloropropene	(1)			Not Detected					0.2	1
25) Methylene Chloride	(1)			Not Detected					0.2	1
26) tert-Butyl Alcohol	(1)			Not Detected					0.5	1
27) Acrylonitrile	(1)			Not Detected					0.5	2
28) trans-1,2-Dichloroethene	(1)			Not Detected					0.2	1
29) Methyl t-Butyl Ether	(1)			Not Detected					0.2	1
30) Hexane	(1)			Not Detected					0.2	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.2	1
32) Vinyl Acetate	(1)			Not Detected					1	1
33) Di-Isopropyl Ether	(1)			Not Detected					0.2	1
34) Ethyl Tert-Butyl Ether	(1)			Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.2	1
36) 1,2-Dichloroethene (total)	(1)			Not Detected					0.2	1
37) 2-Butanone	(1)			Not Detected					0.5	2
38) Ethyl Acetate	(1)			Not Detected					0.5	1
39) Methyl Acrylate	(1)			Not Detected					0.2	1
41) Tetrahydrofuran	(1)			Not Detected					0.5	1
42) Chloroform	(1)			Not Detected					0.2	1
43) 1,1,1-Trichloroethane	(1)			Not Detected					0.2	1
44) Cyclohexane	(1)			Not Detected					0.2	1

Digitally signed by Jacob E. Bailey on 06/19/2018 at 16:10. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun19.b/ef00233.d Injection date and time: **19-JUN-2018 15:44**
Data file Sample Info. Line: VBLKE10;200;E1817030AA;VBLKE10;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1817030AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 16:05 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun19.b/ef00233.d**

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 19-JUN-2018 15:18
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun19.b/ef00232.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
45) Carbon Tetrachloride	(1)				Not Detected					0.2	1
46) Benzene	(2)				Not Detected					0.2	1
47) 1,2-Dichloroethane	(2)				Not Detected					0.2	1
48) Isooctane	(2)				Not Detected					0.2	1
49) Tert-Amyl Methyl Ether	(2)				Not Detected					0.2	1
50) Heptane	(2)				Not Detected					0.5	1
52) Trichloroethene	(2)				Not Detected					0.2	1
53) Ethyl Acrylate	(2)				Not Detected					0.2	1
54) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
55) Dibromomethane	(2)				Not Detected					0.2	1
56) 1,4-Dioxane	(2)				Not Detected					0.5	1
57) Methyl Methacrylate	(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)				Not Detected					0.2	1
62) Octane	(3)				Not Detected					0.2	1
63) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
64) 1,3-Dichloropropene (total)	(3)				Not Detected					0.2	1
65) Ethyl Methacrylate	(3)				Not Detected					0.2	1
66) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
67) Tetrachloroethene	(3)				Not Detected					0.2	1
68) 2-Hexanone	(3)				Not Detected					0.5	2
69) Dibromochloromethane	(3)				Not Detected					0.2	1
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)				Not Detected					0.2	1
75) m/p-Xylene	(3)				Not Detected					0.2	1
76) o-Xylene	(3)				Not Detected					0.2	1
77) Xylene (total)	(3)				Not Detected					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
84) n-Propylbenzene	(3)				Not Detected					0.5	1
85) 2-Chlorotoluene	(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
88) Alpha Methyl Styrene	(3)				Not Detected					0.2	1
89) tert-Butylbenzene	(3)				Not Detected					0.5	1
90) 1,2,4-Trimethylbenzene	(3)				Not Detected					0.2	1
91) sec-Butylbenzene	(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
94) p-Isopropyltoluene	(3)				Not Detected					0.2	1
95) Benzyl Chloride	(3)				Not Detected					0.5	1
96) 1,2-Dichlorobenzene	(3)				Not Detected					0.2	1
97) n-Butylbenzene	(3)				Not Detected					0.2	1
98) Hexachloroethane	(3)				Not Detected					0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)				Not Detected					0.2	1
100) 1,2,4-Trichlorobenzene	(3)				Not Detected					0.5	2

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Data file: /chem/HP22820.i/18jun19.b/ef00233.d Injection date and time: **19-JUN-2018 15:44**
Data file Sample Info. Line: VBLKE10;200;E1817030AA;VBLKE10;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1817030AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 16:05 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun19.b/ef00233.d**

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 19-JUN-2018 15:18
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun19.b/ef00232.d**

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

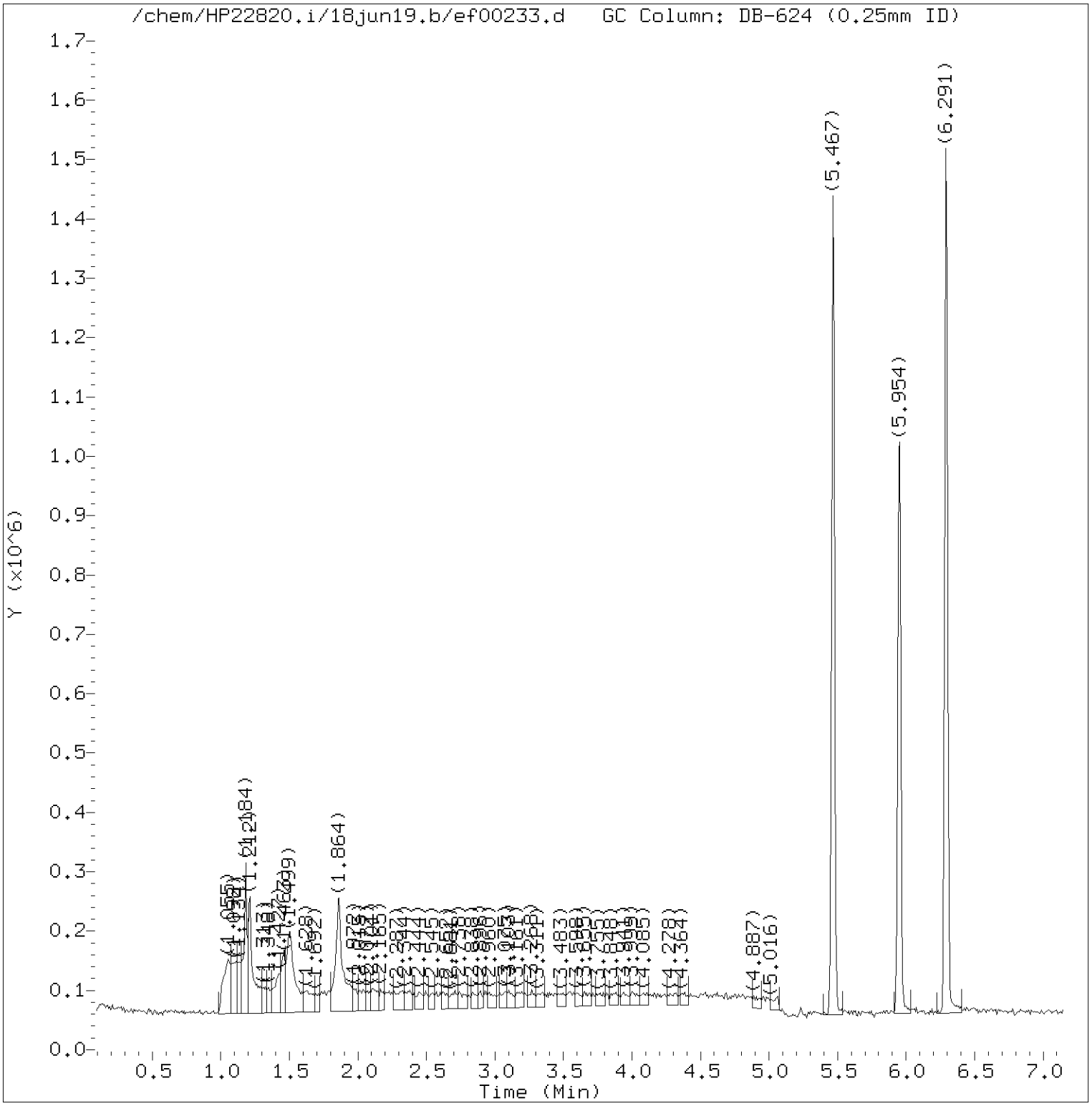
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
101) Hexachlorobutadiene	(3)				Not Detected					0.4	2
102) Naphthalene	(3)				Not Detected					0.4	1

Total number of targets = 99

Digitally signed by Jacob E. Bailey on 06/19/2018 at 16:10. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/20/2018 at 13:53. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun19.b/ef00233.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 15:44 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 16:05 jeb07445

Sample Name: VBLKE10 Lab Sample ID: VBLKE10

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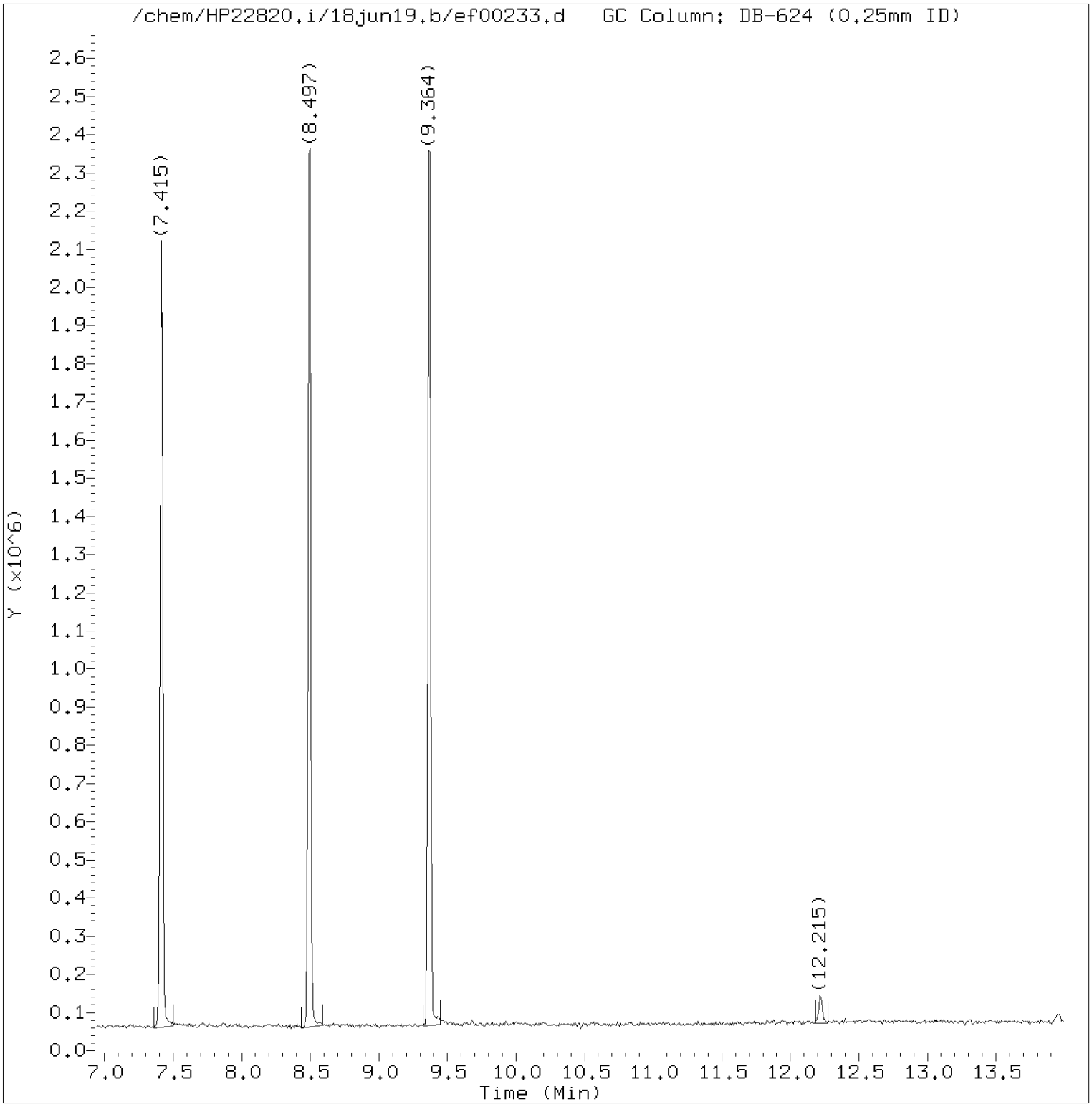
on 06/19/2018 at 16:10.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun19.b/ef00233.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 15:44 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 16:05 jeb07445

Sample Name: VBLKE10 Lab Sample ID: VBLKE10

Digitally signed by Jacob E. Bailey
on 06/19/2018 at 16:10.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun19.b/ef00233.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 15:44 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 16:05 jeb07445

Sample Name: VBLKE10 Lab Sample ID: VBLKE10

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	336346	10.000
51)*1,4-Difluorobenzene	(2)	6.291	114	867004	10.000
71)*Chlorobenzene-d5	(3)	8.497	117	990958	10.000

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/19/2018 at 16:10.
Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun19.b/ef00234.d Injection date and time: **19-JUN-2018 16:29**
Data file Sample Info. Line: LCSE10;200;E1817030AA;LCSE10;0;3;LCS; Instrument ID: **HP22820.i** Batch: **E1817030AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 17:43 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun19.b/ef00233.d**

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 19-JUN-2018 15:18
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun19.b/ef00232.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	5.467(0.000)	751	130	365918 (3)	10.00		212165 - 495049
51) 1,4-Difluorobenzene	6.291(0.000)	866	114	1104800 (4)	10.00		635627 - 1483127
71) Chlorobenzene-d5	8.497(0.000)	1174	117	1082924 (1)	10.00		640174 - 1493738

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)	1.613(0.000)	41	159270	9.210	9.21			0.5	1
2) Dichlorodifluoromethane	(1)	1.649(0.000)	85	656088	10.831	10.83			0.2	1
3) Chlorodifluoromethane	(1)	1.670(0.000)	51	441098	11.485	11.49			0.2	1
4) Freon 114	(1)	1.778(0.000)	85	680769	10.472	10.47			0.2	1
5) Chloromethane	(1)	1.850(0.000)	50	285452	11.706	11.71			0.2	1
6) Vinyl Chloride	(1)	1.971(0.000)	62	237880	10.205	10.20			0.2	1
7) 1,3-Butadiene	(1)	2.007(0.000)	54	143809	8.576	8.58			0.4	2
8) Bromomethane	(1)	2.358(0.000)	94	225393	11.357	11.36			0.5	1
9) Chloroethane	(1)	2.480(0.000)	64	140125	10.787	10.79			0.2	1
10) Bromoethene	(1)	2.695(0.000)	106	172413	8.526	8.53			0.4	2
11) Dichlorofluoromethane	(1)	2.731(0.000)	67	597046	11.554	11.55			0.2	1
12) Trichlorofluoromethane	(1)	2.774(0.000)	101	661813	10.224	10.22			0.2	1
13) Pentane	(1)	2.881(0.000)	43	294616	7.939	7.94			0.5	1
14) Ethanol	(1)	3.082(0.000)	45	75860	9.370	9.37			0.5	2
15) Freon123a	(1)	3.203(0.001)	67	567695	11.832	11.83			0.2	1
16) Acrolein	(1)	3.340(0.001)	56	76139	8.856	8.86			1	2
17) 1,1-Dichloroethene	(1)	3.433(0.000)	61	334930	9.442	9.44			0.2	1
18) Freon 113	(1)	3.447(0.000)	103	352049	9.637	9.64			0.5	2
19) Acetone	(1)	3.533(0.000)	43	384745	10.841	10.84			0.5	2
20) Methyl Iodide	(1)	3.604(0.001)	142	464715	8.014	8.01			0.2	1
21) Carbon Disulfide	(1)	3.662(0.000)	76	711216	10.713	10.71			0.5	1
22) Isopropanol	(1)	3.719(0.000)	45	244269	8.135	8.14			0.5	2
23) Acetonitrile	(1)	3.877(0.001)	40	164454	10.446	10.45			0.5	2
24) 3-Chloropropene	(1)	3.870(0.000)	76	91849	10.159	10.16			0.2	1
25) Methylene Chloride	(1)	4.013(0.000)	84	229983	11.667	11.67			0.2	1
26) tert-Butyl Alcohol	(1)	4.163(0.000)	59	253201	7.548	7.55			0.5	1
27) Acrylonitrile	(1)	4.299(0.000)	53	211162	10.788	10.79			0.5	2
28) trans-1,2-Dichloroethene	(1)	4.292(0.000)	61	330900	10.120	10.12			0.2	1
29) Methyl t-Butyl Ether	(1)	4.299(0.000)	73	411281	7.362	7.36			0.2	1
30) Hexane	(1)	4.564(0.000)	57	259959	7.794	7.79			0.2	1
31) 1,1-Dichloroethane	(1)	4.722(0.000)	63	459369	10.257	10.26			0.2	1
32) Vinyl Acetate	(1)	4.786(0.000)	86	40809	8.608	8.61			1	1
33) Di-Isopropyl Ether	(1)	4.786(0.000)	45	616396	8.528	8.53			0.2	1
34) Ethyl Tert-Butyl Ether	(1)	5.116(0.001)	59	320512	6.568	6.57			0.2	1
35) cis-1,2-Dichloroethene	(1)	5.259(-0.000)	61	283621	9.267	9.27			0.2	1
36) 1,2-Dichloroethene (total)	(1)		61	614521	19.387	19.39			0.2	1
37) 2-Butanone	(1)	5.281(-0.000)	72	106279	9.208	9.21			0.5	2
38) Ethyl Acetate	(1)	5.331(-0.000)	70	49953	8.834	8.83			0.5	1
39) Methyl Acrylate	(1)	5.359(-0.000)	55	336295	8.963	8.96			0.2	1
41) Tetrahydrofuran	(1)	5.503(-0.000)	42	214486	8.451	8.45			0.5	1
42) Chloroform	(1)	5.538(-0.000)	83	563531	10.594	10.59			0.2	1
43) 1,1,1-Trichloroethane	(1)	5.682(-0.000)	97	485832	9.899	9.90			0.2	1
44) Cyclohexane	(1)	5.710(-0.000)	56	286508	8.160	8.16			0.2	1

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun19.b/ef00234.d Injection date and time: **19-JUN-2018 16:29**
Data file Sample Info. Line: LCSE10;200;E1817030AA;LCSE10;0;3;LCS; Instrument ID: **HP22820.i** Batch: **E1817030AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 17:43 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun19.b/ef00233.d**

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 19-JUN-2018 15:18
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun19.b/ef00232.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
45) Carbon Tetrachloride	(1)	5.811(-0.000)	117	503077	10.474	10.47			0.2	1
46) Benzene	(2)	5.990(-0.000)	78	691327	10.214	10.21			0.2	1
47) 1,2-Dichloroethane	(2)	6.011(-0.000)	62	368772	11.626	11.63			0.2	1
48) Isooctane	(2)	6.040(-0.001)	57	918906	9.975	9.98			0.2	1
49) Tert-Amyl Methyl Ether	(2)	6.069(-0.000)	73	361831	8.431	8.43			0.2	1
50) Heptane	(2)	6.176(-0.000)	43	346769	9.724	9.72			0.5	1
52) Trichloroethene	(2)	6.491(-0.000)	130	286917	9.691	9.69			0.2	1
53) Ethyl Acrylate	(2)	6.570(-0.000)	55	351373	8.450	8.45			0.2	1
54) 1,2-Dichloropropane	(2)	6.670(0.001)	63	290008	11.211	11.21			0.2	1
55) Dibromomethane	(2)	6.771(-0.000)	174	286780	10.558	10.56			0.2	1
56) 1,4-Dioxane	(2)	6.778(-0.000)	88	150466	9.688	9.69			0.5	1
57) Methyl Methacrylate	(2)	6.749(-0.000)	69	181261	8.352	8.35			0.2	1
58) Bromodichloromethane	(2)	6.885(-0.000)	83	574072	11.332	11.33			0.2	1
59) cis-1,3-Dichloropropene	(2)	7.215(-0.000)	75	318603	8.640	8.64			0.2	1
60) 4-Methyl-2-Pentanone	(2)	7.329(-0.000)	43	475642	9.435	9.43			0.5	2
61) Toluene	(3)	7.465(0.000)	91	785715	10.100	10.10			0.2	1
62) Octane	(3)	7.516(0.000)	43	514779	10.692	10.69			0.2	1
63) trans-1,3-Dichloropropene	(3)	7.630(-0.000)	75	274488	9.650	9.65			0.2	1
64) 1,3-Dichloropropene (total)	(3)		75	593091	18.290	18.29			0.2	1
65) Ethyl Methacrylate	(3)	7.673(0.000)	69	301241	9.065	9.06			0.2	1
66) 1,1,2-Trichloroethane	(3)	7.773(0.000)	97	337860	11.464	11.46			0.2	1
67) Tetrachloroethene	(3)	7.866(0.000)	166	392069	9.882	9.88			0.2	1
68) 2-Hexanone	(3)	7.945(-0.000)	43	456659	10.280	10.28			0.5	2
69) Dibromochloromethane	(3)	8.067(0.000)	127	416586	11.775	11.78			0.2	1
70) 1,2-Dibromoethane	(3)	8.160(-0.000)	107	472896	10.844	10.84			0.2	1
72) Chlorobenzene	(3)	8.518(-0.000)	112	647666	9.850	9.85			0.2	1
73) 1,1,1,2-Tetrachloroethane	(3)	8.576(-0.000)	131	374330	11.703	11.70			0.2	1
74) Ethylbenzene	(3)	8.583(-0.000)	91	914035	9.345	9.34			0.2	1
75) m/p-Xylene	(3)	8.669(-0.000)	91	687811	9.209	9.21			0.2	1
76) o-Xylene	(3)	8.970(-0.000)	91	655188	8.926	8.93			0.2	1
77) Xylene (total)	(3)		91	1342999	18.135	18.13			0.2	1
78) Styrene	(3)	8.977(-0.000)	104	545992	9.824	9.82			0.2	1
79) Bromoform	(3)	9.142(-0.000)	173	479843	11.293	11.29			0.2	1
80) Cumene	(3)	9.235(0.000)	105	896221	9.157	9.16			0.2	1
81) Bromobenzene	(3)	9.492(-0.000)	156	373771	10.005	10.01			0.2	1
82) 1,1,2,2-Tetrachloroethane	(3)	9.464(0.000)	83	814663	11.922	11.92			0.2	1
83) 1,2,3-Trichloropropane	(3)	9.514(-0.000)	110	231082	11.846	11.85			0.2	1
84) n-Propylbenzene	(3)	9.543(0.000)	120	283586	9.774	9.77			0.5	1
85) 2-Chlorotoluene	(3)	9.629(-0.000)	126	301334	10.882	10.88			0.2	1
86) 4-Ethyltoluene	(3)	9.629(-0.000)	105	1113653M	10.742	10.74			0.2	1
87) 1,3,5-Trimethylbenzene	(3)	9.672(-0.000)	105	908681M	10.746	10.75			0.2	1
88) Alpha Methyl Styrene	(3)	9.844(-0.000)	118	349228	8.959	8.96			0.2	1
89) tert-Butylbenzene	(3)	9.922(-0.000)	119	811788M	10.582	10.58			0.5	1
90) 1,2,4-Trimethylbenzene	(3)	9.958(-0.000)	105	911527	10.992	10.99			0.2	1
91) sec-Butylbenzene	(3)	10.087(-0.000)	105	1259964	10.610	10.61			0.2	1
92) 1,3-Dichlorobenzene	(3)	10.187(0.000)	146	715288	11.175	11.17			0.2	1
93) 1,4-Dichlorobenzene	(3)	10.259(-0.000)	146	679644	10.730	10.73			0.2	1
94) p-Isopropyltoluene	(3)	10.194(-0.000)	119	1007944	10.613	10.61			0.2	1
95) Benzyl Chloride	(3)	10.359(-0.000)	91	381212	8.951	8.95			0.5	1
96) 1,2-Dichlorobenzene	(3)	10.546(-0.000)	146	646380	10.859	10.86			0.2	1
97) n-Butylbenzene	(3)	10.502(-0.000)	91	979084	10.501	10.50			0.2	1
98) Hexachloroethane	(3)	10.732(0.000)	117	345450	13.872	13.87			0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)	11.140(-0.000)	157	281862	10.169	10.17			0.2	1
100) 1,2,4-Trichlorobenzene	(3)	11.763(-0.000)	180	290692	7.538	7.54			0.5	2

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey on 06/19/2018 at 17:43. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun19.b/ef00234.d Injection date and time: **19-JUN-2018 16:29**
Data file Sample Info. Line: LCSE10;200;E1817030AA;LCSE10;0;3;LCS; Instrument ID: **HP22820.i** Batch: **E1817030AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 17:43 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun19.b/ef00233.d**

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 19-JUN-2018 15:18
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun19.b/ef00232.d**

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

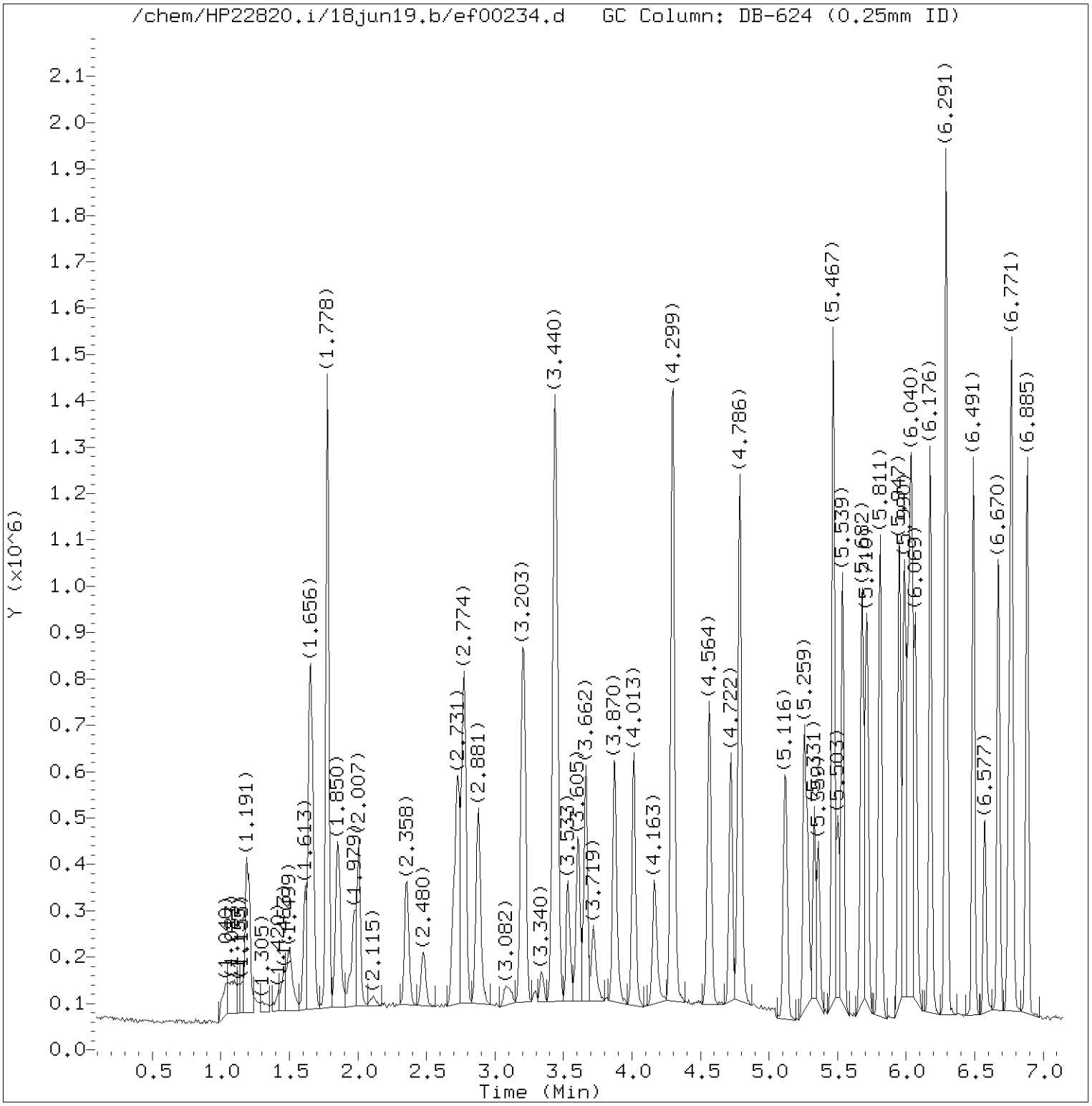
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
101) Hexachlorobutadiene	(3)	11.871(0.000)	225	313596	9.782	9.78			0.4	2
102) Naphthalene	(3)	11.964(-0.000)	128	548150	7.346	7.35			0.4	1

Total number of targets = 99

Digitally signed by Jacob E. Bailey on 06/19/2018 at 17:43. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/20/2018 at 13:53. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

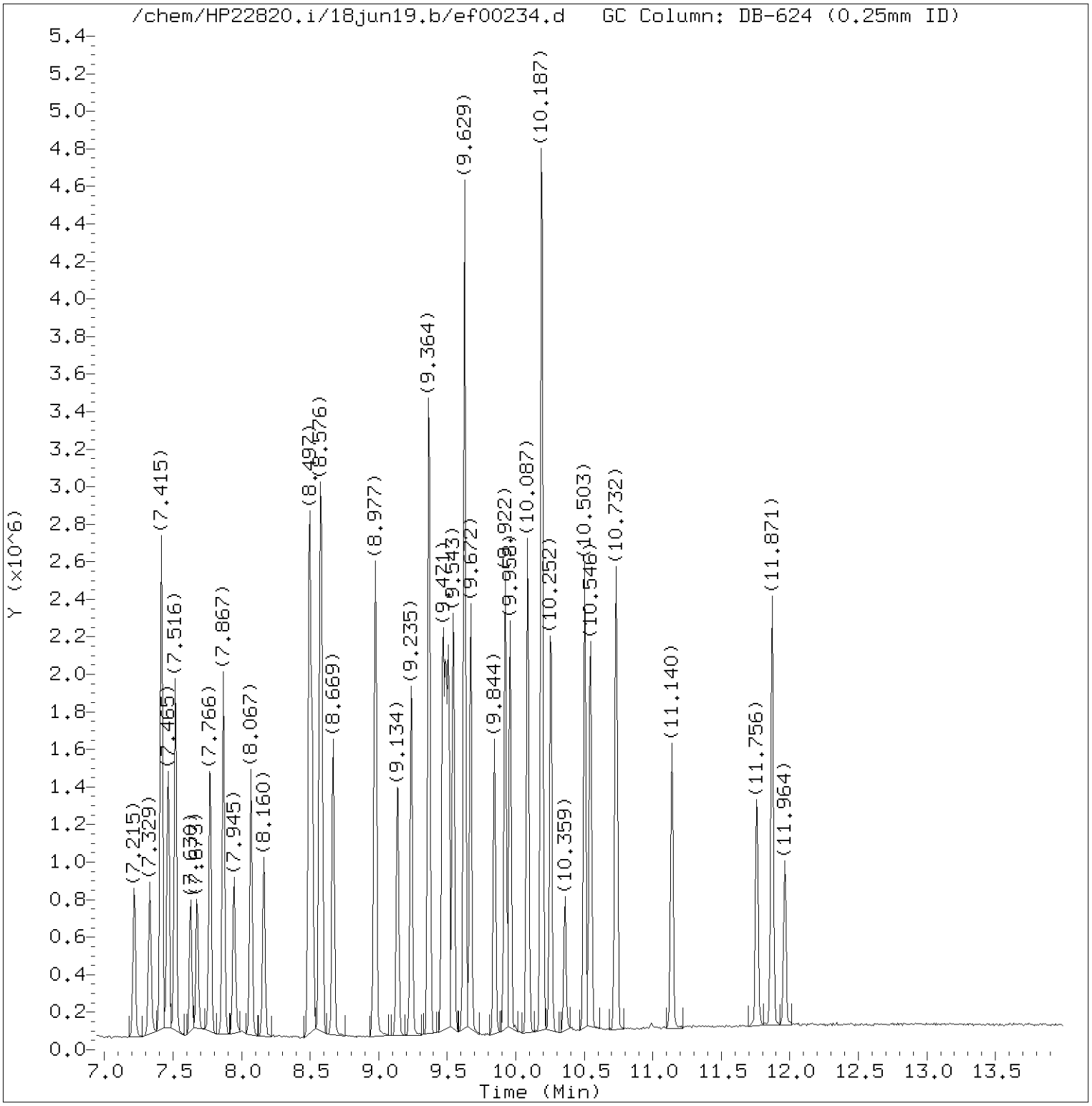
Target Revision 3.5

Data File: /chem/HP22820.i/18jun19.b/ef00234.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 16:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 17:43 jeb07445

Sample Name: LCSE10 Lab Sample ID: LCSE10

Digitally signed by Jacob E. Bailey
on 06/19/2018 at 17:43.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun19.b/ef00234.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 16:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 17:43 jeb07445

Sample Name: LCSE10 Lab Sample ID: LCSE10

Digitally signed by Jacob E. Bailey
on 06/19/2018 at 17:43.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun19.b/ef00234.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 16:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 17:43 jeb07445

Sample Name: LCSE10 Lab Sample ID: LCSE10

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.613	41	159270	9.210
2) Dichlorodifluoromethane	(1)	1.649	85	656088	10.831
3) Chlorodifluoromethane	(1)	1.671	51	441098	11.485
4) Freon 114	(1)	1.778	85	680769	10.472
5) Chloromethane	(1)	1.850	50	285452	11.706
6) Vinyl Chloride	(1)	1.971	62	237880	10.205
7) 1,3-Butadiene	(1)	2.007	54	143809	8.576
8) Bromomethane	(1)	2.358	94	225393	11.357
9) Chloroethane	(1)	2.480	64	140125	10.787
10) Bromoethene	(1)	2.695	106	172413	8.526
11) Dichlorofluoromethane	(1)	2.731	67	597046	11.554
12) Trichlorofluoromethane	(1)	2.774	101	661813	10.224
13) Pentane	(1)	2.881	43	294616	7.939
14) Ethanol	(1)	3.082	45	75860	9.370
15) Freon123a	(1)	3.203	67	567695	11.832
16) Acrolein	(1)	3.340	56	76139	8.856
17) 1,1-Dichloroethene	(1)	3.433	61	334930	9.442
18) Freon 113	(1)	3.447	103	352049	9.637
19) Acetone	(1)	3.533	43	384745	10.841
20) Methyl Iodide	(1)	3.605	142	464715	8.014
21) Carbon Disulfide	(1)	3.662	76	711216	10.713
22) Isopropanol	(1)	3.719	45	244269	8.135
24) 3-Chloropropene	(1)	3.870	76	91849	10.159
23) Acetonitrile	(1)	3.877	40	164454	10.446
25) Methylene Chloride	(1)	4.013	84	229983	11.667
26) tert-Butyl Alcohol	(1)	4.163	59	253201	7.548
28) trans-1,2-Dichloroethene	(1)	4.292	61	330900	10.120
27) Acrylonitrile	(1)	4.299	53	211162	10.788
29) Methyl t-Butyl Ether	(1)	4.299	73	411281	7.362
30) Hexane	(1)	4.564	57	259959	7.794
31) 1,1-Dichloroethane	(1)	4.722	63	459369	10.257
32) Vinyl Acetate	(1)	4.786	86	40809	8.608
33) Di-Isopropyl Ether	(1)	4.786	45	616396	8.528
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	320512	6.568
35) cis-1,2-Dichloroethene	(1)	5.259	61	283621	9.267
37) 2-Butanone	(1)	5.281	72	106279	9.208
38) Ethyl Acetate	(1)	5.331	70	49953	8.834
39) Methyl Acrylate	(1)	5.359	55	336295	8.963

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on 06/19/2018 at 17:43.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun19.b/ef00234.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 16:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 17:43 jeb07445

Sample Name: LCSE10 Lab Sample ID: LCSE10

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	365918	10.000
41) Tetrahydrofuran	(1)	5.503	42	214486	8.451
42) Chloroform	(1)	5.539	83	563531	10.594
43) 1,1,1-Trichloroethane	(1)	5.682	97	485832	9.899
44) Cyclohexane	(1)	5.710	56	286508	8.160
45) Carbon Tetrachloride	(1)	5.811	117	503077	10.474
46) Benzene	(2)	5.990	78	691327	10.214
47) 1,2-Dichloroethane	(2)	6.011	62	368772	11.626
48) Isooctane	(2)	6.040	57	918906	9.975
49) Tert-Amyl Methyl Ether	(2)	6.069	73	361831	8.431
50) Heptane	(2)	6.176	43	346769	9.724
51)*1,4-Difluorobenzene	(2)	6.291	114	1104800	10.000
52) Trichloroethene	(2)	6.491	130	286917	9.691
53) Ethyl Acrylate	(2)	6.570	55	351373	8.450
36) 1,2-Dichloroethene (total)	(1)		61	614521	19.387
54) 1,2-Dichloropropane	(2)	6.670	63	290008	11.211
57) Methyl Methacrylate	(2)	6.749	69	181261	8.352
55) Dibromomethane	(2)	6.771	174	286780	10.558
56) 1,4-Dioxane	(2)	6.778	88	150466	9.688
58) Bromodichloromethane	(2)	6.885	83	574072	11.332
59) cis-1,3-Dichloropropene	(2)	7.215	75	318603	8.640
60) 4-Methyl-2-Pentanone	(2)	7.329	43	475642	9.435
61) Toluene	(3)	7.465	91	785715	10.100
62) Octane	(3)	7.516	43	514779	10.692
63) trans-1,3-Dichloropropene	(3)	7.630	75	274488	9.650
65) Ethyl Methacrylate	(3)	7.673	69	301241	9.065
66) 1,1,2-Trichloroethane	(3)	7.773	97	337860	11.464
67) Tetrachloroethene	(3)	7.867	166	392069	9.882
68) 2-Hexanone	(3)	7.945	43	456659	10.280
69) Dibromochloromethane	(3)	8.067	127	416586	11.775
70) 1,2-Dibromoethane	(3)	8.160	107	472896	10.844
71)*Chlorobenzene-d5	(3)	8.497	117	1082924	10.000
72) Chlorobenzene	(3)	8.518	112	647666	9.850
73) 1,1,1,2-Tetrachloroethane	(3)	8.576	131	374330	11.703
74) Ethylbenzene	(3)	8.583	91	914035	9.345
75) m/p-Xylene	(3)	8.669	91	687811	9.209
76) o-Xylene	(3)	8.970	91	655188	8.926
78) Styrene	(3)	8.977	104	545992	9.824

* = Compound is an internal standard.

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on 06/19/2018 at 17:43.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun19.b/ef00234.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 16:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 17:43 jeb07445

Sample Name: LCSE10 Lab Sample ID: LCSE10

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	479843	11.293
80) Cumene	(3)	9.235	105	896221	9.157
82) 1,1,2,2-Tetrachloroethane	(3)	9.464	83	814663	11.922
81) Bromobenzene	(3)	9.493	156	373771	10.005
83) 1,2,3-Trichloropropane	(3)	9.514	110	231082	11.846
84) n-Propylbenzene	(3)	9.543	120	283586	9.774
86) 4-Ethyltoluene	(3)	9.629	105	1113653M	10.742
85) 2-Chlorotoluene	(3)	9.629	126	301334	10.882
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	908681M	10.746
88) Alpha Methyl Styrene	(3)	9.844	118	349228	8.959
89) tert-Butylbenzene	(3)	9.922	119	811788M	10.582
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	911527	10.992
91) sec-Butylbenzene	(3)	10.087	105	1259964	10.610
92) 1,3-Dichlorobenzene	(3)	10.187	146	715288	11.175
94) p-Isopropyltoluene	(3)	10.195	119	1007944	10.613
93) 1,4-Dichlorobenzene	(3)	10.259	146	679644	10.730
95) Benzyl Chloride	(3)	10.359	91	381212	8.951
97) n-Butylbenzene	(3)	10.503	91	979084	10.501
96) 1,2-Dichlorobenzene	(3)	10.546	146	646380	10.859
98) Hexachloroethane	(3)	10.732	117	345450	13.872
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	281862	10.169
100) 1,2,4-Trichlorobenzene	(3)	11.763	180	290692	7.538
101) Hexachlorobutadiene	(3)	11.871	225	313596	9.782
102) Naphthalene	(3)	11.964	128	548150	7.346
64) 1,3-Dichloropropene (total)	(3)		75	593091	18.290
77) Xylene (total)	(3)		91	1342999	18.135

M = Compound was manually integrated.

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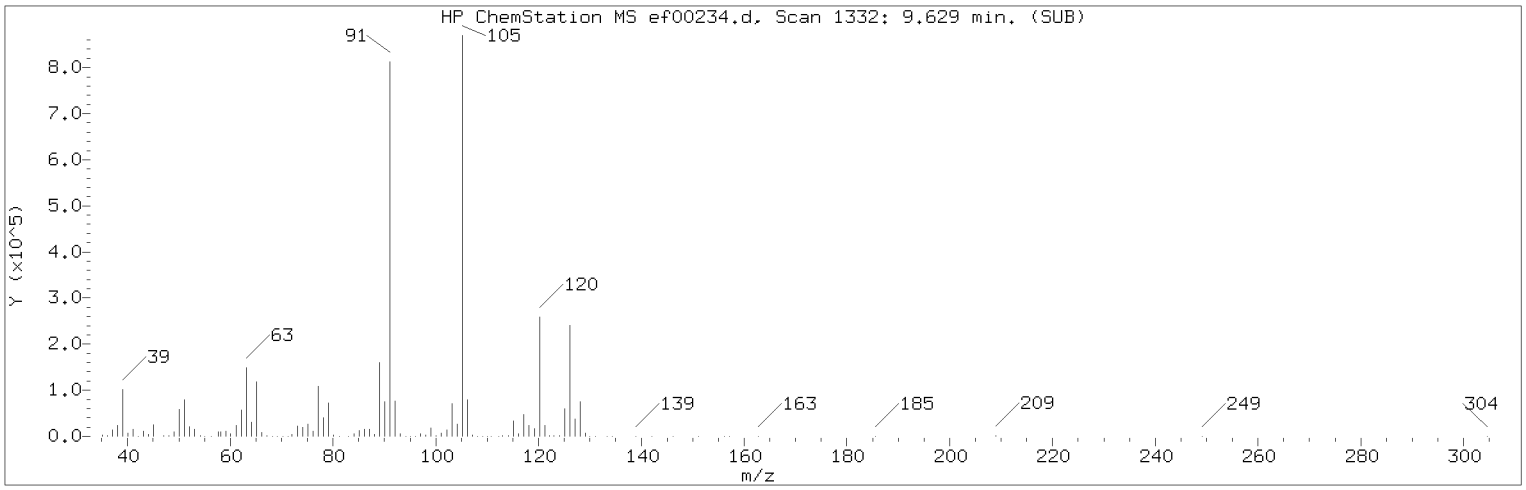
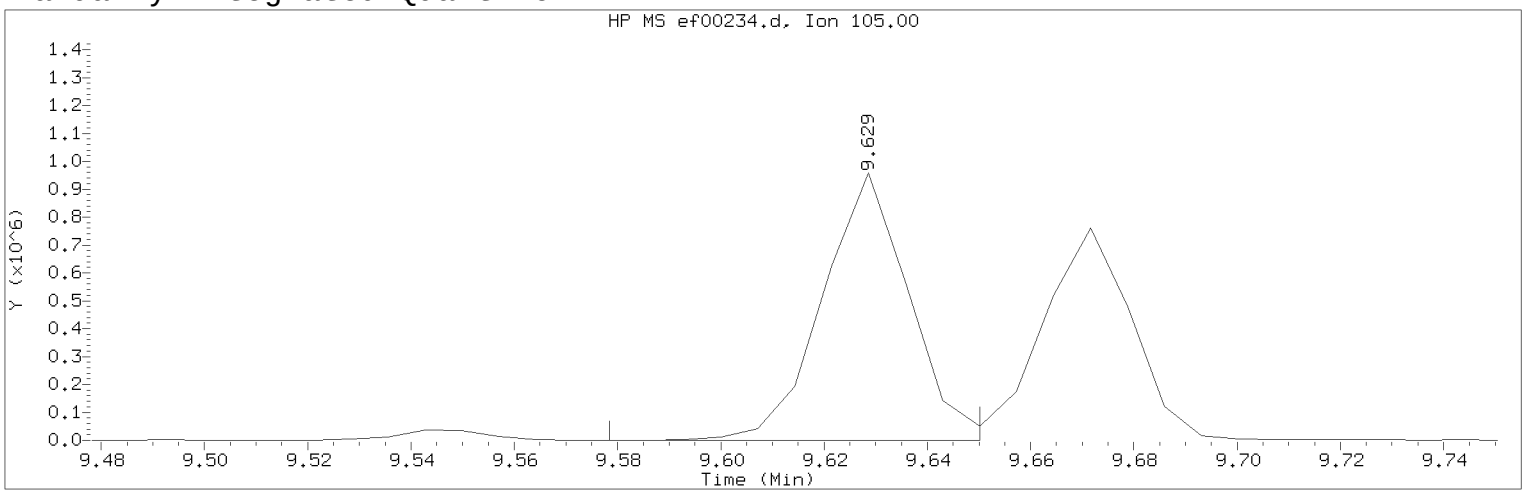
on 06/19/2018 at 17:43.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun19.b/ef00234.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 16:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 17:43 jeb07445

Sample Name: LCSE10 Lab Sample ID: LCSE10

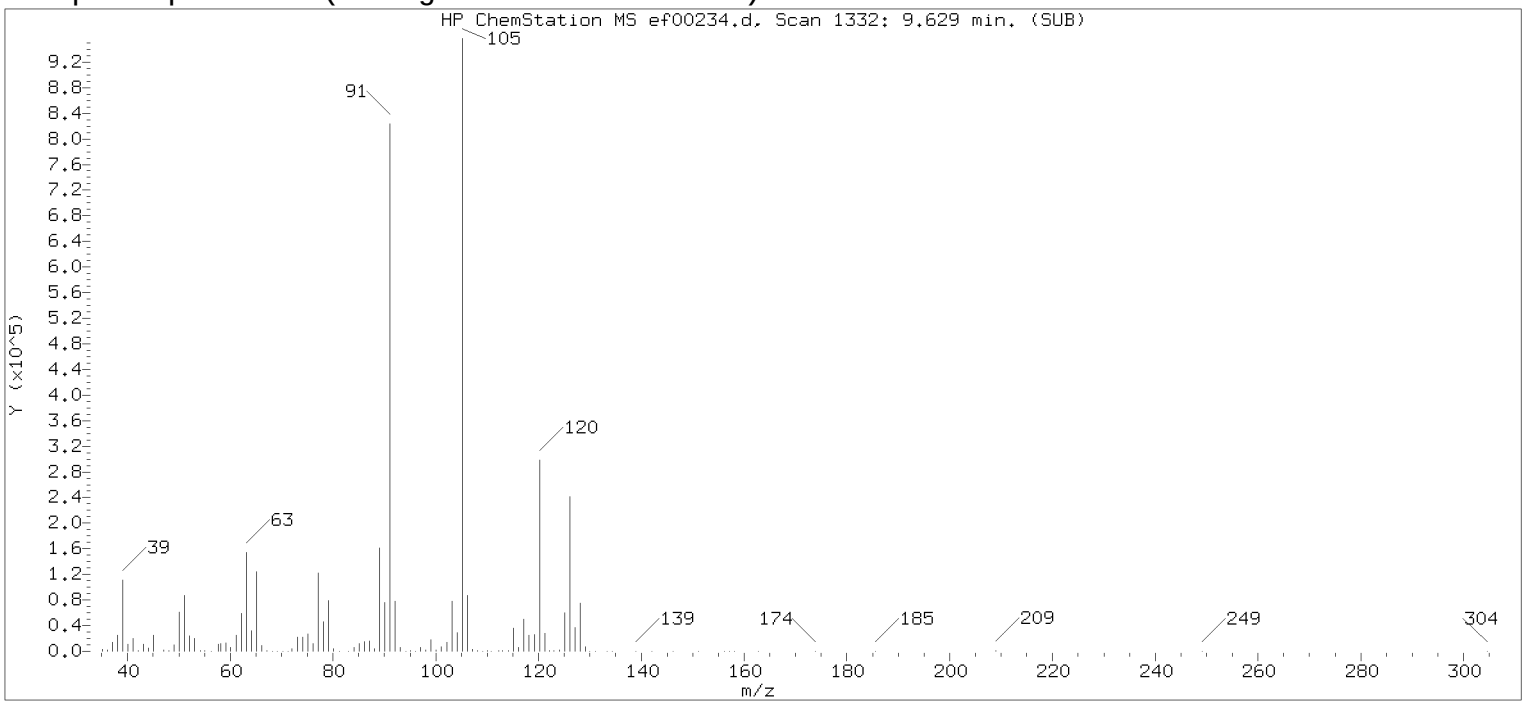
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 1113653M
Concentration (ppb(v)) : 10.7424
Integration start scan : 1324 Integration stop scan: 1334
Y at integration start : 333 Y at integration end: 333

Reason for manual integration: improper integration

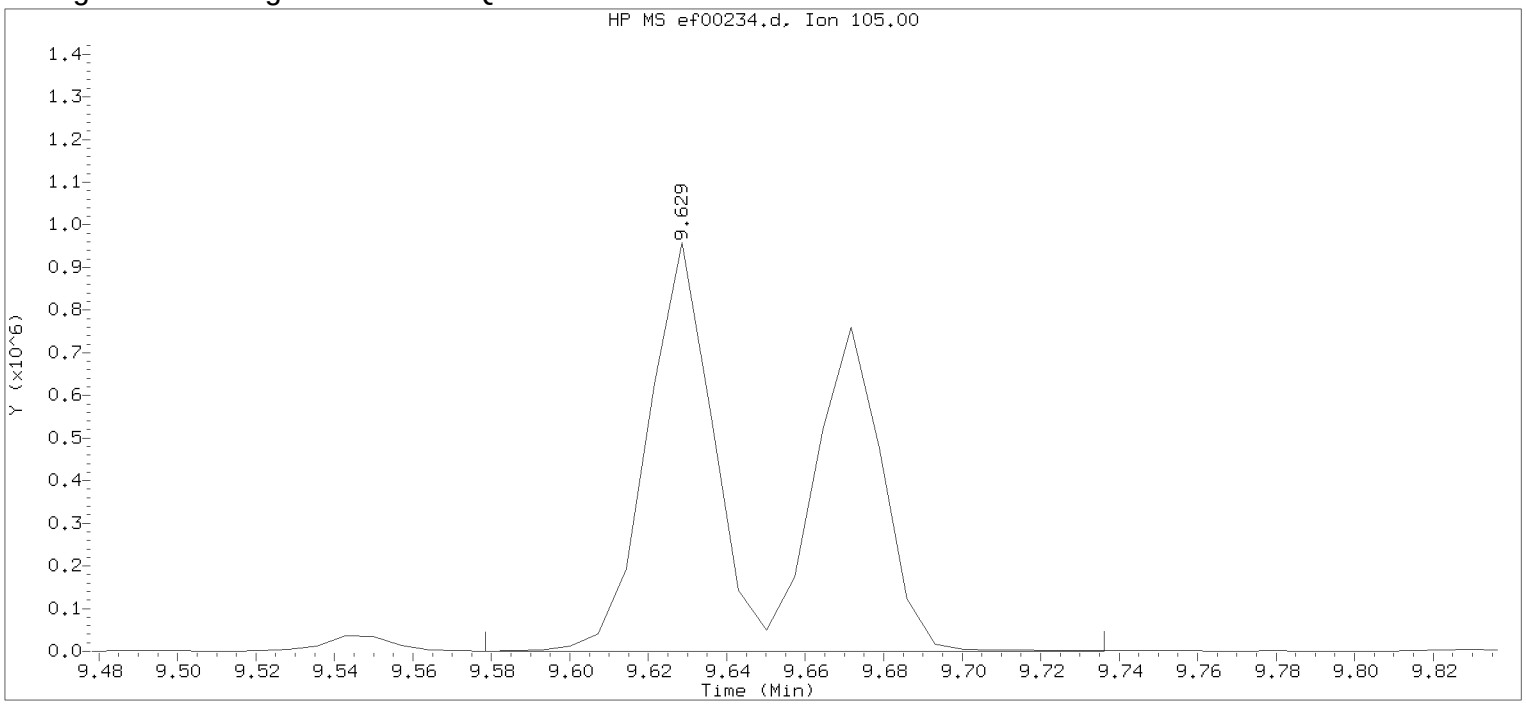
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/19/2018 at 17:43.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/20/2018 at 13:53.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



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Injection date and time: 19-JUN-2018 16:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 16:48 Unknown

Sample Name: LCSE10 Lab Sample ID: LCSE10

Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 2008968
Concentration (ppb(v)) : 19.3787
Integration start scan : 1324 Integration stop scan: 1346
Y at integration start : 333 Y at integration end: 333

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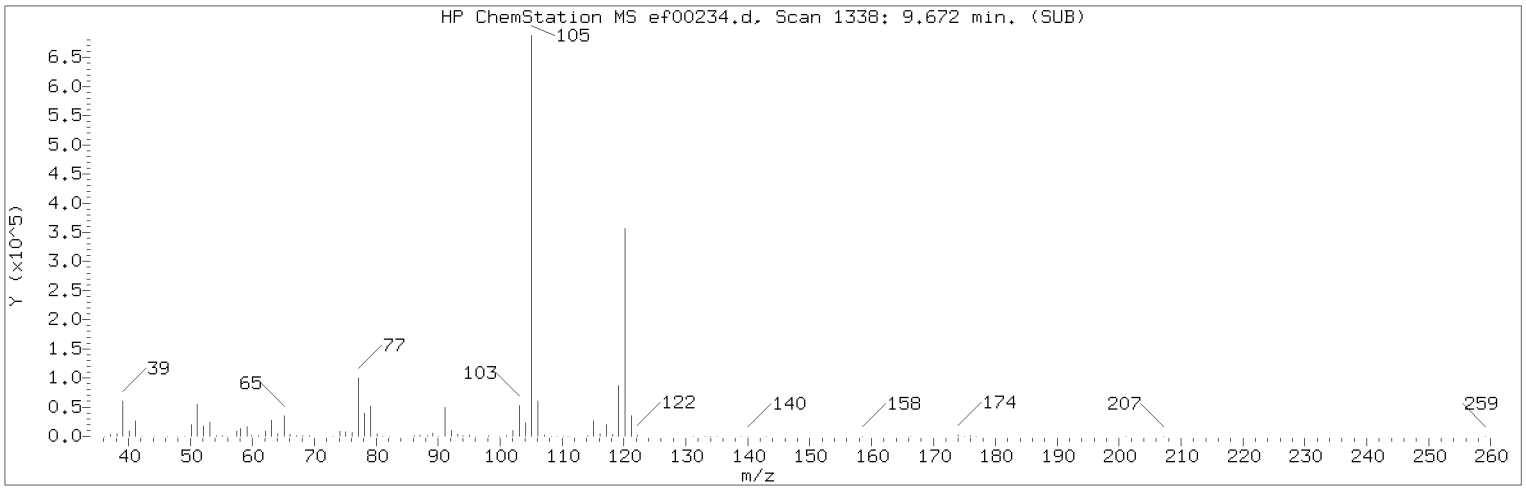
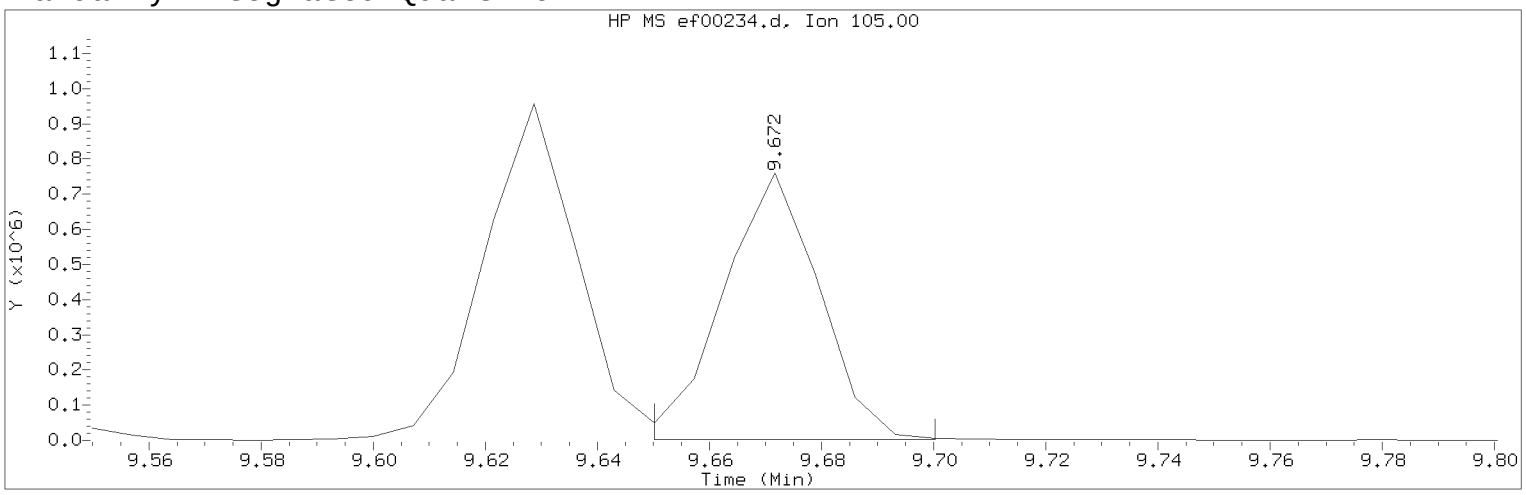
Target 3.5 esignature used for this page

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun19.b/ef00234.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 16:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 17:43 jeb07445

Sample Name: LCSE10 Lab Sample ID: LCSE10

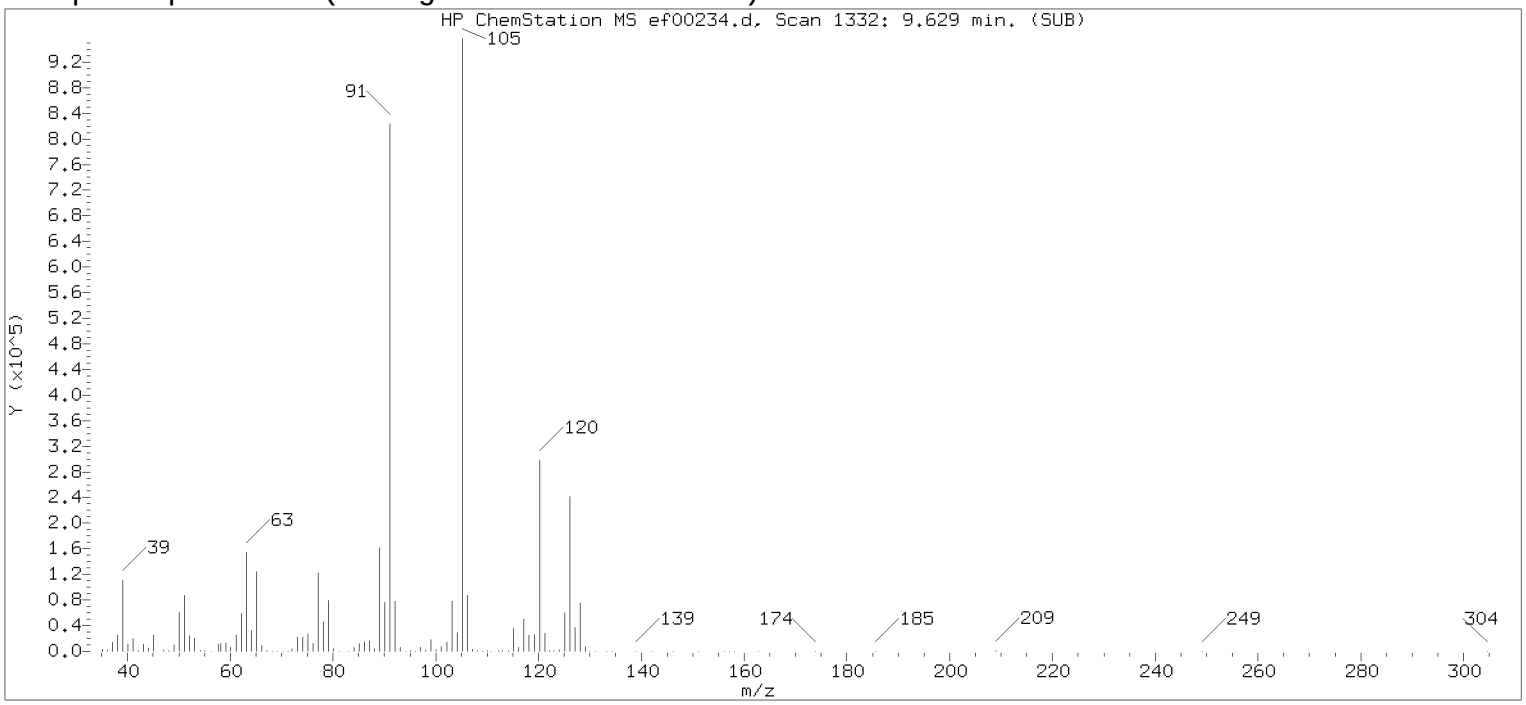
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 908681M
Concentration (ppb(v)) : 10.7460
Integration start scan : 1334 Integration stop scan: 1341
Y at integration start : 1685 Y at integration end: 1685

Reason for manual integration: improper integration

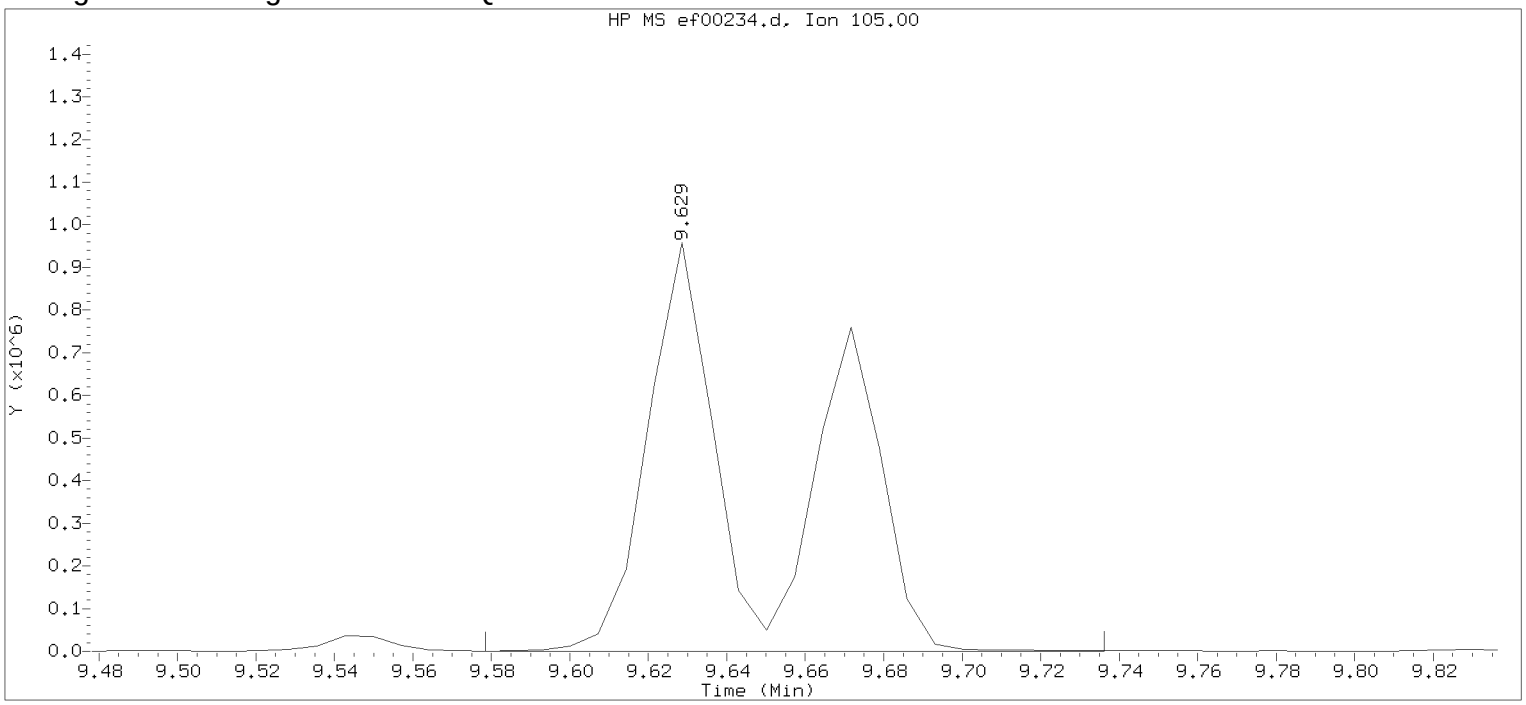
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/19/2018 at 17:43.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/20/2018 at 13:53.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun19.b/ef00234.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 16:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 16:48 Unknown

Sample Name: LCSE10 Lab Sample ID: LCSE10

Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 2010706
Concentration (ppb(v)) : 23.7784
Integration start scan : 1324 Integration stop scan: 1346
Y at integration start : 161 Y at integration end: 161

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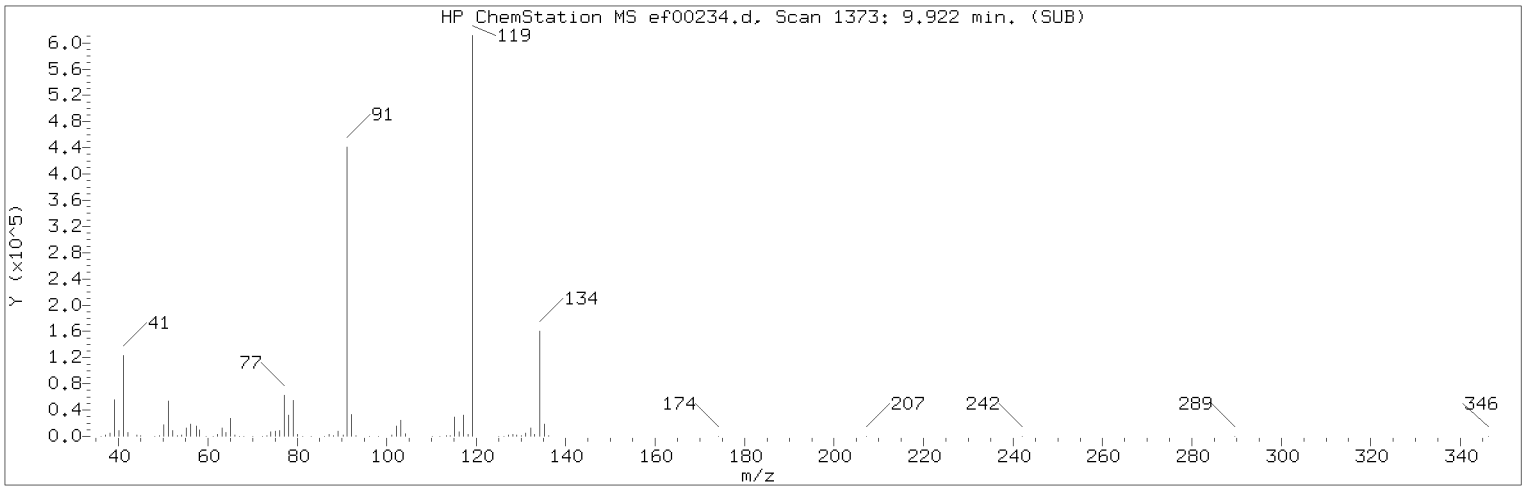
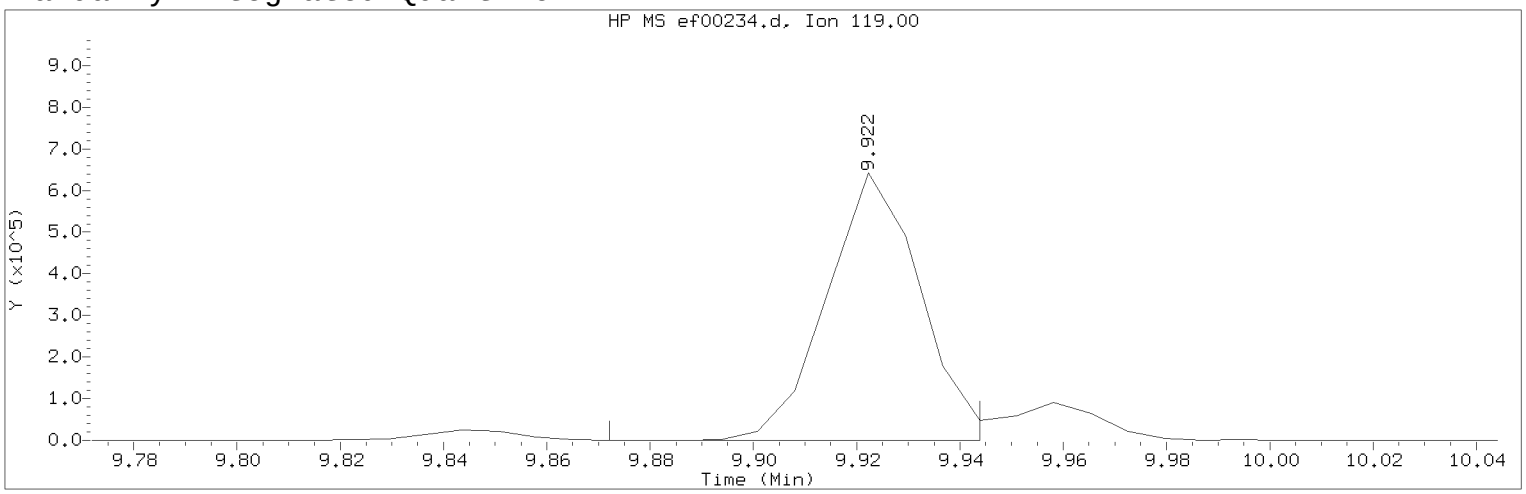
Target 3.5 esignature used. LED1 Page 1495

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun19.b/ef00234.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 16:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 17:43 jeb07445

Sample Name: LCSE10 Lab Sample ID: LCSE10

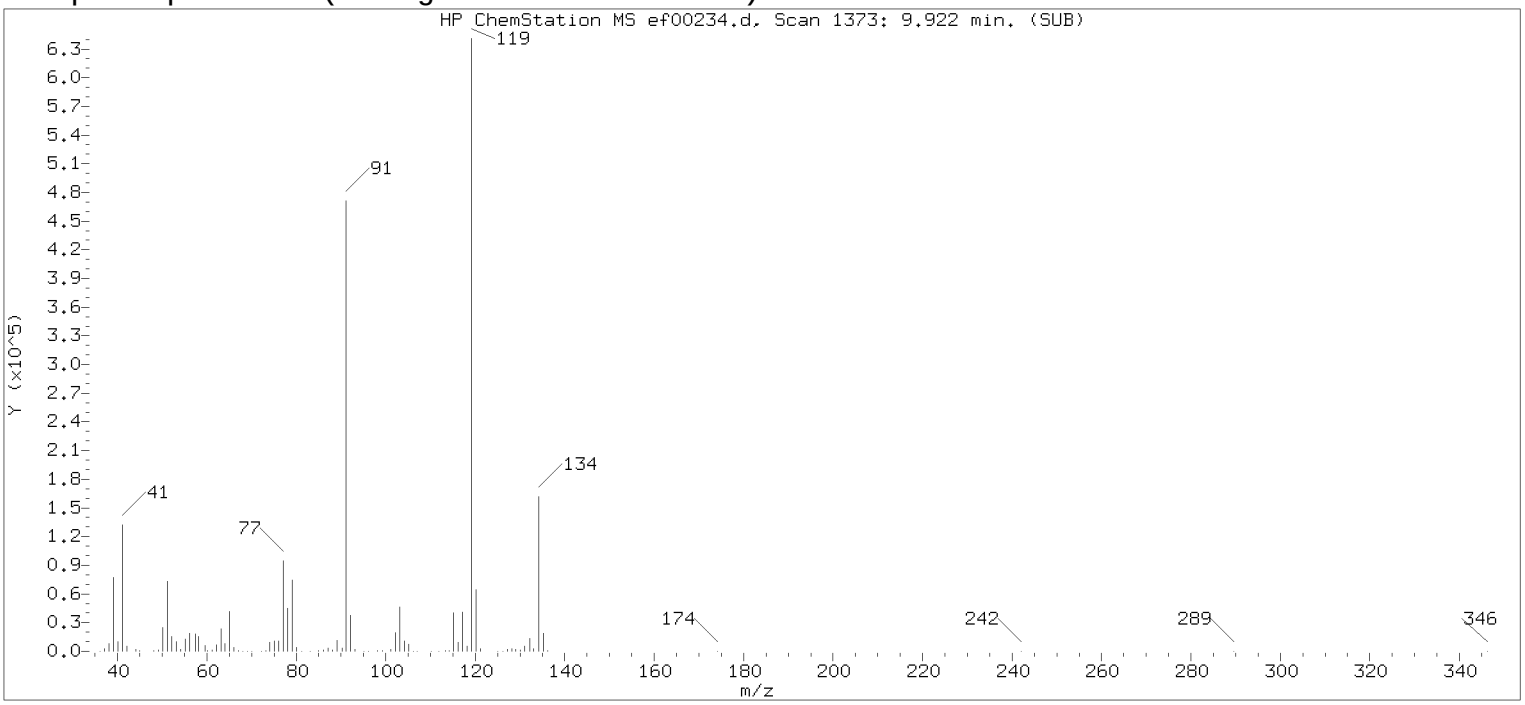
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 811788M
Concentration (ppb(v)) : 10.5816
Integration start scan : 1365 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

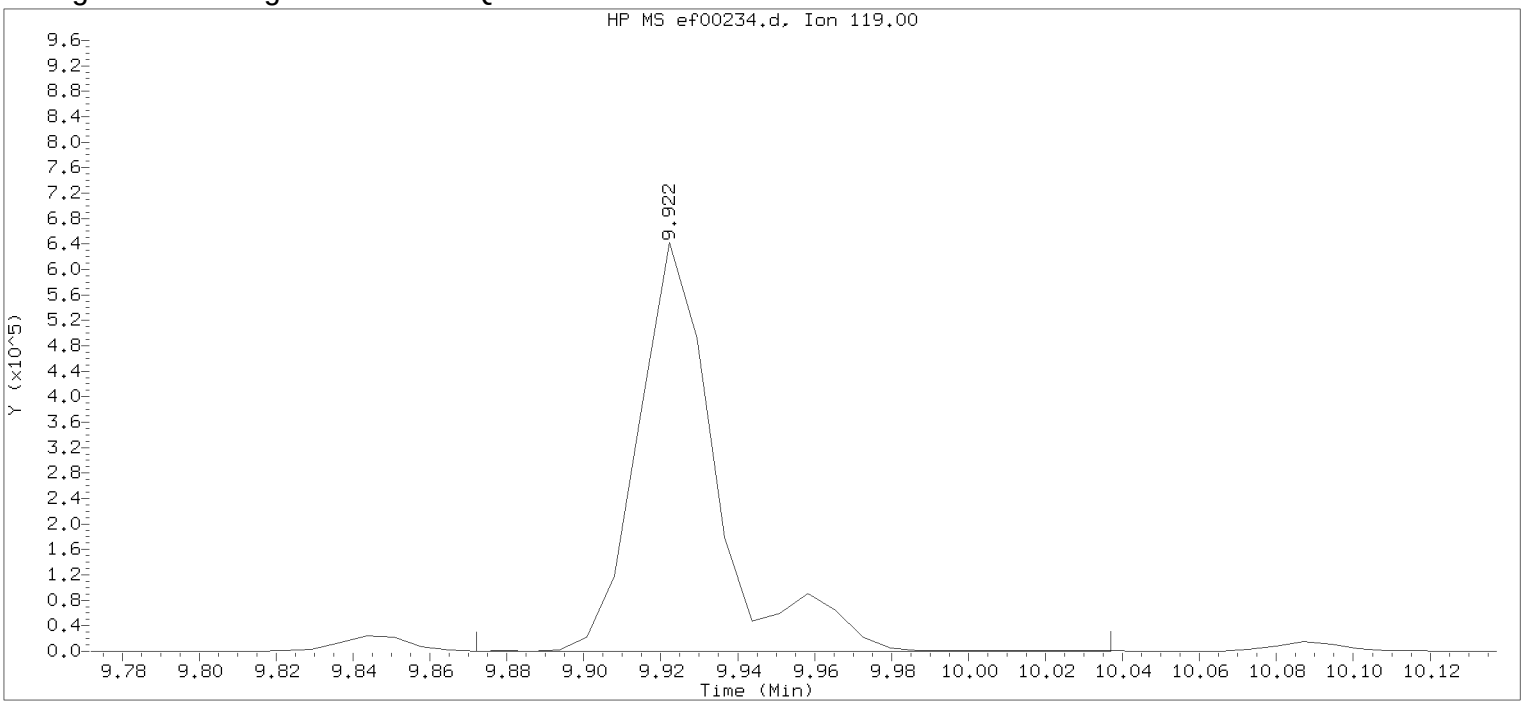
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/19/2018 at 17:43.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/20/2018 at 13:53.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun19.b/ef00234.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 16:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 16:48 Unknown

Sample Name: LCSE10 Lab Sample ID: LCSE10

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 917834
Concentration (ppb(v)) : 11.9639
Integration start scan : 1365 Integration stop scan: 1388
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/19/2018 at 17:43.
Target 3.5 esignature used for this page

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun19.b/ef00235.d Injection date and time: **19-JUN-2018 17:01**
Data file Sample Info. Line: LCSDE10;200;E1817030AA;LCSDE10;0;3;LCSD; Instrument ID: **HP22820.i** Batch: **E1817030AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 17:43 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun19.b/ef00233.d**

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 19-JUN-2018 15:18
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun19.b/ef00232.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	5.467(0.000)	751	130	349910 (-1)	10.00		212165 - 495049
51) 1,4-Difluorobenzene	6.291(0.000)	866	114	1038859 (-2)	10.00		635627 - 1483127
71) Chlorobenzene-d5	8.497(0.000)	1174	117	1057588 (-1)	10.00		640174 - 1493738

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)	1.613(0.000)	41	160589	9.711	9.71			0.5	1
2) Dichlorodifluoromethane	(1)	1.649(0.000)	85	665733	11.493	11.49			0.2	1
3) Chlorodifluoromethane	(1)	1.671(0.000)	51	443699	12.082	12.08			0.2	1
4) Freon 114	(1)	1.778(0.000)	85	690468	11.107	11.11			0.2	1
5) Chloromethane	(1)	1.850(0.000)	50	285856	12.259	12.26			0.2	1
6) Vinyl Chloride	(1)	1.971(0.000)	62	243009	10.902	10.90			0.2	1
7) 1,3-Butadiene	(1)	2.007(0.000)	54	148415	9.256	9.26			0.4	2
8) Bromomethane	(1)	2.358(0.000)	94	227232	11.974	11.97			0.5	1
9) Chloroethane	(1)	2.480(0.000)	64	137349	11.057	11.06			0.2	1
10) Bromoethene	(1)	2.695(0.000)	106	187046	9.673	9.67			0.4	2
11) Dichlorofluoromethane	(1)	2.731(0.000)	67	596494	12.072	12.07			0.2	1
12) Trichlorofluoromethane	(1)	2.774(0.000)	101	669176	10.811	10.81			0.2	1
13) Pentane	(1)	2.881(0.000)	43	309513	8.721	8.72			0.5	1
14) Ethanol	(1)	3.074(0.001)	45	81593	10.539	10.54			0.5	2
15) Freon123a	(1)	3.204(0.001)	67	562105	12.251	12.25			0.2	1
16) Acrolein	(1)	3.340(0.001)	56	79252	9.640	9.64			1	2
17) 1,1-Dichloroethene	(1)	3.433(0.000)	61	349919	10.316	10.32			0.2	1
18) Freon 113	(1)	3.447(0.000)	103	351765	10.070	10.07			0.5	2
19) Acetone	(1)	3.533(0.000)	43	395570	11.656	11.66			0.5	2
20) Methyl Iodide	(1)	3.605(0.001)	142	479020	8.639	8.64			0.2	1
21) Carbon Disulfide	(1)	3.662(0.000)	76	709639	11.178	11.18			0.5	1
22) Isopropanol	(1)	3.719(0.000)	45	257806	8.979	8.98			0.5	2
23) Acetonitrile	(1)	3.877(0.001)	40	165393	10.987	10.99			0.5	2
24) 3-Chloropropene	(1)	3.870(-0.000)	76	94434	10.923	10.92			0.2	1
25) Methylene Chloride	(1)	4.013(-0.000)	84	227378	12.062	12.06			0.2	1
26) tert-Butyl Alcohol	(1)	4.163(-0.000)	59	259794	8.099	8.10			0.5	1
27) Acrylonitrile	(1)	4.299(-0.000)	53	214178	11.443	11.44			0.5	2
28) trans-1,2-Dichloroethene	(1)	4.292(-0.000)	61	340086	10.877	10.88			0.2	1
29) Methyl t-Butyl Ether	(1)	4.299(-0.000)	73	421849	7.896	7.90			0.2	1
30) Hexane	(1)	4.564(-0.000)	57	263835	8.272	8.27			0.2	1
31) 1,1-Dichloroethane	(1)	4.722(-0.000)	63	469385	10.960	10.96			0.2	1
32) Vinyl Acetate	(1)	4.786(-0.000)	86	40299	8.889	8.89			1	1
33) Di-Isopropyl Ether	(1)	4.786(-0.000)	45	639303	9.249	9.25			0.2	1
34) Ethyl Tert-Butyl Ether	(1)	5.116(0.001)	59	334917	7.177	7.18			0.2	1
35) cis-1,2-Dichloroethene	(1)	5.259(-0.000)	61	280687	9.591	9.59			0.2	1
36) 1,2-Dichloroethene (total)	(1)		61	620773	20.468	20.47			0.2	1
37) 2-Butanone	(1)	5.288(-0.001)	72	108482	9.829	9.83			0.5	2
38) Ethyl Acetate	(1)	5.331(0.000)	70	46818	8.658	8.66			0.5	1
39) Methyl Acrylate	(1)	5.360(-0.000)	55	352288	9.819	9.82			0.2	1
41) Tetrahydrofuran	(1)	5.503(-0.000)	42	217564	8.965	8.96			0.5	1
42) Chloroform	(1)	5.539(-0.000)	83	568168	11.170	11.17			0.2	1
43) 1,1,1-Trichloroethane	(1)	5.682(-0.000)	97	485997	10.356	10.36			0.2	1
44) Cyclohexane	(1)	5.710(-0.000)	56	293900	8.753	8.75			0.2	1

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun19.b/ef00235.d Injection date and time: **19-JUN-2018 17:01**
Data file Sample Info. Line: LCSDE10;200;E1817030AA;LCSDE10;0;3;LCSD; Instrument ID: **HP22820.i** Batch: **E1817030AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 17:43 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun19.b/ef00233.d**

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 19-JUN-2018 15:18
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun19.b/ef00232.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
45) Carbon Tetrachloride	(1)	5.811(-0.000)	117	508260	11.066	11.07			0.2	1
46) Benzene	(2)	5.990(0.000)	78	705989	11.093	11.09			0.2	1
47) 1,2-Dichloroethane	(2)	6.011(-0.000)	62	389167	13.047	13.05			0.2	1
48) Isooctane	(2)	6.040(-0.001)	57	939873	10.851	10.85			0.2	1
49) Tert-Amyl Methyl Ether	(2)	6.069(-0.000)	73	368764	9.137	9.14			0.2	1
50) Heptane	(2)	6.176(-0.000)	43	355842	10.612	10.61			0.5	1
52) Trichloroethene	(2)	6.491(-0.000)	130	291596	10.474	10.47			0.2	1
53) Ethyl Acrylate	(2)	6.577(-0.001)	55	366911	9.383	9.38			0.2	1
54) 1,2-Dichloropropane	(2)	6.670(0.001)	63	295957	12.167	12.17			0.2	1
55) Dibromomethane	(2)	6.771(-0.000)	174	296925	11.626	11.63			0.2	1
56) 1,4-Dioxane	(2)	6.778(-0.000)	88	154504	10.579	10.58			0.5	1
57) Methyl Methacrylate	(2)	6.749(-0.000)	69	191631	9.391	9.39			0.2	1
58) Bromodichloromethane	(2)	6.885(-0.000)	83	588879	12.362	12.36			0.2	1
59) cis-1,3-Dichloropropene	(2)	7.215(-0.000)	75	335567	9.678	9.68			0.2	1
60) 4-Methyl-2-Pentanone	(2)	7.329(-0.000)	43	492676	10.393	10.39			0.5	2
61) Toluene	(3)	7.466(-0.000)	91	809217	10.651	10.65			0.2	1
62) Octane	(3)	7.516(-0.000)	43	515429	10.962	10.96			0.2	1
63) trans-1,3-Dichloropropene	(3)	7.630(-0.000)	75	283958	10.222	10.22			0.2	1
64) 1,3-Dichloropropene (total)	(3)		75	619525	19.900	19.90			0.2	1
65) Ethyl Methacrylate	(3)	7.673(0.000)	69	307462	9.474	9.47			0.2	1
66) 1,1,2-Trichloroethane	(3)	7.774(0.000)	97	337628	11.731	11.73			0.2	1
67) Tetrachloroethene	(3)	7.867(0.000)	166	399736	10.317	10.32			0.2	1
68) 2-Hexanone	(3)	7.945(-0.000)	43	466321	10.749	10.75			0.5	2
69) Dibromochloromethane	(3)	8.067(0.000)	127	424720	12.293	12.29			0.2	1
70) 1,2-Dibromoethane	(3)	8.160(0.000)	107	474557	11.143	11.14			0.2	1
72) Chlorobenzene	(3)	8.518(-0.000)	112	672326	10.470	10.47			0.2	1
73) 1,1,1,2-Tetrachloroethane	(3)	8.569(-0.000)	131	377824	12.096	12.10			0.2	1
74) Ethylbenzene	(3)	8.583(-0.000)	91	945573	9.899	9.90			0.2	1
75) m/p-Xylene	(3)	8.669(-0.000)	91	725575	9.948	9.95			0.2	1
76) o-Xylene	(3)	8.970(-0.000)	91	694073	9.682	9.68			0.2	1
77) Xylene (total)	(3)		91	1419648	19.629	19.63			0.2	1
78) Styrene	(3)	8.977(-0.000)	104	563000	10.372	10.37			0.2	1
79) Bromoform	(3)	9.142(-0.000)	173	494546	11.918	11.92			0.2	1
80) Cumene	(3)	9.242(-0.000)	105	917287	9.596	9.60			0.2	1
81) Bromobenzene	(3)	9.493(-0.000)	156	381813	10.465	10.47			0.2	1
82) 1,1,2,2-Tetrachloroethane	(3)	9.471(-0.000)	83	822009	12.318	12.32			0.2	1
83) 1,2,3-Trichloropropane	(3)	9.514(-0.000)	110	230462	12.097	12.10			0.2	1
84) n-Propylbenzene	(3)	9.550(-0.000)	120	290518	10.253	10.25			0.5	1
85) 2-Chlorotoluene	(3)	9.629(-0.000)	126	309148	11.432	11.43			0.2	1
86) 4-Ethyltoluene	(3)	9.629(-0.000)	105	1141247M	11.272	11.27			0.2	1
87) 1,3,5-Trimethylbenzene	(3)	9.672(-0.000)	105	936985M	11.346	11.35			0.2	1
88) Alpha Methyl Styrene	(3)	9.844(-0.000)	118	360912	9.481	9.48			0.2	1
89) tert-Butylbenzene	(3)	9.922(-0.000)	119	865674M	11.554	11.55			0.5	1
90) 1,2,4-Trimethylbenzene	(3)	9.958(-0.000)	105	969539	11.972	11.97			0.2	1
91) sec-Butylbenzene	(3)	10.087(-0.000)	105	1305763	11.260	11.26			0.2	1
92) 1,3-Dichlorobenzene	(3)	10.195(-0.000)	146	733829	11.739	11.74			0.2	1
93) 1,4-Dichlorobenzene	(3)	10.259(-0.000)	146	690888	11.169	11.17			0.2	1
94) p-Isopropyltoluene	(3)	10.195(-0.000)	119	1045041	11.267	11.27			0.2	1
95) Benzyl Chloride	(3)	10.359(-0.000)	91	400452	9.628	9.63			0.5	1
96) 1,2-Dichlorobenzene	(3)	10.546(-0.000)	146	652408	11.222	11.22			0.2	1
97) n-Butylbenzene	(3)	10.503(-0.000)	91	1042737	11.451	11.45			0.2	1
98) Hexachloroethane	(3)	10.739(-0.000)	117	353252	14.525	14.53			0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)	11.140(-0.000)	157	287317	10.614	10.61			0.2	1
100) 1,2,4-Trichlorobenzene	(3)	11.763(-0.000)	180	317449	8.429	8.43			0.5	2

M = Compound was manually integrated.

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Data file: /chem/HP22820.i/18jun19.b/ef00235.d Injection date and time: **19-JUN-2018 17:01**
Data file Sample Info. Line: LCSDE10;200;E1817030AA;LCSDE10;0;3;LCSD; Instrument ID: **HP22820.i** Batch: **E1817030AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 17:43 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun19.b/ef00233.d**

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 19-JUN-2018 15:18
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun19.b/ef00232.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
101) Hexachlorobutadiene	(3)	11.878(-0.000)	225	339338	10.839	10.84			0.4	2
102) Naphthalene	(3)	11.964(-0.000)	128	610754	8.381	8.38			0.4	1

Total number of targets = 99

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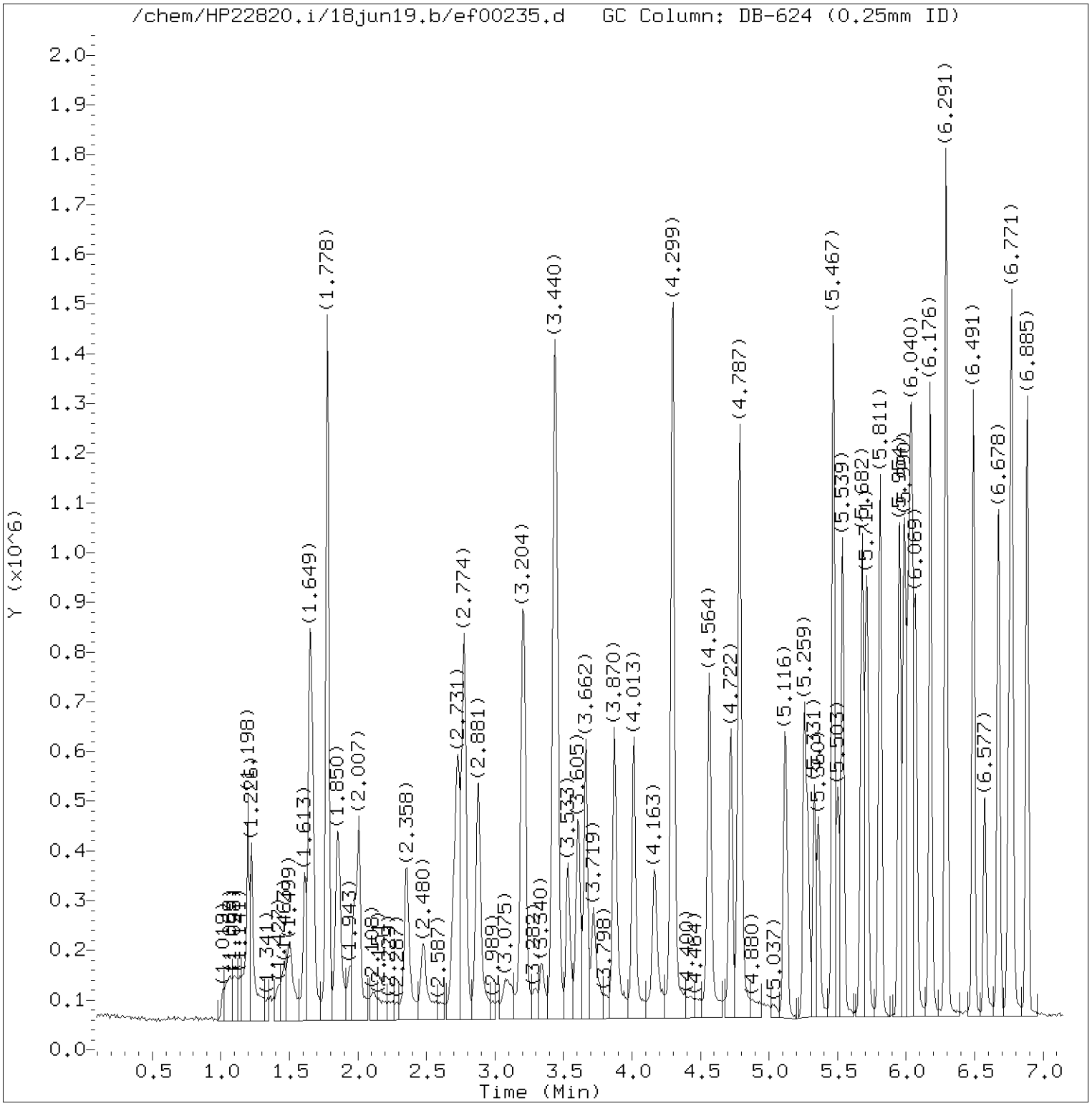
Secondary review performed and digitally signed by Jeffrey B. Smith on 06/20/2018 at 13:53. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

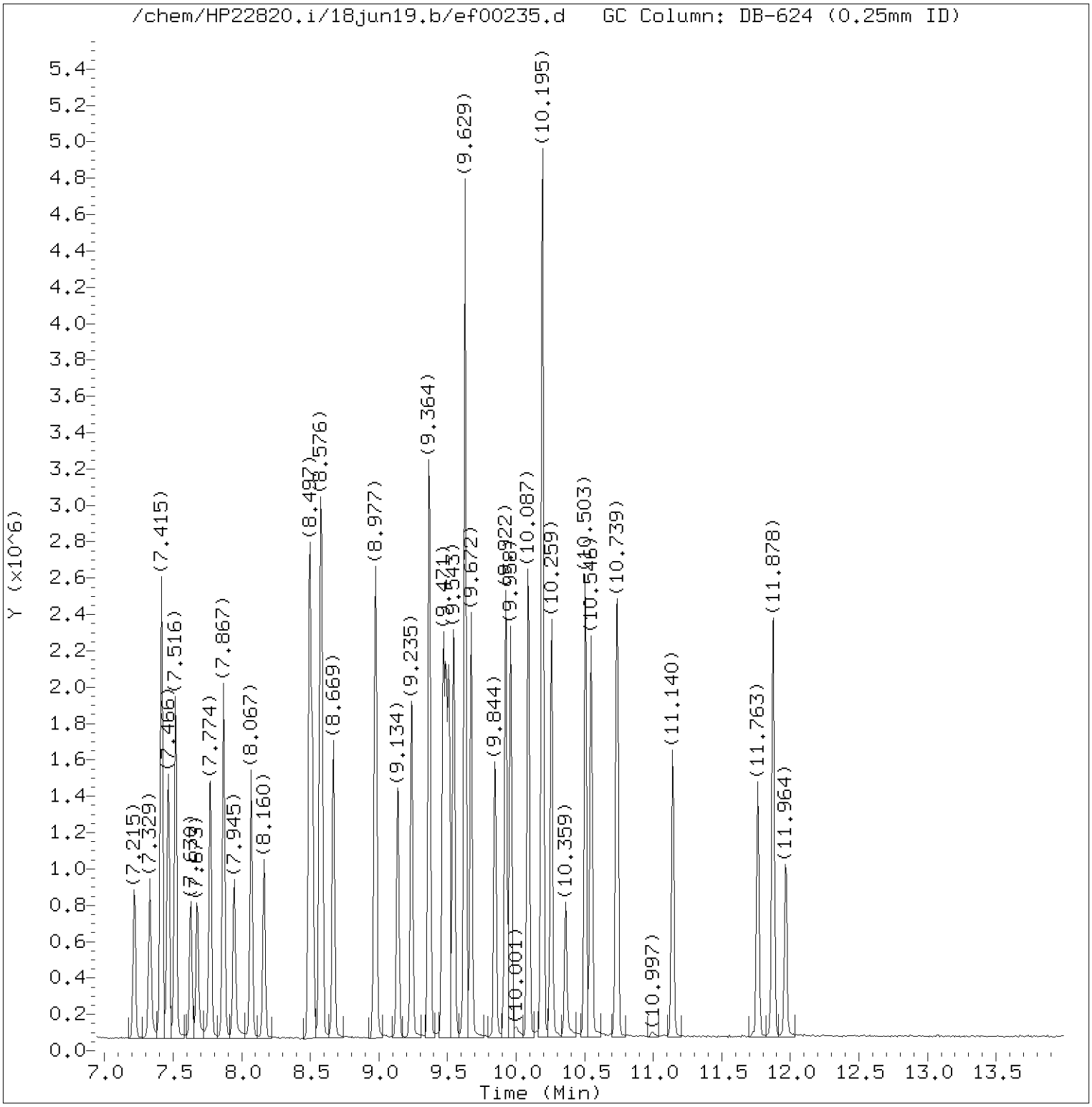
Target Revision 3.5

Data File: /chem/HP22820.i/18jun19.b/ef00235.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 17:01 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 17:43 jeb07445

Sample Name: LCSDE10 Lab Sample ID: LCSDE10

Digitally signed by Jacob E. Bailey
on 06/19/2018 at 17:44.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun19.b/ef00235.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 17:01 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 17:43 jeb07445

Sample Name: LCSDE10 Lab Sample ID: LCSDE10

Digitally signed by Jacob E. Bailey
on 06/19/2018 at 17:44.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun19.b/ef00235.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 17:01 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 17:43 jeb07445

Sample Name: LCSDE10 Lab Sample ID: LCSDE10

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.613	41	160589	9.711
2) Dichlorodifluoromethane	(1)	1.649	85	665733	11.493
3) Chlorodifluoromethane	(1)	1.671	51	443699	12.082
4) Freon 114	(1)	1.778	85	690468	11.107
5) Chloromethane	(1)	1.850	50	285856	12.259
6) Vinyl Chloride	(1)	1.971	62	243009	10.902
7) 1,3-Butadiene	(1)	2.007	54	148415	9.256
8) Bromomethane	(1)	2.358	94	227232	11.974
9) Chloroethane	(1)	2.480	64	137349	11.057
10) Bromoethene	(1)	2.695	106	187046	9.673
11) Dichlorofluoromethane	(1)	2.731	67	596494	12.072
12) Trichlorofluoromethane	(1)	2.774	101	669176	10.811
13) Pentane	(1)	2.881	43	309513	8.721
14) Ethanol	(1)	3.075	45	81593	10.539
15) Freon123a	(1)	3.204	67	562105	12.251
16) Acrolein	(1)	3.340	56	79252	9.640
17) 1,1-Dichloroethene	(1)	3.433	61	349919	10.316
18) Freon 113	(1)	3.447	103	351765	10.070
19) Acetone	(1)	3.533	43	395570	11.656
20) Methyl Iodide	(1)	3.605	142	479020	8.639
21) Carbon Disulfide	(1)	3.662	76	709639	11.178
22) Isopropanol	(1)	3.719	45	257806	8.979
24) 3-Chloropropene	(1)	3.870	76	94434	10.923
23) Acetonitrile	(1)	3.877	40	165393	10.987
25) Methylene Chloride	(1)	4.013	84	227378	12.062
26) tert-Butyl Alcohol	(1)	4.163	59	259794	8.099
28) trans-1,2-Dichloroethene	(1)	4.292	61	340086	10.877
27) Acrylonitrile	(1)	4.299	53	214178	11.443
29) Methyl t-Butyl Ether	(1)	4.299	73	421849	7.896
30) Hexane	(1)	4.564	57	263835	8.272
31) 1,1-Dichloroethane	(1)	4.722	63	469385	10.960
32) Vinyl Acetate	(1)	4.787	86	40299	8.889
33) Di-Isopropyl Ether	(1)	4.787	45	639303	9.249
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	334917	7.177
35) cis-1,2-Dichloroethene	(1)	5.259	61	280687	9.591
37) 2-Butanone	(1)	5.288	72	108482	9.829
38) Ethyl Acetate	(1)	5.331	70	46818	8.658
39) Methyl Acrylate	(1)	5.360	55	352288	9.819

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on 06/19/2018 at 17:44.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun19.b/ef00235.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 17:01 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 17:43 jeb07445

Sample Name: LCSDE10 Lab Sample ID: LCSDE10

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	349910	10.000
41) Tetrahydrofuran	(1)	5.503	42	217564	8.965
42) Chloroform	(1)	5.539	83	568168	11.170
43) 1,1,1-Trichloroethane	(1)	5.682	97	485997	10.356
44) Cyclohexane	(1)	5.711	56	293900	8.753
45) Carbon Tetrachloride	(1)	5.811	117	508260	11.066
46) Benzene	(2)	5.990	78	705989	11.093
47) 1,2-Dichloroethane	(2)	6.011	62	389167	13.047
48) Isooctane	(2)	6.040	57	939873	10.851
49) Tert-Amyl Methyl Ether	(2)	6.069	73	368764	9.137
50) Heptane	(2)	6.176	43	355842	10.612
51)*1,4-Difluorobenzene	(2)	6.291	114	1038859	10.000
52) Trichloroethene	(2)	6.491	130	291596	10.474
53) Ethyl Acrylate	(2)	6.577	55	366911	9.383
36) 1,2-Dichloroethene (total)	(1)		61	620773	20.468
54) 1,2-Dichloropropane	(2)	6.670	63	295957	12.167
57) Methyl Methacrylate	(2)	6.749	69	191631	9.391
55) Dibromomethane	(2)	6.771	174	296925	11.626
56) 1,4-Dioxane	(2)	6.778	88	154504	10.579
58) Bromodichloromethane	(2)	6.885	83	588879	12.362
59) cis-1,3-Dichloropropene	(2)	7.215	75	335567	9.678
60) 4-Methyl-2-Pentanone	(2)	7.329	43	492676	10.393
61) Toluene	(3)	7.466	91	809217	10.651
62) Octane	(3)	7.516	43	515429	10.962
63) trans-1,3-Dichloropropene	(3)	7.630	75	283958	10.222
65) Ethyl Methacrylate	(3)	7.673	69	307462	9.474
66) 1,1,2-Trichloroethane	(3)	7.774	97	337628	11.731
67) Tetrachloroethene	(3)	7.867	166	399736	10.317
68) 2-Hexanone	(3)	7.945	43	466321	10.749
69) Dibromochloromethane	(3)	8.067	127	424720	12.293
70) 1,2-Dibromoethane	(3)	8.160	107	474557	11.143
71)*Chlorobenzene-d5	(3)	8.497	117	1057588	10.000
72) Chlorobenzene	(3)	8.518	112	672326	10.470
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	377824	12.096
74) Ethylbenzene	(3)	8.583	91	945573	9.899
75) m/p-Xylene	(3)	8.669	91	725575	9.948
76) o-Xylene	(3)	8.970	91	694073	9.682
78) Styrene	(3)	8.977	104	563000	10.372

* = Compound is an internal standard.

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on 06/19/2018 at 17:44.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun19.b/ef00235.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 17:01 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 17:43 jeb07445

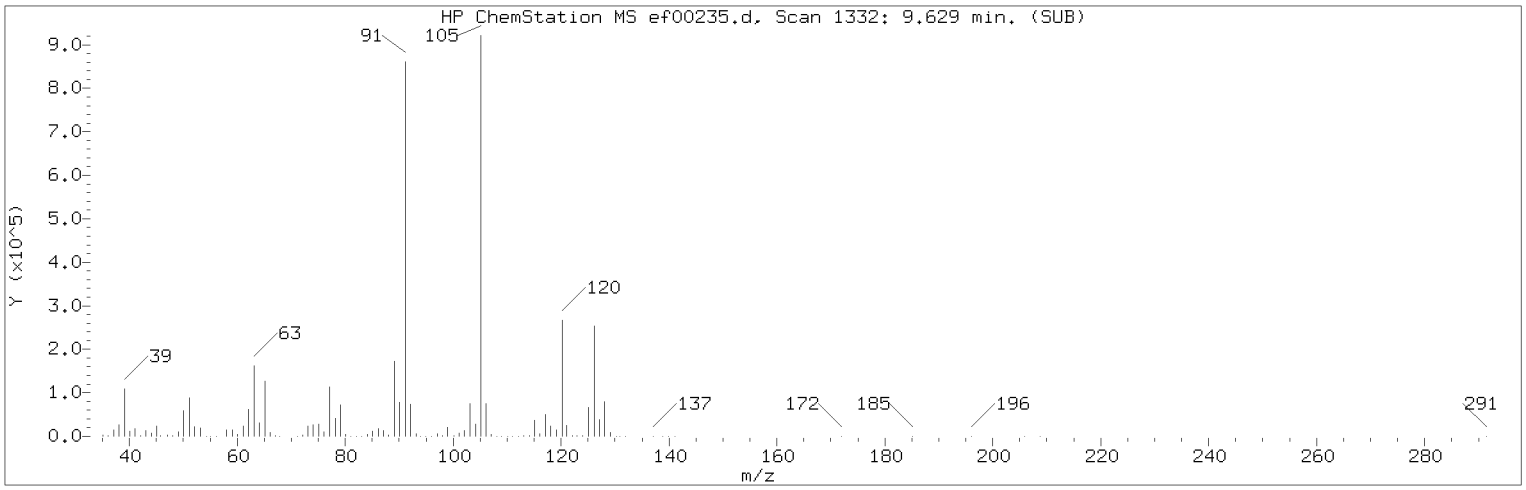
Sample Name: LCSDE10 Lab Sample ID: LCSDE10

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	494546	11.918
80) Cumene	(3)	9.242	105	917287	9.596
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	822009	12.318
81) Bromobenzene	(3)	9.493	156	381813	10.465
83) 1,2,3-Trichloropropane	(3)	9.514	110	230462	12.097
84) n-Propylbenzene	(3)	9.550	120	290518	10.253
86) 4-Ethyltoluene	(3)	9.629	105	1141247M	11.272
85) 2-Chlorotoluene	(3)	9.629	126	309148	11.432
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	936985M	11.346
88) Alpha Methyl Styrene	(3)	9.844	118	360912	9.481
89) tert-Butylbenzene	(3)	9.922	119	865674M	11.554
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	969539	11.972
91) sec-Butylbenzene	(3)	10.087	105	1305763	11.260
92) 1,3-Dichlorobenzene	(3)	10.195	146	733829	11.739
94) p-Isopropyltoluene	(3)	10.195	119	1045041	11.267
93) 1,4-Dichlorobenzene	(3)	10.259	146	690888	11.169
95) Benzyl Chloride	(3)	10.359	91	400452	9.628
97) n-Butylbenzene	(3)	10.503	91	1042737	11.451
96) 1,2-Dichlorobenzene	(3)	10.546	146	652408	11.222
98) Hexachloroethane	(3)	10.739	117	353252	14.525
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	287317	10.614
100) 1,2,4-Trichlorobenzene	(3)	11.763	180	317449	8.429
101) Hexachlorobutadiene	(3)	11.878	225	339338	10.839
102) Naphthalene	(3)	11.964	128	610754	8.381
64) 1,3-Dichloropropene (total)	(3)		75	619525	19.900
77) Xylene (total)	(3)		91	1419648	19.629

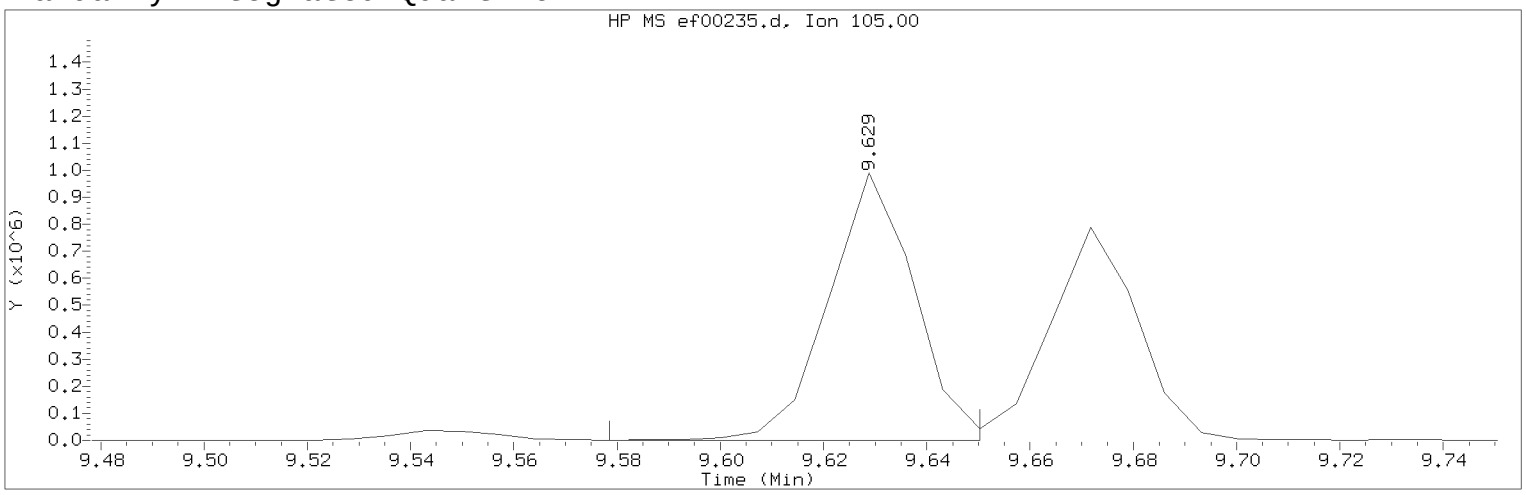
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/19/2018 at 17:44.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun19.b/ef00235.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 17:01 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 17:43 jeb07445

Sample Name: LCSDE10 Lab Sample ID: LCSDE10

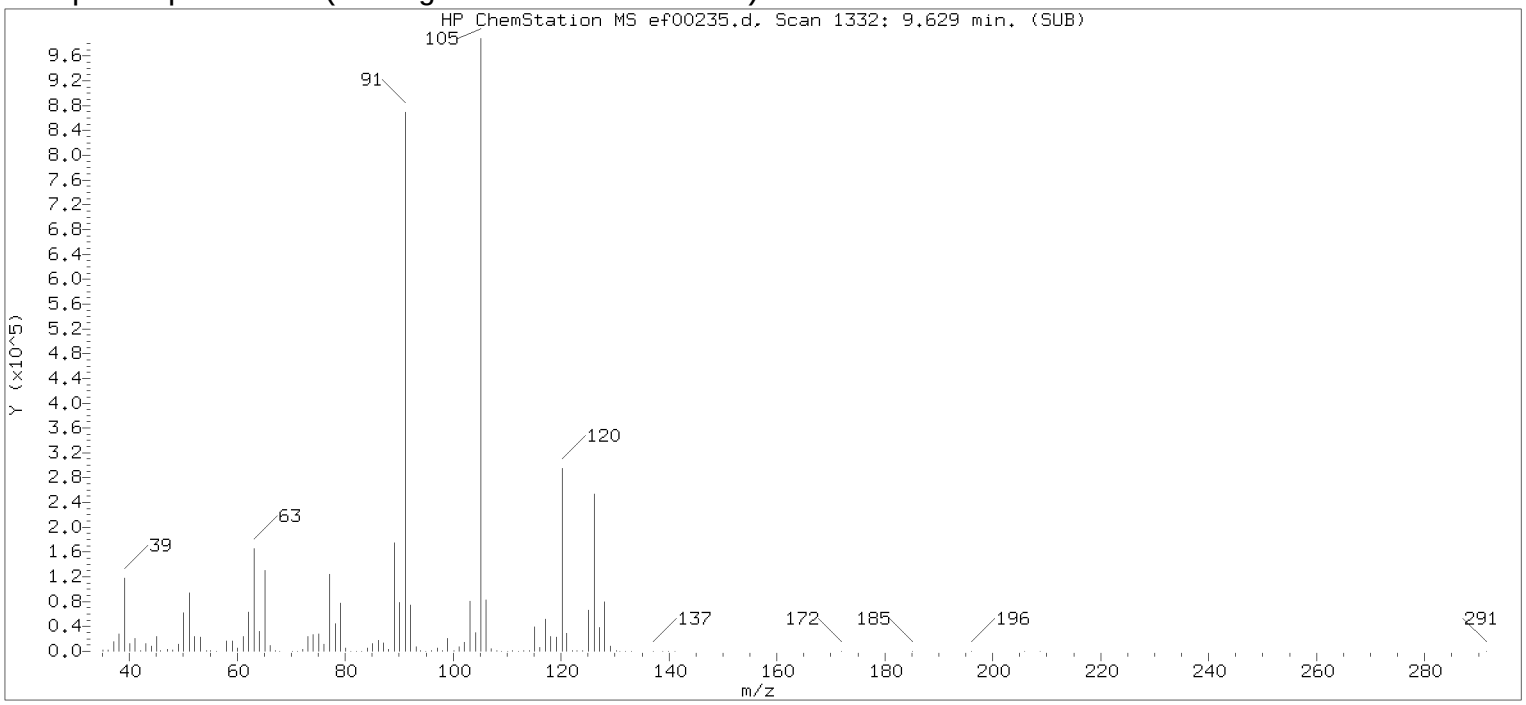
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 1141247M
Concentration (ppb(v)) : 11.2723
Integration start scan : 1324 Integration stop scan: 1334
Y at integration start : 510 Y at integration end: 510

Reason for manual integration: improper integration

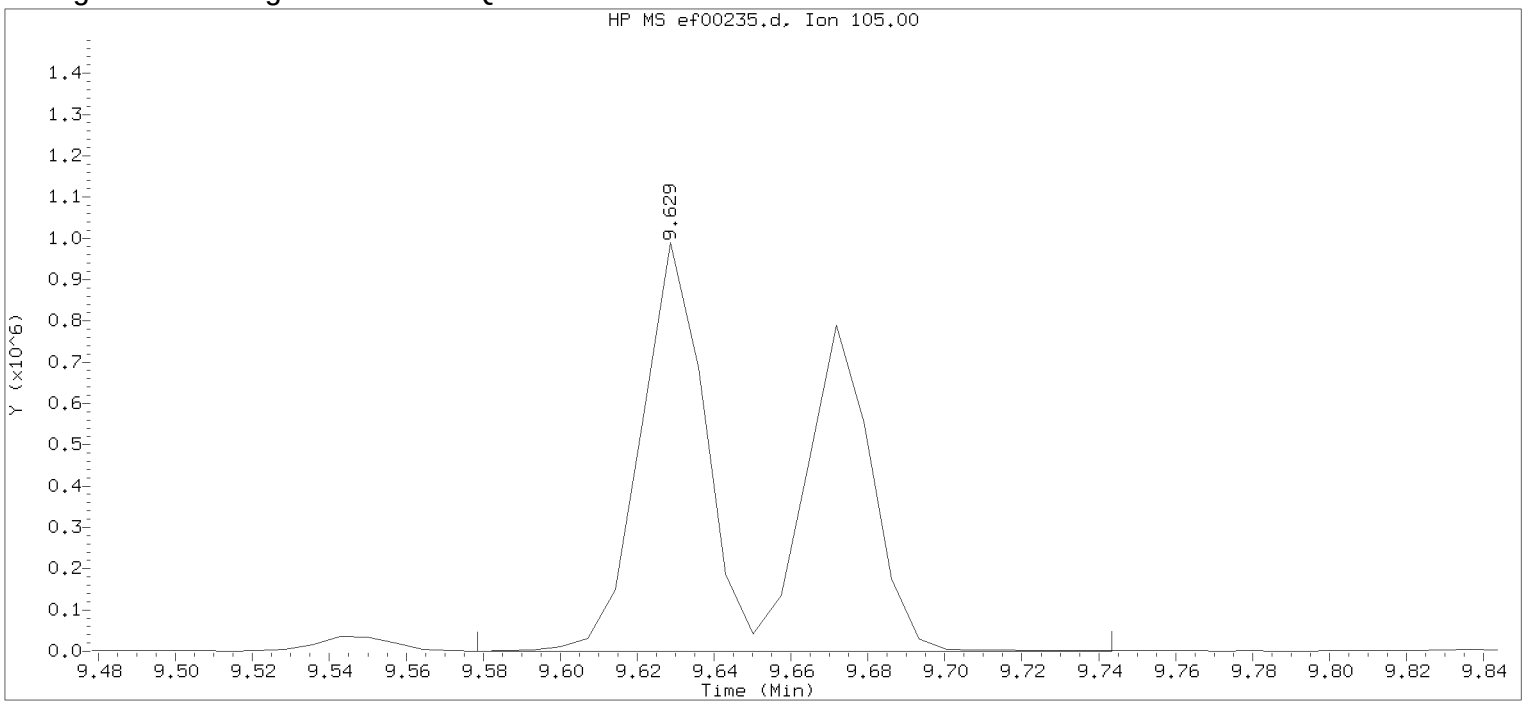
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/19/2018 at 17:44.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/20/2018 at 13:53.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun19.b/ef00235.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 17:01 Analyst ID: jeb07445

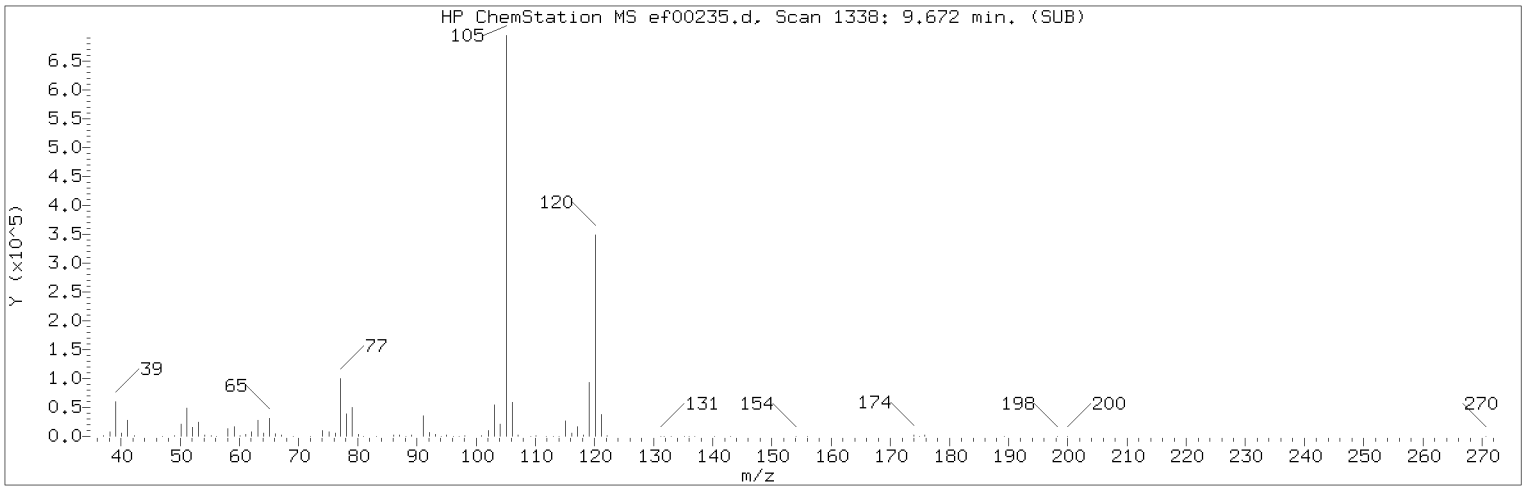
Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 17:20 Unknown

Sample Name: LCSDE10 Lab Sample ID: LCSDE10

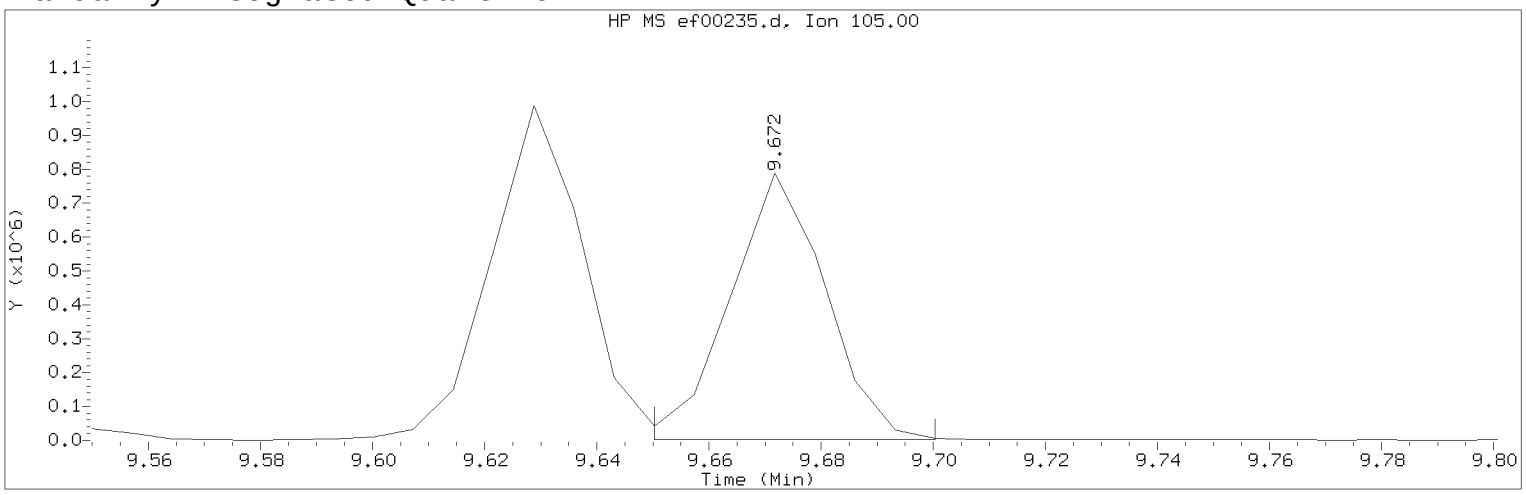
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 2065328
Concentration (ppb(v)) : 20.3997
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 510 Y at integration end: 510

Digitally signed by Jacob E. Bailey on 06/19/2018 at 17:44.
Target 3.5 esignature used.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun19.b/ef00235.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 17:01 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 17:43 jeb07445

Sample Name: LCSDE10 Lab Sample ID: LCSDE10

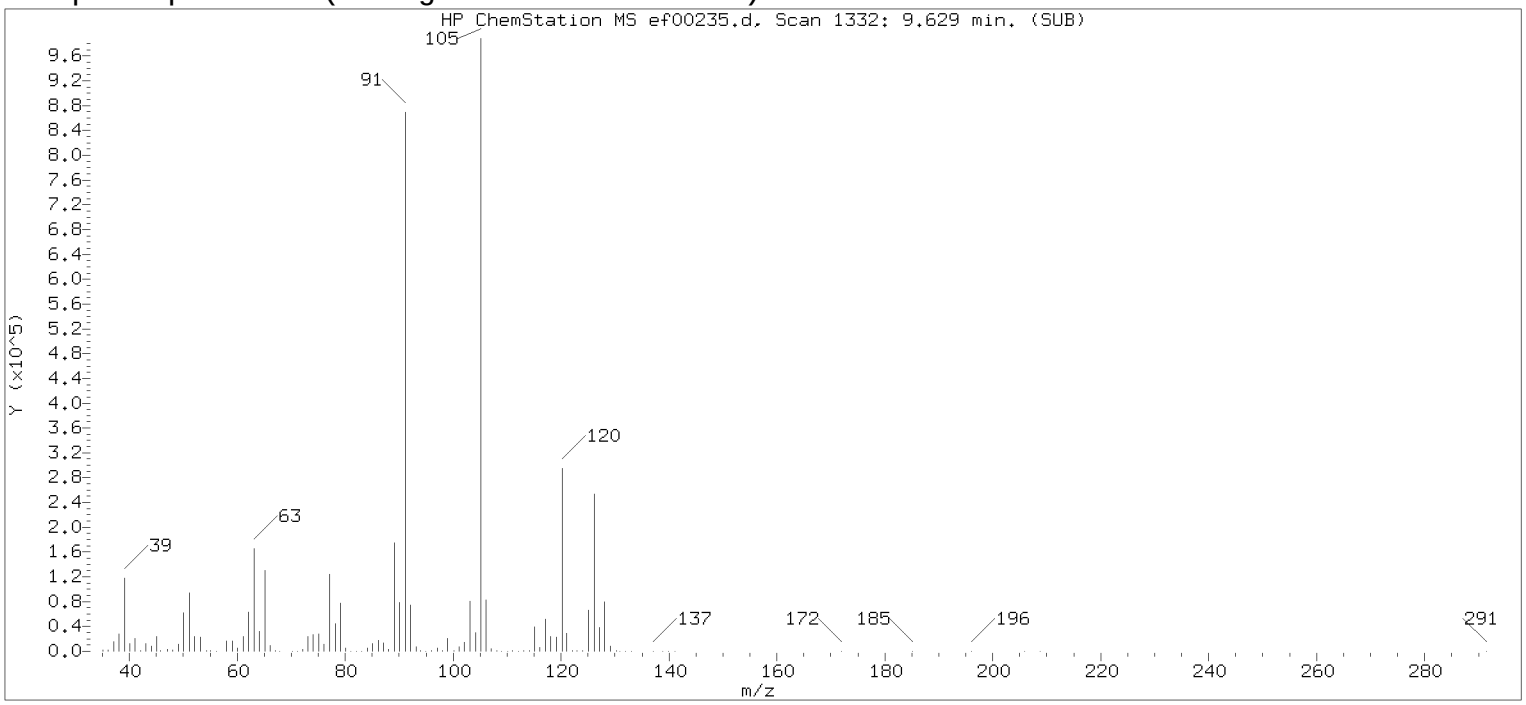
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 936985M
Concentration (ppb(v)) : 11.3462
Integration start scan : 1334 Integration stop scan: 1341
Y at integration start : 1129 Y at integration end: 1129

Reason for manual integration: improper integration

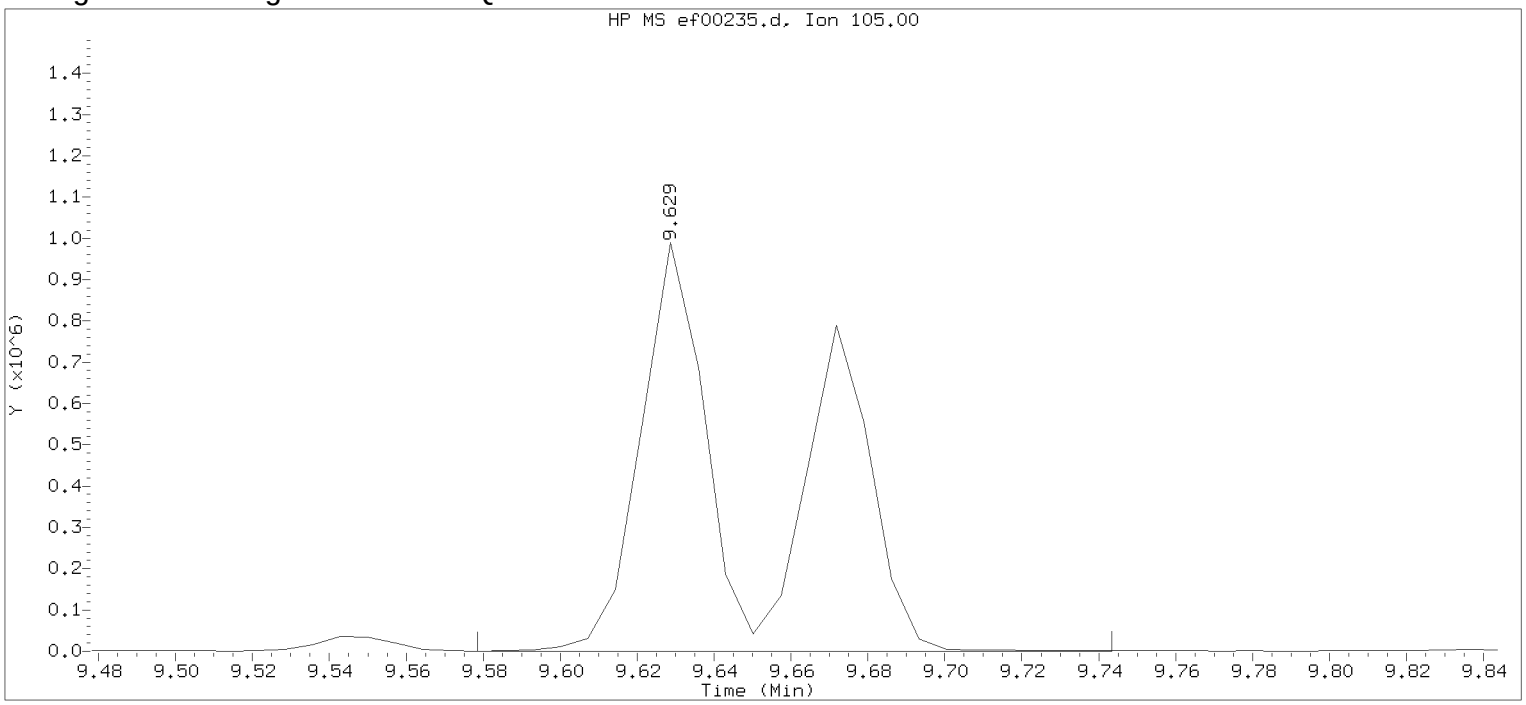
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/19/2018 at 17:44.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/20/2018 at 13:53.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun19.b/ef00235.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 17:01 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 17:20 Unknown

Sample Name: LCSDE10 Lab Sample ID: LCSDE10

Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 2066346
Concentration (ppb(v)) : 25.0218
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 407 Y at integration end: 407

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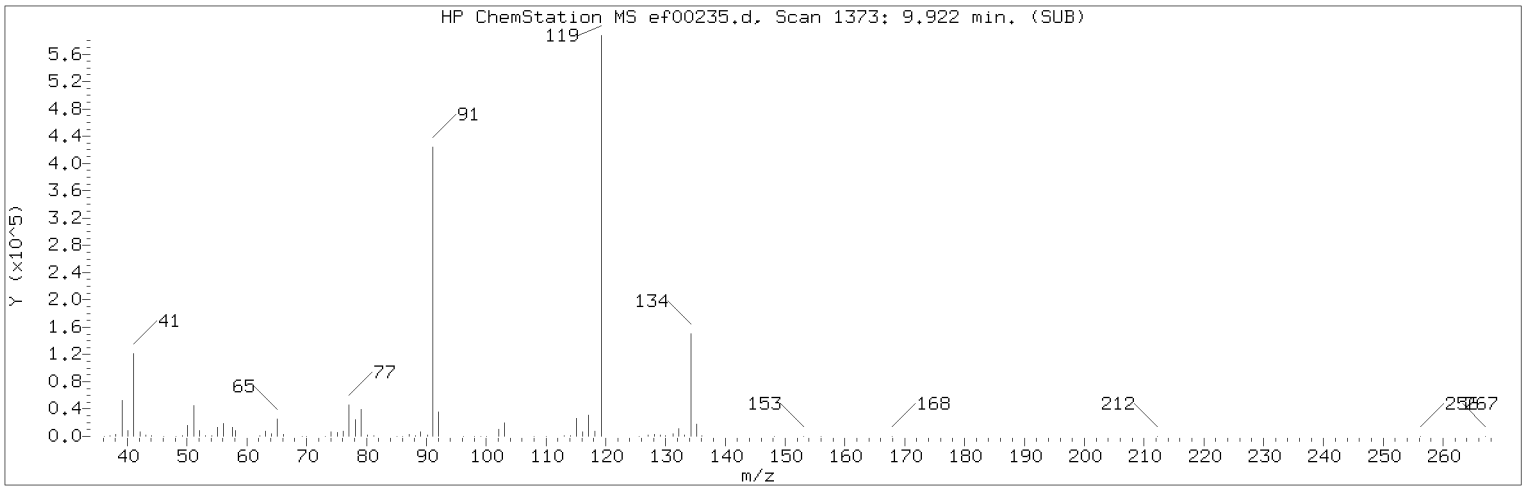
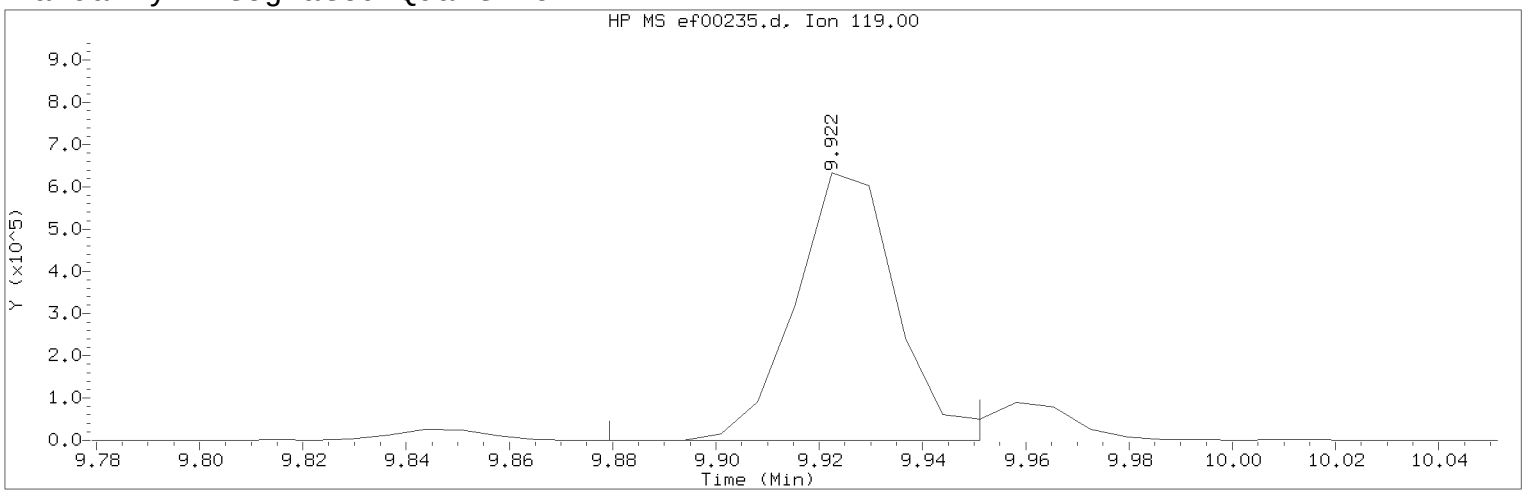
Target 3.5 esignature used. LED1 Page 1405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun19.b/ef00235.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 17:01 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 17:43 jeb07445

Sample Name: LCSDE10 Lab Sample ID: LCSDE10

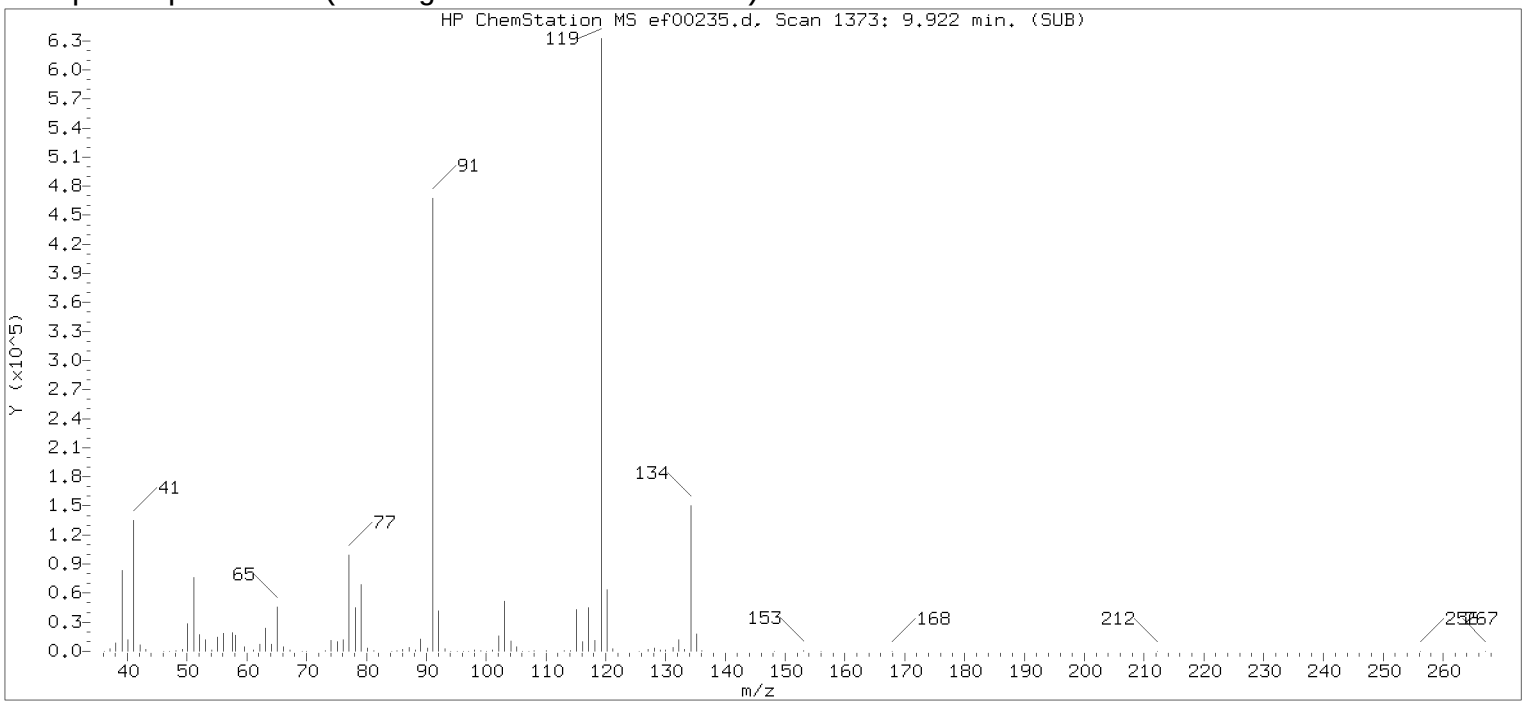
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 865674M
Concentration (ppb(v)) : 11.5544
Integration start scan : 1366 Integration stop scan: 1376
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

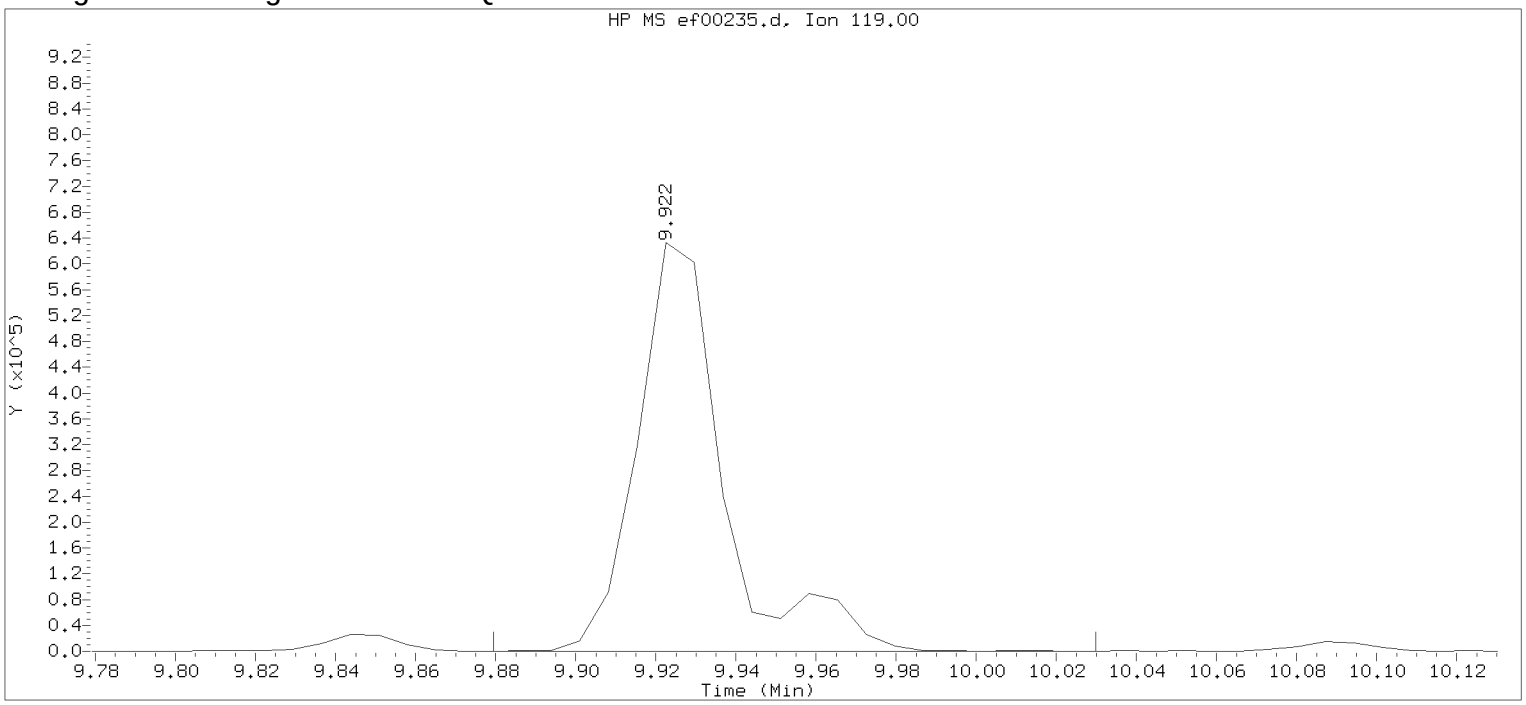
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/19/2018 at 17:44.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/20/2018 at 13:53.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun19.b/ef00235.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 17:01 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 19-Jun-2018 17:20 Unknown

Sample Name: LCSDE10 Lab Sample ID: LCSDE10

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 954831
Concentration (ppb(v)) : 12.7444
Integration start scan : 1366 Integration stop scan: 1387
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/19/2018 at 17:44.
Target 3.5 esignature used for jeb07445

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

Data file: /chem/HP22820.i/18jun19.b/ef00240.d Injection date and time: **19-JUN-2018 20:05**
Data file Sample Info. Line: cc851;200;E1817030AA;cc851;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1817030AA**
Date, time and analyst ID of latest file update: 20-Jun-2018 12:08 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun19.b/ef00233.d**

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 19-JUN-2018 15:18
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun19.b/ef00232.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	5.467(0.000)	751	130	329832 (-7)	10.00		212165 - 495049
51) 1,4-Difluorobenzene	6.291(0.000)	866	114	820408 (-23)	10.00		635627 - 1483127
71) Chlorobenzene-d5	8.497(0.000)	1174	117	947523 (-11)	10.00		640174 - 1493738

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)			Not Detected					0.5	1
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)			Not Detected					0.2	1
7) 1,3-Butadiene	(1)			Not Detected					0.4	2
8) Bromomethane	(1)			Not Detected					0.5	1
9) Chloroethane	(1)			Not Detected					0.2	1
10) Bromoethene	(1)			Not Detected					0.4	2
11) Dichlorofluoromethane	(1)			Not Detected					0.2	1
12) Trichlorofluoromethane	(1)			Not Detected					0.2	1
13) Pentane	(1)			Not Detected					0.5	1
14) Ethanol	(1)			Not Detected					0.5	2
15) Freon123a	(1)			Not Detected					0.2	1
16) Acrolein	(1)			Not Detected					1	2
17) 1,1-Dichloroethene	(1)			Not Detected					0.2	1
18) Freon 113	(1)			Not Detected					0.5	2
19) Acetone	(1)	3.540(-0.001)	43	26156	0.818	0.82		J	0.5	2
20) Methyl Iodide	(1)			Not Detected					0.2	1
21) Carbon Disulfide	(1)			Not Detected					0.5	1
22) Isopropanol	(1)			Not Detected					0.5	2
23) Acetonitrile	(1)			Not Detected					0.5	2
24) 3-Chloropropene	(1)			Not Detected					0.2	1
25) Methylene Chloride	(1)			Not Detected					0.2	1
26) tert-Butyl Alcohol	(1)			Not Detected					0.5	1
27) Acrylonitrile	(1)			Not Detected					0.5	2
28) trans-1,2-Dichloroethene	(1)			Not Detected					0.2	1
29) Methyl t-Butyl Ether	(1)			Not Detected					0.2	1
30) Hexane	(1)			Not Detected					0.2	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.2	1
32) Vinyl Acetate	(1)			Not Detected					1	1
33) Di-Isopropyl Ether	(1)			Not Detected					0.2	1
34) Ethyl Tert-Butyl Ether	(1)			Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.2	1
36) 1,2-Dichloroethene (total)	(1)			Not Detected					0.2	1
37) 2-Butanone	(1)			Not Detected					0.5	2
38) Ethyl Acetate	(1)			Not Detected					0.5	1
39) Methyl Acrylate	(1)			Not Detected					0.2	1
41) Tetrahydrofuran	(1)			Not Detected					0.5	1
42) Chloroform	(1)			Not Detected					0.2	1
43) 1,1,1-Trichloroethane	(1)			Not Detected					0.2	1
44) Cyclohexane	(1)			Not Detected					0.2	1

Digitally signed by Jacob E. Bailey on 06/20/2018 at 12:09. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun19.b/ef00240.d Injection date and time: **19-JUN-2018 20:05**
Data file Sample Info. Line: cc851;200;E1817030AA;cc851;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1817030AA**
Date, time and analyst ID of latest file update: 20-Jun-2018 12:08 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun19.b/ef00233.d**

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 19-JUN-2018 15:18
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun19.b/ef00232.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
45) Carbon Tetrachloride	(1)			Not Detected					0.2	1
46) Benzene	(2)			Not Detected					0.2	1
47) 1,2-Dichloroethane	(2)			Not Detected					0.2	1
48) Isooctane	(2)			Not Detected					0.2	1
49) Tert-Amyl Methyl Ether	(2)			Not Detected					0.2	1
50) Heptane	(2)			Not Detected					0.5	1
52) Trichloroethene	(2)			Not Detected					0.2	1
53) Ethyl Acrylate	(2)			Not Detected					0.2	1
54) 1,2-Dichloropropane	(2)			Not Detected					0.2	1
55) Dibromomethane	(2)			Not Detected					0.2	1
56) 1,4-Dioxane	(2)			Not Detected					0.5	1
57) Methyl Methacrylate	(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)			Not Detected					0.2	1
62) Octane	(3)			Not Detected					0.2	1
63) trans-1,3-Dichloropropene	(3)			Not Detected					0.2	1
64) 1,3-Dichloropropene (total)	(3)			Not Detected					0.2	1
65) Ethyl Methacrylate	(3)			Not Detected					0.2	1
66) 1,1,2-Trichloroethane	(3)			Not Detected					0.2	1
67) Tetrachloroethene	(3)			Not Detected					0.2	1
68) 2-Hexanone	(3)			Not Detected					0.5	2
69) Dibromochloromethane	(3)			Not Detected					0.2	1
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)			Not Detected					0.2	1
75) m/p-Xylene	(3)			Not Detected					0.2	1
76) o-Xylene	(3)			Not Detected					0.2	1
77) Xylene (total)	(3)			Not Detected					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
84) n-Propylbenzene	(3)			Not Detected					0.5	1
85) 2-Chlorotoluene	(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
88) Alpha Methyl Styrene	(3)			Not Detected					0.2	1
89) tert-Butylbenzene	(3)			Not Detected					0.5	1
90) 1,2,4-Trimethylbenzene	(3)			Not Detected					0.2	1
91) sec-Butylbenzene	(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
94) p-Isopropyltoluene	(3)			Not Detected					0.2	1
95) Benzyl Chloride	(3)			Not Detected					0.5	1
96) 1,2-Dichlorobenzene	(3)			Not Detected					0.2	1
97) n-Butylbenzene	(3)			Not Detected					0.2	1
98) Hexachloroethane	(3)			Not Detected					0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)			Not Detected					0.2	1
100) 1,2,4-Trichlorobenzene	(3)			Not Detected					0.5	2

Digitally signed by Jacob E. Bailey on 06/20/2018 at 12:09. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun19.b/ef00240.d Injection date and time: **19-JUN-2018 20:05**
Data file Sample Info. Line: cc851;200;E1817030AA;cc851;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1817030AA**
Date, time and analyst ID of latest file update: 20-Jun-2018 12:08 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun19.b/ef00233.d**

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 19-JUN-2018 15:18
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun19.b/ef00232.d**

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

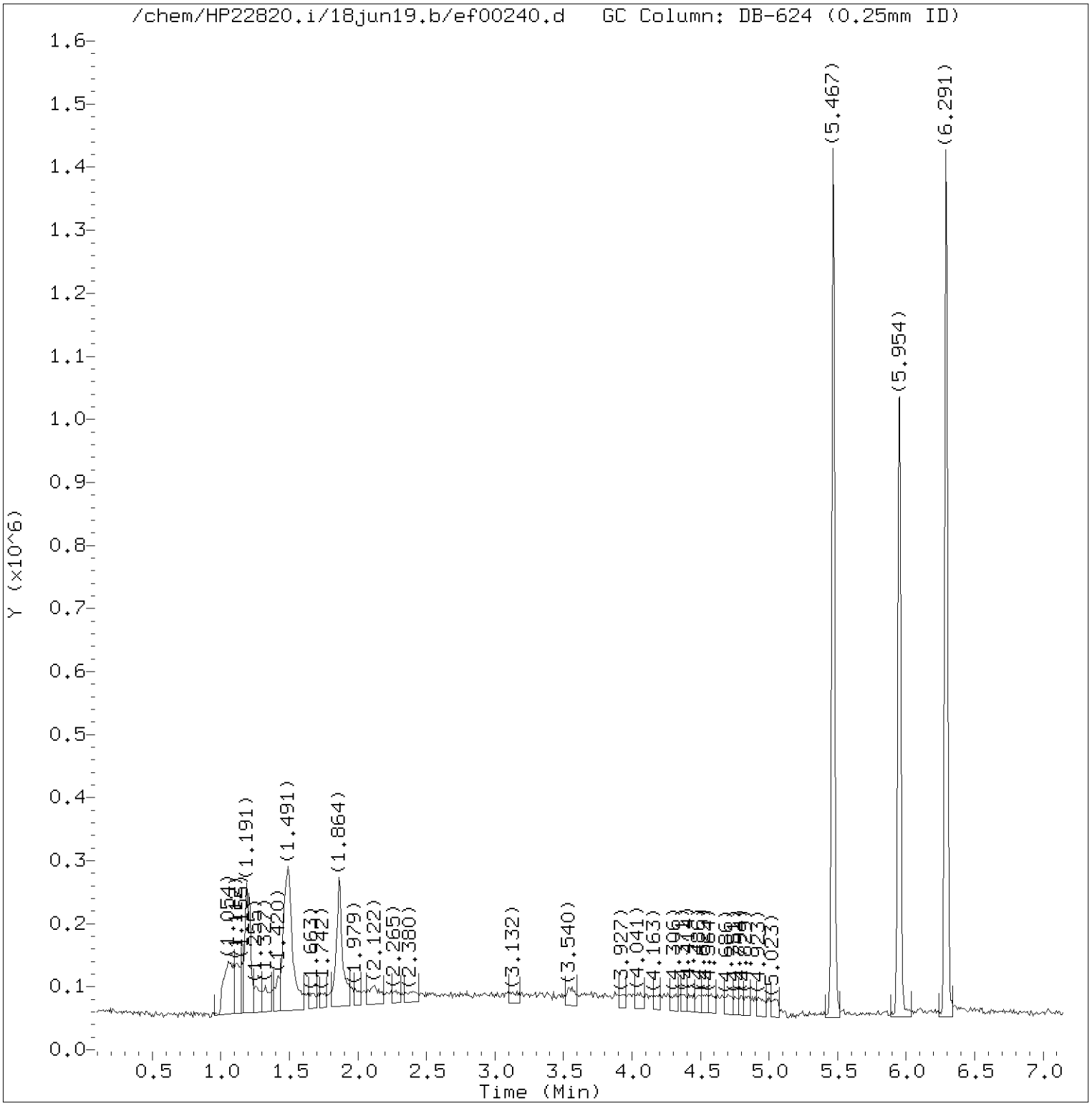
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
101) Hexachlorobutadiene	(3)				Not Detected					0.4	2
102) Naphthalene	(3)				Not Detected					0.4	1

Total number of targets = 99

Digitally signed by Jacob E. Bailey on 06/20/2018 at 12:09. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/20/2018 at 13:59. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

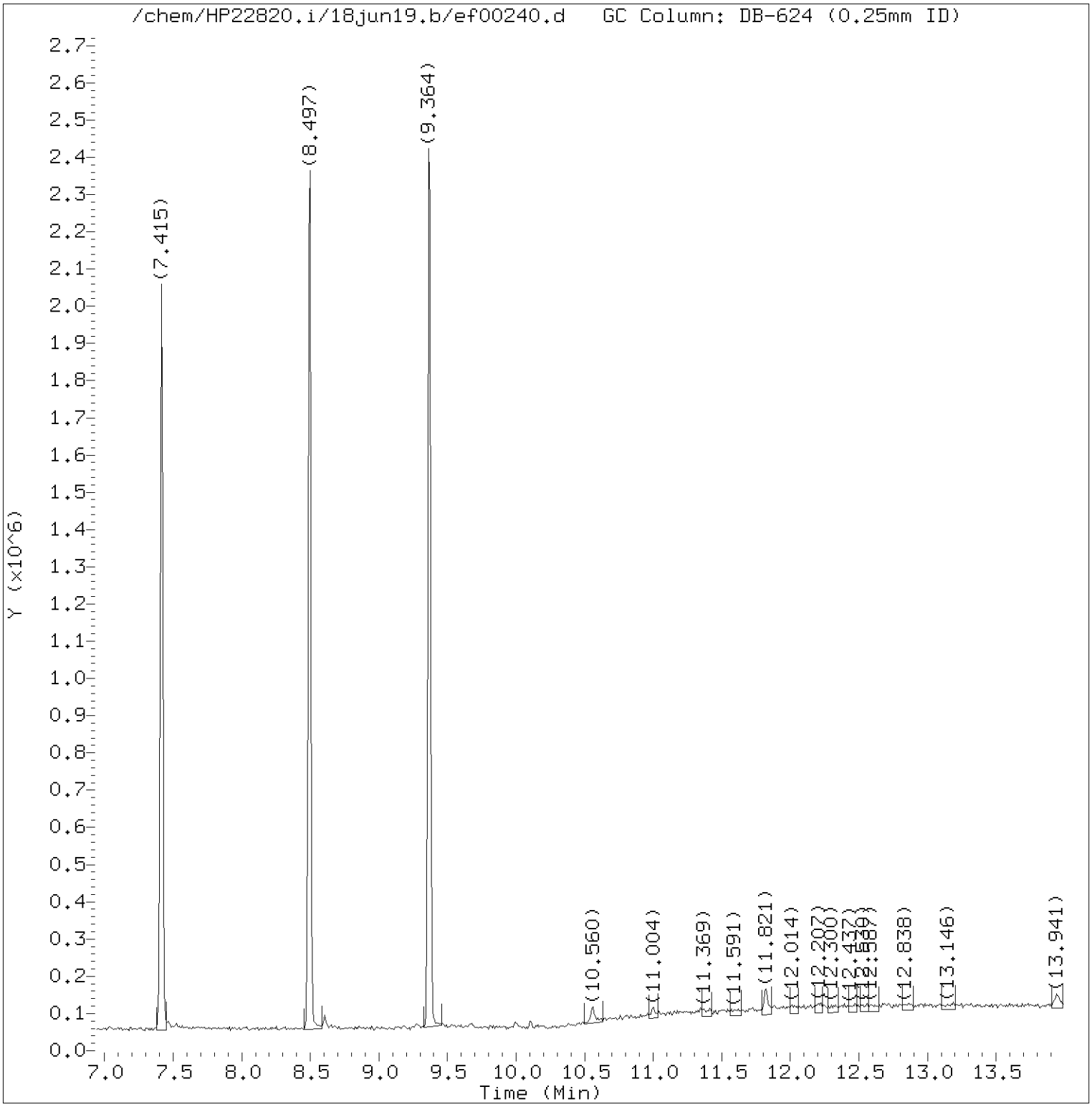
Target Revision 3.5

Data File: /chem/HP22820.i/18jun19.b/ef00240.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 20:05 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 20-Jun-2018 12:08 jeb07445

Sample Name: cc851 Lab Sample ID: cc851

Digitally signed by Jacob E. Bailey
on 06/20/2018 at 12:09.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun19.b/ef00240.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 20:05 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 20-Jun-2018 12:08 jeb07445

Sample Name: cc851 Lab Sample ID: cc851

Digitally signed by Jacob E. Bailey
on 06/20/2018 at 12:09.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun19.b/ef00240.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 20:05 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 20-Jun-2018 12:08 jeb07445

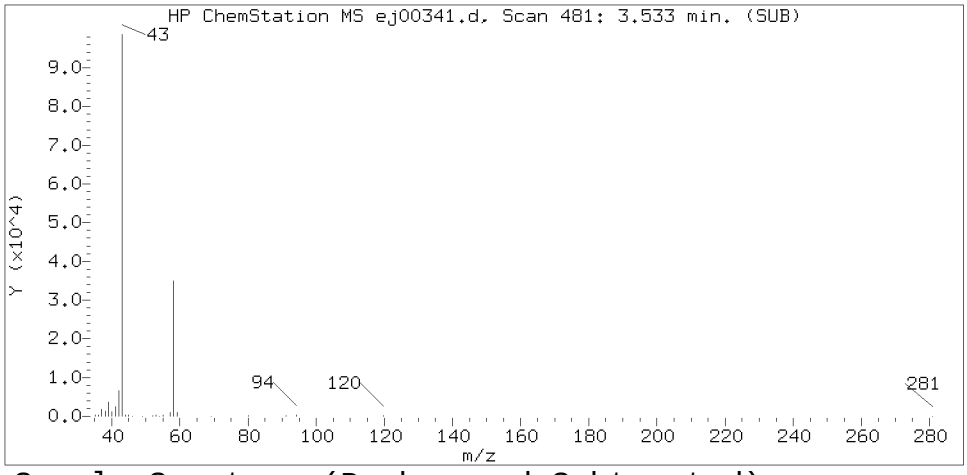
Sample Name: cc851 Lab Sample ID: cc851

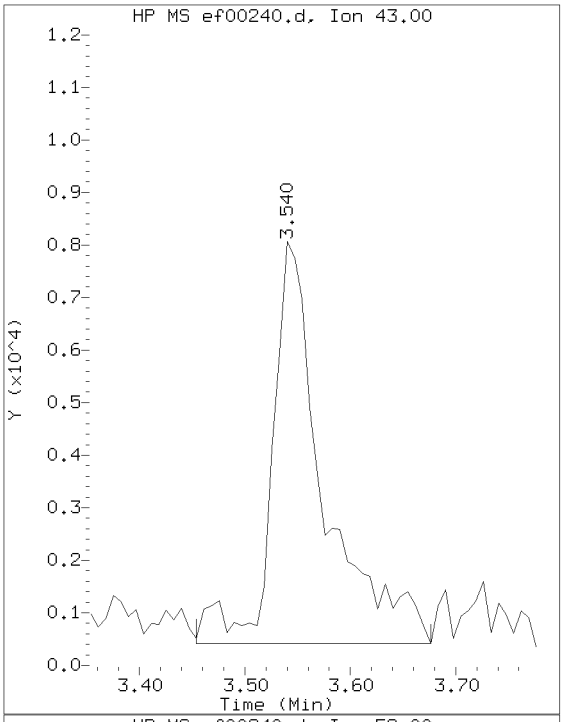
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
19) Acetone	(1)	3.540	43	26156	0.818
40)*Bromochloromethane	(1)	5.467	130	329832	10.000
51)*1,4-Difluorobenzene	(2)	6.291	114	820408	10.000
71)*Chlorobenzene-d5	(3)	8.497	117	947523	10.000

* = Compound is an internal standard.

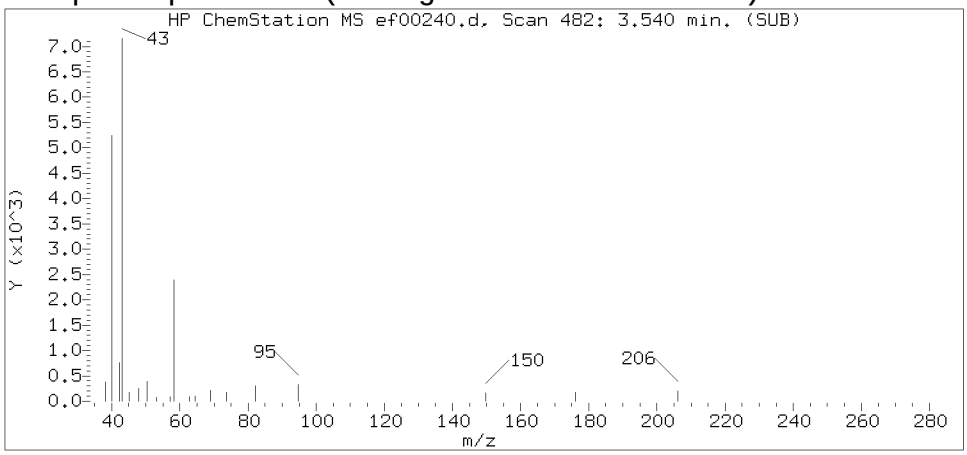
Digitally signed by Jacob E. Bailey
on 06/20/2018 at 12:09.
Target 3.5 esignature user ID: jeb07445

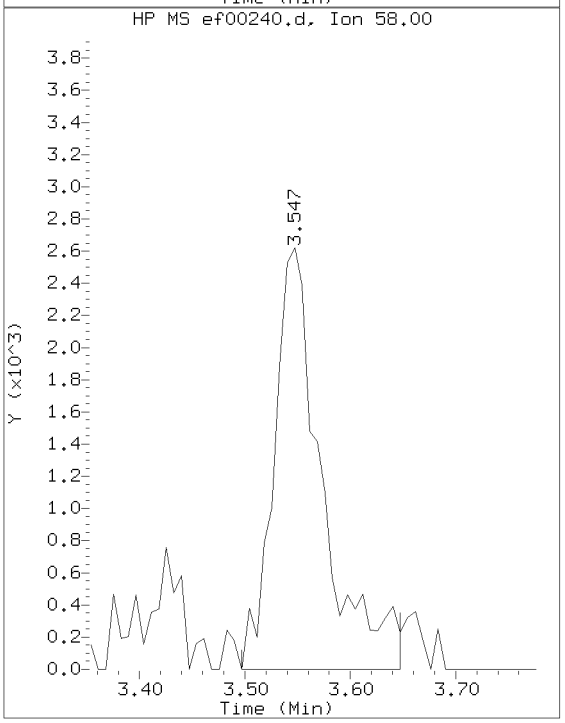
Reference Standard Spectrum for Acetone



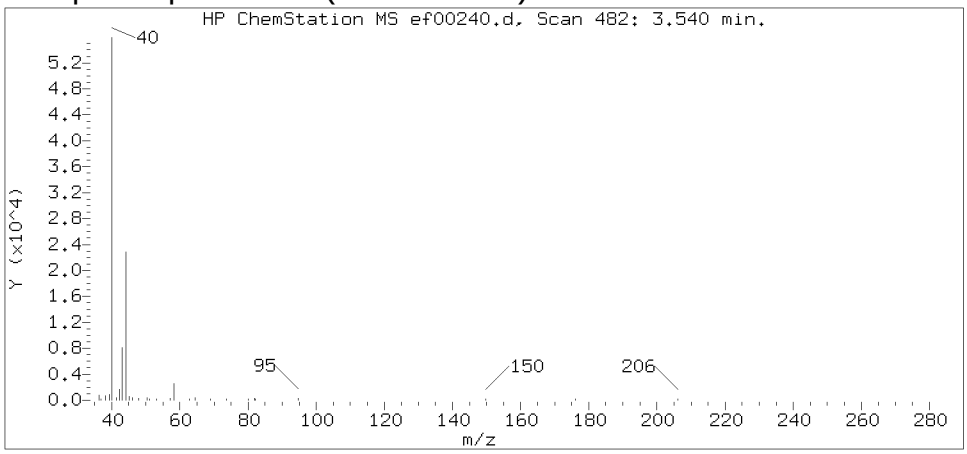


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP22820.i/18jun19.b/ef00240.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 20:05 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 20-Jun-2018 12:08 jeb07445

Sample Name: cc851 Lab Sample ID: cc851

Compound Number : 19
Compound Name : Acetone
Scan Number : 482
Retention Time (minutes): 3.540
Relative Retention Time :-0.00130
Quant Ion : 43.00
Area (flag) : 26156
Concentration (ppb(v)) : 0.8176

Digitally signed by Jacob E. Bailey on 06/20/2018 at 12:09.
Target 3.5 esignature user ID: jeb07445

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

Data file: /chem/HP22820.i/18jun19.b/ef00241.d Injection date and time: **19-JUN-2018 20:37**
Data file Sample Info. Line: cc1157;200;E1817030AA;cc1157;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1817030AA**
Date, time and analyst ID of latest file update: 20-Jun-2018 12:09 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun19.b/ef00233.d**

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 19-JUN-2018 15:18
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun19.b/ef00232.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	5.467	(0.000)	751	130	330368	(-7)	10.00		212165 - 495049
51) 1,4-Difluorobenzene	6.291	(0.000)	866	114	817413	(-23)	10.00		635627 - 1483127
71) Chlorobenzene-d5	8.497	(0.000)	1174	117	946540	(-11)	10.00		640174 - 1493738

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)				Not Detected					0.5	1
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)				Not Detected					0.2	1
7) 1,3-Butadiene	(1)				Not Detected					0.4	2
8) Bromomethane	(1)				Not Detected					0.5	1
9) Chloroethane	(1)				Not Detected					0.2	1
10) Bromoethene	(1)				Not Detected					0.4	2
11) Dichlorofluoromethane	(1)				Not Detected					0.2	1
12) Trichlorofluoromethane	(1)				Not Detected					0.2	1
13) Pentane	(1)				Not Detected					0.5	1
14) Ethanol	(1)				Not Detected					0.5	2
15) Freon123a	(1)				Not Detected					0.2	1
16) Acrolein	(1)				Not Detected					1	2
17) 1,1-Dichloroethene	(1)				Not Detected					0.2	1
18) Freon 113	(1)				Not Detected					0.5	2
19) Acetone	(1)	3.547	(-0.002)	43	28541	0.891	0.89		J	0.5	2
20) Methyl Iodide	(1)				Not Detected					0.2	1
21) Carbon Disulfide	(1)				Not Detected					0.5	1
22) Isopropanol	(1)				Not Detected					0.5	2
23) Acetonitrile	(1)				Not Detected					0.5	2
24) 3-Chloropropene	(1)				Not Detected					0.2	1
25) Methylene Chloride	(1)				Not Detected					0.2	1
26) tert-Butyl Alcohol	(1)				Not Detected					0.5	1
27) Acrylonitrile	(1)				Not Detected					0.5	2
28) trans-1,2-Dichloroethene	(1)				Not Detected					0.2	1
29) Methyl t-Butyl Ether	(1)				Not Detected					0.2	1
30) Hexane	(1)				Not Detected					0.2	1
31) 1,1-Dichloroethane	(1)				Not Detected					0.2	1
32) Vinyl Acetate	(1)				Not Detected					1	1
33) Di-Isopropyl Ether	(1)				Not Detected					0.2	1
34) Ethyl Tert-Butyl Ether	(1)				Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)				Not Detected					0.2	1
36) 1,2-Dichloroethene (total)	(1)				Not Detected					0.2	1
37) 2-Butanone	(1)				Not Detected					0.5	2
38) Ethyl Acetate	(1)				Not Detected					0.5	1
39) Methyl Acrylate	(1)				Not Detected					0.2	1
41) Tetrahydrofuran	(1)				Not Detected					0.5	1
42) Chloroform	(1)				Not Detected					0.2	1
43) 1,1,1-Trichloroethane	(1)				Not Detected					0.2	1
44) Cyclohexane	(1)				Not Detected					0.2	1

Digitally signed by Jacob E. Bailey on 06/20/2018 at 12:10. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun19.b/ef00241.d Injection date and time: **19-JUN-2018 20:37**
Data file Sample Info. Line: cc1157;200;E1817030AA;cc1157;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1817030AA**
Date, time and analyst ID of latest file update: 20-Jun-2018 12:09 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun19.b/ef00233.d**

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 19-JUN-2018 15:18
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun19.b/ef00232.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
45) Carbon Tetrachloride	(1)				Not Detected					0.2	1
46) Benzene	(2)				Not Detected					0.2	1
47) 1,2-Dichloroethane	(2)				Not Detected					0.2	1
48) Isooctane	(2)				Not Detected					0.2	1
49) Tert-Amyl Methyl Ether	(2)				Not Detected					0.2	1
50) Heptane	(2)				Not Detected					0.5	1
52) Trichloroethene	(2)				Not Detected					0.2	1
53) Ethyl Acrylate	(2)				Not Detected					0.2	1
54) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
55) Dibromomethane	(2)				Not Detected					0.2	1
56) 1,4-Dioxane	(2)				Not Detected					0.5	1
57) Methyl Methacrylate	(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)				Not Detected					0.2	1
62) Octane	(3)				Not Detected					0.2	1
63) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
64) 1,3-Dichloropropene (total)	(3)				Not Detected					0.2	1
65) Ethyl Methacrylate	(3)				Not Detected					0.2	1
66) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
67) Tetrachloroethene	(3)				Not Detected					0.2	1
68) 2-Hexanone	(3)				Not Detected					0.5	2
69) Dibromochloromethane	(3)				Not Detected					0.2	1
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)				Not Detected					0.2	1
75) m/p-Xylene	(3)				Not Detected					0.2	1
76) o-Xylene	(3)				Not Detected					0.2	1
77) Xylene (total)	(3)				Not Detected					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
84) n-Propylbenzene	(3)				Not Detected					0.5	1
85) 2-Chlorotoluene	(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
88) Alpha Methyl Styrene	(3)				Not Detected					0.2	1
89) tert-Butylbenzene	(3)				Not Detected					0.5	1
90) 1,2,4-Trimethylbenzene	(3)				Not Detected					0.2	1
91) sec-Butylbenzene	(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
94) p-Isopropyltoluene	(3)				Not Detected					0.2	1
95) Benzyl Chloride	(3)				Not Detected					0.5	1
96) 1,2-Dichlorobenzene	(3)				Not Detected					0.2	1
97) n-Butylbenzene	(3)				Not Detected					0.2	1
98) Hexachloroethane	(3)				Not Detected					0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)				Not Detected					0.2	1
100) 1,2,4-Trichlorobenzene	(3)				Not Detected					0.5	2

Digitally signed by Jacob E. Bailey on 06/20/2018 at 12:10. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun19.b/ef00241.d Injection date and time: **19-JUN-2018 20:37**
Data file Sample Info. Line: cc1157;200;E1817030AA;cc1157;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1817030AA**
Date, time and analyst ID of latest file update: 20-Jun-2018 12:09 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun19.b/ef00233.d**

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 19-JUN-2018 15:18
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun19.b/ef00232.d**

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

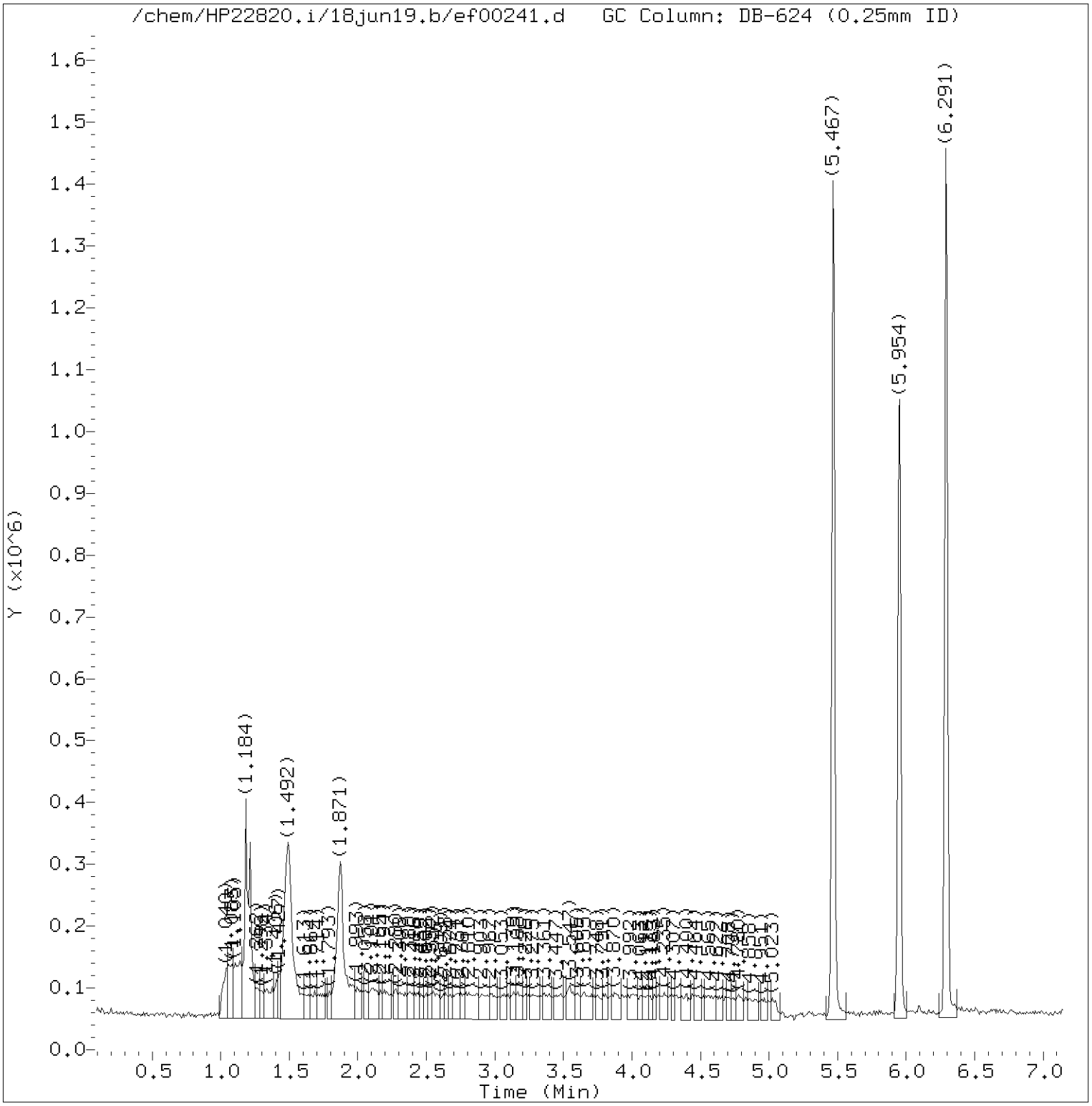
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
101) Hexachlorobutadiene	(3)				Not Detected					0.4	2
102) Naphthalene	(3)				Not Detected					0.4	1

Total number of targets = 99

Digitally signed by Jacob E. Bailey on 06/20/2018 at 12:10. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/20/2018 at 13:59. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

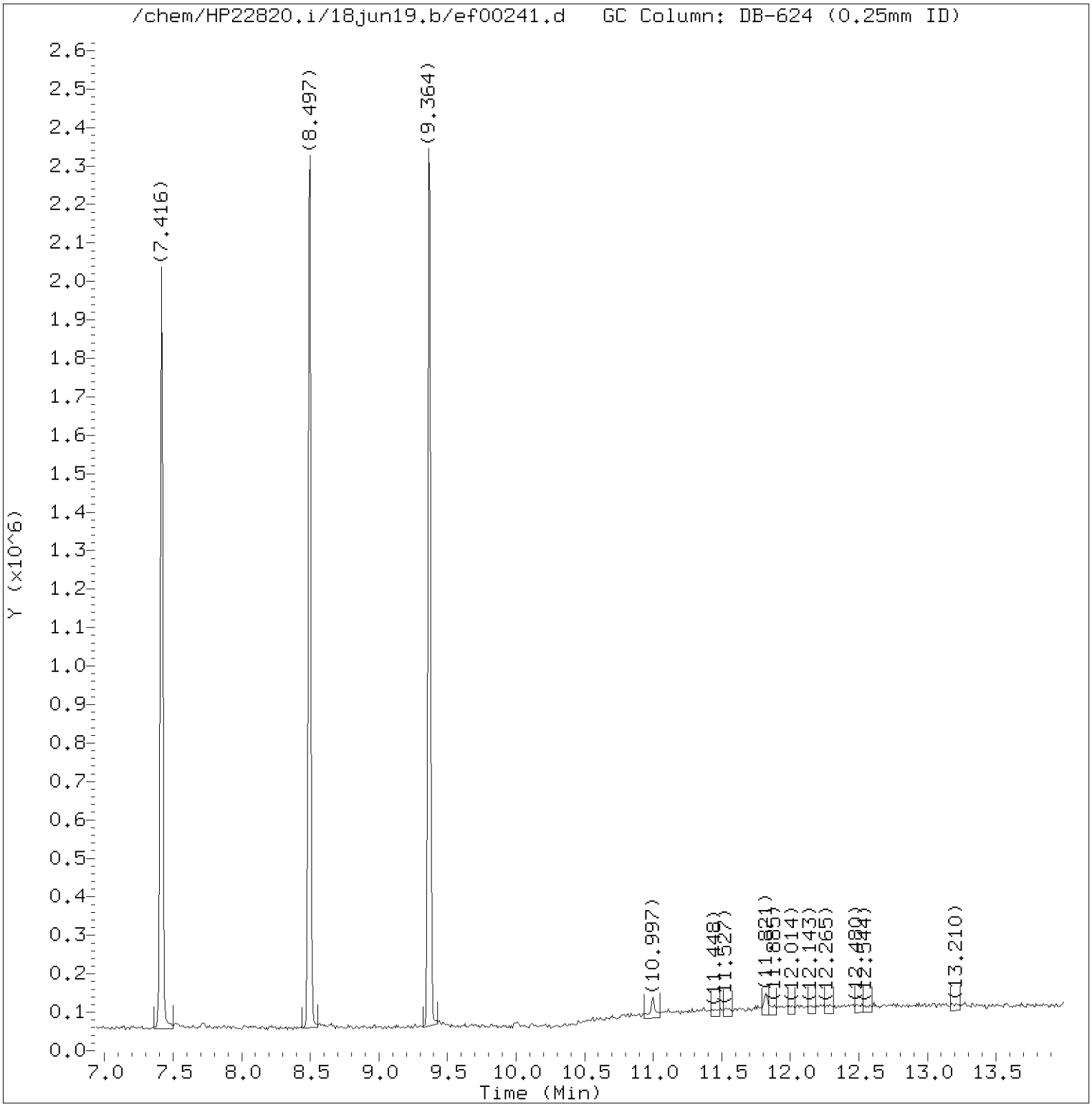
Target Revision 3.5

Data File: /chem/HP22820.i/18jun19.b/ef00241.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 20:37 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 20-Jun-2018 12:09 jeb07445

Sample Name: cc1157 Lab Sample ID: cc1157

Digitally signed by Jacob E. Bailey
on 06/20/2018 at 12:10.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun19.b/ef00241.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 20:37 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 20-Jun-2018 12:09 jeb07445

Sample Name: cc1157 Lab Sample ID: cc1157

Digitally signed by Jacob E. Bailey
on 06/20/2018 at 12:10.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun19.b/ef00241.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 20:37 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 20-Jun-2018 12:09 jeb07445

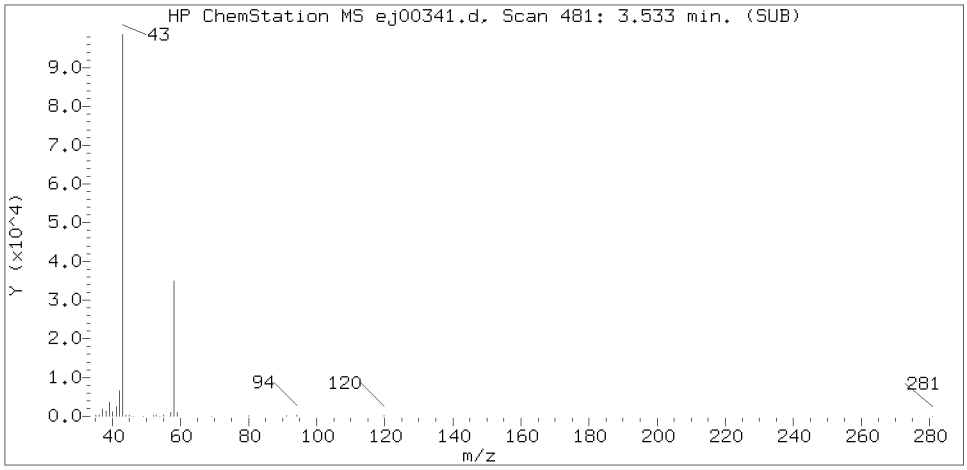
Sample Name: cc1157 Lab Sample ID: cc1157

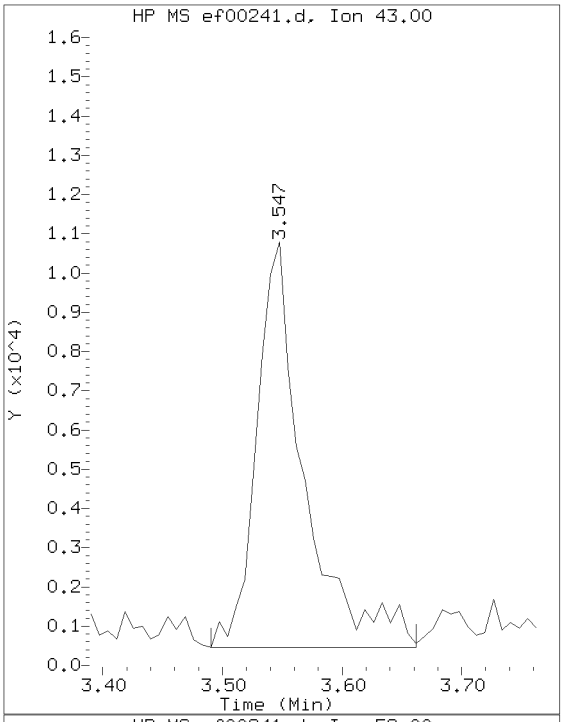
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
19) Acetone	(1)	3.547	43	28541	0.891
40)*Bromochloromethane	(1)	5.467	130	330368	10.000
51)*1,4-Difluorobenzene	(2)	6.291	114	817413	10.000
71)*Chlorobenzene-d5	(3)	8.497	117	946540	10.000

* = Compound is an internal standard.

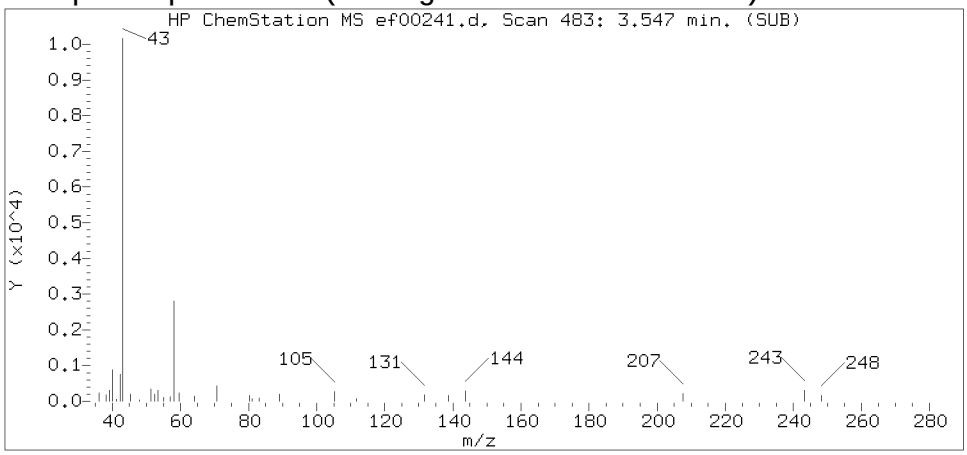
Digitally signed by Jacob E. Bailey
on 06/20/2018 at 12:10.
Target 3.5 esignature user ID: jeb07445

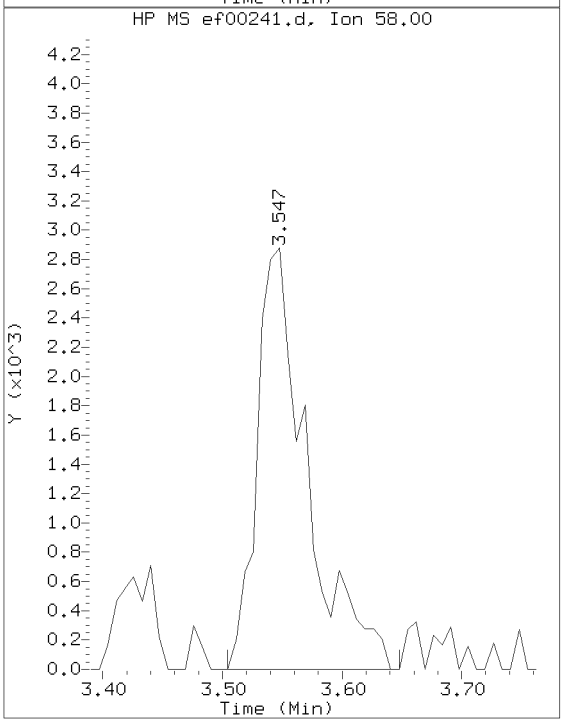
Reference Standard Spectrum for Acetone



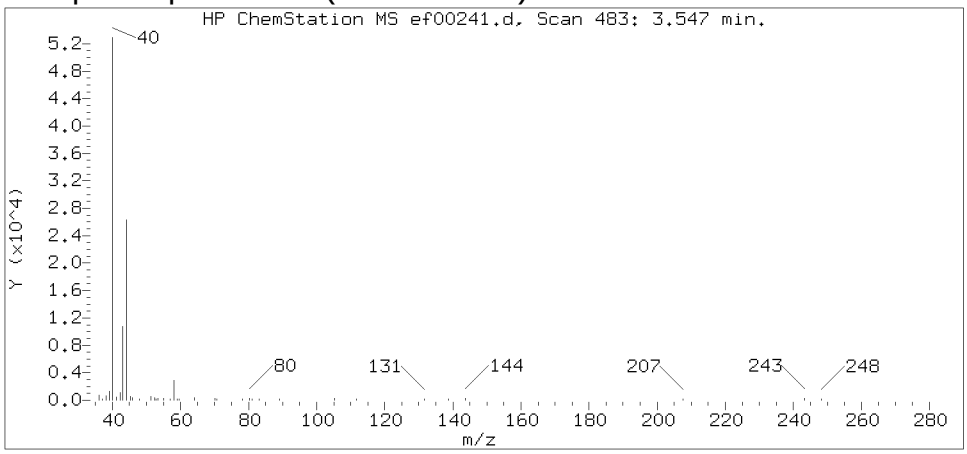


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP22820.i/18jun19.b/ef00241.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 20:37 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 20-Jun-2018 12:09 jeb07445

Sample Name: cc1157 Lab Sample ID: cc1157

Compound Number : 19
Compound Name : Acetone
Scan Number : 483
Retention Time (minutes): 3.547
Relative Retention Time :-0.00263
Quant Ion : 43.00
Area (flag) : 28541
Concentration (ppb(v)) : 0.8908

Digitally signed by Jacob E. Bailey on 06/20/2018 at 12:10.
Target 3.5 esignature user ID: jeb07445

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

Data file: /chem/HP22820.i/18jun19.b/ef00242.d Injection date and time: **19-JUN-2018 21:10**
Data file Sample Info. Line: cc1178;200;E1817030AA;cc1178;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1817030AA**
Date, time and analyst ID of latest file update: 20-Jun-2018 12:09 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun19.b/ef00233.d**

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 19-JUN-2018 15:18
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun19.b/ef00232.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	5.467	(0.000)	751	130	316043	(-11)	10.00		212165 - 495049
51) 1,4-Difluorobenzene	6.291	(0.000)	866	114	759599	(-28)	10.00		635627 - 1483127
71) Chlorobenzene-d5	8.497	(0.000)	1174	117	916761	(-14)	10.00		640174 - 1493738

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)				Not Detected					0.5	1
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)				Not Detected					0.2	1
7) 1,3-Butadiene	(1)				Not Detected					0.4	2
8) Bromomethane	(1)				Not Detected					0.5	1
9) Chloroethane	(1)				Not Detected					0.2	1
10) Bromoethene	(1)				Not Detected					0.4	2
11) Dichlorofluoromethane	(1)				Not Detected					0.2	1
12) Trichlorofluoromethane	(1)				Not Detected					0.2	1
13) Pentane	(1)				Not Detected					0.5	1
14) Ethanol	(1)				Not Detected					0.5	2
15) Freon123a	(1)				Not Detected					0.2	1
16) Acrolein	(1)				Not Detected					1	2
17) 1,1-Dichloroethene	(1)				Not Detected					0.2	1
18) Freon 113	(1)				Not Detected					0.5	2
19) Acetone	(1)	3.540	(-0.001)	43	21010	0.685	0.69		J	0.5	2
20) Methyl Iodide	(1)				Not Detected					0.2	1
21) Carbon Disulfide	(1)				Not Detected					0.5	1
22) Isopropanol	(1)				Not Detected					0.5	2
23) Acetonitrile	(1)				Not Detected					0.5	2
24) 3-Chloropropene	(1)				Not Detected					0.2	1
25) Methylene Chloride	(1)				Not Detected					0.2	1
26) tert-Butyl Alcohol	(1)				Not Detected					0.5	1
27) Acrylonitrile	(1)				Not Detected					0.5	2
28) trans-1,2-Dichloroethene	(1)				Not Detected					0.2	1
29) Methyl t-Butyl Ether	(1)				Not Detected					0.2	1
30) Hexane	(1)				Not Detected					0.2	1
31) 1,1-Dichloroethane	(1)				Not Detected					0.2	1
32) Vinyl Acetate	(1)				Not Detected					1	1
33) Di-Isopropyl Ether	(1)				Not Detected					0.2	1
34) Ethyl Tert-Butyl Ether	(1)				Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)				Not Detected					0.2	1
36) 1,2-Dichloroethene (total)	(1)				Not Detected					0.2	1
37) 2-Butanone	(1)				Not Detected					0.5	2
38) Ethyl Acetate	(1)				Not Detected					0.5	1
39) Methyl Acrylate	(1)				Not Detected					0.2	1
41) Tetrahydrofuran	(1)				Not Detected					0.5	1
42) Chloroform	(1)				Not Detected					0.2	1
43) 1,1,1-Trichloroethane	(1)				Not Detected					0.2	1
44) Cyclohexane	(1)				Not Detected					0.2	1

Digitally signed by Jacob E. Bailey on 06/20/2018 at 12:10. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun19.b/ef00242.d Injection date and time: **19-JUN-2018 21:10**
Data file Sample Info. Line: cc1178;200;E1817030AA;cc1178;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1817030AA**
Date, time and analyst ID of latest file update: 20-Jun-2018 12:09 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun19.b/ef00233.d**

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 19-JUN-2018 15:18
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun19.b/ef00232.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
45) Carbon Tetrachloride	(1)				Not Detected					0.2	1
46) Benzene	(2)				Not Detected					0.2	1
47) 1,2-Dichloroethane	(2)				Not Detected					0.2	1
48) Isooctane	(2)				Not Detected					0.2	1
49) Tert-Amyl Methyl Ether	(2)				Not Detected					0.2	1
50) Heptane	(2)				Not Detected					0.5	1
52) Trichloroethene	(2)				Not Detected					0.2	1
53) Ethyl Acrylate	(2)				Not Detected					0.2	1
54) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
55) Dibromomethane	(2)				Not Detected					0.2	1
56) 1,4-Dioxane	(2)				Not Detected					0.5	1
57) Methyl Methacrylate	(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)				Not Detected					0.2	1
62) Octane	(3)				Not Detected					0.2	1
63) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
64) 1,3-Dichloropropene (total)	(3)				Not Detected					0.2	1
65) Ethyl Methacrylate	(3)				Not Detected					0.2	1
66) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
67) Tetrachloroethene	(3)				Not Detected					0.2	1
68) 2-Hexanone	(3)				Not Detected					0.5	2
69) Dibromochloromethane	(3)				Not Detected					0.2	1
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)				Not Detected					0.2	1
75) m/p-Xylene	(3)				Not Detected					0.2	1
76) o-Xylene	(3)				Not Detected					0.2	1
77) Xylene (total)	(3)				Not Detected					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
84) n-Propylbenzene	(3)				Not Detected					0.5	1
85) 2-Chlorotoluene	(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
88) Alpha Methyl Styrene	(3)				Not Detected					0.2	1
89) tert-Butylbenzene	(3)				Not Detected					0.5	1
90) 1,2,4-Trimethylbenzene	(3)				Not Detected					0.2	1
91) sec-Butylbenzene	(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
94) p-Isopropyltoluene	(3)				Not Detected					0.2	1
95) Benzyl Chloride	(3)				Not Detected					0.5	1
96) 1,2-Dichlorobenzene	(3)				Not Detected					0.2	1
97) n-Butylbenzene	(3)				Not Detected					0.2	1
98) Hexachloroethane	(3)				Not Detected					0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)				Not Detected					0.2	1
100) 1,2,4-Trichlorobenzene	(3)				Not Detected					0.5	2

Digitally signed by Jacob E. Bailey on 06/20/2018 at 12:10. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun19.b/ef00242.d Injection date and time: **19-JUN-2018 21:10**
Data file Sample Info. Line: cc1178;200;E1817030AA;cc1178;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1817030AA**
Date, time and analyst ID of latest file update: 20-Jun-2018 12:09 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun19.b/ef00233.d**

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 19-JUN-2018 15:18
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun19.b/ef00232.d**

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

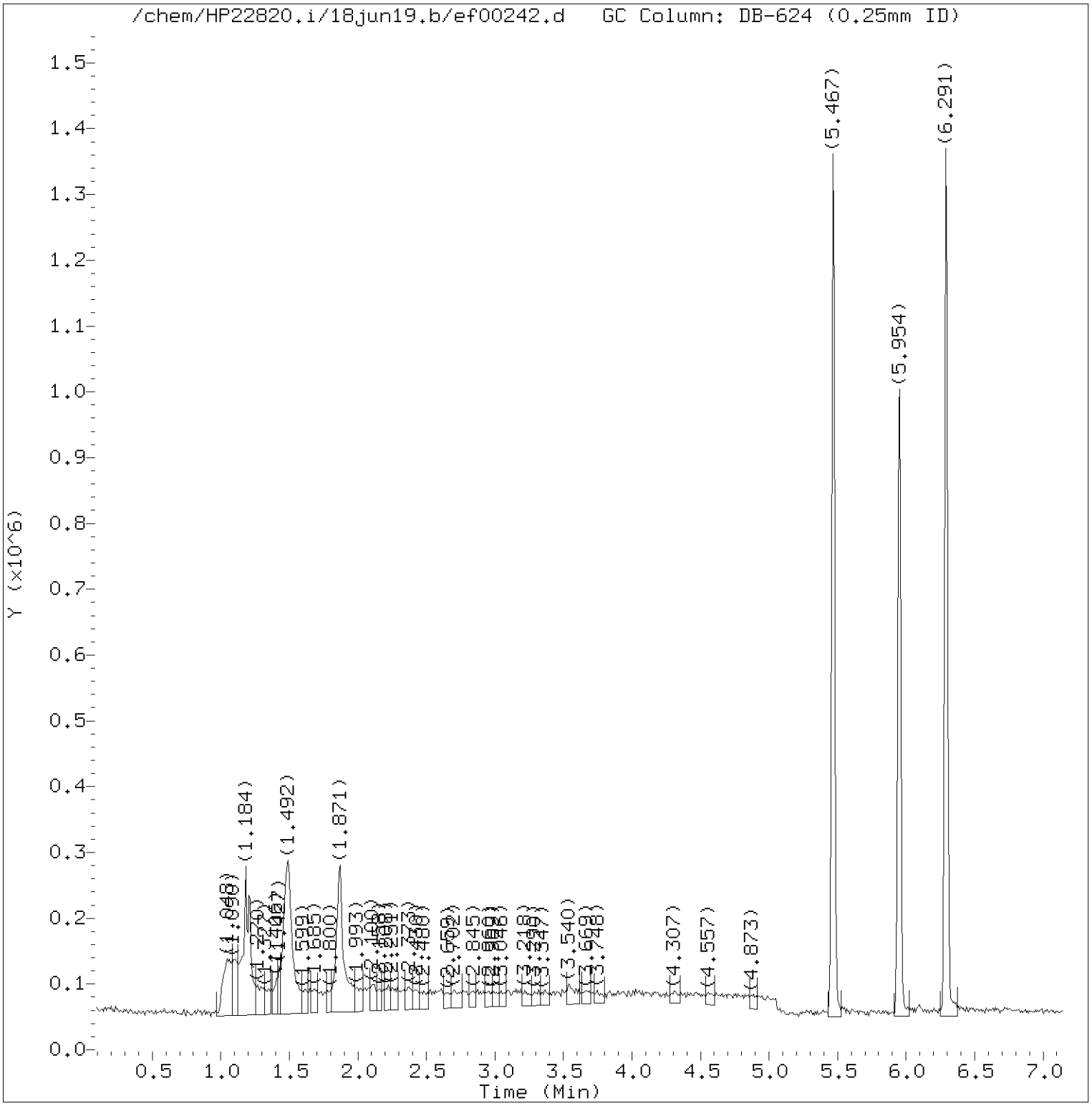
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
101) Hexachlorobutadiene	(3)				Not Detected					0.4	2
102) Naphthalene	(3)				Not Detected					0.4	1

Total number of targets = 99

Digitally signed by Jacob E. Bailey on 06/20/2018 at 12:10. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/20/2018 at 13:59. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

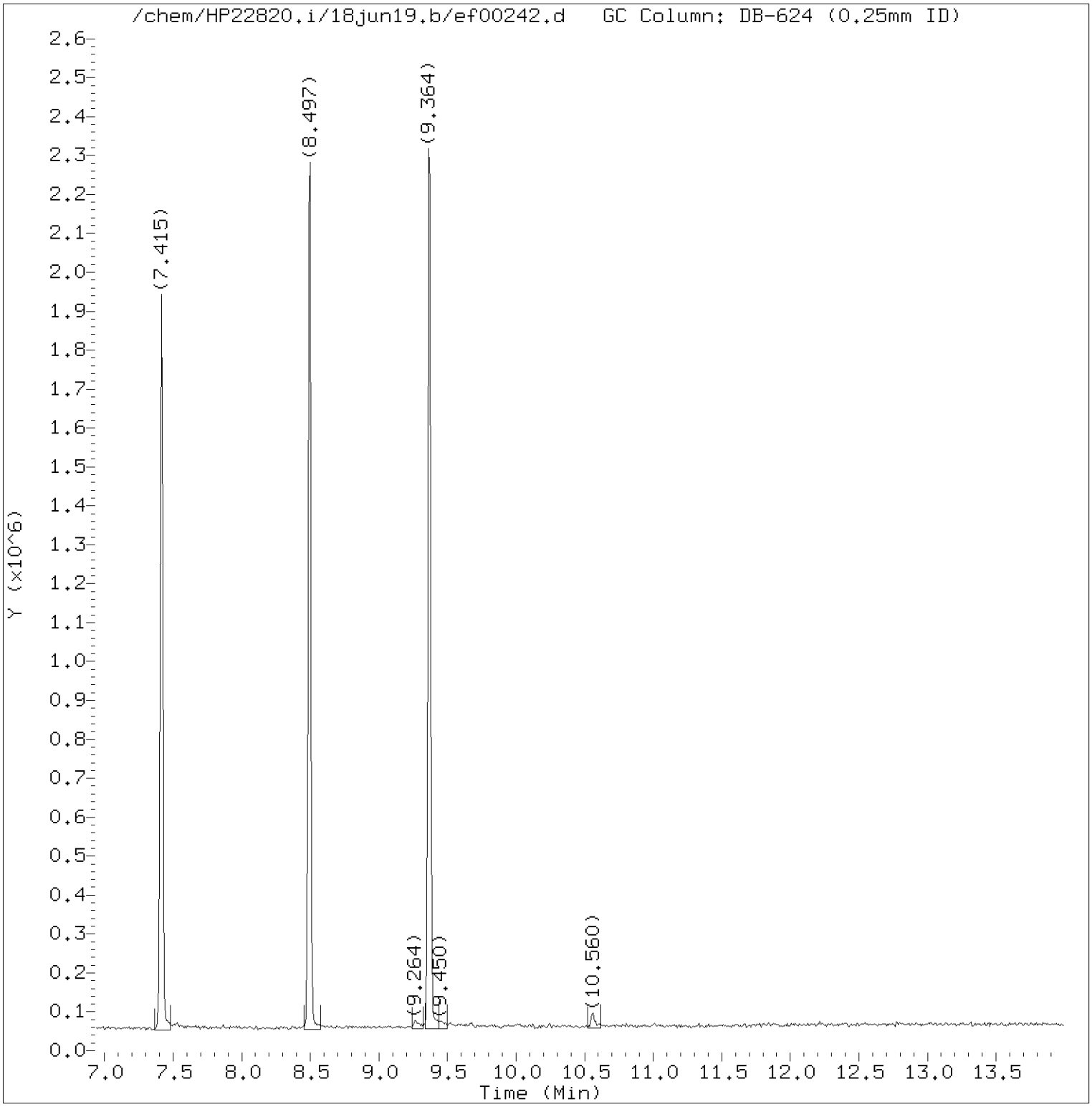
Target Revision 3.5

Data File: /chem/HP22820.i/18jun19.b/ef00242.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 21:10 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 20-Jun-2018 12:09 jeb07445

Sample Name: cc1178 Lab Sample ID: cc1178

Digitally signed by Jacob E. Bailey
on 06/20/2018 at 12:10.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun19.b/ef00242.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 21:10 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 20-Jun-2018 12:09 jeb07445

Sample Name: cc1178 Lab Sample ID: cc1178

Digitally signed by Jacob E. Bailey
on 06/20/2018 at 12:10.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun19.b/ef00242.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 21:10 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 20-Jun-2018 12:09 jeb07445

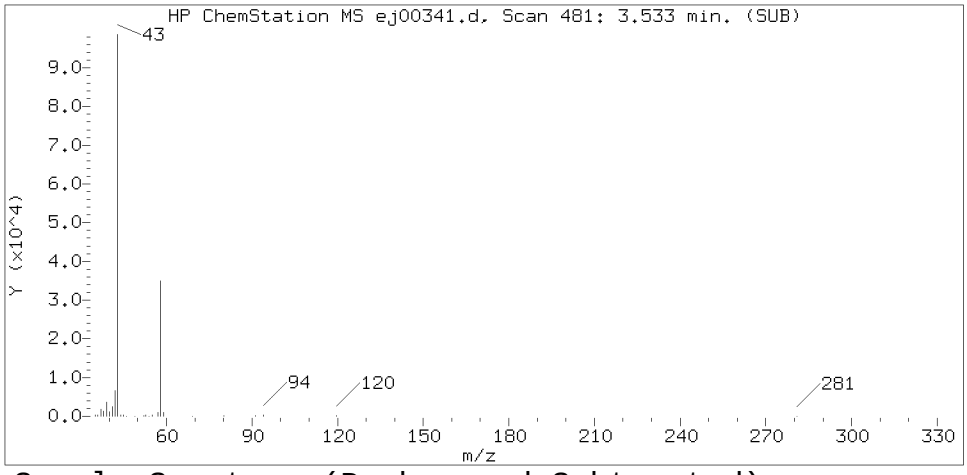
Sample Name: cc1178 Lab Sample ID: cc1178

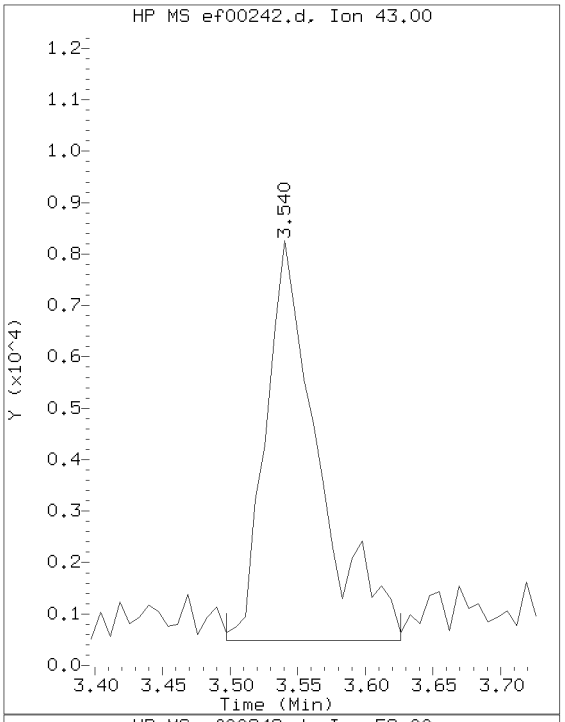
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
19) Acetone	(1)	3.540	43	21010	0.685
40)*Bromochloromethane	(1)	5.467	130	316043	10.000
51)*1,4-Difluorobenzene	(2)	6.291	114	759599	10.000
71)*Chlorobenzene-d5	(3)	8.497	117	916761	10.000

* = Compound is an internal standard.

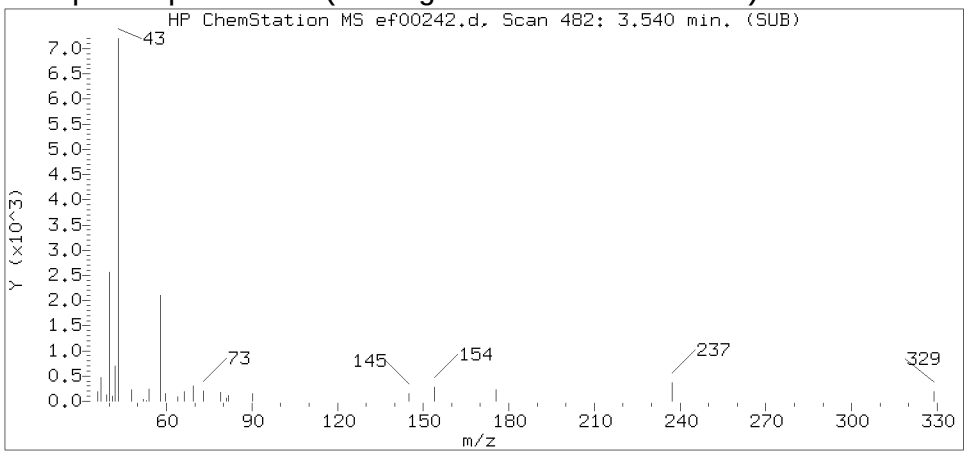
Digitally signed by Jacob E. Bailey
on 06/20/2018 at 12:10.
Target 3.5 esignature user ID: jeb07445

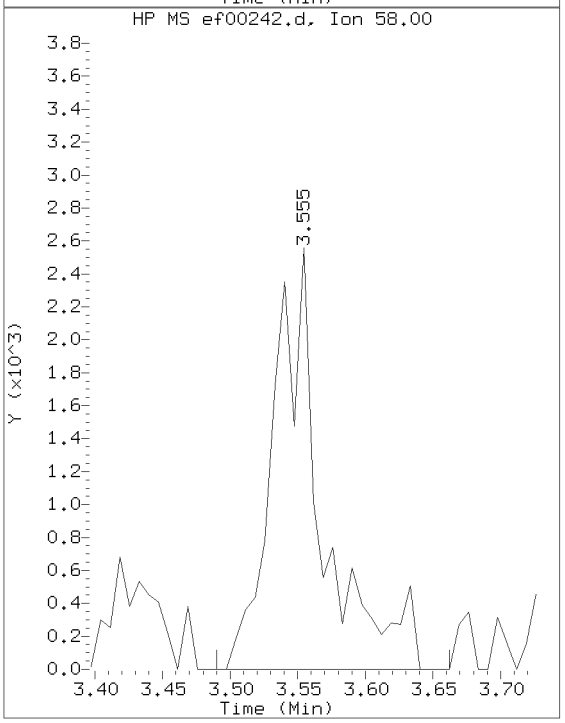
Reference Standard Spectrum for Acetone



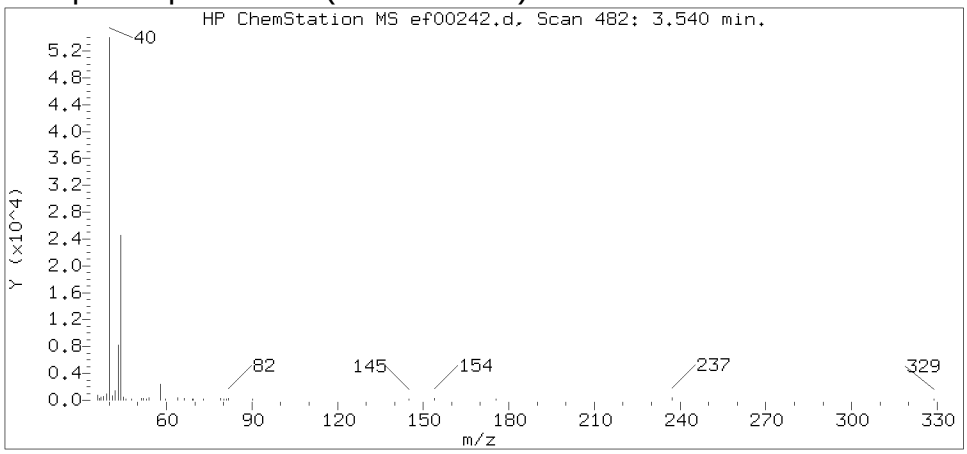


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP22820.i/18jun19.b/ef00242.d Instrument ID: HP22820.i
Injection date and time: 19-JUN-2018 21:10 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun19.b/to-15.m Sublist used: all
Calibration date and time: 19-JUN-2018 15:18
Date, time and analyst ID of latest file update: 20-Jun-2018 12:09 jeb07445

Sample Name: cc1178 Lab Sample ID: cc1178

Compound Number : 19
Compound Name : Acetone
Scan Number : 482
Retention Time (minutes): 3.540
Relative Retention Time :-0.00132
Quant Ion : 43.00
Area (flag) : 21010
Concentration (ppb(v)) : 0.6854

Digitally signed by Jacob E. Bailey on 06/20/2018 at 12:10.
Target 3.5 esignature user ID: jeb07445

Lancaster Laboratories
Volatiles in Air
Runlog for Agilent GC/MS System HP26379 **HP #06**

Data Directory Path is - D:\data\18may31\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
ads07818	FE00590.D	50NGBFB	05/31/2018	08:48		
ads07818	FE00591.D	VSTD010	05/31/2018	09:36		
ads07818	FE00592.D	VBLKF21	05/31/2018	10:49	F1815030AA	
ads07818	FE00593.D	VSTD010	05/31/2018	12:14		
ads07818	FE00594.D	VSTD005	05/31/2018	12:45		
ads07818	FE00595.D	VSTD002	05/31/2018	13:16		
ads07818	FE00596.D	VSTD001	05/31/2018	13:46		
ads07818	FE00597.D	VSTD025	05/31/2018	14:17		
ads07818	FE00598.D	VSTD070	05/31/2018	14:48		
ads07818	FE00599.D	VBLKF22	05/31/2018	15:44	F1815130AA	
ads07818	FE00600.D	VBLKF22	05/31/2018	16:14	F1815130AA	
ads07818	FE00601.D	VBLKF22	05/31/2018	16:45	F1815130AA	
ads07818	FE00602.D	VBLKF22	05/31/2018	17:16	F1815130AA	
ads07818	FE00603.D	LCSF22	05/31/2018	17:47	F1815130AA	
ads07818	FE00604.D	LCSDF22	05/31/2018	18:17	F1815130AA	
ads07818	FE00605.D	mdlv0.5	05/31/2018	18:48	F1815130AA	
ads07818	FE00606.D	mdlv0.2	05/31/2018	19:19	F1815130AA	
ads07818	FE00607.D	9634664	05/31/2018	19:50	F1815130AA	
ads07818	FE00608.D	9634665	05/31/2018	20:20	F1815130AA	
ads07818	FE00609.D	9634666	05/31/2018	20:51	F1815130AA	
ads07818	FE00610.D	9634667	05/31/2018	21:22	F1815130AA	
ads07818	FE00611.D	9634667DL	05/31/2018	21:53	F1815130AA	
ads07818	FE00612.D	9634668	05/31/2018	22:24	F1815130AA	
ads07818	FE00613.D	9634669	05/31/2018	22:54	F1815130AA	
ads07818	FE00614.D	9634669	05/31/2018	23:25	F1815130AA	
ads07818	FE00615.D	VBLKF22	05/31/2018	23:56	F1815130AA	
ads07818	FE00616.D	cc924	06/01/2018	00:27	F1815130AA	
ads07818	FE00617.D	cc971	06/01/2018	00:58	F1815130AA	
ads07818	FE00618.D	9634669DL	06/01/2018	08:21	F1815130AA	

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

SDG No.:

Lab File ID: fe00590.d

BFB Injection Date: 05/31/2018

Instrument ID: 26379

BFB Injection Time: 08:48

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0% - 40.0% of mass 95	21.61
75	30.0% - 66.0% of mass 95	45.10
95	Base peak, 100% relative abundance	100.00
96	5.0% - 9.0% of mass 95	6.98
173	< 2.0% of mass 174	0.75 (0.70)
174	> 50.0% of mass 95	107.55
175	4.0% - 9.0% of mass 174	7.57 (7.04)
176	93.0% - 101.0% of mass 174	104.10 (96.79)
177	5.0% - 9.0% of mass 176	7.06 (6.78)

THIS CHECK APPLIES TO THE FOLLOWING:

LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD010	fe00593.d	05/31/2018	12:14
VSTD005	fe00594.d	05/31/2018	12:45
VSTD002	fe00595.d	05/31/2018	13:16
VSTD001	fe00596.d	05/31/2018	13:46
VSTD025	fe00597.d	05/31/2018	14:17
VSTD070	fe00598.d	05/31/2018	14:48
VBLKF22	fe00602.d	05/31/2018	17:16
LCSF22	fe00603.d	05/31/2018	17:47
LCSDF22	fe00604.d	05/31/2018	18:17
mdlv0.5	fe00605.d	05/31/2018	18:48
mdlv0.2	fe00606.d	05/31/2018	19:19
9634664	fe00607.d	05/31/2018	19:50
9634665	fe00608.d	05/31/2018	20:20
9634666	fe00609.d	05/31/2018	20:51
9634667	fe00610.d	05/31/2018	21:22
9634667DL	fe00611.d	05/31/2018	21:53
9634668	fe00612.d	05/31/2018	22:24
9634669	fe00613.d	05/31/2018	22:54
9634669	fe00614.d	05/31/2018	23:25
cc924	fe00616.d	06/01/2018	00:27
cc971	fe00617.d	06/01/2018	00:58
9634669DL	fe00618.d	06/01/2018	08:21

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FORM 06
VOLATILE ORGANICS IN AIR
INITIAL CALIBRATION DATA

SDG No.:

Instrument ID: 26379 Calibration Start Date: 05/31/2018 Calibration End Date: 05/31/2018

Calibration Start Time: 12:14 Calibration End Time: 14:48

LAB FILE IDs:
RRF 1 = fe00596.d RRF 2 = fe00595.d RRF 5 = fe00594.d RRF 10 = fe00593.d RRF 25 = fe00597.d
RRF 70 = fe00598.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
Propene	1.021	1.108	1.088	1.074	1.098	1.162	1.092	4	AVG
Dichlorodifluoromethane	2.050	2.457	2.781	2.798	2.804	2.924	2.636	12	AVG
Chlorodifluoromethane	1.981	2.188	2.089	2.071	2.136	2.204	2.112	4	AVG
Freon 114	2.848	2.795	2.863	2.864	2.821	2.922	2.852	2	AVG
Chloromethane	1.092	1.127	1.203	1.176	1.210	1.190	1.166	4	AVG
Vinyl Chloride	0.525	0.653	0.682	0.678	0.664	0.690	0.649	10	AVG
1,3-Butadiene	0.707	0.611	0.574	0.609	0.537	0.550	0.598	10	AVG
Bromomethane	0.569	0.859	0.884	0.973	0.921	1.036	0.874	19	AVG
Chloroethane	0.484	0.548	0.617	0.620	0.615	0.644	0.588	10	AVG
Bromoethene	0.804	0.937	1.035	1.047	1.078	1.125	1.004	12	AVG
Dichlorofluoromethane	1.785	2.131	2.286	2.301	2.284	2.361	2.191	10	AVG
Trichlorofluoromethane	3.097	3.008	2.923	2.914	2.922	2.951	2.969	2	AVG
Pentane	2.334	2.459	2.508	2.492	2.477	2.499	2.461	3	AVG
Ethanol	0.464	0.470	0.553	0.519	0.569	0.624	0.533	12	AVG
Freon123a	2.163	2.133	2.094	2.023	2.026	2.081	2.087	3	AVG
Acrolein	0.425	0.383	0.506	0.532	0.529	0.557	0.489	14	AVG
1,1-Dichloroethene	1.433	1.709	1.892	1.940	1.916	2.003	1.815	12	AVG
Freon 113	2.009	1.920	1.755	1.638	1.691	1.628	1.773	9	AVG
Acetone	1.793	1.806	1.964	1.987	2.022	2.077	1.941	6	AVG
Methyl Iodide	2.488	3.109	3.384	2.980	3.326	2.950	3.040	11	AVG
Carbon Disulfide	2.190	2.555	2.927	2.975	2.918	3.035	2.767	12	AVG
Isopropanol	2.037	2.128	2.337	2.362	2.349	2.567	2.297	8	AVG
Acetonitrile	0.988	1.115	1.186	1.210	1.228	1.305	1.172	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.

SDG No.:

Instrument ID: 26379 Calibration Start Date: 05/31/2018 Calibration End Date: 05/31/2018

Calibration Start Time: 12:14 Calibration End Time: 14:48

LAB FILE IDs:
RRF 1 = fe00596.d RRF 2 = fe00595.d RRF 5 = fe00594.d RRF 10 = fe00593.d RRF 25 = fe00597.d
RRF 70 = fe00598.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
3-Chloropropene	1.438	1.568	1.736	1.747	1.764	1.883	1.689	9	AVG
Methylene Chloride	0.708	0.820	0.938	0.908	0.911	0.955	0.873	11	AVG
tert-Butyl Alcohol	2.789	2.866	2.687	2.619	2.658	2.750	2.728	3	AVG
Acrylonitrile	0.866	1.073	1.149	1.140	1.160	1.217	1.101	11	AVG
trans-1,2-Dichloroethene	1.335	1.621	1.770	1.778	1.774	1.876	1.692	11	AVG
Methyl t-Butyl Ether	3.180	3.344	3.273	3.178	3.281	3.224	3.247	2	AVG
Hexane	1.350	1.343	1.272	1.296	1.302	1.310	1.312	2	AVG
1,1-Dichloroethane	1.956	2.065	2.186	2.173	2.195	2.295	2.145	5	AVG
Vinyl Acetate	3.311	3.772	3.951	3.964	4.051	4.136	3.864	8	AVG
Di-Isopropyl Ether	4.955	4.961	4.842	4.712	4.927	4.956	4.892	2	AVG
Ethyl Tert-Butyl Ether	3.895	4.089	4.223	4.112	4.262	4.327	4.151	4	AVG
cis-1,2-Dichloroethene	1.331	1.564	1.705	1.686	1.722	1.820	1.638	10	AVG
2-Butanone	2.614	2.870	2.940	2.826	2.852	2.970	2.845	4	AVG
Ethyl Acetate	3.005	3.278	3.291	3.191	3.310	3.358	3.239	4	AVG
Methyl Acrylate	2.107	2.283	2.418	2.427	2.465	2.570	2.379	7	AVG
Tetrahydrofuran	1.480	1.532	1.647	1.600	1.657	1.716	1.606	5	AVG
Chloroform	2.150	2.291	2.437	2.362	2.408	2.519	2.361	5	AVG
1,1,1-Trichloroethane	2.854	2.805	2.700	2.556	2.661	2.643	2.703	4	AVG
Cyclohexane	2.385	2.433	2.319	2.207	2.351	2.354	2.341	3	AVG
Carbon Tetrachloride	2.941	2.845	2.787	2.682	2.817	2.793	2.811	3	AVG
Benzene	0.949	0.968	1.008	0.988	1.008	0.996	0.986	2	AVG
1,2-Dichloroethane	0.425	0.446	0.472	0.456	0.480	0.488	0.461	5	AVG
Isooctane	1.612	1.786	1.848	1.836	1.925	1.887	1.816	6	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: 26379 Calibration Start Date: 05/31/2018 Calibration End Date: 05/31/2018

Calibration Start Time: 12:14 Calibration End Time: 14:48

LAB FILE IDs:
RRF 1 = fe00596.d RRF 2 = fe00595.d RRF 5 = fe00594.d RRF 10 = fe00593.d RRF 25 = fe00597.d
RRF 70 = fe00598.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
Tert-Amyl Methyl Ether	0.858	0.909	0.938	0.943	0.964	0.970	0.930	4	AVG
Heptane	0.368	0.367	0.354	0.352	0.362	0.356	0.360	2	AVG
Trichloroethene	0.458	0.479	0.508	0.504	0.518	0.528	0.499	5	AVG
Ethyl Acrylate	0.878	0.885	0.891	0.890	0.925	0.934	0.900	3	AVG
1,2-Dichloropropane	0.413	0.416	0.411	0.404	0.415	0.411	0.412	1	AVG
Dibromomethane	0.494	0.525	0.560	0.566	0.569	0.588	0.550	6	AVG
1,4-Dioxane	0.225	0.243	0.246	0.245	0.255	0.264	0.246	5	AVG
Methyl Methacrylate	0.355	0.351	0.343	0.349	0.361	0.368	0.354	2	AVG
Bromodichloromethane	0.690	0.692	0.697	0.712	0.730	0.734	0.709	3	AVG
cis-1,3-Dichloropropene	0.586	0.577	0.605	0.608	0.627	0.639	0.607	4	AVG
4-Methyl-2-Pentanone	1.168	1.136	1.029	1.005	1.050	1.006	1.066	7	AVG
Toluene	1.323	1.263	1.263	1.246	1.283	1.244	1.270	2	AVG
Octane	1.287	1.203	1.085	1.071	1.119	1.052	1.136	8	AVG
trans-1,3-Dichloropropene	0.510	0.542	0.533	0.532	0.552	0.552	0.537	3	AVG
Ethyl Methacrylate	0.705	0.653	0.608	0.614	0.636	0.637	0.642	5	AVG
1,1,2-Trichloroethane	0.471	0.475	0.454	0.459	0.467	0.460	0.464	2	AVG
Tetrachloroethene	0.875	0.835	0.823	0.829	0.833	0.818	0.836	2	AVG
2-Hexanone	1.148	1.086	0.998	1.000	1.045	1.014	1.048	6	AVG
Dibromochloromethane	0.639	0.616	0.626	0.626	0.664	0.662	0.639	3	AVG
1,2-Dibromoethane	0.737	0.749	0.731	0.717	0.738	0.735	0.734	1	AVG
Chlorobenzene	1.247	1.175	1.103	1.088	1.108	1.067	1.131	6	AVG
1,1,1,2-Tetrachloroethane	0.674	0.671	0.635	0.617	0.639	0.615	0.642	4	AVG
Ethylbenzene	2.041	1.845	1.759	1.684	1.756	****	1.817	8	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: 26379 Calibration Start Date: 05/31/2018 Calibration End Date: 05/31/2018

Calibration Start Time: 12:14 Calibration End Time: 14:48

LAB FILE IDs:
RRF 1 = fe00596.d RRF 2 = fe00595.d RRF 5 = fe00594.d RRF 10 = fe00593.d RRF 25 = fe00597.d
RRF 70 = fe00598.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
m/p-Xylene	1.473	1.389	1.308	1.290	1.368	1.290	1.353	5	AVG
o-Xylene	1.444	1.426	1.343	1.302	1.384	1.326	1.371	4	AVG
Styrene	1.101	1.053	1.003	1.016	1.095	1.046	1.052	4	AVG
Bromoform	1.013	1.007	0.982	0.978	1.049	1.018	1.008	3	AVG
Cumene	2.143	2.087	1.940	1.909	2.005	****	2.017	5	AVG
Bromobenzene	0.851	0.812	0.786	0.771	0.792	0.748	0.793	4	AVG
1,1,2,2-Tetrachloroethane	1.125	1.099	1.011	0.971	1.001	0.934	1.024	7	AVG
1,2,3-Trichloropropane	0.360	0.366	0.336	0.313	0.324	0.309	0.335	7	AVG
n-Propylbenzene	0.624	0.611	0.599	0.572	0.608	0.581	0.599	3	AVG
2-Chlorotoluene	0.581	0.575	0.532	0.511	0.537	0.499	0.539	6	AVG
4-Ethyltoluene	2.129	2.071	1.994	1.936	2.025	****	2.031	4	AVG
1,3,5-Trimethylbenzene	1.743	1.734	1.650	1.610	1.693	****	1.686	3	AVG
Alpha Methyl Styrene	0.916	0.861	0.837	0.844	0.926	****	0.877	5	AVG
tert-Butylbenzene	1.673	1.753	1.651	1.571	1.657	****	1.661	4	AVG
1,2,4-Trimethylbenzene	1.768	1.746	1.621	1.592	1.685	****	1.682	5	AVG
sec-Butylbenzene	2.686	2.548	2.454	2.360	2.470	****	2.504	5	AVG
1,3-Dichlorobenzene	1.454	1.385	1.285	1.239	1.319	****	1.336	6	AVG
1,4-Dichlorobenzene	1.482	1.409	1.313	1.266	1.344	****	1.363	6	AVG
p-Isopropyltoluene	2.181	2.180	2.077	2.063	2.161	****	2.132	3	AVG
Benzyl Chloride	0.341	0.331	0.335	0.338	0.377	****	0.345	5	AVG
1,2-Dichlorobenzene	1.346	1.335	1.222	1.192	1.252	1.162	1.252	6	AVG
n-Butylbenzene	1.177	1.210	1.171	1.135	1.246	1.148	1.181	3	AVG
Hexachloroethane	0.652	0.637	0.650	0.639	0.689	0.661	0.655	3	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.

SDG No.:

Instrument ID: 26379 Calibration Start Date: 05/31/2018 Calibration End Date: 05/31/2018

Calibration Start Time: 12:14 Calibration End Time: 14:48

LAB FILE IDs:
RRF 1 = fe00596.d RRF 2 = fe00595.d RRF 5 = fe00594.d RRF 10 = fe00593.d RRF 25 = fe00597.d
RRF 70 = fe00598.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
1,2-Dibromo-3-chloropropane	0.663	0.673	0.662	0.646	0.729	****	0.675	5	AVG
1,2,4-Trichlorobenzene	1.129	1.135	1.102	1.024	1.163	1.159	1.119	5	AVG
Hexachlorobutadiene	1.275	1.283	1.179	1.094	1.212	1.193	1.206	6	AVG
Naphthalene	2.070	2.047	2.002	1.902	2.186	****	2.041	5	AVG

Average % RSD: 6

* 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.

Internal Standard
Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP26379.i/18may31.b/fe00593.d VSTD010
/chem/HP26379.i/18may31.b/fe00594.d VSTD005
/chem/HP26379.i/18may31.b/fe00595.d VSTD002
/chem/HP26379.i/18may31.b/fe00596.d VSTD001
/chem/HP26379.i/18may31.b/fe00597.d VSTD025
/chem/HP26379.i/18may31.b/fe00598.d VSTD070

Area Summary

Internal Standard Name	File ID: fe00593.d	fe00594.d	fe00595.d	fe00596.d	fe00597.d	fe00598.d	Avg. Area	%RSD	In Spec
Bromochloromethane	425871	404885	385100	381280	386291	378307	393622	5	Yes
1,4-Difluorobenzene	1530774	1478765	1410977	1407768	1383341	1378772	1431733	4	Yes
Chlorobenzene-d5	1494003	1448579	1366151	1370420	1369575	1367324	1402675	4	Yes

%RSD of internal standard area is flagged out of spec if greater than 30.

RT Summary

Internal Standard Name	File ID: fe00593.d	fe00594.d	fe00595.d	fe00596.d	fe00597.d	fe00598.d	Avg. RT
Bromochloromethane	11.101	11.108	11.108	11.101	11.108	11.115	11.107
1,4-Difluorobenzene	13.386	13.393	13.393	13.393	13.393	13.400	13.393
Chlorobenzene-d5	18.228	18.235	18.235	18.235	18.228	18.235	18.233

Comments:_____

_____

Report generated on 05/31/2018 at 15:18

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 LCS File ID: fe00603.d LCSD File ID: fe00604.d

Batch: F1815130AA LCS Injected: 05/31/2018 LCSD Injected: 05/31/2018

Method: EPA TO-15 LCS Client ID: LCSF22 LCSD Client ID: LCSDF22

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	10.00	10.48	10.05	105	100	78-126	4	25	YES
Dichlorodifluoromethane	10.00	11.60	11.44	116	114	74-133	1	25	YES
Chlorodifluoromethane	10.00	11.48	11.12	115	111	70-138	3	25	YES
Freon 114	10.00	10.94	10.84	109	108	66-126	1	25	YES
Chloromethane	10.00	10.78	10.83	108	108	65-140	0	25	YES
Vinyl Chloride	10.00	11.28	11.21	113	112	75-130	1	25	YES
1,3-Butadiene	10.00	9.40	9.45	94	95	72-122	1	25	YES
Bromomethane	10.00	12.35	11.85	123	118	71-133	4	25	YES
Chloroethane	10.00	11.42	11.28	114	113	76-129	1	25	YES
Bromoethene	10.00	11.50	11.51	115	115	77-123	0	25	YES
Dichlorofluoromethane	10.00	11.86	11.67	119	117	75-137	2	25	YES
Trichlorofluoromethane	10.00	10.65	10.65	106	107	73-132	0	25	YES
Pentane	10.00	10.18	10.17	102	102	69-125	0	25	YES
Ethanol	10.00	11.17	10.96	112	110	56-149	2	25	YES
Acrolein	10.00	12.07	11.89	121	119	54-132	2	25	YES
1,1-Dichloroethene	10.00	11.47	11.22	115	112	70-129	2	25	YES
Freon 113	10.00	10.00	9.96	100	100	66-119	0	25	YES
Acetone	10.00	11.28	11.13	113	111	71-136	1	25	YES
Methyl Iodide	10.00	10.12	10.22	101	102	72-127	1	25	YES
Carbon Disulfide	10.00	11.20	11.04	112	110	72-128	1	25	YES
Isopropanol	10.00	10.97	10.90	110	109	69-160	1	25	YES
Acetonitrile	10.00	11.21	11.18	112	112	56-136	0	25	YES
3-Chloropropene	10.00	13.25	13.10	132	131	67-141	1	25	YES
Methylene Chloride	10.00	12.62	12.43	126	124	69-128	2	25	YES
tert-Butyl Alcohol	10.00	11.12	11.10	111	111	71-154	0	25	YES
Acrylonitrile	10.00	11.41	10.96	114	110	68-135	4	25	YES
trans-1,2-Dichloroethene	10.00	11.17	11.11	112	111	77-128	1	25	YES
Methyl t-Butyl Ether	10.00	10.34	10.18	103	102	71-119	2	25	YES
Hexane	10.00	10.62	10.44	106	104	70-118	2	25	YES
1,1-Dichloroethane	10.00	11.04	10.93	110	109	74-129	1	25	YES
Vinyl Acetate	10.00	12.17	11.94	122	119	75-161	2	25	YES
Di-Isopropyl Ether	10.00	10.22	10.21	102	102	71-122	0	25	YES
Ethyl Tert-Butyl Ether	10.00	10.43	10.43	104	104	68-121	0	25	YES
cis-1,2-Dichloroethene	10.00	11.10	11.27	111	113	76-126	2	25	YES
2-Butanone	10.00	10.83	10.68	108	107	75-126	1	25	YES
Ethyl Acetate	10.00	10.28	10.47	103	105	73-124	2	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 LCS File ID: fe00603.d LCSD File ID: fe00604.d

Batch: F1815130AA LCS Injected: 05/31/2018 LCSD Injected: 05/31/2018

Method: EPA TO-15 LCS Client ID: LCSF22 LCSD Client ID: LCSDF22

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	10.00	10.86	10.99	109	110	75-125	1	25	YES
Tetrahydrofuran	10.00	11.50	11.14	115	111	67-127	3	25	YES
Chloroform	10.00	11.07	10.94	111	109	75-127	1	25	YES
1,1,1-Trichloroethane	10.00	10.49	10.25	105	102	74-122	2	25	YES
Cyclohexane	10.00	10.25	10.14	102	101	70-118	1	25	YES
Carbon Tetrachloride	10.00	10.59	10.37	106	104	72-127	2	25	YES
Benzene	10.00	10.90	10.68	109	107	76-123	2	25	YES
1,2-Dichloroethane	10.00	11.17	10.93	112	109	72-138	2	25	YES
Isooctane	10.00	10.78	10.53	108	105	74-127	2	25	YES
Tert-Amyl Methyl Ether	10.00	10.60	10.27	106	103	78-124	3	25	YES
Heptane	10.00	10.11	9.67	101	97	74-122	4	25	YES
Trichloroethene	10.00	11.22	10.85	112	109	76-118	3	25	YES
Ethyl Acrylate	10.00	10.63	10.18	106	102	71-126	4	25	YES
1,2-Dichloropropane	10.00	10.74	10.44	107	104	75-127	3	25	YES
Dibromomethane	10.00	11.10	10.87	111	109	76-124	2	25	YES
1,4-Dioxane	10.00	10.59	10.58	106	106	76-124	0	25	YES
Methyl Methacrylate	10.00	10.18	10.02	102	100	73-117	2	25	YES
Bromodichloromethane	10.00	10.80	10.61	108	106	75-134	2	25	YES
cis-1,3-Dichloropropene	10.00	10.70	10.44	107	104	51-120	3	25	YES
4-Methyl-2-Pentanone	10.00	10.38	10.05	104	101	79-131	3	25	YES
Toluene	10.00	10.37	10.22	104	102	78-119	1	25	YES
Octane	10.00	9.82	9.70	98	97	73-122	1	25	YES
trans-1,3-Dichloropropene	10.00	10.40	10.59	104	106	76-131	2	25	YES
Ethyl Methacrylate	10.00	9.72	9.45	97	94	69-137	3	25	YES
1,1,2-Trichloroethane	10.00	10.40	10.65	104	107	76-127	2	25	YES
Tetrachloroethene	10.00	10.30	10.42	103	104	68-123	1	25	YES
2-Hexanone	10.00	9.98	9.98	100	100	74-134	0	25	YES
Dibromochloromethane	10.00	10.48	10.43	105	104	74-131	0	25	YES
1,2-Dibromoethane	10.00	10.50	10.36	105	104	73-121	1	25	YES
Chlorobenzene	10.00	10.15	10.07	102	101	76-117	1	25	YES
1,1,1,2-Tetrachloroethane	10.00	10.17	10.14	102	101	73-137	0	25	YES
Ethylbenzene	10.00	9.72	9.79	97	98	77-117	1	25	YES
m/p-Xylene	10.00	10.00	9.94	100	99	78-119	1	25	YES
o-Xylene	10.00	10.06	9.98	101	100	78-121	1	25	YES
Xylene (total)	20.00	20.06	19.92	100	100	79-120	1	25	YES
Styrene	10.00	10.46	10.28	105	103	77-143	2	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 LCS File ID: fe00603.d LCSD File ID: fe00604.d

Batch: F1815130AA LCS Injected: 05/31/2018 LCSD Injected: 05/31/2018

Method: EPA TO-15 LCS Client ID: LCSF22 LCSD Client ID: LCSDF22

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	10.03	9.99	100	100	58-144	0	25	YES
Cumene	10.00	9.96	9.91	100	99	80-133	0	25	YES
Bromobenzene	10.00	10.14	9.88	101	99	74-118	3	25	YES
1,1,2,2-Tetrachloroethane	10.00	9.91	10.01	99	100	72-133	1	25	YES
1,2,3-Trichloropropane	10.00	9.95	9.96	100	100	71-127	0	25	YES
n-Propylbenzene	10.00	9.89	9.90	99	99	73-120	0	25	YES
2-Chlorotoluene	10.00	10.09	10.01	101	100	74-123	1	25	YES
4-Ethyltoluene	10.00	9.95	9.87	99	99	73-130	1	25	YES
1,3,5-Trimethylbenzene	10.00	10.20	10.22	102	102	72-130	0	25	YES
Alpha Methyl Styrene	10.00	9.94	10.02	99	100	71-138	1	25	YES
tert-Butylbenzene	10.00	10.08	10.13	101	101	78-138	0	25	YES
1,2,4-Trimethylbenzene	10.00	9.92	9.93	99	99	70-138	0	25	YES
sec-Butylbenzene	10.00	10.00	10.07	100	101	79-139	1	25	YES
1,3-Dichlorobenzene	10.00	9.78	9.75	98	98	75-129	0	25	YES
1,4-Dichlorobenzene	10.00	9.73	9.88	97	99	74-123	2	25	YES
p-Isopropyltoluene	10.00	10.09	10.19	101	102	75-145	1	25	YES
Benzyl Chloride	10.00	10.39	10.24	104	102	49-163	1	25	YES
1,2-Dichlorobenzene	10.00	9.85	9.80	98	98	71-126	0	25	YES
n-Butylbenzene	10.00	10.18	10.24	102	102	72-143	1	25	YES
Hexachloroethane	10.00	10.36	10.19	104	102	59-135	2	25	YES
1,2-Dibromo-3-chloropropane	10.00	10.26	10.27	103	103	52-156	0	25	YES
1,2,4-Trichlorobenzene	10.00	10.02	10.32	100	103	45-156	3	25	YES
Hexachlorobutadiene	10.00	10.13	10.35	101	103	49-154	2	25	YES
Naphthalene	10.00	10.06	10.59	101	106	39-152	5	25	YES

COMMENTS:

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Data File: /chem/HP26379.i/18may31.b/fe00590.d

Date : 31-MAY-2018 08:48

Client ID: BFB

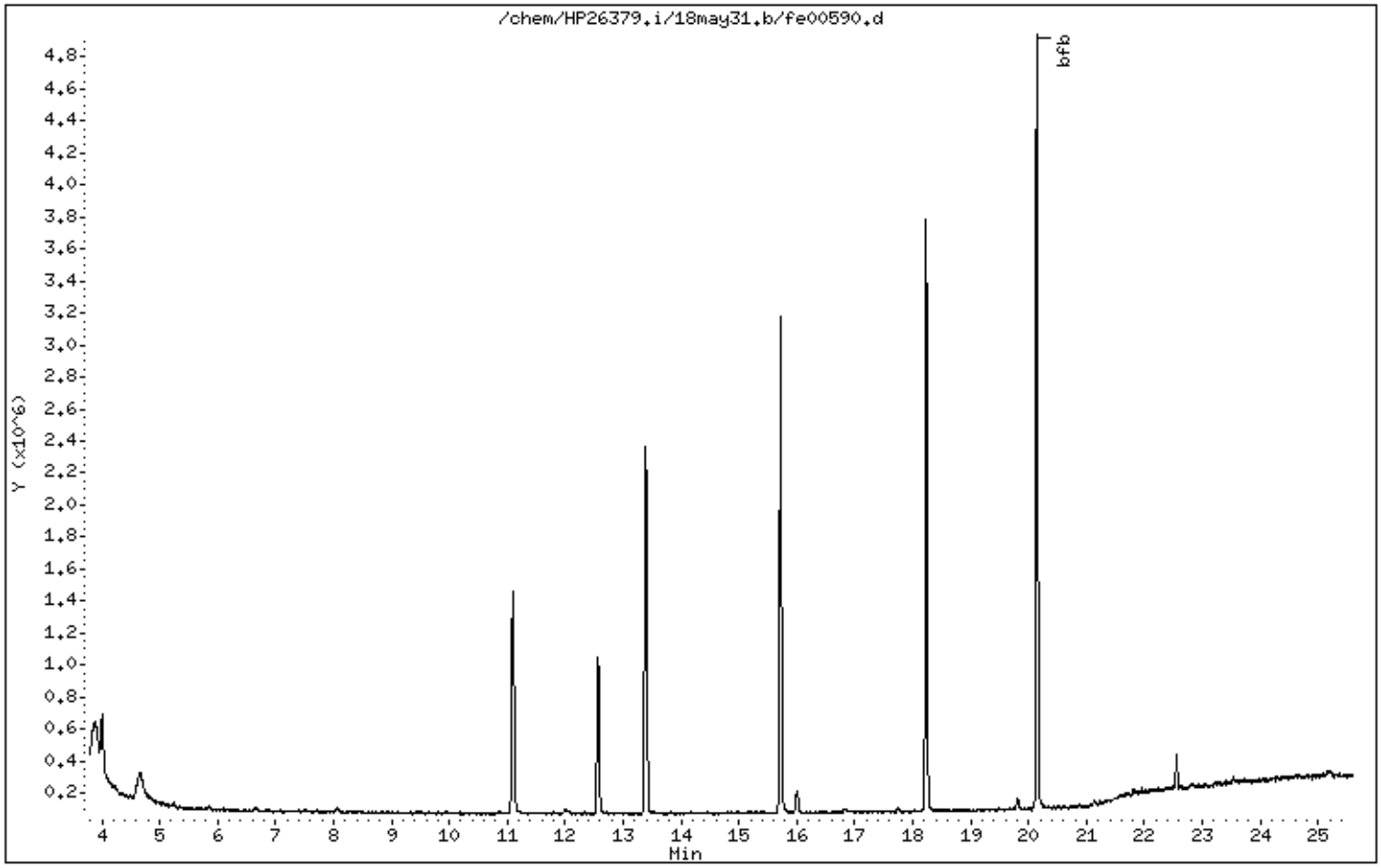
Instrument: HP26379.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: ads07818

Column phase: DB-624

Column diameter: 0.25



Digitally signed by Jacob E. Bailey on 05/31/2018 at 15:58.
Target 3.5 esignature user ID: jeb07445

Data File: /chem/HP26379.i/18may31.b/fe00590.d

Date : 31-MAY-2018 08:48

Client ID: BFB

Instrument: HP26379.i

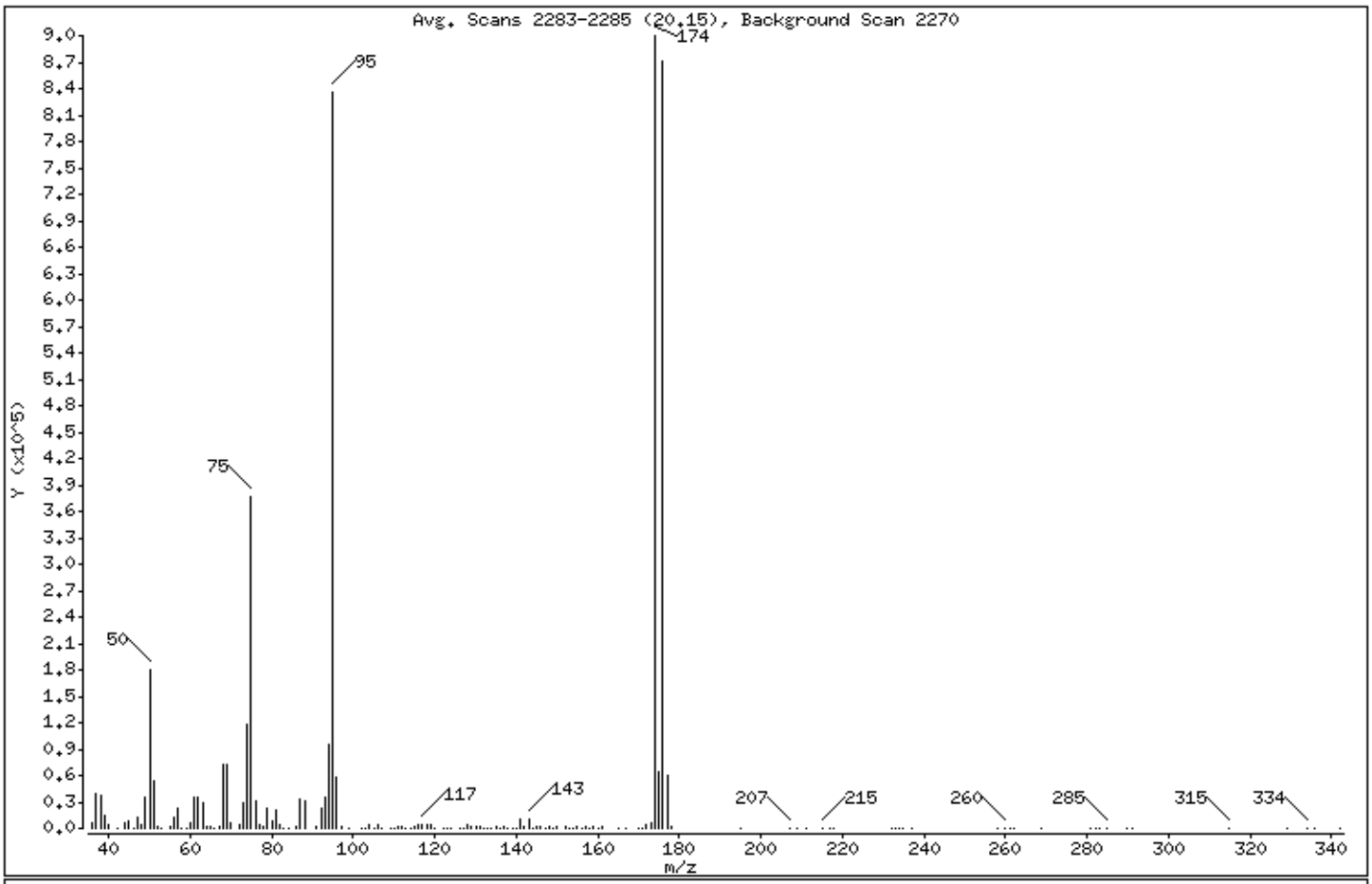
Sample Info: 50NGBFB;;;BFB;0;;;

Operator: ads07818

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	21.61
75	30.00 - 66.00% of mass 95	45.10
96	5.00 - 9.00% of mass 95	6.98
173	Less than 2.00% of mass 174	0.75 (0.70)
174	50.00 - 120.00% of mass 95	107.55
175	4.00 - 9.00% of mass 174	7.57 (7.04)
176	93.00 - 101.00% of mass 174	104.10 (96.79)
177	5.00 - 9.00% of mass 176	7.06 (6.78)

Digitally signed by Jacob E. Bailey on 05/31/2018 at 15:58.
Target 3.5 esignature user ID: jeb07445

Date : 31-MAY-2018 08:48

Client ID: BFB Instrument: HP26379.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: ads07818

Column phase: DB-624 Column diameter: 0.25

Data File: fe00590.d
Spectrum: Avg. Scans 2283-2285 (20,15), Background Scan 2270
Location of Maximum: 174.00
Number of points: 151

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	6171	78.00	2689	124.00	901	170.00	116
37.00	39120	79.00	22776	126.00	178	171.00	527
38.00	36600	80.00	7281	127.00	148	172.00	3712
39.00	14616	81.00	21680	128.00	3451	173.00	6315
40.00	3710	82.00	4869	129.00	1465	174.00	900288
42.00	124	83.00	531	130.00	2953	175.00	63400
44.00	6192	84.00	89	131.00	1773	176.00	871360
45.00	7452	86.00	1396	132.00	228	177.00	59112
46.00	314	87.00	33992	133.00	313	178.00	1342
47.00	11532	88.00	31288	134.00	395	195.00	323
48.00	4576	91.00	2739	135.00	2347	207.00	987
49.00	34672	92.00	21848	136.00	340	209.00	46
50.00	180864	93.00	34256	137.00	1179	211.00	297
51.00	53928	94.00	94480	138.00	112	215.00	699
52.00	2021	95.00	837056	139.00	641	217.00	181
53.00	612	96.00	58424	140.00	496	218.00	133
55.00	2355	97.00	1640	141.00	9990	232.00	101
56.00	12716	99.00	124	142.00	1187	233.00	439
57.00	22680	102.00	116	143.00	10028	234.00	310
58.00	682	103.00	537	144.00	745	235.00	114
59.00	413	104.00	3933	145.00	1244	237.00	528
60.00	6983	105.00	888	146.00	1779	258.00	103
61.00	34832	106.00	3600	147.00	713	260.00	407
62.00	35400	107.00	410	148.00	2152	261.00	90
63.00	28216	109.00	119	149.00	807	262.00	128
64.00	2769	110.00	390	150.00	1217	269.00	432
65.00	2302	111.00	1250	152.00	1045	281.00	59
66.00	460	112.00	1107	153.00	789	282.00	278
67.00	1473	113.00	1019	154.00	628	283.00	1
68.00	72544	114.00	119	155.00	2103	285.00	482
69.00	71992	115.00	1177	156.00	719	290.00	126
70.00	5375	116.00	3320	157.00	1900	291.00	108
72.00	3158	117.00	5094	158.00	243	315.00	117
73.00	28184	118.00	3650	159.00	1220	329.00	117
74.00	117912	119.00	4203	160.00	131	334.00	480

Digitally signed by Jacob E. Bailey on 05/31/2018 at 15:58.
Target 3.5 esignature user ID: jeb07445

Date : 31-MAY-2018 08:48

Client ID: BFB Instrument: HP26379.i

Sample Info: 50NGBFB;;;BFB;0;;;

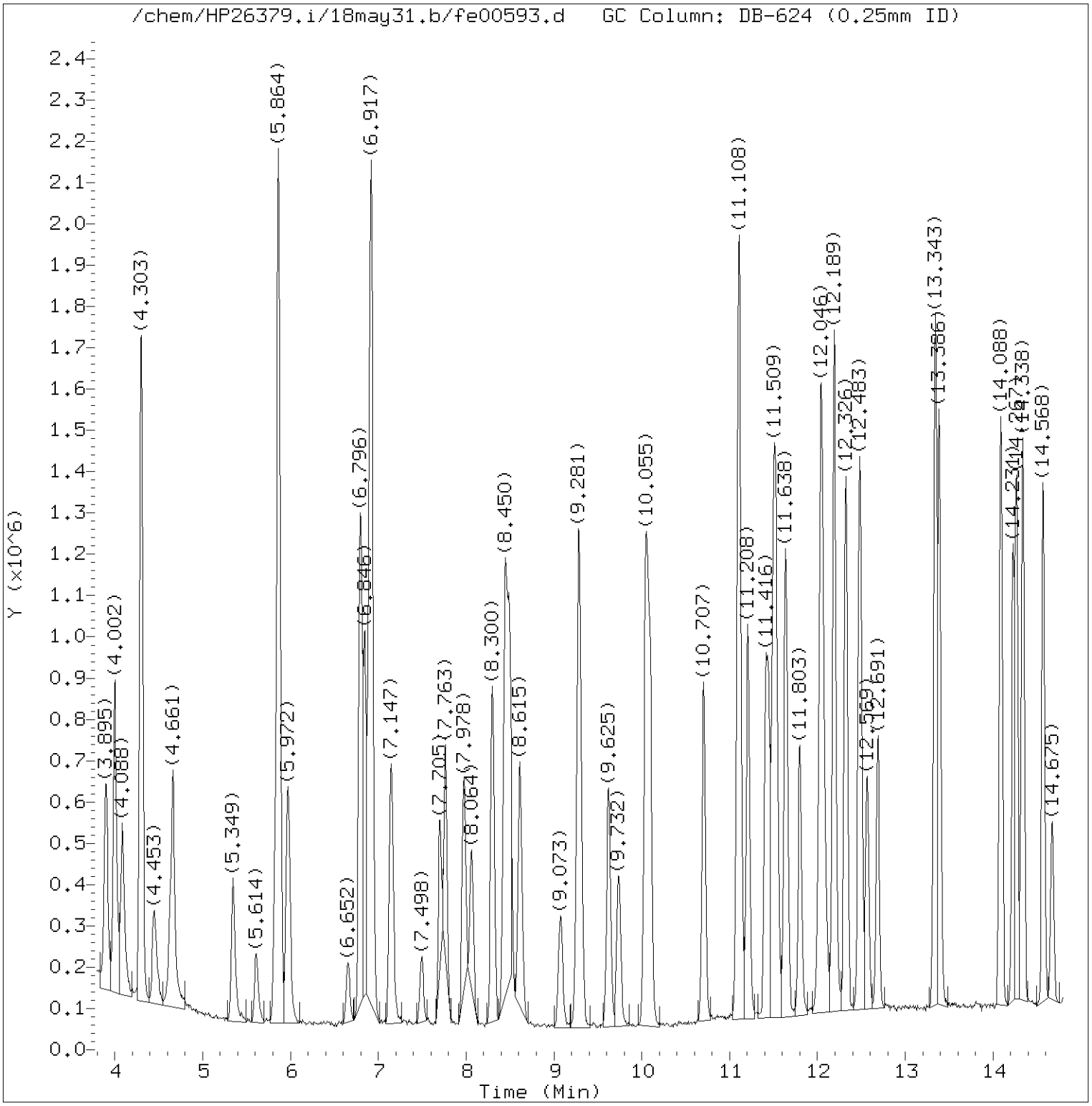
Operator: ads07818

Column phase: DB-624 Column diameter: 0.25

Data File: fe00590.d
Spectrum: Avg. Scans 2283-2285 (20.15), Background Scan 2270
Location of Maximum: 174.00
Number of points: 151

m/z	Y	m/z	Y	m/z	Y	m/z	Y
75.00	377536	120.00	308	161.00	1173	336.00	148
76.00	31792	122.00	439	165.00	106	342.00	140
77.00	3308	123.00	218	167.00	123		

Digitally signed by Jacob E. Bailey on 05/31/2018 at 15:58.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

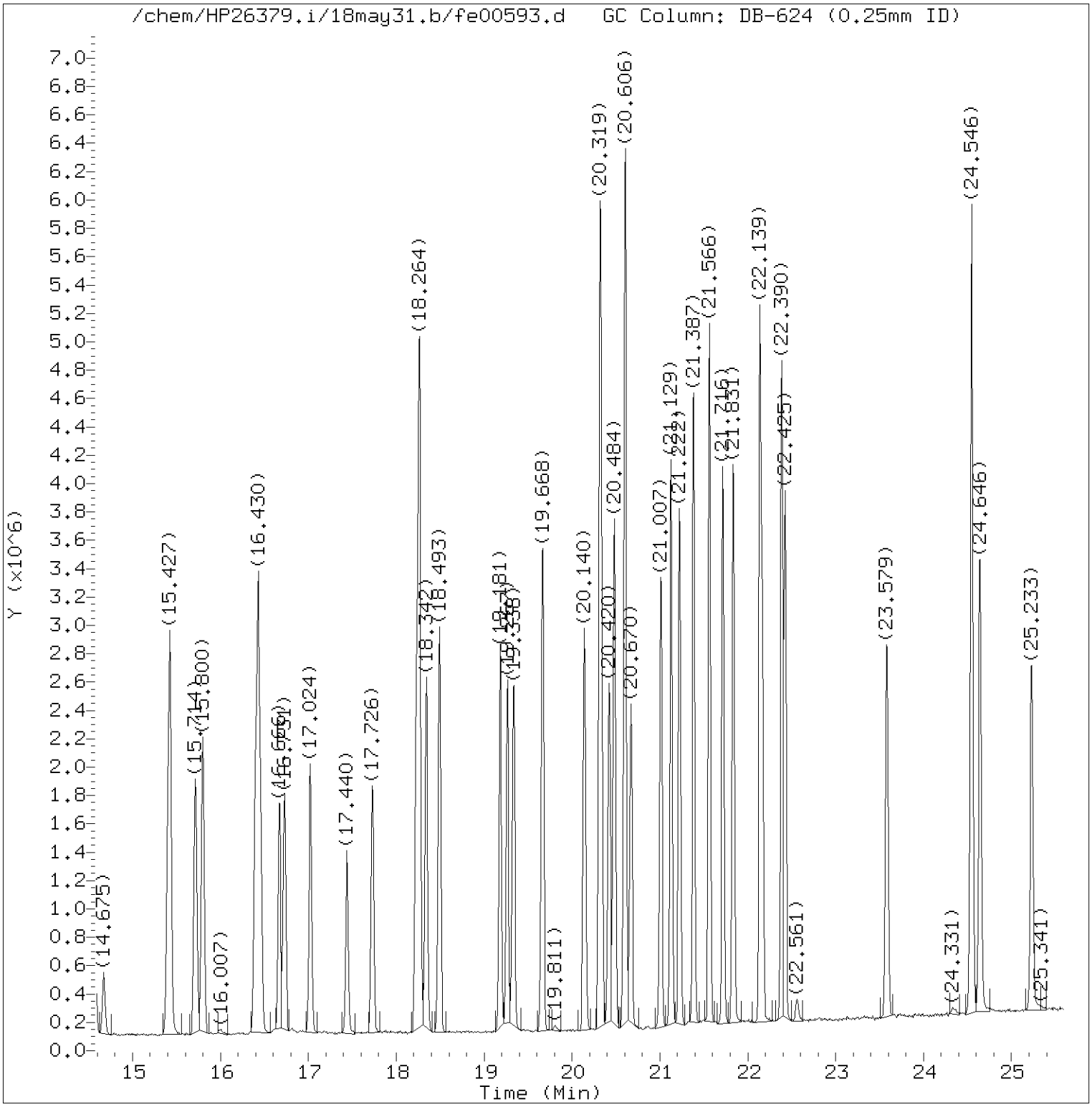
Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00593.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 12:14 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:20 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 05/31/2018 at 15:57.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00593.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 12:14 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:20 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 05/31/2018 at 15:57.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00593.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 12:14 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:20 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.895	41	457205	9.834
2) Dichlorodifluoromethane	(1)	4.002	85	1191776	10.616
3) Chlorodifluoromethane	(1)	4.088	51	882182	9.810
4) Freon 114	(1)	4.296	85	1219897	10.043
5) Chloromethane	(1)	4.453	50	500910	10.085
6) Vinyl Chloride	(1)	4.632	62	288783	10.452
7) 1,3-Butadiene	(1)	4.661	54	259264	10.182
8) Bromomethane	(1)	5.349	94	414354	11.137
9) Chloroethane	(1)	5.614	64	264036	10.547
10) Bromoethene	(1)	5.821	106	445911	10.427
11) Pentane	(1)	5.864	43	1061331	10.125
12) Trichlorofluoromethane	(1)	5.872	101	1241099	9.815
13) Dichlorofluoromethane	(1)	5.972	67	979923	10.500
14) Ethanol	(1)	6.645	45	220896	9.729
15) Freon123a	(1)	6.796	67	956349	10.762
16) 1,1-Dichloroethene	(1)	6.846	61	826049	10.684
17) Freon 113	(1)	6.910	103	697412	9.234
18) Carbon Disulfide	(1)	6.932	76	1267172	10.754
19) Methyl Iodide	(1)	7.147	142	1269205	9.805
20) Acrolein	(1)	7.498	56	226617	10.891
21) Isopropanol	(1)	7.698	45	1006083	10.286
22) 3-Chloropropene	(1)	7.770	41	826054	11.481
23) Methylene Chloride	(1)	7.978	84	429381	11.545
24) Acetone	(1)	8.064	43	846127	10.234
25) trans-1,2-Dichloroethene	(1)	8.300	61	757389	10.508
26) Hexane	(1)	8.450	56	551785	9.875
27) Methyl t-Butyl Ether	(1)	8.493	73	1353230	10.801
28) tert-Butyl Alcohol	(1)	8.615	59	1238144	10.657
29) Acetonitrile	(1)	9.073	41	515131	10.320
30) Di-Isopropyl Ether	(1)	9.288	45	2006702	9.632
31) 1,1-Dichloroethane	(1)	9.625	63	925386	10.130
32) Acrylonitrile	(1)	9.732	53	485606	10.357
33) Ethyl Tert-Butyl Ether	(1)	10.048	59	1751383	9.906
34) Vinyl Acetate	(1)	10.098	43	1890499	12.401
35) cis-1,2-Dichloroethene	(1)	10.707	61	717807	10.291
36) 1,2-Dichloroethene (total)	(1)		61	1475196	20.799
37)*Bromochloromethane	(1)	11.101	130	425871	10.000
38) Cyclohexane	(1)	11.115	56	939803	9.425

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 05/31/2018 at 15:57.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00593.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 12:14 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:20 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.208	83	1006104	10.005
40) Ethyl Acetate	(1)	11.416	43	1359053	9.853
41) Methyl Acrylate	(1)	11.444	55	1033744	10.205
42) Carbon Tetrachloride	(1)	11.502	117	1142308	9.542
43) Tetrahydrofuran	(1)	11.538	42	681578	9.968
44) 1,1,1-Trichloroethane	(1)	11.638	97	1088639	9.457
45) 2-Butanone	(1)	11.803	43	1203674	10.722
46) Isooctane	(2)	12.046	57	2810445	10.112
47) Heptane	(2)	12.189	71	539344	9.785
48) Benzene	(2)	12.326	78	1512929	10.022
49) Tert-Amyl Methyl Ether	(2)	12.483	73	1443943	10.140
50) 1,2-Dichloroethane	(2)	12.684	62	698770	9.899
51) Trichloroethene	(2)	13.343	130	771745	10.102
52)*1,4-Difluorobenzene	(2)	13.386	114	1530774	10.000
53) Dibromomethane	(2)	14.088	174	867097	10.291
54) Ethyl Acrylate	(2)	14.224	55	1361875	9.880
55) 1,2-Dichloropropane	(2)	14.267	63	618600	9.819
56) Bromodichloromethane	(2)	14.338	83	1090446	10.042
57) Methyl Methacrylate	(2)	14.568	69	534779	9.859
58) 1,4-Dioxane	(2)	14.675	88	375198	9.948
59) cis-1,3-Dichloropropene	(2)	15.398	75	930909	10.017
60) Octane	(3)	15.427	43	1600700	9.429
61) Toluene	(3)	15.800	91	1861360	9.806
62) 4-Methyl-2-Pentanone	(2)	16.394	43	1538169	9.429
63) Tetrachloroethene	(3)	16.430	166	1238764	9.922
64) trans-1,3-Dichloropropene	(3)	16.459	75	794975	9.911
65) 1,3-Dichloropropene (total)	(3)		75	1725884	19.980
66) Ethyl Methacrylate	(3)	16.673	69	916936	9.558
67) 1,1,2-Trichloroethane	(3)	16.731	97	685041	9.875
68) Dibromochloromethane	(3)	17.024	127	935917	9.804
69) 1,2-Dibromoethane	(3)	17.440	107	1070859	9.759
70) 2-Hexanone	(3)	17.726	43	1494727	9.543
71)*Chlorobenzene-d5	(3)	18.228	117	1494003	10.000
72) Chlorobenzene	(3)	18.257	112	1625153	9.616
73) Ethylbenzene	(3)	18.271	91	2515425	9.267
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	922210	9.617
75) m/p-Xylene	(3)	18.493	91	1927704	9.536
76) o-Xylene	(3)	19.181	91	1945012	9.496

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 05/31/2018 at 15:57.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00593.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 12:14 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:20 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	3872716	19.032
78) Styrene	(3)	19.267	104	1518457	9.657
79) Bromoform	(3)	19.331	173	1461431	9.705
80) Cumene	(3)	19.668	105	2852791M	9.467
81) n-Propylbenzene	(3)	20.319	120	854341	9.545
82) Bromobenzene	(3)	20.327	156	1152376	9.721
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	1450409	9.484
84) 4-Ethyltoluene	(3)	20.484	105	2892118	9.532
85) 2-Chlorotoluene	(3)	20.599	126	763605	9.477
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	2405304	9.549
87) 1,2,3-Trichloropropane	(3)	20.670	110	467830	9.357
88) Alpha Methyl Styrene	(3)	21.014	118	1260933	9.625
89) tert-Butylbenzene	(3)	21.129	119	2346752	9.458
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	2378005	9.462
91) sec-Butylbenzene	(3)	21.387	105	3525801	9.426
92) p-Isopropyltoluene	(3)	21.566	119	3082150	9.674
93) 1,3-Dichlorobenzene	(3)	21.716	146	1850369	9.268
94) 1,4-Dichlorobenzene	(3)	21.838	146	1890667	9.287
95) n-Butylbenzene	(3)	22.139	92	1695594	9.608
96) Benzyl Chloride	(3)	22.168	126	505651	9.823
97) Hexachloroethane	(3)	22.390	117	954075	9.754
98) 1,2-Dichlorobenzene	(3)	22.425	146	1780130	9.521
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	965573	9.580
100) Hexachlorobutadiene	(3)	24.546	225	1633979	9.069
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	1530324	9.156
102) Naphthalene	(3)	25.233	128	2841790	9.318

M = Compound was manually integrated.

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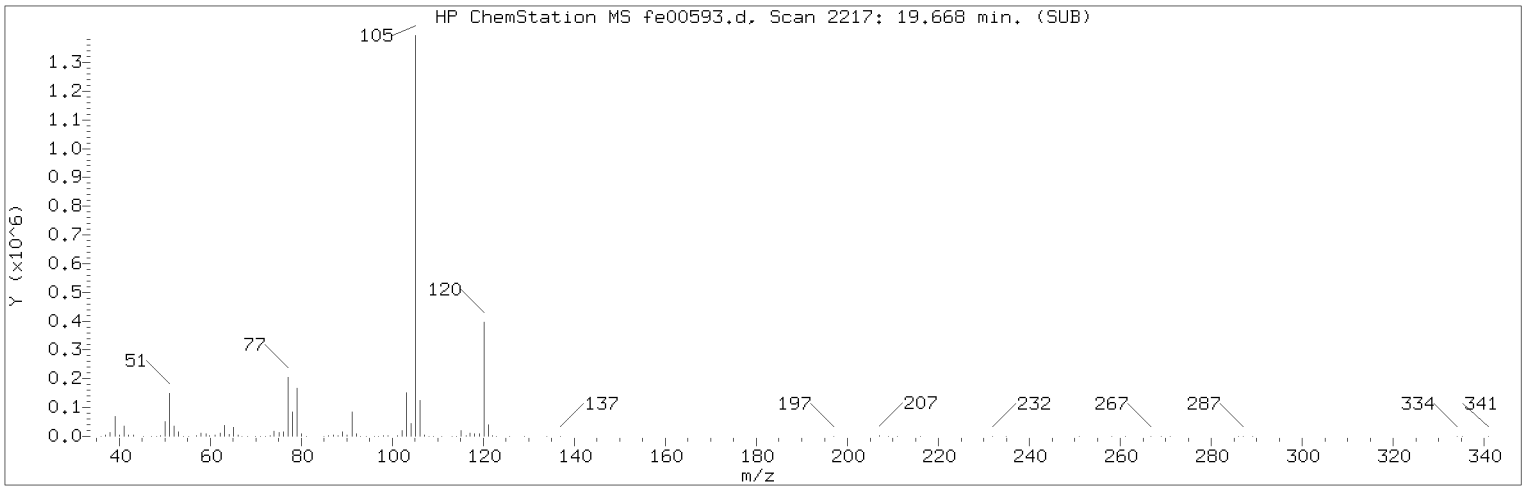
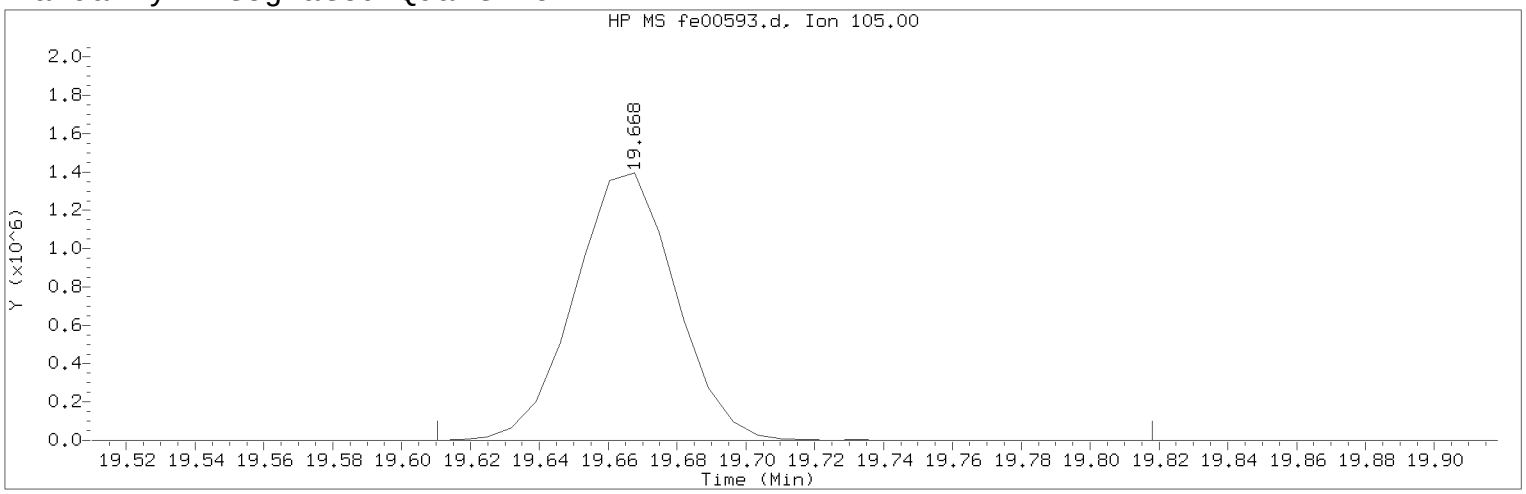
on 05/31/2018 at 15:57.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18may31.b/fe00593.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 12:14 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:20 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

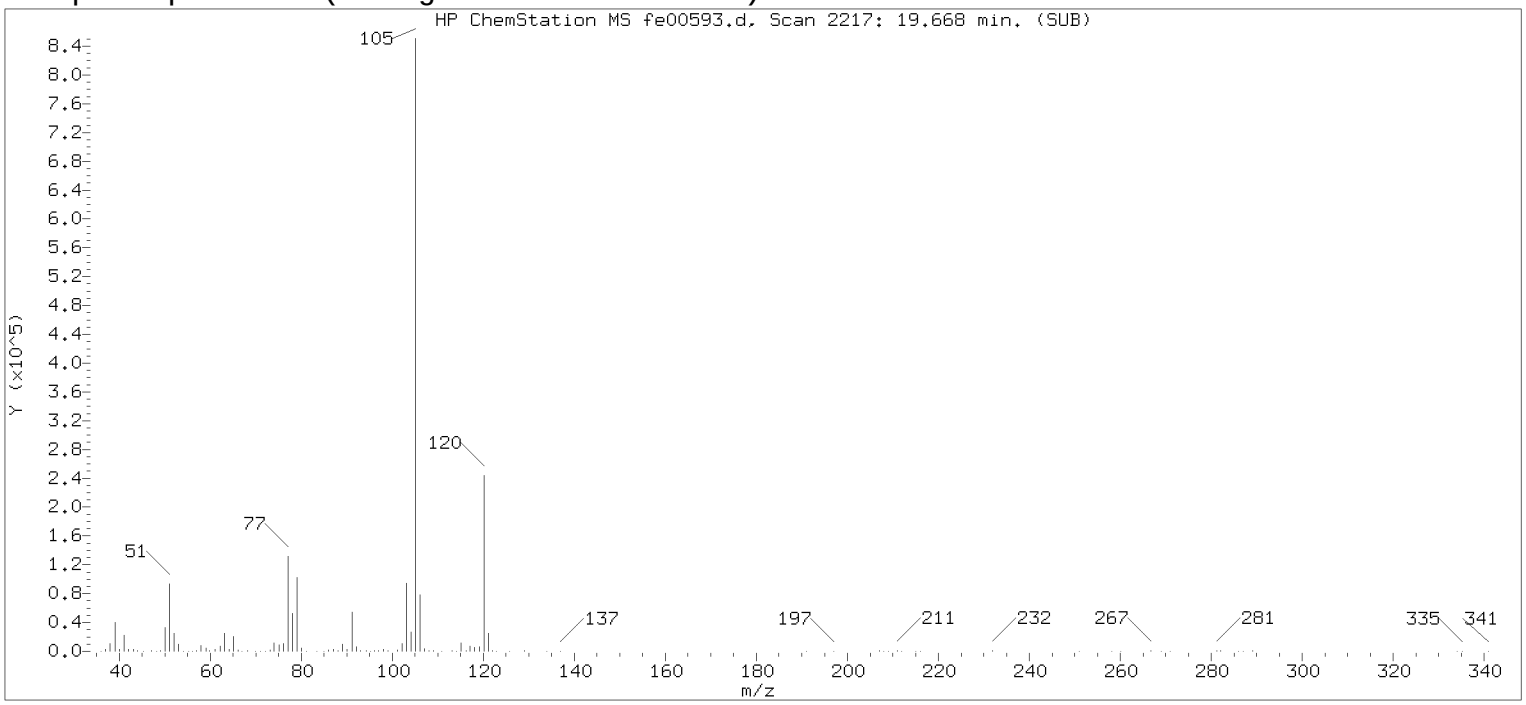
Compound Number : 80
Compound Name : Cumene
Scan Number : 2217
Retention Time (minutes): 19.668
Quant Ion : 105.00
Area (flag) : 2852791M
Concentration (ppb(v)) : 9.4668
Integration start scan : 2208 Integration stop scan: 2237
Y at integration start : 359 Y at integration end: 359

Reason for manual integration: improper integration

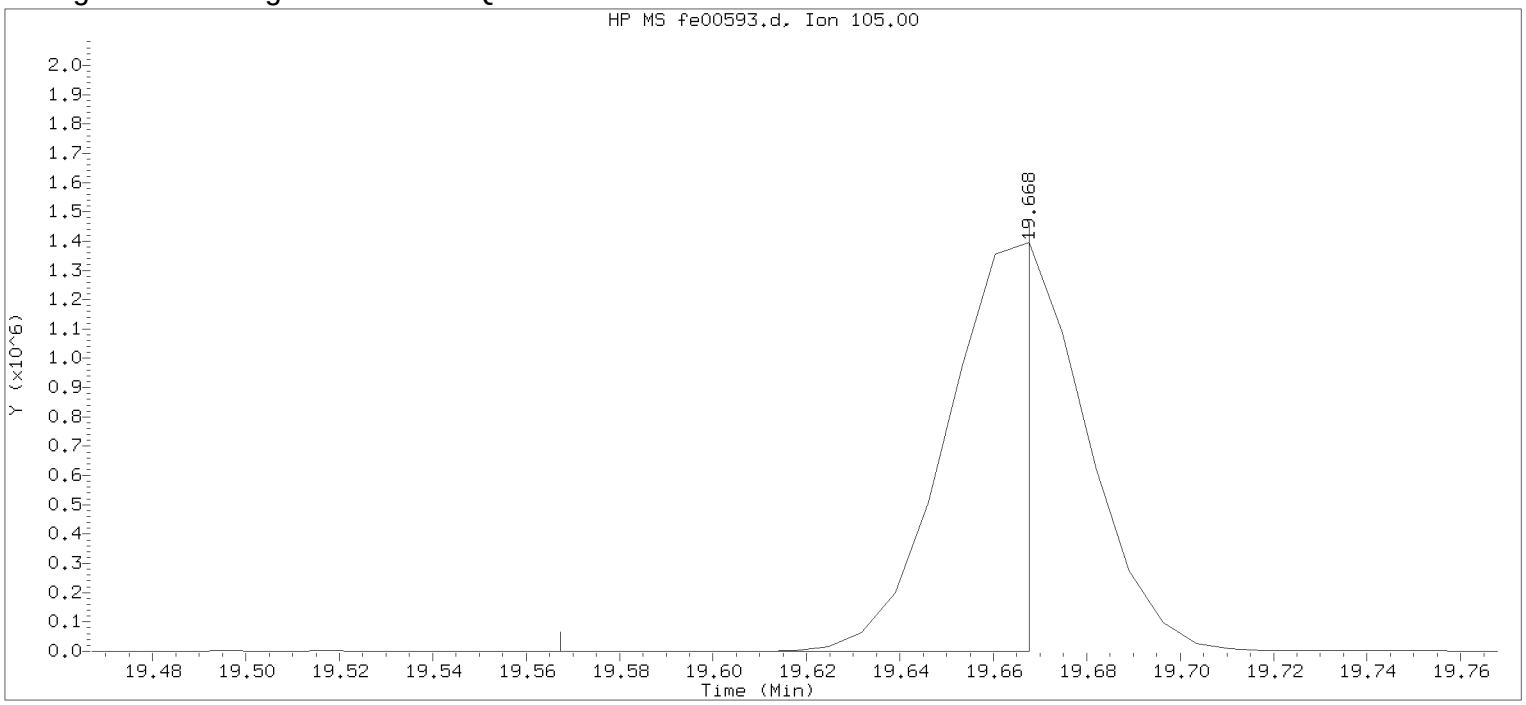
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 05/31/2018 at 15:57.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/01/2018 at 10:41.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18may31.b/fe00593.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 12:14 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 10:16
Date, time and analyst ID of latest file update: 31-May-2018 12:42 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 80
Compound Name : Cumene
Scan Number : 2217
Retention Time (minutes): 19.668
Quant Ion : 105.00
Area : 1638866
Concentration (ppb(v)) : 5.9866
Integration start scan : 2202 Integration stop scan: 2216
Y at integration start : 509 Y at integration end: 509

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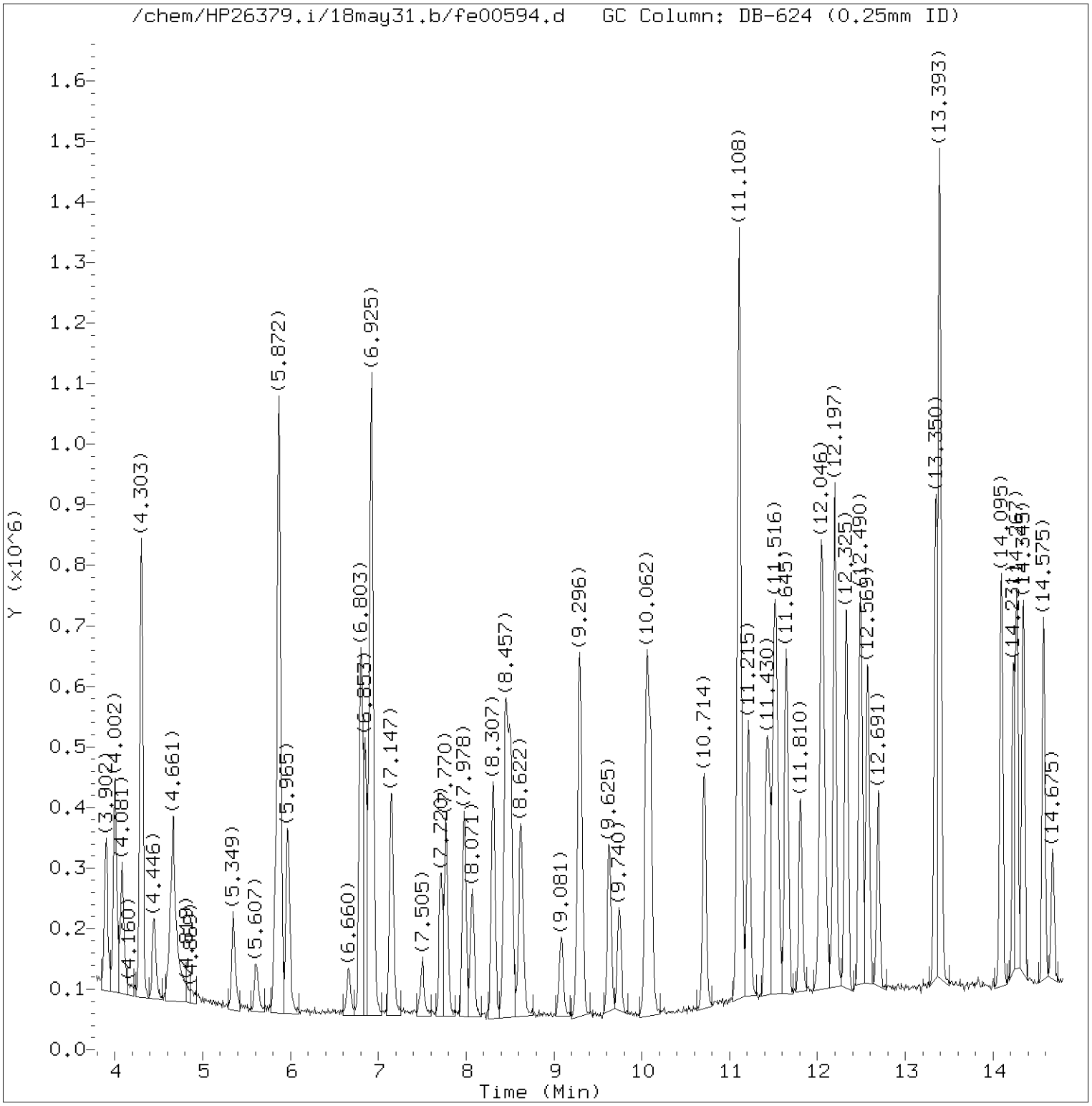
Target 3.5 esignature used. GLED1 Page 1455 of 1687



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00594.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 12:45 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 18:20
Date, time and analyst ID of latest file update: 31-May-2018 18:20 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

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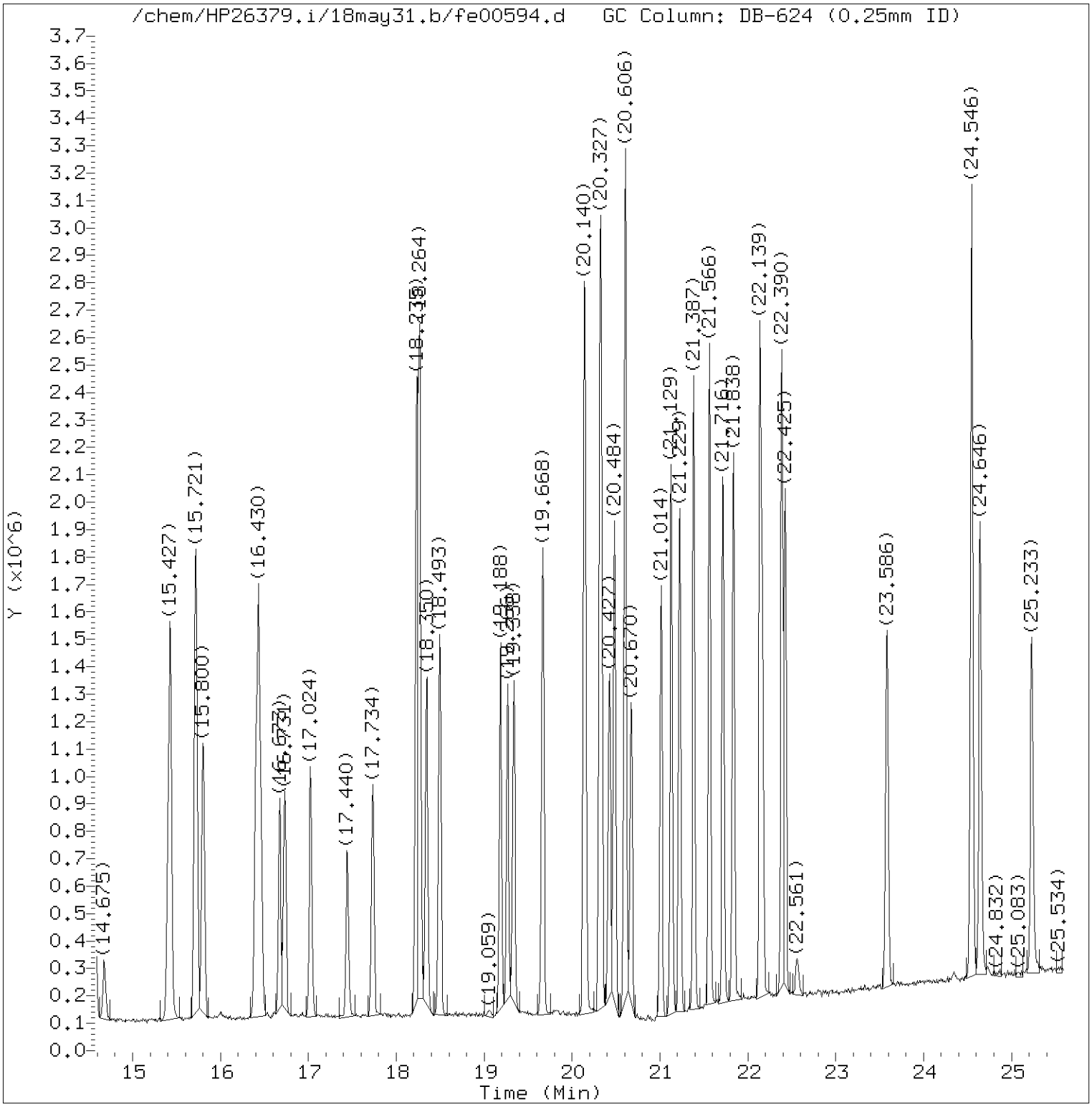
on 05/31/2018 at 18:20.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00594.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 12:45 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 18:20
Date, time and analyst ID of latest file update: 31-May-2018 18:20 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Digitally signed by Jacob E. Bailey
on 05/31/2018 at 18:20.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00594.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 12:45 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 18:20
Date, time and analyst ID of latest file update: 31-May-2018 18:20 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.895	41	220206	4.982
2) Dichlorodifluoromethane	(1)	4.002	85	563083	5.276
3) Chlorodifluoromethane	(1)	4.088	51	422857	4.946
4) Freon 114	(1)	4.303	85	579552	5.018
5) Chloromethane	(1)	4.446	50	243497	5.157
6) Vinyl Chloride	(1)	4.632	62	138102	5.258
7) 1,3-Butadiene	(1)	4.668	54	116161	4.798
8) Bromomethane	(1)	5.349	94	178980	5.060
9) Chloroethane	(1)	5.607	64	124857	5.246
10) Bromoethene	(1)	5.829	106	209558	5.154
11) Pentane	(1)	5.864	43	507676	5.094
12) Trichlorofluoromethane	(1)	5.872	101	591684	4.922
13) Dichlorofluoromethane	(1)	5.972	67	462752	5.216
14) Ethanol	(1)	6.660	45	111899	5.184
15) Freon123a	(1)	6.803	67	470475	5.569
16) 1,1-Dichloroethene	(1)	6.853	61	383038	5.211
17) Freon 113	(1)	6.910	103	355300	4.948
18) Carbon Disulfide	(1)	6.932	76	592649	5.291
19) Methyl Iodide	(1)	7.154	142	685010	5.566
20) Acrolein	(1)	7.490	56	102398	5.176
21) Isopropanol	(1)	7.712	45	473088	5.088
22) 3-Chloropropene	(1)	7.770	41	390073	5.703
23) Methylene Chloride	(1)	7.978	84	210851	5.963
24) Acetone	(1)	8.071	43	397686	5.059
25) trans-1,2-Dichloroethene	(1)	8.307	61	358274	5.228
26) Hexane	(1)	8.457	56	257502	4.847
27) Methyl t-Butyl Ether	(1)	8.508	73	662593	5.041
28) tert-Butyl Alcohol	(1)	8.622	59	603767	5.466
29) Acetonitrile	(1)	9.081	41	240165	5.061
30) Di-Isopropyl Ether	(1)	9.296	45	980251	4.949
31) 1,1-Dichloroethane	(1)	9.625	63	442463	5.095
32) Acrylonitrile	(1)	9.747	53	232616	5.218
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	854885	5.086
34) Vinyl Acetate	(1)	10.105	43	895799	5.726
35) cis-1,2-Dichloroethene	(1)	10.714	61	345164	5.205
36) 1,2-Dichloroethene (total)	(1)		61	703438	10.433
37)*Bromochloromethane	(1)	11.108	130	404885	10.000
38) Cyclohexane	(1)	11.122	56	469407	4.952

* = Compound is an internal standard.

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on 05/31/2018 at 18:20.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00594.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 12:45 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 18:20
Date, time and analyst ID of latest file update: 31-May-2018 18:20 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	493370	5.161
40) Ethyl Acetate	(1)	11.423	43	666180	5.080
41) Methyl Acrylate	(1)	11.459	55	489585	5.084
42) Carbon Tetrachloride	(1)	11.509	117	564132	4.957
43) Tetrahydrofuran	(1)	11.545	42	333433	5.129
44) 1,1,1-Trichloroethane	(1)	11.645	97	546590	4.994
45) 2-Butanone	(1)	11.810	43	595204	5.166
46) Isooctane	(2)	12.053	57	1366252	5.088
47) Heptane	(2)	12.197	71	262063	4.922
48) Benzene	(2)	12.333	78	745206	5.110
49) Tert-Amyl Methyl Ether	(2)	12.490	73	693397	5.041
50) 1,2-Dichloroethane	(2)	12.698	62	348977	5.117
51) Trichloroethene	(2)	13.350	130	375555	5.089
52)*1,4-Difluorobenzene	(2)	13.393	114	1478765	10.000
53) Dibromomethane	(2)	14.095	174	414022	5.086
54) Ethyl Acrylate	(2)	14.231	55	658613	4.946
55) 1,2-Dichloropropane	(2)	14.267	63	304114	4.997
56) Bromodichloromethane	(2)	14.345	83	515529	4.915
57) Methyl Methacrylate	(2)	14.575	69	253382	4.836
58) 1,4-Dioxane	(2)	14.675	88	181971	4.994
59) cis-1,3-Dichloropropene	(2)	15.406	75	447602	4.986
60) Octane	(3)	15.434	43	785748	4.774
61) Toluene	(3)	15.800	91	914750	4.970
62) 4-Methyl-2-Pentanone	(2)	16.401	43	760894	4.828
63) Tetrachloroethene	(3)	16.437	166	596082	4.924
64) trans-1,3-Dichloropropene	(3)	16.466	75	386120	4.965
65) 1,3-Dichloropropene (total)	(3)		75	833722	9.954
66) Ethyl Methacrylate	(3)	16.673	69	440176	4.732
67) 1,1,2-Trichloroethane	(3)	16.731	97	329070	4.892
68) Dibromochloromethane	(3)	17.024	127	453592	4.900
69) 1,2-Dibromoethane	(3)	17.440	107	529302	4.975
70) 2-Hexanone	(3)	17.734	43	722581	4.758
71)*Chlorobenzene-d5	(3)	18.235	117	1448579	10.000
72) Chlorobenzene	(3)	18.264	112	798914	4.875
73) Ethylbenzene	(3)	18.271	91	1273807	4.840
74) 1,1,1,2-Tetrachloroethane	(3)	18.350	131	459745	4.945
75) m/p-Xylene	(3)	18.493	91	947591	4.834
76) o-Xylene	(3)	19.188	91	972719	4.898

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 05/31/2018 at 18:20.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00594.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 12:45 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 18:20
Date, time and analyst ID of latest file update: 31-May-2018 18:20 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	1920310	9.733
78) Styrene	(3)	19.266	104	726717	4.767
79) Bromoform	(3)	19.338	173	711119	4.871
80) Cumene	(3)	19.668	105	1405233	4.809
81) n-Propylbenzene	(3)	20.319	120	433646	4.997
82) Bromobenzene	(3)	20.334	156	569483	4.955
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	732354	4.939
84) 4-Ethyltoluene	(3)	20.484	105	1443893	4.908
85) 2-Chlorotoluene	(3)	20.599	126	385629	4.936
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	1195200	4.894
87) 1,2,3-Trichloropropane	(3)	20.678	110	243715	5.027
88) Alpha Methyl Styrene	(3)	21.014	118	605967	4.771
89) tert-Butylbenzene	(3)	21.129	119	1195545	4.970
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	1174048	4.818
91) sec-Butylbenzene	(3)	21.387	105	1777186	4.900
92) p-Isopropyltoluene	(3)	21.566	119	1504240	4.870
93) 1,3-Dichlorobenzene	(3)	21.723	146	930710	4.808
94) 1,4-Dichlorobenzene	(3)	21.838	146	950877	4.817
95) n-Butylbenzene	(3)	22.139	92	848110	4.957
96) Benzyl Chloride	(3)	22.168	126	242734	4.863
97) Hexachloroethane	(3)	22.390	117	470823	4.964
98) 1,2-Dichlorobenzene	(3)	22.425	146	885414	4.884
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	479216	4.904
100) Hexachlorobutadiene	(3)	24.546	225	854011	4.889
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	798222	4.926
102) Naphthalene	(3)	25.233	128	1449721	4.902

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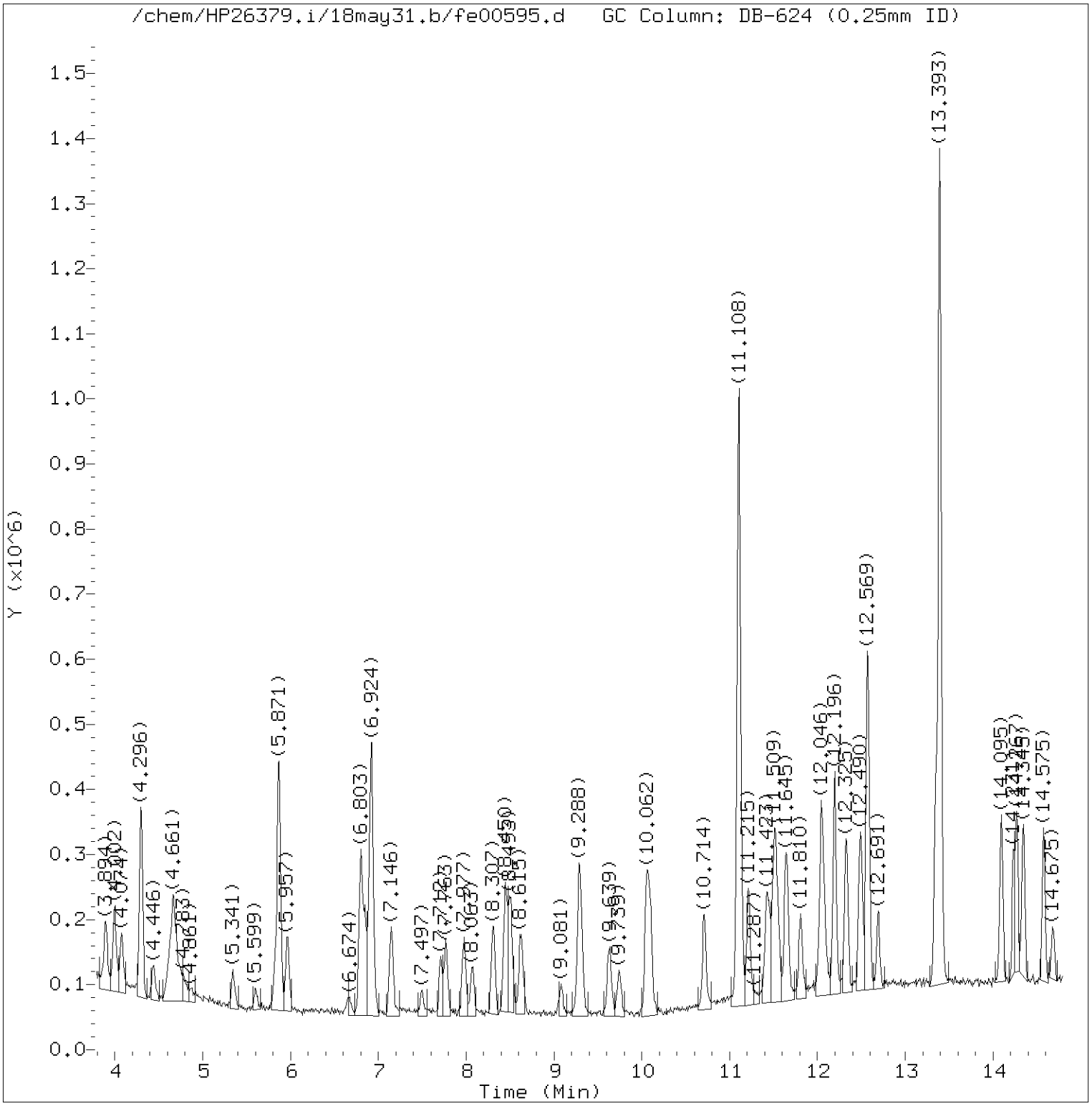
on 05/31/2018 at 18:20.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00595.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 13:16 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:19 ads07818

Sample Name: VSTD002 Lab Sample ID: VSTD002

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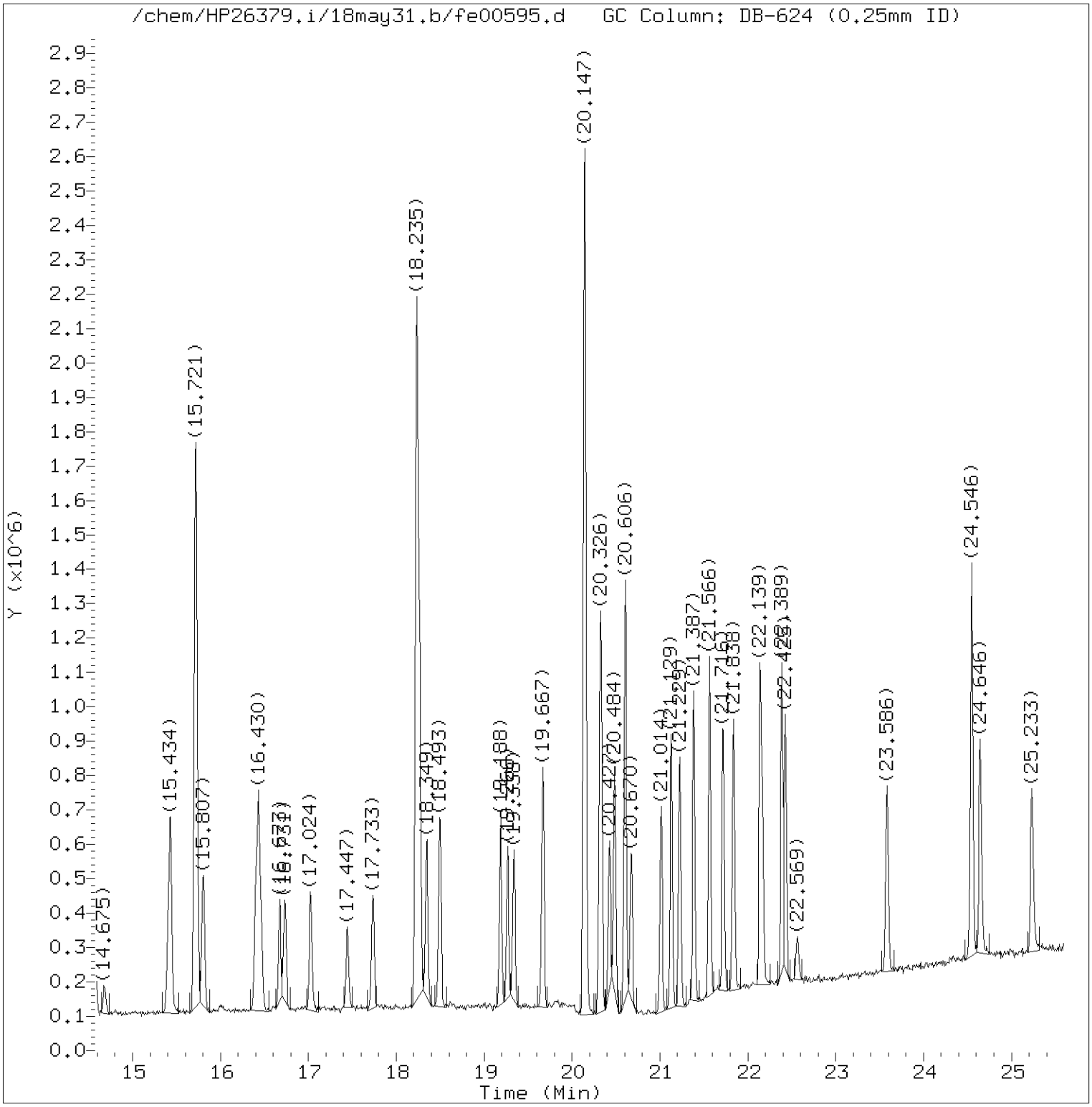
on 05/31/2018 at 15:57.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00595.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 13:16 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:19 ads07818

Sample Name: VSTD002 Lab Sample ID: VSTD002

Digitally signed by Jacob E. Bailey
on 05/31/2018 at 15:57.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00595.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 13:16 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:19 ads07818

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.894	41	85314	2.033
2) Dichlorodifluoromethane	(1)	3.995	85	189270	1.835
3) Chlorodifluoromethane	(1)	4.081	51	168521	2.068
4) Freon 114	(1)	4.296	85	215284	1.968
5) Chloromethane	(1)	4.439	50	86796	1.929
6) Vinyl Chloride	(1)	4.632	62	50284	1.946
7) 1,3-Butadiene	(1)	4.661	54	47052	2.044
8) Bromomethane	(1)	5.356	94	66172	1.898
9) Chloroethane	(1)	5.592	64	42217	1.843
10) Bromoethene	(1)	5.821	106	72194	1.863
11) Pentane	(1)	5.864	43	189386	1.978
12) Trichlorofluoromethane	(1)	5.871	101	231669	2.040
13) Dichlorofluoromethane	(1)	5.972	67	164124	1.903
14) Ethanol	(1)	6.659	45	36233	1.831
15) Freon123a	(1)	6.803	67	182378	2.273
16) 1,1-Dichloroethene	(1)	6.853	61	131631	1.851
17) Freon 113	(1)	6.910	103	147865	2.168
18) Carbon Disulfide	(1)	6.932	76	196759	1.812
19) Methyl Iodide	(1)	7.146	142	239429	1.969
20) Acrolein	(1)	7.497	56	29485	1.617
21) Isopropanol	(1)	7.712	45	163863	1.870
22) 3-Chloropropene	(1)	7.763	41	134086	2.068
23) Methylene Chloride	(1)	7.977	84	70111	2.048
24) Acetone	(1)	8.063	43	139097	1.882
25) trans-1,2-Dichloroethene	(1)	8.307	61	124887	1.882
26) Hexane	(1)	8.443	56	103413	2.060
27) Methyl t-Butyl Ether	(1)	8.507	73	257562	2.049
28) tert-Butyl Alcohol	(1)	8.622	59	245019	2.336
29) Acetonitrile	(1)	9.073	41	85912	1.906
30) Di-Isopropyl Ether	(1)	9.288	45	382083	2.051
31) 1,1-Dichloroethane	(1)	9.639	63	159071	1.929
32) Acrylonitrile	(1)	9.739	53	82620	1.914
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	314962	1.975
34) Vinyl Acetate	(1)	10.105	43	325376	2.169
35) cis-1,2-Dichloroethene	(1)	10.714	61	120444	1.894
36) 1,2-Dichloroethene (total)	(1)		61	245331	3.776
37)*Bromochloromethane	(1)	11.108	130	385100	10.000
38) Cyclohexane	(1)	11.122	56	187414	2.098

* = 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/HP26379.i/18may31.b/fe00595.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 13:16 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:19 ads07818

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	176465	1.939
40) Ethyl Acetate	(1)	11.416	43	252462	2.015
41) Methyl Acrylate	(1)	11.451	55	175865	1.922
42) Carbon Tetrachloride	(1)	11.509	117	219157	2.053
43) Tetrahydrofuran	(1)	11.552	42	118030	1.924
44) 1,1,1-Trichloroethane	(1)	11.645	97	216024	2.088
45) 2-Butanone	(1)	11.810	43	221078	1.994
46) Isooctane	(2)	12.046	57	504061	1.959
47) Heptane	(2)	12.189	71	103487	2.050
48) Benzene	(2)	12.333	78	273072	1.959
49) Tert-Amyl Methyl Ether	(2)	12.497	73	256442	1.954
50) 1,2-Dichloroethane	(2)	12.698	62	125824	1.947
51) Trichloroethene	(2)	13.343	130	135095	1.927
52)*1,4-Difluorobenzene	(2)	13.393	114	1410977	10.000
53) Dibromomethane	(2)	14.095	174	148103	1.907
54) Ethyl Acrylate	(2)	14.231	55	249827	1.993
55) 1,2-Dichloropropane	(2)	14.274	63	117311	2.026
56) Bromodichloromethane	(2)	14.345	83	195416	1.977
57) Methyl Methacrylate	(2)	14.575	69	99062	2.019
58) 1,4-Dioxane	(2)	14.675	88	68582	1.986
59) cis-1,3-Dichloropropene	(2)	15.405	75	162927	1.934
60) Octane	(3)	15.434	43	328670	2.149
61) Toluene	(3)	15.807	91	345224	2.010
62) 4-Methyl-2-Pentanone	(2)	16.401	43	320647	2.151
63) Tetrachloroethene	(3)	16.437	166	228272	2.015
64) trans-1,3-Dichloropropene	(3)	16.466	75	148021	2.023
65) 1,3-Dichloropropene (total)	(3)		75	310948	3.965
66) Ethyl Methacrylate	(3)	16.673	69	178363	2.090
67) 1,1,2-Trichloroethane	(3)	16.731	97	129745	2.053
68) Dibromochloromethane	(3)	17.024	127	168357	1.978
69) 1,2-Dibromoethane	(3)	17.447	107	204713	2.046
70) 2-Hexanone	(3)	17.733	43	296659	2.112
71)*Chlorobenzene-d5	(3)	18.235	117	1366151	10.000
72) Chlorobenzene	(3)	18.264	112	321064	2.095
73) Ethylbenzene	(3)	18.271	91	504010	2.093
74) 1,1,1,2-Tetrachloroethane	(3)	18.349	131	183430	2.094
75) m/p-Xylene	(3)	18.493	91	379455	2.090
76) o-Xylene	(3)	19.188	91	389658	2.102

* = Compound is an internal standard.

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Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00595.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 13:16 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:19 ads07818

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	769113	4.192
78) Styrene	(3)	19.266	104	287586	2.056
79) Bromoform	(3)	19.338	173	275215	2.037
80) Cumene	(3)	19.667	105	570348	2.444
81) n-Propylbenzene	(3)	20.319	120	166956	2.058
82) Bromobenzene	(3)	20.334	156	221967	2.057
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	300286	2.140
84) 4-Ethyltoluene	(3)	20.484	105	565832	2.071
85) 2-Chlorotoluene	(3)	20.599	126	157188	2.132
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	473702	2.083
87) 1,2,3-Trichloropropane	(3)	20.670	110	99880	2.161
88) Alpha Methyl Styrene	(3)	21.014	118	235354	2.033
89) tert-Butylbenzene	(3)	21.129	119	478896	2.114
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	476961	2.112
91) sec-Butylbenzene	(3)	21.387	105	696293	2.077
92) p-Isopropyltoluene	(3)	21.566	119	595707	2.070
93) 1,3-Dichlorobenzene	(3)	21.723	146	378429	2.126
94) 1,4-Dichlorobenzene	(3)	21.838	146	385036	2.120
95) n-Butylbenzene	(3)	22.139	92	330582	2.065
96) Benzyl Chloride	(3)	22.160	126	90433	1.977
97) Hexachloroethane	(3)	22.389	117	174118	1.985
98) 1,2-Dichlorobenzene	(3)	22.425	146	364885	2.137
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	183968	2.039
100) Hexachlorobutadiene	(3)	24.546	225	350491	2.165
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	310092	2.088
102) Naphthalene	(3)	25.233	128	559339	2.064

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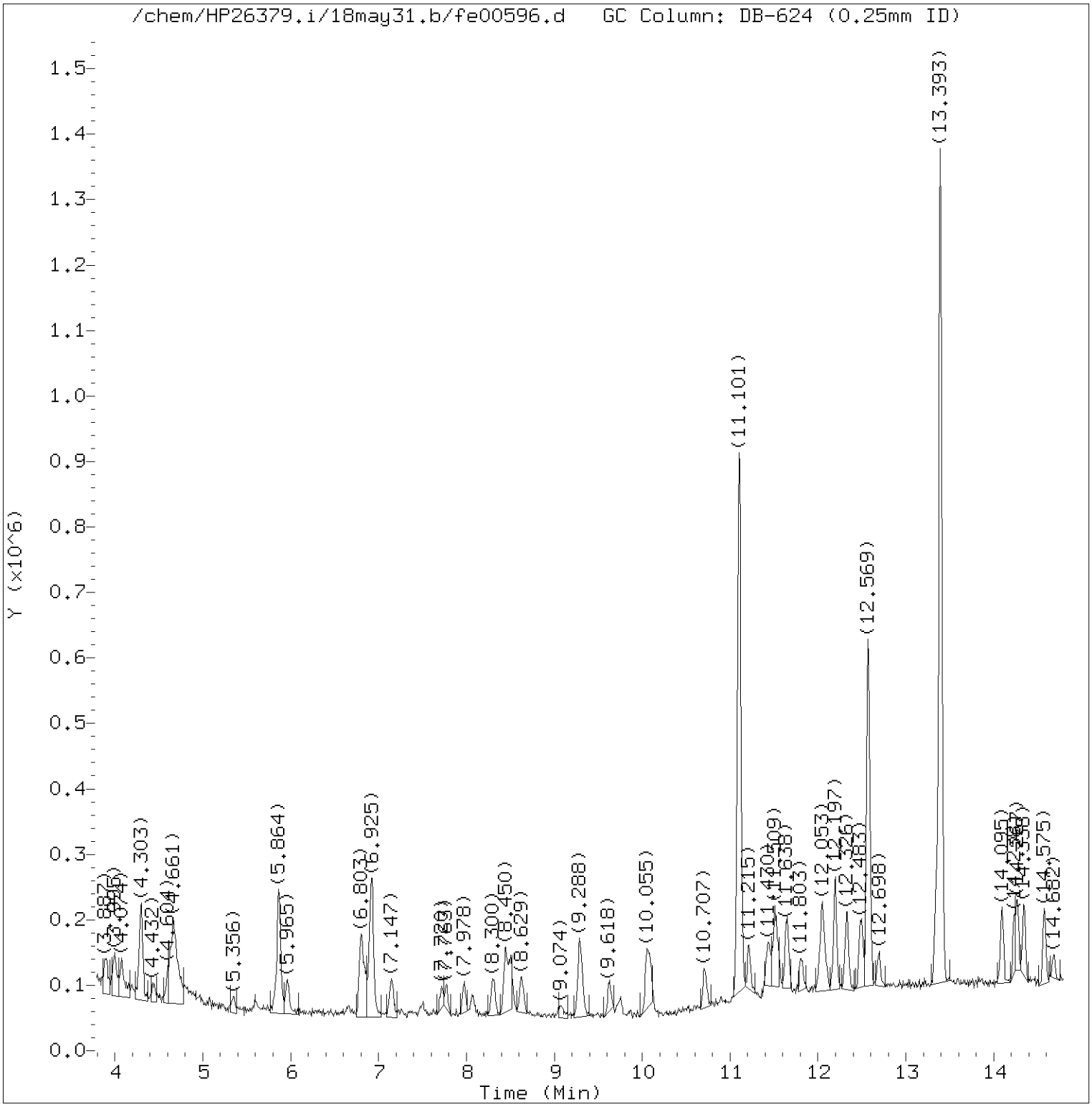

Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00596.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 13:46 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:19 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

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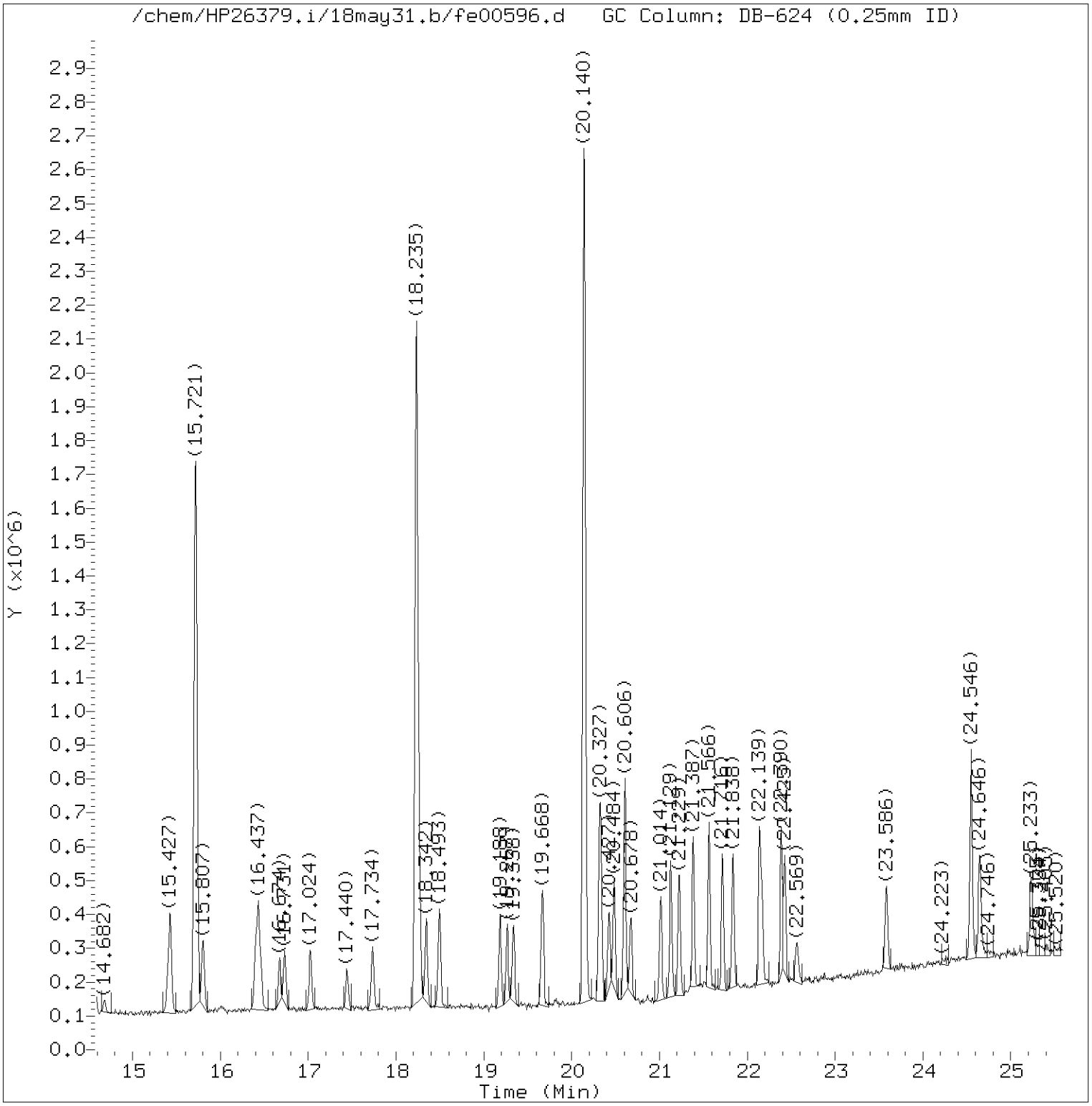
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00596.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 13:46 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:19 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

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on 05/31/2018 at 15:57.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00596.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 13:46 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:19 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.887	41	38940	0.952
2) Dichlorodifluoromethane	(1)	3.995	85	78175	0.813
3) Chlorodifluoromethane	(1)	4.074	51	75544	0.951
4) Freon 114	(1)	4.303	85	108606	1.002
5) Chloromethane	(1)	4.432	50	41617	0.950
6) Vinyl Chloride	(1)	4.632	62	20020	0.827
7) 1,3-Butadiene	(1)	4.668	54	26964	1.131
8) Bromomethane	(1)	5.334	94	21680	0.692
9) Chloroethane	(1)	5.592	64	18452	0.853
10) Bromoethene	(1)	5.829	106	30636	0.841
11) Pentane	(1)	5.864	43	88986	0.953
12) Trichlorofluoromethane	(1)	5.864	101	118092	1.037
13) Dichlorofluoromethane	(1)	5.965	67	68074	0.840
14) Ethanol	(1)	6.660	45	17696	0.925
15) Freon123a	(1)	6.796	67	91557	1.142
16) 1,1-Dichloroethene	(1)	6.839	61	54639	0.822
17) Freon 113	(1)	6.910	103	76597	1.098
18) Carbon Disulfide	(1)	6.932	76	83519	0.823
19) Methyl Iodide	(1)	7.147	142	94867	0.832
20) Acrolein	(1)	7.498	56	16211	0.921
21) Isopropanol	(1)	7.713	45	77654	0.919
22) 3-Chloropropene	(1)	7.763	41	60877	0.984
23) Methylene Chloride	(1)	7.978	84	29946	0.931
24) Acetone	(1)	8.064	43	68357	0.950
25) trans-1,2-Dichloroethene	(1)	8.300	61	50890	0.821
26) Hexane	(1)	8.450	56	51481	1.027
27) Methyl t-Butyl Ether	(1)	8.508	73	121244	0.980
28) tert-Butyl Alcohol	(1)	8.629	59	118044	1.130
29) Acetonitrile	(1)	9.074	41	37662	0.878
30) Di-Isopropyl Ether	(1)	9.296	45	188908	1.018
31) 1,1-Dichloroethane	(1)	9.632	63	74596	0.934
32) Acrylonitrile	(1)	9.740	53	33024	0.819
33) Ethyl Tert-Butyl Ether	(1)	10.055	59	148519	0.955
34) Vinyl Acetate	(1)	10.098	43	141392	0.989
35) cis-1,2-Dichloroethene	(1)	10.714	61	50749	0.847
36) 1,2-Dichloroethene (total)	(1)		61	101639	1.668
37)*Bromochloromethane	(1)	11.101	130	381280	10.000
38) Cyclohexane	(1)	11.115	56	90924	1.021

* = 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/HP26379.i/18may31.b/fe00596.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 13:46 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:19 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	81957	0.931
40) Ethyl Acetate	(1)	11.423	43	114556	0.942
41) Methyl Acrylate	(1)	11.452	55	80352	0.913
42) Carbon Tetrachloride	(1)	11.509	117	112147	1.045
43) Tetrahydrofuran	(1)	11.545	42	56431	0.946
44) 1,1,1-Trichloroethane	(1)	11.652	97	108814	1.046
45) 2-Butanone	(1)	11.810	43	99661	0.929
46) Isooctane	(2)	12.053	57	226938	0.910
47) Heptane	(2)	12.204	71	51847	1.022
48) Benzene	(2)	12.326	78	133603	0.970
49) Tert-Amyl Methyl Ether	(2)	12.490	73	120751	0.941
50) 1,2-Dichloroethane	(2)	12.698	62	59862	0.945
51) Trichloroethene	(2)	13.343	130	64533	0.941
52)*1,4-Difluorobenzene	(2)	13.393	114	1407768	10.000
53) Dibromomethane	(2)	14.095	174	69611	0.922
54) Ethyl Acrylate	(2)	14.231	55	123600	0.991
55) 1,2-Dichloropropane	(2)	14.274	63	58150	1.005
56) Bromodichloromethane	(2)	14.338	83	97140	0.989
57) Methyl Methacrylate	(2)	14.582	69	49939	1.015
58) 1,4-Dioxane	(2)	14.682	88	31736	0.940
59) cis-1,3-Dichloropropene	(2)	15.406	75	82481	0.986
60) Octane	(3)	15.434	43	176376	1.108
61) Toluene	(3)	15.807	91	181346	1.039
62) 4-Methyl-2-Pentanone	(2)	16.401	43	164390	1.077
63) Tetrachloroethene	(3)	16.437	166	119952	1.041
64) trans-1,3-Dichloropropene	(3)	16.459	75	69938	0.964
65) 1,3-Dichloropropene (total)	(3)		75	152419	1.953
66) Ethyl Methacrylate	(3)	16.674	69	96648	1.094
67) 1,1,2-Trichloroethane	(3)	16.731	97	64572	1.014
68) Dibromochloromethane	(3)	17.024	127	87553	1.019
69) 1,2-Dibromoethane	(3)	17.440	107	100971	1.005
70) 2-Hexanone	(3)	17.734	43	157260	1.085
71)*Chlorobenzene-d5	(3)	18.235	117	1370420	10.000
72) Chlorobenzene	(3)	18.257	112	170870	1.081
73) Ethylbenzene	(3)	18.271	91	279695	1.114
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	92420	1.038
75) m/p-Xylene	(3)	18.493	91	201810	1.079
76) o-Xylene	(3)	19.188	91	197908	1.047

* = 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/HP26379.i/18may31.b/fe00596.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 13:46 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:19 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	399718	2.126
78) Styrene	(3)	19.267	104	150918	1.055
79) Bromoform	(3)	19.338	173	138761	1.018
80) Cumene	(3)	19.668	105	293644	1.179
81) n-Propylbenzene	(3)	20.319	120	85520	1.038
82) Bromobenzene	(3)	20.334	156	116689	1.057
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	154193	1.070
84) 4-Ethyltoluene	(3)	20.484	105	291796	1.048
85) 2-Chlorotoluene	(3)	20.599	126	79609	1.056
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	238850	1.035
87) 1,2,3-Trichloropropane	(3)	20.678	110	49386	1.048
88) Alpha Methyl Styrene	(3)	21.014	118	125526	1.060
89) tert-Butylbenzene	(3)	21.129	119	229261	1.007
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	242234	1.051
91) sec-Butylbenzene	(3)	21.387	105	368115	1.069
92) p-Isopropyltoluene	(3)	21.566	119	298913	1.026
93) 1,3-Dichlorobenzene	(3)	21.716	146	199326	1.085
94) 1,4-Dichlorobenzene	(3)	21.838	146	203083	1.084
95) n-Butylbenzene	(3)	22.139	92	161365	1.004
96) Benzyl Chloride	(3)	22.168	126	46789	1.015
97) Hexachloroethane	(3)	22.390	117	89406	1.012
98) 1,2-Dichlorobenzene	(3)	22.425	146	184434	1.057
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	90854	1.003
100) Hexachlorobutadiene	(3)	24.546	225	174734	1.056
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	154770	1.029
102) Naphthalene	(3)	25.233	128	283684	1.032

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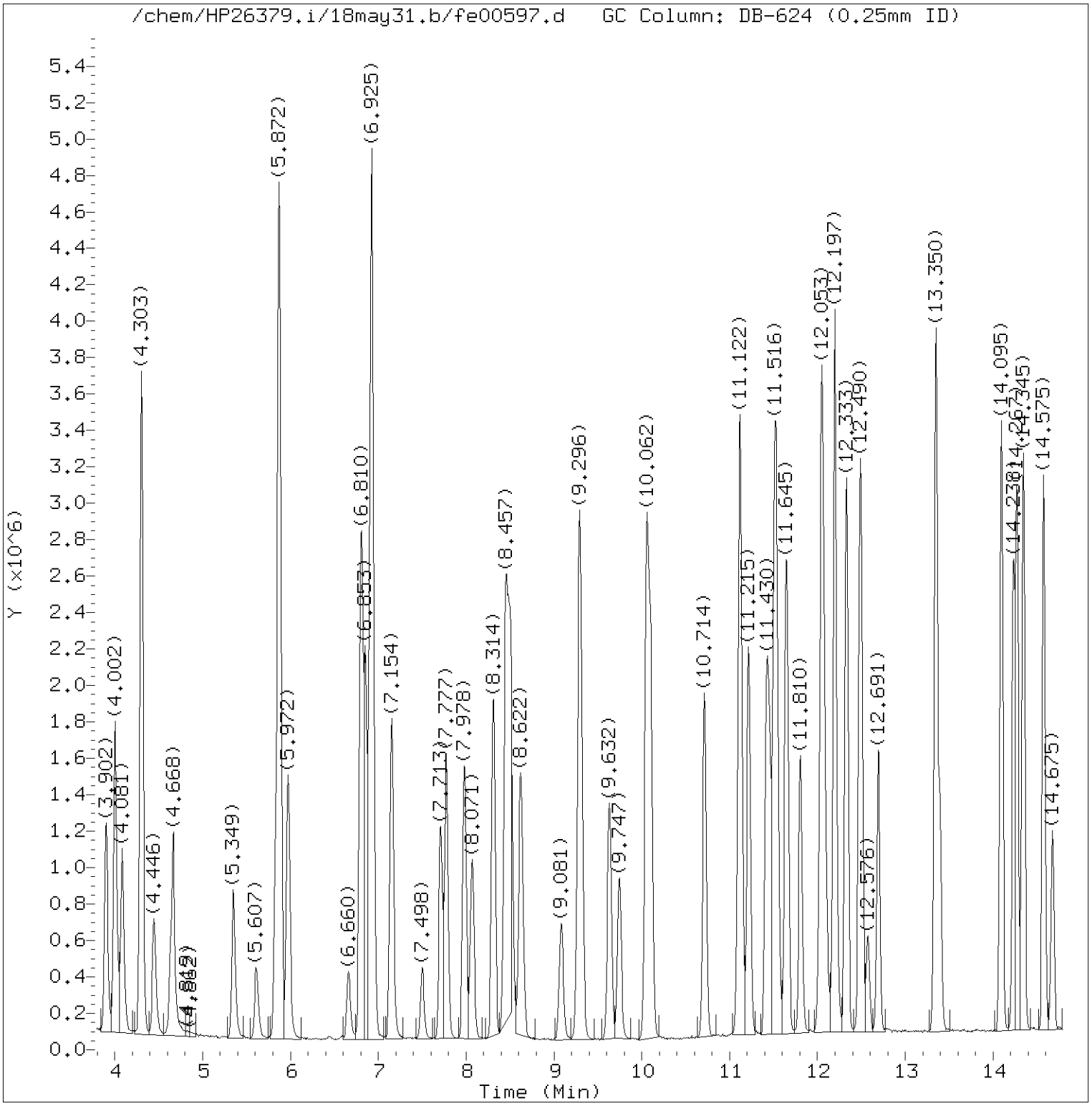
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00597.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 14:17 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:23 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

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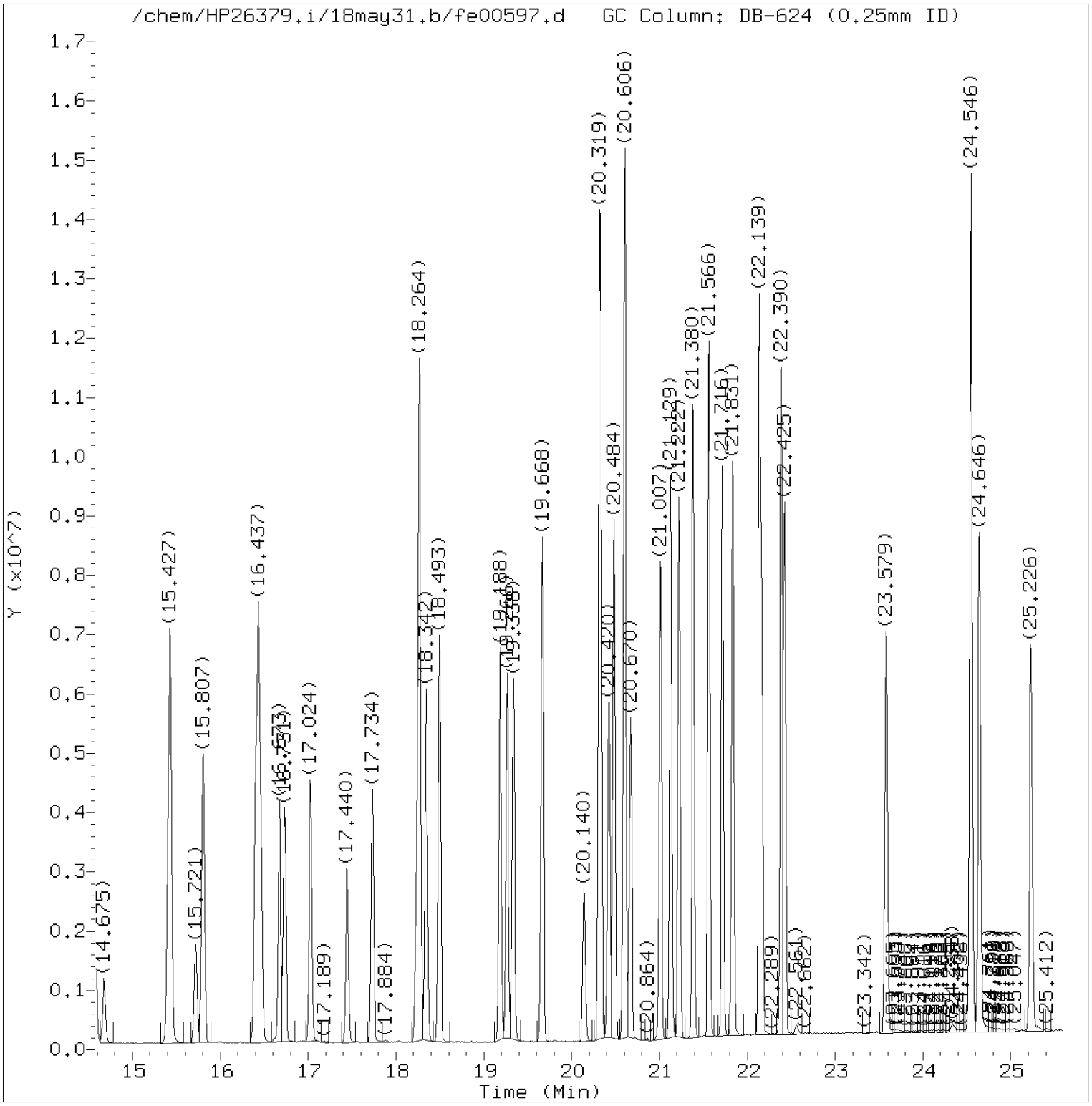
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00597.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 14:17 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:23 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

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Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00597.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 14:17 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:23 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	1059910	25.134
2) Dichlorodifluoromethane	(1)	4.002	85	2708135	26.596
3) Chlorodifluoromethane	(1)	4.088	51	2063159	25.293
4) Freon 114	(1)	4.303	85	2723922	24.722
5) Chloromethane	(1)	4.446	50	1168862	25.945
6) Vinyl Chloride	(1)	4.632	62	641250	25.588
7) 1,3-Butadiene	(1)	4.668	54	518767	22.461
8) Bromomethane	(1)	5.349	94	889661	26.361
9) Chloroethane	(1)	5.607	64	593635	26.142
10) Bromoethene	(1)	5.829	106	1040635	26.826
11) Pentane	(1)	5.864	43	2391931	25.156
12) Trichlorofluoromethane	(1)	5.879	101	2821853	24.602
13) Dichlorofluoromethane	(1)	5.972	67	2205287	26.052
14) Ethanol	(1)	6.652	45	549224	26.669
15) Freon123a	(1)	6.803	67	2171420	26.938
16) 1,1-Dichloroethene	(1)	6.853	61	1849948	26.380
17) Freon 113	(1)	6.917	103	1632871	23.835
18) Carbon Disulfide	(1)	6.939	76	2817575	26.363
19) Methyl Iodide	(1)	7.154	142	3211867	27.355
20) Acrolein	(1)	7.498	56	510766	27.063
21) Isopropanol	(1)	7.713	45	2268818	25.574
22) 3-Chloropropene	(1)	7.777	41	1890763	28.972
23) Methylene Chloride	(1)	7.978	84	976229	28.937
24) Acetone	(1)	8.071	43	1952754	26.038
25) trans-1,2-Dichloroethene	(1)	8.314	61	1713320	26.207
26) Hexane	(1)	8.450	56	1257626	24.812
27) Methyl t-Butyl Ether	(1)	8.500	73	3168707	27.882
28) tert-Butyl Alcohol	(1)	8.622	59	2849205	27.035
29) Acetonitrile	(1)	9.088	41	1185858	26.192
30) Di-Isopropyl Ether	(1)	9.296	45	4758180	25.179
31) 1,1-Dichloroethane	(1)	9.632	63	2120003	25.585
32) Acrylonitrile	(1)	9.747	53	1120642	26.349
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	4115757	25.665
34) Vinyl Acetate	(1)	10.105	43	4381311	31.684
35) cis-1,2-Dichloroethene	(1)	10.714	61	1662575	26.278
36) 1,2-Dichloroethene (total)	(1)		61	3375895	52.485
37)*Bromochloromethane	(1)	11.108	130	386291	10.000
38) Cyclohexane	(1)	11.122	56	2270560	25.104

* = Compound is an internal standard.

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on 05/31/2018 at 15:57.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00597.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 14:17 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:23 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	2325507	25.496
40) Ethyl Acetate	(1)	11.423	43	3197018	25.553
41) Methyl Acrylate	(1)	11.459	55	2380589	25.908
42) Carbon Tetrachloride	(1)	11.509	117	2720575	25.055
43) Tetrahydrofuran	(1)	11.545	42	1600306	25.803
44) 1,1,1-Trichloroethane	(1)	11.645	97	2569929	24.611
45) 2-Butanone	(1)	11.810	43	2754430M	25.059
46) Isooctane	(2)	12.053	57	6658909	26.511
47) Heptane	(2)	12.197	71	1252504	25.146
48) Benzene	(2)	12.333	78	3486957	25.561
49) Tert-Amyl Methyl Ether	(2)	12.490	73	3334032	25.908
50) 1,2-Dichloroethane	(2)	12.691	62	1658519	25.998
51) Trichloroethene	(2)	13.350	130	1790126	25.929
52)*1,4-Difluorobenzene	(2)	13.393	114	1383341	10.000
53) Dibromomethane	(2)	14.095	174	1967588	25.840
54) Ethyl Acrylate	(2)	14.231	55	3197412	25.670
55) 1,2-Dichloropropane	(2)	14.274	63	1433649	25.181
56) Bromodichloromethane	(2)	14.345	83	2524046	25.722
57) Methyl Methacrylate	(2)	14.575	69	1247180	25.443
58) 1,4-Dioxane	(2)	14.675	88	882153	25.881
59) cis-1,3-Dichloropropene	(2)	15.406	75	2169943	25.837
60) Octane	(3)	15.434	43	3832382	24.625
61) Toluene	(3)	15.807	91	4393940	25.252
62) 4-Methyl-2-Pentanone	(2)	16.401	43	3631385	24.632
63) Tetrachloroethene	(3)	16.437	166	2851801	24.918
64) trans-1,3-Dichloropropene	(3)	16.466	75	1891406	25.722
65) 1,3-Dichloropropene (total)	(3)		75	4061349	51.288
66) Ethyl Methacrylate	(3)	16.673	69	2178684	24.774
67) 1,1,2-Trichloroethane	(3)	16.731	97	1600169	25.163
68) Dibromochloromethane	(3)	17.024	127	2274809	25.994
69) 1,2-Dibromoethane	(3)	17.440	107	2527621	25.128
70) 2-Hexanone	(3)	17.734	43	3578359	24.922
71)*Chlorobenzene-d5	(3)	18.228	117	1369575	10.000
72) Chlorobenzene	(3)	18.256	112	3792163	24.477
73) Ethylbenzene	(3)	18.271	91	6014140	24.169
74) 1,1,1,2-Tetrachloroethane	(3)	18.350	131	2186786	24.877
75) m/p-Xylene	(3)	18.493	91	4684852	25.280
76) o-Xylene	(3)	19.188	91	4739672	25.243

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

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on 05/31/2018 at 15:57.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00597.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 14:17 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:23 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	9424524	50.523
78) Styrene	(3)	19.266	104	3749777	26.015
79) Bromoform	(3)	19.338	173	3592234	26.023
80) Cumene	(3)	19.668	105	6866495	24.856
81) n-Propylbenzene	(3)	20.319	120	2082793	25.384
82) Bromobenzene	(3)	20.327	156	2711079	24.947
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	3428985	24.458
84) 4-Ethyltoluene	(3)	20.484	105	6933027	24.926
85) 2-Chlorotoluene	(3)	20.599	126	1838624	24.891
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	5796737	25.105
87) 1,2,3-Trichloropropane	(3)	20.670	110	1107951	24.172
88) Alpha Methyl Styrene	(3)	21.014	118	3171421	26.409
89) tert-Butylbenzene	(3)	21.129	119	5672082	24.938
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	5770315	25.045
91) sec-Butylbenzene	(3)	21.380	105	8456491	24.663
92) p-Isopropyltoluene	(3)	21.566	119	7399381	25.335
93) 1,3-Dichlorobenzene	(3)	21.716	146	4514471	24.667
94) 1,4-Dichlorobenzene	(3)	21.831	146	4601467	24.656
95) n-Butylbenzene	(3)	22.139	92	4266087	26.371
96) Benzyl Chloride	(3)	22.160	126	1289938	27.336
97) Hexachloroethane	(3)	22.382	117	2358202	26.299
98) 1,2-Dichlorobenzene	(3)	22.425	146	4285567	25.003
99) 1,2-Dibromo-3-chloropropane	(3)	23.579	157	2496163	27.015
100) Hexachlorobutadiene	(3)	24.546	225	4148395	25.117
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	3981475	25.986
102) Naphthalene	(3)	25.226	128	7485378	26.773

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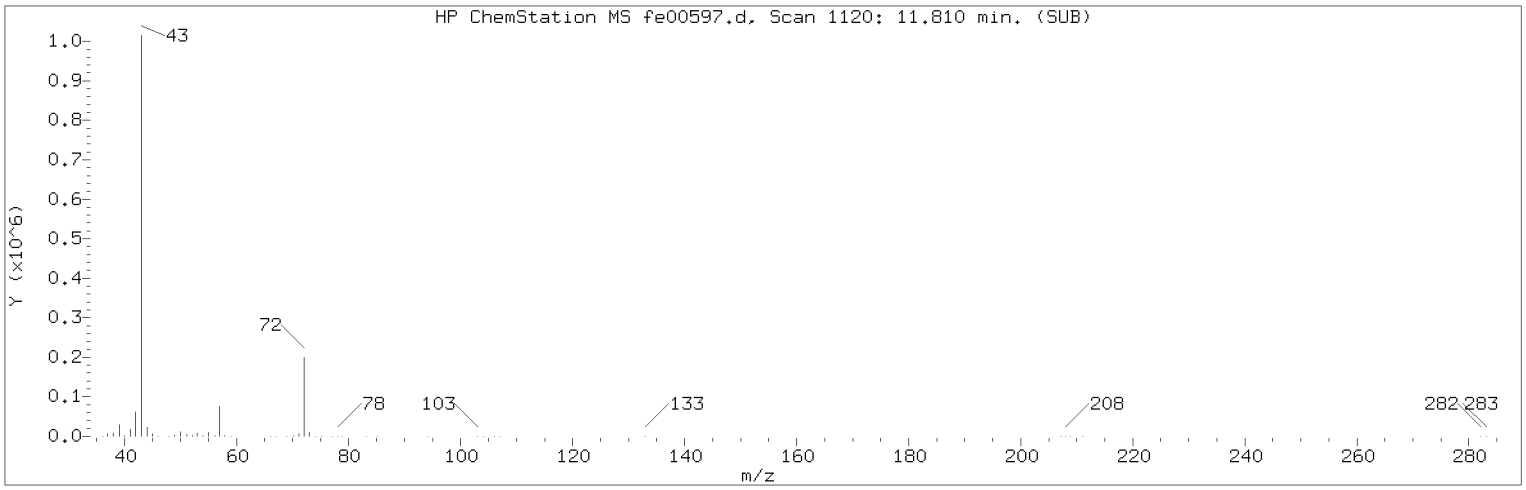
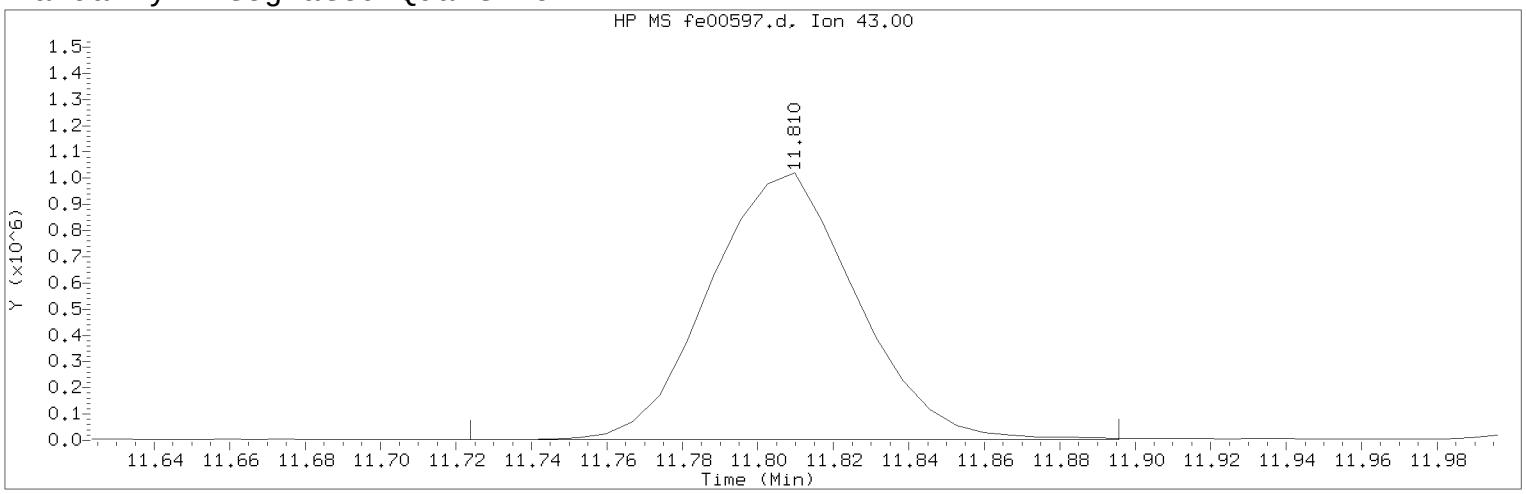
on 05/31/2018 at 15:57.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18may31.b/fe00597.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 14:17 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:23 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

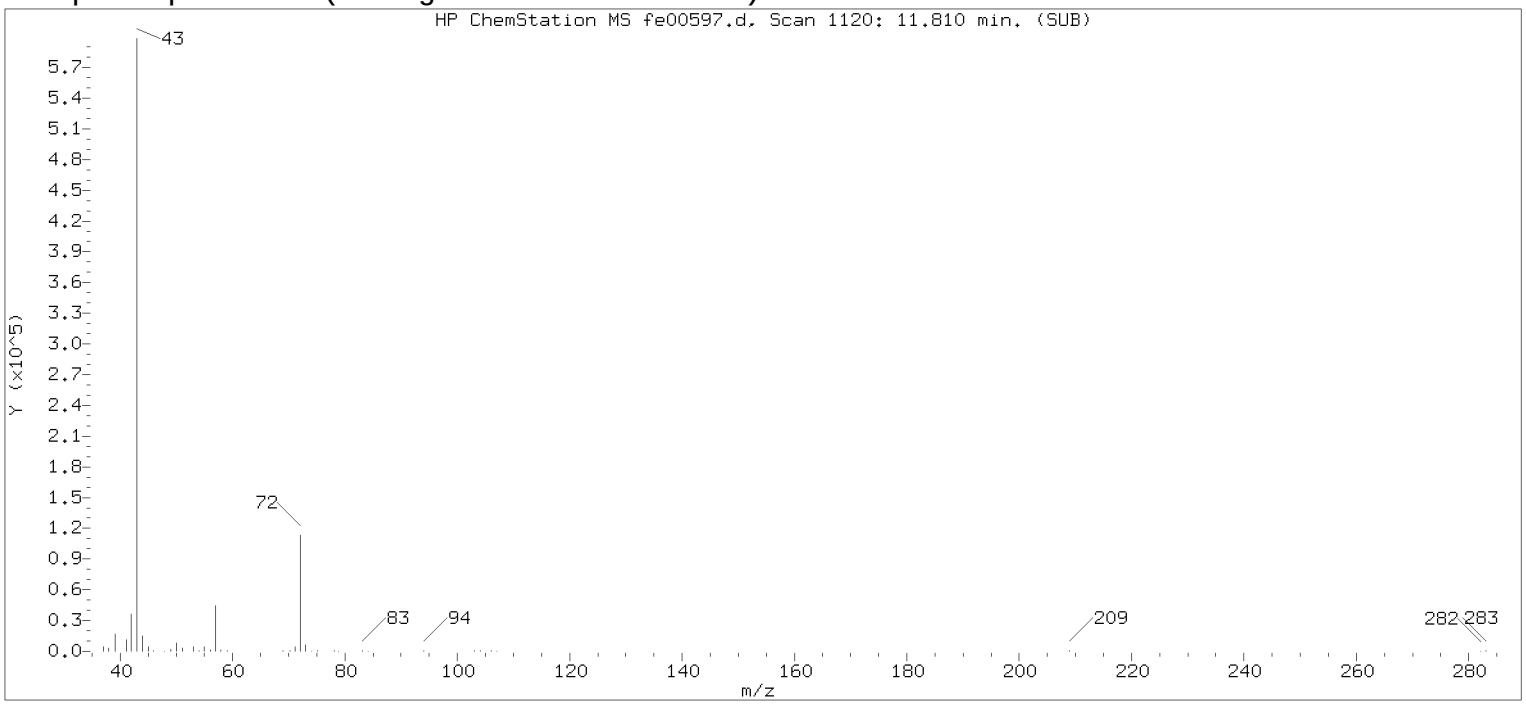
Compound Number : 45
Compound Name : 2-Butanone
Scan Number : 1120
Retention Time (minutes): 11.810
Quant Ion : 43.00
Area (flag) : 2754430M
Concentration (ppb(v)) : 25.0589
Integration start scan : 1107 Integration stop scan: 1131
Y at integration start : 2374 Y at integration end: 2374

Reason for manual integration: improper integration

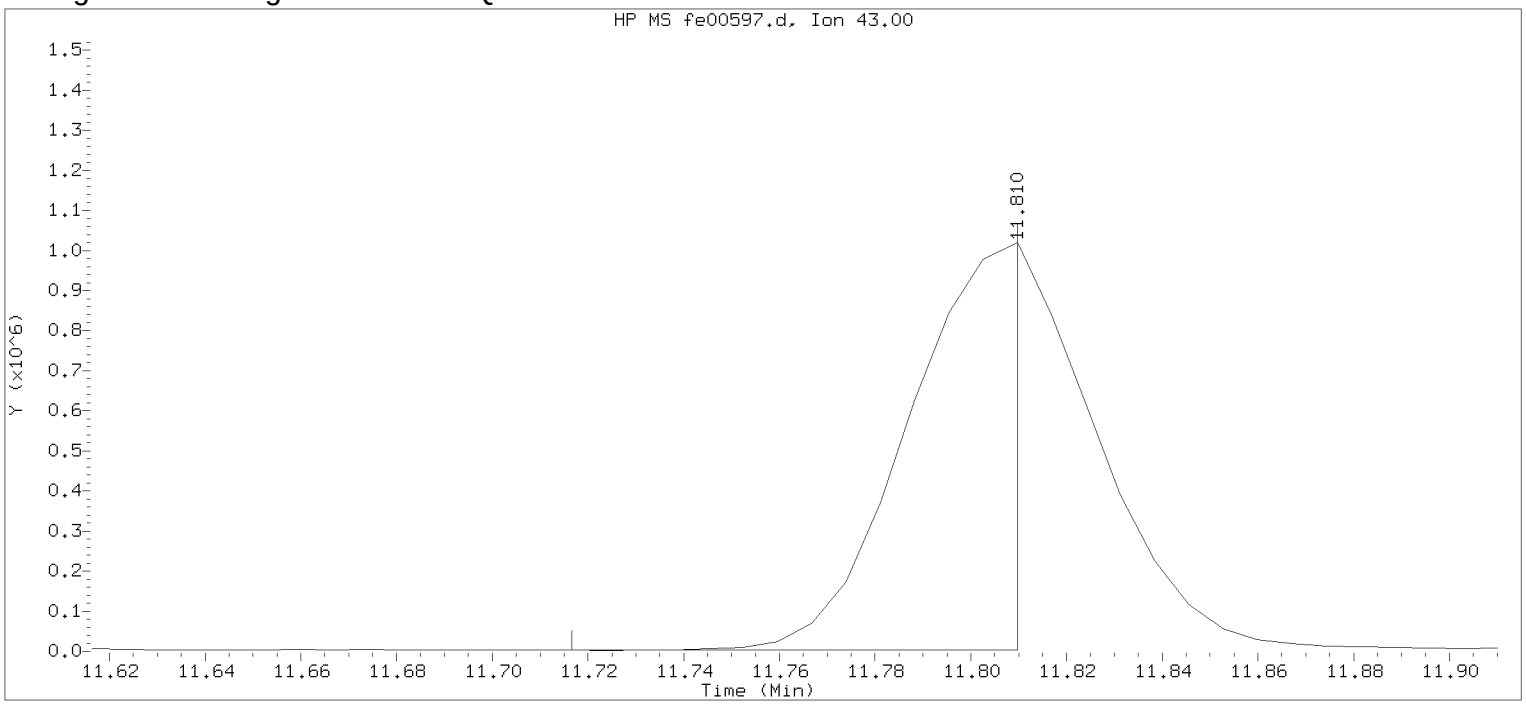
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 05/31/2018 at 15:57.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/01/2018 at 10:41.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18may31.b/fe00597.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 14:17 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 10:16
Date, time and analyst ID of latest file update: 31-May-2018 14:45 Unknown

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compound Number : 45
Compound Name : 2-Butanone
Scan Number : 1120
Retention Time (minutes): 11.810
Quant Ion : 43.00
Area : 1540962
Concentration (ppb(v)) : 14.3001
Integration start scan : 1106 Integration stop scan: 1119
Y at integration start : 2913 Y at integration end: 2913

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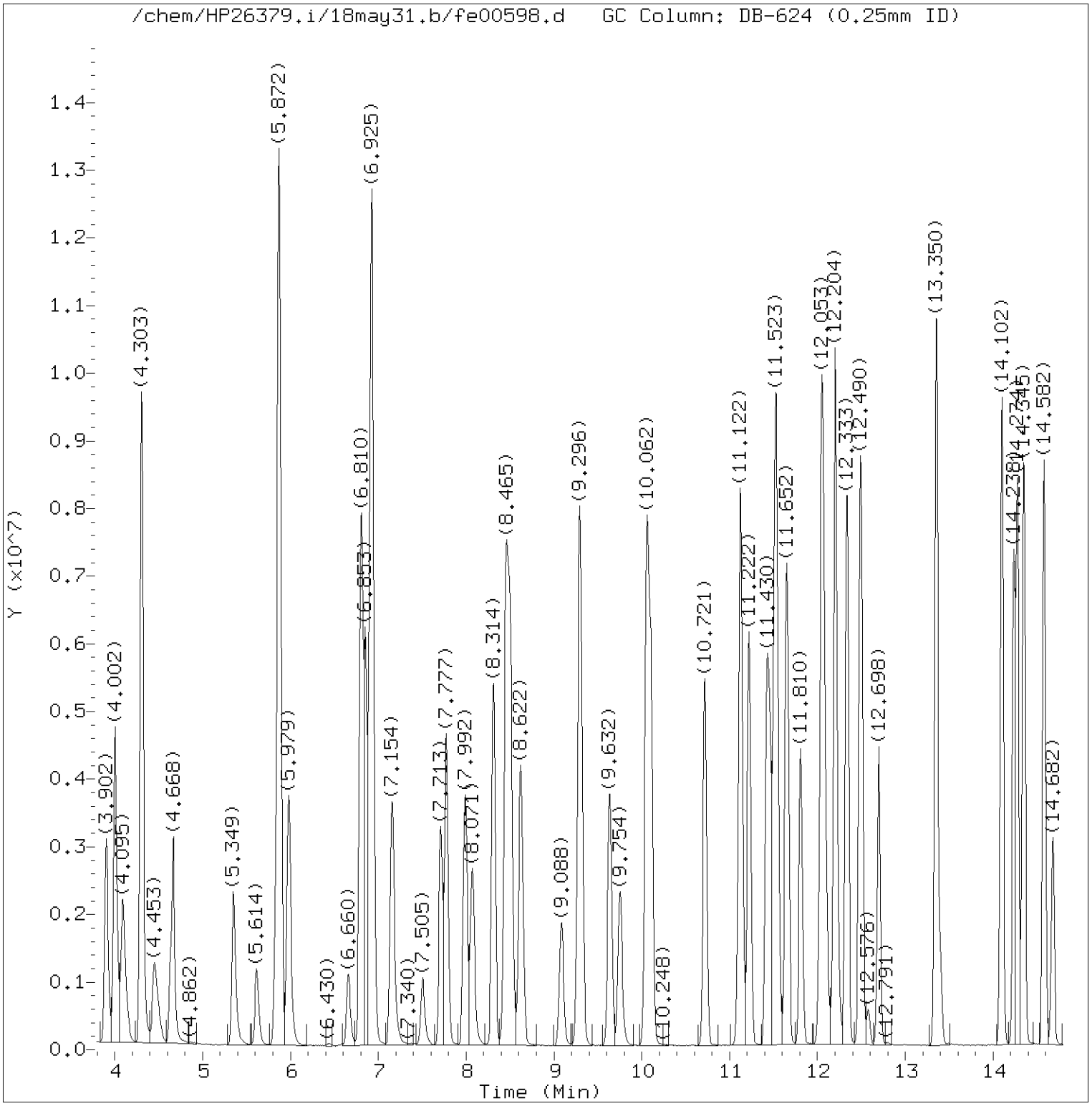
Target 3.5 esignature used. GLED1 Page 1472 of 1687



Total Ion Chromatogram (TIC)

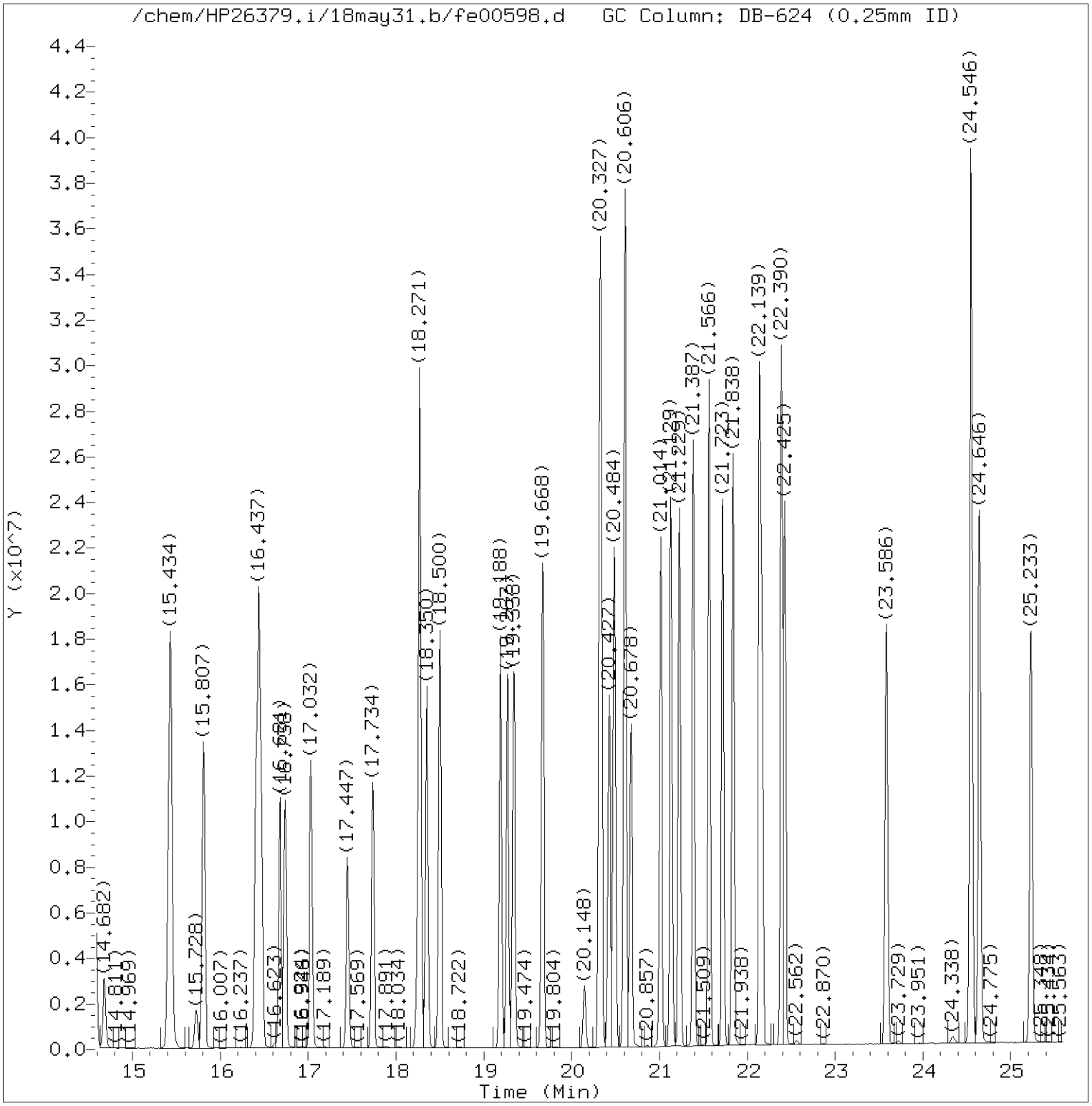
Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00598.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 14:48 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:25 ads07818

Sample Name: VSTD070 Lab Sample ID: VSTD070

Digitally signed by Jacob E. Bailey
on 05/31/2018 at 15:57.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00598.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 14:48 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:25 ads07818

Sample Name: VSTD070 Lab Sample ID: VSTD070

Digitally signed by Jacob E. Bailey
on 05/31/2018 at 15:57.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00598.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 14:48 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:25 ads07818

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	3077987	74.529
2) Dichlorodifluoromethane	(1)	4.002	85	7743134	77.648
3) Chlorodifluoromethane	(1)	4.095	51	5836497	73.061
4) Freon 114	(1)	4.303	85	7738823	71.719
5) Chloromethane	(1)	4.453	50	3150750	71.412
6) Vinyl Chloride	(1)	4.632	62	1827855	74.477
7) 1,3-Butadiene	(1)	4.668	54	1455226	64.337
8) Bromomethane	(1)	5.349	94	2743290	83.001
9) Chloroethane	(1)	5.614	64	1704318	76.637
10) Bromoethene	(1)	5.836	106	2978303	78.397
11) Pentane	(1)	5.864	43	6617950	71.071
12) Trichlorofluoromethane	(1)	5.879	101	7815585	69.578
13) Dichlorofluoromethane	(1)	5.979	67	6253156	75.430
14) Ethanol	(1)	6.660	45	1652658	81.942
15) Freon123a	(1)	6.803	67	6117291	77.492
16) 1,1-Dichloroethene	(1)	6.853	61	5304482	77.236
17) Freon 113	(1)	6.917	103	4312061	64.273
18) Carbon Disulfide	(1)	6.939	76	8036536	76.781
19) Methyl Iodide	(1)	7.154	142	7813109	67.948
20) Acrolein	(1)	7.505	56	1474005	79.749
21) Isopropanol	(1)	7.713	45	6797696	78.239
22) 3-Chloropropene	(1)	7.777	41	5533895	86.585
23) Methylene Chloride	(1)	7.992	84	2807409	84.972
24) Acetone	(1)	8.071	43	5499020	74.871
25) trans-1,2-Dichloroethene	(1)	8.314	61	4968192	77.596
26) Hexane	(1)	8.457	56	3468614	69.879
27) Methyl t-Butyl Ether	(1)	8.500	73	8537382M	69.511
28) tert-Butyl Alcohol	(1)	8.622	59	8083483	78.321
29) Acetonitrile	(1)	9.088	41	3456725	77.959
30) Di-Isopropyl Ether	(1)	9.296	45	13123840	70.913
31) 1,1-Dichloroethane	(1)	9.632	63	6077175	74.888
32) Acrylonitrile	(1)	9.754	53	3223763	77.399
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	11458581	72.960
34) Vinyl Acetate	(1)	10.112	43	12266990M	83.918
35) cis-1,2-Dichloroethene	(1)	10.721	61	4820279	77.795
36) 1,2-Dichloroethene (total)	(1)		61	9788471	155.391
37)*Bromochloromethane	(1)	11.115	130	378307	10.000
38) Cyclohexane	(1)	11.129	56	6233438	70.373

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

Digitally signed by Jacob E. Bailey
on 05/31/2018 at 15:57.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00598.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 14:48 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:25 ads07818

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.222	83	6670798	74.679
40) Ethyl Acetate	(1)	11.423	43	8893690	72.584
41) Methyl Acrylate	(1)	11.459	55	6806461	75.639
42) Carbon Tetrachloride	(1)	11.516	117	7396613	69.555
43) Tetrahydrofuran	(1)	11.545	42	4544290	74.818
44) 1,1,1-Trichloroethane	(1)	11.652	97	6998817	68.440
45) 2-Butanone	(1)	11.810	43	7864809	73.062
46) Isooctane	(2)	12.053	57	18209798	72.739
47) Heptane	(2)	12.204	71	3440545	69.302
48) Benzene	(2)	12.340	78	9608904	70.672
49) Tert-Amyl Methyl Ether	(2)	12.490	73	9361626	72.988
50) 1,2-Dichloroethane	(2)	12.698	62	4707803	74.042
51) Trichloroethene	(2)	13.357	130	5092600	74.007
52)*1,4-Difluorobenzene	(2)	13.400	114	1378772	10.000
53) Dibromomethane	(2)	14.102	174	5675399	74.781
54) Ethyl Acrylate	(2)	14.231	55	9017286	72.633
55) 1,2-Dichloropropane	(2)	14.274	63	3963264	69.843
56) Bromodichloromethane	(2)	14.345	83	7086093	72.452
57) Methyl Methacrylate	(2)	14.582	69	3547988	72.621
58) 1,4-Dioxane	(2)	14.682	88	2544074	74.888
59) cis-1,3-Dichloropropene	(2)	15.413	75	6162779	73.622
60) Octane	(3)	15.434	43	10073282	64.833
61) Toluene	(3)	15.807	91	11905717	68.536
62) 4-Methyl-2-Pentanone	(2)	16.401	43	9711819	66.096
63) Tetrachloroethene	(3)	16.437	166	7830019	68.528
64) trans-1,3-Dichloropropene	(3)	16.466	75	5280483	71.930
65) 1,3-Dichloropropene (total)	(3)		75	11443262	144.746
66) Ethyl Methacrylate	(3)	16.681	69	6095202	69.424
67) 1,1,2-Trichloroethane	(3)	16.738	97	4399967	69.303
68) Dibromochloromethane	(3)	17.032	127	6333827	72.495
69) 1,2-Dibromoethane	(3)	17.447	107	7035264	70.054
70) 2-Hexanone	(3)	17.734	43	9703326	67.691
71)*Chlorobenzene-d5	(3)	18.235	117	1367324	10.000
72) Chlorobenzene	(3)	18.264	112	10211919	66.023
73) Ethylbenzene	(3)	18.278	91	15313886	61.643
74) 1,1,1,2-Tetrachloroethane	(3)	18.350	131	5882410	67.028
75) m/p-Xylene	(3)	18.500	91	12350071	66.753
76) o-Xylene	(3)	19.188	91	12695493	67.725

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 05/31/2018 at 15:57.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00598.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 14:48 Analyst ID: ads07818

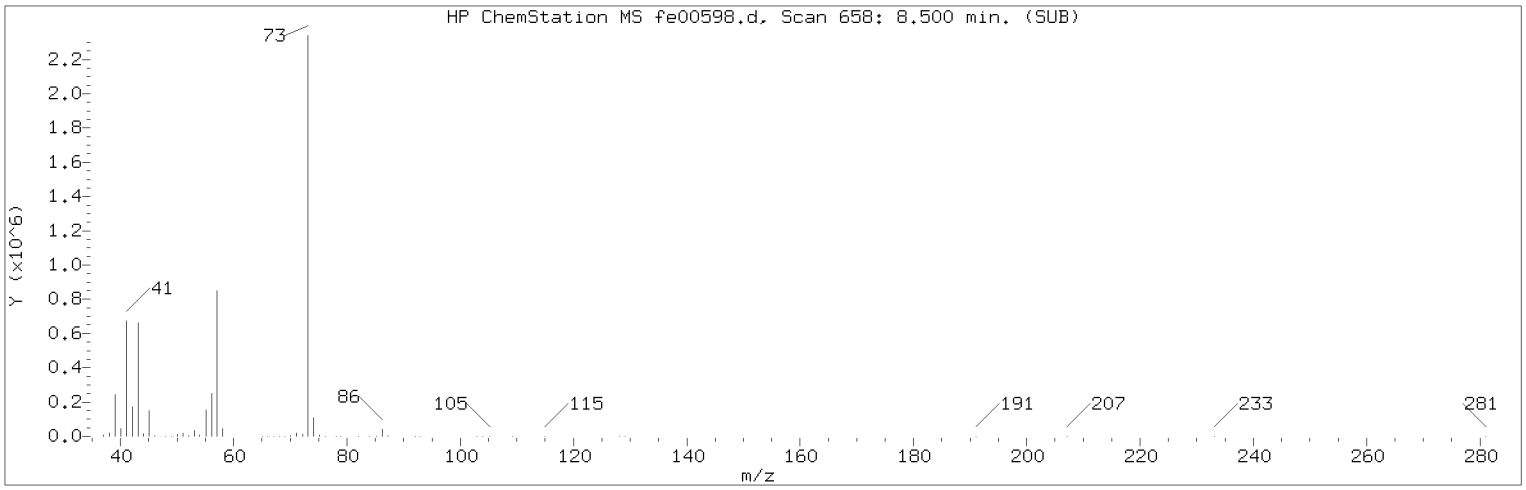
Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:25 ads07818

Sample Name: VSTD070 Lab Sample ID: VSTD070

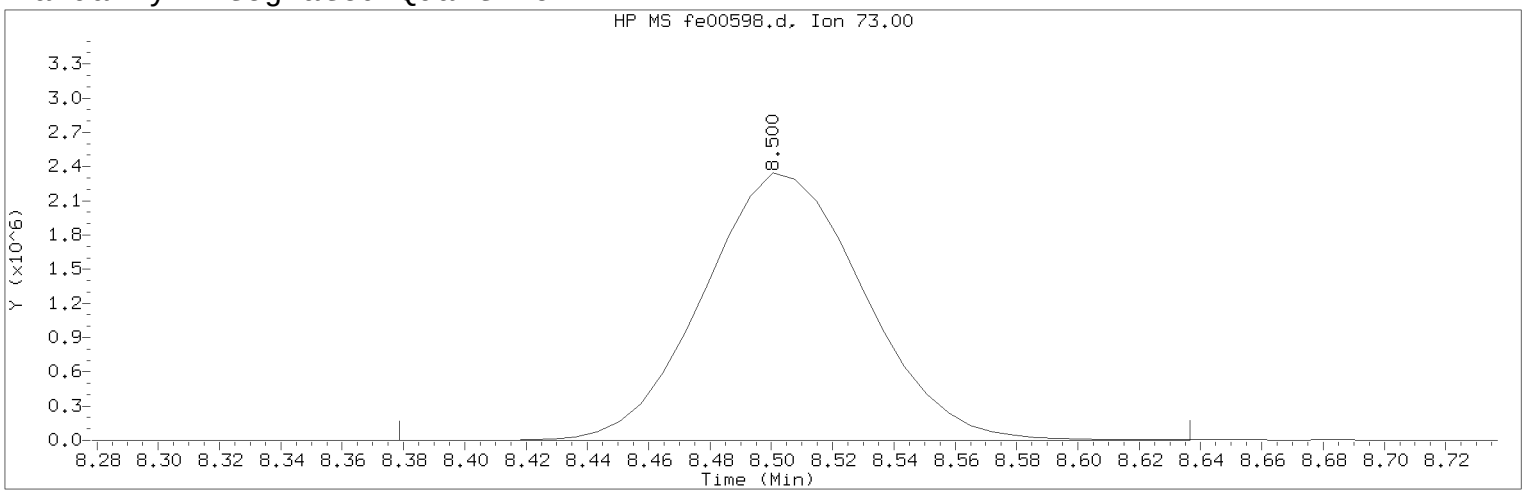
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	25045564	134.484
78) Styrene	(3)	19.274	104	10011287	69.570
79) Bromoform	(3)	19.345	173	9747411	70.730
80) Cumene	(3)	19.668	105	17586557	63.767
81) n-Propylbenzene	(3)	20.319	120	5558065	67.849
82) Bromobenzene	(3)	20.334	156	7155850	65.956
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	8942247	63.889
84) 4-Ethyltoluene	(3)	20.484	105	17654746	63.578
85) 2-Chlorotoluene	(3)	20.606	126	4779088	64.805
86) 1,3,5-Trimethylbenzene	(3)	20.613	105	14544803	63.095
87) 1,2,3-Trichloropropane	(3)	20.678	110	2956463	64.607
88) Alpha Methyl Styrene	(3)	21.014	118	8588534	71.635
89) tert-Butylbenzene	(3)	21.129	119	14299871	62.974
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	14654908	63.713
91) sec-Butylbenzene	(3)	21.394	105	18616640	54.383
92) p-Isopropyltoluene	(3)	21.573	119	17056314	58.497
93) 1,3-Dichlorobenzene	(3)	21.723	146	11571314	63.329
94) 1,4-Dichlorobenzene	(3)	21.838	146	11929622	64.027
95) n-Butylbenzene	(3)	22.139	92	10986582	68.026
96) Benzyl Chloride	(3)	22.168	126	3414639	72.481
97) Hexachloroethane	(3)	22.390	117	6329198	70.700
98) 1,2-Dichlorobenzene	(3)	22.425	146	11124140	65.006
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	6961667	75.468
100) Hexachlorobutadiene	(3)	24.546	225	11422732	69.275
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	11090691	72.505
102) Naphthalene	(3)	25.233	128	20373494	72.990

Digitally signed by Jacob E. Bailey
on 05/31/2018 at 15:57.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18may31.b/fe00598.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 14:48 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:25 ads07818

Sample Name: VSTD070 Lab Sample ID: VSTD070

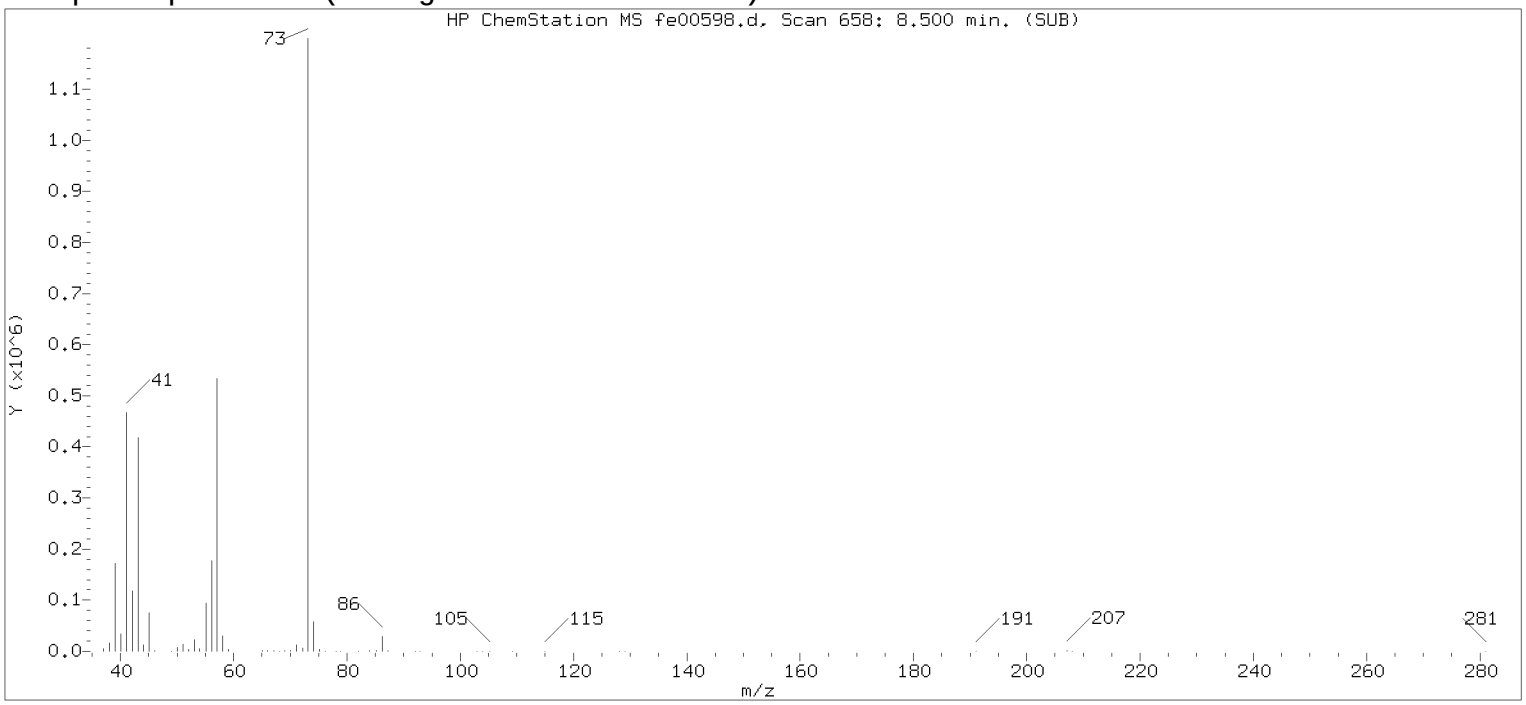
Compound Number : 27
Compound Name : Methyl t-Butyl Ether
Scan Number : 658
Retention Time (minutes): 8.500
Quant Ion : 73.00
Area (flag) : 8537382M
Concentration (ppb(v)) : 69.5106
Integration start scan : 640 Integration stop scan: 676
Y at integration start : 494 Y at integration end: 494

Reason for manual integration: improper integration

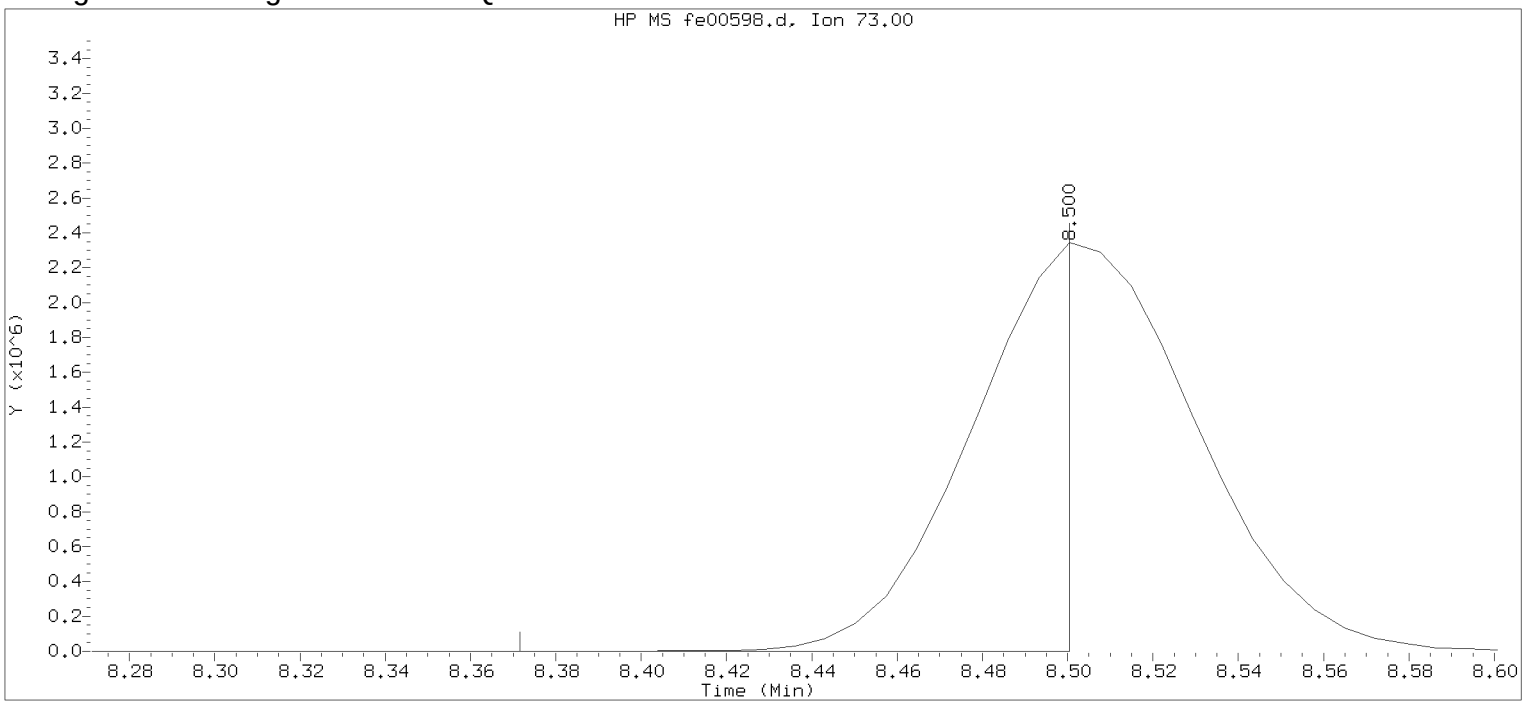
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 05/31/2018 at 15:57.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/01/2018 at 10:41.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18may31.b/fe00598.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 14:48 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 10:16
Date, time and analyst ID of latest file update: 31-May-2018 15:16 Unknown

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compound Number : 27
Compound Name : Methyl t-Butyl Ether
Scan Number : 658
Retention Time (minutes): 8.500
Quant Ion : 73.00
Area : 3697603
Concentration (ppb(v)) : 30.5289
Integration start scan : 639 Integration stop scan: 657
Y at integration start : 495 Y at integration end: 495

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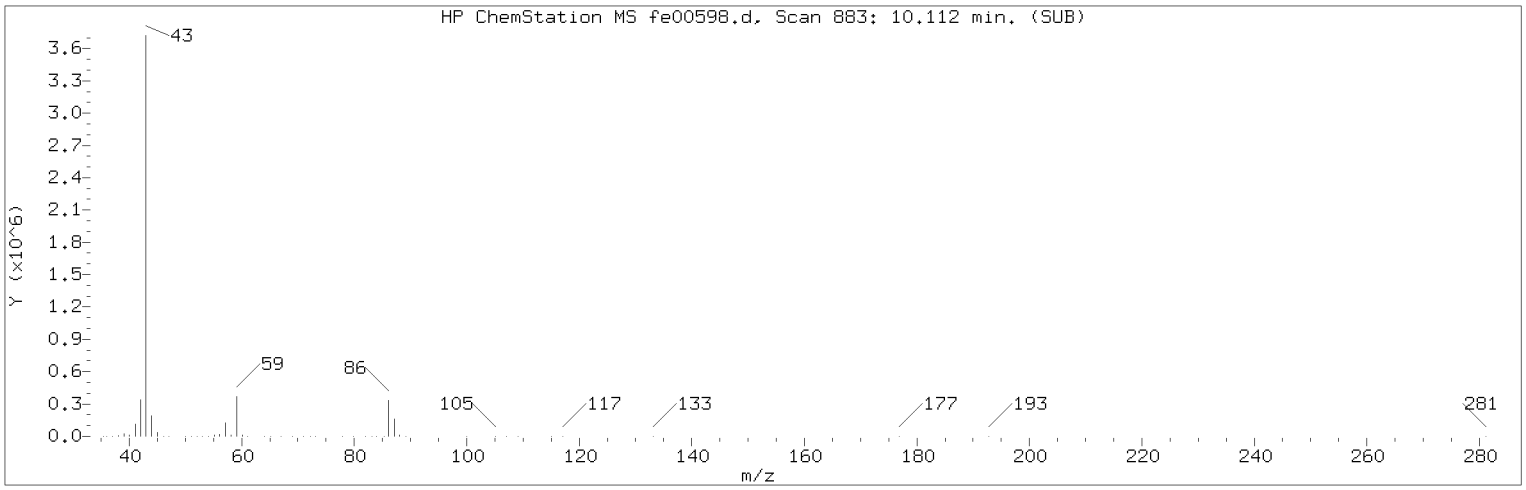
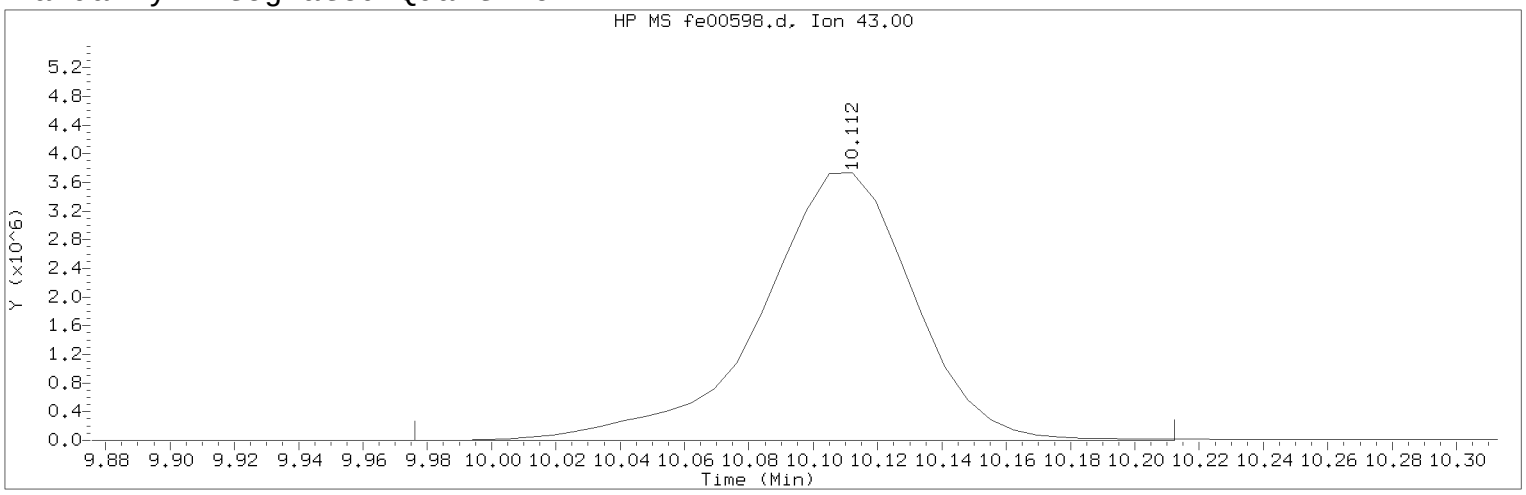
Target 3.5 esignature used. GLED1 Page 1479 of 1687

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18may31.b/fe00598.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 14:48 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:18
Date, time and analyst ID of latest file update: 31-May-2018 15:25 ads07818

Sample Name: VSTD070 Lab Sample ID: VSTD070

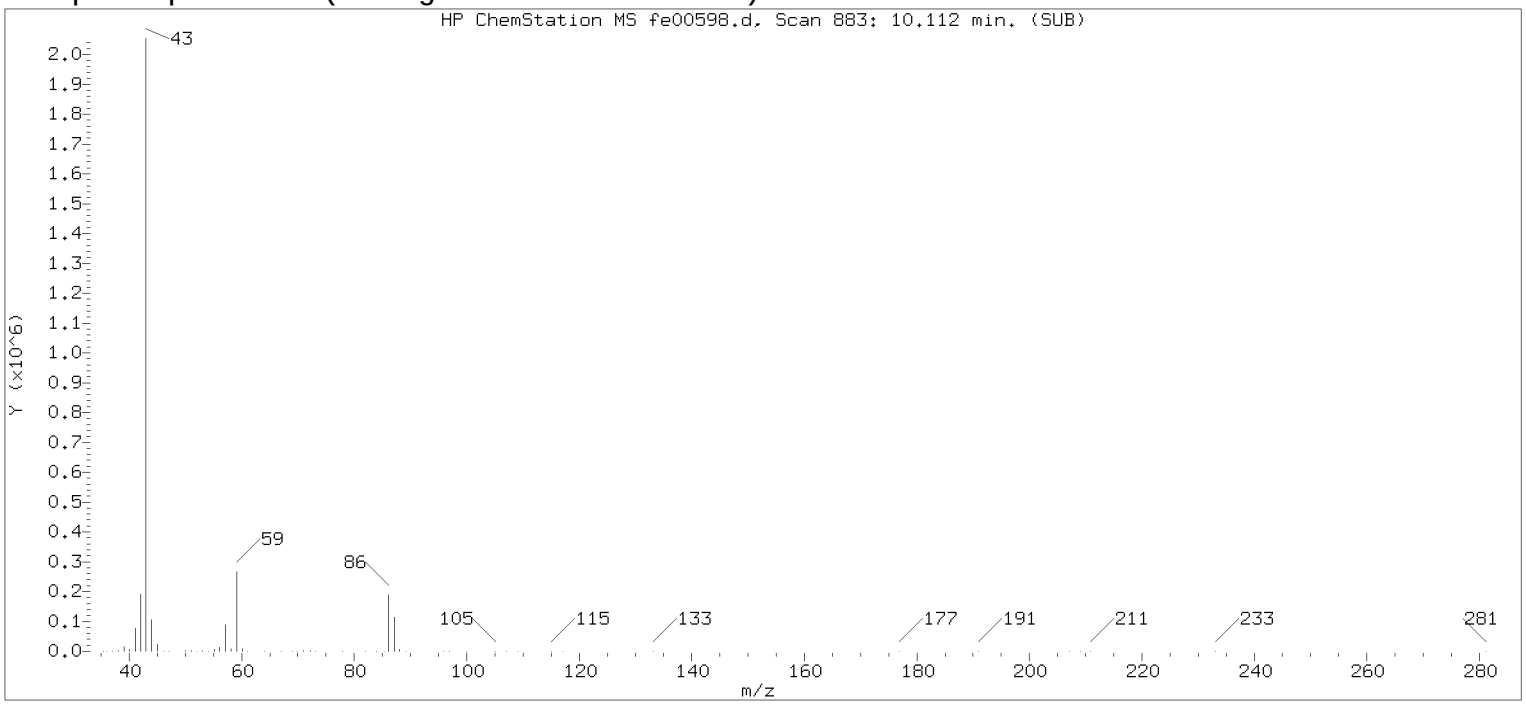
Compound Number : 34
Compound Name : Vinyl Acetate
Scan Number : 883
Retention Time (minutes): 10.112
Quant Ion : 43.00
Area (flag) : 12266990M
Concentration (ppb(v)) : 83.9182
Integration start scan : 863 Integration stop scan: 896
Y at integration start : 1661 Y at integration end: 1661

Reason for manual integration: improper integration

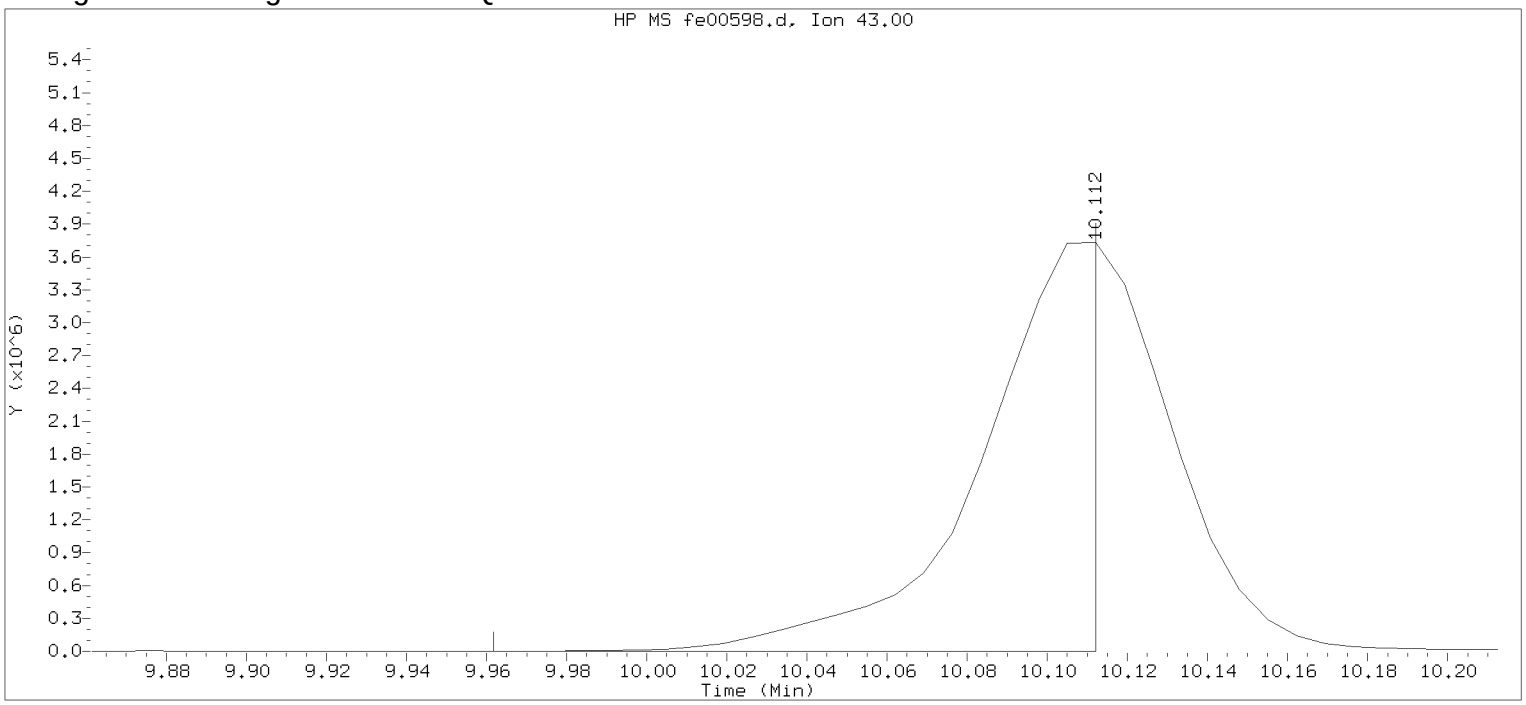
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 05/31/2018 at 15:57.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/01/2018 at 10:41.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18may31.b/fe00598.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 14:48 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 10:16
Date, time and analyst ID of latest file update: 31-May-2018 15:16 Unknown

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compound Number : 34
Compound Name : Vinyl Acetate
Scan Number : 883
Retention Time (minutes): 10.112
Quant Ion : 43.00
Area : 7208515
Concentration (ppb(v)) : 49.6711
Integration start scan : 861 Integration stop scan: 882
Y at integration start : 1699 Y at integration end: 1699

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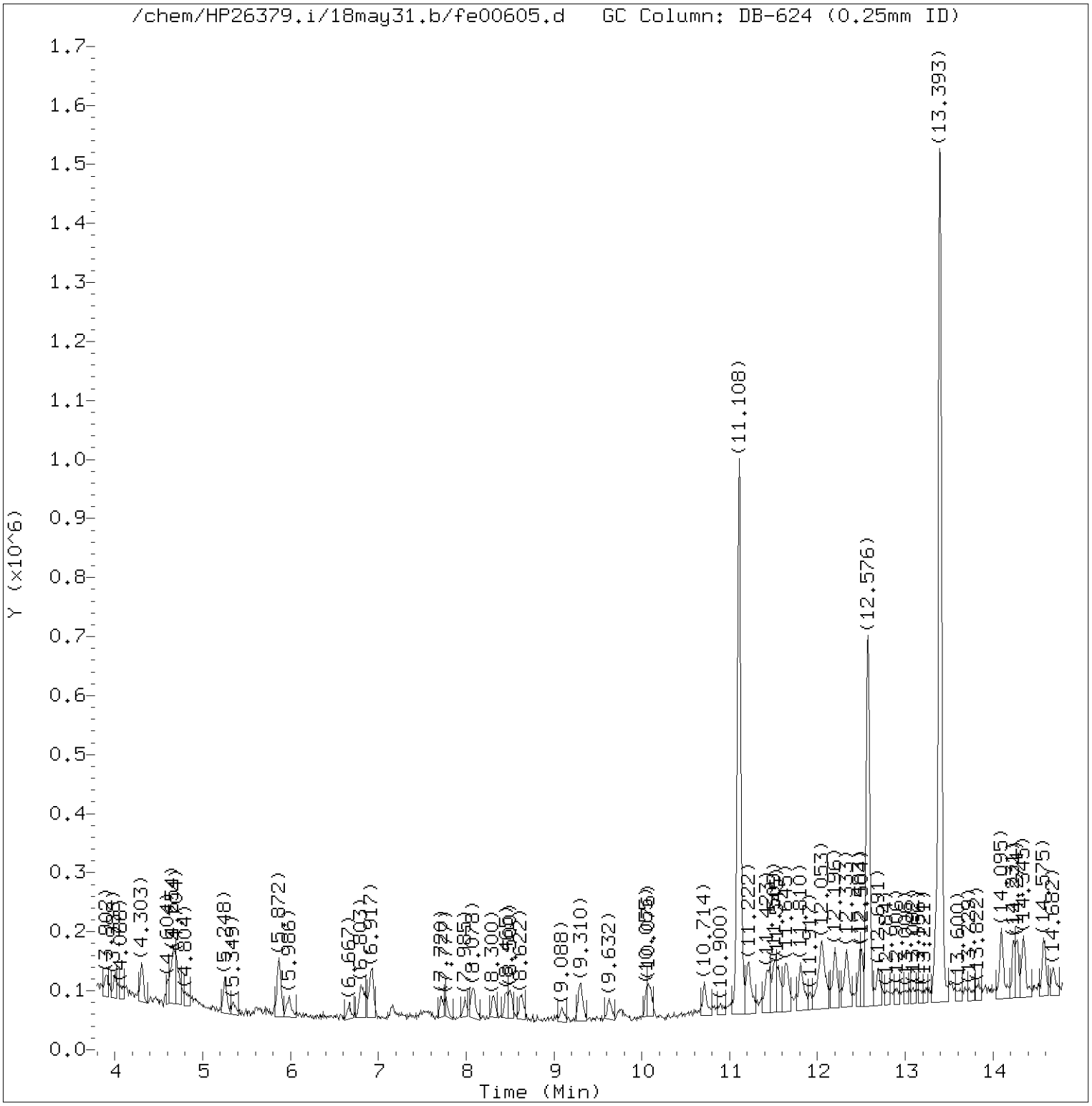
Target 3.5 esignature used. GLED1 Page 1485 of 1687



Total Ion Chromatogram (TIC)

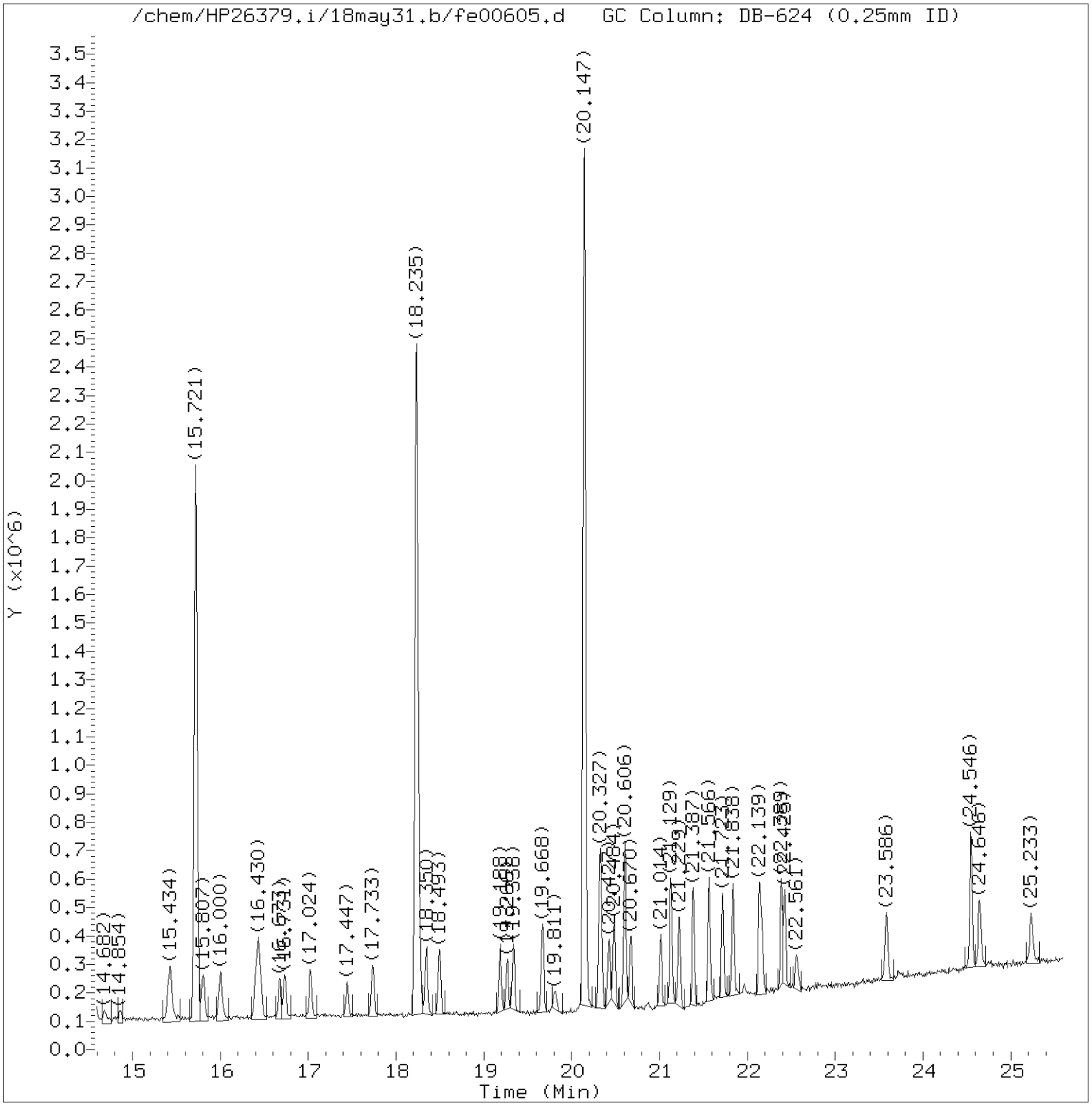
Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00605.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 18:48 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 01-JUN-2018 08:36
Date, time and analyst ID of latest file update: 01-Jun-2018 10:45 jbs01304

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

Digitally signed by Jeffrey B. Smith
on 06/01/2018 at 10:46.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00605.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 18:48 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 01-JUN-2018 08:36
Date, time and analyst ID of latest file update: 01-Jun-2018 10:45 jbs01304

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

Digitally signed by Jeffrey B. Smith
on 06/01/2018 at 10:46.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00605.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 18:48 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 01-JUN-2018 08:36
Date, time and analyst ID of latest file update: 01-Jun-2018 10:45 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.909	41	27976M	0.574
2) Dichlorodifluoromethane	(1)	4.002	85	46931	0.399
3) Chlorodifluoromethane	(1)	4.095	51	32376	0.344
4) Freon 114	(1)	4.310	85	48703	0.383
5) Chloromethane	(1)	4.453	50	16855	0.324
6) Vinyl Chloride	(1)	4.632	62	13544	0.468
7) 1,3-Butadiene	(1)	4.668	54	13565	0.509
8) Bromomethane	(1)	5.341	94	17928	0.460
9) Chloroethane	(1)	5.606	64	13168	0.502
10) Bromoethene	(1)	5.829	106	18165	0.405
11) Pentane	(1)	5.864	43	49612	0.452
12) Trichlorofluoromethane	(1)	5.879	101	50578	0.382
13) Dichlorofluoromethane	(1)	5.986	67	32251	0.330
14) Ethanol	(1)	6.667	45	38326	1.611
15) Freon123a	(1)	6.803	67	44649	0.480
16) 1,1-Dichloroethene	(1)	6.860	61	34236	0.423
17) Freon 113	(1)	6.917	103	28985	0.366
18) Carbon Disulfide	(1)	6.939	76	52554	0.426
19) Methyl Iodide	(1)	7.147	142	36143	0.267
20) Acrolein	(1)	7.512	56	11660	0.535
21) Isopropanol	(1)	7.720	45	74159M	0.724
22) 3-Chloropropene	(1)	7.770	41	39893	0.529
23) Methylene Chloride	(1)	7.985	84	21369	0.548
24) Acetone	(1)	8.078	43	136126	1.572
25) trans-1,2-Dichloroethene	(1)	8.300	61	34556	0.458
26) Hexane	(1)	8.465	56	31412	0.537
27) Methyl t-Butyl Ether	(1)	8.522	73	64630	0.446
28) tert-Butyl Alcohol	(1)	8.636	59	83550	0.686
29) Acetonitrile	(1)	9.088	41	40197	0.769
30) Di-Isopropyl Ether	(1)	9.310	45	98955	0.453
31) 1,1-Dichloroethane	(1)	9.632	63	43334	0.453
32) Acrylonitrile	(1)	9.754	53	30031	0.611
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	83725	0.452
34) Vinyl Acetate	(1)	10.112	43	97023	0.563
35) cis-1,2-Dichloroethene	(1)	10.707	61	35666	0.488
36) 1,2-Dichloroethene (total)	(1)		61	70222	0.946
37)*Bromochloromethane	(1)	11.108	130	446115	10.000
38) Cyclohexane	(1)	11.115	56	46584	0.446

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

Digitally signed by Jeffrey B. Smith
on 06/01/2018 at 10:46.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00605.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 18:48 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 01-JUN-2018 08:36
Date, time and analyst ID of latest file update: 01-Jun-2018 10:45 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	55808	0.530
40) Ethyl Acetate	(1)	11.423	43	91221	0.631
41) Methyl Acrylate	(1)	11.459	55	61347	0.578
42) Carbon Tetrachloride	(1)	11.502	117	57634	0.460
43) Tetrahydrofuran	(1)	11.559	42	45611	0.637
44) 1,1,1-Trichloroethane	(1)	11.645	97	57455	0.476
45) 2-Butanone	(1)	11.810	43	110706	0.872
46) Isooctane	(2)	12.046	57	140020	0.484
47) Heptane	(2)	12.196	71	28285	0.493
48) Benzene	(2)	12.340	78	87791	0.559
49) Tert-Amyl Methyl Ether	(2)	12.490	73	87955	0.593
50) 1,2-Dichloroethane	(2)	12.691	62	44497	0.606
51) Trichloroethene	(2)	13.350	130	55929	0.703
52)*1,4-Difluorobenzene	(2)	13.400	114	1593126	10.000
53) Dibromomethane	(2)	14.095	174	54850	0.625
54) Ethyl Acrylate	(2)	14.238	55	102191	0.712
55) 1,2-Dichloropropane	(2)	14.274	63	40333	0.615
56) Bromodichloromethane	(2)	14.345	83	73952	0.654
57) Methyl Methacrylate	(2)	14.582	69	43055	0.763
58) 1,4-Dioxane	(2)	14.689	88	27026	0.688
59) cis-1,3-Dichloropropene	(2)	15.406	75	65196	0.674
60) Octane	(3)	15.434	43	116828	0.628
61) Toluene	(3)	15.807	91	135009	0.649
62) 4-Methyl-2-Pentanone	(2)	16.408	43	143267	0.844
63) Tetrachloroethene	(3)	16.437	166	103912	0.759
64) trans-1,3-Dichloropropene	(3)	16.466	75	61329	0.698
65) 1,3-Dichloropropene (total)	(3)		75	126525	1.372
66) Ethyl Methacrylate	(3)	16.673	69	79908	0.760
67) 1,1,2-Trichloroethane	(3)	16.738	97	61927	0.814
68) Dibromochloromethane	(3)	17.032	127	80204	0.767
69) 1,2-Dibromoethane	(3)	17.447	107	97806	0.813
70) 2-Hexanone	(3)	17.733	43	152050	0.886
71)*Chlorobenzene-d5	(3)	18.235	117	1637525	10.000
72) Chlorobenzene	(3)	18.264	112	145334	0.785
73) Ethylbenzene	(3)	18.271	91	222135	0.747
74) 1,1,1,2-Tetrachloroethane	(3)	18.350	131	86319	0.821
75) m/p-Xylene	(3)	18.493	91	170087	0.768
76) o-Xylene	(3)	19.188	91	177734	0.792

* = Compound is an internal standard.

Digitally signed by Jeffrey B. Smith
on 06/01/2018 at 10:46.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00605.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 18:48 Analyst ID: ads07818

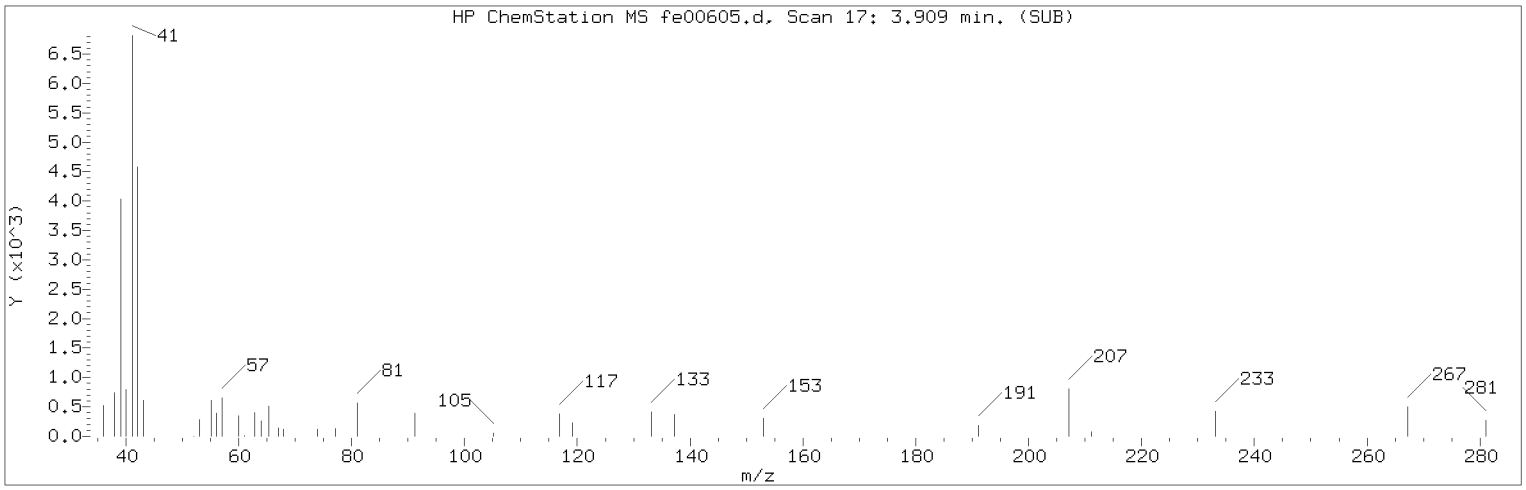
Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 01-JUN-2018 08:36
Date, time and analyst ID of latest file update: 01-Jun-2018 10:45 jbs01304

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

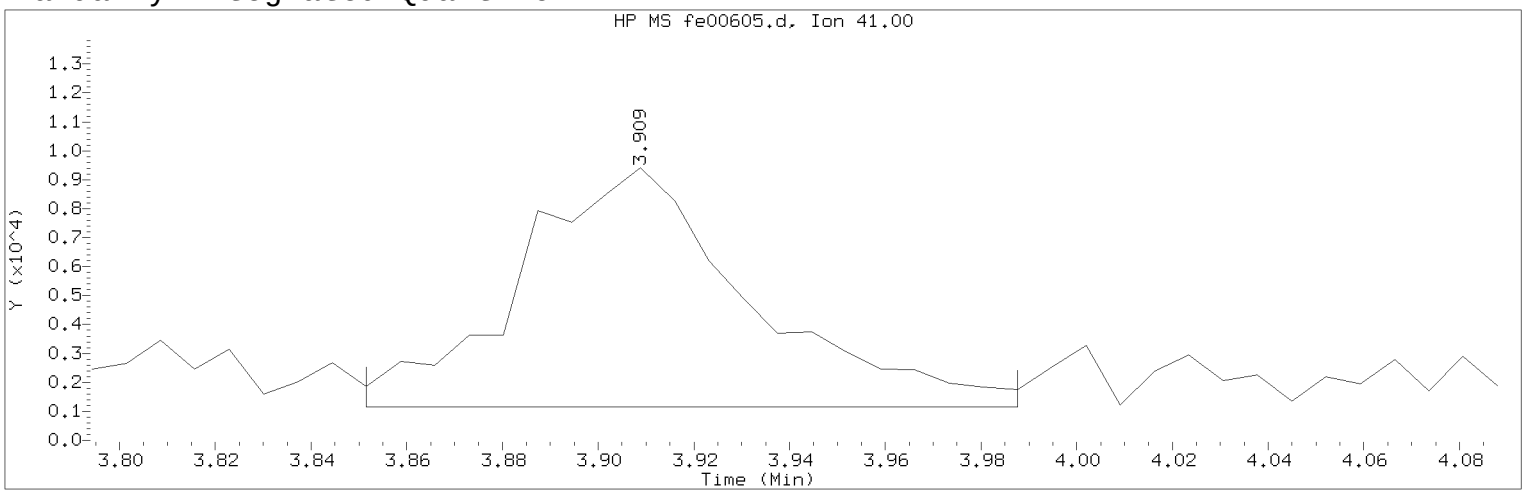
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	347821	1.559
78) Styrene	(3)	19.266	104	119718	0.695
79) Bromoform	(3)	19.338	173	137398	0.832
80) Cumene	(3)	19.668	105	265412	0.804
81) n-Propylbenzene	(3)	20.319	120	80056	0.816
82) Bromobenzene	(3)	20.334	156	111088	0.855
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	147992	0.883
84) 4-Ethyltoluene	(3)	20.484	105	252192	0.758
85) 2-Chlorotoluene	(3)	20.606	126	70227	0.795
86) 1,3,5-Trimethylbenzene	(3)	20.613	105	211865	0.767
87) 1,2,3-Trichloropropane	(3)	20.670	110	51148	0.933
88) Alpha Methyl Styrene	(3)	21.014	118	99008	0.690
89) tert-Butylbenzene	(3)	21.129	119	261498	0.962
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	219055	0.795
91) sec-Butylbenzene	(3)	21.387	105	333181	0.813
92) p-Isopropyltoluene	(3)	21.566	119	265254	0.760
93) 1,3-Dichlorobenzene	(3)	21.723	146	178912	0.818
94) 1,4-Dichlorobenzene	(3)	21.838	146	181762	0.815
95) n-Butylbenzene	(3)	22.139	92	139376	0.721
96) Benzyl Chloride	(3)	22.167	126	38873	0.689
97) Hexachloroethane	(3)	22.389	117	75385	0.703
98) 1,2-Dichlorobenzene	(3)	22.425	146	173848	0.848
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	83771	0.758
100) Hexachlorobutadiene	(3)	24.553	225	140426	0.711
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	120121	0.656
102) Naphthalene	(3)	25.233	128	205918	0.616

Digitally signed by Jeffrey B. Smith
on 06/01/2018 at 10:46.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18may31.b/fe00605.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 18:48 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 01-JUN-2018 08:36
Date, time and analyst ID of latest file update: 01-Jun-2018 10:45 jbs01304

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

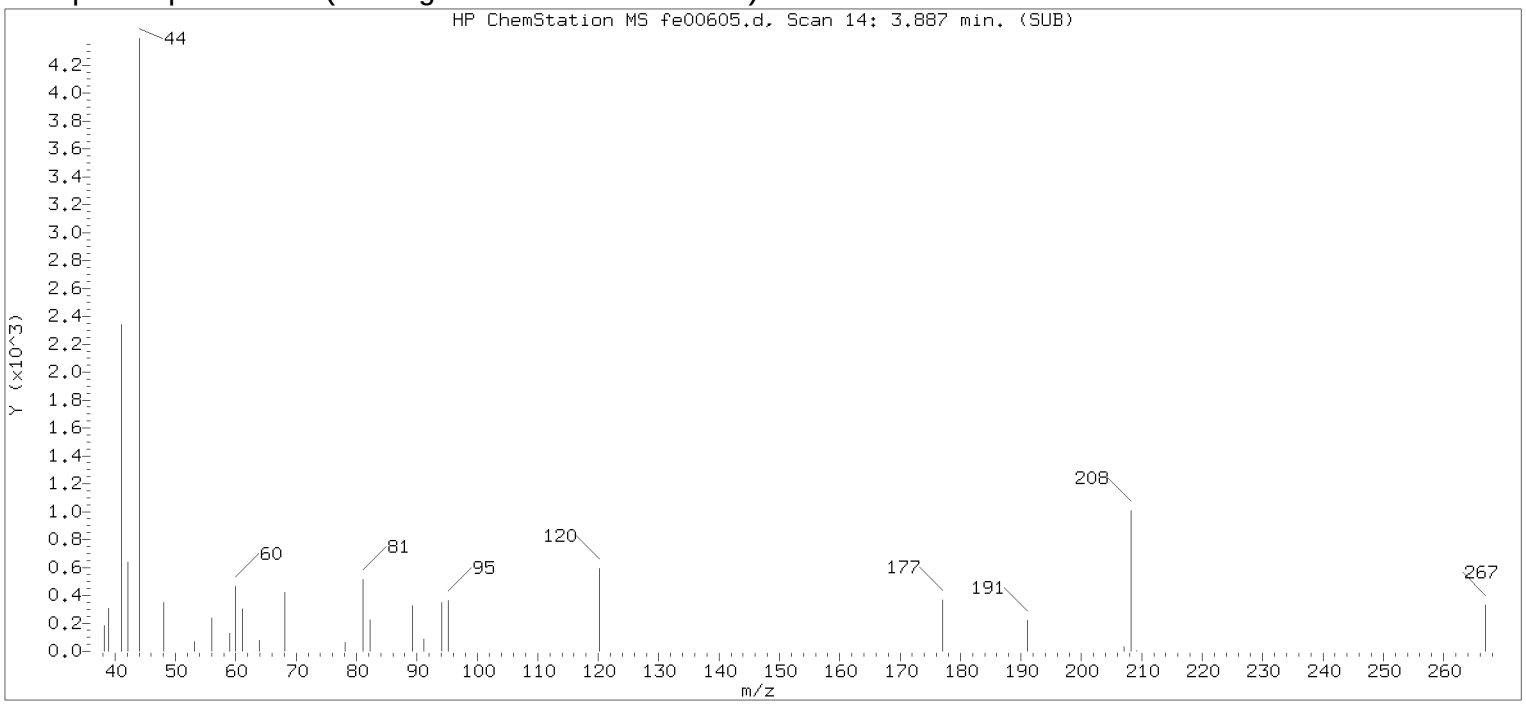
Compound Number : 1
Compound Name : Propene
Scan Number : 17
Retention Time (minutes): 3.909
Quant Ion : 41.00
Area (flag) : 27976M
Concentration (ppb(v)) : 0.5744
Integration start scan : 8 Integration stop scan: 27
Y at integration start : 1152 Y at integration end: 1152

Reason for manual integration: improper integration

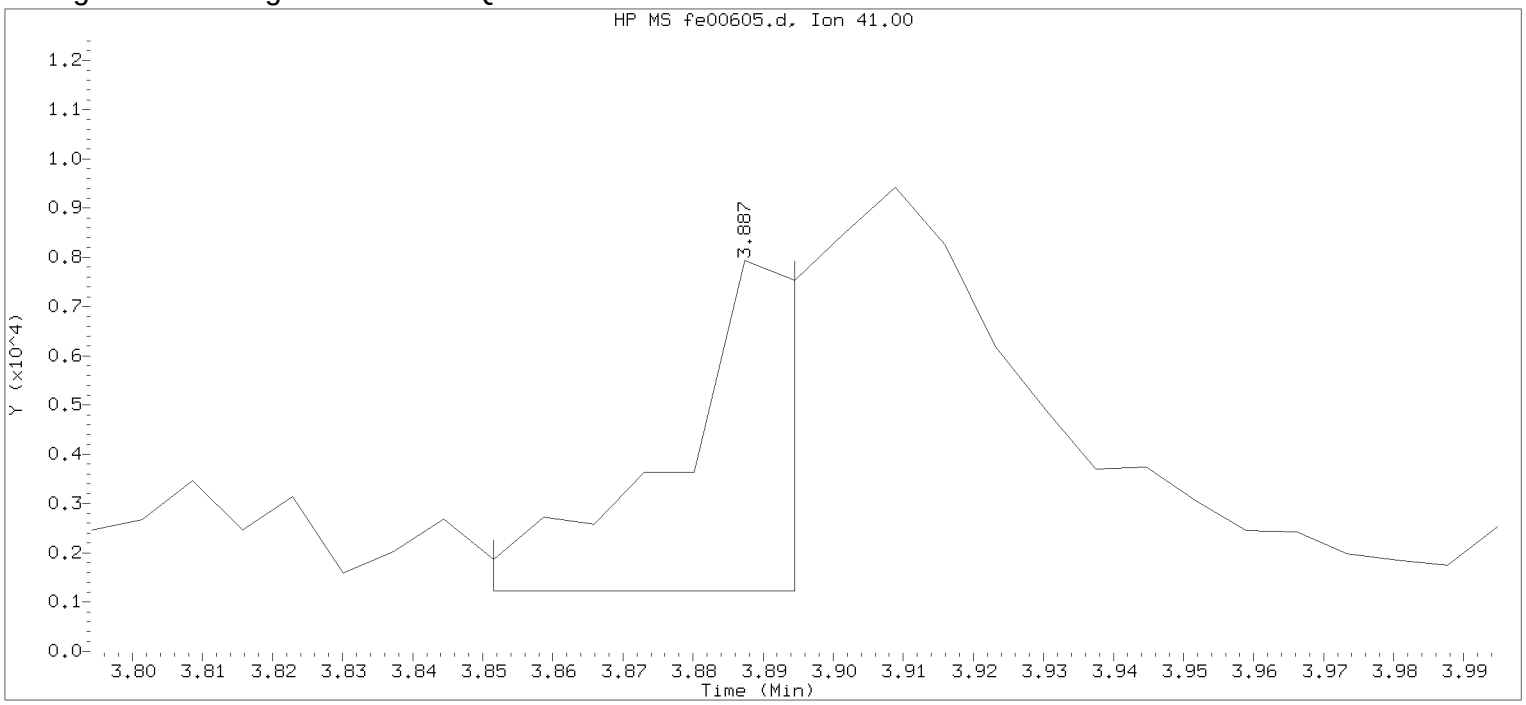
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/01/2018 at 10:46.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/01/2018 at 10:58.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18may31.b/fe00605.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 18:48 Analyst ID: ads07818

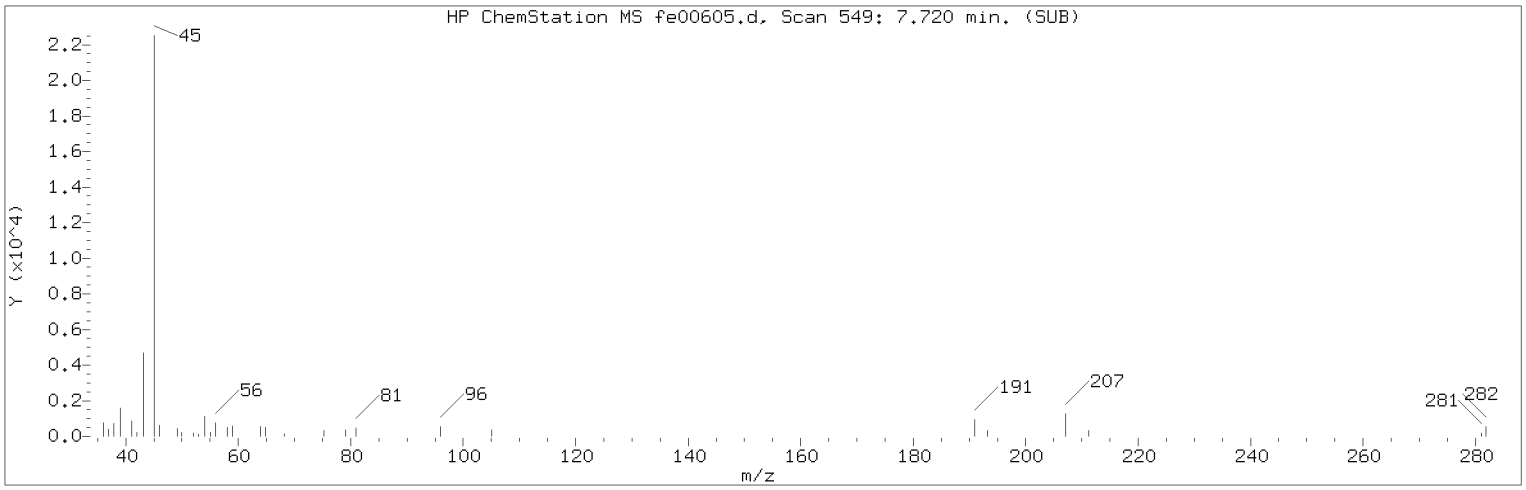
Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 18:20
Date, time and analyst ID of latest file update: 31-May-2018 19:16 Unknown

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

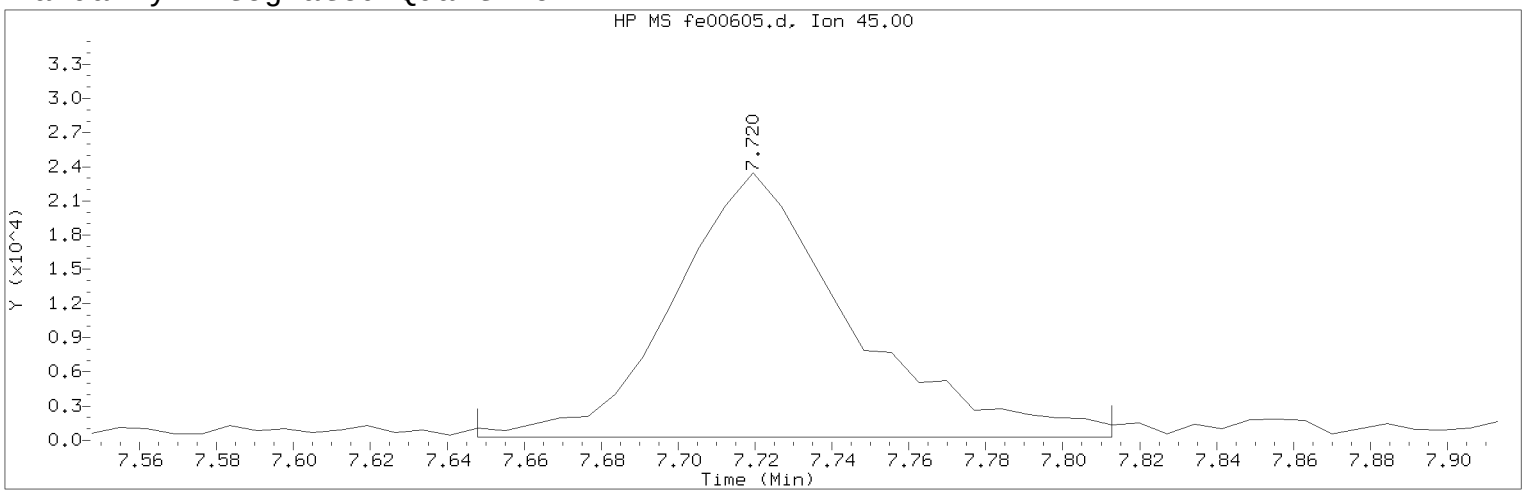
Compound Number : 1
Compound Name : Propene
Scan Number : 14
Retention Time (minutes): 3.887
Quant Ion : 41.00
Area : 7687
Concentration (ppb(v)) : 0.1578
Integration start scan : 8 Integration stop scan: 14
Y at integration start : 1222 Y at integration end: 1222

Digitally signed by Jeffrey B. Smith on 06/01/2018 at 10:46.
Target 3.5 esignature used. EDI Page 1384 of 1687

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18may31.b/fe00605.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 18:48 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 01-JUN-2018 08:36
Date, time and analyst ID of latest file update: 01-Jun-2018 10:45 jbs01304

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

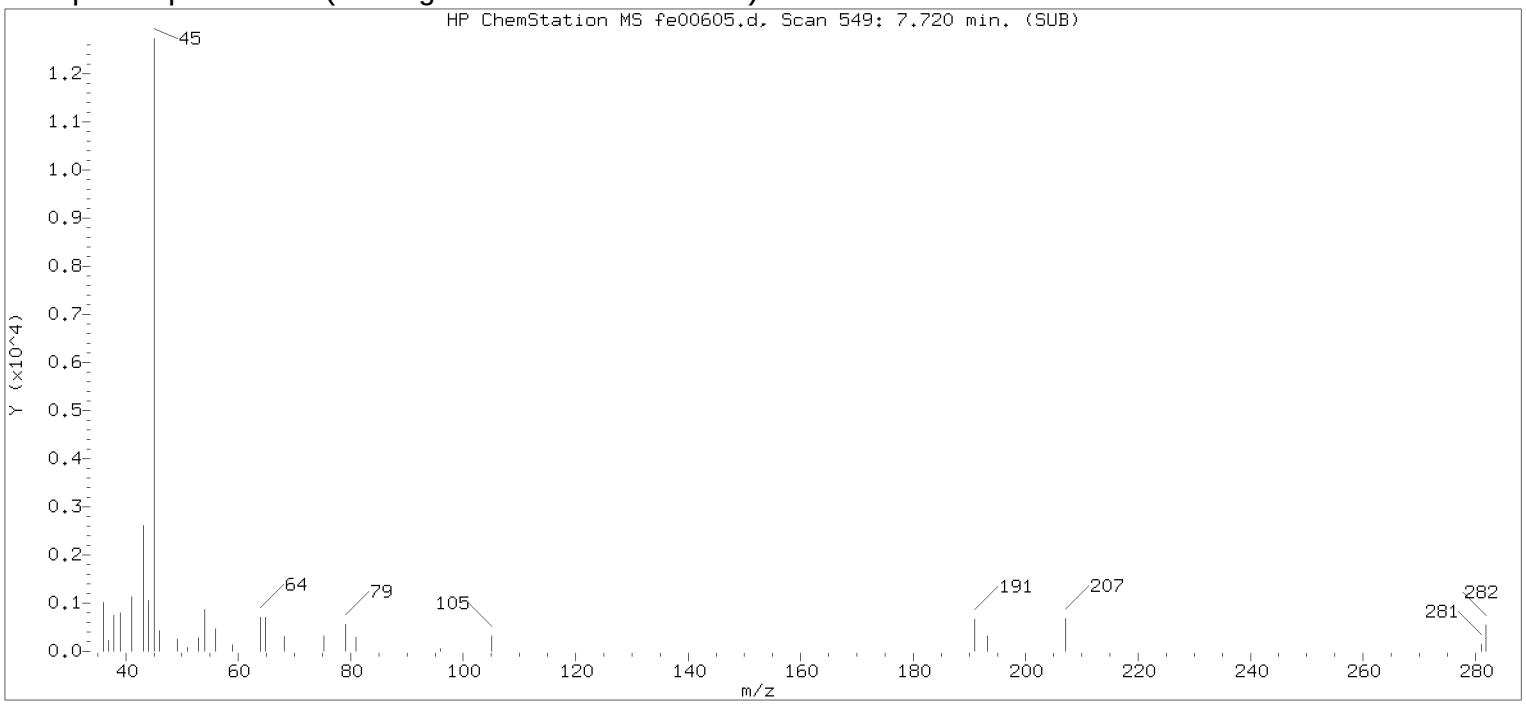
Compound Number : 21
Compound Name : Isopropanol
Scan Number : 549
Retention Time (minutes): 7.720
Quant Ion : 45.00
Area (flag) : 74159M
Concentration (ppb(v)) : 0.7238
Integration start scan : 538 Integration stop scan: 561
Y at integration start : 270 Y at integration end: 270

Reason for manual integration: improper integration

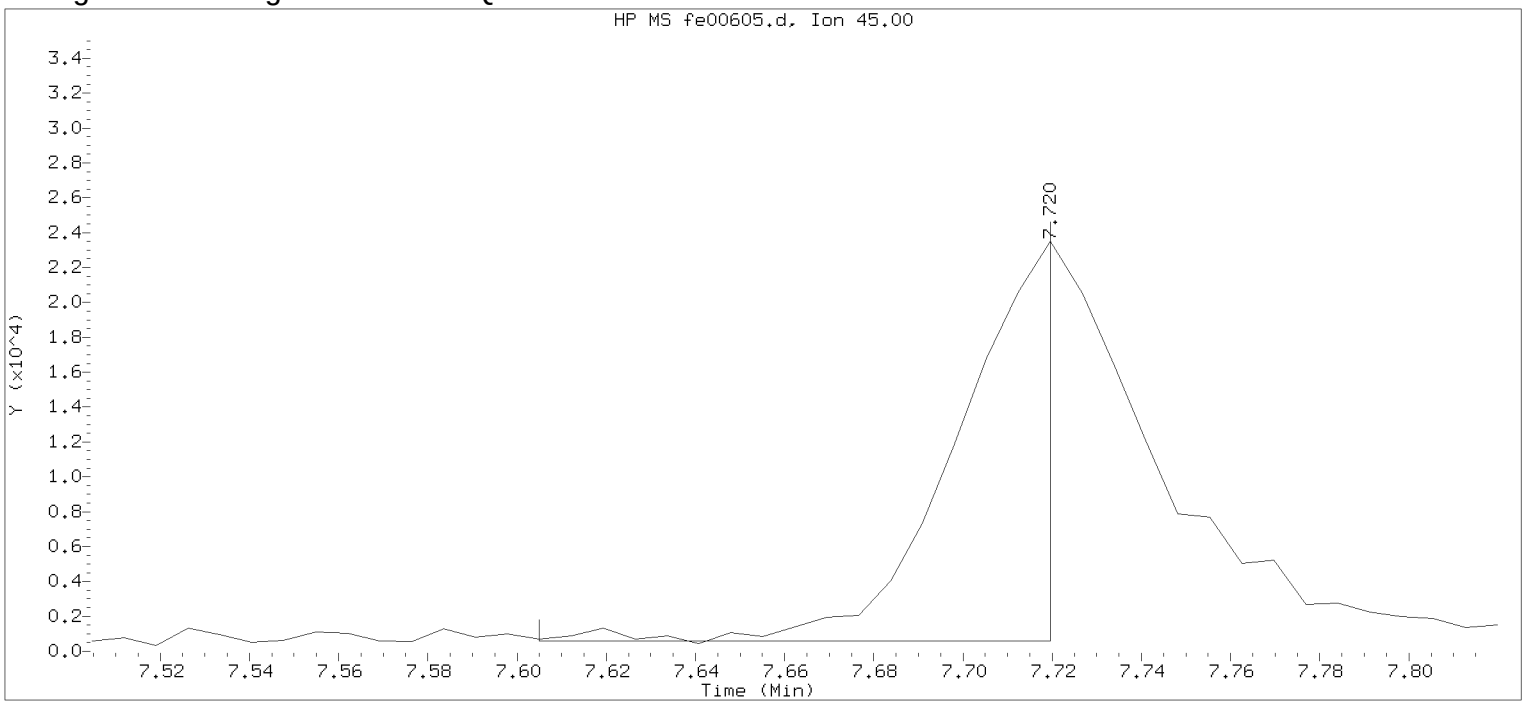
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/01/2018 at 10:46.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/01/2018 at 10:58.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



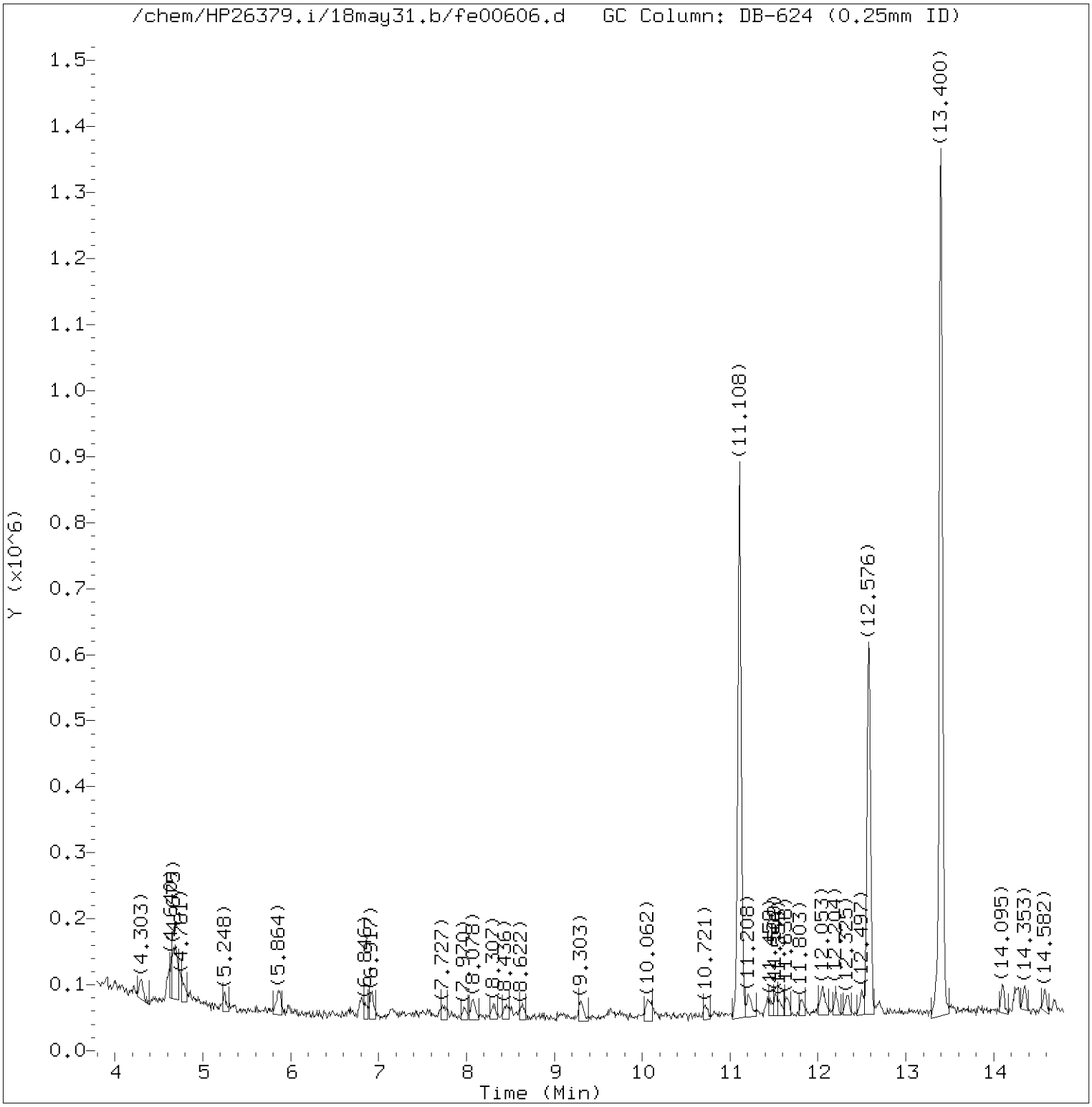
Data File: /chem/HP26379.i/18may31.b/fe00605.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 18:48 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 18:20
Date, time and analyst ID of latest file update: 31-May-2018 19:16 Unknown

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

Compound Number : 21
Compound Name : Isopropanol
Scan Number : 549
Retention Time (minutes): 7.720
Quant Ion : 45.00
Area : 32160
Concentration (ppb(v)) : 0.3139
Integration start scan : 532 Integration stop scan: 548
Y at integration start : 583 Y at integration end: 583

Digitally signed by Jeffrey B. Smith on 06/01/2018 at 10:46.
Target 3.5 esignature used. EDT Page 1394



Total Ion Chromatogram (TIC)

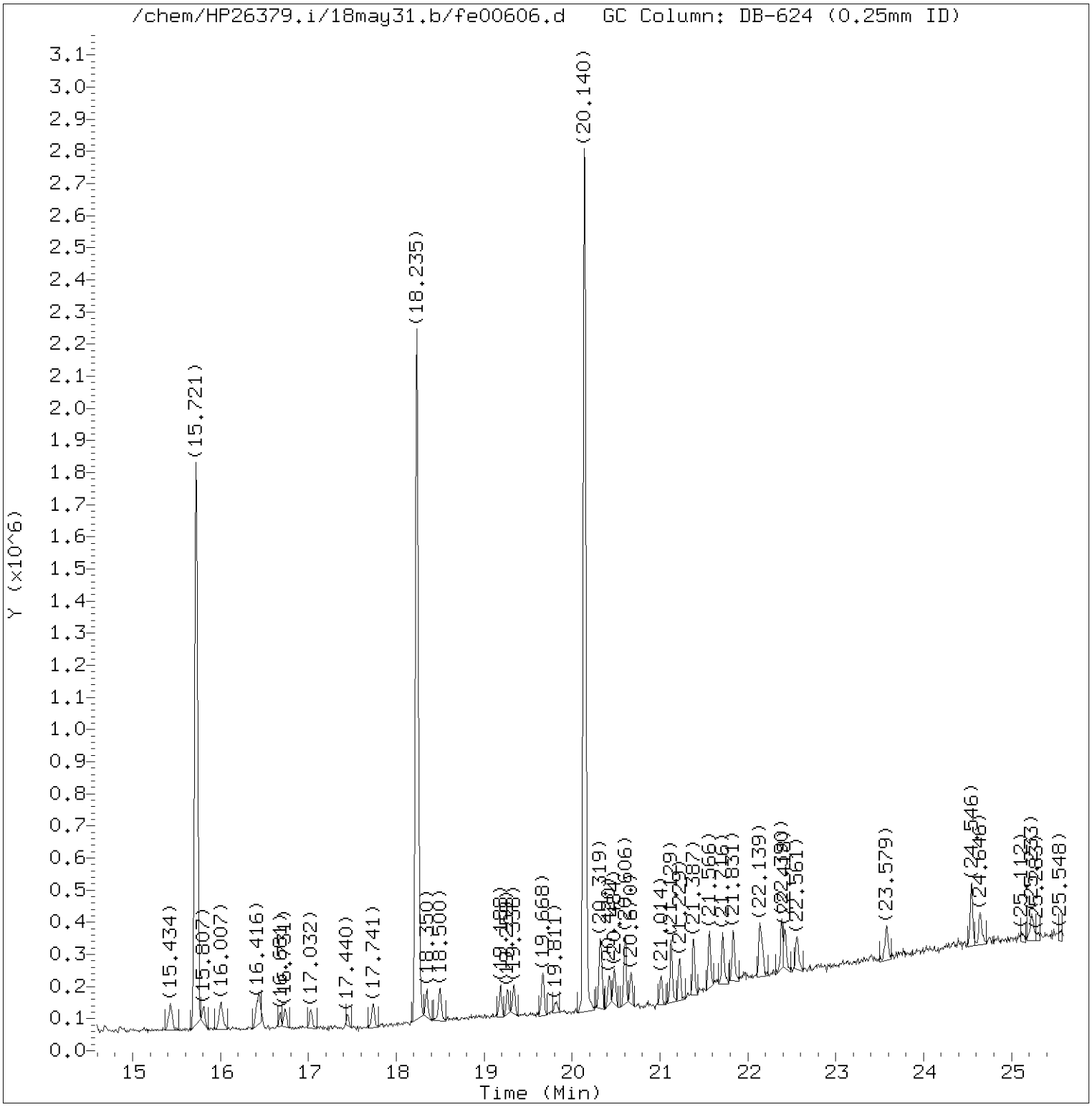
Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00606.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 19:19 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 01-JUN-2018 08:36
Date, time and analyst ID of latest file update: 01-Jun-2018 10:45 jbs01304

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

Digitally signed by Jeffrey B. Smith
on 06/01/2018 at 10:46.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00606.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 19:19 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 01-JUN-2018 08:36
Date, time and analyst ID of latest file update: 01-Jun-2018 10:45 jbs01304

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

Digitally signed by Jeffrey B. Smith
on 06/01/2018 at 10:46.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00606.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 19:19 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 01-JUN-2018 08:36
Date, time and analyst ID of latest file update: 01-Jun-2018 10:45 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.880	41	9494	0.214
2) Dichlorodifluoromethane	(1)	4.002	85	19363	0.181
3) Chlorodifluoromethane	(1)	4.081	51	16183	0.189
4) Freon 114	(1)	4.296	85	20759	0.179
5) Chloromethane	(1)	4.460	50	7095	0.150
6) Vinyl Chloride	(1)	4.632	62	5711	0.217
7) 1,3-Butadiene	(1)	4.668	54	9514	0.392
8) Bromomethane	(1)	5.342	94	11572	0.326
9) Chloroethane	(1)	5.599	64	5682M	0.238
10) Bromoethene	(1)	5.829	106	7761	0.190
12) Trichlorofluoromethane	(1)	5.857	101	17982	0.149
11) Pentane	(1)	5.872	43	23730	0.238
13) Dichlorofluoromethane	(1)	5.950	67	14778	0.166
14) Ethanol	(1)	6.660	45	17910	0.828
15) Freon123a	(1)	6.796	67	20069	0.237
16) 1,1-Dichloroethene	(1)	6.839	61	15088	0.205
17) Freon 113	(1)	6.932	103	11550	0.161
18) Carbon Disulfide	(1)	6.939	76	22640	0.202
19) Methyl Iodide	(1)	7.147	142	20245	0.164
20) Acrolein	(1)	7.498	56	5106	0.258
21) Isopropanol	(1)	7.727	45	27342	0.293
22) 3-Chloropropene	(1)	7.777	41	17328	0.253
23) Methylene Chloride	(1)	7.963	84	8550	0.241
24) Acetone	(1)	8.071	43	55008	0.698
25) trans-1,2-Dichloroethene	(1)	8.314	61	14351	0.209
26) Hexane	(1)	8.457	56	12217	0.230
27) Methyl t-Butyl Ether	(1)	8.508	73	27611	0.210
28) tert-Butyl Alcohol	(1)	8.637	59	35312	0.319
29) Acetonitrile	(1)	9.102	41	19519	0.410
30) Di-Isopropyl Ether	(1)	9.288	45	40983	0.206
31) 1,1-Dichloroethane	(1)	9.618	63	19772	0.227
32) Acrylonitrile	(1)	9.747	53	13853	0.310
33) Ethyl Tert-Butyl Ether	(1)	10.069	59	34183	0.203
34) Vinyl Acetate	(1)	10.105	43	37348	0.238
35) cis-1,2-Dichloroethene	(1)	10.714	61	12805	0.193
36) 1,2-Dichloroethene (total)	(1)		61	27156	0.402
37)*Bromochloromethane	(1)	11.108	130	405708	10.000
38) Cyclohexane	(1)	11.129	56	18608	0.196

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

Digitally signed by Jeffrey B. Smith
on 06/01/2018 at 10:46.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00606.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 19:19 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 01-JUN-2018 08:36
Date, time and analyst ID of latest file update: 01-Jun-2018 10:45 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.222	83	24059	0.251
40) Ethyl Acetate	(1)	11.423	43	36664	0.279
41) Methyl Acrylate	(1)	11.459	55	28573	0.296
42) Carbon Tetrachloride	(1)	11.509	117	24916	0.218
43) Tetrahydrofuran	(1)	11.552	42	20190	0.310
44) 1,1,1-Trichloroethane	(1)	11.652	97	22183	0.202
45) 2-Butanone	(1)	11.810	43	42842	0.371
46) Isooctane	(2)	12.060	57	59818	0.227
47) Heptane	(2)	12.204	71	10501	0.201
48) Benzene	(2)	12.333	78	36111	0.253
49) Tert-Amyl Methyl Ether	(2)	12.505	73	40402	0.300
50) 1,2-Dichloroethane	(2)	12.698	62	16712	0.250
51) Trichloroethene	(2)	13.350	130	19862	0.275
52)*1,4-Difluorobenzene	(2)	13.400	114	1449775	10.000
53) Dibromomethane	(2)	14.095	174	21548	0.270
54) Ethyl Acrylate	(2)	14.238	55	35237	0.270
55) 1,2-Dichloropropane	(2)	14.274	63	19858	0.333
56) Bromodichloromethane	(2)	14.353	83	28556	0.278
57) Methyl Methacrylate	(2)	14.582	69	17587	0.342
58) 1,4-Dioxane	(2)	14.682	88	11843	0.332
59) cis-1,3-Dichloropropene	(2)	15.413	75	26706	0.303
60) Octane	(3)	15.434	43	49674	0.297
61) Toluene	(3)	15.807	91	57859	0.310
62) 4-Methyl-2-Pentanone	(2)	16.401	43	52121	0.337
63) Tetrachloroethene	(3)	16.430	166	42817	0.348
64) trans-1,3-Dichloropropene	(3)	16.459	75	24034	0.304
65) 1,3-Dichloropropene (total)	(3)		75	50740	0.608
66) Ethyl Methacrylate	(3)	16.673	69	28574	0.303
67) 1,1,2-Trichloroethane	(3)	16.731	97	22294	0.326
68) Dibromochloromethane	(3)	17.032	127	28020	0.298
69) 1,2-Dibromoethane	(3)	17.447	107	36407	0.337
70) 2-Hexanone	(3)	17.741	43	58881	0.382
71)*Chlorobenzene-d5	(3)	18.235	117	1470565	10.000
72) Chlorobenzene	(3)	18.256	112	56895	0.342
73) Ethylbenzene	(3)	18.264	91	90639	0.339
74) 1,1,1,2-Tetrachloroethane	(3)	18.350	131	33332	0.353
75) m/p-Xylene	(3)	18.493	91	67274	0.338
76) o-Xylene	(3)	19.181	91	72641	0.360

* = Compound is an internal standard.

Digitally signed by Jeffrey B. Smith
on 06/01/2018 at 10:46.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00606.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 19:19 Analyst ID: ads07818

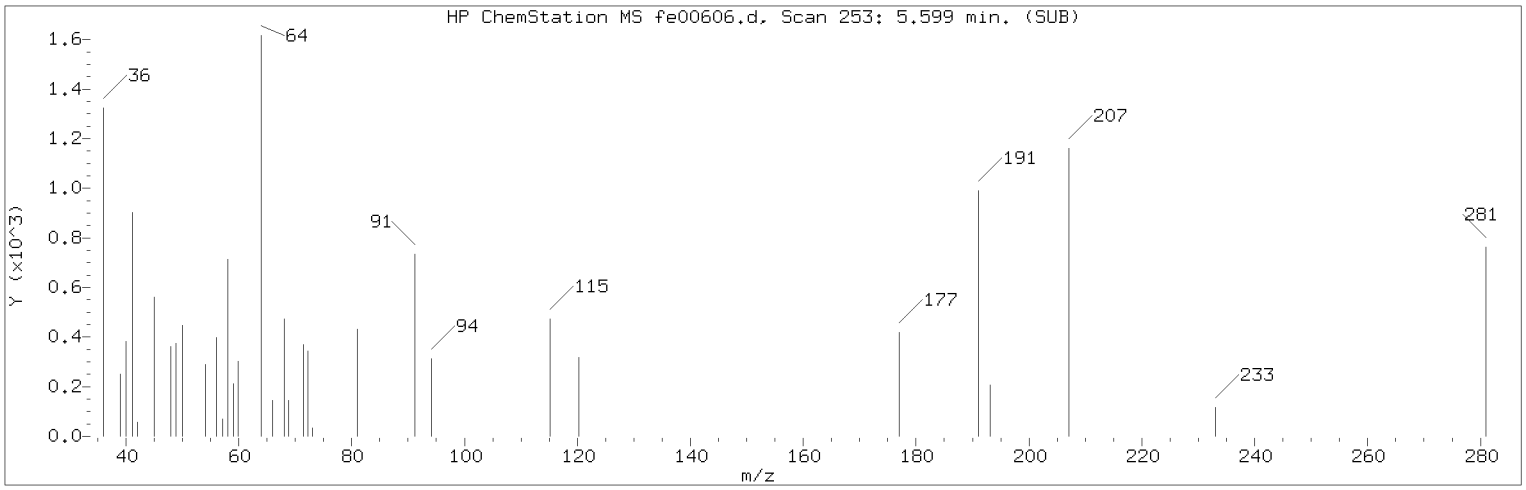
Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 01-JUN-2018 08:36
Date, time and analyst ID of latest file update: 01-Jun-2018 10:45 jbs01304

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

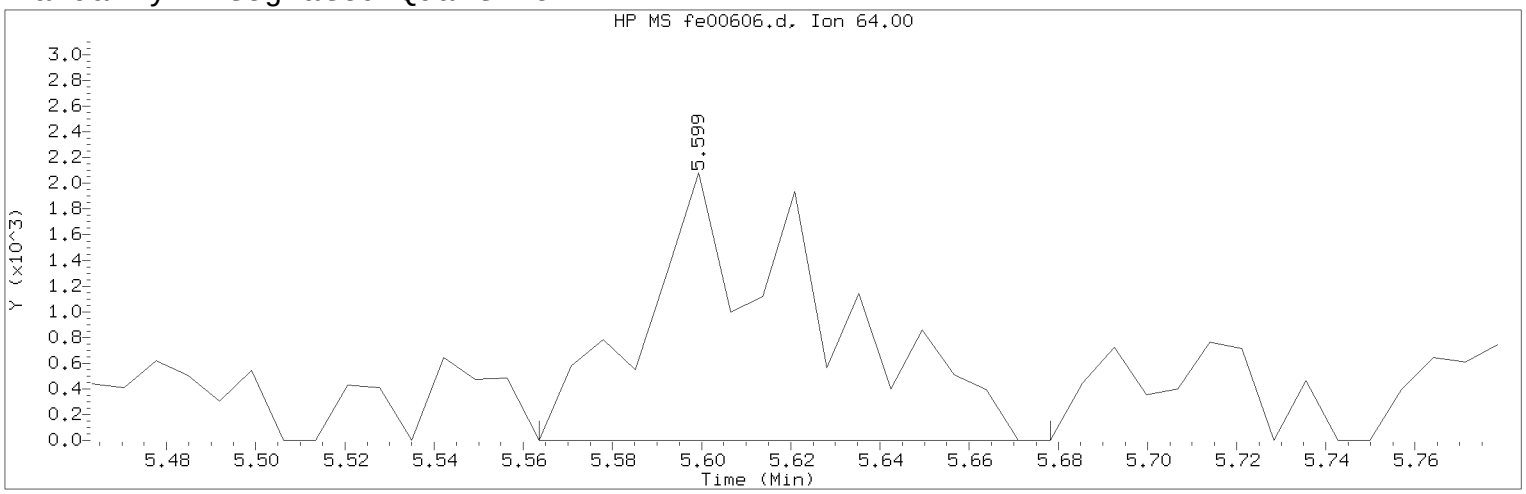
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	139915	0.698
78) Styrene	(3)	19.266	104	49660	0.321
79) Bromoform	(3)	19.338	173	50990	0.344
80) Cumene	(3)	19.668	105	107112	0.361
81) n-Propylbenzene	(3)	20.319	120	31330	0.356
82) Bromobenzene	(3)	20.334	156	41232	0.353
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	61921	0.411
84) 4-Ethyltoluene	(3)	20.484	105	103781	0.347
85) 2-Chlorotoluene	(3)	20.599	126	28819	0.363
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	92608	0.374
87) 1,2,3-Trichloropropane	(3)	20.670	110	21567	0.438
88) Alpha Methyl Styrene	(3)	21.007	118	37176	0.288
89) tert-Butylbenzene	(3)	21.129	119	114189	0.468
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	84765	0.343
91) sec-Butylbenzene	(3)	21.387	105	143654	0.390
92) p-Isopropyltoluene	(3)	21.566	119	112048	0.357
93) 1,3-Dichlorobenzene	(3)	21.716	146	72640	0.370
94) 1,4-Dichlorobenzene	(3)	21.831	146	74105	0.370
95) n-Butylbenzene	(3)	22.139	92	57205	0.329
96) Benzyl Chloride	(3)	22.160	126	14317	0.283
97) Hexachloroethane	(3)	22.382	117	32290	0.335
98) 1,2-Dichlorobenzene	(3)	22.425	146	68948	0.375
99) 1,2-Dibromo-3-chloropropane	(3)	23.579	157	35533	0.358
100) Hexachlorobutadiene	(3)	24.538	225	57216	0.323
101) 1,2,4-Trichlorobenzene	(3)	24.653	180	46926	0.285
102) Naphthalene	(3)	25.233	128	83042	0.277

Digitally signed by Jeffrey B. Smith
on 06/01/2018 at 10:46.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18may31.b/fe00606.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 19:19 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 01-JUN-2018 08:36
Date, time and analyst ID of latest file update: 01-Jun-2018 10:45 jbs01304

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

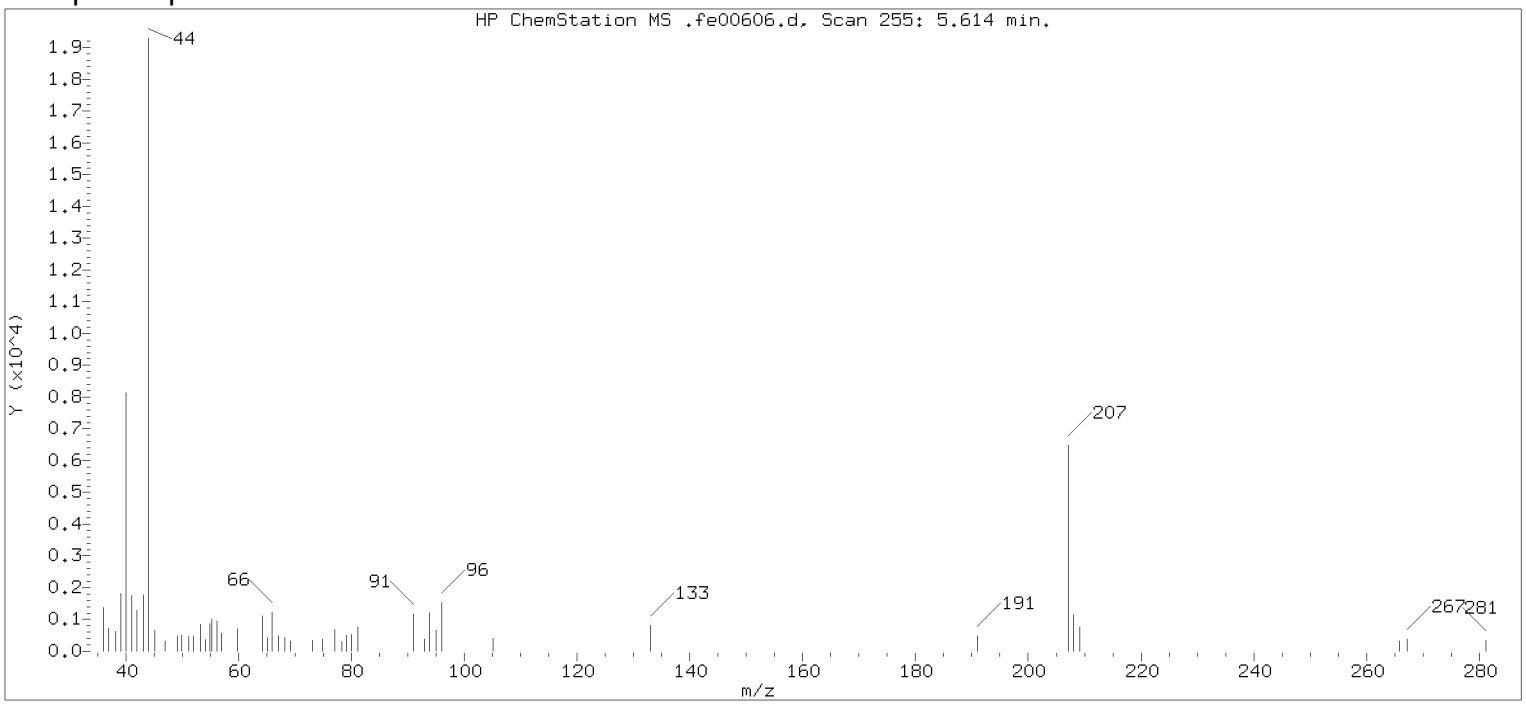
Compound Number : 9
Compound Name : Chloroethane
Scan Number : 253
Retention Time (minutes): 5.599
Quant Ion : 64.00
Area (flag) : 5682M
Concentration (ppb(v)) : 0.2382
Integration start scan : 247 Integration stop scan: 263
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

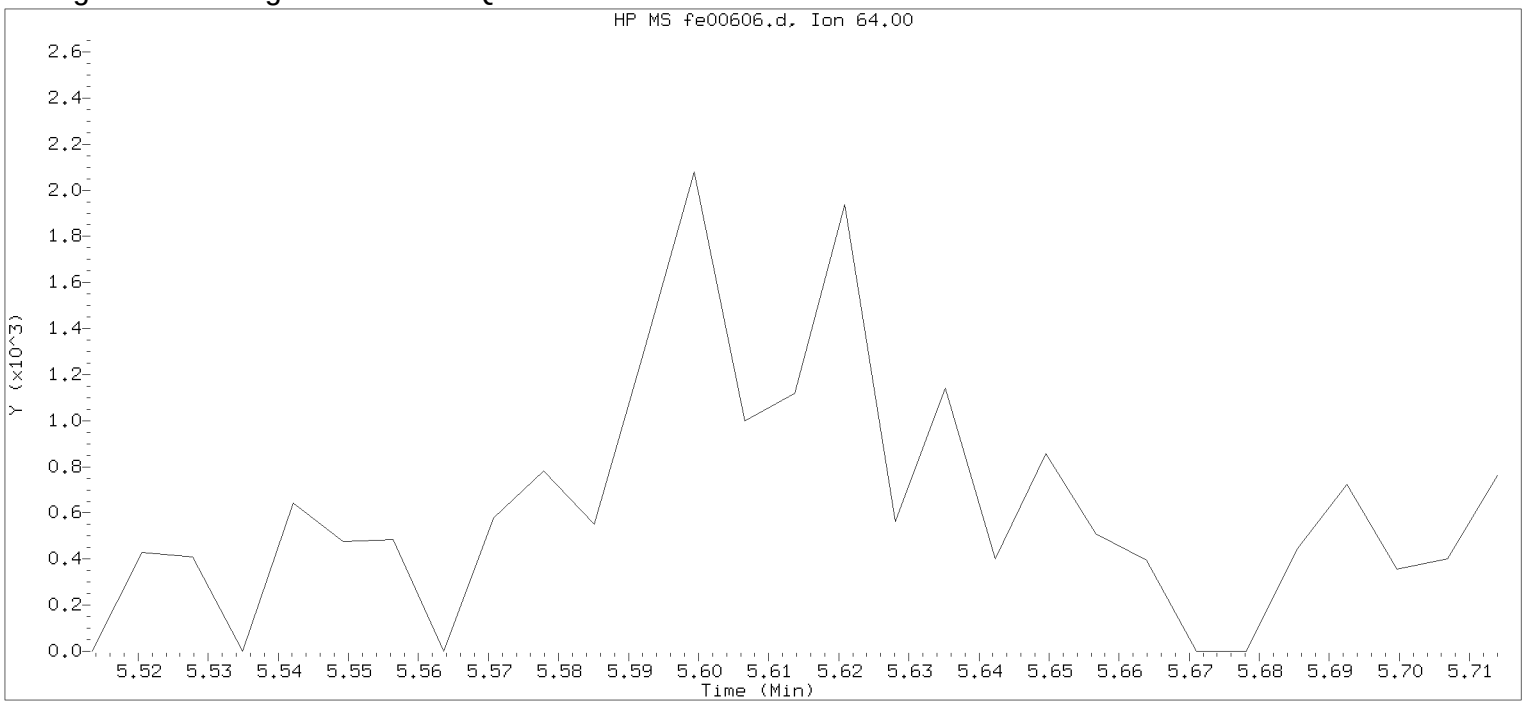
Analyst responsible for change: Digitally signed by Jeffrey B. Smith on 06/01/2018 at 10:46.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/01/2018 at 10:58.
PARALLAX ID: jbs01304

Sample Spectrum



Original Integration of Quant Ion



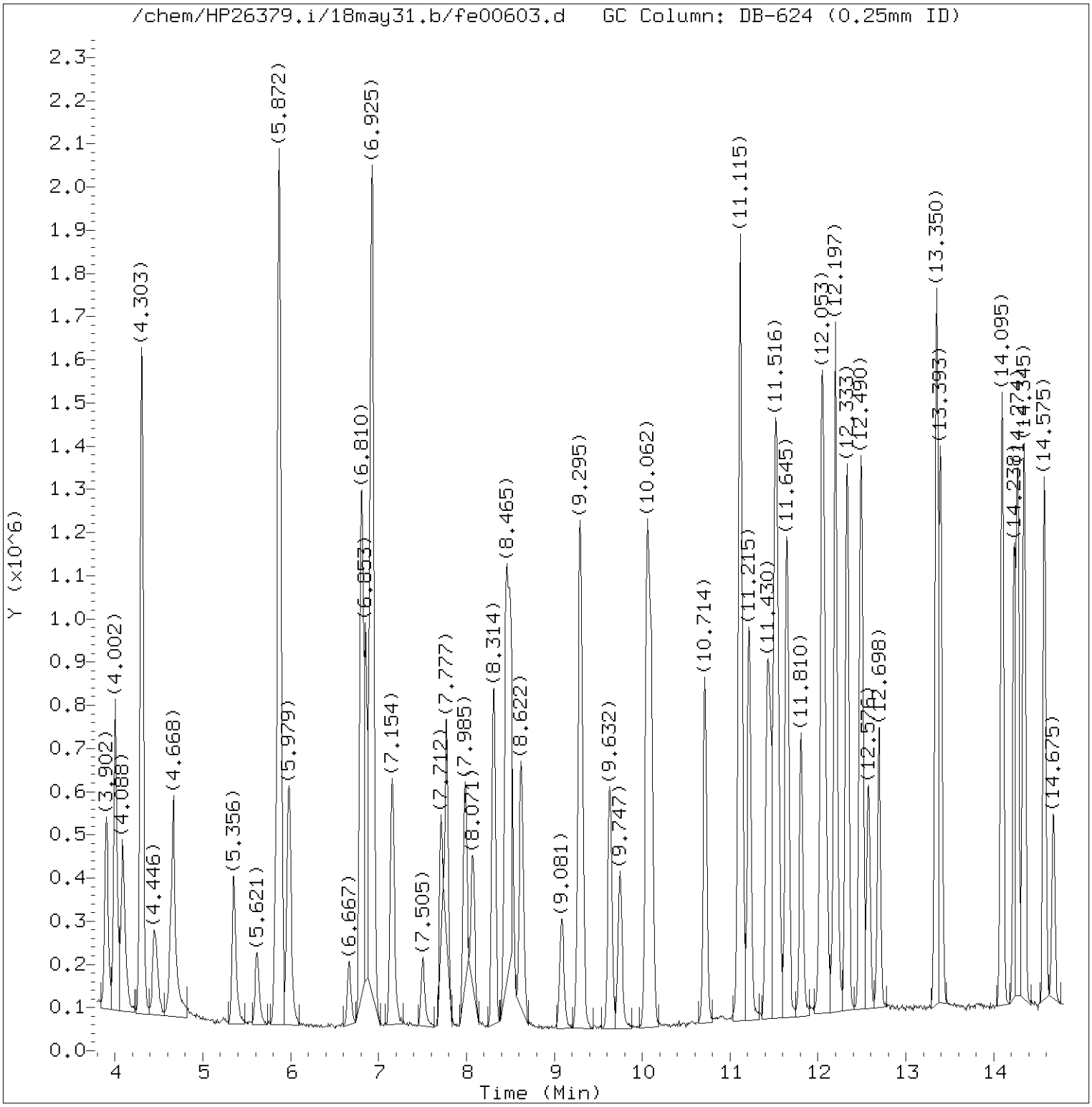
Data File: /chem/HP26379.i/18may31.b/fe00606.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 19:19 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 18:20
Date, time and analyst ID of latest file update: 31-May-2018 19:47 Unknown

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

Compound Number : 9
Compound Name : Chloroethane
Expected RT (minutes) : 5.614
Quant Ion : 64.00

Digitally signed by Jeffrey B. Smith on 06/01/2018 at 10:46.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

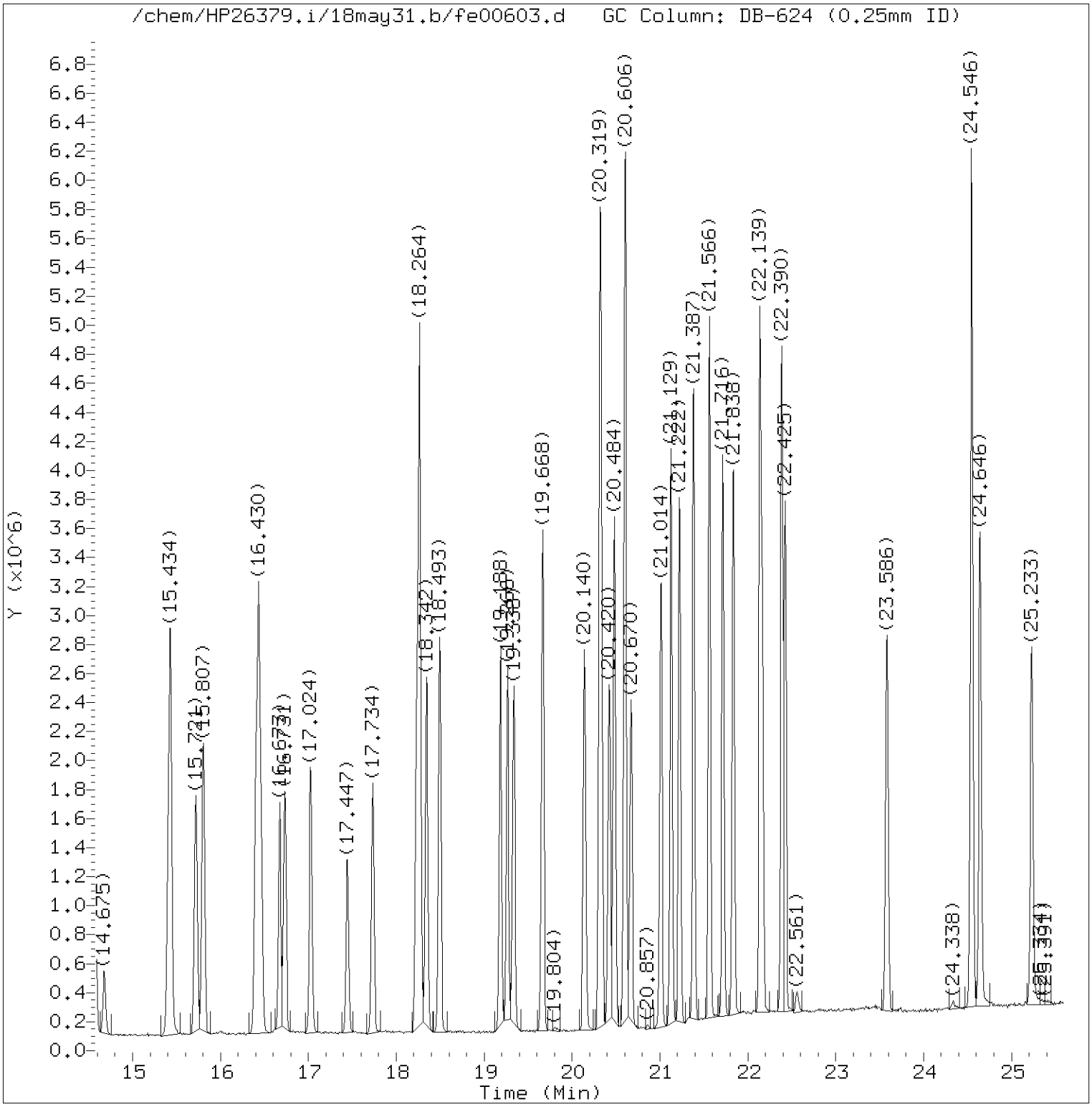
Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00603.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 17:47 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:25
Date, time and analyst ID of latest file update: 31-May-2018 18:15 jeb07445

Sample Name: LCSF22 Lab Sample ID: LCSF22

Digitally signed by Jacob E. Bailey
on 05/31/2018 at 18:15.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00603.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 17:47 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:25
Date, time and analyst ID of latest file update: 31-May-2018 18:15 jeb07445

Sample Name: LCSF22 Lab Sample ID: LCSF22

Digitally signed by Jacob E. Bailey
on 05/31/2018 at 18:15.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00603.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 17:47 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:25
Date, time and analyst ID of latest file update: 31-May-2018 18:15 jeb07445

Sample Name: LCSF22 Lab Sample ID: LCSF22

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	435863	10.483
2) Dichlorodifluoromethane	(1)	4.002	85	1164092	11.595
3) Chlorodifluoromethane	(1)	4.088	51	923585	11.484
4) Freon 114	(1)	4.303	85	1188627	10.942
5) Chloromethane	(1)	4.453	50	478922	10.782
6) Vinyl Chloride	(1)	4.632	62	278623	11.277
7) 1,3-Butadiene	(1)	4.668	54	214114	9.403
8) Bromomethane	(1)	5.349	94	410929	12.350
9) Chloroethane	(1)	5.614	64	255755	11.423
10) Bromoethene	(1)	5.829	106	439881	11.501
11) Pentane	(1)	5.864	43	954255	10.179
12) Trichlorofluoromethane	(1)	5.879	101	1204167	10.648
13) Dichlorofluoromethane	(1)	5.979	67	989917	11.861
14) Ethanol	(1)	6.659	45	226763	11.168
15) Freon123a	(1)	6.803	67	957010	12.042
16) 1,1-Dichloroethene	(1)	6.853	61	792757	11.466
17) Freon 113	(1)	6.917	103	675463	10.001
18) Carbon Disulfide	(1)	6.939	76	1180030	11.199
19) Methyl Iodide	(1)	7.154	142	1171920	10.124
20) Acrolein	(1)	7.505	56	224606	12.071
21) Isopropanol	(1)	7.712	45	959828	10.973
22) 3-Chloropropene	(1)	7.777	41	852524M	13.250
23) Methylene Chloride	(1)	7.985	84	419694	12.618
24) Acetone	(1)	8.071	43	834216	11.282
25) trans-1,2-Dichloroethene	(1)	8.314	61	720215	11.174
26) Hexane	(1)	8.450	56	530691	10.620
27) Methyl t-Butyl Ether	(1)	8.500	73	1279086	10.345
28) tert-Butyl Alcohol	(1)	8.622	59	1155403	11.120
29) Acetonitrile	(1)	9.088	41	500426	11.211
30) Di-Isopropyl Ether	(1)	9.295	45	1903267	10.215
31) 1,1-Dichloroethane	(1)	9.632	63	902224	11.044
32) Acrylonitrile	(1)	9.747	53	478273	11.406
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	1648565	10.427
34) Vinyl Acetate	(1)	10.105	43	1790857M	12.169
35) cis-1,2-Dichloroethene	(1)	10.714	61	692347	11.099
36) 1,2-Dichloroethene (total)	(1)		61	1412562	22.273
37)*Bromochloromethane	(1)	11.108	130	380855	10.000
38) Cyclohexane	(1)	11.122	56	913874	10.248

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

Digitally signed by Jacob E. Bailey
on 05/31/2018 at 18:15.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00603.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 17:47 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:25
Date, time and analyst ID of latest file update: 31-May-2018 18:15 jeb07445

Sample Name: LCSF22 Lab Sample ID: LCSF22

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	995681	11.072
40) Ethyl Acetate	(1)	11.423	43	1268419	10.283
41) Methyl Acrylate	(1)	11.459	55	984123	10.863
42) Carbon Tetrachloride	(1)	11.516	117	1133406	10.587
43) Tetrahydrofuran	(1)	11.545	42	703370	11.503
44) 1,1,1-Trichloroethane	(1)	11.645	97	1080284	10.493
45) 2-Butanone	(1)	11.810	43	1173993	10.833
46) Isooctane	(2)	12.053	57	2669512	10.784
47) Heptane	(2)	12.197	71	496386	10.112
48) Benzene	(2)	12.333	78	1466002	10.904
49) Tert-Amyl Methyl Ether	(2)	12.490	73	1344080M	10.598
50) 1,2-Dichloroethane	(2)	12.698	62	702388	11.172
51) Trichloroethene	(2)	13.343	130	763430	11.220
52)*1,4-Difluorobenzene	(2)	13.400	114	1363307	10.000
53) Dibromomethane	(2)	14.095	174	833020	11.101
54) Ethyl Acrylate	(2)	14.231	55	1304978	10.631
55) 1,2-Dichloropropane	(2)	14.274	63	602578	10.739
56) Bromodichloromethane	(2)	14.345	83	1044730	10.803
57) Methyl Methacrylate	(2)	14.575	69	491865	10.182
58) 1,4-Dioxane	(2)	14.682	88	355776	10.591
59) cis-1,3-Dichloropropene	(2)	15.406	75	885722	10.701
60) Octane	(3)	15.434	43	1533896	9.817
61) Toluene	(3)	15.807	91	1810939	10.366
62) 4-Methyl-2-Pentanone	(2)	16.401	43	1508669M	10.384
63) Tetrachloroethene	(3)	16.437	166	1183333	10.299
64) trans-1,3-Dichloropropene	(3)	16.466	75	767940	10.402
65) 1,3-Dichloropropene (total)	(3)		75	1653662	21.103
66) Ethyl Methacrylate	(3)	16.673	69	858123	9.719
67) 1,1,2-Trichloroethane	(3)	16.731	97	664296	10.405
68) Dibromochloromethane	(3)	17.024	127	920439	10.476
69) 1,2-Dibromoethane	(3)	17.447	107	1060898	10.505
70) 2-Hexanone	(3)	17.734	43	1438960	9.982
71)*Chlorobenzene-d5	(3)	18.235	117	1375019	10.000
72) Chlorobenzene	(3)	18.264	112	1579244	10.153
73) Ethylbenzene	(3)	18.271	91	2428171	9.719
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	897331	10.168
75) m/p-Xylene	(3)	18.493	91	1860809	10.001
76) o-Xylene	(3)	19.188	91	1896148	10.059

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

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on 05/31/2018 at 18:15.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00603.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 17:47 Analyst ID: ads07818

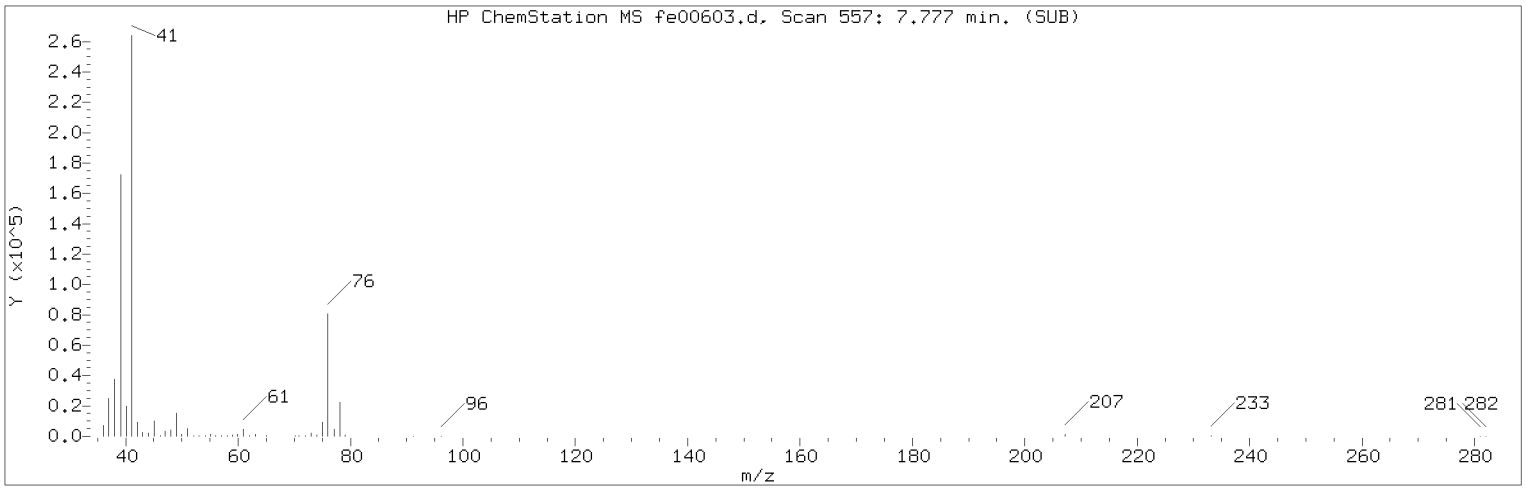
Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:25
Date, time and analyst ID of latest file update: 31-May-2018 18:15 jeb07445

Sample Name: LCSF22 Lab Sample ID: LCSF22

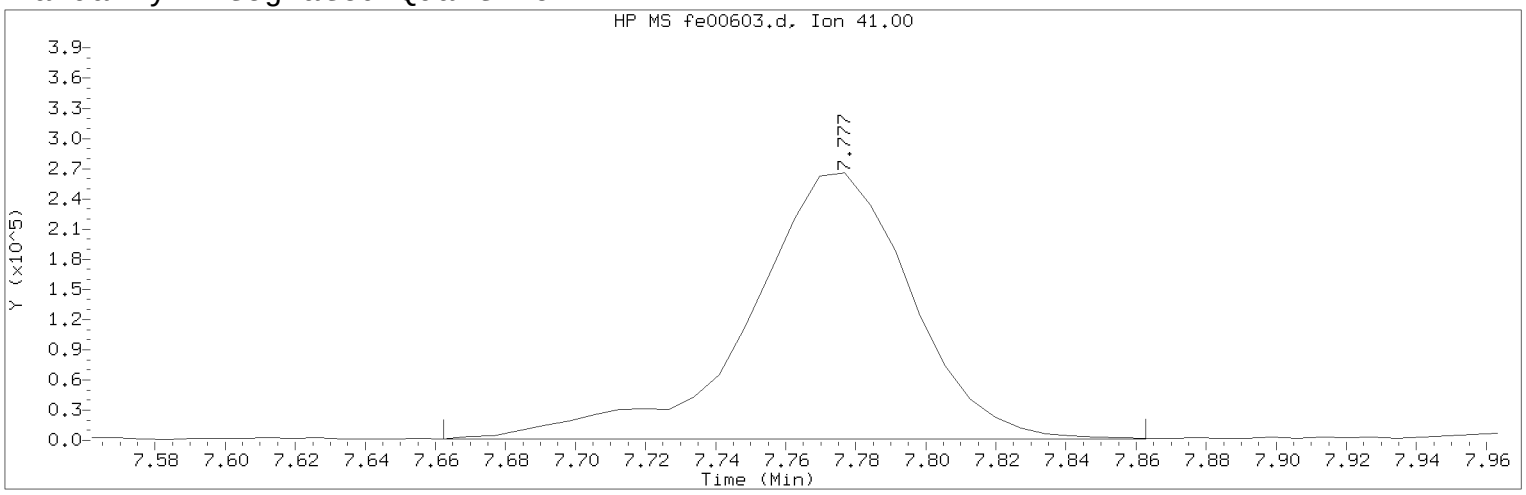
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	3756957	20.060
78) Styrene	(3)	19.266	104	1513996	10.462
79) Bromoform	(3)	19.338	173	1389929	10.029
80) Cumene	(3)	19.668	105	2761350	9.956
81) n-Propylbenzene	(3)	20.319	120	814735	9.890
82) Bromobenzene	(3)	20.327	156	1106744	10.144
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	1394402	9.907
84) 4-Ethyltoluene	(3)	20.484	105	2777418	9.946
85) 2-Chlorotoluene	(3)	20.599	126	748120	10.088
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	2363708	10.196
87) 1,2,3-Trichloropropane	(3)	20.670	110	458026	9.953
88) Alpha Methyl Styrene	(3)	21.014	118	1198366	9.939
89) tert-Butylbenzene	(3)	21.129	119	2302038	10.081
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	2295678	9.925
91) sec-Butylbenzene	(3)	21.387	105	3440805	9.995
92) p-Isopropyltoluene	(3)	21.566	119	2958472	10.090
93) 1,3-Dichlorobenzene	(3)	21.716	146	1797113	9.780
94) 1,4-Dichlorobenzene	(3)	21.838	146	1822651	9.728
95) n-Butylbenzene	(3)	22.139	92	1653418	10.180
96) Benzyl Chloride	(3)	22.167	126	492155	10.388
97) Hexachloroethane	(3)	22.390	117	932937	10.363
98) 1,2-Dichlorobenzene	(3)	22.425	146	1694212	9.845
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	951753	10.260
100) Hexachlorobutadiene	(3)	24.546	225	1680314	10.133
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	1540992	10.018
102) Naphthalene	(3)	25.233	128	2822871	10.057

Digitally signed by Jacob E. Bailey
on 05/31/2018 at 18:15.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18may31.b/fe00603.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 17:47 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:25
Date, time and analyst ID of latest file update: 31-May-2018 18:15 jeb07445

Sample Name: LCSF22 Lab Sample ID: LCSF22

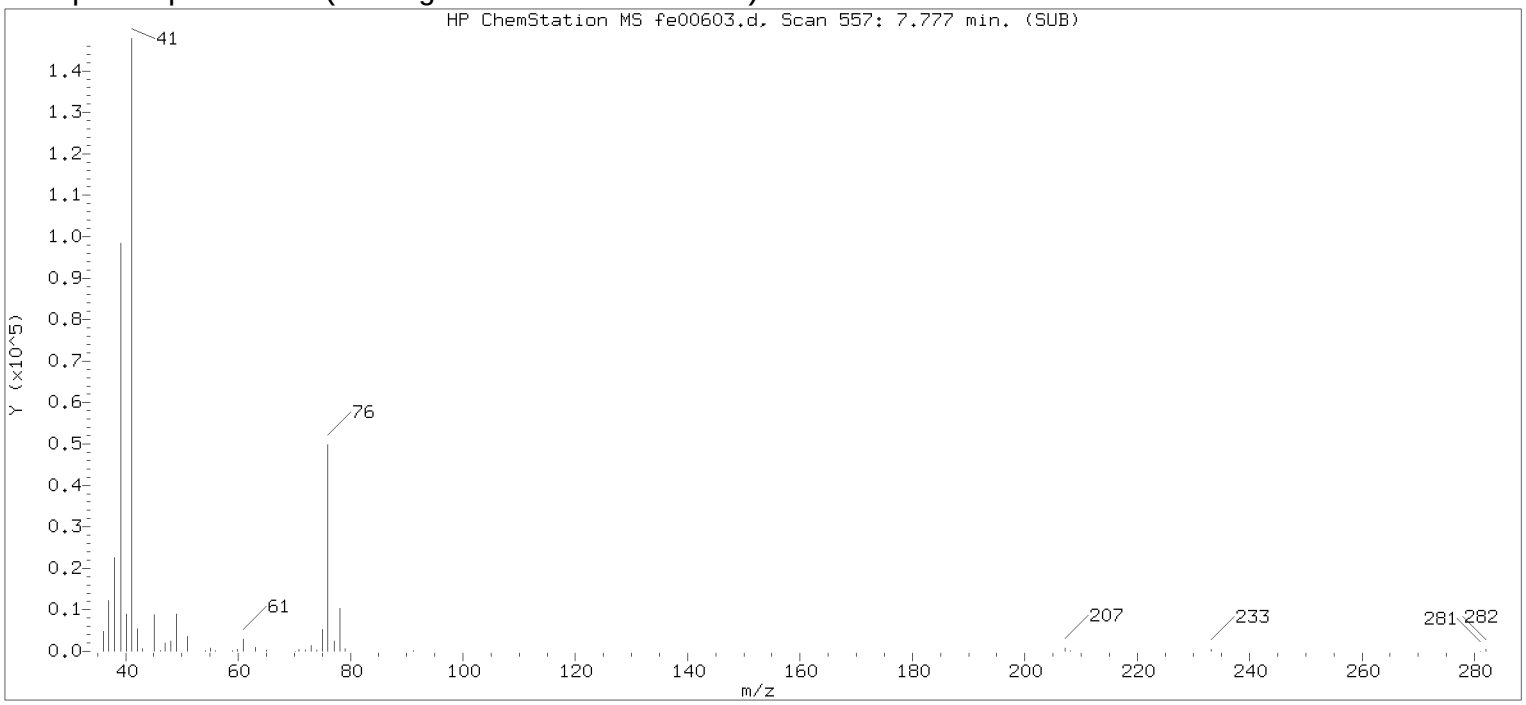
Compound Number : 22
Compound Name : 3-Chloropropene
Scan Number : 557
Retention Time (minutes): 7.777
Quant Ion : 41.00
Area (flag) : 852524M
Concentration (ppb(v)) : 13.2496
Integration start scan : 540 Integration stop scan: 568
Y at integration start : 1306 Y at integration end: 1306

Reason for manual integration: improper integration

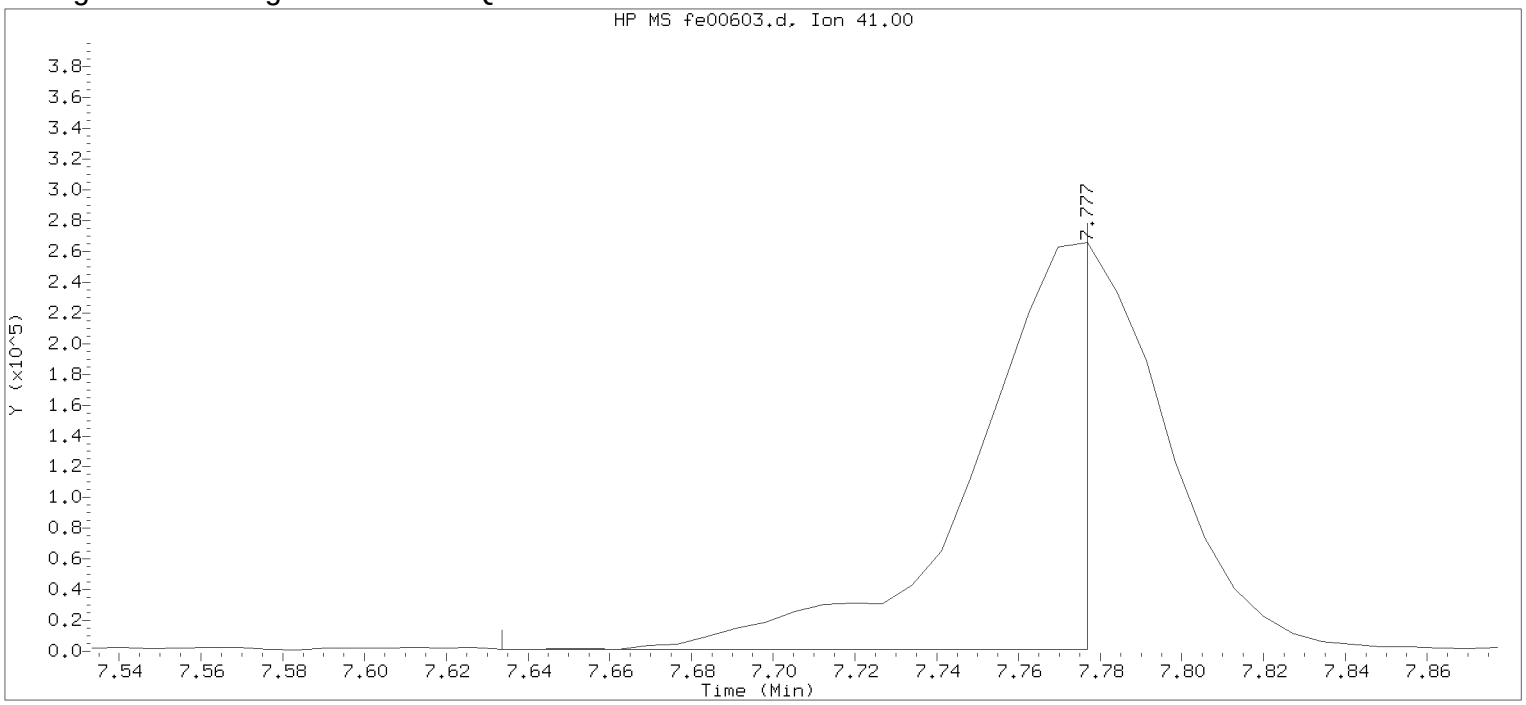
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 05/31/2018 at 18:15.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/01/2018 at 10:41.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18may31.b/fe00603.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 17:47 Analyst ID: ads07818

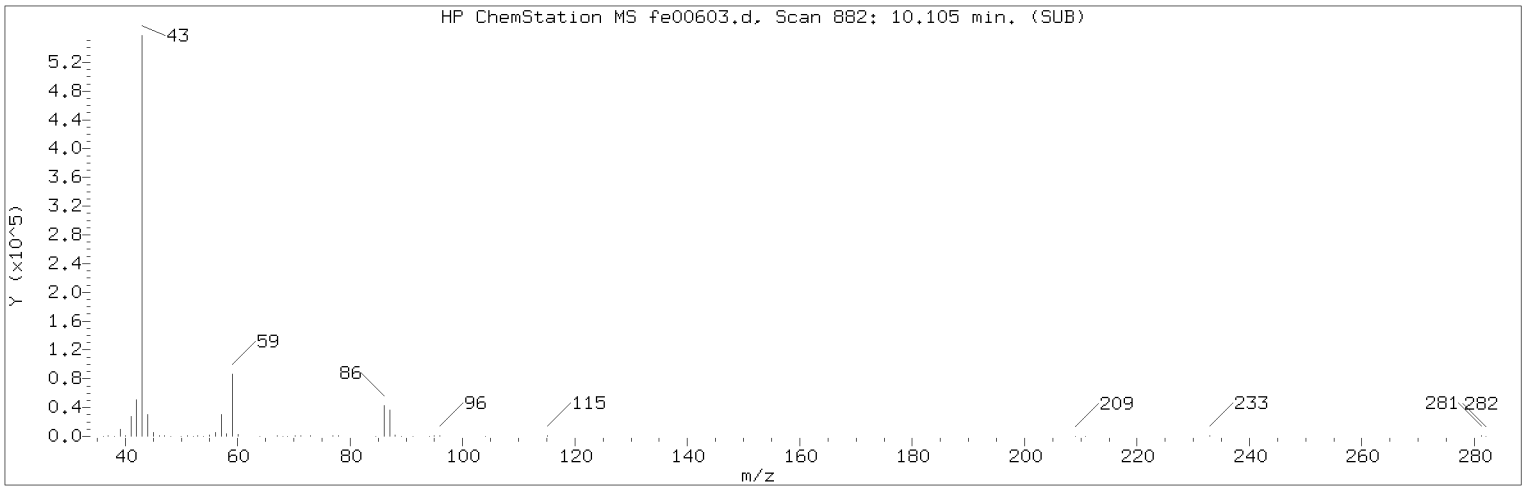
Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:25
Date, time and analyst ID of latest file update: 31-May-2018 18:13 Unknown

Sample Name: LCSF22 Lab Sample ID: LCSF22

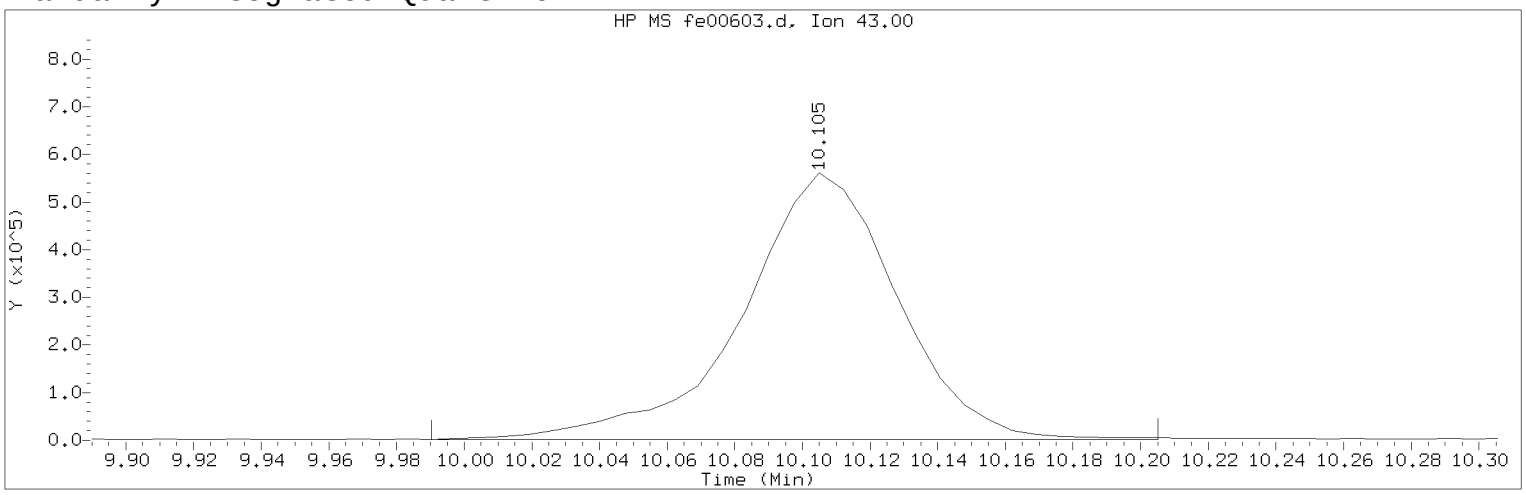
Compound Number : 22
Compound Name : 3-Chloropropene
Scan Number : 557
Retention Time (minutes): 7.777
Quant Ion : 41.00
Area : 495499
Concentration (ppb(v)) : 7.7009
Integration start scan : 536 Integration stop scan: 556
Y at integration start : 1360 Y at integration end: 1360

Digitally signed by Jacob E. Bailey on 05/31/2018 at 18:15.
Target 3.5 esignature used. EDD Page 1404 of 1687

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18may31.b/fe00603.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 17:47 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:25
Date, time and analyst ID of latest file update: 31-May-2018 18:15 jeb07445

Sample Name: LCSF22 Lab Sample ID: LCSF22

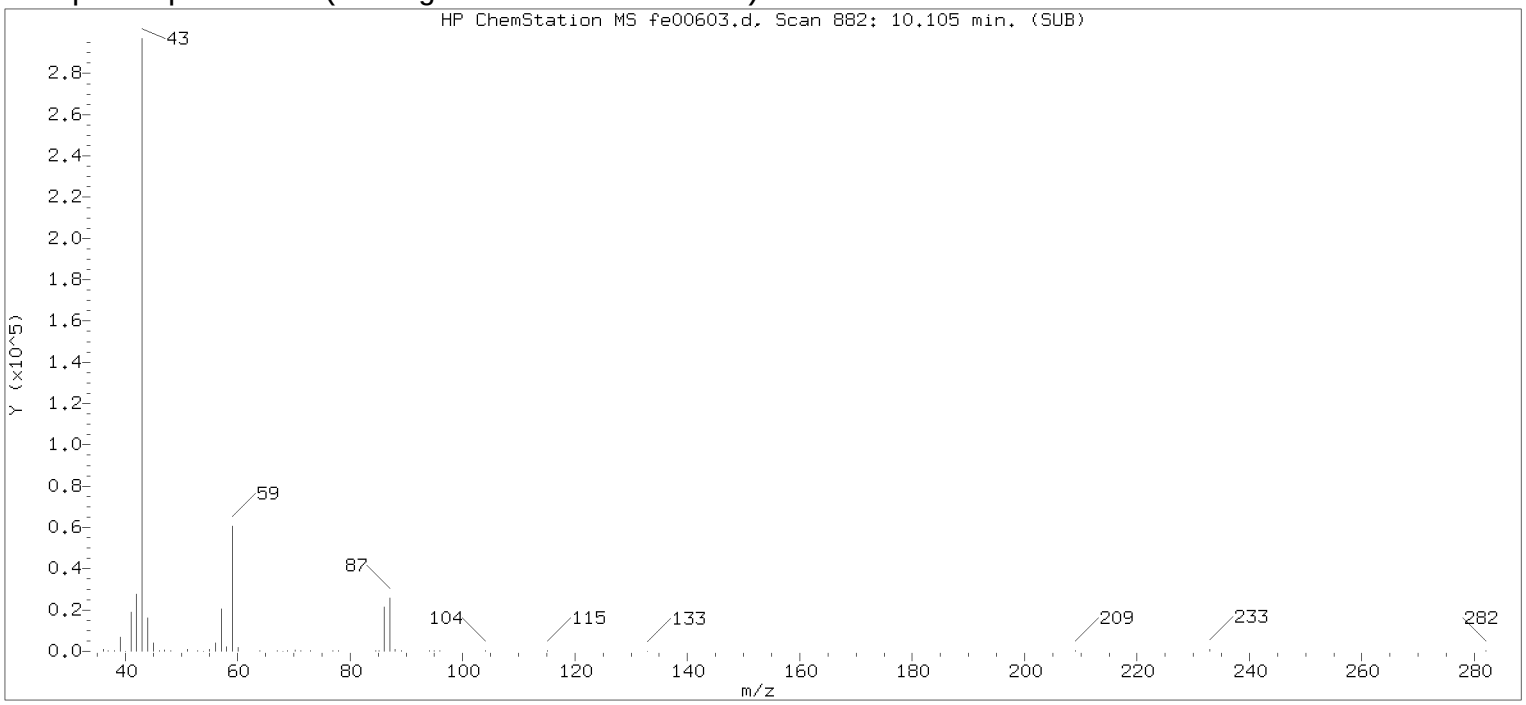
Compound Number : 34
Compound Name : Vinyl Acetate
Scan Number : 882
Retention Time (minutes): 10.105
Quant Ion : 43.00
Area (flag) : 1790857M
Concentration (ppb(v)) : 12.1693
Integration start scan : 865 Integration stop scan: 895
Y at integration start : 924 Y at integration end: 924

Reason for manual integration: improper integration

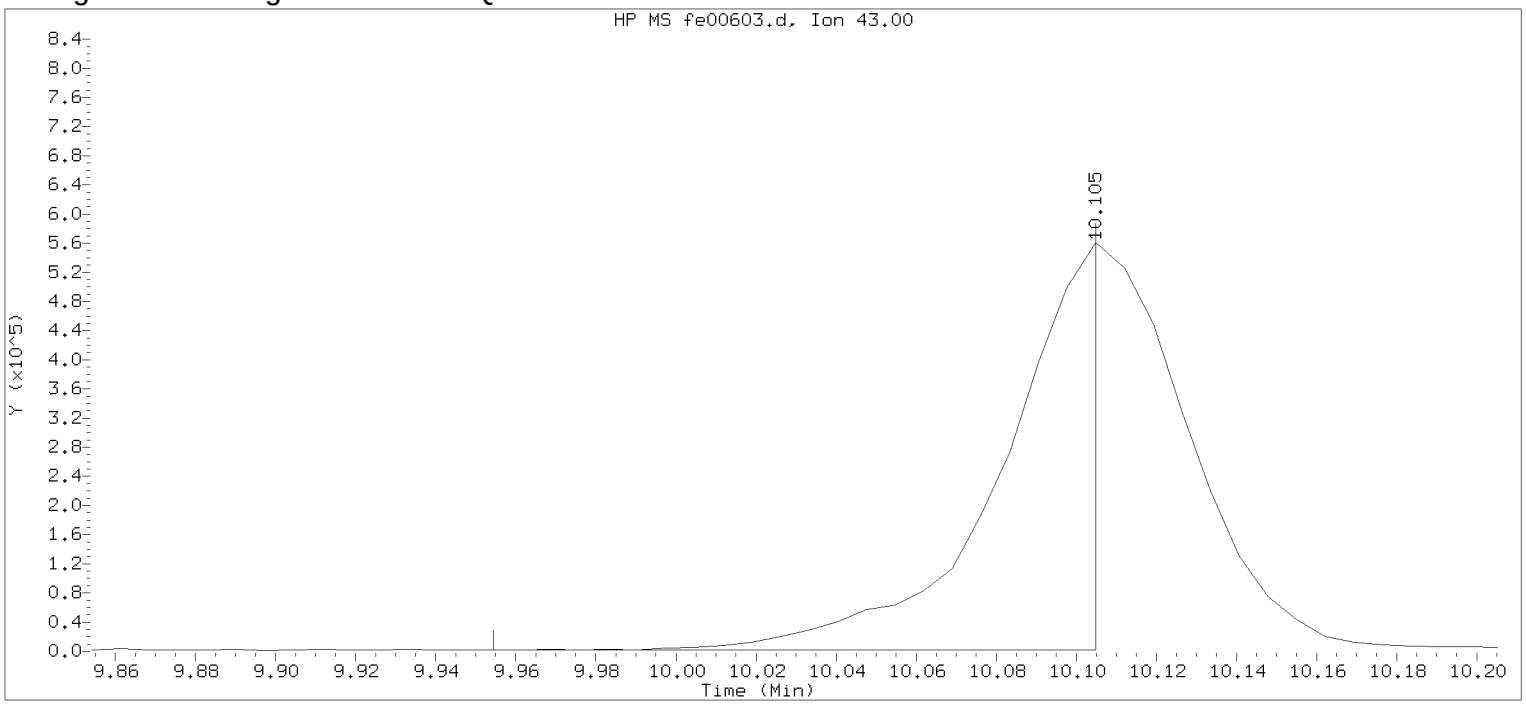
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 05/31/2018 at 18:15.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/01/2018 at 10:41.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18may31.b/fe00603.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 17:47 Analyst ID: ads07818

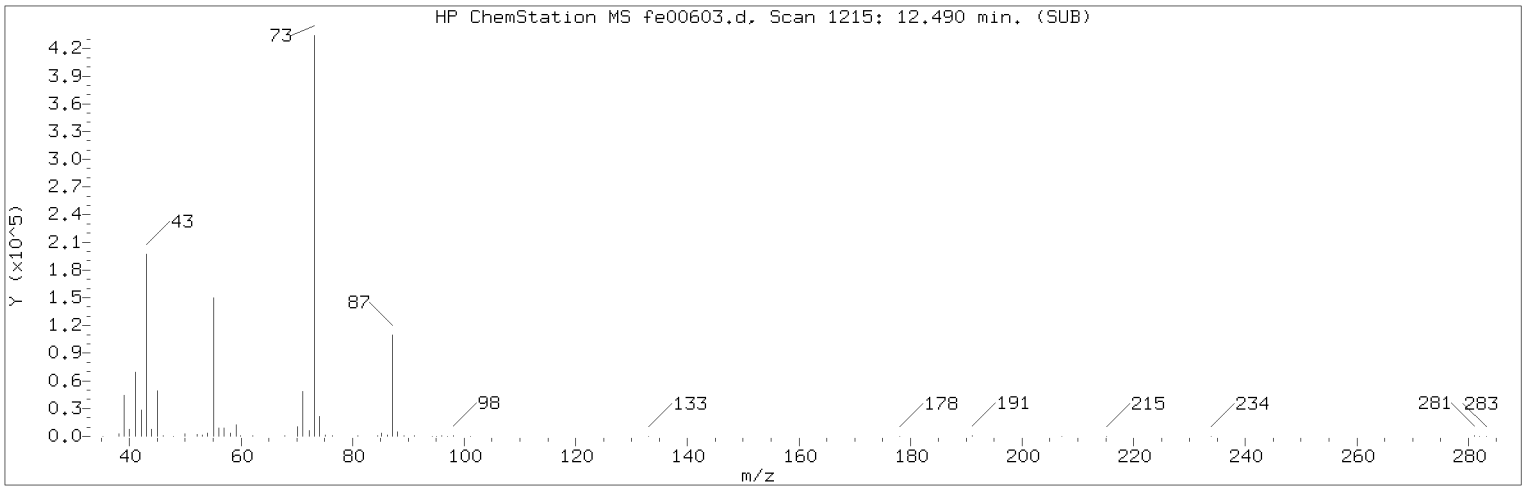
Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:25
Date, time and analyst ID of latest file update: 31-May-2018 18:13 Unknown

Sample Name: LCSF22 Lab Sample ID: LCSF22

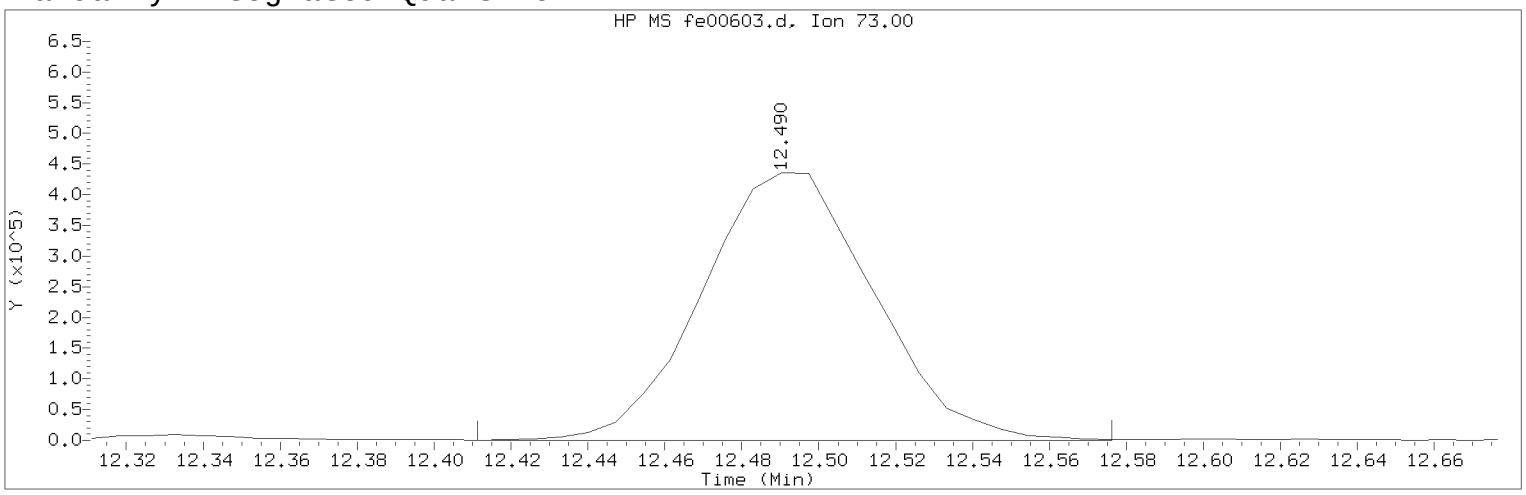
Compound Number : 34
Compound Name : Vinyl Acetate
Scan Number : 882
Retention Time (minutes): 10.105
Quant Ion : 43.00
Area : 881030
Concentration (ppb(v)) : 5.9868
Integration start scan : 860 Integration stop scan: 881
Y at integration start : 1805 Y at integration end: 1805

Digitally signed by Jacob E. Bailey on 05/31/2018 at 18:15.
Target 3.5 esignature used.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18may31.b/fe00603.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 17:47 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:25
Date, time and analyst ID of latest file update: 31-May-2018 18:15 jeb07445

Sample Name: LCSF22 Lab Sample ID: LCSF22

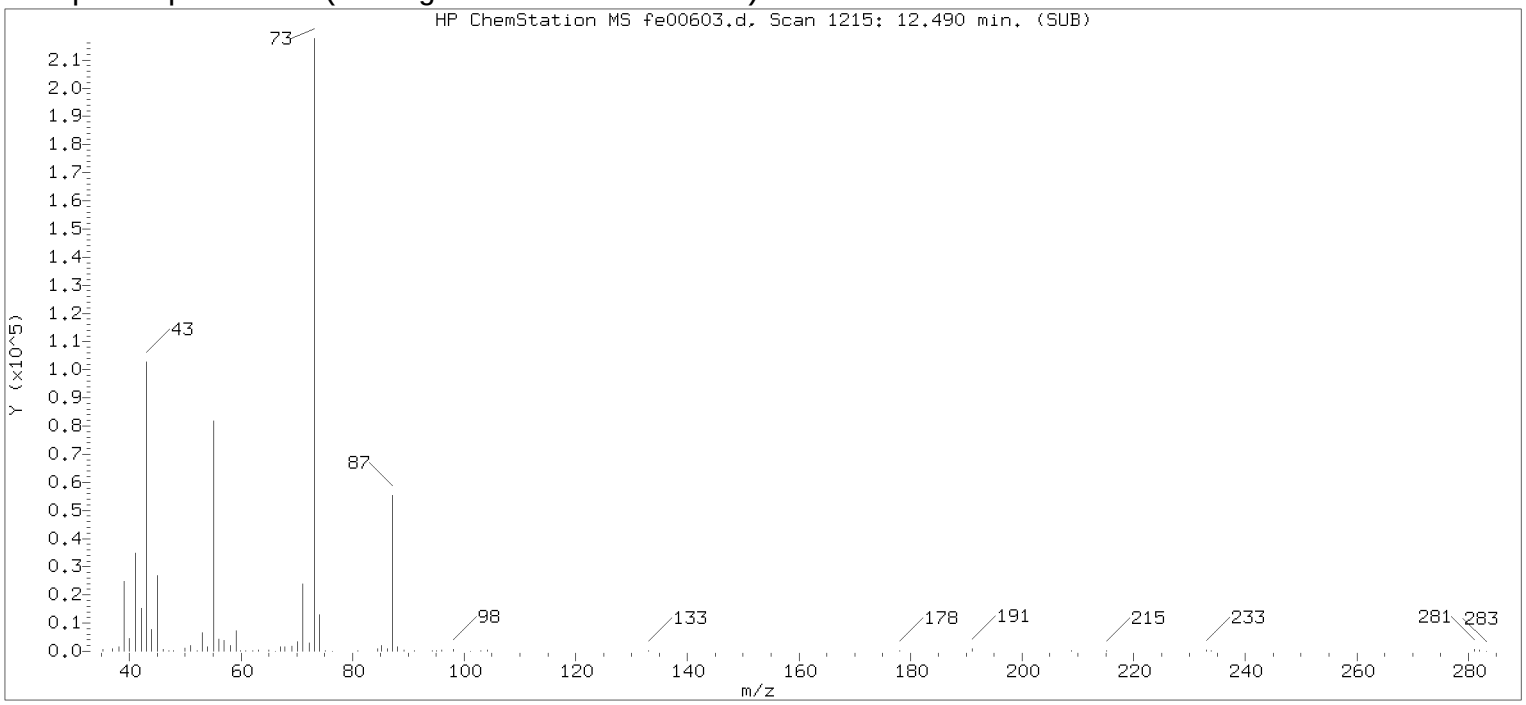
Compound Number : 49
Compound Name : Tert-Amyl Methyl Ether
Scan Number : 1215
Retention Time (minutes): 12.490
Quant Ion : 73.00
Area (flag) : 1344080M
Concentration (ppb(v)) : 10.5980
Integration start scan : 1203 Integration stop scan: 1226
Y at integration start : 344 Y at integration end: 344

Reason for manual integration: improper integration

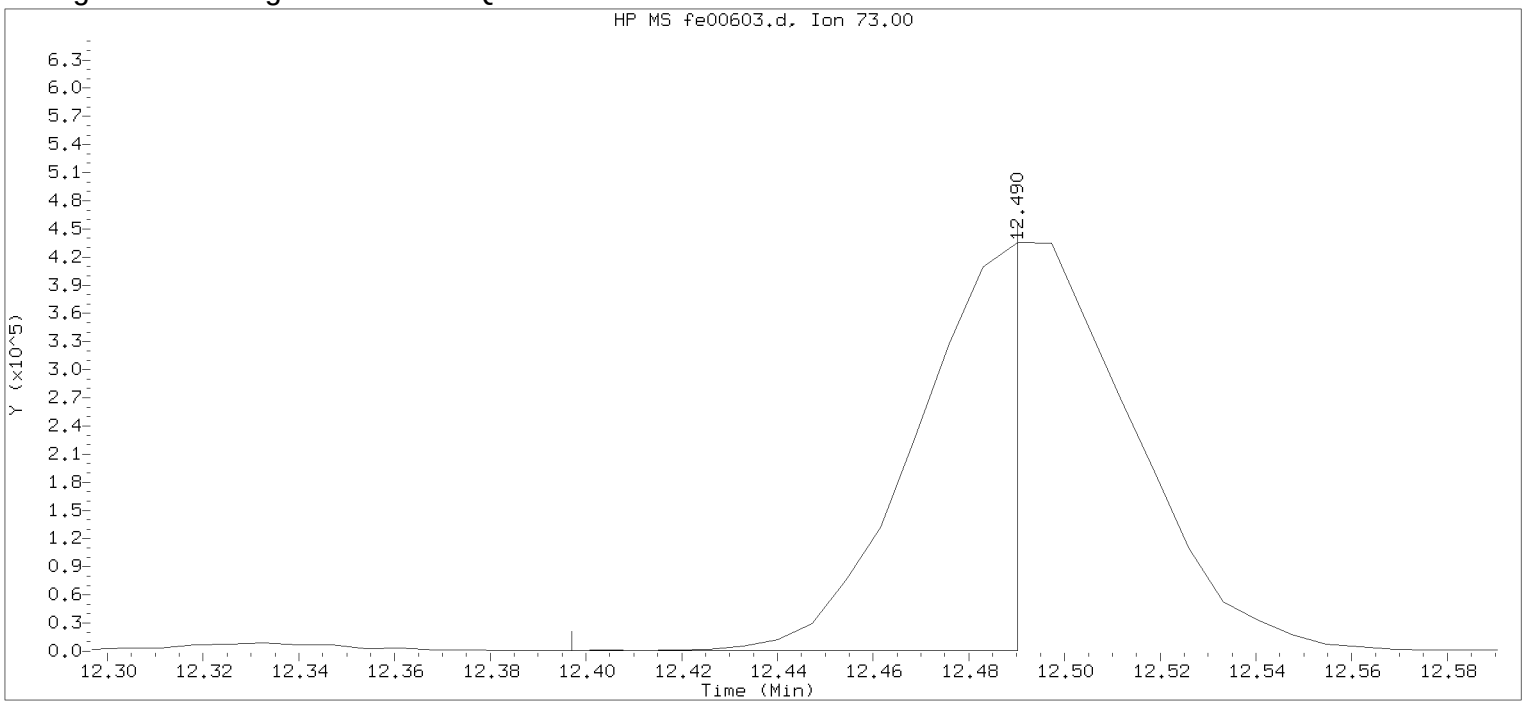
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 05/31/2018 at 18:15.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/01/2018 at 10:41.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18may31.b/fe00603.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 17:47 Analyst ID: ads07818

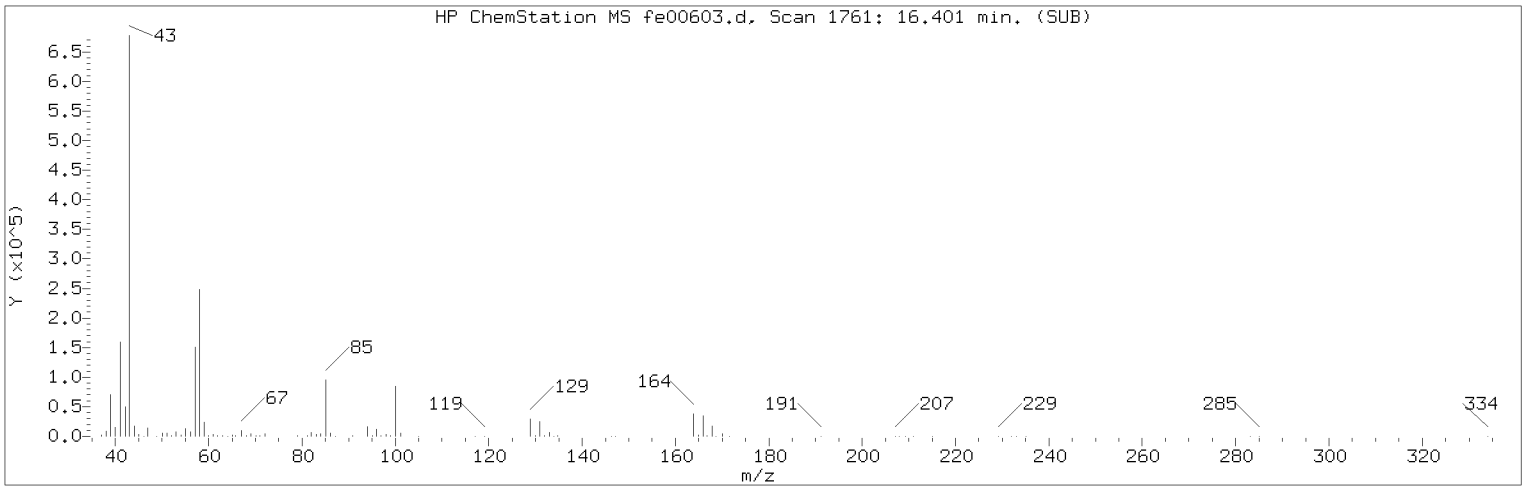
Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:25
Date, time and analyst ID of latest file update: 31-May-2018 18:13 Unknown

Sample Name: LCSF22 Lab Sample ID: LCSF22

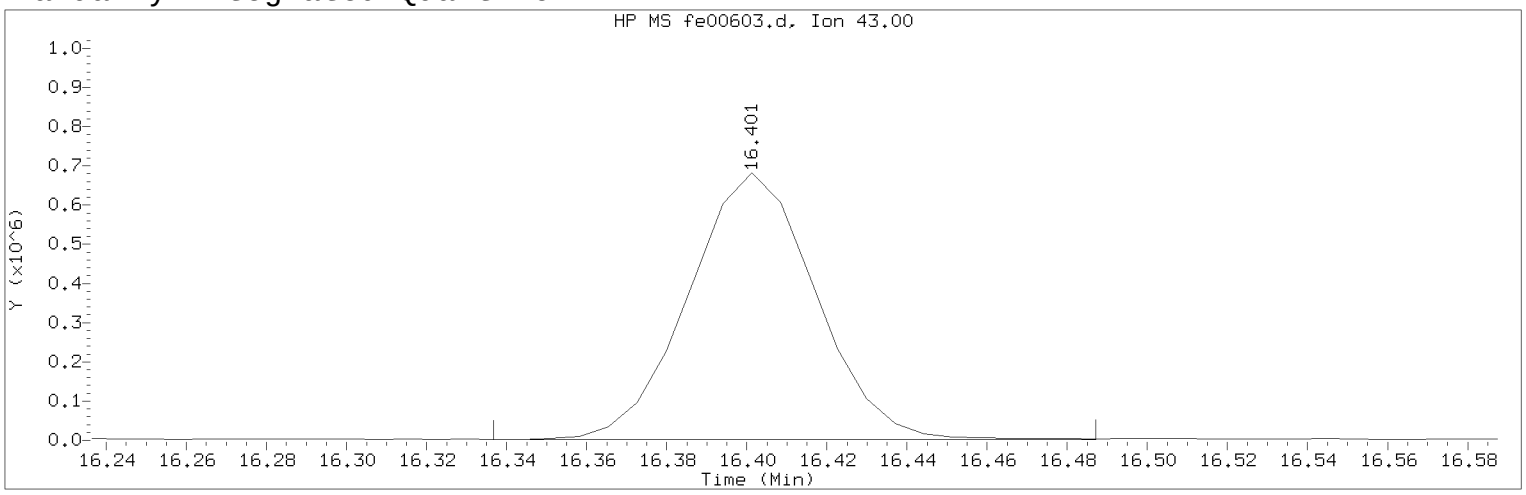
Compound Number : 49
Compound Name : Tert-Amyl Methyl Ether
Scan Number : 1215
Retention Time (minutes): 12.490
Quant Ion : 73.00
Area : 616531
Concentration (ppb(v)) : 4.8613
Integration start scan : 1201 Integration stop scan: 1214
Y at integration start : 548 Y at integration end: 548

Digitally signed by Jacob E. Bailey on 05/31/2018 at 18:15.
Target 3.5 esignature used.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18may31.b/fe00603.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 17:47 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:25
Date, time and analyst ID of latest file update: 31-May-2018 18:15 jeb07445

Sample Name: LCSF22 Lab Sample ID: LCSF22

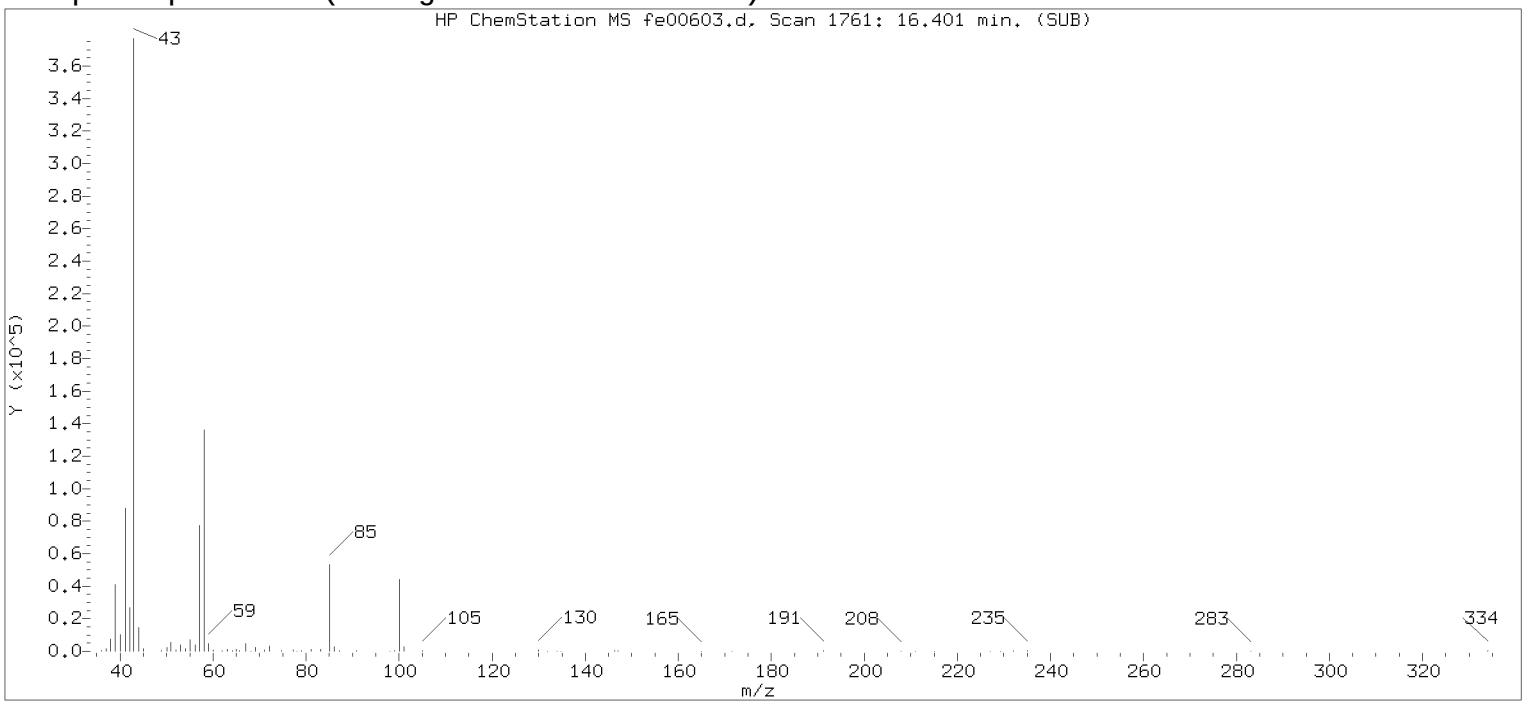
Compound Number : 62
Compound Name : 4-Methyl-2-Pentanone
Scan Number : 1761
Retention Time (minutes): 16.401
Quant Ion : 43.00
Area (flag) : 1508669M
Concentration (ppb(v)) : 10.3840
Integration start scan : 1751 Integration stop scan: 1772
Y at integration start : 948 Y at integration end: 948

Reason for manual integration: improper integration

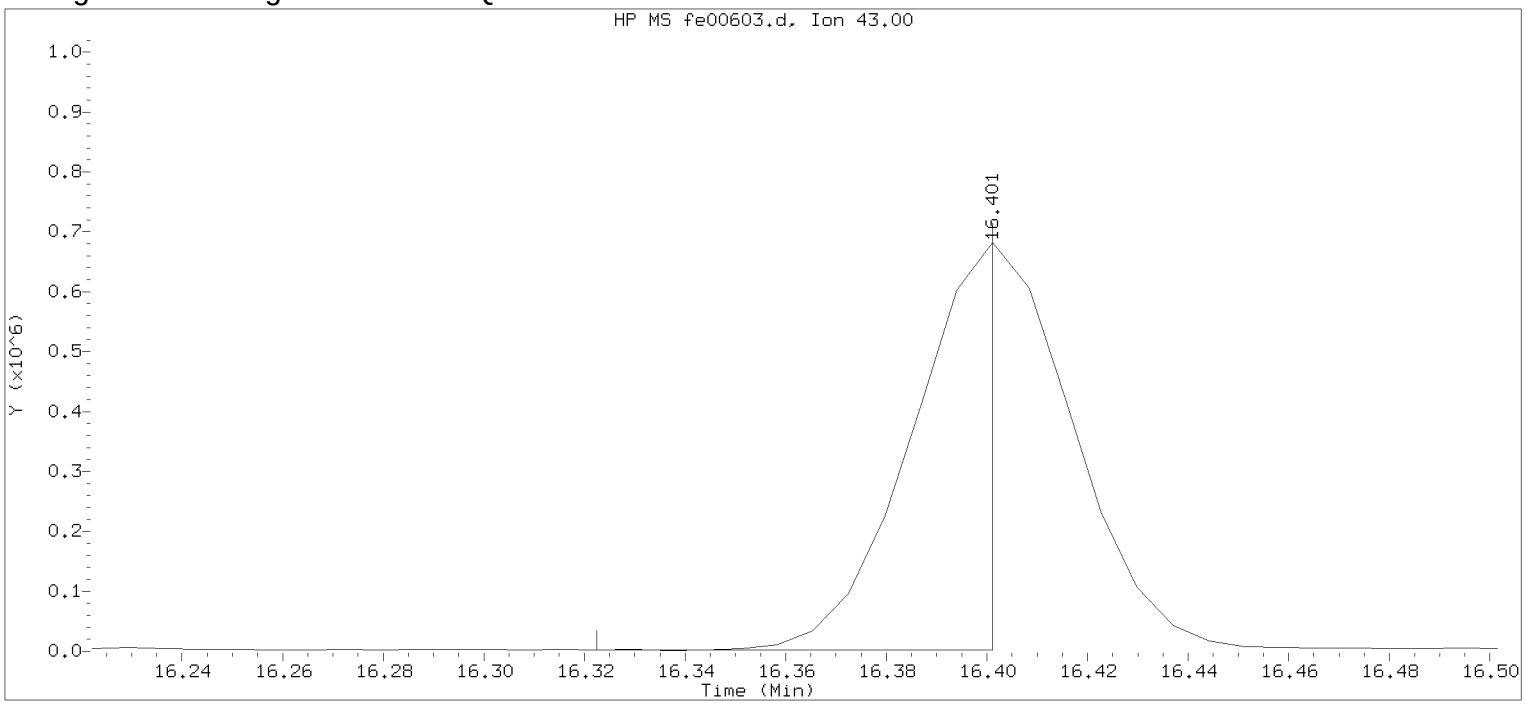
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 05/31/2018 at 18:15.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/01/2018 at 10:41.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



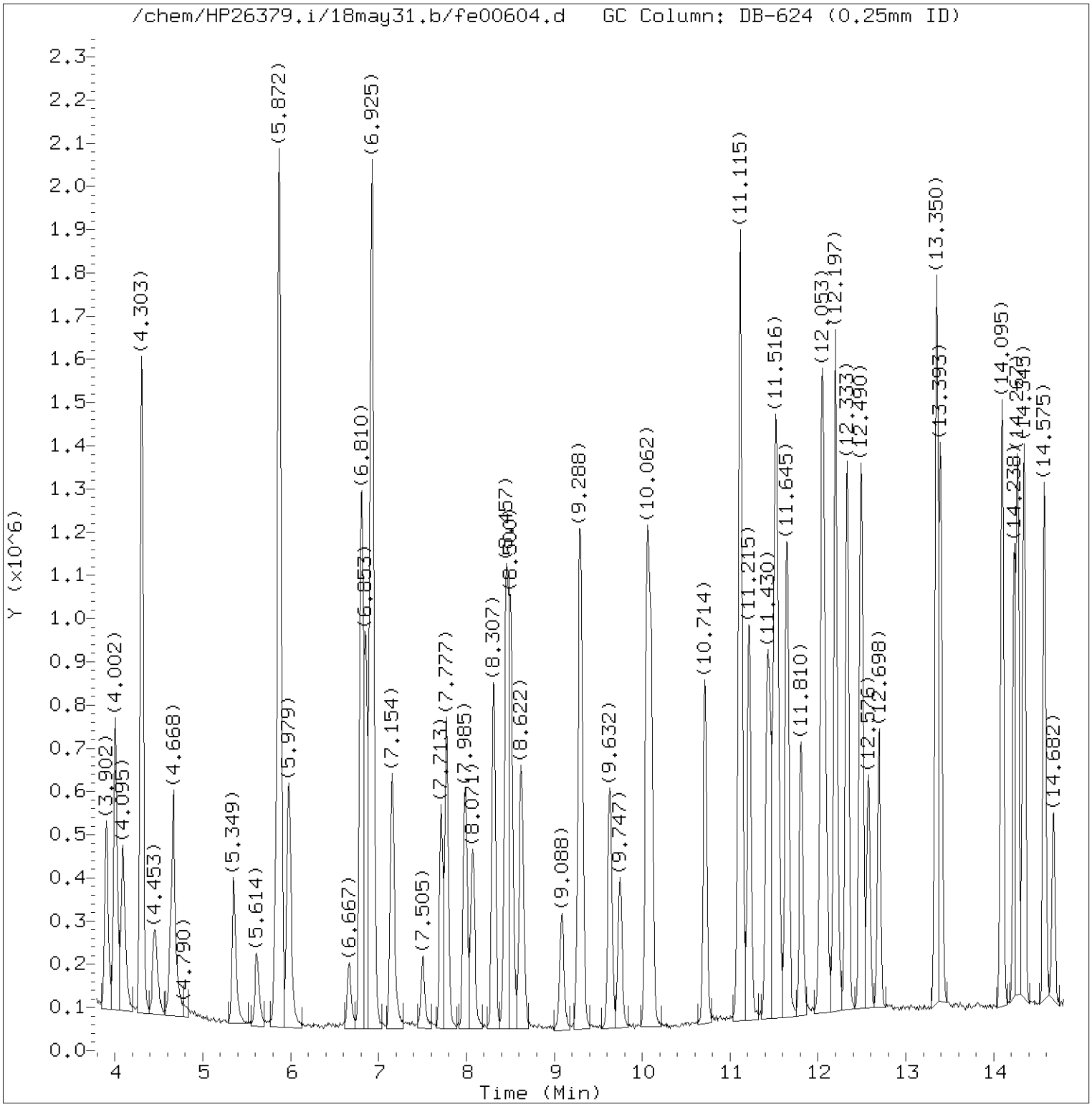
Data File: /chem/HP26379.i/18may31.b/fe00603.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 17:47 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 15:25
Date, time and analyst ID of latest file update: 31-May-2018 18:13 Unknown

Sample Name: LCSF22 Lab Sample ID: LCSF22

Compound Number : 62
Compound Name : 4-Methyl-2-Pentanone
Scan Number : 1761
Retention Time (minutes): 16.401
Quant Ion : 43.00
Area : 735486
Concentration (ppb(v)) : 5.0623
Integration start scan : 1749 Integration stop scan: 1760
Y at integration start : 2011 Y at integration end: 2011

Digitally signed by Jacob E. Bailey on 05/31/2018 at 18:15.
Target 3.5 esignature used. LED1 Page 1445



Total Ion Chromatogram (TIC)

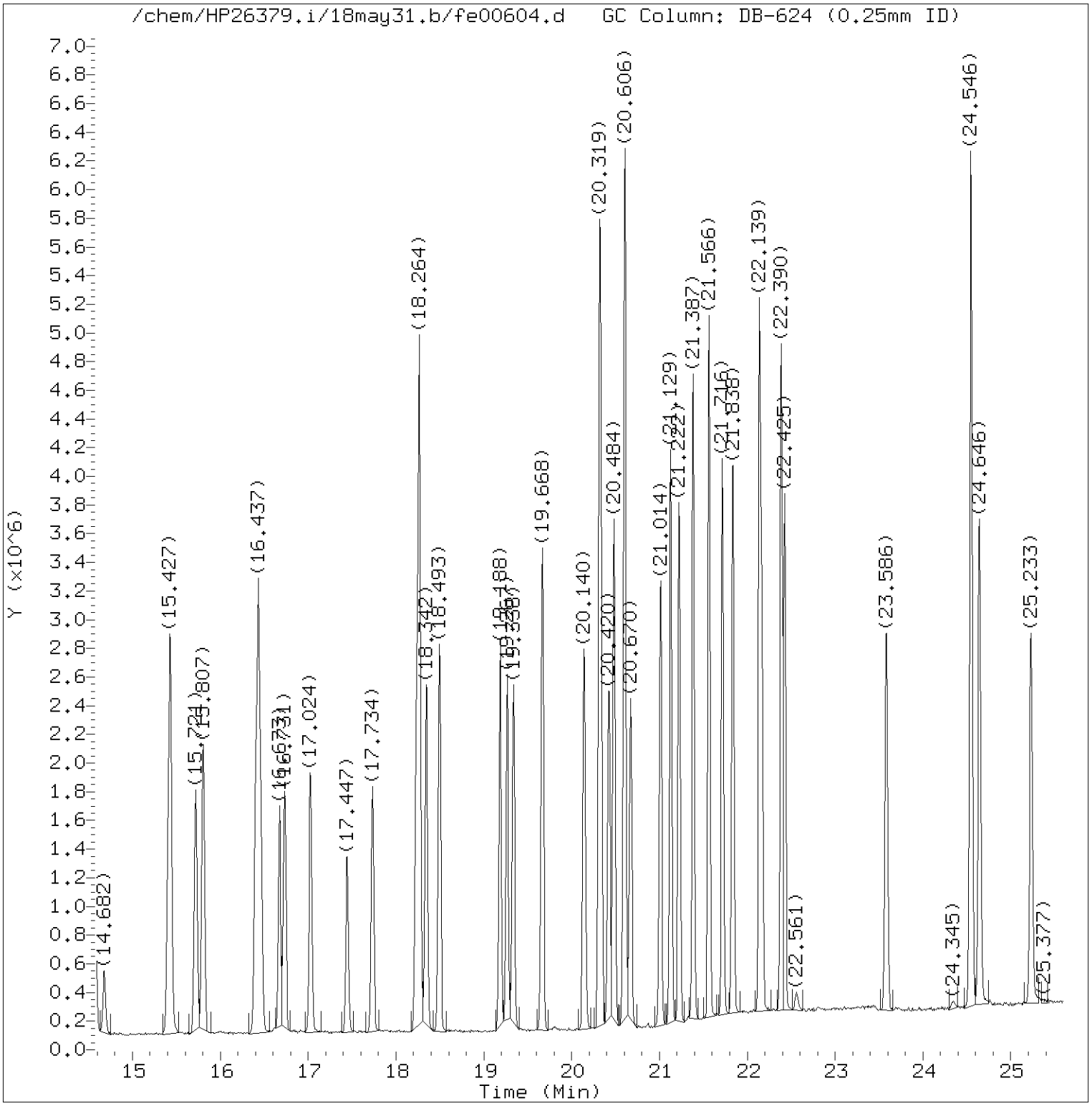
Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00604.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 18:17 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 18:20
Date, time and analyst ID of latest file update: 31-May-2018 19:09 jeb07445

Sample Name: LCSDF22 Lab Sample ID: LCSDF22

Digitally signed by Jacob E. Bailey
on 05/31/2018 at 19:10.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00604.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 18:17 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 18:20
Date, time and analyst ID of latest file update: 31-May-2018 19:09 jeb07445

Sample Name: LCSDF22 Lab Sample ID: LCSDF22

Digitally signed by Jacob E. Bailey
on 05/31/2018 at 19:10.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00604.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 18:17 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 18:20
Date, time and analyst ID of latest file update: 31-May-2018 19:09 jeb07445

Sample Name: LCSDF22 Lab Sample ID: LCSDF22

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	420821	10.045
2) Dichlorodifluoromethane	(1)	4.002	85	1157537	11.444
3) Chlorodifluoromethane	(1)	4.095	51	901089	11.120
4) Freon 114	(1)	4.303	85	1186367	10.839
5) Chloromethane	(1)	4.446	50	484665	10.830
6) Vinyl Chloride	(1)	4.640	62	279049	11.209
7) 1,3-Butadiene	(1)	4.668	54	216864	9.452
8) Bromomethane	(1)	5.349	94	397197	11.848
9) Chloroethane	(1)	5.614	64	254390	11.277
10) Bromoethene	(1)	5.836	106	443450	11.508
11) Pentane	(1)	5.864	43	960644	10.170
12) Trichlorofluoromethane	(1)	5.879	101	1213552	10.651
13) Dichlorofluoromethane	(1)	5.979	67	981515	11.672
14) Ethanol	(1)	6.660	45	224155	10.957
15) Freon123a	(1)	6.803	67	951104	11.878
16) 1,1-Dichloroethene	(1)	6.860	61	781692	11.221
17) Freon 113	(1)	6.917	103	677510	9.956
18) Carbon Disulfide	(1)	6.939	76	1172121	11.040
19) Methyl Iodide	(1)	7.154	142	1191513	10.216
20) Acrolein	(1)	7.505	56	222882	11.888
21) Isopropanol	(1)	7.713	45	960263	10.896
22) 3-Chloropropene	(1)	7.777	41	849254M	13.100
23) Methylene Chloride	(1)	7.985	84	416466	12.427
24) Acetone	(1)	8.071	43	829507	11.134
25) trans-1,2-Dichloroethene	(1)	8.314	61	721823	11.114
26) Hexane	(1)	8.450	56	525830	10.443
27) Methyl t-Butyl Ether	(1)	8.500	73	1268594	10.183
28) tert-Butyl Alcohol	(1)	8.622	59	1161653	11.096
29) Acetonitrile	(1)	9.088	41	502796	11.179
30) Di-Isopropyl Ether	(1)	9.288	45	1917601	10.215
31) 1,1-Dichloroethane	(1)	9.632	63	900017	10.934
32) Acrylonitrile	(1)	9.747	53	463129	10.962
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	1661419	10.429
34) Vinyl Acetate	(1)	10.105	43	1770420	11.940
35) cis-1,2-Dichloroethene	(1)	10.714	61	708418	11.271
36) 1,2-Dichloroethene (total)	(1)		61	1430241	22.386
37)*Bromochloromethane	(1)	11.108	130	383736	10.000
38) Cyclohexane	(1)	11.122	56	911295	10.143

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

Digitally signed by Jacob E. Bailey
on 05/31/2018 at 19:10.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00604.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 18:17 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 18:20
Date, time and analyst ID of latest file update: 31-May-2018 19:09 jeb07445

Sample Name: LCSDF22 Lab Sample ID: LCSDF22

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.222	83	991407	10.942
40) Ethyl Acetate	(1)	11.423	43	1301644	10.473
41) Methyl Acrylate	(1)	11.459	55	1003300	10.992
42) Carbon Tetrachloride	(1)	11.516	117	1118534	10.369
43) Tetrahydrofuran	(1)	11.545	42	686459	11.142
44) 1,1,1-Trichloroethane	(1)	11.645	97	1063015	10.248
45) 2-Butanone	(1)	11.810	43	1166344	10.682
46) Isooctane	(2)	12.053	57	2662836	10.528
47) Heptane	(2)	12.197	71	485106	9.672
48) Benzene	(2)	12.333	78	1466721	10.677
49) Tert-Amyl Methyl Ether	(2)	12.490	73	1330795	10.270
50) 1,2-Dichloroethane	(2)	12.691	62	701947	10.927
51) Trichloroethene	(2)	13.350	130	754422	10.851
52)*1,4-Difluorobenzene	(2)	13.393	114	1393003	10.000
53) Dibromomethane	(2)	14.095	174	833378	10.869
54) Ethyl Acrylate	(2)	14.231	55	1277135	10.182
55) 1,2-Dichloropropane	(2)	14.274	63	598754	10.444
56) Bromodichloromethane	(2)	14.345	83	1048359	10.609
57) Methyl Methacrylate	(2)	14.582	69	494537	10.019
58) 1,4-Dioxane	(2)	14.682	88	363286	10.584
59) cis-1,3-Dichloropropene	(2)	15.406	75	882641	10.436
60) Octane	(3)	15.434	43	1521878	9.701
61) Toluene	(3)	15.807	91	1792862	10.222
62) 4-Methyl-2-Pentanone	(2)	16.401	43	1492394	10.053
63) Tetrachloroethene	(3)	16.437	166	1202396	10.423
64) trans-1,3-Dichloropropene	(3)	16.466	75	784819	10.588
65) 1,3-Dichloropropene (total)	(3)		75	1667460	21.025
66) Ethyl Methacrylate	(3)	16.673	69	837325	9.446
67) 1,1,2-Trichloroethane	(3)	16.731	97	682976	10.655
68) Dibromochloromethane	(3)	17.024	127	919682	10.426
69) 1,2-Dibromoethane	(3)	17.447	107	1050128	10.357
70) 2-Hexanone	(3)	17.734	43	1443734	9.975
71)*Chlorobenzene-d5	(3)	18.235	117	1380536	10.000
72) Chlorobenzene	(3)	18.264	112	1573228	10.074
73) Ethylbenzene	(3)	18.271	91	2456691	9.794
74) 1,1,1,2-Tetrachloroethane	(3)	18.350	131	898860	10.144
75) m/p-Xylene	(3)	18.493	91	1856804	9.940
76) o-Xylene	(3)	19.188	91	1888275	9.977

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 05/31/2018 at 19:10.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may31.b/fe00604.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 18:17 Analyst ID: ads07818

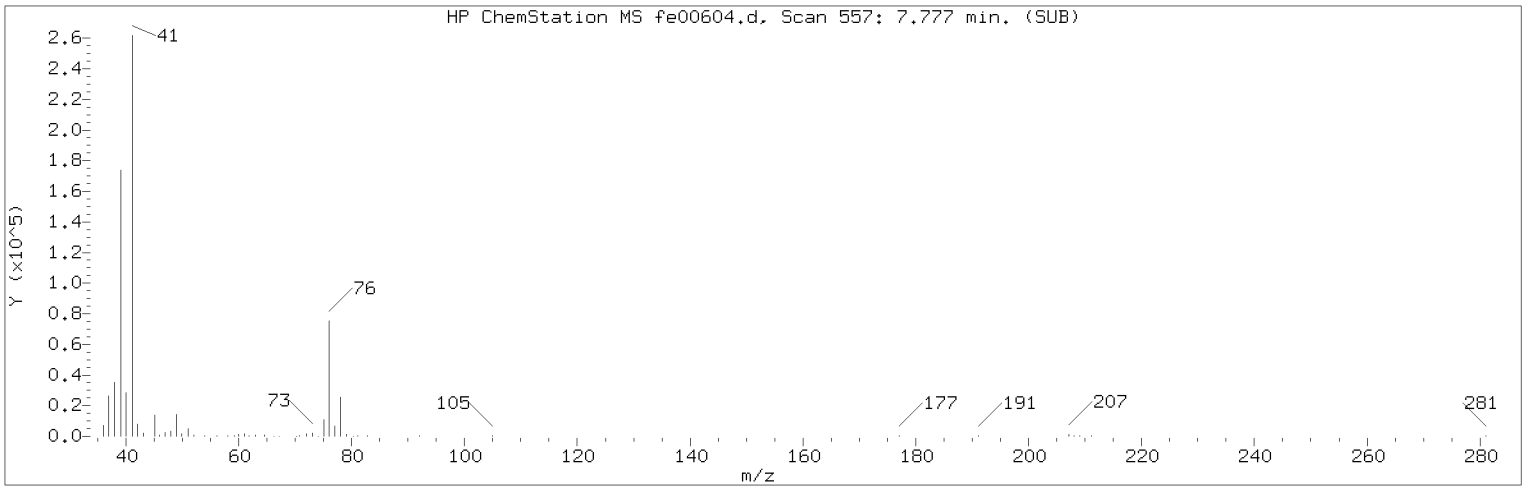
Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 18:20
Date, time and analyst ID of latest file update: 31-May-2018 19:09 jeb07445

Sample Name: LCSDF22 Lab Sample ID: LCSDF22

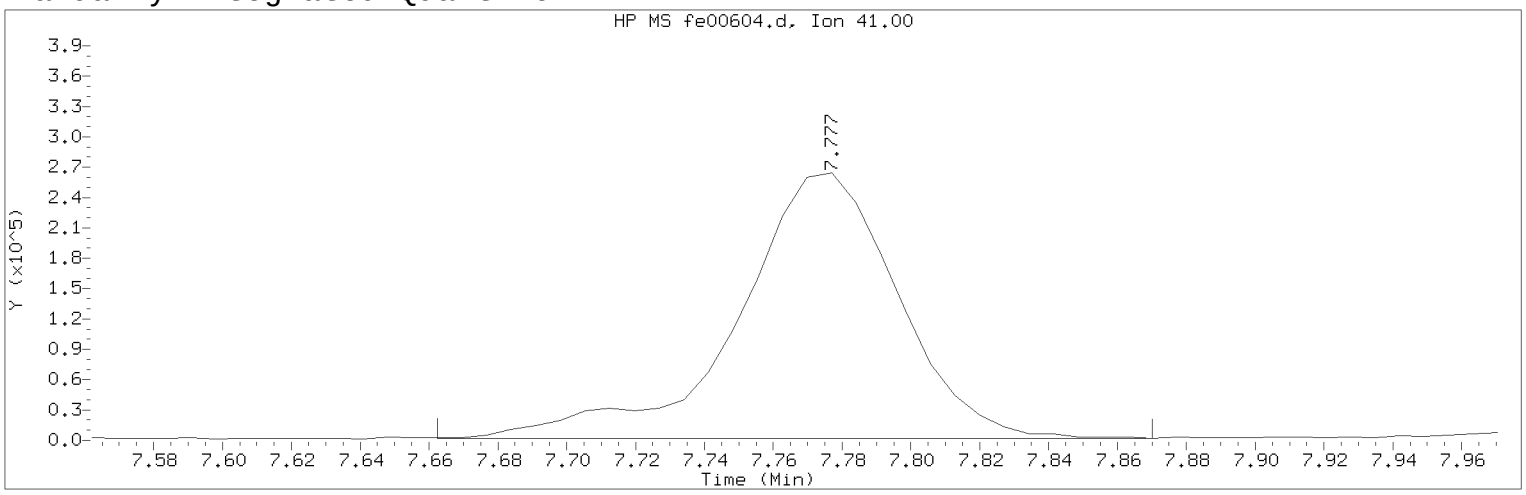
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	3745079	19.917
78) Styrene	(3)	19.267	104	1494190	10.284
79) Bromoform	(3)	19.338	173	1390094	9.990
80) Cumene	(3)	19.668	105	2759231	9.909
81) n-Propylbenzene	(3)	20.319	120	818415	9.895
82) Bromobenzene	(3)	20.334	156	1081867	9.876
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	1415108	10.014
84) 4-Ethyltoluene	(3)	20.484	105	2767462	9.871
85) 2-Chlorotoluene	(3)	20.599	126	745321	10.010
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	2377985	10.217
87) 1,2,3-Trichloropropane	(3)	20.670	110	460338	9.963
88) Alpha Methyl Styrene	(3)	21.014	118	1213445	10.024
89) tert-Butylbenzene	(3)	21.129	119	2322746	10.131
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	2305314	9.926
91) sec-Butylbenzene	(3)	21.387	105	3481798	10.074
92) p-Isopropyltoluene	(3)	21.566	119	3000420	10.192
93) 1,3-Dichlorobenzene	(3)	21.716	146	1798804	9.751
94) 1,4-Dichlorobenzene	(3)	21.838	146	1859440	9.884
95) n-Butylbenzene	(3)	22.139	92	1669704	10.239
96) Benzyl Chloride	(3)	22.168	126	486853	10.235
97) Hexachloroethane	(3)	22.390	117	920706	10.186
98) 1,2-Dichlorobenzene	(3)	22.425	146	1692887	9.798
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	956908	10.274
100) Hexachlorobutadiene	(3)	24.546	225	1722279	10.345
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	1593692	10.319
102) Naphthalene	(3)	25.233	128	2984861	10.591

Digitally signed by Jacob E. Bailey
on 05/31/2018 at 19:10.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18may31.b/fe00604.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 18:17 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 18:20
Date, time and analyst ID of latest file update: 31-May-2018 19:09 jeb07445

Sample Name: LCSDF22 Lab Sample ID: LCSDF22

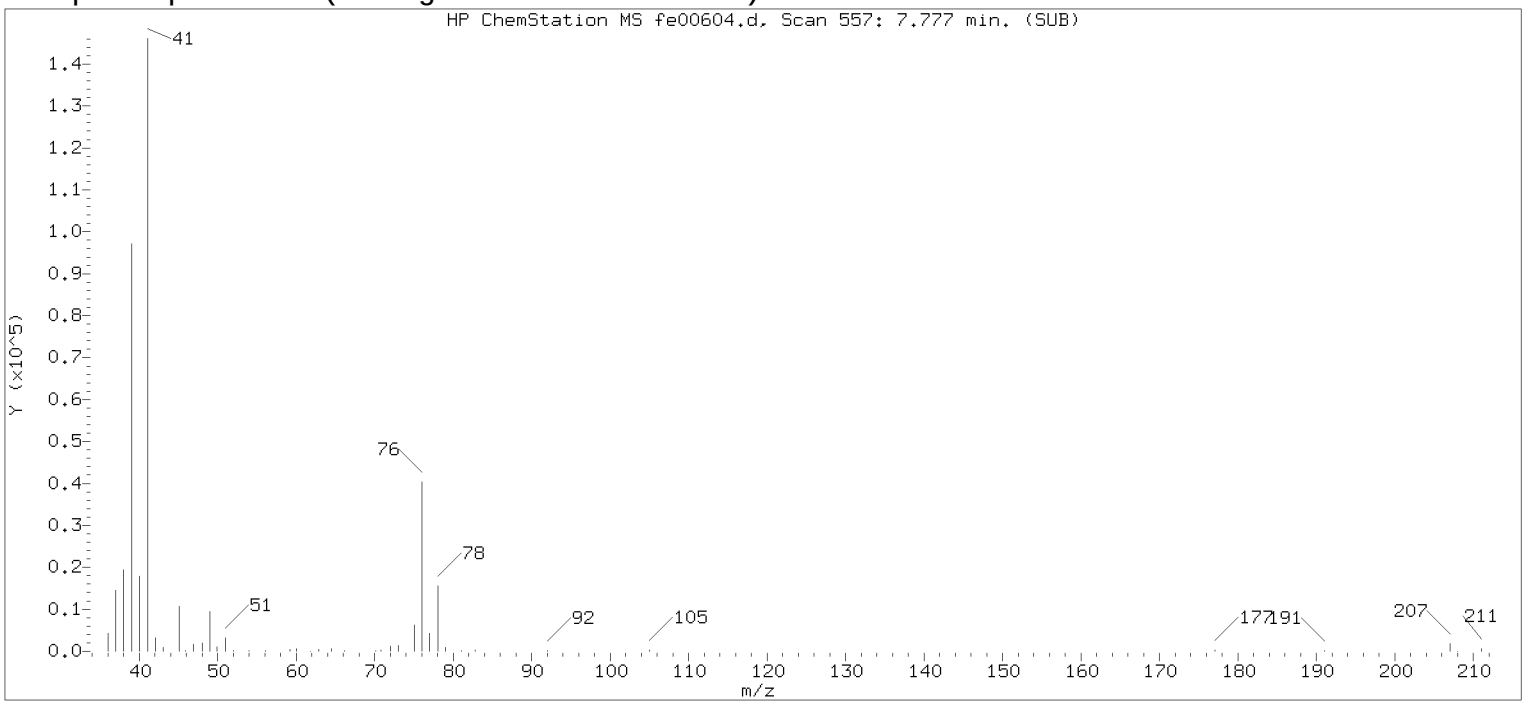
Compound Number : 22
Compound Name : 3-Chloropropene
Scan Number : 557
Retention Time (minutes): 7.777
Quant Ion : 41.00
Area (flag) : 849254M
Concentration (ppb(v)) : 13.0997
Integration start scan : 540 Integration stop scan: 569
Y at integration start : 1717 Y at integration end: 1717

Reason for manual integration: improper integration

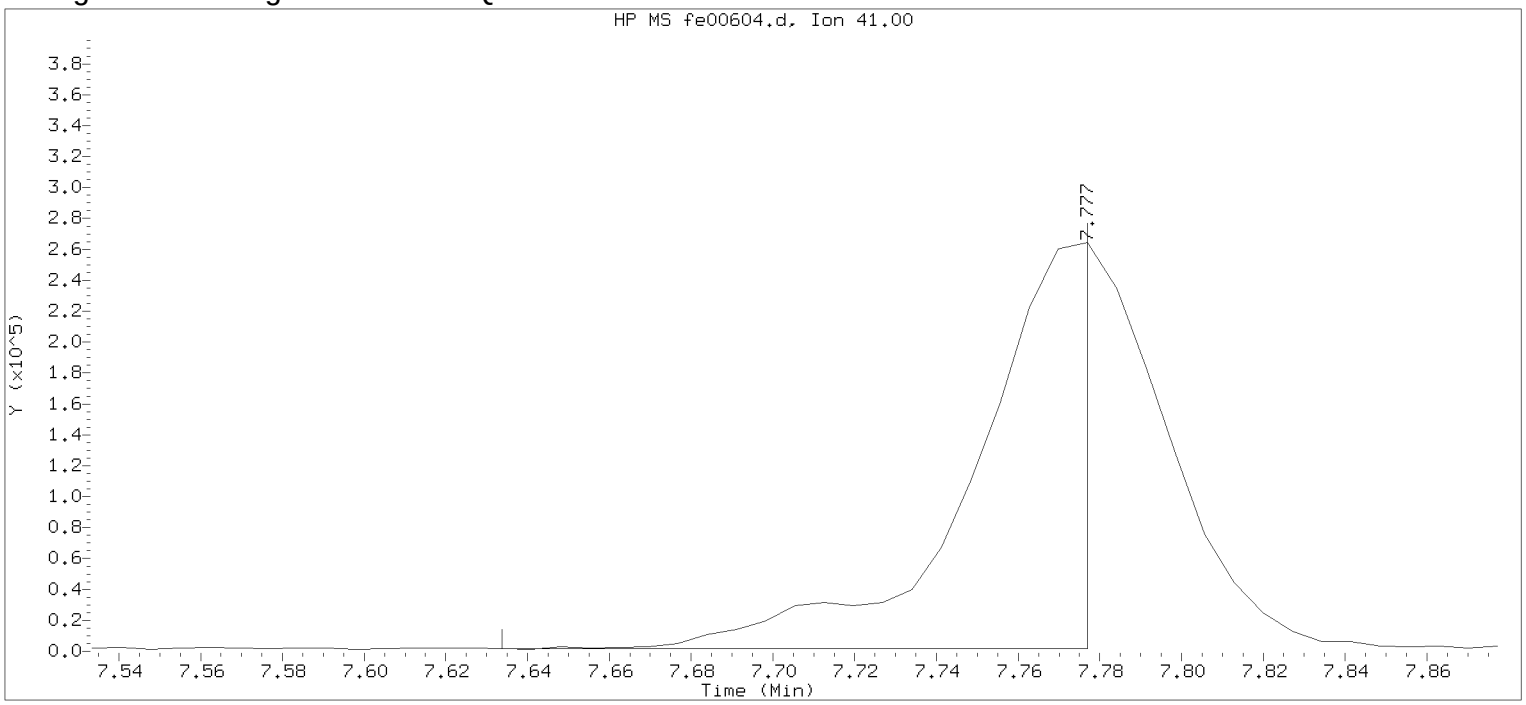
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 05/31/2018 at 19:10.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/01/2018 at 10:41.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18may31.b/fe00604.d Instrument ID: HP26379.i
Injection date and time: 31-MAY-2018 18:17 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may31.b/to-15.m Sublist used: all
Calibration date and time: 31-MAY-2018 18:20
Date, time and analyst ID of latest file update: 31-May-2018 18:45 Unknown

Sample Name: LCSDF22 Lab Sample ID: LCSDF22

Compound Number : 22
Compound Name : 3-Chloropropene
Scan Number : 557
Retention Time (minutes): 7.777
Quant Ion : 41.00
Area : 490594
Concentration (ppb(v)) : 7.5674
Integration start scan : 536 Integration stop scan: 556
Y at integration start : 1633 Y at integration end: 1633

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Target 3.5 esignature used. LED1 Page 1445

Lancaster Laboratories
Volatiles in Air
Runlog for Agilent GC/MS System HP26379 **HP #06**

Data Directory Path is - D:\data\18jun12\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
jeb07445	FF00180.D	50NGBFB	06/12/2018	12:10		
jeb07445	FF00181.D	VSTD010	06/12/2018	13:06		
jeb07445	FF00182.D	VSTD010	06/12/2018	13:53		
jeb07445	FF00183.D	VBLKF09	06/12/2018	14:41	F1816330AA	
jeb07445	FF00184.D	LCSF09	06/12/2018	15:27	F1816330AA	
jeb07445	FF00185.D	LCSDF09	06/12/2018	15:57	F1816330AA	
jeb07445	FF00187.D	VBLKF09	06/12/2018	16:58	F1816330AA	
jeb07445	FF00188.D	9654195	06/12/2018	17:28	F1816330AA	100
jeb07445	FF00189.D	9654193	06/12/2018	17:59	F1816330AA	
jeb07445	FF00190.D	9654194	06/12/2018	18:30	F1816330AA	
jeb07445	FF00191.D	9654175	06/12/2018	19:00	F1816330AA	100
jeb07445	FF00192.D	9654176	06/12/2018	19:31	F1816330AA	
jeb07445	FF00193.D	9654176DL	06/12/2018	20:02	F1816330AA	
jeb07445	FF00194.D	9654177	06/12/2018	20:33	F1816330AA	
jeb07445	FF00195.D	9654177DL	06/12/2018	21:03	F1816330AA	
jeb07445	FF00196.D	9654194	06/12/2018	21:34	F1816330AA	
jeb07445	FF00197.D	cc1386	06/12/2018	22:05	F1816330AA	
jeb07445	FF00199.D	9654194	06/13/2018	08:22	F1816330AA	
jeb07445	FF00200.D	cc1386	06/13/2018	08:52	F1816330AA	
jeb07445	FF00201.D	cc1506	06/13/2018	09:23	F1816330AA	

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKF09
Canister ID:	N/A	Lab File ID:	ff00183.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/12/2018
Injection Volume:	200 cc	Analyzed Time:	14:41
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
115-07-1	Propene	0.50	U
75-71-8	Dichlorodifluoromethane	0.20	U
75-45-6	Chlorodifluoromethane	0.20	U
76-14-2	Freon 114	0.20	U
74-87-3	Chloromethane	0.20	U
75-01-4	Vinyl Chloride	0.20	U
106-99-0	1,3-Butadiene	0.40	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.20	U
593-60-2	Bromoethene	0.40	U
75-43-4	Dichlorofluoromethane	0.20	U
75-69-4	Trichlorofluoromethane	0.20	U
109-66-0	Pentane	0.50	U
64-17-5	Ethanol	0.50	U
107-02-8	Acrolein	1.0	U
75-35-4	1,1-Dichloroethene	0.20	U
76-13-1	Freon 113	0.50	U
67-64-1	Acetone	0.50	U
74-88-4	Methyl Iodide	0.20	U
75-15-0	Carbon Disulfide	1.0	U
67-63-0	Isopropanol	0.50	U
75-05-8	Acetonitrile	0.50	U
107-05-1	3-Chloropropene	0.20	U
75-09-2	Methylene Chloride	0.20	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKF09
Canister ID:	N/A	Lab File ID:	ff00183.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/12/2018
Injection Volume:	200 cc	Analyzed Time:	14:41
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-65-0	tert-Butyl Alcohol	0.50	U
107-13-1	Acrylonitrile	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.20	U
1634-04-4	Methyl t-Butyl Ether	0.20	U
110-54-3	Hexane	0.20	U
75-34-3	1,1-Dichloroethane	0.20	U
108-05-4	Vinyl Acetate	1.0	U
108-20-3	Di-Isopropyl Ether	0.20	U
637-92-3	Ethyl Tert-Butyl Ether	0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	U
540-59-0	1,2-Dichloroethene (total)	0.20	U
78-93-3	2-Butanone	0.50	U
141-78-6	Ethyl Acetate	0.50	U
96-33-3	Methyl Acrylate	0.20	U
109-99-9	Tetrahydrofuran	0.50	U
67-66-3	Chloroform	0.20	U
71-55-6	1,1,1-Trichloroethane	0.20	U
110-82-7	Cyclohexane	0.20	U
56-23-5	Carbon Tetrachloride	0.20	U
71-43-2	Benzene	0.20	U
107-06-2	1,2-Dichloroethane	0.20	U
540-84-1	Isooctane	0.20	U
994-05-8	Tert-Amyl Methyl Ether	0.20	U
142-82-5	Heptane	0.50	U

Abbreviations:
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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKF09
Canister ID:	N/A	Lab File ID:	ff00183.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/12/2018
Injection Volume:	200 cc	Analyzed Time:	14:41
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
79-01-6	Trichloroethene	0.20	U
140-88-5	Ethyl Acrylate	0.20	U
78-87-5	1,2-Dichloropropane	0.20	U
74-95-3	Dibromomethane	0.20	U
123-91-1	1,4-Dioxane	0.50	U
80-62-6	Methyl Methacrylate	0.20	U
75-27-4	Bromodichloromethane	0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	U
108-10-1	4-Methyl-2-Pentanone	0.50	U
108-88-3	Toluene	0.20	U
111-65-9	Octane	0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	U
542-75-6	1,3-Dichloropropene (total)	0.20	U
97-63-2	Ethyl Methacrylate	0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	U
127-18-4	Tetrachloroethene	0.20	U
591-78-6	2-Hexanone	0.50	U
124-48-1	Dibromochloromethane	0.20	U
106-93-4	1,2-Dibromoethane	0.20	U
108-90-7	Chlorobenzene	0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	U
100-41-4	Ethylbenzene	0.20	U
179601-23-1	m/p-Xylene	0.20	U
95-47-6	o-Xylene	0.20	U

Abbreviations:
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D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKF09
Canister ID:	N/A	Lab File ID:	ff00183.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/12/2018
Injection Volume:	200 cc	Analyzed Time:	14:41
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
1330-20-7	Xylene (total)	0.20	U
100-42-5	Styrene	0.20	U
75-25-2	Bromoform	0.20	U
98-82-8	Cumene	0.20	U
108-86-1	Bromobenzene	0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U
96-18-4	1,2,3-Trichloropropane	0.20	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.20	U
622-96-8	4-Ethyltoluene	0.20	U
108-67-8	1,3,5-Trimethylbenzene	0.20	U
98-83-9	Alpha Methyl Styrene	0.20	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.20	U
135-98-8	sec-Butylbenzene	0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	U
99-87-6	p-Isopropyltoluene	0.20	U
100-44-7	Benzyl Chloride	0.50	U
95-50-1	1,2-Dichlorobenzene	0.20	U
104-51-8	n-Butylbenzene	0.20	U
67-72-1	Hexachloroethane	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKF09
Canister ID:	N/A	Lab File ID:	ff00183.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/12/2018
Injection Volume:	200 cc	Analyzed Time:	14:41
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
87-68-3	Hexachlorobutadiene	0.40	U
91-20-3	Naphthalene	0.40	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 LCS File ID: ff00184.d LCSD File ID: ff00185.d

Batch: F1816330AA LCS Injected: 06/12/2018 LCSD Injected: 06/12/2018

Method: EPA TO-15 LCS Client ID: LCSF09 LCSD Client ID: LCSDF09

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	10.00	9.02	9.29	90	93	78-126	3	25	YES
Dichlorodifluoromethane	10.00	12.17	11.99	122	120	74-133	1	25	YES
Chlorodifluoromethane	10.00	11.65	11.48	116	115	70-138	1	25	YES
Freon 114	10.00	11.14	11.03	111	110	66-126	1	25	YES
Chloromethane	10.00	10.42	9.92	104	99	65-140	5	25	YES
Vinyl Chloride	10.00	10.59	10.82	106	108	75-130	2	25	YES
1,3-Butadiene	10.00	9.86	8.79	99	88	72-122	11	25	YES
Bromomethane	10.00	12.01	11.45	120	114	71-133	5	25	YES
Chloroethane	10.00	10.78	10.74	108	107	76-129	0	25	YES
Bromoethene	10.00	10.02	9.86	100	99	77-123	2	25	YES
Dichlorofluoromethane	10.00	12.12	11.96	121	120	75-137	1	25	YES
Trichlorofluoromethane	10.00	11.32	11.15	113	112	73-132	2	25	YES
Pentane	10.00	8.18	8.31	82	83	69-125	2	25	YES
Ethanol	10.00	8.98	8.93	90	89	56-149	1	25	YES
Acrolein	10.00	8.44	8.95	84	90	54-132	6	25	YES
1,1-Dichloroethene	10.00	9.77	9.89	98	99	70-129	1	25	YES
Freon 113	10.00	10.11	9.96	101	100	66-119	2	25	YES
Acetone	10.00	10.96	10.93	110	109	71-136	0	25	YES
Methyl Iodide	10.00	7.88	8.19	79	82	72-127	4	25	YES
Carbon Disulfide	10.00	10.18	9.98	102	100	72-128	2	25	YES
Isopropanol	10.00	8.00	8.48	80	85	69-160	6	25	YES
Acetonitrile	10.00	10.61	10.80	106	108	56-136	2	25	YES
3-Chloropropene	10.00	11.10	10.40	111	104	67-141	6	25	YES
Methylene Chloride	10.00	12.28	12.24	123	122	69-128	0	25	YES
tert-Butyl Alcohol	10.00	8.40	8.69	84	87	71-154	3	25	YES
Acrylonitrile	10.00	9.22	9.51	92	95	68-135	3	25	YES
trans-1,2-Dichloroethene	10.00	9.69	9.89	97	99	77-128	2	25	YES
Methyl t-Butyl Ether	10.00	8.26	8.46	83	85	71-119	2	25	YES
Hexane	10.00	9.55	9.55	95	95	70-118	0	25	YES
1,1-Dichloroethane	10.00	10.42	10.43	104	104	74-129	0	25	YES
Vinyl Acetate	10.00	9.69	9.82	97	98	75-161	1	25	YES
Di-Isopropyl Ether	10.00	7.16	7.35	72	74	71-122	3	25	YES
Ethyl Tert-Butyl Ether	10.00	7.32	7.32	73	73	68-121	0	25	YES
cis-1,2-Dichloroethene	10.00	8.98	9.17	90	92	76-126	2	25	YES
2-Butanone	10.00	9.41	9.48	94	95	75-126	1	25	YES
Ethyl Acetate	10.00	8.61	8.59	86	86	73-124	0	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 LCS File ID: ff00184.d LCSD File ID: ff00185.d

Batch: F1816330AA LCS Injected: 06/12/2018 LCSD Injected: 06/12/2018

Method: EPA TO-15 LCS Client ID: LCSF09 LCSD Client ID: LCSDF09

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	10.00	8.52	8.50	85	85	75-125	0	25	YES
Tetrahydrofuran	10.00	8.78	9.04	88	90	67-127	3	25	YES
Chloroform	10.00	11.23	11.09	112	111	75-127	1	25	YES
1,1,1-Trichloroethane	10.00	10.37	10.28	104	103	74-122	1	25	YES
Cyclohexane	10.00	7.28	7.36	73	74	70-118	1	25	YES
Carbon Tetrachloride	10.00	10.37	10.26	104	103	72-127	1	25	YES
Benzene	10.00	12.34	12.39	123	124*	76-123	0	25	NO
1,2-Dichloroethane	10.00	13.92	13.81	139*	138	72-138	1	25	NO
Isooctane	10.00	9.78	9.92	98	99	74-127	1	25	YES
Tert-Amyl Methyl Ether	10.00	9.18	9.13	92	91	78-124	1	25	YES
Heptane	10.00	9.17	9.36	92	94	74-122	2	25	YES
Trichloroethene	10.00	11.28	11.45	113	114	76-118	1	25	YES
Ethyl Acrylate	10.00	8.65	8.43	86	84	71-126	3	25	YES
1,2-Dichloropropane	10.00	12.04	11.83	120	118	75-127	2	25	YES
Dibromomethane	10.00	12.50	12.27	125*	123	76-124	2	25	NO
1,4-Dioxane	10.00	10.17	10.51	102	105	76-124	3	25	YES
Methyl Methacrylate	10.00	8.63	8.29	86	83	73-117	4	25	YES
Bromodichloromethane	10.00	13.01	12.26	130	123	75-134	6	25	YES
cis-1,3-Dichloropropene	10.00	10.22	9.89	102	99	51-120	3	25	YES
4-Methyl-2-Pentanone	10.00	9.70	9.36	97	94	79-131	4	25	YES
Toluene	10.00	10.10	10.18	101	102	78-119	1	25	YES
Octane	10.00	8.50	8.66	85	87	73-122	2	25	YES
trans-1,3-Dichloropropene	10.00	10.43	10.39	104	104	76-131	0	25	YES
Ethyl Methacrylate	10.00	7.51	7.40	75	74	69-137	2	25	YES
1,1,2-Trichloroethane	10.00	12.14	11.89	121	119	76-127	2	25	YES
Tetrachloroethene	10.00	11.71	11.60	117	116	68-123	1	25	YES
2-Hexanone	10.00	8.38	8.42	84	84	74-134	0	25	YES
Dibromochloromethane	10.00	11.20	10.60	112	106	74-131	6	25	YES
1,2-Dibromoethane	10.00	10.81	10.73	108	107	73-121	1	25	YES
Chlorobenzene	10.00	10.85	10.90	109	109	76-117	0	25	YES
1,1,1,2-Tetrachloroethane	10.00	11.39	10.80	114	108	73-137	5	25	YES
Ethylbenzene	10.00	9.19	9.46	92	95	77-117	3	25	YES
m/p-Xylene	10.00	8.54	9.10	85	91	78-119	6	25	YES
o-Xylene	10.00	7.99	8.30	80	83	78-121	4	25	YES
Xylene (total)	20.00	16.53	17.39	83	87	79-120	5	25	YES
Styrene	10.00	8.80	8.98	88	90	77-143	2	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 LCS File ID: ff00184.d LCSD File ID: ff00185.d

Batch: F1816330AA LCS Injected: 06/12/2018 LCSD Injected: 06/12/2018

Method: EPA TO-15 LCS Client ID: LCSF09 LCSD Client ID: LCSDF09

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	10.04	9.36	100	94	58-144	7	25	YES
Cumene	10.00	8.53	8.90	85	89	80-133	4	25	YES
Bromobenzene	10.00	10.83	11.05	108	111	74-118	2	25	YES
1,1,2,2-Tetrachloroethane	10.00	11.05	10.92	111	109	72-133	1	25	YES
1,2,3-Trichloropropane	10.00	11.64	11.52	116	115	71-127	1	25	YES
n-Propylbenzene	10.00	8.88	9.28	89	93	73-120	4	25	YES
2-Chlorotoluene	10.00	10.22	10.83	102	108	74-123	6	25	YES
4-Ethyltoluene	10.00	8.93	9.53	89	95	73-130	7	25	YES
1,3,5-Trimethylbenzene	10.00	9.76	10.40	98	104	72-130	6	25	YES
Alpha Methyl Styrene	10.00	8.24	7.92	82	79	71-138	4	25	YES
tert-Butylbenzene	10.00	9.42	10.24	94	102	78-138	8	25	YES
1,2,4-Trimethylbenzene	10.00	9.45	10.10	94	101	70-138	7	25	YES
sec-Butylbenzene	10.00	9.53	10.16	95	102	79-139	6	25	YES
1,3-Dichlorobenzene	10.00	10.38	10.79	104	108	75-129	4	25	YES
1,4-Dichlorobenzene	10.00	9.89	10.51	99	105	74-123	6	25	YES
p-Isopropyltoluene	10.00	9.13	9.88	91	99	75-145	8	25	YES
Benzyl Chloride	10.00	10.52	9.75	105	97	49-163	8	25	YES
1,2-Dichlorobenzene	10.00	10.03	10.72	100	107	71-126	7	25	YES
n-Butylbenzene	10.00	9.45	10.20	94	102	72-143	8	25	YES
Hexachloroethane	10.00	10.55	10.07	105	101	59-135	5	25	YES
1,2-Dibromo-3-chloropropane	10.00	9.73	9.86	97	99	52-156	1	25	YES
1,2,4-Trichlorobenzene	10.00	8.55	10.34	85	103	45-156	19	25	YES
Hexachlorobutadiene	10.00	10.05	11.19	100	112	49-154	11	25	YES
Naphthalene	10.00	7.63	9.60	76	96	39-152	23	25	YES

COMMENTS:

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FORM 04
VOLATILE ORGANICS IN AIR
METHOD BLANK SUMMARY

SDG No.:

Lab Sample ID: VBLKF09 Analyzed Date: 06/12/2018

Lab File ID: ff00183.d Analyzed Time: 14:41

Instrument ID: 26379

THIS BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS AND LCSD:

LAB SAMPLE ID	LAB FILE ID	CANISTER ID	DATE ANALYZED	TIME ANALYZED
LCSF09	ff00184.d	N/A	06/12/2018	15:27
LCSDF09	ff00185.d	N/A	06/12/2018	15:57
9654195	ff00188.d	N/A	06/12/2018	17:28
9654193	ff00189.d	N/A	06/12/2018	17:59
9654194	ff00190.d	N/A	06/12/2018	18:30
9654175	ff00191.d	N/A	06/12/2018	19:00
9654176	ff00192.d	N/A	06/12/2018	19:31
9654176DL	ff00193.d	N/A	06/12/2018	20:02
9654177	ff00194.d	N/A	06/12/2018	20:33
9654194	ff00199.d	N/A	06/13/2018	08:22
cc1386	ff00200.d	1386	06/13/2018	08:52
cc1506	ff00201.d	1506	06/13/2018	09:23

COMMENTS:

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

SDG No.:

Lab File ID: ff00180.d

BFB Injection Date: 06/12/2018

Instrument ID: 26379

BFB Injection Time: 12:10

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0% - 40.0% of mass 95	23.45
75	30.0% - 66.0% of mass 95	47.64
95	Base peak, 100% relative abundance	100.00
96	5.0% - 9.0% of mass 95	6.97
173	< 2.0% of mass 174	1.11 (1.08)
174	> 50.0% of mass 95	102.97
175	4.0% - 9.0% of mass 174	7.06 (6.86)
176	93.0% - 101.0% of mass 174	99.34 (96.47)
177	5.0% - 9.0% of mass 176	6.78 (6.83)

THIS CHECK APPLIES TO THE FOLLOWING:

LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD010	ff00182.d	06/12/2018	13:53
VBLKF09	ff00183.d	06/12/2018	14:41
LCSF09	ff00184.d	06/12/2018	15:27
LCSDF09	ff00185.d	06/12/2018	15:57
9654195	ff00188.d	06/12/2018	17:28
9654193	ff00189.d	06/12/2018	17:59
9654194	ff00190.d	06/12/2018	18:30
9654175	ff00191.d	06/12/2018	19:00
9654176	ff00192.d	06/12/2018	19:31
9654176DL	ff00193.d	06/12/2018	20:02
9654177	ff00194.d	06/12/2018	20:33
9654194	ff00199.d	06/13/2018	08:22
cc1386	ff00200.d	06/13/2018	08:52
cc1506	ff00201.d	06/13/2018	09:23

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: ff00182.d

Calibration Date: 06/12/2018

Instrument ID: 26379

Calibration Time: 13:53

Init. Calib. Date(s): 05/31/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
Propene	1.092	1.011	9.264	10	-7
Dichlorodifluoromethane	2.636	3.099	11.758	10	18
Chlorodifluoromethane	2.112	2.234	10.579	10	6
Freon 114	2.852	3.069	10.759	10	8
Chloromethane	1.166	1.166	9.995	10	0
Vinyl Chloride	0.649	0.692	10.661	10	7
1,3-Butadiene	0.598	0.587	9.815	10	-2
Bromomethane	0.874	1.011	11.574	10	16
Chloroethane	0.588	0.611	10.400	10	4
Bromoethene	1.004	0.943	9.387	10	-6
Dichlorofluoromethane	2.191	2.456	11.209	10	12
Trichlorofluoromethane	2.969	3.264	10.992	10	10
Pentane	2.461	2.054	8.344	10	-17
Ethanol	0.533	0.421	7.892	10	-21
Freon123a	2.087	2.116	11.257	11.1	1
Acrolein	0.489	0.395	8.091	10	-19
1,1-Dichloroethene	1.815	1.667	9.184	10	-8
Freon 113	1.773	1.761	9.932	10	-1
Acetone	1.941	2.040	10.507	10	5
Methyl Iodide	3.040	2.375	7.815	10	-22
Carbon Disulfide	2.767	2.806	10.143	10	1
Isopropanol	2.297	1.808	7.872	10	-21
Acetonitrile	1.172	1.192	10.167	10	2
3-Chloropropene	1.689	1.553	10.201	11.1	-8
Methylene Chloride	0.873	0.956	12.145	11.1	9
tert-Butyl Alcohol	2.728	2.058	8.371	11.1	-25
Acrylonitrile	1.101	0.984	8.941	10	-11
trans-1,2-Dichloroethene	1.692	1.629	9.626	10	-4
Methyl t-Butyl Ether	3.247	2.615	8.054	10	-19
Hexane	1.312	1.213	9.241	10	-8
1,1-Dichloroethane	2.145	2.198	10.245	10	2
Vinyl Acetate	3.864	3.298	9.558	11.2	-15
Di-Isopropyl Ether	4.892	3.512	7.180	10	-28
Ethyl Tert-Butyl Ether	4.151	2.951	7.109	10	-29
cis-1,2-Dichloroethene	1.638	1.496	9.135	10	-9
2-Butanone	2.845	2.575	9.048	10	-10
Ethyl Acetate	3.239	2.749	8.486	10	-15
Methyl Acrylate	2.379	1.960	8.238	10	-18
Tetrahydrofuran	1.606	1.386	8.632	10	-14

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: ff00182.d

Calibration Date: 06/12/2018

Instrument ID: 26379

Calibration Time: 13:53

Init. Calib. Date(s): 05/31/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
Chloroform	2.361	2.586	10.952	10	10
1,1,1-Trichloroethane	2.703	2.703	9.999	10	0
Cyclohexane	2.341	1.631	6.967	10	-30
Carbon Tetrachloride	2.811	2.753	9.794	10	-2
Benzene	0.986	1.183	11.999	10	20
1,2-Dichloroethane *	0.461	0.616	13.363	10	34 *
Isooctane	1.816	1.742	9.596	10	-4
Tert-Amyl Methyl Ether	0.930	0.827	8.888	10	-11
Heptane	0.360	0.321	8.912	10	-11
Trichloroethene	0.499	0.540	10.810	10	8
Ethyl Acrylate	0.900	0.714	7.927	10	-21
1,2-Dichloropropane	0.412	0.473	11.489	10	15
Dibromomethane	0.550	0.654	11.889	10	19
1,4-Dioxane	0.246	0.243	9.876	10	-1
Methyl Methacrylate	0.354	0.283	7.991	10	-20
Bromodichloromethane	0.709	0.866	12.204	10	22
cis-1,3-Dichloropropene	0.607	0.575	9.476	10	-5
4-Methyl-2-Pentanone	1.066	0.963	9.035	10	-10
Toluene	1.270	1.237	9.740	10	-3
Octane	1.136	0.940	8.273	10	-17
trans-1,3-Dichloropropene	0.537	0.538	10.029	10	0
Ethyl Methacrylate	0.642	0.459	7.145	10	-29
1,1,2-Trichloroethane	0.464	0.542	11.669	10	17
Tetrachloroethene	0.836	0.968	11.584	10	16
2-Hexanone	1.048	0.841	8.020	10	-20
Dibromochloromethane	0.639	0.652	10.207	10	2
1,2-Dibromoethane	0.734	0.763	10.386	10	4
Chlorobenzene	1.131	1.199	10.601	10	6
1,1,1,2-Tetrachloroethane	0.642	0.681	10.613	10	6
Ethylbenzene	1.817	1.664	9.158	10	-8
m/p-Xylene	1.353	1.152	8.513	10	-15
o-Xylene	1.371	1.063	7.757	10	-22
Styrene	1.052	0.866	8.232	10	-18
Bromoform	1.008	0.927	9.197	10	-8
Cumene	2.017	1.676	8.309	10	-17
Bromobenzene	0.793	0.857	10.805	10	8
1,1,2,2-Tetrachloroethane	1.024	1.135	11.083	10	11
1,2,3-Trichloropropane	0.335	0.373	11.136	10	11
n-Propylbenzene	0.599	0.544	9.083	10	-9

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: ff00182.d

Calibration Date: 06/12/2018

Instrument ID: 26379

Calibration Time: 13:53

Init. Calib. Date(s): 05/31/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
2-Chlorotoluene	0.539	0.552	10.239	10	2
4-Ethyltoluene	2.031	1.843	9.073	10	-9
1,3,5-Trimethylbenzene	1.686	1.708	10.132	10	1
Alpha Methyl Styrene	0.877	0.645	7.360	10	-26
tert-Butylbenzene	1.661	1.777	10.702	10	7
1,2,4-Trimethylbenzene	1.682	1.659	9.863	10	-1
sec-Butylbenzene	2.504	2.432	9.714	10	-3
1,3-Dichlorobenzene	1.336	1.403	10.496	10	5
1,4-Dichlorobenzene	1.363	1.374	10.080	10	1
p-Isopropyltoluene	2.132	1.990	9.332	10	-7
Benzyl Chloride	0.345	0.337	9.785	10	-2
1,2-Dichlorobenzene	1.252	1.305	10.427	10	4
n-Butylbenzene	1.181	1.149	9.726	10	-3
Hexachloroethane	0.655	0.606	9.250	10	-8
1,2-Dibromo-3-chloropropane	0.675	0.646	9.574	10	-4
1,2,4-Trichlorobenzene	1.119	1.041	9.305	10	-7
Hexachlorobutadiene	1.206	1.236	10.252	10	3
Naphthalene	2.041	1.741	8.528	10	-15

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

Continuing Calibration
Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP26379.i/18may31.b/fe00593.d
/chem/HP26379.i/18may31.b/fe00594.d
/chem/HP26379.i/18may31.b/fe00595.d
/chem/HP26379.i/18may31.b/fe00596.d
/chem/HP26379.i/18may31.b/fe00597.d
/chem/HP26379.i/18may31.b/fe00598.d

** ICAL Area and RT are the average from the above standards.

Current Continuing Calibration Standard:

/chem/HP26379.i/18jun12.b/ff00182.d

Area Summary

Internal Standard Name	File ID: ff00182.d	ICAL Area	Low Limit	High Limit	In Spec
Bromochloromethane	372077	393622	236173	551071	Yes
1,4-Difluorobenzene	1091224	1431733	859040	2004426	Yes
Chlorobenzene-d5	1159973	1402675	841605	1963745	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

RT Summary

Internal Standard Name	File ID: ff00182.d	ICAL RT	In Spec
Bromochloromethane	11.101	11.107	Yes
1,4-Difluorobenzene	13.393	13.393	Yes
Chlorobenzene-d5	18.235	18.233	Yes

A "No" indicates the retention time is greater than 30 seconds from the RT of the referenced ICAL average.

Comments:_____

_____

Page 1 of 1

Report generated on 06/12/2018 at 14:23

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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: 06/12/2018

Lab File ID: ff00182.d Analyzed Time: 13:53

Instrument ID: 26379

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	R.T.	Area	R.T.	Area	R.T.
24 HOUR STANDARD	372077	11.10	1091224	13.39	1159973	18.23
UPPER LIMIT	520908	11.43	1527714	13.72	1623962	18.56
LOWER LIMIT	223246	10.77	654734	13.06	695984	17.90
LAB SAMPLE ID						
VBLKF09	367097	11.10	976994	13.39	1071645	18.24
LCSF09	362892	11.11	1066786	13.39	1130289	18.24
LCSDF09	364730	11.11	1077360	13.41	1144986	18.23
9654195	329563	11.11	995762	13.40	1047461	18.23
9654193	333798	11.11	948996	13.40	1020655	18.23
9654194	337329	11.11	971049	13.40	1057619	18.23
9654175	355160	11.11	942851	13.40	1036766	18.23
9654176	334427	11.11	1049857	13.40	1061592	18.23
9654176DL	345345	11.11	924713	13.39	993819	18.23
9654177	336344	11.12	939643	13.40	1048137	18.24
9654194	354051	11.10	1033044	13.39	1072019	18.23
cc1386	369098	11.11	917935	13.39	1013060	18.23
cc1506	364553	11.11	803785	13.41	942793	18.23

* = 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.

Data File: /chem/HP26379.i/18jun12.b/ff00180.d

Page 1

Date : 12-JUN-2018 12:10

Client ID: BFB

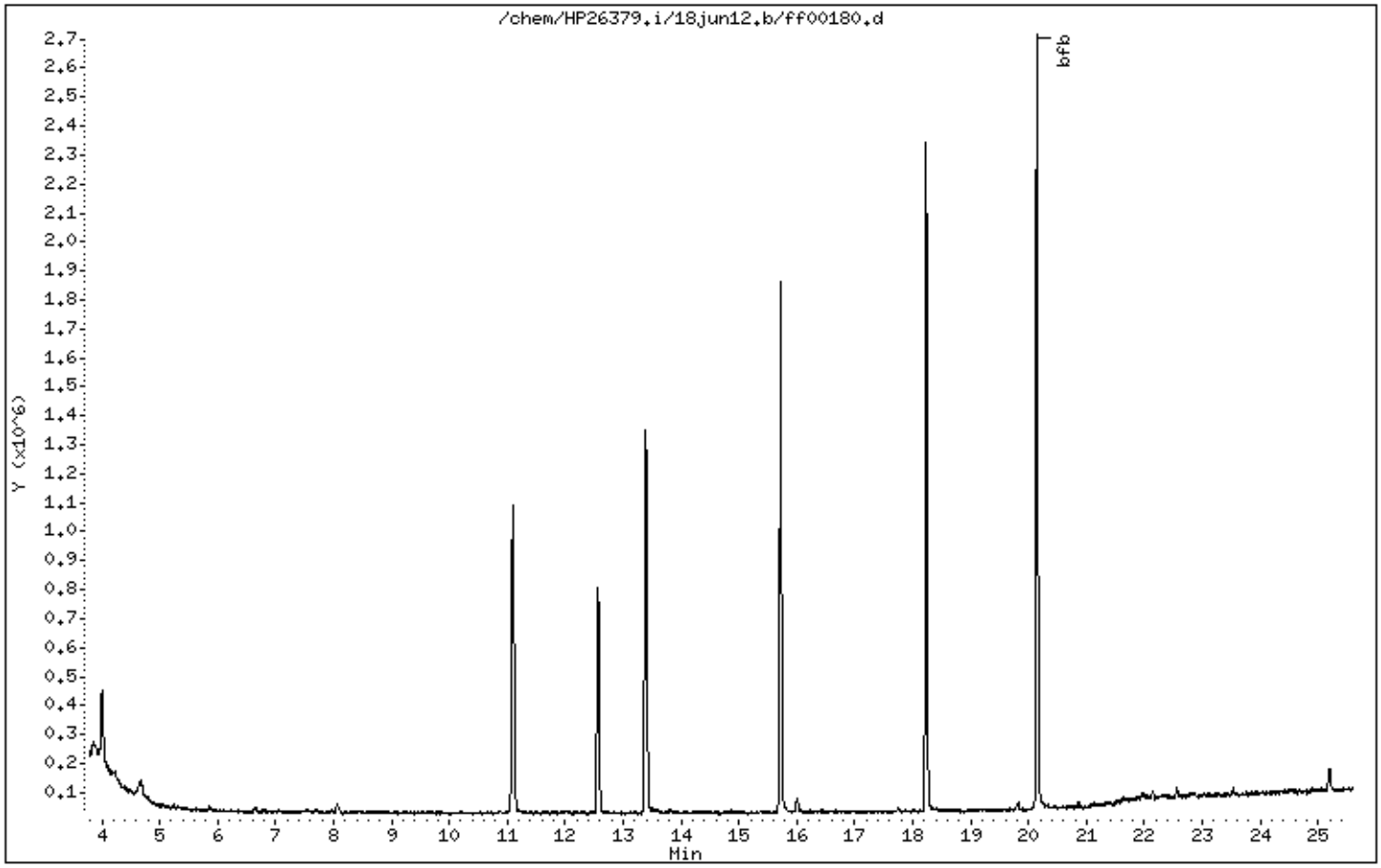
Instrument: HP26379.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25



Digitally signed by Jacob E. Bailey on 06/12/2018 at 14:28.
Target 3.5 esignature user ID: jeb07445

Data File: /chem/HP26379.i/18jun12.b/ff00180.d

Date : 12-JUN-2018 12:10

Client ID: BFB

Instrument: HP26379.i

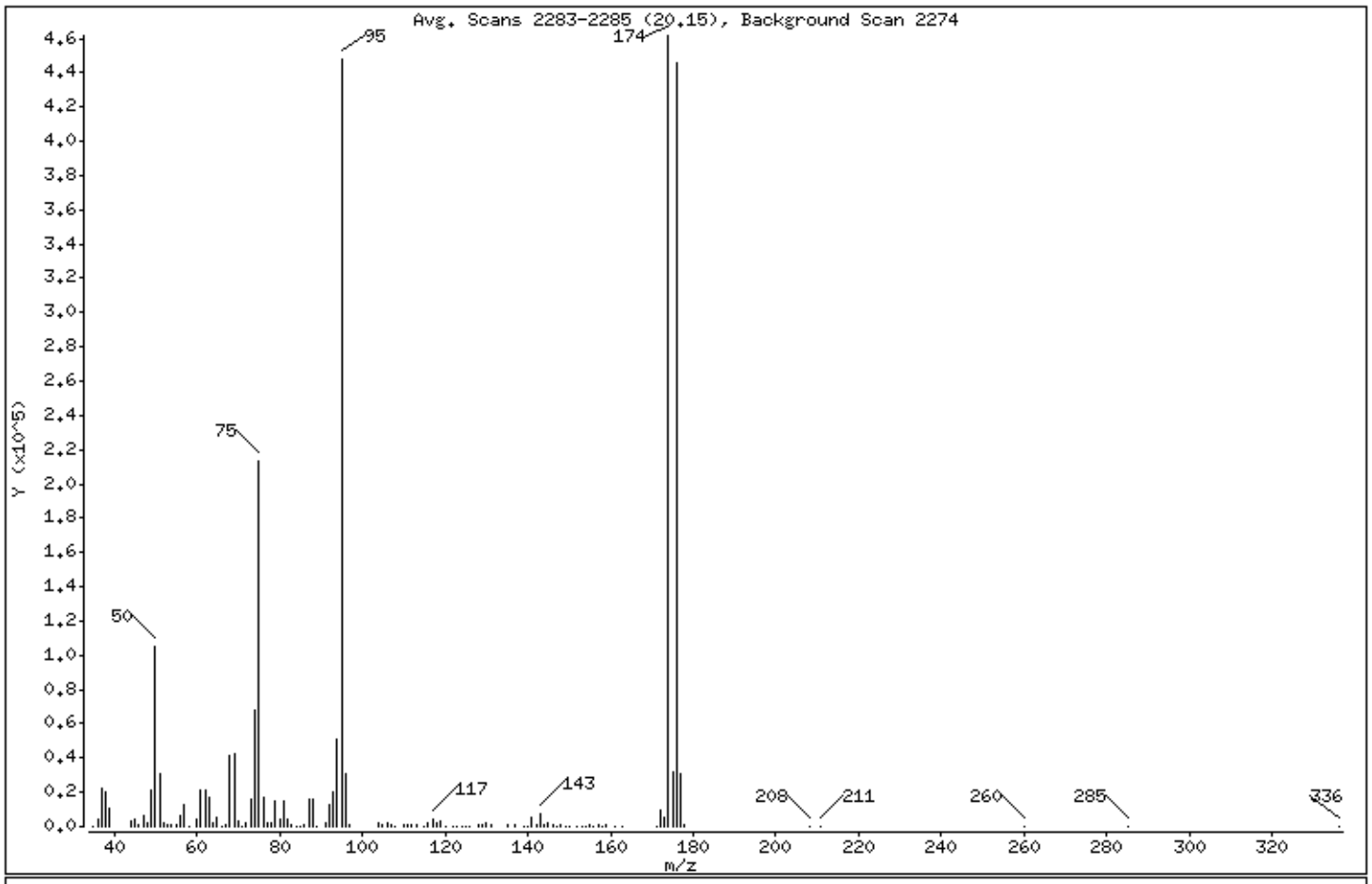
Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	23.45
75	30.00 - 66.00% of mass 95	47.64
96	5.00 - 9.00% of mass 95	6.97
173	Less than 2.00% of mass 174	1.11 (1.08)
174	50.00 - 120.00% of mass 95	102.97
175	4.00 - 9.00% of mass 174	7.06 (6.86)
176	93.00 - 101.00% of mass 174	99.34 (96.47)
177	5.00 - 9.00% of mass 176	6.78 (6.83)

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Target 3.5 esignature user ID: jeb07445

Date : 12-JUN-2018 12:10

Client ID: BFB Instrument: HP26379.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624 Column diameter: 0.25

Data File: ff00180.d
Spectrum: Avg. Scans 2283-2285 (20,15), Background Scan 2274
Location of Maximum: 174.00
Number of points: 118

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	191	70.00	3354	107.00	591	146.00	1089
36.00	4215	71.00	133	108.00	203	147.00	334
37.00	21848	72.00	1902	110.00	585	148.00	1506
38.00	20200	73.00	15821	111.00	666	149.00	178
39.00	10691	74.00	67896	112.00	767	150.00	437
44.00	3040	75.00	213568	113.00	749	152.00	149
45.00	4157	76.00	16816	115.00	306	153.00	123
46.00	708	77.00	2152	116.00	1781	154.00	283
47.00	6079	78.00	1799	117.00	3795	155.00	1576
48.00	2611	79.00	15272	118.00	1756	156.00	409
49.00	21120	80.00	4033	119.00	3206	157.00	981
50.00	105152	81.00	15252	120.00	166	158.00	120
51.00	30856	82.00	4049	122.00	146	159.00	725
52.00	1792	83.00	606	123.00	105	161.00	497
53.00	695	84.00	408	124.00	330	163.00	103
54.00	553	85.00	121	125.00	127	171.00	514
55.00	968	86.00	822	126.00	270	172.00	9023
56.00	6711	87.00	16408	128.00	1224	173.00	4990
57.00	12874	88.00	15504	129.00	1007	174.00	461632
58.00	309	89.00	219	130.00	1823	175.00	31664
60.00	4391	91.00	1815	131.00	1051	176.00	445376
61.00	20888	92.00	12341	135.00	984	177.00	30416
62.00	20816	93.00	19760	137.00	856	178.00	942
63.00	17376	94.00	50824	139.00	112	208.00	111
64.00	2561	95.00	448320	140.00	395	211.00	49
65.00	4846	96.00	31240	141.00	5261	260.00	365
66.00	264	97.00	1102	142.00	789	285.00	247
67.00	718	104.00	2079	143.00	7459	336.00	111
68.00	41248	105.00	969	144.00	552		
69.00	42152	106.00	2130	145.00	2105		

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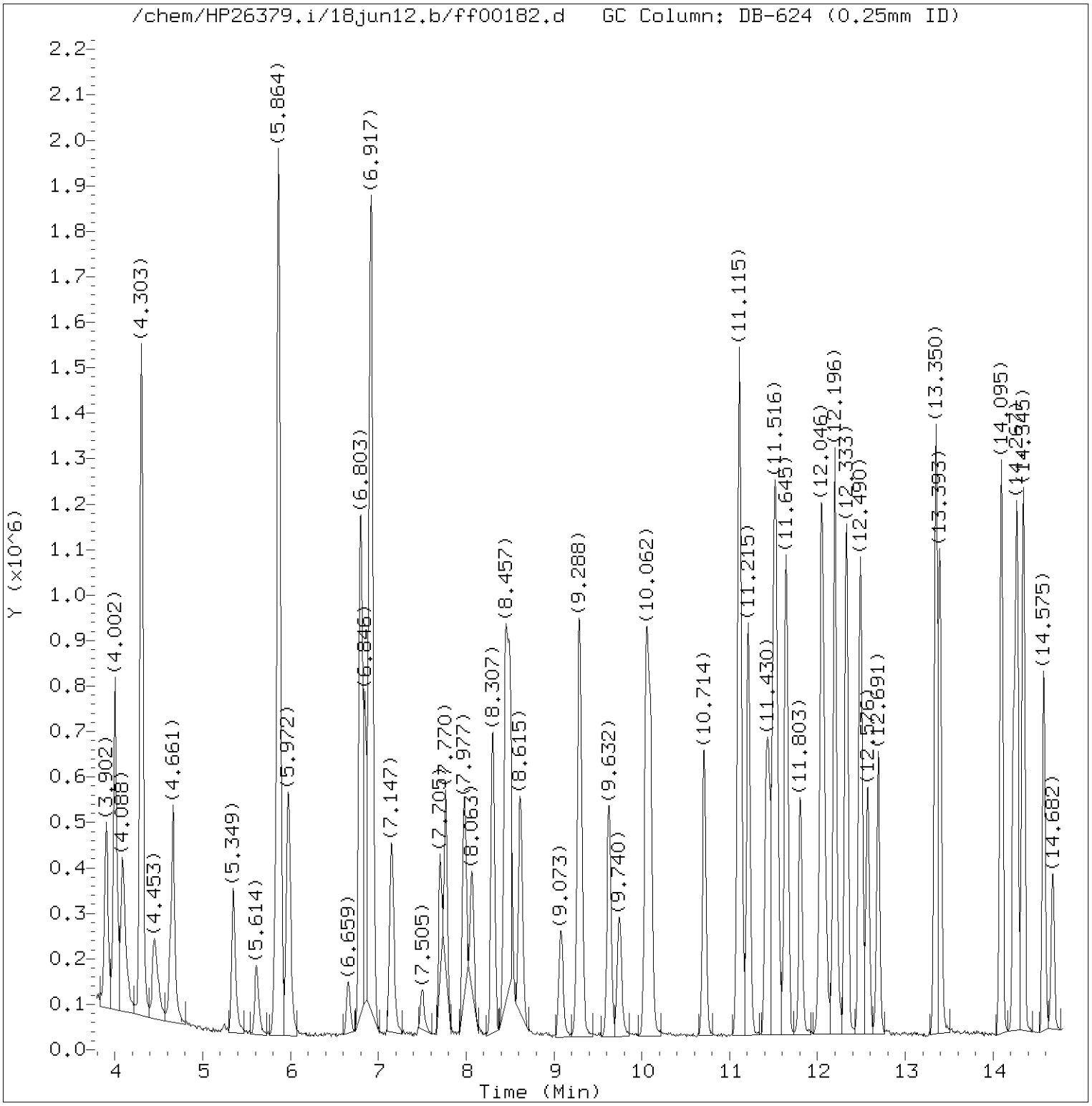
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

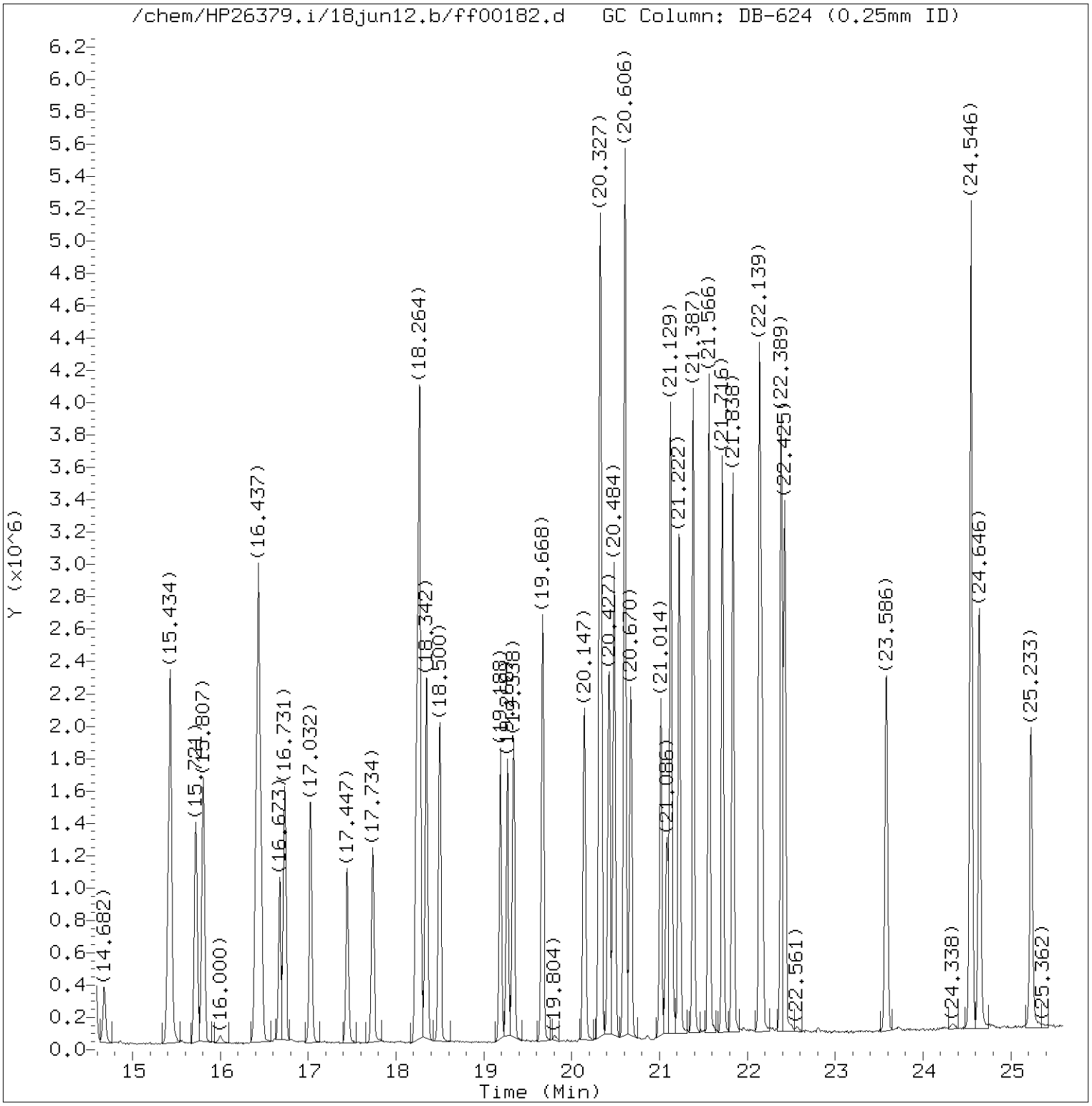
Target Revision 3.5

Data File: /chem/HP26379.i/18jun12.b/ff00182.d Instrument ID: HP26379.i
Injection date and time: 12-JUN-2018 13:53 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 14:24
Date, time and analyst ID of latest file update: 12-Jun-2018 14:24 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 06/12/2018 at 14:27.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun12.b/ff00182.d Instrument ID: HP26379.i
Injection date and time: 12-JUN-2018 13:53 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 14:24
Date, time and analyst ID of latest file update: 12-Jun-2018 14:24 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 06/12/2018 at 14:27.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun12.b/ff00182.d Instrument ID: HP26379.i
Injection date and time: 12-JUN-2018 13:53 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 14:24
Date, time and analyst ID of latest file update: 12-Jun-2018 14:24 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	376311	9.264
2) Dichlorodifluoromethane	(1)	4.002	85	1153192	11.758
3) Chlorodifluoromethane	(1)	4.088	51	831219	10.579
4) Freon 114	(1)	4.303	85	1141874	10.759
5) Chloromethane	(1)	4.446	50	433713	9.995
6) Vinyl Chloride	(1)	4.632	62	257347	10.661
7) 1,3-Butadiene	(1)	4.661	54	218350	9.815
8) Bromomethane	(1)	5.349	94	376225	11.574
9) Chloroethane	(1)	5.614	64	227472	10.400
10) Bromoethene	(1)	5.836	106	350750	9.387
11) Pentane	(1)	5.864	43	764142	8.344
12) Trichlorofluoromethane	(1)	5.872	101	1214435	10.992
13) Dichlorofluoromethane	(1)	5.972	67	913915M	11.209
14) Ethanol	(1)	6.652	45	156542	7.892
15) Freon123a	(1)	6.803	67	874035	11.257
16) 1,1-Dichloroethene	(1)	6.846	61	620363	9.184
17) Freon 113	(1)	6.910	103	655394	9.932
18) Carbon Disulfide	(1)	6.932	76	1044111	10.143
19) Methyl Iodide	(1)	7.154	142	883809	7.815
20) Acrolein	(1)	7.505	56	147075	8.091
21) Isopropanol	(1)	7.705	45	672721	7.872
22) 3-Chloropropene	(1)	7.770	41	641230M	10.201
23) Methylene Chloride	(1)	7.977	84	394648	12.145
24) Acetone	(1)	8.071	43	758993	10.507
25) trans-1,2-Dichloroethene	(1)	8.300	61	606168	9.626
26) Hexane	(1)	8.457	56	451153	9.241
27) Methyl t-Butyl Ether	(1)	8.493	73	972972	8.054
28) tert-Butyl Alcohol	(1)	8.622	59	849759	8.371
29) Acetonitrile	(1)	9.073	41	443367	10.167
30) Di-Isopropyl Ether	(1)	9.295	45	1306833	7.180
31) 1,1-Dichloroethane	(1)	9.632	63	817685	10.245
32) Acrylonitrile	(1)	9.740	53	366267	8.941
33) Ethyl Tert-Butyl Ether	(1)	10.055	59	1098126	7.109
34) Vinyl Acetate	(1)	10.098	43	1374210M	9.558
35) cis-1,2-Dichloroethene	(1)	10.714	61	556687	9.135
36) 1,2-Dichloroethene (total)	(1)		61	1162855	18.761
37)*Bromochloromethane	(1)	11.101	130	372077	10.000
38) Cyclohexane	(1)	11.122	56	606954	6.967

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

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on 06/12/2018 at 14:27.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun12.b/ff00182.d Instrument ID: HP26379.i
Injection date and time: 12-JUN-2018 13:53 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 14:24
Date, time and analyst ID of latest file update: 12-Jun-2018 14:24 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	962159	10.952
40) Ethyl Acetate	(1)	11.416	43	1022670	8.486
41) Methyl Acrylate	(1)	11.452	55	729114	8.238
42) Carbon Tetrachloride	(1)	11.509	117	1024366	9.794
43) Tetrahydrofuran	(1)	11.545	42	515640	8.632
44) 1,1,1-Trichloroethane	(1)	11.645	97	1005672	9.999
45) 2-Butanone	(1)	11.803	43	957986	9.048
46) Isooctane	(2)	12.046	57	1901313	9.596
47) Heptane	(2)	12.196	71	350162	8.912
48) Benzene	(2)	12.333	78	1291228	11.999
49) Tert-Amyl Methyl Ether	(2)	12.490	73	902220	8.888
50) 1,2-Dichloroethane	(2)	12.691	62	672443	13.363
51) Trichloroethene	(2)	13.350	130	588745	10.810
52)*1,4-Difluorobenzene	(2)	13.393	114	1091224	10.000
53) Dibromomethane	(2)	14.095	174	714124	11.889
54) Ethyl Acrylate	(2)	14.231	55	778845	7.927
55) 1,2-Dichloropropane	(2)	14.267	63	515983	11.489
56) Bromodichloromethane	(2)	14.345	83	944698	12.204
57) Methyl Methacrylate	(2)	14.582	69	308998	7.991
58) 1,4-Dioxane	(2)	14.682	88	265542	9.876
59) cis-1,3-Dichloropropene	(2)	15.406	75	627787	9.476
60) Octane	(3)	15.434	43	1090433	8.273
61) Toluene	(3)	15.807	91	1435452	9.740
62) 4-Methyl-2-Pentanone	(2)	16.401	43	1050696	9.035
63) Tetrachloroethene	(3)	16.437	166	1122824	11.584
64) trans-1,3-Dichloropropene	(3)	16.466	75	624605	10.029
65) 1,3-Dichloropropene (total)	(3)		75	1252392	18.673
66) Ethyl Methacrylate	(3)	16.673	69	532165	7.145
67) 1,1,2-Trichloroethane	(3)	16.731	97	628509	11.669
68) Dibromochloromethane	(3)	17.024	127	756568	10.207
69) 1,2-Dibromoethane	(3)	17.447	107	884875	10.386
70) 2-Hexanone	(3)	17.734	43	975275	8.020
71)*Chlorobenzene-d5	(3)	18.235	117	1159973	10.000
72) Chlorobenzene	(3)	18.264	112	1390960	10.601
73) Ethylbenzene	(3)	18.271	91	1930019	9.158
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	790138	10.613
75) m/p-Xylene	(3)	18.500	91	1336224	8.513
76) o-Xylene	(3)	19.188	91	1233573	7.757

* = Compound is an internal standard.

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on 06/12/2018 at 14:27.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun12.b/ff00182.d Instrument ID: HP26379.i
Injection date and time: 12-JUN-2018 13:53 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 14:24
Date, time and analyst ID of latest file update: 12-Jun-2018 14:24 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	2569797	16.265
78) Styrene	(3)	19.266	104	1005015	8.232
79) Bromoform	(3)	19.338	173	1075211	9.197
80) Cumene	(3)	19.668	105	1944017	8.309
81) n-Propylbenzene	(3)	20.319	120	631240	9.083
82) Bromobenzene	(3)	20.334	156	994532	10.805
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	1316015	11.083
84) 4-Ethyltoluene	(3)	20.484	105	2137277	9.073
85) 2-Chlorotoluene	(3)	20.606	126	640560	10.239
86) 1,3,5-Trimethylbenzene	(3)	20.613	105	1981390	10.132
87) 1,2,3-Trichloropropane	(3)	20.670	110	432307	11.136
88) Alpha Methyl Styrene	(3)	21.014	118	748579	7.360
89) tert-Butylbenzene	(3)	21.129	119	2061706	10.702
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	1924573	9.863
91) sec-Butylbenzene	(3)	21.387	105	2821031	9.714
92) p-Isopropyltoluene	(3)	21.566	119	2308278	9.332
93) 1,3-Dichlorobenzene	(3)	21.716	146	1626993	10.496
94) 1,4-Dichlorobenzene	(3)	21.838	146	1593338	10.080
95) n-Butylbenzene	(3)	22.139	92	1332636	9.726
96) Benzyl Chloride	(3)	22.167	126	391074	9.785
97) Hexachloroethane	(3)	22.389	117	702467	9.250
98) 1,2-Dichlorobenzene	(3)	22.425	146	1513700	10.427
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	749272	9.574
100) Hexachlorobutadiene	(3)	24.546	225	1434086	10.252
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	1207504	9.305
102) Naphthalene	(3)	25.233	128	2019326	8.528

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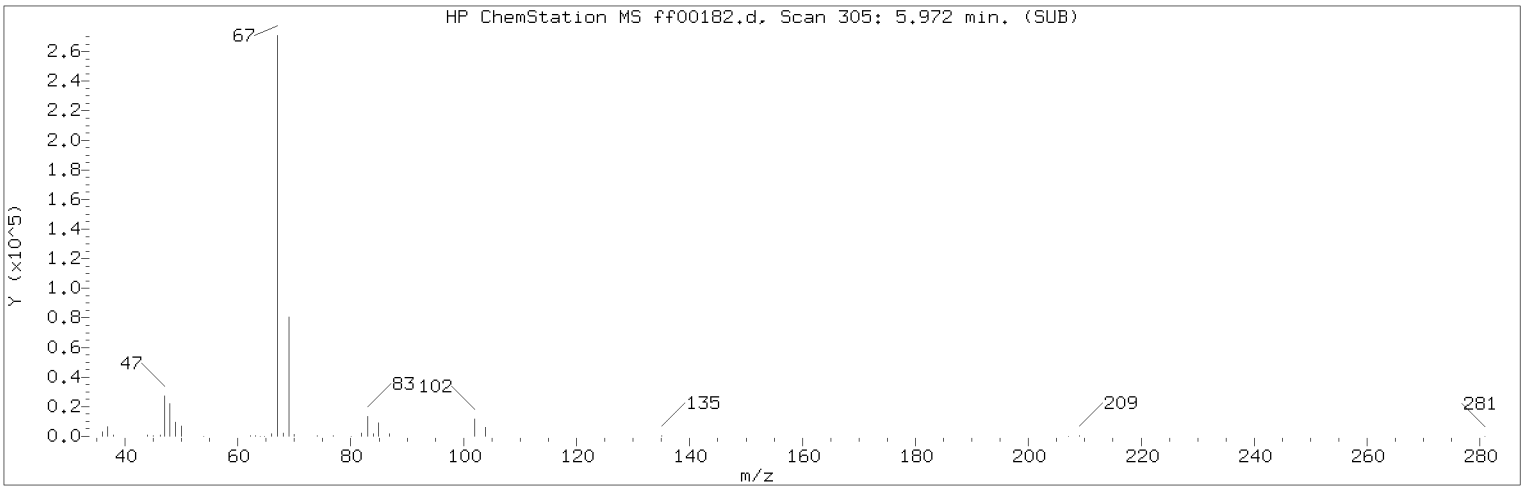
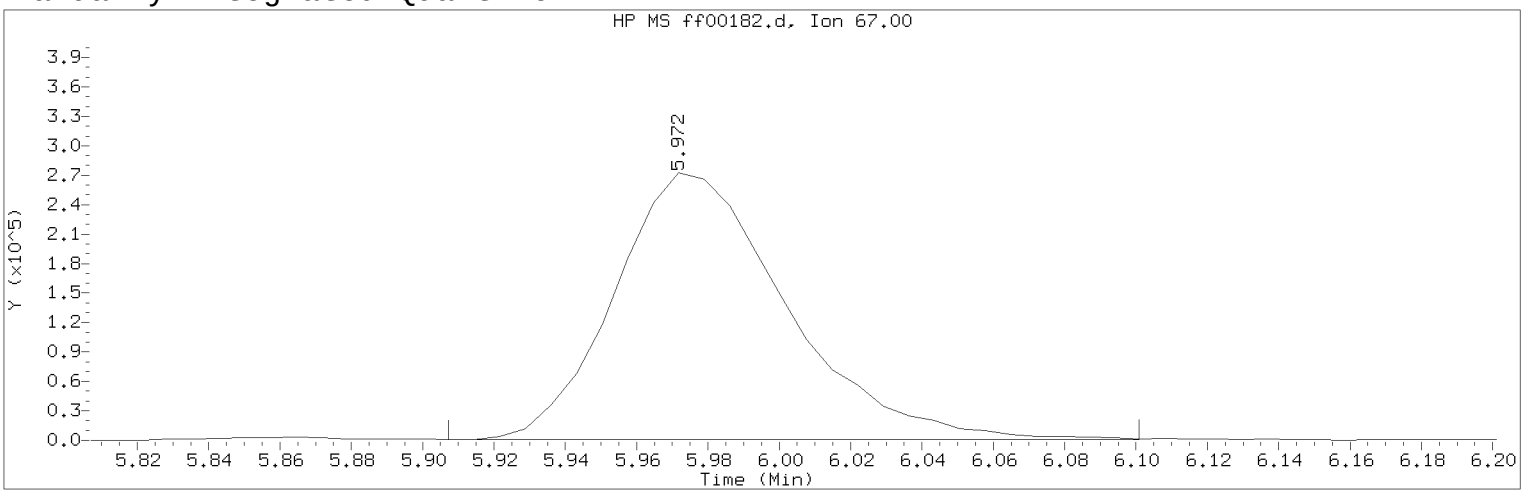
on 06/12/2018 at 14:27.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18jun12.b/ff00182.d Instrument ID: HP26379.i
Injection date and time: 12-JUN-2018 13:53 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 14:24
Date, time and analyst ID of latest file update: 12-Jun-2018 14:24 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

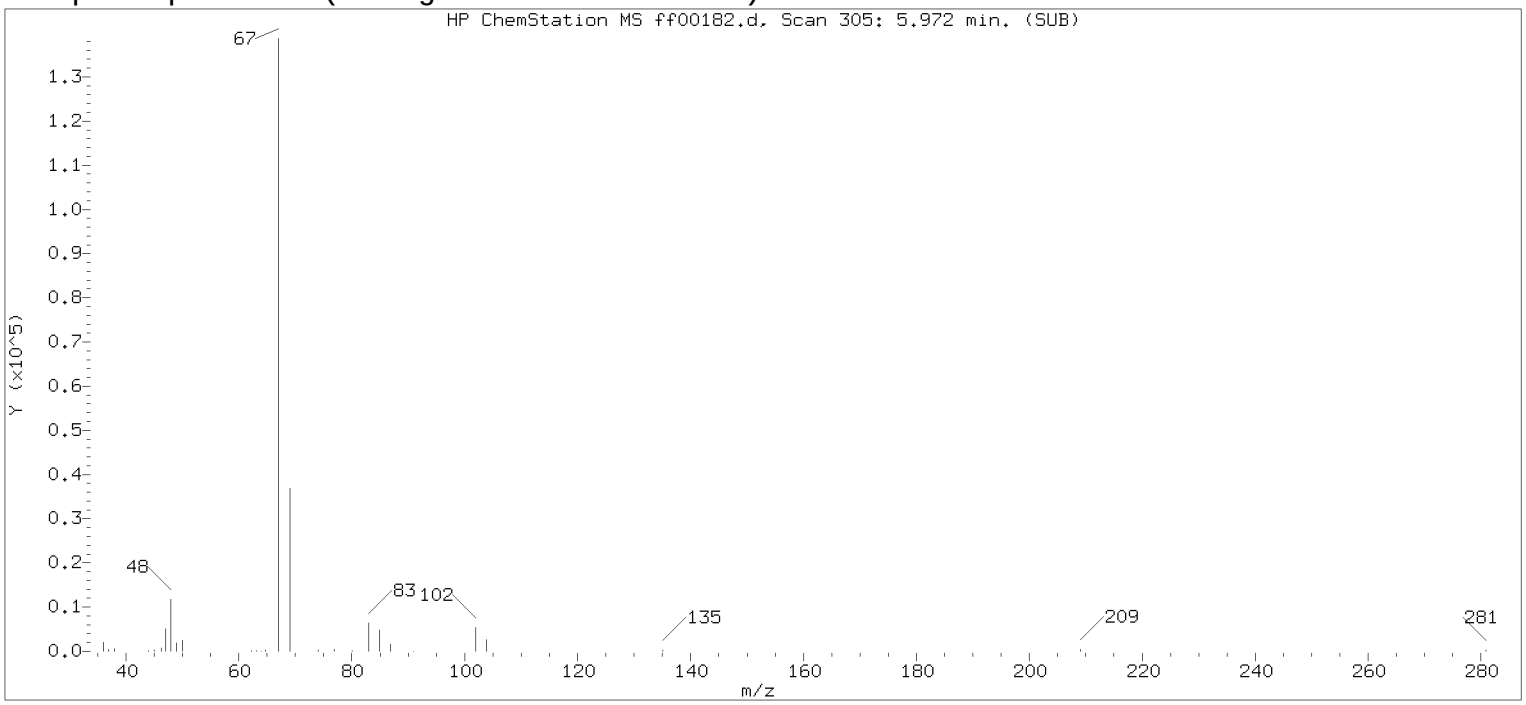
Compound Number : 13
Compound Name : Dichlorofluoromethane
Scan Number : 305
Retention Time (minutes): 5.972
Quant Ion : 67.00
Area (flag) : 913915M
Concentration (ppb(v)) : 11.2089
Integration start scan : 295 Integration stop scan: 322
Y at integration start : 339 Y at integration end: 339

Reason for manual integration: improper integration

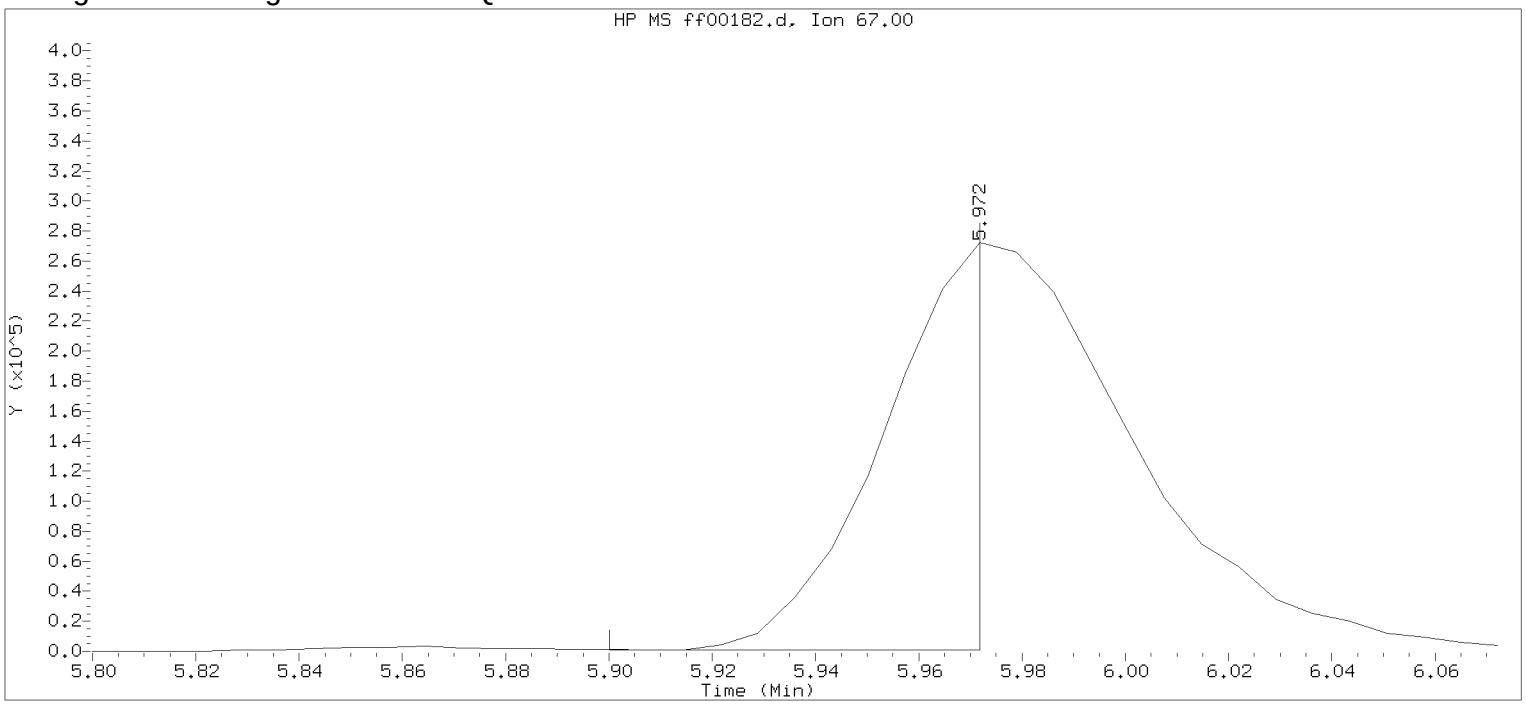
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/12/2018 at 14:27.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/13/2018 at 13:47.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18jun12.b/ff00182.d Instrument ID: HP26379.i
Injection date and time: 12-JUN-2018 13:53 Analyst ID: jeb07445

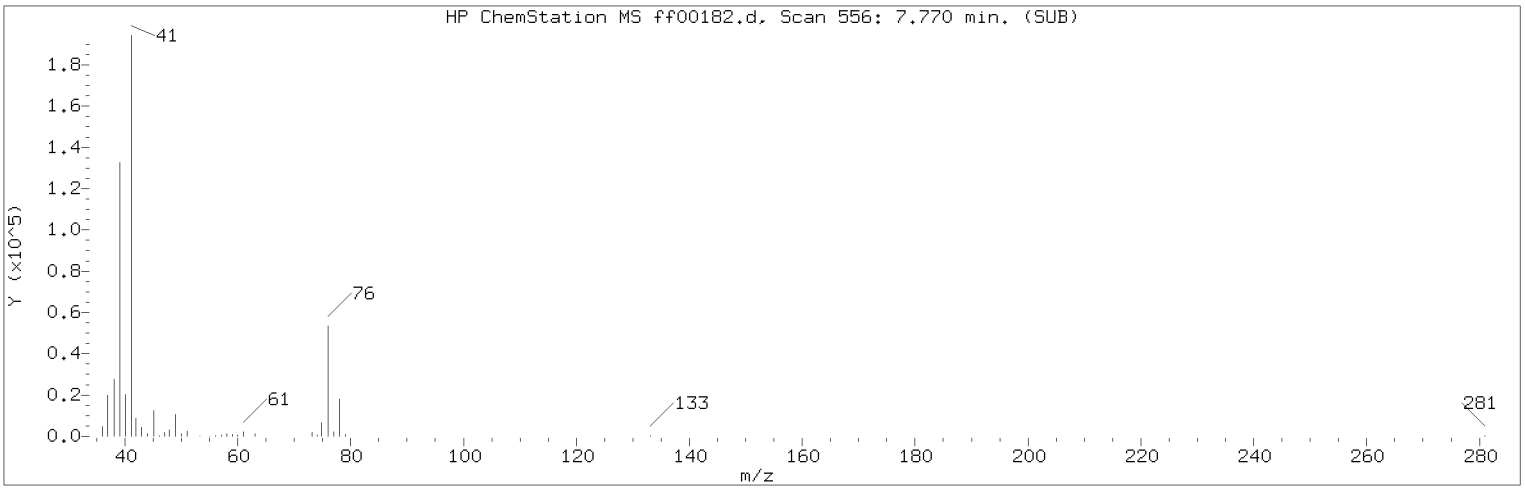
Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 13:35
Date, time and analyst ID of latest file update: 12-Jun-2018 14:21 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

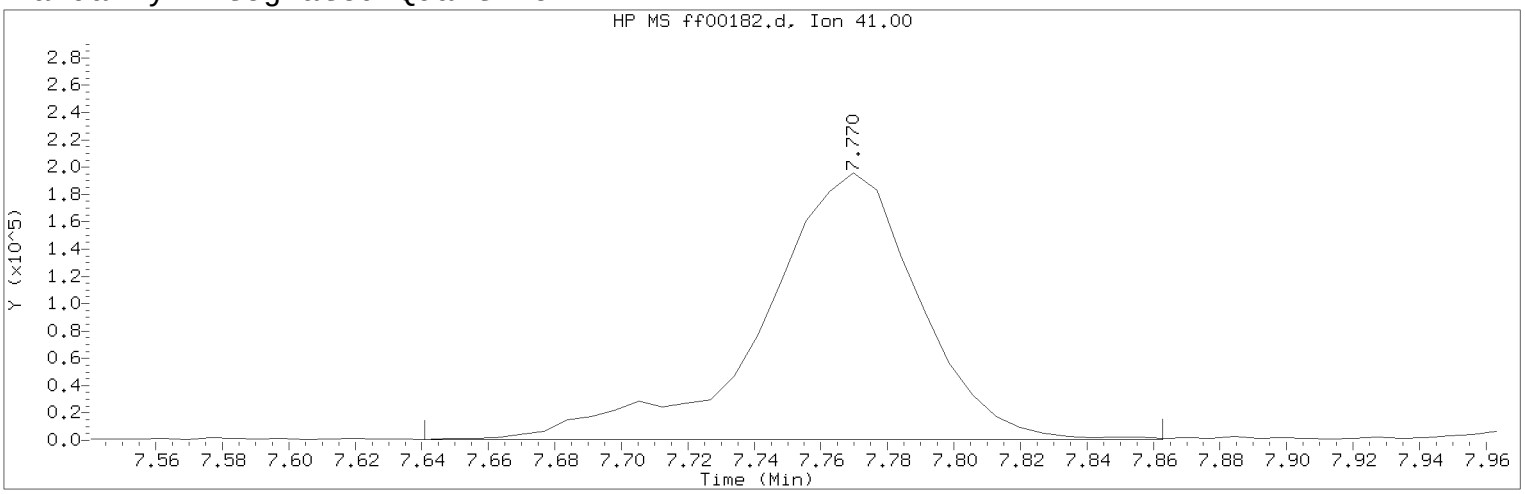
Compound Number : 13
Compound Name : Dichlorofluoromethane
Scan Number : 305
Retention Time (minutes): 5.972
Quant Ion : 67.00
Area : 340579
Concentration (ppb(v)) : 4.1771
Integration start scan : 294 Integration stop scan: 304
Y at integration start : 1061 Y at integration end: 1061

Digitally signed by Jacob E. Bailey on 06/12/2018 at 14:27.
Target 3.5 esignature used. GLED1 Page 1445 of 1687

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18jun12.b/ff00182.d Instrument ID: HP26379.i
Injection date and time: 12-JUN-2018 13:53 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 14:24
Date, time and analyst ID of latest file update: 12-Jun-2018 14:24 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

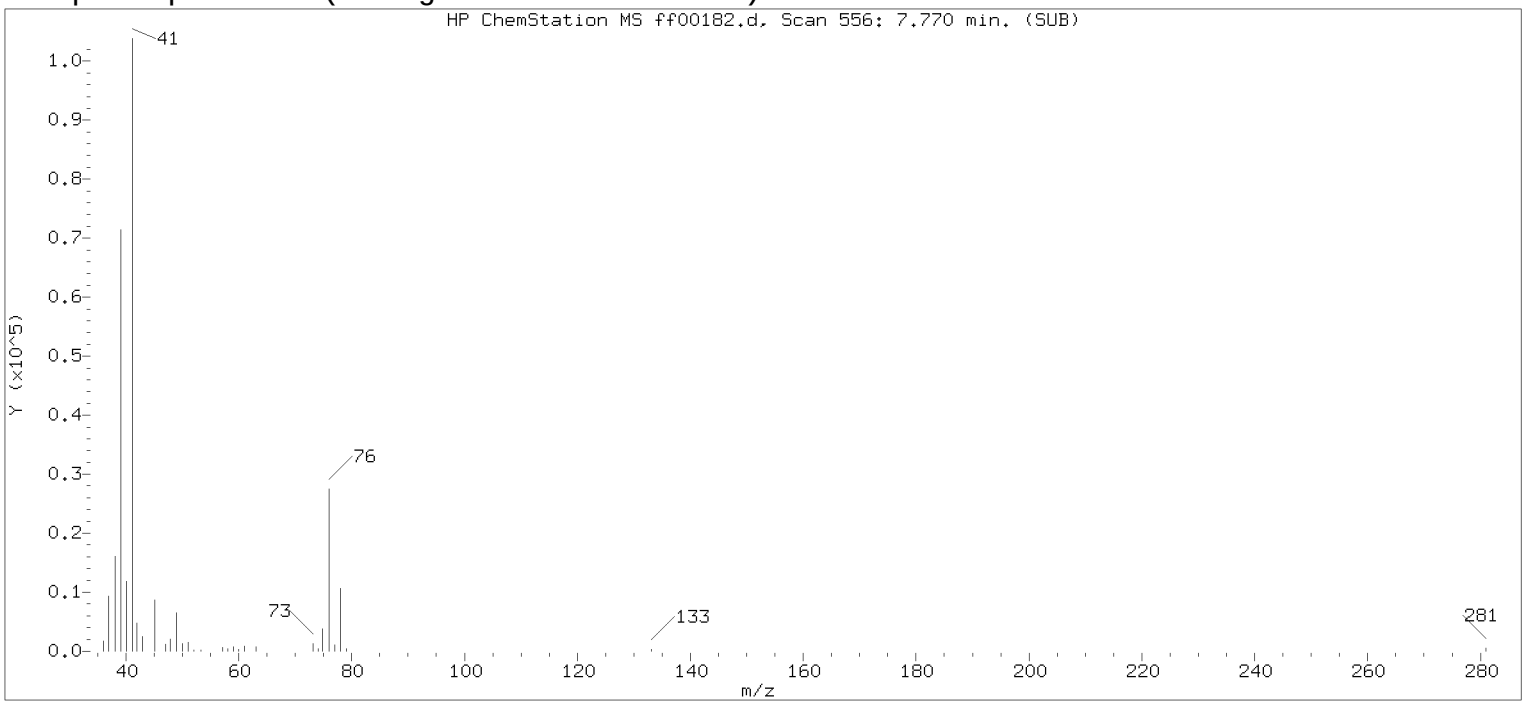
Compound Number : 22
Compound Name : 3-Chloropropene
Scan Number : 556
Retention Time (minutes): 7.770
Quant Ion : 41.00
Area (flag) : 641230M
Concentration (ppb(v)) : 10.2009
Integration start scan : 537 Integration stop scan: 568
Y at integration start : 431 Y at integration end: 431

Reason for manual integration: improper integration

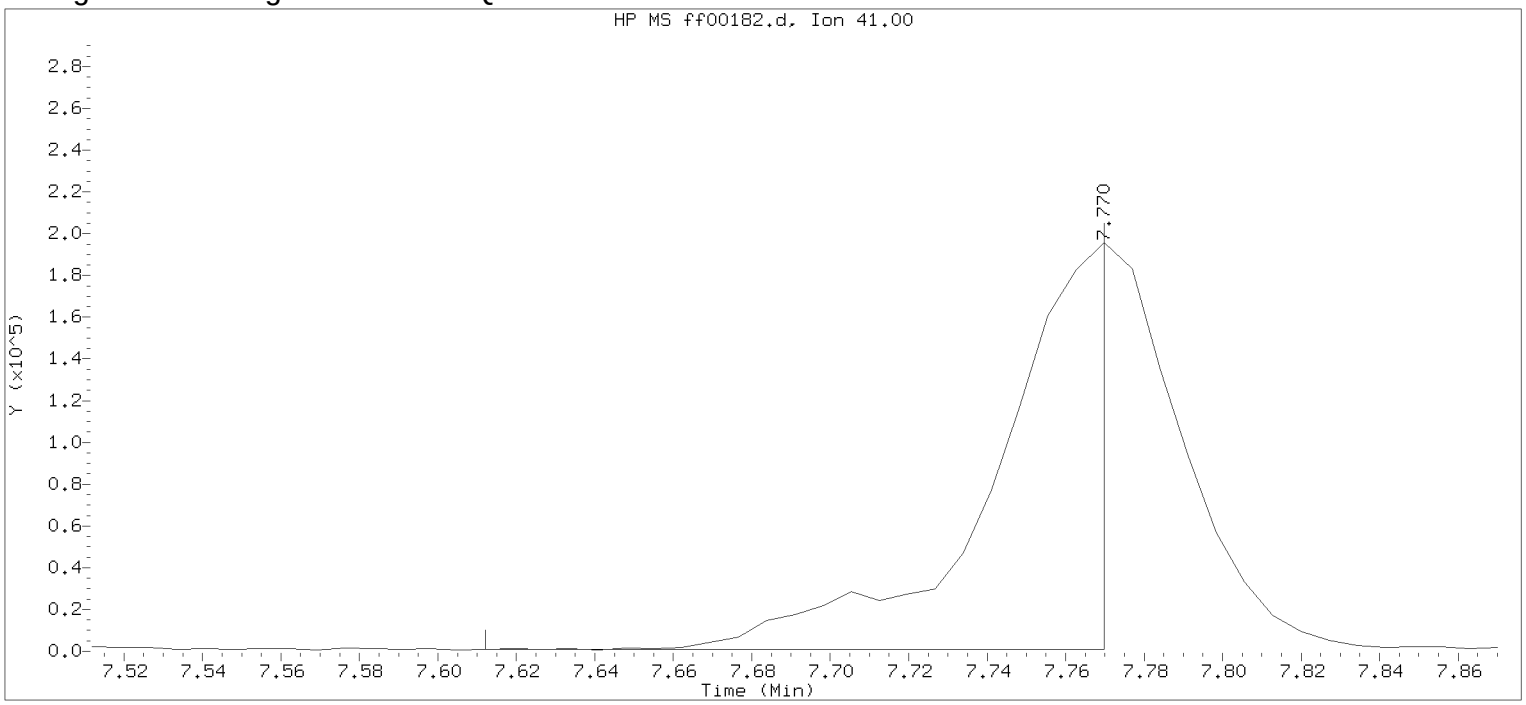
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/12/2018 at 14:27.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/13/2018 at 13:47.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18jun12.b/ff00182.d Instrument ID: HP26379.i
Injection date and time: 12-JUN-2018 13:53 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 13:35
Date, time and analyst ID of latest file update: 12-Jun-2018 14:21 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 22
Compound Name : 3-Chloropropene
Scan Number : 556
Retention Time (minutes): 7.770
Quant Ion : 41.00
Area : 365021
Concentration (ppb(v)) : 5.8069
Integration start scan : 533 Integration stop scan: 555
Y at integration start : 792 Y at integration end: 792

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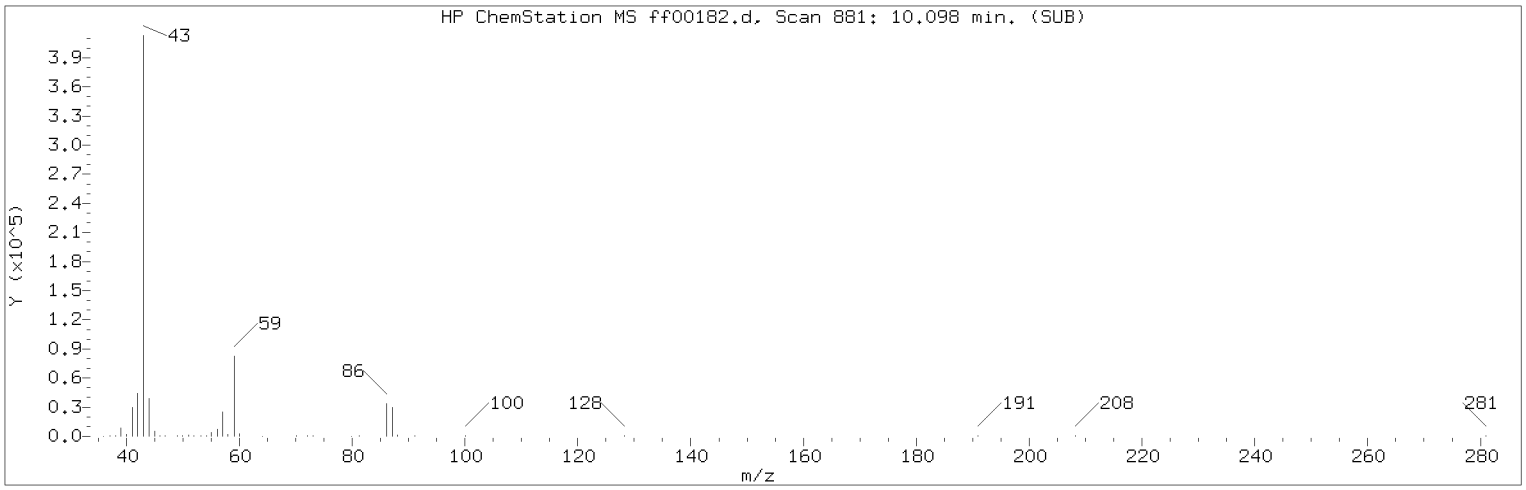
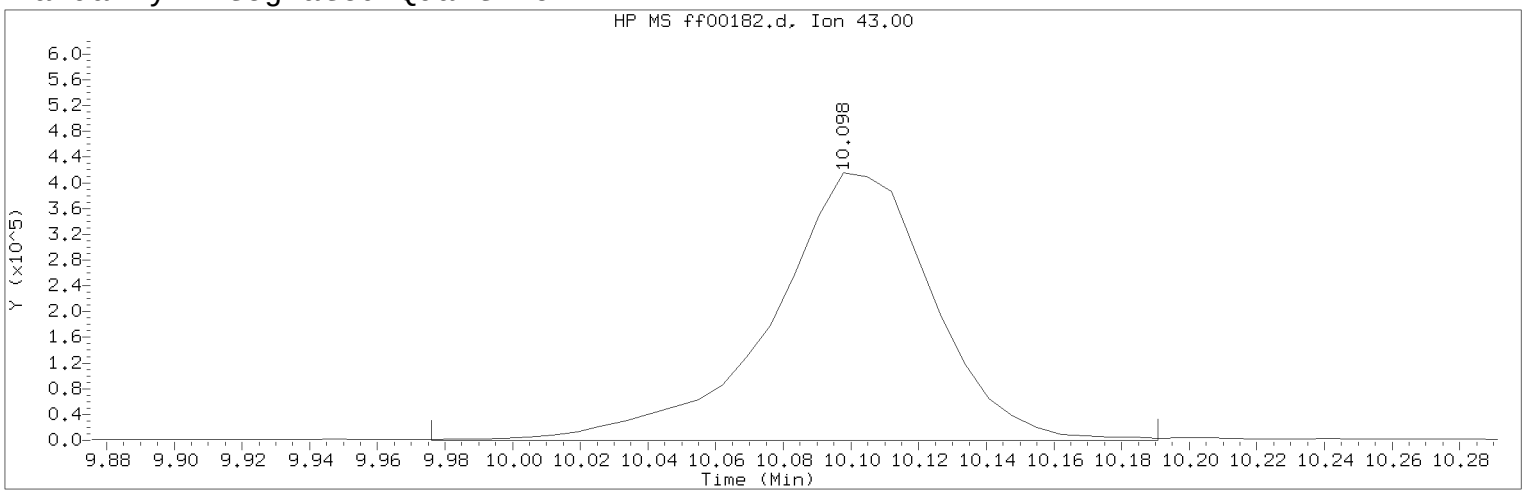
Target 3.5 esignature used. ED1 Page 1445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18jun12.b/ff00182.d Instrument ID: HP26379.i
Injection date and time: 12-JUN-2018 13:53 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 14:24
Date, time and analyst ID of latest file update: 12-Jun-2018 14:24 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

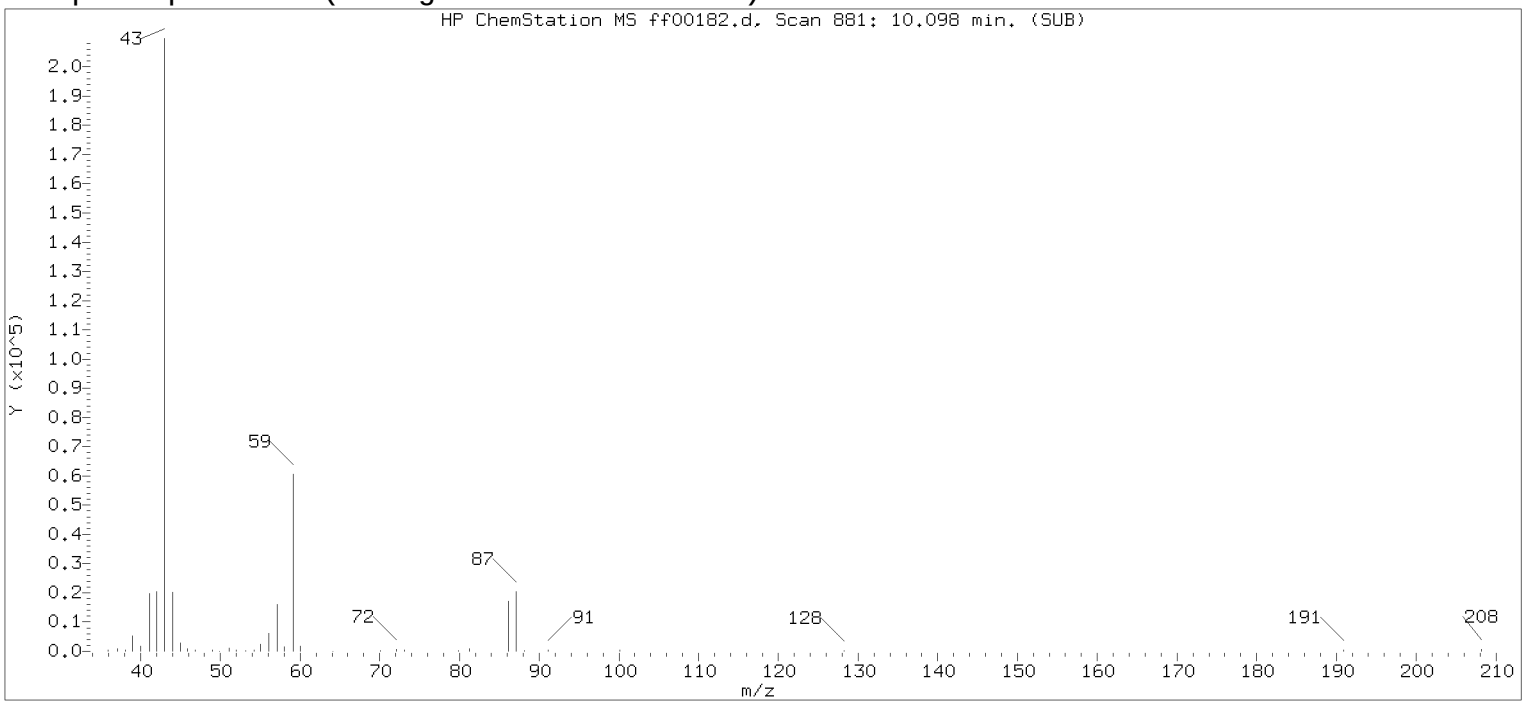
Compound Number : 34
Compound Name : Vinyl Acetate
Scan Number : 881
Retention Time (minutes): 10.098
Quant Ion : 43.00
Area (flag) : 1374210M
Concentration (ppb(v)) : 9.5584
Integration start scan : 863 Integration stop scan: 893
Y at integration start : 387 Y at integration end: 387

Reason for manual integration: improper integration

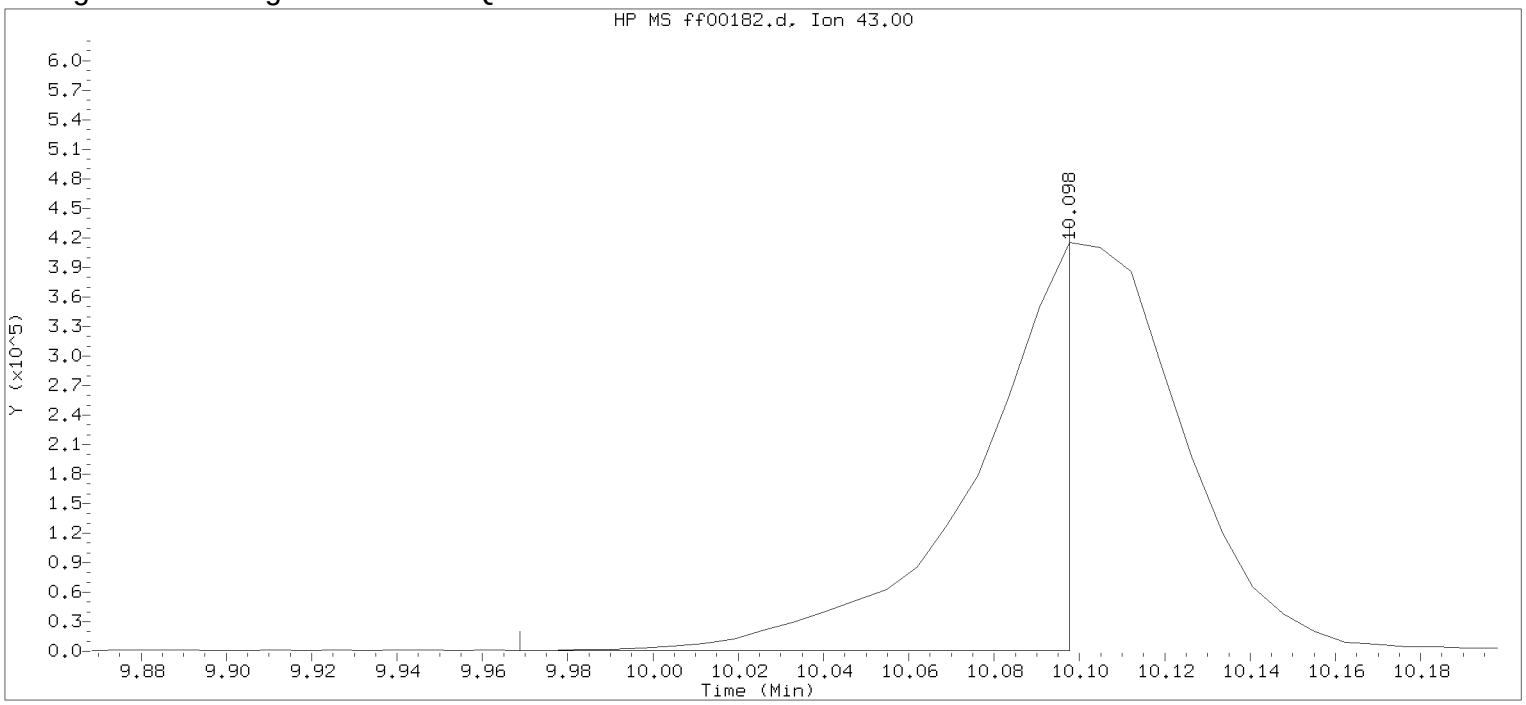
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/12/2018 at 14:27.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/13/2018 at 13:47.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18jun12.b/ff00182.d Instrument ID: HP26379.i
Injection date and time: 12-JUN-2018 13:53 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 13:35
Date, time and analyst ID of latest file update: 12-Jun-2018 14:21 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 34
Compound Name : Vinyl Acetate
Scan Number : 881
Retention Time (minutes): 10.098
Quant Ion : 43.00
Area : 614926
Concentration (ppb(v)) : 4.2771
Integration start scan : 862 Integration stop scan: 880
Y at integration start : 925 Y at integration end: 925

Digitally signed by Jacob E. Bailey on 06/12/2018 at 14:27.
Target 3.5 esignature used for jeb07445

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

VBLKF09

Data file: /chem/HP26379.i/18jun12.b/ff00183.d Injection date and time: **12-JUN-2018 14:41**
Data file Sample Info. Line: VBLKF09;200;F1816330AA;VBLKF09;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1816330AA**
Date, time and analyst ID of latest file update: 12-Jun-2018 15:19 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun12.b/ff00183.d**

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 12-JUN-2018 14:24
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun12.b/ff00182.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.101(0.000)	1021	130	367097 (-1)	10.00		223247 - 520907
52) 1,4-Difluorobenzene	13.393(0.000)	1341	114	976994 (-10)	10.00		654735 - 1527713
71) Chlorobenzene-d5	18.235(0.000)	2017	117	1071645 (-8)	10.00		695984 - 1623962

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)			Not Detected					0.5	1
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)			Not Detected					0.2	1
7) 1,3-Butadiene	(1)			Not Detected					0.4	2
8) Bromomethane	(1)			Not Detected					0.5	1
9) Chloroethane	(1)			Not Detected					0.2	1
10) Bromoethene	(1)			Not Detected					0.4	2
13) Dichlorofluoromethane	(1)			Not Detected					0.2	1
12) Trichlorofluoromethane	(1)			Not Detected					0.2	1
11) Pentane	(1)			Not Detected					0.5	1
14) Ethanol	(1)			Not Detected					0.5	2
15) Freon123a	(1)			Not Detected					0.2	1
20) Acrolein	(1)			Not Detected					1	2
16) 1,1-Dichloroethene	(1)			Not Detected					0.2	1
17) Freon 113	(1)			Not Detected					0.5	2
24) Acetone	(1)			Not Detected					0.5	2
19) Methyl Iodide	(1)			Not Detected					0.2	1
18) Carbon Disulfide	(1)			Not Detected					1	1
21) Isopropanol	(1)			Not Detected					0.5	2
29) Acetonitrile	(1)			Not Detected					0.5	2
22) 3-Chloropropene	(1)			Not Detected					0.2	1
23) Methylene Chloride	(1)			Not Detected					0.2	1
28) tert-Butyl Alcohol	(1)			Not Detected					0.5	1
32) Acrylonitrile	(1)			Not Detected					0.5	2
25) trans-1,2-Dichloroethene	(1)			Not Detected					0.2	1
27) Methyl t-Butyl Ether	(1)			Not Detected					0.2	1
26) Hexane	(1)			Not Detected					0.2	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.2	1
34) Vinyl Acetate	(1)			Not Detected					1	1
30) Di-Isopropyl Ether	(1)			Not Detected					0.2	1
33) Ethyl Tert-Butyl Ether	(1)			Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.2	1
36) 1,2-Dichloroethene (total)	(1)			Not Detected					0.2	1
45) 2-Butanone	(1)			Not Detected					0.5	2
40) Ethyl Acetate	(1)			Not Detected					0.5	1
41) Methyl Acrylate	(1)			Not Detected					0.2	1
43) Tetrahydrofuran	(1)			Not Detected					0.5	1
39) Chloroform	(1)			Not Detected					0.2	1
44) 1,1,1-Trichloroethane	(1)			Not Detected					0.2	1
38) Cyclohexane	(1)			Not Detected					0.2	1

Digitally signed by Jacob E. Bailey on 06/12/2018 at 15:19. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18jun12.b/ff00183.d Injection date and time: **12-JUN-2018 14:41**
Data file Sample Info. Line: VBLKF09;200;F1816330AA;VBLKF09;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1816330AA**
Date, time and analyst ID of latest file update: 12-Jun-2018 15:19 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun12.b/ff00183.d**

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 12-JUN-2018 14:24
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun12.b/ff00182.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
42) Carbon Tetrachloride	(1)				Not Detected					0.2	1
48) Benzene	(2)				Not Detected					0.2	1
50) 1,2-Dichloroethane	(2)				Not Detected					0.2	1
46) Isooctane	(2)				Not Detected					0.2	1
49) Tert-Amyl Methyl Ether	(2)				Not Detected					0.2	1
47) Heptane	(2)				Not Detected					0.5	1
51) Trichloroethene	(2)				Not Detected					0.2	1
54) Ethyl Acrylate	(2)				Not Detected					0.2	1
55) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
53) Dibromomethane	(2)				Not Detected					0.2	1
58) 1,4-Dioxane	(2)				Not Detected					0.5	1
57) Methyl Methacrylate	(2)				Not Detected					0.2	1
56) Bromodichloromethane	(2)				Not Detected					0.2	1
59) cis-1,3-Dichloropropene	(2)				Not Detected					0.2	1
62) 4-Methyl-2-Pentanone	(2)				Not Detected					0.5	2
61) Toluene	(3)				Not Detected					0.2	1
60) Octane	(3)				Not Detected					0.2	1
64) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
65) 1,3-Dichloropropene (total)	(3)				Not Detected					0.2	1
66) Ethyl Methacrylate	(3)				Not Detected					0.2	1
67) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
63) Tetrachloroethene	(3)				Not Detected					0.2	1
70) 2-Hexanone	(3)				Not Detected					0.5	2
68) Dibromochloromethane	(3)				Not Detected					0.2	1
69) 1,2-Dibromoethane	(3)				Not Detected					0.2	1
72) Chlorobenzene	(3)				Not Detected					0.2	1
74) 1,1,1,2-Tetrachloroethane	(3)				Not Detected					0.2	1
73) Ethylbenzene	(3)				Not Detected					0.2	1
75) m/p-Xylene	(3)				Not Detected					0.2	1
76) o-Xylene	(3)				Not Detected					0.2	1
77) Xylene (total)	(3)				Not Detected					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
82) Bromobenzene	(3)				Not Detected					0.2	1
83) 1,1,2,2-Tetrachloroethane	(3)				Not Detected					0.2	1
87) 1,2,3-Trichloropropane	(3)				Not Detected					0.2	1
81) n-Propylbenzene	(3)				Not Detected					0.5	1
85) 2-Chlorotoluene	(3)				Not Detected					0.2	1
84) 4-Ethyltoluene	(3)				Not Detected					0.2	1
86) 1,3,5-Trimethylbenzene	(3)				Not Detected					0.2	1
88) Alpha Methyl Styrene	(3)				Not Detected					0.2	1
89) tert-Butylbenzene	(3)				Not Detected					0.5	1
90) 1,2,4-Trimethylbenzene	(3)				Not Detected					0.2	1
91) sec-Butylbenzene	(3)				Not Detected					0.2	1
93) 1,3-Dichlorobenzene	(3)				Not Detected					0.2	1
94) 1,4-Dichlorobenzene	(3)				Not Detected					0.2	1
92) p-Isopropyltoluene	(3)				Not Detected					0.2	1
96) Benzyl Chloride	(3)				Not Detected					0.5	1
98) 1,2-Dichlorobenzene	(3)				Not Detected					0.2	1
95) n-Butylbenzene	(3)				Not Detected					0.2	1
97) Hexachloroethane	(3)				Not Detected					0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)				Not Detected					0.2	1
101) 1,2,4-Trichlorobenzene	(3)				Not Detected					0.5	2

Digitally signed by Jacob E. Bailey on 06/12/2018 at 15:19. Target 3.5 esignature user ID: jeb07445

Data file: /chem/HP26379.i/18jun12.b/ff00183.d Injection date and time: **12-JUN-2018 14:41**
Data file Sample Info. Line: VBLKF09;200;F1816330AA;VBLKF09;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1816330AA**
Date, time and analyst ID of latest file update: 12-Jun-2018 15:19 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun12.b/ff00183.d**

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 12-JUN-2018 14:24
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun12.b/ff00182.d**

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

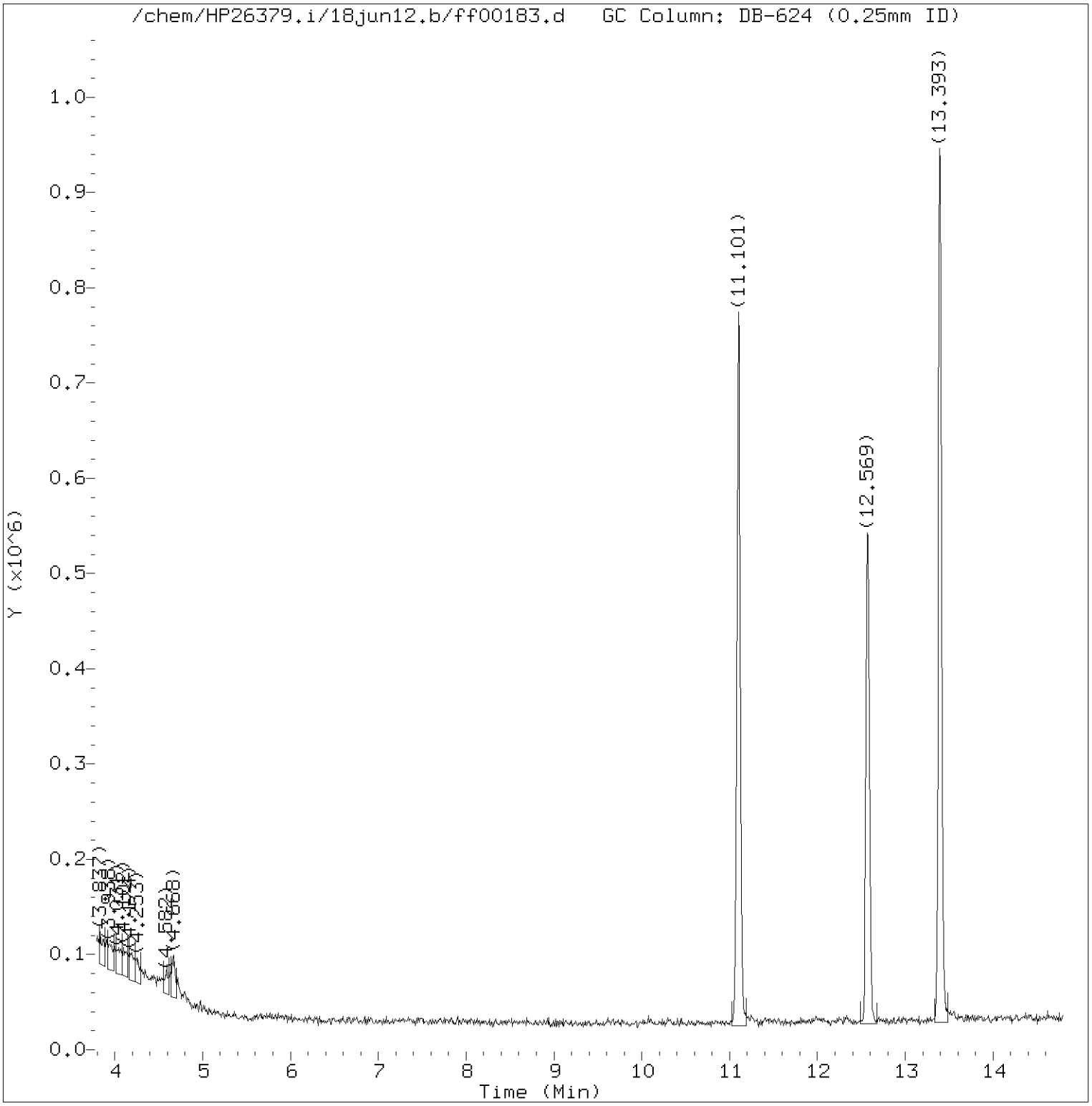
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
100) Hexachlorobutadiene	(3)				Not Detected					0.4	2
102) Naphthalene	(3)				Not Detected					0.4	1

Total number of targets = 99

Digitally signed by Jacob E. Bailey on 06/12/2018 at 15:19. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/13/2018 at 13:47. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

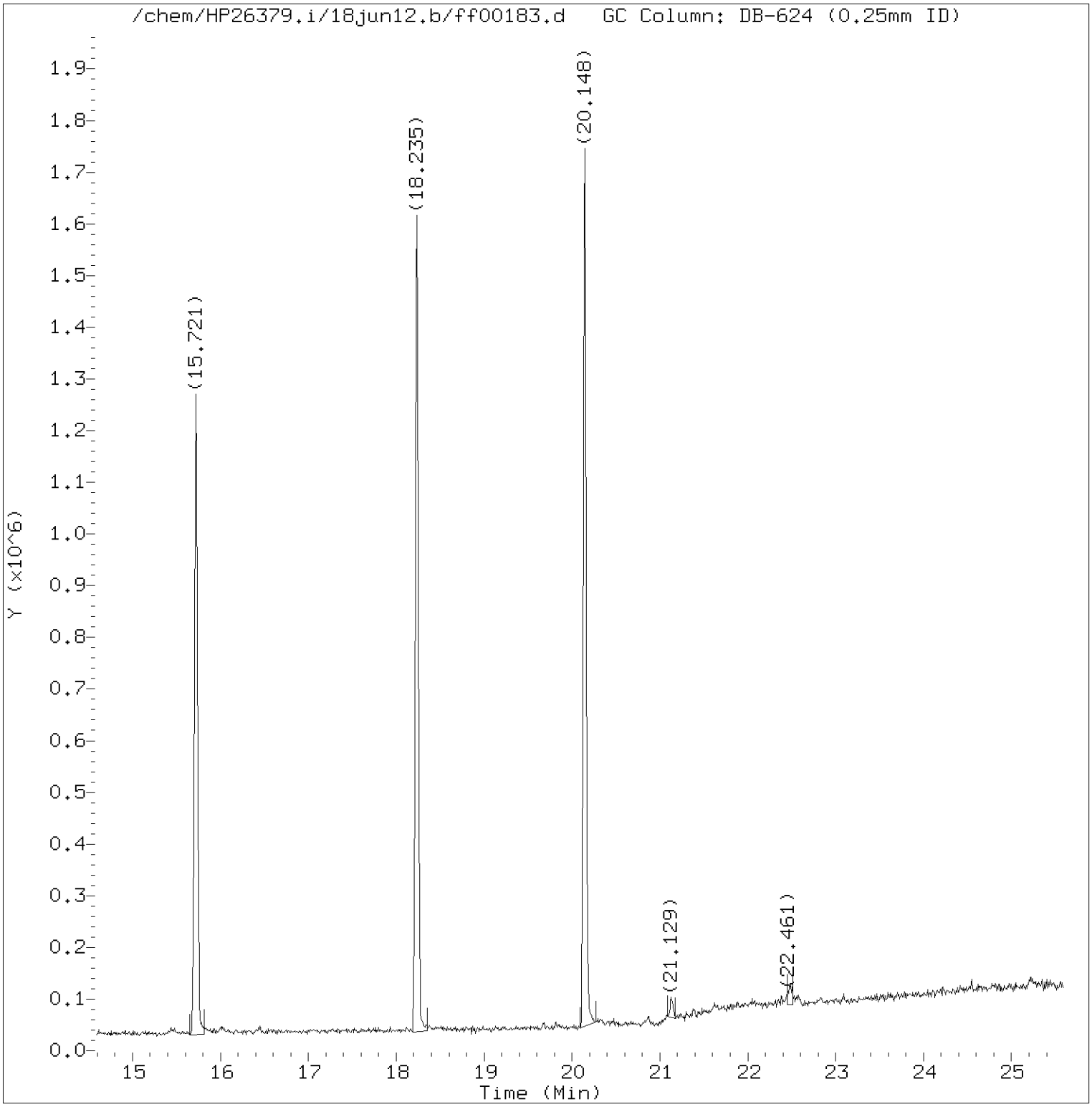
Target Revision 3.5

Data File: /chem/HP26379.i/18jun12.b/ff00183.d Instrument ID: HP26379.i
Injection date and time: 12-JUN-2018 14:41 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 14:24
Date, time and analyst ID of latest file update: 12-Jun-2018 15:19 jeb07445

Sample Name: VBLKF09 Lab Sample ID: VBLKF09

Digitally signed by Jacob E. Bailey
on 06/12/2018 at 15:19.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun12.b/ff00183.d Instrument ID: HP26379.i
Injection date and time: 12-JUN-2018 14:41 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 14:24
Date, time and analyst ID of latest file update: 12-Jun-2018 15:19 jeb07445

Sample Name: VBLKF09 Lab Sample ID: VBLKF09

Digitally signed by Jacob E. Bailey
on 06/12/2018 at 15:19.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun12.b/ff00183.d Instrument ID: HP26379.i
Injection date and time: 12-JUN-2018 14:41 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 14:24
Date, time and analyst ID of latest file update: 12-Jun-2018 15:19 jeb07445

Sample Name: VBLKF09 Lab Sample ID: VBLKF09

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
37)*Bromochloromethane	(1)	11.101	130	367097	10.000
52)*1,4-Difluorobenzene	(2)	13.393	114	976994	10.000
71)*Chlorobenzene-d5	(3)	18.235	117	1071645	10.000

* = Compound is an internal standard.

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on 06/12/2018 at 15:19.
Target 3.5 esignature user ID: jeb07445

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

LCSF09

Data file: /chem/HP26379.i/18jun12.b/ff00184.d Injection date and time: **12-JUN-2018 15:27**
Data file Sample Info. Line: LCSF09;200;F1816330AA;LCSF09;0;3;LCS; Instrument ID: **HP26379.i** Batch: **F1816330AA**
Date, time and analyst ID of latest file update: 12-Jun-2018 16:27 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun12.b/ff00183.d**

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 12-JUN-2018 14:24
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun12.b/ff00182.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.108(-0.007)	1022	130	362892 (-2)	10.00		223247 - 520907
52) 1,4-Difluorobenzene	13.393(0.000)	1341	114	1066786 (-2)	10.00		654735 - 1527713
71) Chlorobenzene-d5	18.235(0.000)	2017	117	1130289 (-3)	10.00		695984 - 1623962

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)	3.923(-0.001)	41	357219	9.017	9.02			0.5	1
2) Dichlorodifluoromethane	(1)	4.024(-0.001)	85	1164156	12.170	12.17			0.2	1
3) Chlorodifluoromethane	(1)	4.110(-0.001)	51	892376	11.645	11.65			0.2	1
4) Freon 114	(1)	4.324(-0.001)	85	1153326	11.142	11.14			0.2	1
5) Chloromethane	(1)	4.475(-0.002)	50	441056M	10.421	10.42			0.2	1
6) Vinyl Chloride	(1)	4.654(-0.001)	62	249275	10.588	10.59			0.2	1
7) 1,3-Butadiene	(1)	4.683(-0.001)	54	213830	9.855	9.86			0.4	2
8) Bromomethane	(1)	5.370(-0.001)	94	380797	12.011	12.01			0.5	1
9) Chloroethane	(1)	5.628(-0.000)	64	229995	10.781	10.78			0.2	1
10) Bromoethene	(1)	5.850(-0.000)	106	365265	10.023	10.02			0.4	2
13) Dichlorofluoromethane	(1)	5.993(-0.001)	67	963957	12.122	12.12			0.2	1
12) Trichlorofluoromethane	(1)	5.886(-0.000)	101	1220057	11.323	11.32			0.2	1
11) Pentane	(1)	5.879(-0.000)	43	730342	8.176	8.18			0.5	1
14) Ethanol	(1)	6.667(-0.000)	45	173767	8.982	8.98			0.5	2
15) Freon123a	(1)	6.810(-0.000)	67	917961	12.122	12.12			0.2	1
20) Acrolein	(1)	7.519(-0.000)	56	149561	8.435	8.44			1	2
16) 1,1-Dichloroethene	(1)	6.867(-0.001)	61	643672	9.770	9.77			0.2	1
17) Freon 113	(1)	6.925(-0.000)	103	650799	10.112	10.11			0.5	2
24) Acetone	(1)	8.078(-0.000)	43	771912	10.956	10.96			0.5	2
19) Methyl Iodide	(1)	7.168(-0.000)	142	869682	7.885	7.88			0.2	1
18) Carbon Disulfide	(1)	6.946(-0.000)	76	1022548	10.184	10.18			1	1
21) Isopropanol	(1)	7.720(-0.000)	45	666917	8.002	8.00			0.5	2
29) Acetonitrile	(1)	9.095(-0.001)	41	451117	10.606	10.61			0.5	2
22) 3-Chloropropene	(1)	7.784(-0.000)	41	680326	11.097	11.10			0.2	1
23) Methylene Chloride	(1)	7.999(-0.001)	84	389288	12.283	12.28			0.2	1
28) tert-Butyl Alcohol	(1)	8.629(-0.000)	59	831201	8.396	8.40			0.5	1
32) Acrylonitrile	(1)	9.754(-0.000)	53	368464	9.222	9.22			0.5	2
25) trans-1,2-Dichloroethene	(1)	8.314(-0.000)	61	595179	9.691	9.69			0.2	1
27) Methyl t-Butyl Ether	(1)	8.508(-0.000)	73	973254	8.261	8.26			0.2	1
26) Hexane	(1)	8.465(-0.000)	56	454561	9.547	9.55			0.2	1
31) 1,1-Dichloroethane	(1)	9.639(-0.000)	63	811410	10.424	10.42			0.2	1
34) Vinyl Acetate	(1)	10.105(-0.000)	43	1359225	9.693	9.69			1	1
30) Di-Isopropyl Ether	(1)	9.303(-0.000)	45	1270818	7.158	7.16			0.2	1
33) Ethyl Tert-Butyl Ether	(1)	10.069(-0.000)	59	1103094	7.322	7.32			0.2	1
35) cis-1,2-Dichloroethene	(1)	10.721(-0.000)	61	533509M	8.976	8.98			0.2	1
36) 1,2-Dichloroethene (total)	(1)		61	1128688	18.667	18.67			0.2	1
45) 2-Butanone	(1)	11.810(0.000)	43	971658	9.410	9.41			0.5	2
40) Ethyl Acetate	(1)	11.423(0.000)	43	1011957	8.610	8.61			0.5	1
41) Methyl Acrylate	(1)	11.459(0.000)	55	735081	8.516	8.52			0.2	1
43) Tetrahydrofuran	(1)	11.545(0.000)	42	511822	8.785	8.78			0.5	1
39) Chloroform	(1)	11.215(0.000)	83	962332	11.231	11.23			0.2	1
44) 1,1,1-Trichloroethane	(1)	11.645(0.000)	97	1017337	10.371	10.37			0.2	1
38) Cyclohexane	(1)	11.129(0.000)	56	618608	7.280	7.28			0.2	1

M = Compound was manually integrated.

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18jun12.b/ff00184.d Injection date and time: **12-JUN-2018 15:27**
Data file Sample Info. Line: LCSF09;200;F1816330AA;LCSF09;0;3;LCS; Instrument ID: **HP26379.i** Batch: **F1816330AA**
Date, time and analyst ID of latest file update: 12-Jun-2018 16:27 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun12.b/ff00183.d**

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 12-JUN-2018 14:24
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun12.b/ff00182.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
42) Carbon Tetrachloride	(1)	11.509(0.000)	117	1058175	10.373	10.37			0.2	1
48) Benzene	(2)	12.333(-0.000)	78	1298306	12.341	12.34			0.2	1
50) 1,2-Dichloroethane	(2)	12.691(-0.000)	62	685028	13.925	13.92			0.2	1
46) Isooctane	(2)	12.053(-0.000)	57	1894692	9.782	9.78			0.2	1
49) Tert-Amyl Methyl Ether	(2)	12.490(-0.000)	73	911418	9.184	9.18			0.2	1
47) Heptane	(2)	12.204(-0.000)	71	352101	9.166	9.17			0.5	1
51) Trichloroethene	(2)	13.350(-0.000)	130	600784	11.284	11.28			0.2	1
54) Ethyl Acrylate	(2)	14.231(-0.000)	55	830617	8.647	8.65			0.2	1
55) 1,2-Dichloropropane	(2)	14.267(-0.000)	63	528560	12.039	12.04			0.2	1
53) Dibromomethane	(2)	14.095(0.000)	174	733866	12.498	12.50			0.2	1
58) 1,4-Dioxane	(2)	14.682(0.000)	88	267205	10.166	10.17			0.5	1
57) Methyl Methacrylate	(2)	14.575(0.000)	69	326347	8.633	8.63			0.2	1
56) Bromodichloromethane	(2)	14.346(0.000)	83	984234	13.006	13.01			0.2	1
59) cis-1,3-Dichloropropene	(2)	15.406(0.000)	75	661768	10.218	10.22			0.2	1
62) 4-Methyl-2-Pentanone	(2)	16.401(0.000)	43	1103046	9.702	9.70			0.5	2
61) Toluene	(3)	15.807(-0.000)	91	1450750	10.103	10.10			0.2	1
60) Octane	(3)	15.434(-0.000)	43	1091743	8.500	8.50			0.2	1
64) trans-1,3-Dichloropropene	(3)	16.459(0.000)	75	633084	10.432	10.43			0.2	1
65) 1,3-Dichloropropene (total)	(3)		75	1294852	20.650	20.65			0.2	1
66) Ethyl Methacrylate	(3)	16.674(-0.000)	69	544916	7.508	7.51			0.2	1
67) 1,1,2-Trichloroethane	(3)	16.731(-0.000)	97	636967	12.137	12.14			0.2	1
63) Tetrachloroethene	(3)	16.430(0.000)	166	1105957	11.709	11.71			0.2	1
70) 2-Hexanone	(3)	17.734(-0.000)	43	993395	8.383	8.38			0.5	2
68) Dibromochloromethane	(3)	17.024(-0.000)	127	808867	11.200	11.20			0.2	1
69) 1,2-Dibromoethane	(3)	17.440(0.000)	107	897421	10.810	10.81			0.2	1
72) Chlorobenzene	(3)	18.257(0.000)	112	1387461	10.852	10.85			0.2	1
74) 1,1,1,2-Tetrachloroethane	(3)	18.342(-0.000)	131	826036	11.386	11.39			0.2	1
73) Ethylbenzene	(3)	18.271(0.000)	91	1888283	9.195	9.19			0.2	1
75) m/p-Xylene	(3)	18.493(0.000)	91	1305909	8.539	8.54			0.2	1
76) o-Xylene	(3)	19.188(0.000)	91	1238613	7.993	7.99			0.2	1
77) Xylene (total)	(3)		91	2544522	16.532	16.53			0.2	1
78) Styrene	(3)	19.267(-0.000)	104	1046413	8.797	8.80			0.2	1
79) Bromoform	(3)	19.338(0.000)	173	1144180	10.044	10.04			0.2	1
80) Cumene	(3)	19.668(0.000)	105	1945027	8.531	8.53			0.2	1
82) Bromobenzene	(3)	20.327(0.000)	156	970984	10.826	10.83			0.2	1
83) 1,1,2,2-Tetrachloroethane	(3)	20.420(0.000)	83	1278627	11.051	11.05			0.2	1
87) 1,2,3-Trichloropropane	(3)	20.670(0.000)	110	440494	11.645	11.64			0.2	1
81) n-Propylbenzene	(3)	20.320(0.000)	120	601203	8.878	8.88			0.5	1
85) 2-Chlorotoluene	(3)	20.599(0.000)	126	623101	10.221	10.22			0.2	1
84) 4-Ethyltoluene	(3)	20.484(0.000)	105	2049849	8.930	8.93			0.2	1
86) 1,3,5-Trimethylbenzene	(3)	20.606(0.000)	105	1859282	9.757	9.76			0.2	1
88) Alpha Methyl Styrene	(3)	21.014(0.000)	118	817133	8.245	8.24			0.2	1
89) tert-Butylbenzene	(3)	21.129(0.000)	119	1768568	9.422	9.42			0.5	1
90) 1,2,4-Trimethylbenzene	(3)	21.222(0.000)	105	1795908	9.445	9.45			0.2	1
91) sec-Butylbenzene	(3)	21.380(0.000)	105	2696961	9.531	9.53			0.2	1
93) 1,3-Dichlorobenzene	(3)	21.716(0.000)	146	1568306	10.383	10.38			0.2	1
94) 1,4-Dichlorobenzene	(3)	21.831(0.000)	146	1523902	9.894	9.89			0.2	1
92) p-Isopropyltoluene	(3)	21.566(0.000)	119	2200985	9.132	9.13			0.2	1
96) Benzyl Chloride	(3)	22.168(0.000)	126	409737	10.521	10.52			0.5	1
98) 1,2-Dichlorobenzene	(3)	22.426(0.000)	146	1418262	10.026	10.03			0.2	1
95) n-Butylbenzene	(3)	22.139(0.000)	92	1261493	9.449	9.45			0.2	1
97) Hexachloroethane	(3)	22.382(0.000)	117	780614	10.549	10.55			0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)	23.586(0.000)	157	741911	9.729	9.73			0.2	1
101) 1,2,4-Trichlorobenzene	(3)	24.646(0.000)	180	1081110	8.550	8.55			0.5	2

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18jun12.b/ff00184.d Injection date and time: **12-JUN-2018 15:27**
Data file Sample Info. Line: LCSF09;200;F1816330AA;LCSF09;0;3;LCS; Instrument ID: **HP26379.i** Batch: **F1816330AA**
Date, time and analyst ID of latest file update: 12-Jun-2018 16:27 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun12.b/ff00183.d**

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 12-JUN-2018 14:24
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun12.b/ff00182.d**

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

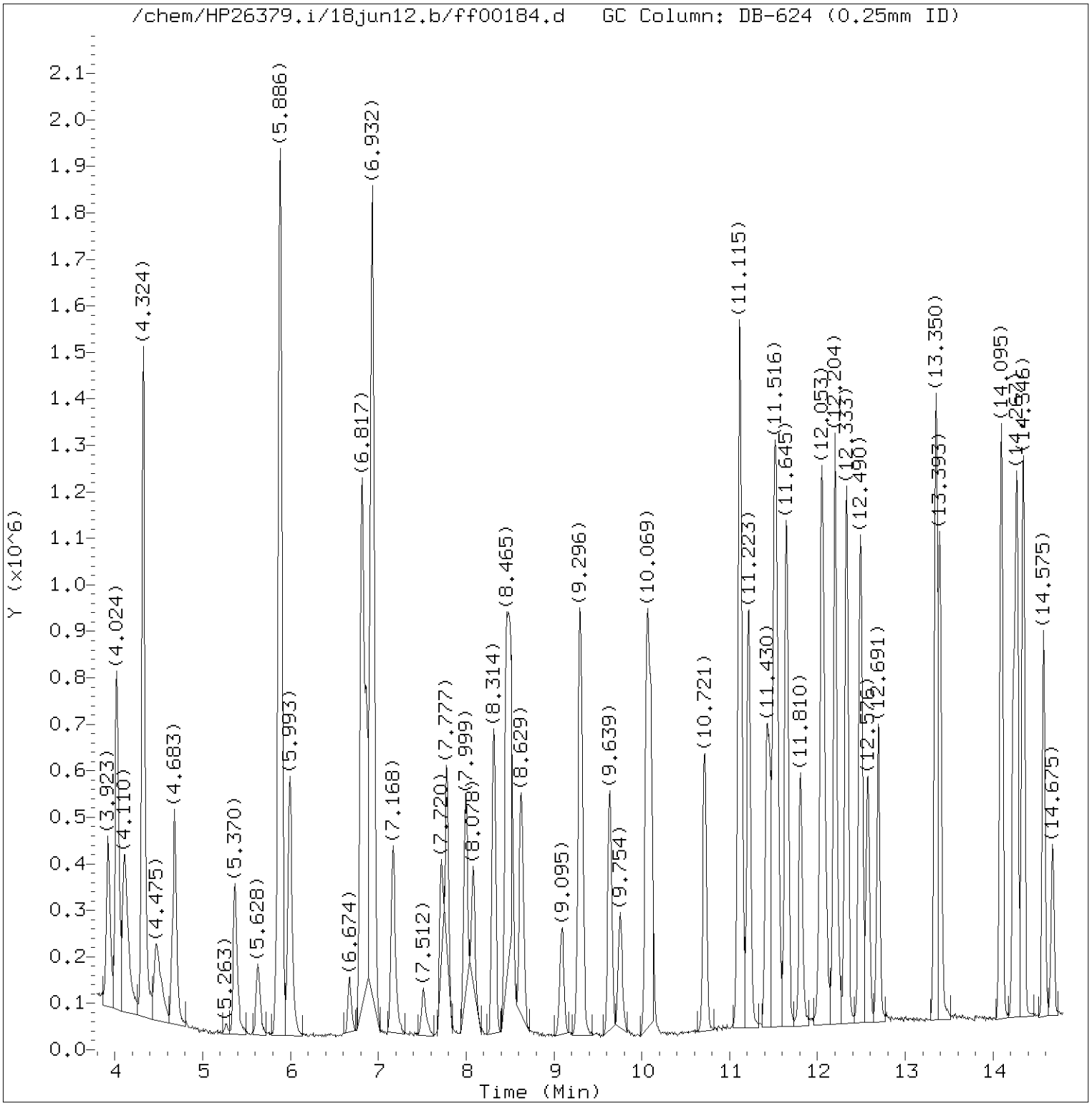
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
100) Hexachlorobutadiene	(3)	24.546(0.000)	225	1369392	10.046	10.05			0.4	2
102) Naphthalene	(3)	25.233(0.000)	128	1760494	7.630	7.63			0.4	1

Total number of targets = 99

Digitally signed by Jacob E. Bailey on 06/12/2018 at 16:27. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/13/2018 at 13:47. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

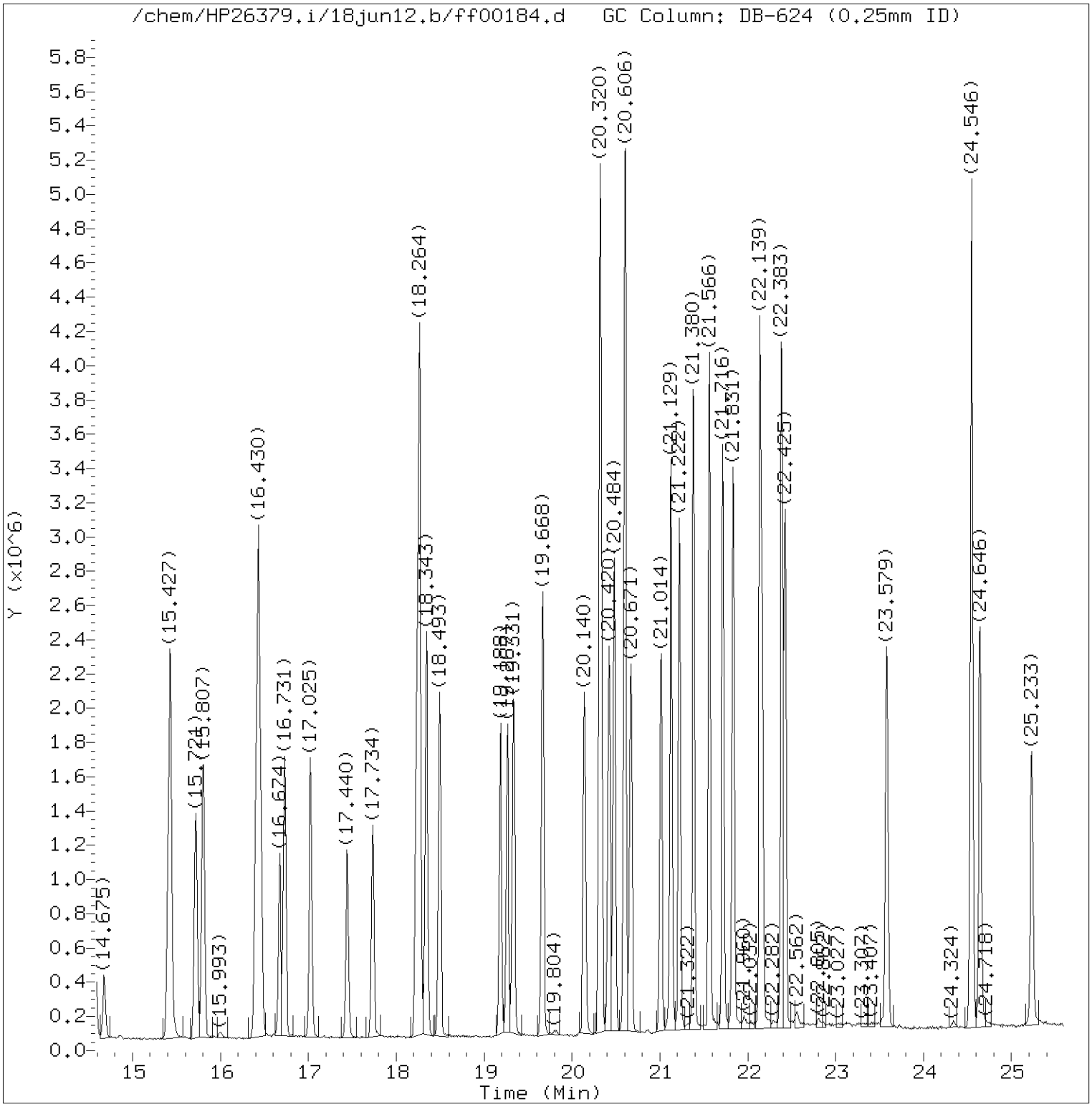
Target Revision 3.5

Data File: /chem/HP26379.i/18jun12.b/ff00184.d Instrument ID: HP26379.i
Injection date and time: 12-JUN-2018 15:27 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 14:24
Date, time and analyst ID of latest file update: 12-Jun-2018 16:27 jeb07445

Sample Name: LCSF09 Lab Sample ID: LCSF09

Digitally signed by Jacob E. Bailey
on 06/12/2018 at 16:27.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun12.b/ff00184.d Instrument ID: HP26379.i
Injection date and time: 12-JUN-2018 15:27 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 14:24
Date, time and analyst ID of latest file update: 12-Jun-2018 16:27 jeb07445

Sample Name: LCSF09 Lab Sample ID: LCSF09

Digitally signed by Jacob E. Bailey
on 06/12/2018 at 16:27.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun12.b/ff00184.d Instrument ID: HP26379.i
Injection date and time: 12-JUN-2018 15:27 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 14:24
Date, time and analyst ID of latest file update: 12-Jun-2018 16:27 jeb07445

Sample Name: LCSF09 Lab Sample ID: LCSF09

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.923	41	357219	9.017
2) Dichlorodifluoromethane	(1)	4.024	85	1164156	12.170
3) Chlorodifluoromethane	(1)	4.110	51	892376	11.645
4) Freon 114	(1)	4.324	85	1153326	11.142
5) Chloromethane	(1)	4.475	50	441056M	10.421
6) Vinyl Chloride	(1)	4.654	62	249275	10.588
7) 1,3-Butadiene	(1)	4.683	54	213830	9.855
8) Bromomethane	(1)	5.370	94	380797	12.011
9) Chloroethane	(1)	5.628	64	229995	10.781
10) Bromoethene	(1)	5.850	106	365265	10.023
11) Pentane	(1)	5.879	43	730342	8.176
12) Trichlorofluoromethane	(1)	5.886	101	1220057	11.323
13) Dichlorofluoromethane	(1)	5.993	67	963957	12.122
14) Ethanol	(1)	6.667	45	173767	8.982
15) Freon123a	(1)	6.810	67	917961	12.122
16) 1,1-Dichloroethene	(1)	6.867	61	643672	9.770
17) Freon 113	(1)	6.925	103	650799	10.112
18) Carbon Disulfide	(1)	6.946	76	1022548	10.184
19) Methyl Iodide	(1)	7.168	142	869682	7.885
20) Acrolein	(1)	7.519	56	149561	8.435
21) Isopropanol	(1)	7.720	45	666917	8.002
22) 3-Chloropropene	(1)	7.784	41	680326	11.097
23) Methylene Chloride	(1)	7.999	84	389288	12.283
24) Acetone	(1)	8.078	43	771912	10.956
25) trans-1,2-Dichloroethene	(1)	8.314	61	595179	9.691
26) Hexane	(1)	8.465	56	454561	9.547
27) Methyl t-Butyl Ether	(1)	8.508	73	973254	8.261
28) tert-Butyl Alcohol	(1)	8.629	59	831201	8.396
29) Acetonitrile	(1)	9.095	41	451117	10.606
30) Di-Isopropyl Ether	(1)	9.303	45	1270818	7.158
31) 1,1-Dichloroethane	(1)	9.639	63	811410	10.424
32) Acrylonitrile	(1)	9.754	53	368464	9.222
33) Ethyl Tert-Butyl Ether	(1)	10.069	59	1103094	7.322
34) Vinyl Acetate	(1)	10.105	43	1359225	9.693
35) cis-1,2-Dichloroethene	(1)	10.721	61	533509M	8.976
36) 1,2-Dichloroethene (total)	(1)		61	1128688	18.667
37)*Bromochloromethane	(1)	11.108	130	362892	10.000
38) Cyclohexane	(1)	11.129	56	618608	7.280

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

Digitally signed by Jacob E. Bailey
on 06/12/2018 at 16:27.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun12.b/ff00184.d Instrument ID: HP26379.i
Injection date and time: 12-JUN-2018 15:27 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 14:24
Date, time and analyst ID of latest file update: 12-Jun-2018 16:27 jeb07445

Sample Name: LCSF09 Lab Sample ID: LCSF09

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	962332	11.231
40) Ethyl Acetate	(1)	11.423	43	1011957	8.610
41) Methyl Acrylate	(1)	11.459	55	735081	8.516
42) Carbon Tetrachloride	(1)	11.509	117	1058175	10.373
43) Tetrahydrofuran	(1)	11.545	42	511822	8.785
44) 1,1,1-Trichloroethane	(1)	11.645	97	1017337	10.371
45) 2-Butanone	(1)	11.810	43	971658	9.410
46) Isooctane	(2)	12.053	57	1894692	9.782
47) Heptane	(2)	12.204	71	352101	9.166
48) Benzene	(2)	12.333	78	1298306	12.341
49) Tert-Amyl Methyl Ether	(2)	12.490	73	911418	9.184
50) 1,2-Dichloroethane	(2)	12.691	62	685028	13.925
51) Trichloroethene	(2)	13.350	130	600784	11.284
52)*1,4-Difluorobenzene	(2)	13.393	114	1066786	10.000
53) Dibromomethane	(2)	14.095	174	733866	12.498
54) Ethyl Acrylate	(2)	14.231	55	830617	8.647
55) 1,2-Dichloropropane	(2)	14.267	63	528560	12.039
56) Bromodichloromethane	(2)	14.346	83	984234	13.006
57) Methyl Methacrylate	(2)	14.575	69	326347	8.633
58) 1,4-Dioxane	(2)	14.682	88	267205	10.166
59) cis-1,3-Dichloropropene	(2)	15.406	75	661768	10.218
60) Octane	(3)	15.434	43	1091743	8.500
61) Toluene	(3)	15.807	91	1450750	10.103
62) 4-Methyl-2-Pentanone	(2)	16.401	43	1103046	9.702
63) Tetrachloroethene	(3)	16.430	166	1105957	11.709
64) trans-1,3-Dichloropropene	(3)	16.459	75	633084	10.432
65) 1,3-Dichloropropene (total)	(3)		75	1294852	20.650
66) Ethyl Methacrylate	(3)	16.674	69	544916	7.508
67) 1,1,2-Trichloroethane	(3)	16.731	97	636967	12.137
68) Dibromochloromethane	(3)	17.025	127	808867	11.200
69) 1,2-Dibromoethane	(3)	17.440	107	897421	10.810
70) 2-Hexanone	(3)	17.734	43	993395	8.383
71)*Chlorobenzene-d5	(3)	18.235	117	1130289	10.000
72) Chlorobenzene	(3)	18.257	112	1387461	10.852
73) Ethylbenzene	(3)	18.271	91	1888283	9.195
74) 1,1,1,2-Tetrachloroethane	(3)	18.343	131	826036	11.386
75) m/p-Xylene	(3)	18.493	91	1305909	8.539
76) o-Xylene	(3)	19.188	91	1238613	7.993

* = Compound is an internal standard.

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on 06/12/2018 at 16:27.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun12.b/ff00184.d Instrument ID: HP26379.i
Injection date and time: 12-JUN-2018 15:27 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 14:24
Date, time and analyst ID of latest file update: 12-Jun-2018 16:27 jeb07445

Sample Name: LCSF09 Lab Sample ID: LCSF09

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	2544522	16.532
78) Styrene	(3)	19.267	104	1046413	8.797
79) Bromoform	(3)	19.338	173	1144180	10.044
80) Cumene	(3)	19.668	105	1945027	8.531
81) n-Propylbenzene	(3)	20.320	120	601203	8.878
82) Bromobenzene	(3)	20.327	156	970984	10.826
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	1278627	11.051
84) 4-Ethyltoluene	(3)	20.484	105	2049849	8.930
85) 2-Chlorotoluene	(3)	20.599	126	623101	10.221
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	1859282	9.757
87) 1,2,3-Trichloropropane	(3)	20.671	110	440494	11.645
88) Alpha Methyl Styrene	(3)	21.014	118	817133	8.245
89) tert-Butylbenzene	(3)	21.129	119	1768568	9.422
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	1795908	9.445
91) sec-Butylbenzene	(3)	21.380	105	2696961	9.531
92) p-Isopropyltoluene	(3)	21.566	119	2200985	9.132
93) 1,3-Dichlorobenzene	(3)	21.716	146	1568306	10.383
94) 1,4-Dichlorobenzene	(3)	21.831	146	1523902	9.894
95) n-Butylbenzene	(3)	22.139	92	1261493	9.449
96) Benzyl Chloride	(3)	22.168	126	409737	10.521
97) Hexachloroethane	(3)	22.383	117	780614	10.549
98) 1,2-Dichlorobenzene	(3)	22.425	146	1418262	10.026
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	741911	9.729
100) Hexachlorobutadiene	(3)	24.546	225	1369392	10.046
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	1081110	8.550
102) Naphthalene	(3)	25.233	128	1760494	7.630

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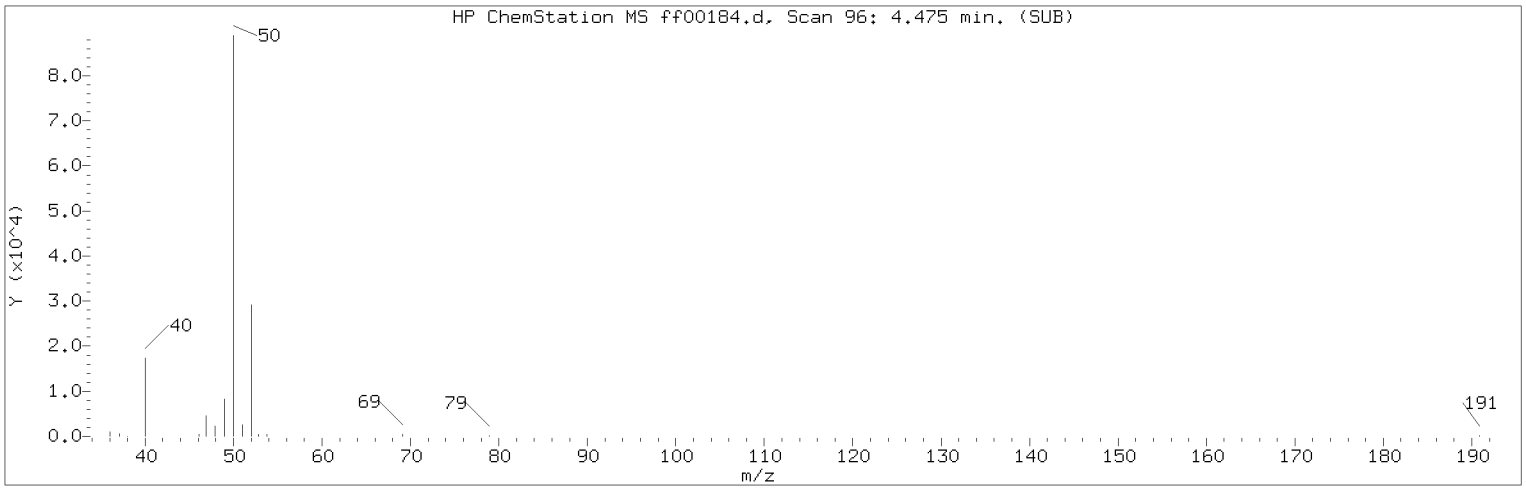
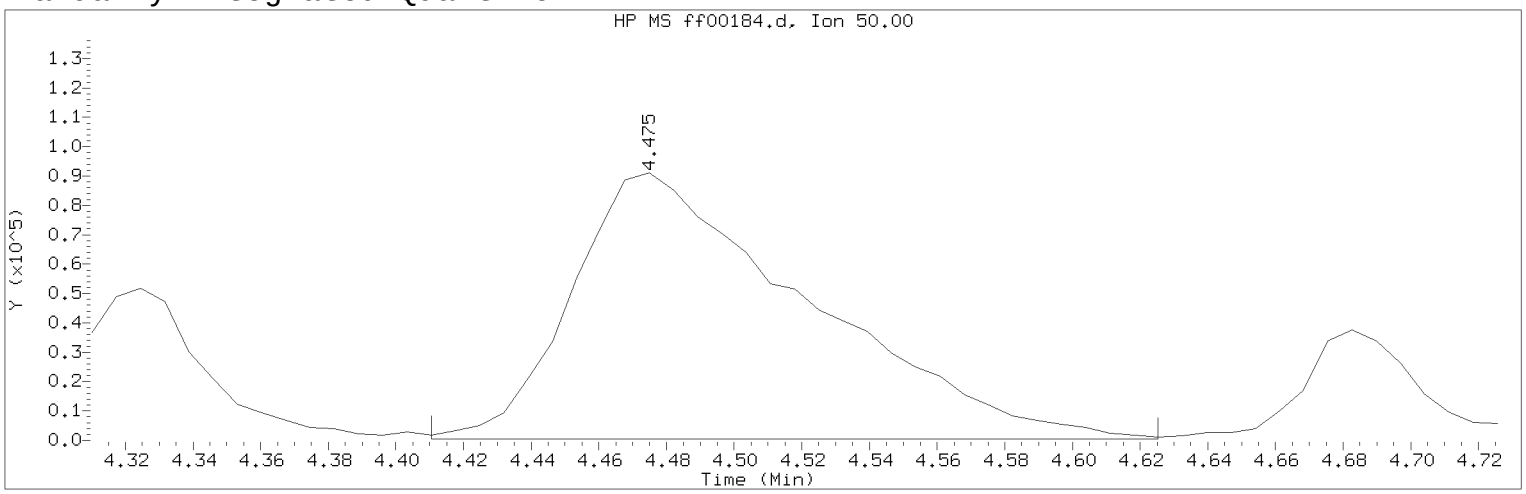
on 06/12/2018 at 16:27.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18jun12.b/ff00184.d Instrument ID: HP26379.i
Injection date and time: 12-JUN-2018 15:27 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 14:24
Date, time and analyst ID of latest file update: 12-Jun-2018 16:27 jeb07445

Sample Name: LCSF09 Lab Sample ID: LCSF09

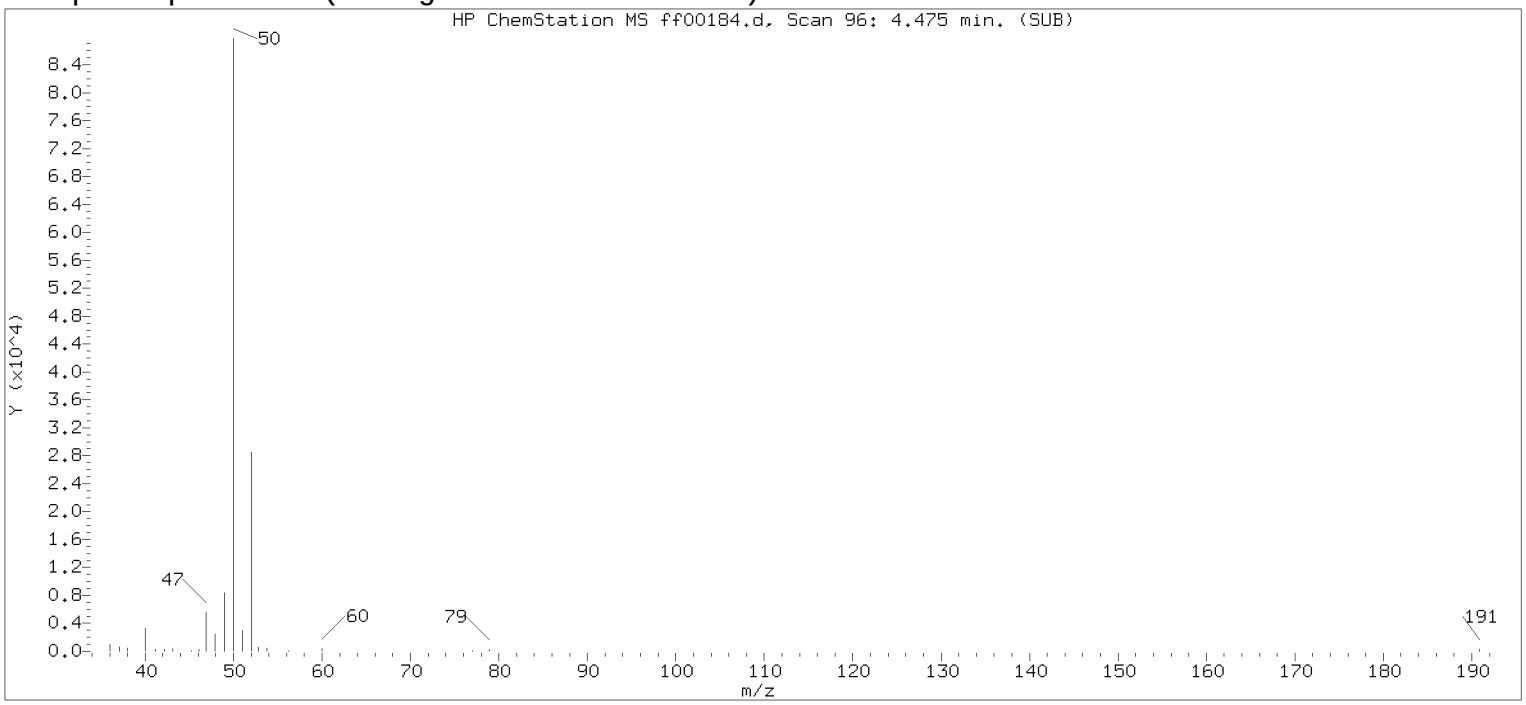
Compound Number : 5
Compound Name : Chloromethane
Scan Number : 96
Retention Time (minutes): 4.475
Quant Ion : 50.00
Area (flag) : 441056M
Concentration (ppb(v)) : 10.4213
Integration start scan : 86 Integration stop scan: 116
Y at integration start : 416 Y at integration end: 416

Reason for manual integration: improper integration

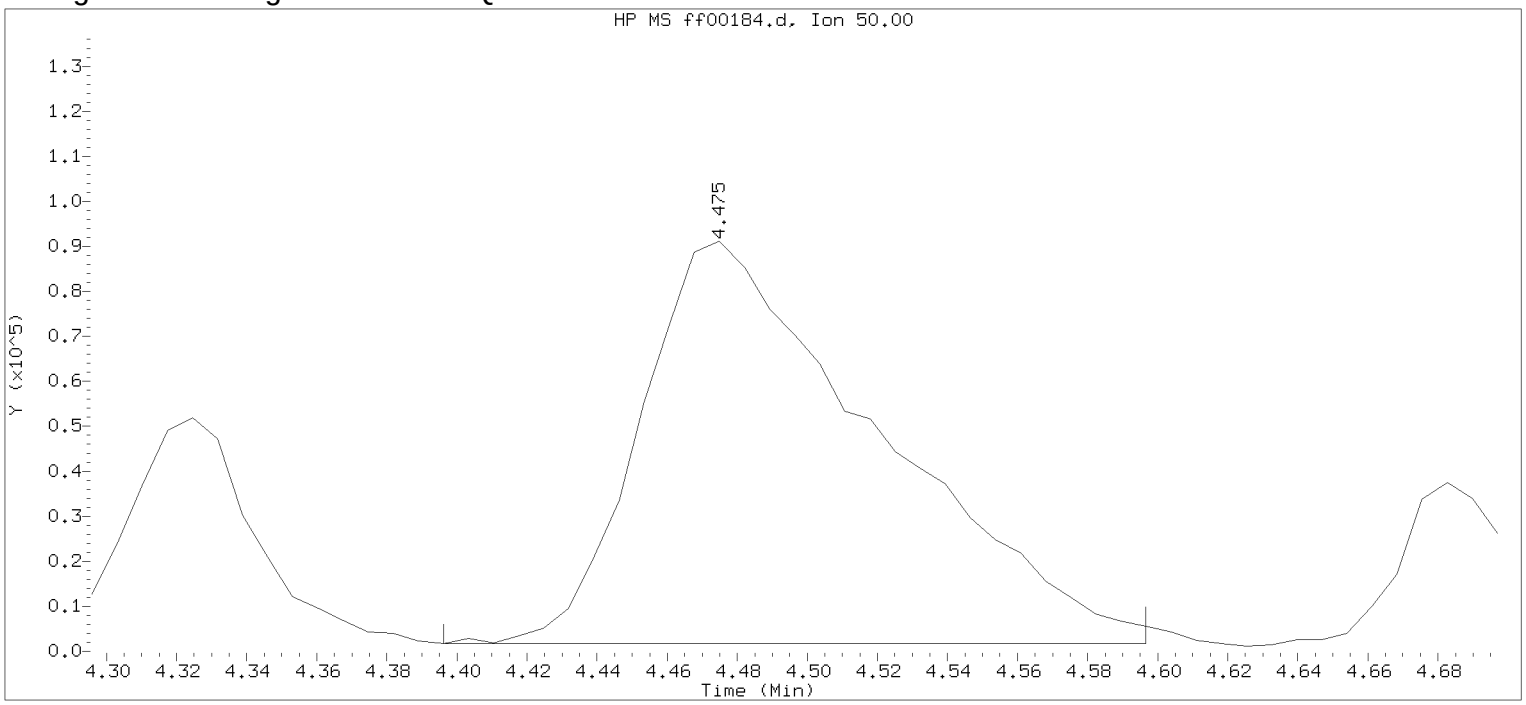
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/12/2018 at 16:27.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/13/2018 at 13:47.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18jun12.b/ff00184.d Instrument ID: HP26379.i
Injection date and time: 12-JUN-2018 15:27 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 14:24
Date, time and analyst ID of latest file update: 12-Jun-2018 15:55 Unknown

Sample Name: LCSF09 Lab Sample ID: LCSF09

Compound Number : 5
Compound Name : Chloromethane
Scan Number : 96
Retention Time (minutes): 4.475
Quant Ion : 50.00
Area : 422041
Concentration (ppb(v)) : 9.9720
Integration start scan : 84 Integration stop scan: 112
Y at integration start : 1726 Y at integration end: 1726

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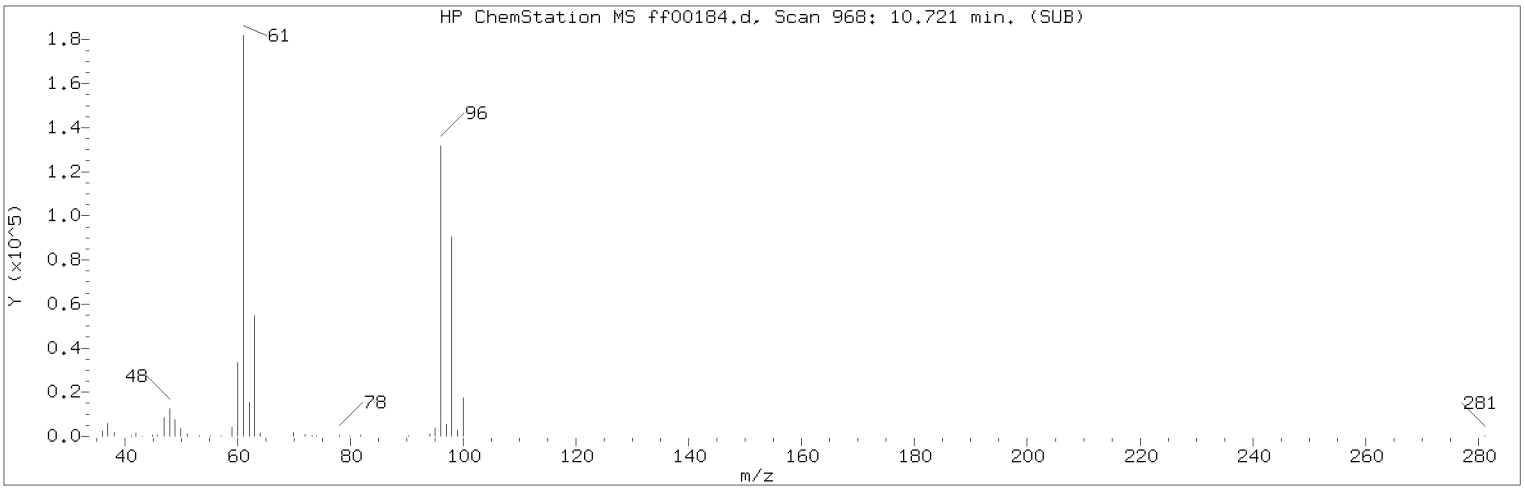
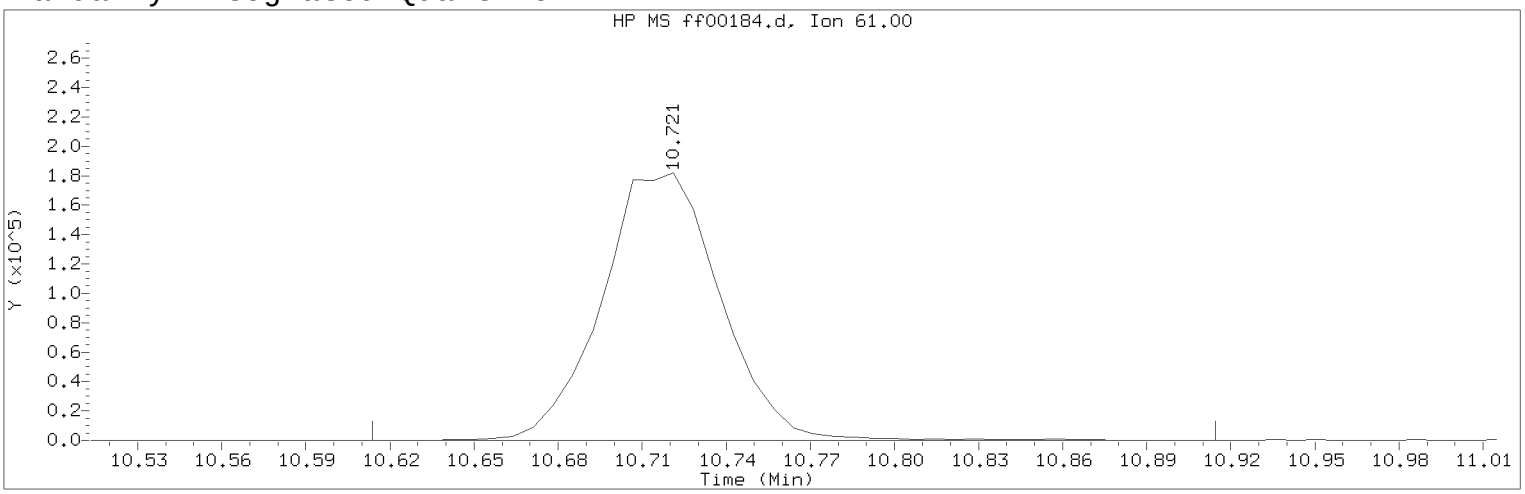
Target 3.5 esignature used. LED1 Page 1445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18jun12.b/ff00184.d Instrument ID: HP26379.i
Injection date and time: 12-JUN-2018 15:27 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 14:24
Date, time and analyst ID of latest file update: 12-Jun-2018 16:27 jeb07445

Sample Name: LCSF09 Lab Sample ID: LCSF09

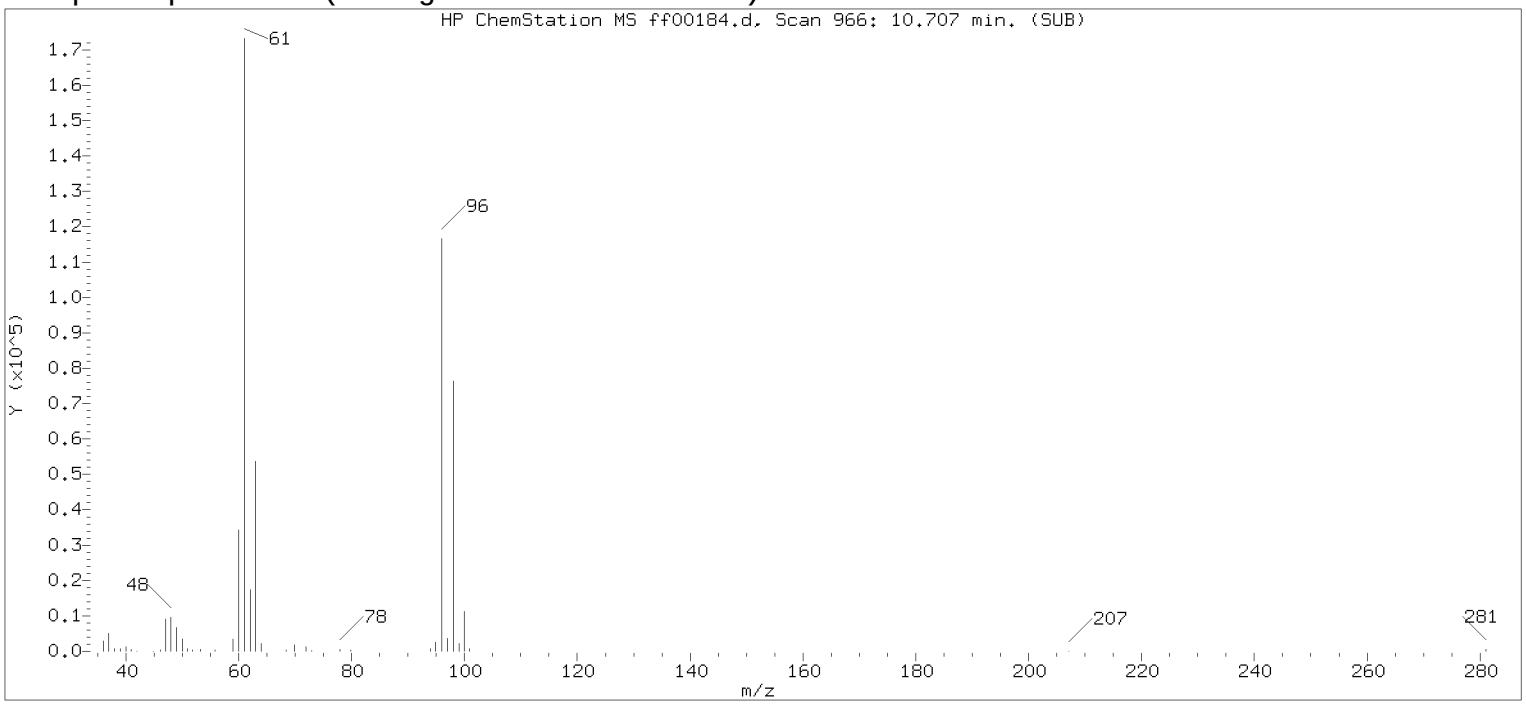
Compound Number : 35
Compound Name : cis-1,2-Dichloroethene
Scan Number : 968
Retention Time (minutes): 10.721
Quant Ion : 61.00
Area (flag) : 533509M
Concentration (ppb(v)) : 8.9761
Integration start scan : 952 Integration stop scan: 994
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

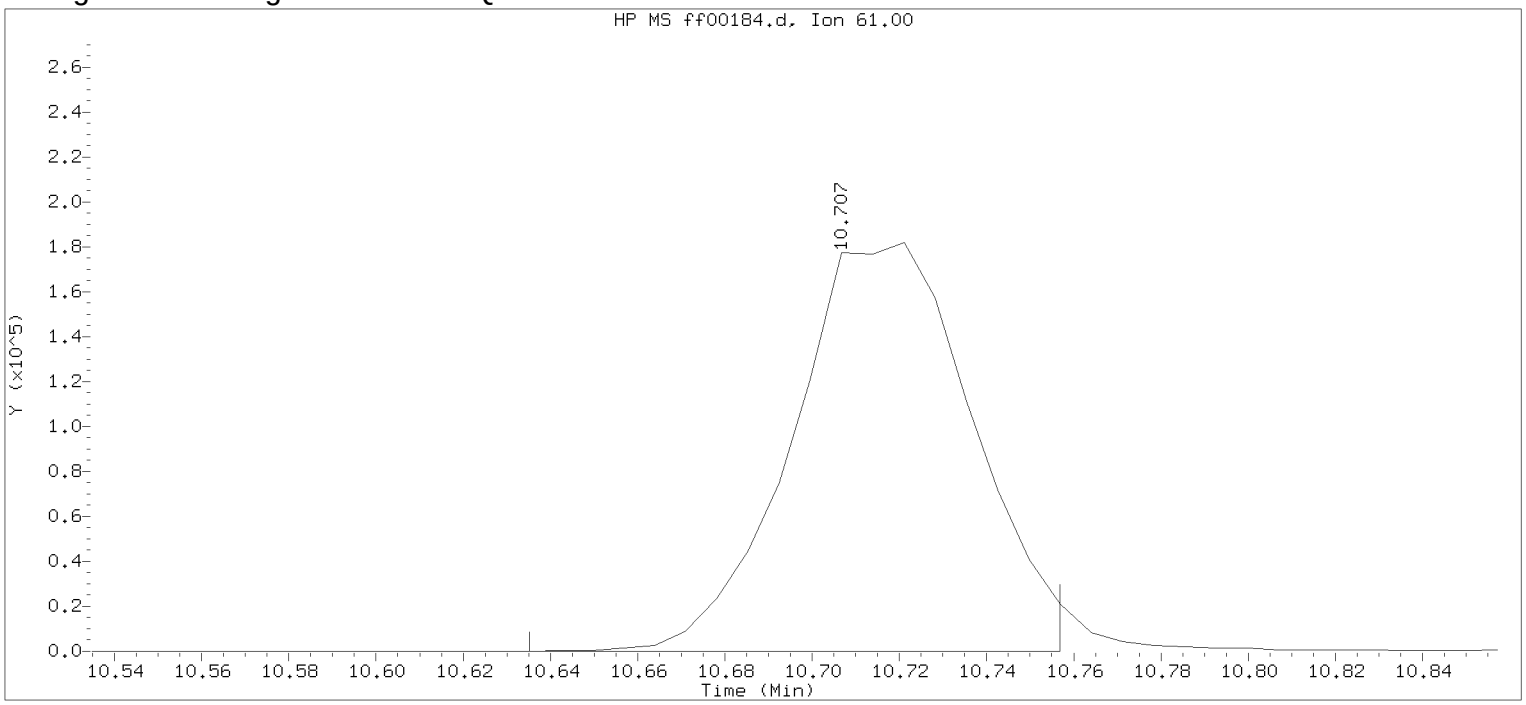
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/12/2018 at 16:27.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/13/2018 at 13:47.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18jun12.b/ff00184.d Instrument ID: HP26379.i
Injection date and time: 12-JUN-2018 15:27 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 14:24
Date, time and analyst ID of latest file update: 12-Jun-2018 15:55 Unknown

Sample Name: LCSF09 Lab Sample ID: LCSF09

Compound Number : 35
Compound Name : cis-1,2-Dichloroethene
Scan Number : 966
Retention Time (minutes): 10.707
Quant Ion : 61.00
Area : 518175
Concentration (ppb(v)) : 8.7181
Integration start scan : 955 Integration stop scan: 972
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/12/2018 at 16:27.
Target 3.5 esignature used for jeb07445

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

Data file: /chem/HP26379.i/18jun12.b/ff00185.d Injection date and time: **12-JUN-2018 15:57**
Data file Sample Info. Line: LCSDF09;200;F1816330AA;LCSDF09;0;3;LCSD; Instrument ID: **HP26379.i** Batch: **F1816330AA**
Date, time and analyst ID of latest file update: 12-Jun-2018 16:25 Unknown

Blank Data file reference: **/chem/HP26379.i/18jun12.b/ff00183.d**

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 12-JUN-2018 14:24
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun12.b/ff00182.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.115(-0.014)	1023	130	364730 (-2)	10.00		223247 - 520907
52) 1,4-Difluorobenzene	13.407(-0.014)	1343	114	1077360 (-1)	10.00		654735 - 1527713
71) Chlorobenzene-d5	18.235(0.000)	2017	117	1144986 (-1)	10.00		695984 - 1623962

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)	3.916(-0.000)	41	369778	9.287	9.29			0.5	1
2) Dichlorodifluoromethane	(1)	4.016(-0.000)	85	1152819	11.991	11.99			0.2	1
3) Chlorodifluoromethane	(1)	4.109(-0.001)	51	884119	11.479	11.48			0.2	1
4) Freon 114	(1)	4.317(-0.000)	85	1147389	11.029	11.03			0.2	1
5) Chloromethane	(1)	4.468(-0.001)	50	422049	9.922	9.92			0.2	1
6) Vinyl Chloride	(1)	4.646(-0.000)	62	256077	10.822	10.82			0.2	1
7) 1,3-Butadiene	(1)	4.682(-0.001)	54	191583	8.785	8.79			0.4	2
8) Bromomethane	(1)	5.363(-0.000)	94	364852	11.450	11.45			0.5	1
9) Chloroethane	(1)	5.628(-0.000)	64	230362	10.744	10.74			0.2	1
10) Bromoethene	(1)	5.850(-0.000)	106	361304	9.864	9.86			0.4	2
13) Dichlorofluoromethane	(1)	5.993(-0.001)	67	955778	11.958	11.96			0.2	1
12) Trichlorofluoromethane	(1)	5.886(-0.000)	101	1207845	11.153	11.15			0.2	1
11) Pentane	(1)	5.879(-0.000)	43	746337	8.313	8.31			0.5	1
14) Ethanol	(1)	6.674(-0.001)	45	173692	8.933	8.93			0.5	2
15) Freon123a	(1)	6.817(-0.000)	67	904454	11.884	11.88			0.2	1
20) Acrolein	(1)	7.519(-0.000)	56	159560	8.954	8.95			1	2
16) 1,1-Dichloroethene	(1)	6.860(-0.000)	61	654999	9.892	9.89			0.2	1
17) Freon 113	(1)	6.932(-0.001)	103	644328	9.961	9.96			0.5	2
24) Acetone	(1)	8.085(-0.000)	43	773917	10.929	10.93			0.5	2
19) Methyl Iodide	(1)	7.168(-0.000)	142	908219	8.192	8.19			0.2	1
18) Carbon Disulfide	(1)	6.946(-0.000)	76	1006609	9.975	9.98			1	1
21) Isopropanol	(1)	7.727(-0.001)	45	709918	8.475	8.48			0.5	2
29) Acetonitrile	(1)	9.095(-0.000)	41	461580	10.797	10.80			0.5	2
22) 3-Chloropropene	(1)	7.784(-0.000)	41	640893	10.401	10.40			0.2	1
23) Methylene Chloride	(1)	7.999(-0.001)	84	389857	12.239	12.24			0.2	1
28) tert-Butyl Alcohol	(1)	8.636(-0.000)	59	864971	8.693	8.69			0.5	1
32) Acrylonitrile	(1)	9.761(-0.000)	53	382053	9.514	9.51			0.5	2
25) trans-1,2-Dichloroethene	(1)	8.321(-0.000)	61	610245	9.886	9.89			0.2	1
27) Methyl t-Butyl Ether	(1)	8.515(-0.000)	73	1001221	8.455	8.46			0.2	1
26) Hexane	(1)	8.464(0.000)	56	456959	9.549	9.55			0.2	1
31) 1,1-Dichloroethane	(1)	9.639(0.000)	63	816039	10.430	10.43			0.2	1
34) Vinyl Acetate	(1)	10.119(-0.000)	43	1383507	9.817	9.82			1	1
30) Di-Isopropyl Ether	(1)	9.310(-0.000)	45	1311729	7.352	7.35			0.2	1
33) Ethyl Tert-Butyl Ether	(1)	10.069(-0.000)	59	1108474	7.321	7.32			0.2	1
35) cis-1,2-Dichloroethene	(1)	10.721(0.000)	61	547595	9.167	9.17			0.2	1
36) 1,2-Dichloroethene (total)	(1)		61	1157840	19.053	19.05			0.2	1
45) 2-Butanone	(1)	11.817(0.000)	43	984319	9.484	9.48			0.5	2
40) Ethyl Acetate	(1)	11.430(0.000)	43	1014518	8.588	8.59			0.5	1
41) Methyl Acrylate	(1)	11.466(0.000)	55	737318	8.499	8.50			0.2	1
43) Tetrahydrofuran	(1)	11.552(0.000)	42	529272	9.038	9.04			0.5	1
39) Chloroform	(1)	11.222(0.000)	83	954786	11.087	11.09			0.2	1
44) 1,1,1-Trichloroethane	(1)	11.659(0.000)	97	1013506	10.280	10.28			0.2	1
38) Cyclohexane	(1)	11.129(0.000)	56	628561	7.360	7.36			0.2	1

Digitally signed by Jacob E. Bailey on 06/12/2018 at 16:25. Target 3.5 esignature user ID: jeb07445

Data file: /chem/HP26379.i/18jun12.b/ff00185.d Injection date and time: **12-JUN-2018 15:57**
Data file Sample Info. Line: LCSDF09;200;F1816330AA;LCSDF09;0;3;LCSD; Instrument ID: **HP26379.i** Batch: **F1816330AA**
Date, time and analyst ID of latest file update: 12-Jun-2018 16:25 Unknown

Blank Data file reference: **/chem/HP26379.i/18jun12.b/ff00183.d**

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 12-JUN-2018 14:24
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun12.b/ff00182.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
42) Carbon Tetrachloride	(1)	11.523(0.000)	117	1051758	10.259	10.26			0.2	1
48) Benzene	(2)	12.340(0.000)	78	1316177	12.388	12.39			0.2	1
50) 1,2-Dichloroethane	(2)	12.705(-0.000)	62	685923	13.806	13.81			0.2	1
46) Isooctane	(2)	12.067(-0.000)	57	1941299	9.924	9.92			0.2	1
49) Tert-Amyl Methyl Ether	(2)	12.497(0.000)	73	915156	9.131	9.13			0.2	1
47) Heptane	(2)	12.211(-0.000)	71	362976	9.357	9.36			0.5	1
51) Trichloroethene	(2)	13.357(0.000)	130	615511	11.447	11.45			0.2	1
54) Ethyl Acrylate	(2)	14.238(0.000)	55	817617	8.428	8.43			0.2	1
55) 1,2-Dichloropropane	(2)	14.274(0.000)	63	524602	11.831	11.83			0.2	1
53) Dibromomethane	(2)	14.102(0.000)	174	727659	12.270	12.27			0.2	1
58) 1,4-Dioxane	(2)	14.682(0.001)	88	278867	10.505	10.51			0.5	1
57) Methyl Methacrylate	(2)	14.582(0.001)	69	316555	8.292	8.29			0.2	1
56) Bromodichloromethane	(2)	14.352(0.000)	83	936863	12.259	12.26			0.2	1
59) cis-1,3-Dichloropropene	(2)	15.413(0.000)	75	646818	9.889	9.89			0.2	1
62) 4-Methyl-2-Pentanone	(2)	16.408(0.000)	43	1074343	9.357	9.36			0.5	2
61) Toluene	(3)	15.806(0.000)	91	1481337	10.183	10.18			0.2	1
60) Octane	(3)	15.441(-0.000)	43	1126450	8.658	8.66			0.2	1
64) trans-1,3-Dichloropropene	(3)	16.473(-0.000)	75	638511	10.387	10.39			0.2	1
65) 1,3-Dichloropropene (total)	(3)		75	1285329	20.275	20.28			0.2	1
66) Ethyl Methacrylate	(3)	16.680(-0.000)	69	543711	7.395	7.40			0.2	1
67) 1,1,2-Trichloroethane	(3)	16.738(-0.000)	97	631954	11.887	11.89			0.2	1
63) Tetrachloroethene	(3)	16.437(0.000)	166	1110324	11.605	11.60			0.2	1
70) 2-Hexanone	(3)	17.741(-0.000)	43	1010647	8.419	8.42			0.5	2
68) Dibromochloromethane	(3)	17.031(-0.000)	127	775419	10.599	10.60			0.2	1
69) 1,2-Dibromoethane	(3)	17.447(0.000)	107	902592	10.733	10.73			0.2	1
72) Chlorobenzene	(3)	18.264(-0.000)	112	1412160	10.903	10.90			0.2	1
74) 1,1,1,2-Tetrachloroethane	(3)	18.349(-0.000)	131	793851	10.802	10.80			0.2	1
73) Ethylbenzene	(3)	18.278(-0.000)	91	1968186	9.461	9.46			0.2	1
75) m/p-Xylene	(3)	18.500(0.000)	91	1409370	9.097	9.10			0.2	1
76) o-Xylene	(3)	19.195(-0.000)	91	1302262	8.296	8.30			0.2	1
77) Xylene (total)	(3)		91	2711632	17.393	17.39			0.2	1
78) Styrene	(3)	19.274(-0.000)	104	1082011	8.979	8.98			0.2	1
79) Bromoform	(3)	19.338(-0.000)	173	1080292	9.361	9.36			0.2	1
80) Cumene	(3)	19.675(-0.000)	105	2055310	8.899	8.90			0.2	1
82) Bromobenzene	(3)	20.334(-0.000)	156	1004072	11.052	11.05			0.2	1
83) 1,1,2,2-Tetrachloroethane	(3)	20.427(-0.000)	83	1280382	10.924	10.92			0.2	1
87) 1,2,3-Trichloropropane	(3)	20.677(-0.000)	110	441539	11.523	11.52			0.2	1
81) n-Propylbenzene	(3)	20.319(-0.000)	120	636851	9.284	9.28			0.5	1
85) 2-Chlorotoluene	(3)	20.606(0.000)	126	668563	10.826	10.83			0.2	1
84) 4-Ethyltoluene	(3)	20.484(-0.000)	105	2216485	9.532	9.53			0.2	1
86) 1,3,5-Trimethylbenzene	(3)	20.613(-0.000)	105	2007632	10.400	10.40			0.2	1
88) Alpha Methyl Styrene	(3)	21.014(-0.000)	118	795380	7.922	7.92			0.2	1
89) tert-Butylbenzene	(3)	21.129(-0.000)	119	1947275	10.241	10.24			0.5	1
90) 1,2,4-Trimethylbenzene	(3)	21.229(-0.000)	105	1946061	10.103	10.10			0.2	1
91) sec-Butylbenzene	(3)	21.387(-0.000)	105	2913096	10.162	10.16			0.2	1
93) 1,3-Dichlorobenzene	(3)	21.723(-0.000)	146	1650575	10.788	10.79			0.2	1
94) 1,4-Dichlorobenzene	(3)	21.838(-0.000)	146	1640123	10.512	10.51			0.2	1
92) p-Isopropyltoluene	(3)	21.566(0.000)	119	2412048	9.879	9.88			0.2	1
96) Benzyl Chloride	(3)	22.167(-0.000)	126	384451	9.745	9.75			0.5	1
98) 1,2-Dichlorobenzene	(3)	22.425(-0.000)	146	1536123	10.720	10.72			0.2	1
95) n-Butylbenzene	(3)	22.139(-0.000)	92	1379566	10.201	10.20			0.2	1
97) Hexachloroethane	(3)	22.389(-0.000)	117	754904	10.070	10.07			0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)	23.586(-0.000)	157	761910	9.863	9.86			0.2	1
101) 1,2,4-Trichlorobenzene	(3)	24.646(-0.000)	180	1323936	10.336	10.34			0.5	2

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Data file: /chem/HP26379.i/18jun12.b/ff00185.d Injection date and time: **12-JUN-2018 15:57**
Data file Sample Info. Line: LCSDF09;200;F1816330AA;LCSDF09;0;3;LCSD; Instrument ID: **HP26379.i** Batch: **F1816330AA**
Date, time and analyst ID of latest file update: 12-Jun-2018 16:25 Unknown

Blank Data file reference: **/chem/HP26379.i/18jun12.b/ff00183.d**

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 12-JUN-2018 14:24
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun12.b/ff00182.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
100) Hexachlorobutadiene	(3)	24.546(-0.000)	225	1545472	11.193	11.19			0.4	2
102) Naphthalene	(3)	25.233(-0.000)	128	2243333	9.598	9.60			0.4	1

Total number of targets = 99

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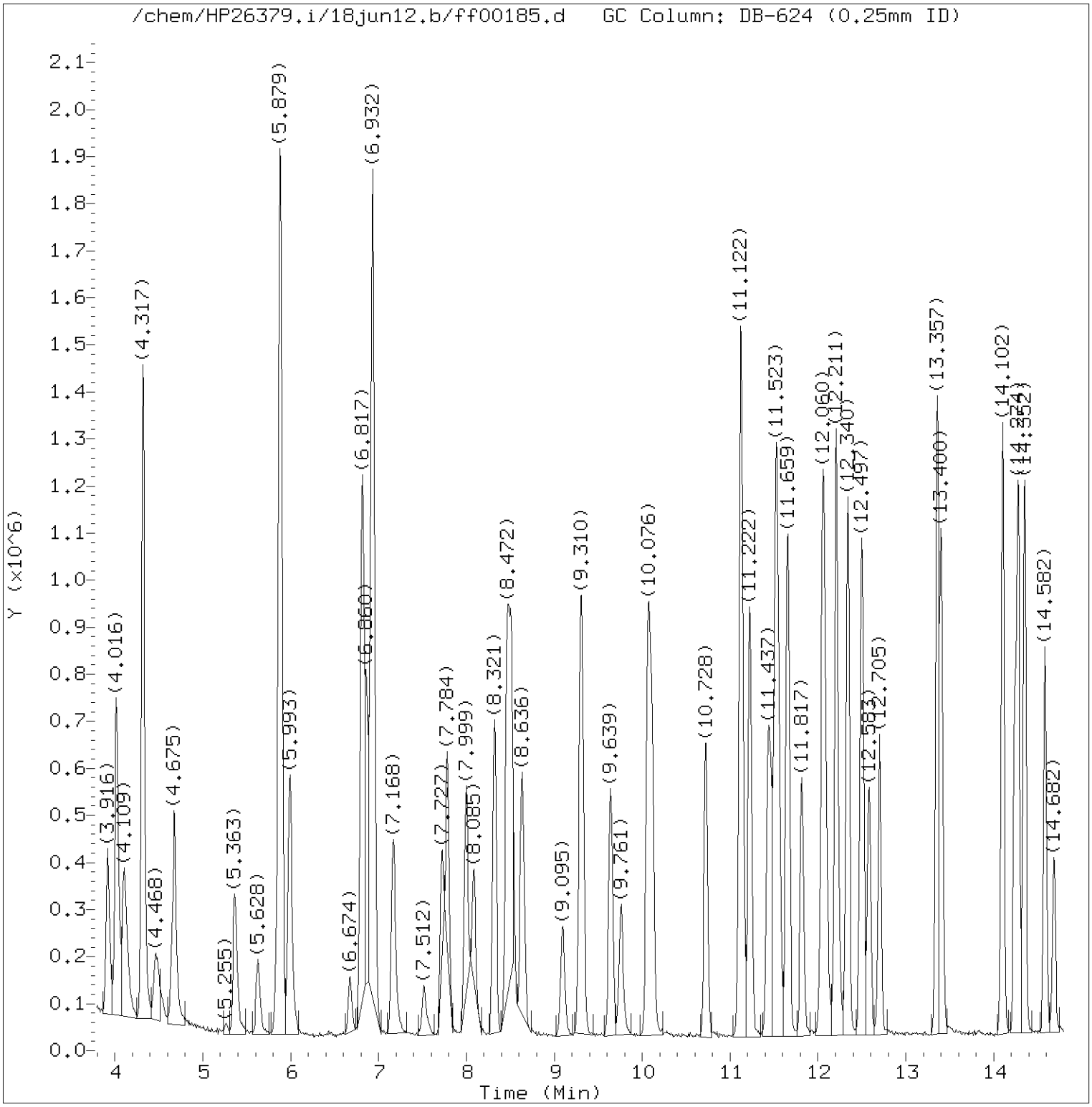
Secondary review performed and digitally signed by Jeffrey B. Smith on 06/13/2018 at 13:47. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

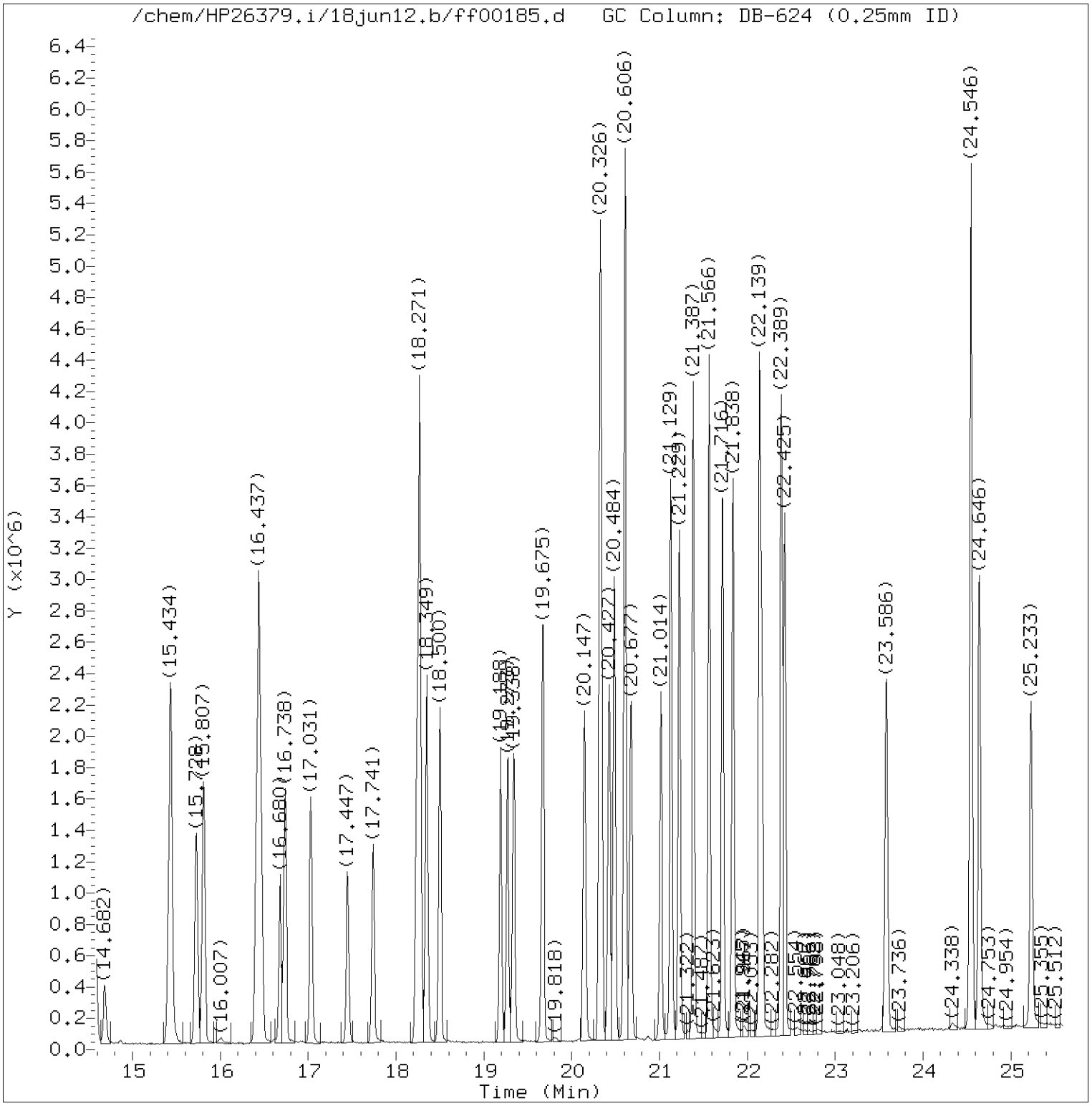
Target Revision 3.5

Data File: /chem/HP26379.i/18jun12.b/ff00185.d Instrument ID: HP26379.i
Injection date and time: 12-JUN-2018 15:57 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 14:24
Date, time and analyst ID of latest file update: 12-Jun-2018 16:25 Unknown

Sample Name: LCSDF09 Lab Sample ID: LCSDF09

Digitally signed by Jacob E. Bailey
on 06/12/2018 at 16:25.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun12.b/ff00185.d Instrument ID: HP26379.i
Injection date and time: 12-JUN-2018 15:57 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 14:24
Date, time and analyst ID of latest file update: 12-Jun-2018 16:25 Unknown

Sample Name: LCSDF09 Lab Sample ID: LCSDF09

Digitally signed by Jacob E. Bailey
on 06/12/2018 at 16:25.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun12.b/ff00185.d Instrument ID: HP26379.i
Injection date and time: 12-JUN-2018 15:57 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 14:24
Date, time and analyst ID of latest file update: 12-Jun-2018 16:25 Unknown

Sample Name: LCSDF09 Lab Sample ID: LCSDF09

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.916	41	369778	9.287
2) Dichlorodifluoromethane	(1)	4.016	85	1152819	11.991
3) Chlorodifluoromethane	(1)	4.109	51	884119	11.479
4) Freon 114	(1)	4.317	85	1147389	11.029
5) Chloromethane	(1)	4.468	50	422049	9.922
6) Vinyl Chloride	(1)	4.647	62	256077	10.822
7) 1,3-Butadiene	(1)	4.682	54	191583	8.785
8) Bromomethane	(1)	5.363	94	364852	11.450
9) Chloroethane	(1)	5.628	64	230362	10.744
10) Bromoethene	(1)	5.850	106	361304	9.864
11) Pentane	(1)	5.879	43	746337	8.313
12) Trichlorofluoromethane	(1)	5.886	101	1207845	11.153
13) Dichlorofluoromethane	(1)	5.993	67	955778	11.958
14) Ethanol	(1)	6.674	45	173692	8.933
15) Freon123a	(1)	6.817	67	904454	11.884
16) 1,1-Dichloroethene	(1)	6.860	61	654999	9.892
17) Freon 113	(1)	6.932	103	644328	9.961
18) Carbon Disulfide	(1)	6.946	76	1006609	9.975
19) Methyl Iodide	(1)	7.168	142	908219	8.192
20) Acrolein	(1)	7.519	56	159560	8.954
21) Isopropanol	(1)	7.727	45	709918	8.475
22) 3-Chloropropene	(1)	7.784	41	640893	10.401
23) Methylene Chloride	(1)	7.999	84	389857	12.239
24) Acetone	(1)	8.085	43	773917	10.929
25) trans-1,2-Dichloroethene	(1)	8.321	61	610245	9.886
26) Hexane	(1)	8.464	56	456959	9.549
27) Methyl t-Butyl Ether	(1)	8.515	73	1001221	8.455
28) tert-Butyl Alcohol	(1)	8.636	59	864971	8.693
29) Acetonitrile	(1)	9.095	41	461580	10.797
30) Di-Isopropyl Ether	(1)	9.310	45	1311729	7.352
31) 1,1-Dichloroethane	(1)	9.639	63	816039	10.430
32) Acrylonitrile	(1)	9.761	53	382053	9.514
33) Ethyl Tert-Butyl Ether	(1)	10.069	59	1108474	7.321
34) Vinyl Acetate	(1)	10.119	43	1383507	9.817
35) cis-1,2-Dichloroethene	(1)	10.721	61	547595	9.167
36) 1,2-Dichloroethene (total)	(1)		61	1157840	19.053
37)*Bromochloromethane	(1)	11.115	130	364730	10.000
38) Cyclohexane	(1)	11.129	56	628561	7.360

* = Compound is an internal standard.

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on 06/12/2018 at 16:25.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun12.b/ff00185.d Instrument ID: HP26379.i
Injection date and time: 12-JUN-2018 15:57 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 14:24
Date, time and analyst ID of latest file update: 12-Jun-2018 16:25 Unknown

Sample Name: LCSDF09 Lab Sample ID: LCSDF09

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.222	83	954786	11.087
40) Ethyl Acetate	(1)	11.430	43	1014518	8.588
41) Methyl Acrylate	(1)	11.466	55	737318	8.499
42) Carbon Tetrachloride	(1)	11.523	117	1051758	10.259
43) Tetrahydrofuran	(1)	11.552	42	529272	9.038
44) 1,1,1-Trichloroethane	(1)	11.659	97	1013506	10.280
45) 2-Butanone	(1)	11.817	43	984319	9.484
46) Isooctane	(2)	12.067	57	1941299	9.924
47) Heptane	(2)	12.211	71	362976	9.357
48) Benzene	(2)	12.340	78	1316177	12.388
49) Tert-Amyl Methyl Ether	(2)	12.497	73	915156	9.131
50) 1,2-Dichloroethane	(2)	12.705	62	685923	13.806
51) Trichloroethene	(2)	13.357	130	615511	11.447
52)*1,4-Difluorobenzene	(2)	13.407	114	1077360	10.000
53) Dibromomethane	(2)	14.102	174	727659	12.270
54) Ethyl Acrylate	(2)	14.238	55	817617	8.428
55) 1,2-Dichloropropane	(2)	14.274	63	524602	11.831
56) Bromodichloromethane	(2)	14.352	83	936863	12.259
57) Methyl Methacrylate	(2)	14.582	69	316555	8.292
58) 1,4-Dioxane	(2)	14.682	88	278867	10.505
59) cis-1,3-Dichloropropene	(2)	15.413	75	646818	9.889
60) Octane	(3)	15.441	43	1126450	8.658
61) Toluene	(3)	15.807	91	1481337	10.183
62) 4-Methyl-2-Pentanone	(2)	16.408	43	1074343	9.357
63) Tetrachloroethene	(3)	16.437	166	1110324	11.605
64) trans-1,3-Dichloropropene	(3)	16.473	75	638511	10.387
65) 1,3-Dichloropropene (total)	(3)		75	1285329	20.275
66) Ethyl Methacrylate	(3)	16.680	69	543711	7.395
67) 1,1,2-Trichloroethane	(3)	16.738	97	631954	11.887
68) Dibromochloromethane	(3)	17.031	127	775419	10.599
69) 1,2-Dibromoethane	(3)	17.447	107	902592	10.733
70) 2-Hexanone	(3)	17.741	43	1010647	8.419
71)*Chlorobenzene-d5	(3)	18.235	117	1144986	10.000
72) Chlorobenzene	(3)	18.264	112	1412160	10.903
73) Ethylbenzene	(3)	18.278	91	1968186	9.461
74) 1,1,1,2-Tetrachloroethane	(3)	18.349	131	793851	10.802
75) m/p-Xylene	(3)	18.500	91	1409370	9.097
76) o-Xylene	(3)	19.195	91	1302262	8.296

* = Compound is an internal standard.

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on 06/12/2018 at 16:25.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun12.b/ff00185.d Instrument ID: HP26379.i
Injection date and time: 12-JUN-2018 15:57 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 14:24
Date, time and analyst ID of latest file update: 12-Jun-2018 16:25 Unknown

Sample Name: LCSDF09 Lab Sample ID: LCSDF09

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	2711632	17.393
78) Styrene	(3)	19.273	104	1082011	8.979
79) Bromoform	(3)	19.338	173	1080292	9.361
80) Cumene	(3)	19.675	105	2055310	8.899
81) n-Propylbenzene	(3)	20.319	120	636851	9.284
82) Bromobenzene	(3)	20.334	156	1004072	11.052
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	1280382	10.924
84) 4-Ethyltoluene	(3)	20.484	105	2216485	9.532
85) 2-Chlorotoluene	(3)	20.606	126	668563	10.826
86) 1,3,5-Trimethylbenzene	(3)	20.613	105	2007632	10.400
87) 1,2,3-Trichloropropane	(3)	20.677	110	441539	11.523
88) Alpha Methyl Styrene	(3)	21.014	118	795380	7.922
89) tert-Butylbenzene	(3)	21.129	119	1947275	10.241
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	1946061	10.103
91) sec-Butylbenzene	(3)	21.387	105	2913096	10.162
92) p-Isopropyltoluene	(3)	21.566	119	2412048	9.879
93) 1,3-Dichlorobenzene	(3)	21.723	146	1650575	10.788
94) 1,4-Dichlorobenzene	(3)	21.838	146	1640123	10.512
95) n-Butylbenzene	(3)	22.139	92	1379566	10.201
96) Benzyl Chloride	(3)	22.167	126	384451	9.745
97) Hexachloroethane	(3)	22.389	117	754904	10.070
98) 1,2-Dichlorobenzene	(3)	22.425	146	1536123	10.720
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	761910	9.863
100) Hexachlorobutadiene	(3)	24.546	225	1545472	11.193
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	1323936	10.336
102) Naphthalene	(3)	25.233	128	2243333	9.598

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on 06/12/2018 at 16:25.
Target 3.5 esignature user ID: jeb07445

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

Data file: /chem/HP26379.i/18jun12.b/ff00201.d Injection date and time: **13-JUN-2018 09:23**
Data file Sample Info. Line: cc1506;200;F1816330AA;cc1506;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1816330AA**
Date, time and analyst ID of latest file update: 14-Aug-2018 18:20 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun12.b/ff00183.d**

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 12-JUN-2018 14:24
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun12.b/ff00182.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.115(-0.014)	1023	130	364553 (-2)	10.00		223247 - 520907
52) 1,4-Difluorobenzene	13.407(-0.014)	1343	114	803785 (-26)	10.00		654735 - 1527713
71) Chlorobenzene-d5	18.235(0.000)	2017	117	942793 (-19)	10.00		695984 - 1623962

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)			Not Detected					0.5	1
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)			Not Detected					0.2	1
7) 1,3-Butadiene	(1)			Not Detected					0.4	2
8) Bromomethane	(1)			Not Detected					0.5	1
9) Chloroethane	(1)			Not Detected					0.2	1
10) Bromoethene	(1)			Not Detected					0.4	2
13) Dichlorofluoromethane	(1)			Not Detected					0.2	1
12) Trichlorofluoromethane	(1)			Not Detected					0.2	1
11) Pentane	(1)			Not Detected					0.5	1
14) Ethanol	(1)			Not Detected					0.5	2
15) Freon123a	(1)			Not Detected					0.2	1
20) Acrolein	(1)			Not Detected					1	2
16) 1,1-Dichloroethene	(1)			Not Detected					0.2	1
17) Freon 113	(1)			Not Detected					0.5	2
24) Acetone	(1)			Not Detected					0.5	2
19) Methyl Iodide	(1)			Not Detected					0.2	1
18) Carbon Disulfide	(1)			Not Detected					1	1
21) Isopropanol	(1)			Not Detected					0.5	2
29) Acetonitrile	(1)			Not Detected					0.5	2
22) 3-Chloropropene	(1)			Not Detected					0.2	1
23) Methylene Chloride	(1)			Not Detected					0.2	1
28) tert-Butyl Alcohol	(1)			Not Detected					0.5	1
32) Acrylonitrile	(1)			Not Detected					0.5	2
25) trans-1,2-Dichloroethene	(1)			Not Detected					0.2	1
27) Methyl t-Butyl Ether	(1)			Not Detected					0.2	1
26) Hexane	(1)			Not Detected					0.2	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.2	1
34) Vinyl Acetate	(1)			Not Detected					1	1
30) Di-Isopropyl Ether	(1)			Not Detected					0.2	1
33) Ethyl Tert-Butyl Ether	(1)			Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.2	1
36) 1,2-Dichloroethene (total)	(1)			Not Detected					0.2	1
45) 2-Butanone	(1)			Not Detected					0.5	2
40) Ethyl Acetate	(1)			Not Detected					0.5	1
41) Methyl Acrylate	(1)			Not Detected					0.2	1
43) Tetrahydrofuran	(1)			Not Detected					0.5	1
39) Chloroform	(1)			Not Detected					0.2	1
44) 1,1,1-Trichloroethane	(1)			Not Detected					0.2	1
38) Cyclohexane	(1)			Not Detected					0.2	1

Digitally signed by Jacob E. Bailey on 08/14/2018 at 18:20. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18jun12.b/ff00201.d Injection date and time: **13-JUN-2018 09:23**
Data file Sample Info. Line: cc1506;200;F1816330AA;cc1506;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1816330AA**
Date, time and analyst ID of latest file update: 14-Aug-2018 18:20 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun12.b/ff00183.d**

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 12-JUN-2018 14:24
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun12.b/ff00182.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
42) Carbon Tetrachloride	(1)				Not Detected					0.2	1
48) Benzene	(2)				Not Detected					0.2	1
50) 1,2-Dichloroethane	(2)				Not Detected					0.2	1
46) Isooctane	(2)				Not Detected					0.2	1
49) Tert-Amyl Methyl Ether	(2)				Not Detected					0.2	1
47) Heptane	(2)				Not Detected					0.5	1
51) Trichloroethene	(2)				Not Detected					0.2	1
54) Ethyl Acrylate	(2)				Not Detected					0.2	1
55) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
53) Dibromomethane	(2)				Not Detected					0.2	1
58) 1,4-Dioxane	(2)				Not Detected					0.5	1
57) Methyl Methacrylate	(2)				Not Detected					0.2	1
56) Bromodichloromethane	(2)				Not Detected					0.2	1
59) cis-1,3-Dichloropropene	(2)				Not Detected					0.2	1
62) 4-Methyl-2-Pentanone	(2)				Not Detected					0.5	2
61) Toluene	(3)				Not Detected					0.2	1
60) Octane	(3)				Not Detected					0.2	1
64) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
65) 1,3-Dichloropropene (total)	(3)				Not Detected					0.2	1
66) Ethyl Methacrylate	(3)				Not Detected					0.2	1
67) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
63) Tetrachloroethene	(3)				Not Detected					0.2	1
70) 2-Hexanone	(3)				Not Detected					0.5	2
68) Dibromochloromethane	(3)				Not Detected					0.2	1
69) 1,2-Dibromoethane	(3)				Not Detected					0.2	1
72) Chlorobenzene	(3)				Not Detected					0.2	1
74) 1,1,1,2-Tetrachloroethane	(3)				Not Detected					0.2	1
73) Ethylbenzene	(3)				Not Detected					0.2	1
75) m/p-Xylene	(3)				Not Detected					0.2	1
76) o-Xylene	(3)				Not Detected					0.2	1
77) Xylene (total)	(3)				Not Detected					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
82) Bromobenzene	(3)				Not Detected					0.2	1
83) 1,1,2,2-Tetrachloroethane	(3)				Not Detected					0.2	1
87) 1,2,3-Trichloropropane	(3)				Not Detected					0.2	1
81) n-Propylbenzene	(3)				Not Detected					0.5	1
85) 2-Chlorotoluene	(3)				Not Detected					0.2	1
84) 4-Ethyltoluene	(3)				Not Detected					0.2	1
86) 1,3,5-Trimethylbenzene	(3)				Not Detected					0.2	1
88) Alpha Methyl Styrene	(3)				Not Detected					0.2	1
89) tert-Butylbenzene	(3)				Not Detected					0.5	1
90) 1,2,4-Trimethylbenzene	(3)				Not Detected					0.2	1
91) sec-Butylbenzene	(3)				Not Detected					0.2	1
93) 1,3-Dichlorobenzene	(3)				Not Detected					0.2	1
94) 1,4-Dichlorobenzene	(3)				Not Detected					0.2	1
92) p-Isopropyltoluene	(3)				Not Detected					0.2	1
96) Benzyl Chloride	(3)				Not Detected					0.5	1
98) 1,2-Dichlorobenzene	(3)				Not Detected					0.2	1
95) n-Butylbenzene	(3)				Not Detected					0.2	1
97) Hexachloroethane	(3)				Not Detected					0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)				Not Detected					0.2	1
101) 1,2,4-Trichlorobenzene	(3)				Not Detected					0.5	2

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18jun12.b/ff00201.d Injection date and time: **13-JUN-2018 09:23**
Data file Sample Info. Line: cc1506;200;F1816330AA;cc1506;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1816330AA**
Date, time and analyst ID of latest file update: 14-Aug-2018 18:20 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun12.b/ff00183.d**

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 12-JUN-2018 14:24
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun12.b/ff00182.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
100) Hexachlorobutadiene	(3)				Not Detected					0.4	2
102) Naphthalene	(3)				Not Detected					0.4	1

Total number of targets = 99

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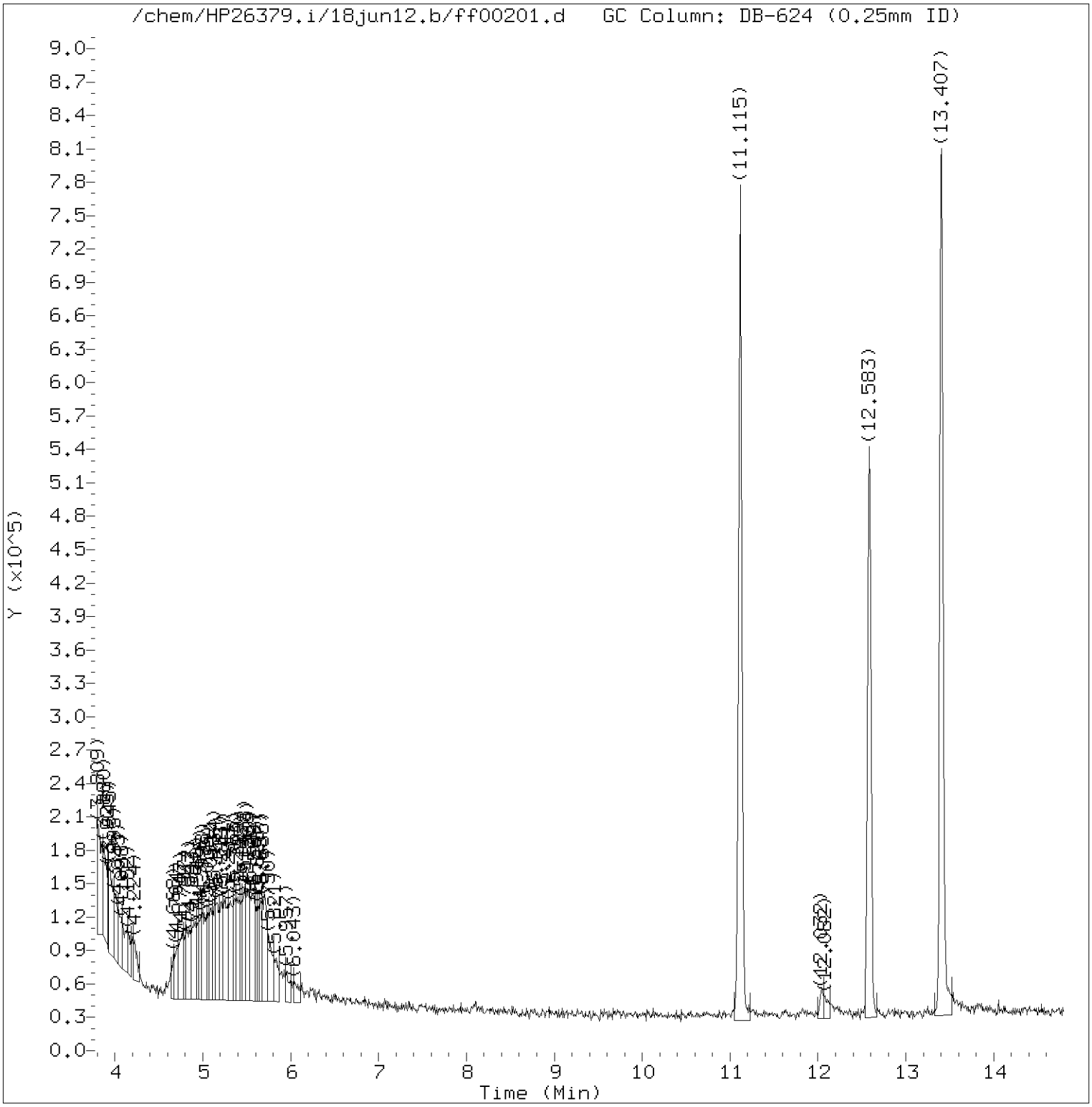
Secondary review performed and digitally signed by Jeffrey B. Smith on 08/28/2018 at 10:34. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun12.b/ff00201.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 09:23 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 14:24
Date, time and analyst ID of latest file update: 14-Aug-2018 18:20 jeb07445

Sample Name: cc1506 Lab Sample ID: cc1506

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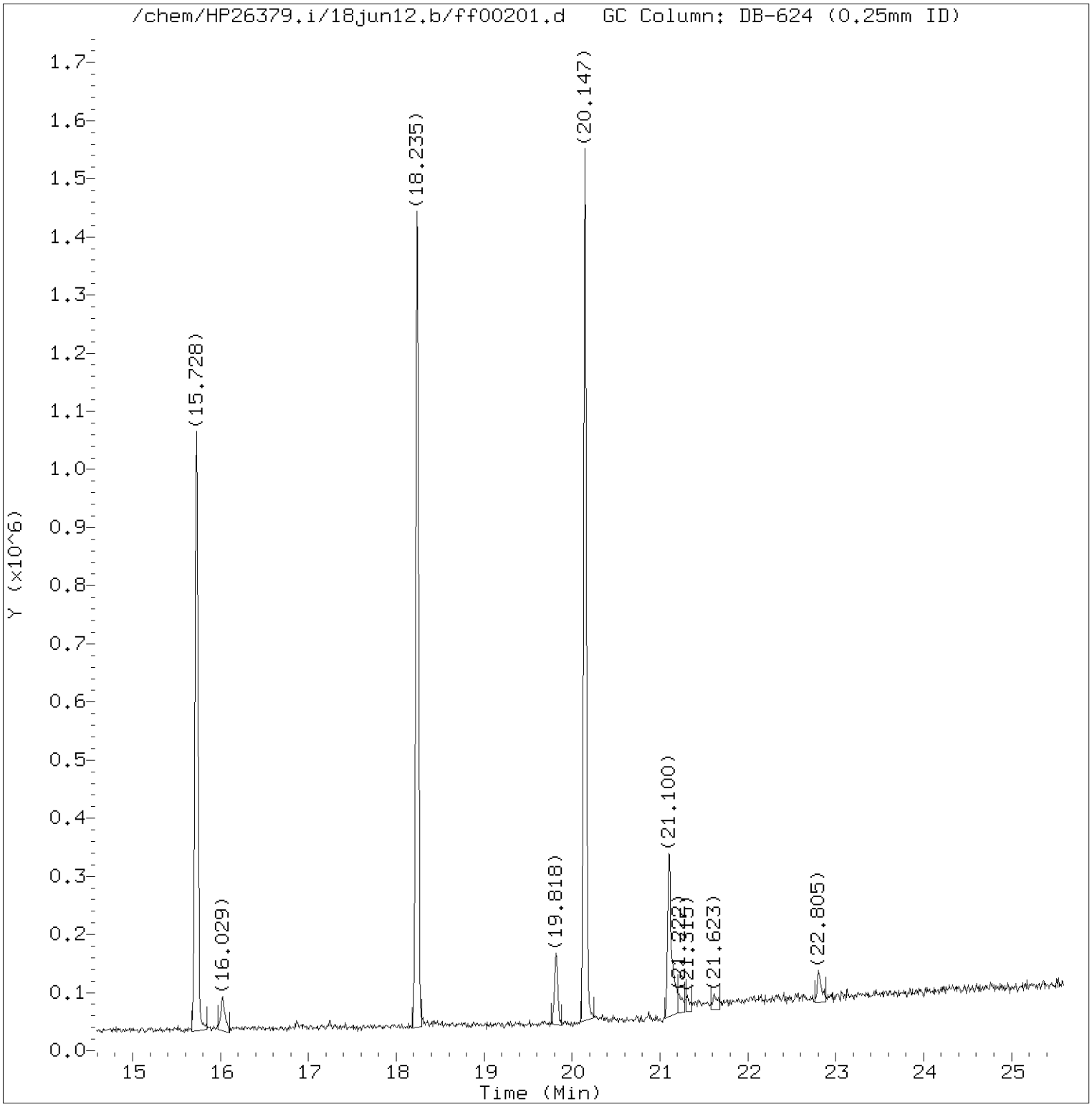
on 08/14/2018 at 18:20.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun12.b/ff00201.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 09:23 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 14:24
Date, time and analyst ID of latest file update: 14-Aug-2018 18:20 jeb07445

Sample Name: cc1506 Lab Sample ID: cc1506

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on 08/14/2018 at 18:20.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun12.b/ff00201.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 09:23 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun12.b/to-15.m Sublist used: all
Calibration date and time: 12-JUN-2018 14:24
Date, time and analyst ID of latest file update: 14-Aug-2018 18:20 jeb07445

Sample Name: cc1506 Lab Sample ID: cc1506

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
37)*Bromochloromethane	(1)	11.115	130	364553	10.000
52)*1,4-Difluorobenzene	(2)	13.407	114	803785	10.000
71)*Chlorobenzene-d5	(3)	18.235	117	942793	10.000

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 08/14/2018 at 18:20.
Target 3.5 esignature user ID: jeb07445

Lancaster Laboratories
Volatiles in Air
Runlog for Agilent GC/MS System HP26379 **HP #06**

Data Directory Path is - D:\data\18jun13\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
jeb07445	FF00210.D	50NGBFB	06/13/2018	12:20		
jeb07445	FF00211.D	VSTD010	06/13/2018	13:09		
jeb07445	FF00212.D	VSTD010	06/13/2018	13:58		
jeb07445	FF00213.D	VBLKF10	06/13/2018	14:56	F1816430AA	
jeb07445	FF00214.D	VBLKF10	06/13/2018	15:26	F1816430AA	
jeb07445	FF00215.D	VBLKF10	06/13/2018	16:13	F1816430AA	
jeb07445	FF00216.D	VBLKF10	06/13/2018	16:44	F1816430AA	
jeb07445	FF00217.D	VBLKF10	06/13/2018	17:29	F1816430AA	
jeb07445	FF00220.D	50NGBFB	06/13/2018	18:00		
jeb07445	FF00221.D	50NGBFB	06/13/2018	18:44		
jeb07445	FF00222.D	VSTD010	06/13/2018	19:33		
jeb07445	FF00223.D	VSTD005	06/13/2018	20:04		
jeb07445	FF00224.D	VSTD002	06/13/2018	20:34		
jeb07445	FF00225.D	VSTD001	06/13/2018	21:05		
jeb07445	FF00226.D	VSTD025	06/13/2018	21:36		
jeb07445	FF00227.D	VSTD070	06/13/2018	22:07		
jeb07445	FF00228.D	VBLKF10	06/13/2018	22:38	F1816430AA	
jeb07445	FF00229.D	VBLKF10	06/13/2018	23:08	F1816430AA	
jeb07445	FF00230.D	VBLKF10	06/13/2018	23:39	F1816430AA	
jeb07445	FF00231.D	VBLKF10	06/14/2018	00:10	F1816430AA	
jeb07445	FF00232.D	LCSF10	06/14/2018	00:41	F1816430AA	
jeb07445	FF00233.D	LCSDF10	06/14/2018	01:12	F1816430AA	
jeb07445	FF00234.D	LCSDF10	06/14/2018	01:42	F1816430AA	
jeb07445	FF00235.D	mdlv0.5	06/14/2018	02:13	F1816430AA	
jeb07445	FF00236.D	mdlv0.2	06/14/2018	02:44	F1816430AA	

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

SDG No.:

Lab File ID: ff00221.d

BFB Injection Date: 06/13/2018

Instrument ID: 26379

BFB Injection Time: 18:44

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0% - 40.0% of mass 95	23.32
75	30.0% - 66.0% of mass 95	48.30
95	Base peak, 100% relative abundance	100.00
96	5.0% - 9.0% of mass 95	6.51
173	< 2.0% of mass 174	0.87 (0.83)
174	> 50.0% of mass 95	103.85
175	4.0% - 9.0% of mass 174	7.38 (7.10)
176	93.0% - 101.0% of mass 174	97.35 (93.74)
177	5.0% - 9.0% of mass 176	6.83 (7.01)

THIS CHECK APPLIES TO THE FOLLOWING:

LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD010	ff00222.d	06/13/2018	19:33
VSTD005	ff00223.d	06/13/2018	20:04
VSTD002	ff00224.d	06/13/2018	20:34
VSTD001	ff00225.d	06/13/2018	21:05
VSTD025	ff00226.d	06/13/2018	21:36
VSTD070	ff00227.d	06/13/2018	22:07
VBLKF10	ff00231.d	06/14/2018	00:10
LCSF10	ff00232.d	06/14/2018	00:41
LCSDF10	ff00233.d	06/14/2018	01:12
mdlv0.5	ff00235.d	06/14/2018	02:13
mdlv0.2	ff00236.d	06/14/2018	02:44

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FORM 06
VOLATILE ORGANICS IN AIR
INITIAL CALIBRATION DATA

SDG No.:

Instrument ID: 26379 Calibration Start Date: 06/13/2018 Calibration End Date: 06/13/2018

Calibration Start Time: 19:33 Calibration End Time: 22:07

LAB FILE IDs:
RRF 1 = ff00225.d RRF 2 = ff00224.d RRF 5 = ff00223.d RRF 10 = ff00222.d RRF 25 = ff00226.d
RRF 70 = ff00227.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
Propene	0.718	0.928	1.026	0.978	1.019	1.140	0.968	15	AVG
Dichlorodifluoromethane	2.282	2.796	3.157	3.185	3.074	3.095	2.932	12	AVG
Chlorodifluoromethane	2.279	2.281	2.356	2.366	2.308	2.292	2.314	2	AVG
Freon 114	3.141	2.958	3.129	3.240	3.018	2.985	3.078	4	AVG
Chloromethane	1.202	1.126	1.255	1.239	1.208	1.200	1.205	4	AVG
Vinyl Chloride	0.505	0.625	0.672	0.694	0.649	0.674	0.636	11	AVG
1,3-Butadiene	0.551	0.561	0.521	0.557	0.512	0.545	0.541	4	AVG
Bromomethane	0.672	0.801	0.919	1.001	0.953	1.018	0.894	15	AVG
Chloroethane	0.441	0.528	0.614	0.594	0.581	0.625	0.564	12	AVG
Bromoethene	0.571	0.727	0.863	0.881	0.933	1.083	0.843	21	AVG
Dichlorofluoromethane	1.795	2.205	2.539	2.600	2.455	2.434	2.338	13	AVG
Trichlorofluoromethane	3.551	3.350	3.288	3.382	3.249	3.079	3.317	5	AVG
Pentane	1.483	1.686	1.896	1.952	2.213	2.408	1.940	17	AVG
Ethanol	0.381	0.419	0.437	0.400	0.461	0.561	0.443	14	AVG
Freon123a	2.476	2.254	2.220	2.234	2.164	2.099	2.241	6	AVG
Acrolein	0.233	0.303	0.358	0.356	0.404	0.506	0.360	26	AVG
1,1-Dichloroethene	1.224	1.410	1.571	1.609	1.743	1.937	1.583	16	AVG
Freon 113	2.150	2.048	1.909	1.848	1.805	1.674	1.905	9	AVG
Acetone	1.619	1.766	1.960	2.086	2.080	2.134	1.941	11	AVG
Methyl Iodide	1.918	2.386	2.852	2.437	2.880	2.803	2.546	15	AVG
Carbon Disulfide	1.844	2.243	2.755	2.882	2.879	2.938	2.590	17	AVG
Isopropanol	1.345	1.457	1.683	1.735	1.916	2.306	1.740	20	AVG
Acetonitrile	0.865	1.049	1.281	1.283	1.252	1.315	1.174	15	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: 26379 Calibration Start Date: 06/13/2018 Calibration End Date: 06/13/2018

Calibration Start Time: 19:33 Calibration End Time: 22:07

LAB FILE IDs:
RRF 1 = ff00225.d RRF 2 = ff00224.d RRF 5 = ff00223.d RRF 10 = ff00222.d RRF 25 = ff00226.d
RRF 70 = ff00227.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
3-Chloropropene	0.927	1.154	1.407	1.503	1.648	1.858	1.416	24	AVG
Methylene Chloride	0.636	0.828	0.945	0.991	0.963	0.964	0.888	15	AVG
tert-Butyl Alcohol	1.818	1.897	2.034	2.079	2.157	2.430	2.069	10	AVG
Acrylonitrile	0.715	0.790	0.942	0.984	1.034	1.162	0.938	17	AVG
trans-1,2-Dichloroethene	1.192	1.384	1.572	1.586	1.632	1.817	1.531	14	AVG
Methyl t-Butyl Ether	2.057	2.117	2.378	2.543	2.879	3.003	2.496	16	AVG
Hexane	1.094	1.171	1.200	1.216	1.327	1.342	1.225	8	AVG
1,1-Dichloroethane	1.896	2.020	2.202	2.233	2.168	2.248	2.128	7	AVG
Vinyl Acetate	1.878	2.269	2.855	3.238	3.678	3.985	2.984	27	AVG
Di-Isopropyl Ether	2.677	2.932	3.154	3.228	3.883	4.525	3.400	20	AVG
Ethyl Tert-Butyl Ether	1.938	2.261	2.609	2.791	3.380	3.888	2.811	26	AVG
cis-1,2-Dichloroethene	0.963	1.231	1.358	1.430	1.495	1.724	1.367	19	AVG
2-Butanone	2.082	2.243	2.559	2.653	2.748	2.915	2.533	12	AVG
Ethyl Acetate	2.310	2.394	2.749	2.793	2.970	3.227	2.740	13	AVG
Methyl Acrylate	1.319	1.549	1.807	1.959	2.190	2.455	1.880	22	AVG
Tetrahydrofuran	0.919	0.985	1.217	1.367	1.494	1.660	1.274	23	AVG
Chloroform	2.343	2.436	2.662	2.726	2.567	2.581	2.553	6	AVG
1,1,1-Trichloroethane	2.908	2.881	2.886	2.898	2.840	2.721	2.856	2	AVG
Cyclohexane	1.271	1.339	1.463	1.504	1.884	2.165	1.604	22	AVG
Carbon Tetrachloride	3.075	2.953	3.009	3.033	2.978	2.864	2.985	2	AVG
Benzene	1.229	1.197	1.263	1.323	1.190	1.095	1.216	6	AVG
1,2-Dichloroethane	0.642	0.672	0.705	0.714	0.628	0.570	0.655	8	AVG
Isooctane	1.372	1.449	1.682	1.861	1.965	1.944	1.712	15	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.

SDG No.:

Instrument ID: 26379 Calibration Start Date: 06/13/2018 Calibration End Date: 06/13/2018

Calibration Start Time: 19:33 Calibration End Time: 22:07

LAB FILE IDs:
RRF 1 = ff00225.d RRF 2 = ff00224.d RRF 5 = ff00223.d RRF 10 = ff00222.d RRF 25 = ff00226.d
RRF 70 = ff00227.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
Tert-Amyl Methyl Ether	0.709	0.735	0.798	0.876	0.911	0.945	0.829	12	AVG
Heptane	0.272	0.268	0.316	0.343	0.374	0.372	0.324	15	AVG
Trichloroethene	0.563	0.566	0.605	0.608	0.555	0.557	0.576	4	AVG
Ethyl Acrylate	0.812	0.749	0.787	0.843	0.867	0.939	0.833	8	AVG
1,2-Dichloropropane	0.581	0.538	0.549	0.581	0.506	0.450	0.534	9	AVG
Dibromomethane	0.699	0.723	0.760	0.772	0.666	0.623	0.707	8	AVG
1,4-Dioxane	0.209	0.210	0.235	0.269	0.275	0.280	0.246	13	AVG
Methyl Methacrylate	0.295	0.281	0.294	0.332	0.345	0.375	0.320	11	AVG
Bromodichloromethane	1.069	1.015	1.049	1.098	0.928	0.829	0.998	10	AVG
cis-1,3-Dichloropropene	0.632	0.602	0.639	0.685	0.664	0.674	0.649	5	AVG
4-Methyl-2-Pentanone	1.164	1.078	1.136	1.245	1.163	1.091	1.146	5	AVG
Toluene	1.345	1.312	1.349	1.385	1.376	1.326	1.349	2	AVG
Octane	0.780	0.815	0.948	1.077	1.216	1.136	0.996	18	AVG
trans-1,3-Dichloropropene	0.546	0.560	0.610	0.645	0.614	0.600	0.596	6	AVG
Ethyl Methacrylate	0.447	0.475	0.496	0.556	0.605	0.658	0.539	15	AVG
1,1,2-Trichloroethane	0.711	0.680	0.646	0.667	0.581	0.526	0.635	11	AVG
Tetrachloroethene	1.114	1.075	1.065	1.091	0.993	0.891	1.038	8	AVG
2-Hexanone	0.879	0.955	1.000	1.087	1.112	1.098	1.022	9	AVG
Dibromochloromethane	0.903	0.833	0.835	0.866	0.773	0.725	0.822	8	AVG
1,2-Dibromoethane	0.951	0.915	0.910	0.934	0.848	0.810	0.895	6	AVG
Chlorobenzene	1.459	1.391	1.402	1.413	1.303	1.162	1.355	8	AVG
1,1,1,2-Tetrachloroethane	1.006	0.981	0.922	0.907	0.792	0.696	0.884	13	AVG
Ethylbenzene	1.817	1.710	1.821	1.978	1.913	****	1.848	6	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: 26379 Calibration Start Date: 06/13/2018 Calibration End Date: 06/13/2018

Calibration Start Time: 19:33 Calibration End Time: 22:07

LAB FILE IDs:
RRF 1 = ff00225.d RRF 2 = ff00224.d RRF 5 = ff00223.d RRF 10 = ff00222.d RRF 25 = ff00226.d
RRF 70 = ff00227.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
m/p-Xylene	1.149	1.156	1.255	1.357	1.411	1.349	1.279	9	AVG
o-Xylene	1.081	1.097	1.171	1.293	1.375	****	1.203	11	AVG
Styrene	0.792	0.815	0.941	1.095	1.140	1.119	0.984	16	AVG
Bromoform	1.338	1.299	1.263	1.296	1.177	1.083	1.242	8	AVG
Cumene	1.551	1.619	1.799	2.057	2.096	****	1.824	14	AVG
Bromobenzene	0.981	0.951	1.033	1.070	0.959	0.822	0.970	9	AVG
1,1,2,2-Tetrachloroethane	1.720	1.556	1.519	1.483	1.251	1.065	1.432	16	AVG
1,2,3-Trichloropropane	0.556	0.522	0.495	0.497	0.412	0.360	0.473	15	AVG
n-Propylbenzene	0.485	0.517	0.591	0.649	0.658	0.621	0.587	12	AVG
2-Chlorotoluene	0.528	0.548	0.631	0.683	0.647	0.565	0.600	10	AVG
4-Ethyltoluene	1.590	1.611	1.960	2.259	2.210	****	1.926	17	AVG
1,3,5-Trimethylbenzene	1.466	1.457	1.910	2.127	1.964	****	1.785	17	AVG
Alpha Methyl Styrene	0.686	0.614	0.682	0.857	0.917	****	0.751	17	AVG
tert-Butylbenzene	1.259	1.355	1.836	2.140	1.894	****	1.697	22	AVG
1,2,4-Trimethylbenzene	1.309	1.440	1.824	2.017	1.932	****	1.704	18	AVG
sec-Butylbenzene	2.042	2.179	2.695	2.973	2.784	****	2.535	16	AVG
1,3-Dichlorobenzene	1.604	1.614	1.712	1.687	1.573	****	1.638	4	AVG
1,4-Dichlorobenzene	1.542	1.519	1.626	1.649	1.563	****	1.580	4	AVG
p-Isopropyltoluene	1.549	1.698	2.106	2.444	2.399	****	2.039	20	AVG
Benzyl Chloride	0.348	0.382	0.393	0.436	0.427	****	0.397	9	AVG
1,2-Dichlorobenzene	1.485	1.492	1.560	1.549	1.479	1.252	1.470	8	AVG
n-Butylbenzene	0.855	0.950	1.233	1.394	1.418	1.261	1.185	20	AVG
Hexachloroethane	0.866	0.821	0.845	0.854	0.802	0.725	0.819	6	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: 26379 Calibration Start Date: 06/13/2018 Calibration End Date: 06/13/2018

Calibration Start Time: 19:33 Calibration End Time: 22:07

LAB FILE IDs:
RRF 1 = ff00225.d RRF 2 = ff00224.d RRF 5 = ff00223.d RRF 10 = ff00222.d RRF 25 = ff00226.d
RRF 70 = ff00227.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
1,2-Dibromo-3-chloropropane	0.719	0.714	0.726	0.757	0.829	****	0.749	6	AVG
1,2,4-Trichlorobenzene	0.837	0.974	1.017	1.016	1.252	1.220	1.053	15	AVG
Hexachlorobutadiene	1.476	1.367	1.336	1.259	1.394	1.251	1.347	6	AVG
Naphthalene	1.174	1.243	1.477	1.557	2.251	****	1.541	28	AVG

Average % RSD: 12

* 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.

Internal Standard
Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP26379.i/18jun13.b/ff00222.d VSTD010
/chem/HP26379.i/18jun13.b/ff00223.d VSTD005
/chem/HP26379.i/18jun13.b/ff00224.d VSTD002
/chem/HP26379.i/18jun13.b/ff00225.d VSTD001
/chem/HP26379.i/18jun13.b/ff00226.d VSTD025
/chem/HP26379.i/18jun13.b/ff00227.d VSTD070

Area Summary

	File ID:								
Internal Standard Name	ff00222.d	ff00223.d	ff00224.d	ff00225.d	ff00226.d	ff00227.d	Avg. Area	%RSD	In Spec
Bromochloromethane	581988	581358	570047	546165	577933	590786	574713	3	Yes
1,4-Difluorobenzene	1552121	1560683	1491961	1350085	1702719	1933919	1598581	13	Yes
Chlorobenzene-d5	1695833	1662146	1601948	1524961	1733322	1894400	1685435	7	Yes

%RSD of internal standard area is flagged out of spec if greater than 30.

RT Summary

	File ID:						
Internal Standard Name	ff00222.d	ff00223.d	ff00224.d	ff00225.d	ff00226.d	ff00227.d	Avg. RT
Bromochloromethane	11.100	11.101	11.101	11.108	11.108	11.108	11.104
1,4-Difluorobenzene	13.393	13.393	13.393	13.393	13.393	13.393	13.393
Chlorobenzene-d5	18.228	18.235	18.235	18.235	18.235	18.235	18.234

Comments:_____

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Report generated on 06/14/2018 at 12:44

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 LCS File ID: ff00232.d LCSD File ID: ff00233.d

Batch: F1816430AA LCS Injected: 06/14/2018 LCSD Injected: 06/14/2018

Method: EPA TO-15 LCS Client ID: LCSF10 LCSD Client ID: LCSDF10

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	10.00	10.23	11.30	102	113	78-126	10	25	YES
Dichlorodifluoromethane	10.00	11.30	11.18	113	112	74-133	1	25	YES
Chlorodifluoromethane	10.00	11.05	11.14	111	111	70-138	1	25	YES
Freon 114	10.00	10.77	10.98	108	110	66-126	2	25	YES
Chloromethane	10.00	10.50	10.86	105	109	65-140	3	25	YES
Vinyl Chloride	10.00	10.90	11.49	109	115	75-130	5	25	YES
1,3-Butadiene	10.00	9.80	10.25	98	102	72-122	4	25	YES
Bromomethane	10.00	12.08	12.29	121	123	71-133	2	25	YES
Chloroethane	10.00	10.74	11.57	107	116	76-129	7	25	YES
Bromoethene	10.00	10.76	11.92	108	119	77-123	10	25	YES
Dichlorofluoromethane	10.00	11.67	11.75	117	117	75-137	1	25	YES
Trichlorofluoromethane	10.00	10.50	10.65	105	107	73-132	1	25	YES
Pentane	10.00	9.98	10.77	100	108	69-125	8	25	YES
Ethanol	10.00	9.54	9.87	95	99	56-149	3	25	YES
Acrolein	10.00	10.71	11.72	107	117	54-132	9	25	YES
1,1-Dichloroethene	10.00	10.48	11.30	105	113	70-129	8	25	YES
Freon 113	10.00	9.88	10.20	99	102	66-119	3	25	YES
Acetone	10.00	10.97	11.36	110	114	71-136	3	25	YES
Methyl Iodide	10.00	9.83	10.70	98	107	72-127	8	25	YES
Carbon Disulfide	10.00	11.30	11.38	113	114	72-128	1	25	YES
Isopropanol	10.00	10.76	11.54	108	115	69-160	7	25	YES
Acetonitrile	10.00	10.67	10.86	107	109	56-136	2	25	YES
3-Chloropropene	10.00	13.05	13.81	130	138	67-141	6	25	YES
Methylene Chloride	10.00	12.52	13.02	125	130*	69-128	4	25	NO
tert-Butyl Alcohol	10.00	11.54	12.31	115	123	71-154	6	25	YES
Acrylonitrile	10.00	10.41	11.45	104	114	68-135	9	25	YES
trans-1,2-Dichloroethene	10.00	10.47	11.28	105	113	77-128	7	25	YES
Methyl t-Butyl Ether	10.00	10.75	11.24	107	112	71-119	4	25	YES
Hexane	10.00	10.25	10.87	102	109	70-118	6	25	YES
1,1-Dichloroethane	10.00	10.98	11.13	110	111	74-129	1	25	YES
Vinyl Acetate	10.00	12.54	13.14	125	131	75-161	5	25	YES
Di-Isopropyl Ether	10.00	9.87	10.83	99	108	71-122	9	25	YES
Ethyl Tert-Butyl Ether	10.00	10.35	10.81	104	108	68-121	4	25	YES
cis-1,2-Dichloroethene	10.00	10.59	11.03	106	110	76-126	4	25	YES
2-Butanone	10.00	10.78	11.04	108	110	75-126	2	25	YES
Ethyl Acetate	10.00	10.40	10.80	104	108	73-124	4	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 LCS File ID: ff00232.d LCSD File ID: ff00233.d

Batch: F1816430AA LCS Injected: 06/14/2018 LCSD Injected: 06/14/2018

Method: EPA TO-15 LCS Client ID: LCSF10 LCSD Client ID: LCSDF10

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	10.00	10.85	11.33	108	113	75-125	4	25	YES
Tetrahydrofuran	10.00	11.34	11.70	113	117	67-127	3	25	YES
Chloroform	10.00	11.08	10.87	111	109	75-127	2	25	YES
1,1,1-Trichloroethane	10.00	10.53	10.51	105	105	74-122	0	25	YES
Cyclohexane	10.00	10.07	10.90	101	109	70-118	8	25	YES
Carbon Tetrachloride	10.00	10.67	10.67	107	107	72-127	0	25	YES
Benzene	10.00	10.93	10.62	109	106	76-123	3	25	YES
1,2-Dichloroethane	10.00	11.12	10.72	111	107	72-138	4	25	YES
Isooctane	10.00	10.80	10.90	108	109	74-127	1	25	YES
Tert-Amyl Methyl Ether	10.00	10.40	10.82	104	108	78-124	4	25	YES
Heptane	10.00	10.81	10.88	108	109	74-122	1	25	YES
Trichloroethene	10.00	10.73	10.46	107	105	76-118	3	25	YES
Ethyl Acrylate	10.00	9.90	10.23	99	102	71-126	3	25	YES
1,2-Dichloropropane	10.00	10.65	10.20	107	102	75-127	4	25	YES
Dibromomethane	10.00	10.88	10.74	109	107	76-124	1	25	YES
1,4-Dioxane	10.00	11.13	10.72	111	107	76-124	4	25	YES
Methyl Methacrylate	10.00	10.17	10.34	102	103	73-117	2	25	YES
Bromodichloromethane	10.00	10.80	10.39	108	104	75-134	4	25	YES
cis-1,3-Dichloropropene	10.00	10.57	10.44	106	104	51-120	1	25	YES
4-Methyl-2-Pentanone	10.00	10.52	10.58	105	106	79-131	1	25	YES
Toluene	10.00	10.35	10.49	103	105	78-119	1	25	YES
Octane	10.00	10.68	11.07	107	111	73-122	4	25	YES
trans-1,3-Dichloropropene	10.00	10.89	10.69	109	107	76-131	2	25	YES
Ethyl Methacrylate	10.00	10.08	10.29	101	103	69-137	2	25	YES
1,1,2-Trichloroethane	10.00	10.35	10.34	104	103	76-127	0	25	YES
Tetrachloroethene	10.00	10.38	10.22	104	102	68-123	2	25	YES
2-Hexanone	10.00	9.93	10.04	99	100	74-134	1	25	YES
Dibromochloromethane	10.00	10.57	10.25	106	103	74-131	3	25	YES
1,2-Dibromoethane	10.00	10.26	10.29	103	103	73-121	0	25	YES
Chlorobenzene	10.00	10.18	10.15	102	102	76-117	0	25	YES
1,1,1,2-Tetrachloroethane	10.00	9.99	9.88	100	99	73-137	1	25	YES
Ethylbenzene	10.00	10.31	10.40	103	104	77-117	1	25	YES
m/p-Xylene	10.00	10.16	10.34	102	103	78-119	2	25	YES
o-Xylene	10.00	9.98	10.13	100	101	78-121	2	25	YES
Xylene (total)	20.00	20.13	20.47	101	102	79-120	2	25	YES
Styrene	10.00	10.73	10.96	107	110	77-143	2	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 LCS File ID: ff00232.d LCSD File ID: ff00233.d

Batch: F1816430AA LCS Injected: 06/14/2018 LCSD Injected: 06/14/2018

Method: EPA TO-15 LCS Client ID: LCSF10 LCSD Client ID: LCSDF10

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	10.20	9.93	102	99	58-144	3	25	YES
Cumene	10.00	10.49	10.67	105	107	80-133	2	25	YES
Bromobenzene	10.00	10.44	10.28	104	103	74-118	2	25	YES
1,1,2,2-Tetrachloroethane	10.00	9.68	9.39	97	94	72-133	3	25	YES
1,2,3-Trichloropropane	10.00	9.85	9.41	99	94	71-127	5	25	YES
n-Propylbenzene	10.00	10.23	10.05	102	101	73-120	2	25	YES
2-Chlorotoluene	10.00	10.48	10.41	105	104	74-123	1	25	YES
4-Ethyltoluene	10.00	10.34	10.32	103	103	73-130	0	25	YES
1,3,5-Trimethylbenzene	10.00	10.51	10.47	105	105	72-130	0	25	YES
Alpha Methyl Styrene	10.00	10.10	10.24	101	102	71-138	1	25	YES
tert-Butylbenzene	10.00	10.73	10.43	107	104	78-138	3	25	YES
1,2,4-Trimethylbenzene	10.00	10.25	10.05	103	101	70-138	2	25	YES
sec-Butylbenzene	10.00	10.20	10.10	102	101	79-139	1	25	YES
1,3-Dichlorobenzene	10.00	9.30	9.14	93	91	75-129	2	25	YES
1,4-Dichlorobenzene	10.00	9.18	9.12	92	91	74-123	1	25	YES
p-Isopropyltoluene	10.00	9.97	10.01	100	100	75-145	0	25	YES
Benzyl Chloride	10.00	9.83	9.72	98	97	49-163	1	25	YES
1,2-Dichlorobenzene	10.00	9.23	9.02	92	90	71-126	2	25	YES
n-Butylbenzene	10.00	9.51	9.50	95	95	72-143	0	25	YES
Hexachloroethane	10.00	9.77	9.47	98	95	59-135	3	25	YES
1,2-Dibromo-3-chloropropane	10.00	8.44	8.51	84	85	52-156	1	25	YES
1,2,4-Trichlorobenzene	10.00	7.28	7.34	73	73	45-156	1	25	YES
Hexachlorobutadiene	10.00	7.39	7.18	74	72	49-154	3	25	YES
Naphthalene	10.00	7.57	7.74	76	77	39-152	2	25	YES

COMMENTS:

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Data File: /chem/HP26379.i/18jun13.b/ff00221.d

Date : 13-JUN-2018 18:44

Client ID: BFB

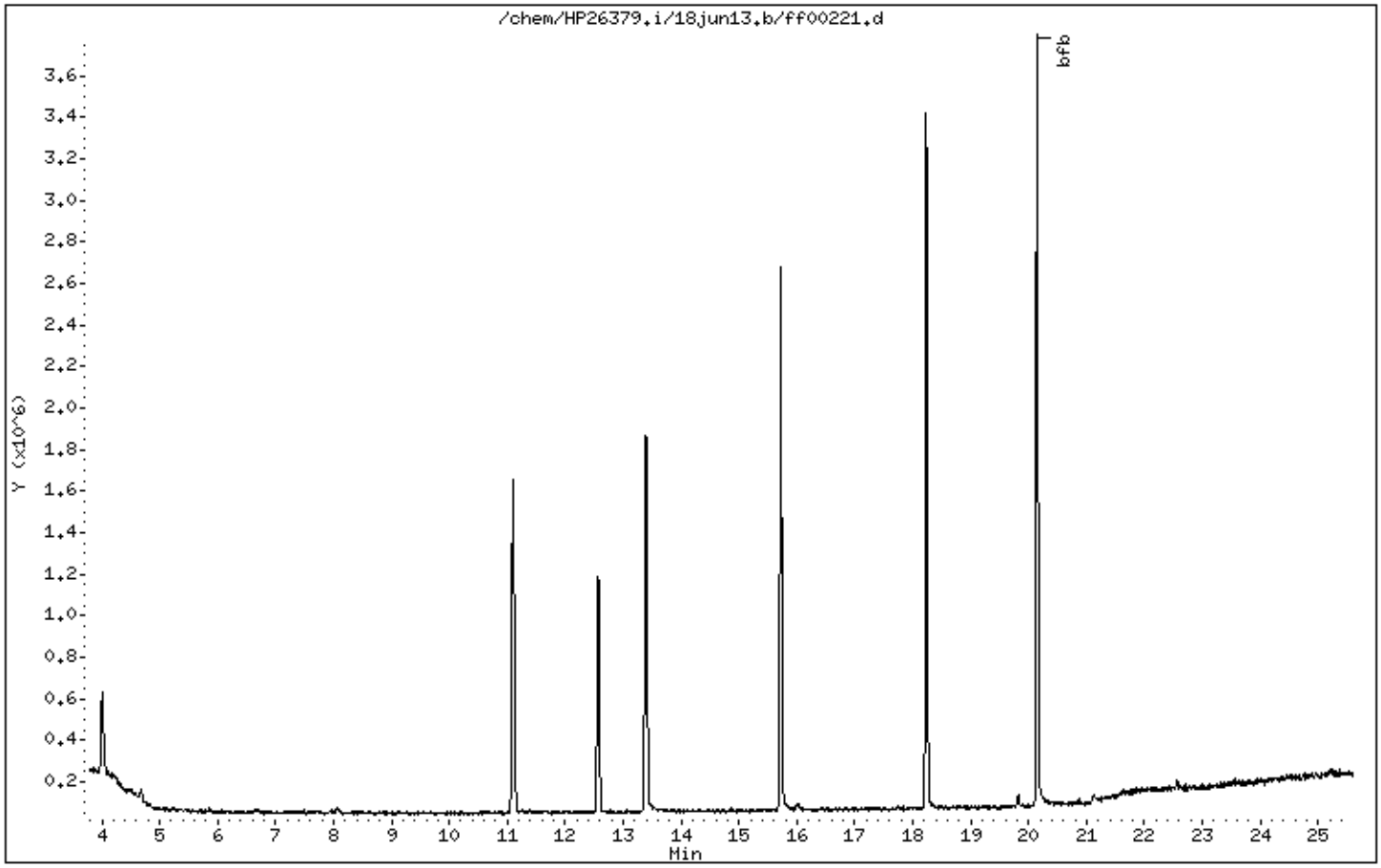
Instrument: HP26379.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25



Digitally signed by Jacob E. Bailey on 06/14/2018 at 15:09.
Target 3.5 esignature user ID: jeb07445

Data File: /chem/HP26379.i/18jun13.b/ff00221.d

Date : 13-JUN-2018 18:44

Client ID: BFB

Instrument: HP26379.i

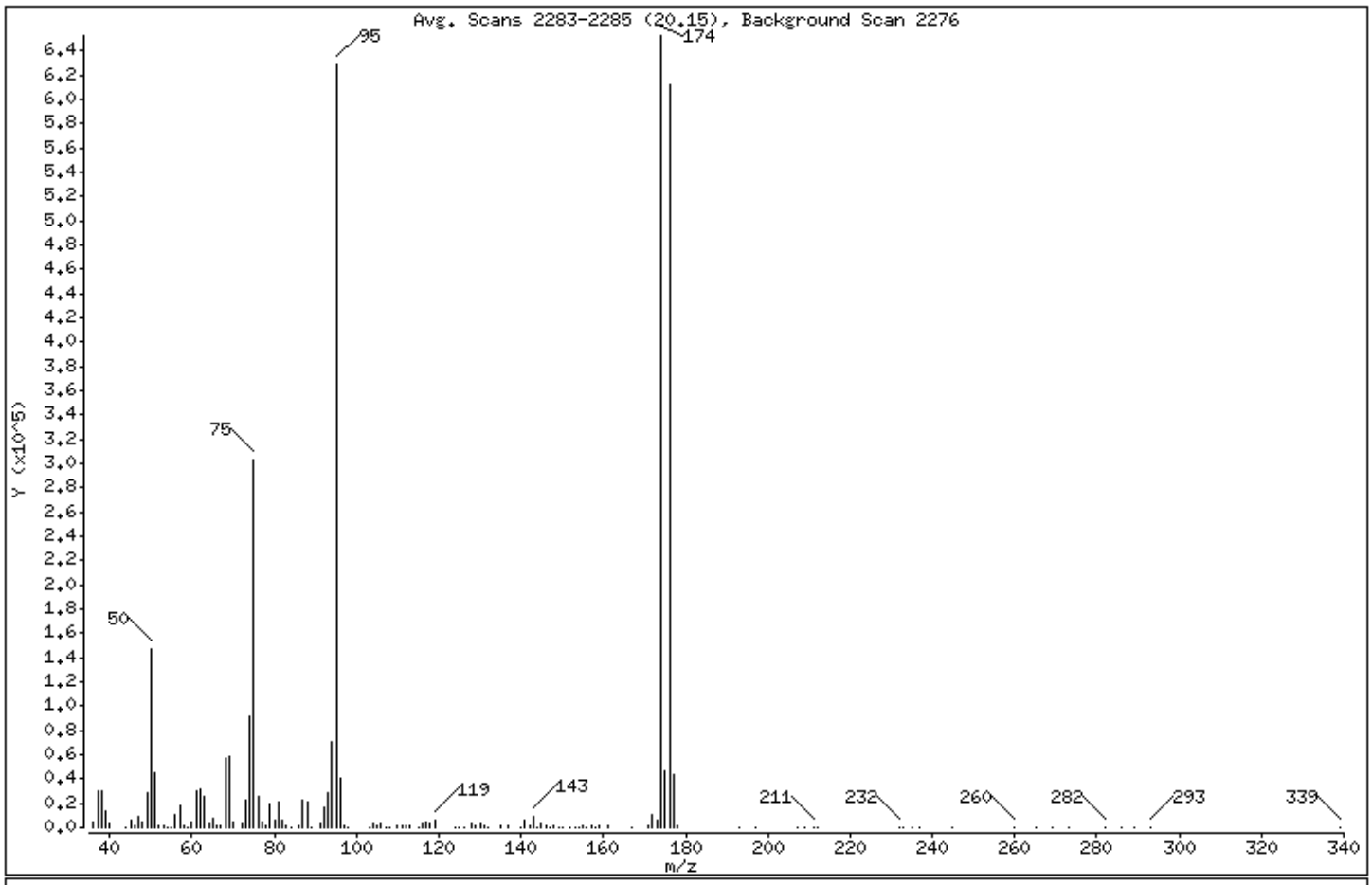
Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	23.32
75	30.00 - 66.00% of mass 95	48.30
96	5.00 - 9.00% of mass 95	6.51
173	Less than 2.00% of mass 174	0.87 (0.83)
174	50.00 - 120.00% of mass 95	103.85
175	4.00 - 9.00% of mass 174	7.38 (7.10)
176	93.00 - 101.00% of mass 174	97.35 (93.74)
177	5.00 - 9.00% of mass 176	6.83 (7.01)

Digitally signed by Jacob E. Bailey on 06/14/2018 at 15:09.
Target 3.5 esignature user ID: jeb07445

Date : 13-JUN-2018 18:44

Client ID: BFB Instrument: HP26379.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624 Column diameter: 0.25

Data File: ff00221.d
Spectrum: Avg. Scans 2283-2285 (20,15), Background Scan 2276
Location of Maximum: 174.00
Number of points: 131

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4636	73.00	22984	113.00	1178	158.00	652
37.00	29672	74.00	91200	115.00	718	159.00	781
38.00	29480	75.00	303424	116.00	2254	161.00	761
39.00	14113	76.00	24808	117.00	4374	167.00	100
40.00	2785	77.00	4208	118.00	2417	171.00	1151
44.00	160	78.00	1367	119.00	5352	172.00	10474
45.00	6474	79.00	20024	124.00	237	173.00	5435
46.00	1630	80.00	6325	125.00	406	174.00	652352
47.00	9142	81.00	21104	126.00	173	175.00	46336
48.00	4495	82.00	5655	128.00	2438	176.00	611520
49.00	27824	83.00	1120	129.00	1204	177.00	42872
50.00	146496	84.00	315	130.00	3075	178.00	1060
51.00	45112	86.00	1206	131.00	1031	193.00	218
52.00	1964	87.00	23096	132.00	420	197.00	252
53.00	1727	88.00	21376	135.00	1078	207.00	371
54.00	143	89.00	599	137.00	1822	209.00	186
55.00	709	91.00	3078	140.00	499	211.00	634
56.00	9755	92.00	17056	141.00	6462	212.00	321
57.00	17312	93.00	28112	142.00	1245	232.00	620
58.00	864	94.00	69968	143.00	8551	233.00	328
59.00	509	95.00	628160	144.00	560	235.00	109
60.00	4631	96.00	40872	145.00	2973	237.00	316
61.00	29520	97.00	1834	146.00	1611	245.00	132
62.00	31264	98.00	325	147.00	367	260.00	675
63.00	25352	103.00	150	148.00	1768	265.00	116
64.00	2541	104.00	2633	149.00	262	269.00	178
65.00	7205	105.00	1249	150.00	734	273.00	128
66.00	1212	106.00	3307	152.00	259	282.00	420
67.00	1793	107.00	620	153.00	699	286.00	304
68.00	57520	108.00	261	154.00	715	289.00	136
69.00	58880	110.00	796	155.00	1786	293.00	225
70.00	4099	111.00	837	156.00	543	339.00	358
72.00	3110	112.00	1011	157.00	1356		

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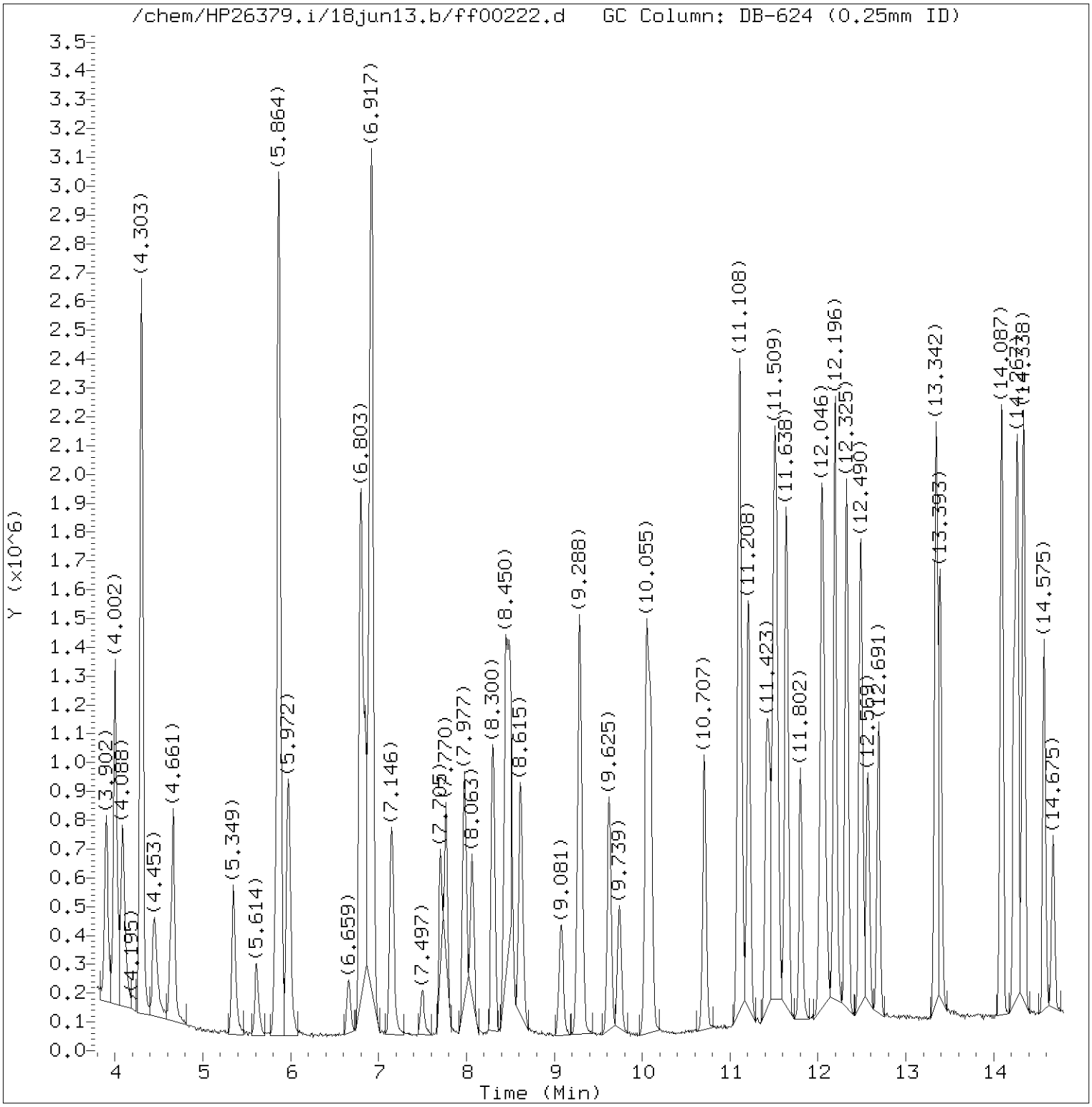
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00222.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 19:33 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

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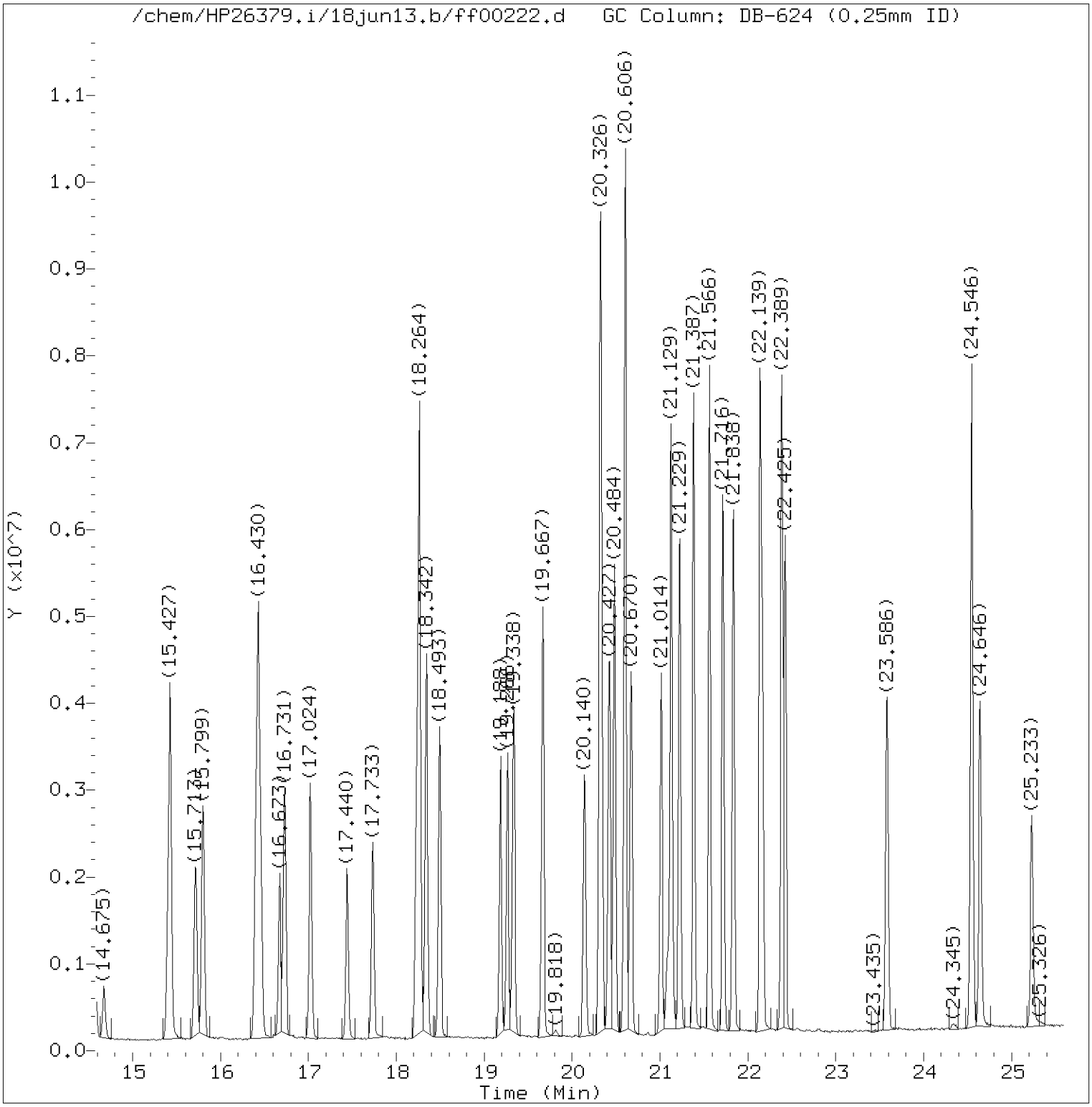
on 06/14/2018 at 15:09.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00222.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 19:33 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:09.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00222.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 19:33 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	569140	10.100
2) Dichlorodifluoromethane	(1)	4.002	85	1853351	10.863
3) Chlorodifluoromethane	(1)	4.088	51	1376702	10.225
4) Freon 114	(1)	4.303	85	1885425	10.524
5) Chloromethane	(1)	4.453	50	721118	12.083
6) Vinyl Chloride	(1)	4.632	62	403964	10.907
7) 1,3-Butadiene	(1)	4.661	54	323947	10.284
8) Bromomethane	(1)	5.349	94	582342	11.193
9) Chloroethane	(1)	5.606	64	345702	10.533
10) Bromoethene	(1)	5.828	106	512832	10.454
11) Pentane	(1)	5.864	43	1136173	10.064
12) Trichlorofluoromethane	(1)	5.871	101	1968560	10.199
13) Dichlorofluoromethane	(1)	5.972	67	1513074	11.120
14) Ethanol	(1)	6.659	45	232656	9.021
15) Freon123a	(1)	6.795	67	1442858	11.063
16) 1,1-Dichloroethene	(1)	6.846	61	936320	10.166
17) Freon 113	(1)	6.917	103	1075457	9.698
18) Carbon Disulfide	(1)	6.932	76	1677442	11.128
19) Methyl Iodide	(1)	7.146	142	1418478	9.574
20) Acrolein	(1)	7.505	56	207089	10.548
21) Isopropanol	(1)	7.705	45	1009622	9.968
22) 3-Chloropropene	(1)	7.770	41	970845	11.780
23) Methylene Chloride	(1)	7.977	84	640154	12.390
24) Acetone	(1)	8.063	43	1214138	10.749
25) trans-1,2-Dichloroethene	(1)	8.300	61	923122	10.362
26) Hexane	(1)	8.450	56	707921	9.929
27) Methyl t-Butyl Ether	(1)	8.500	73	1479769	10.187
28) tert-Butyl Alcohol	(1)	8.615	59	1343201	11.154
29) Acetonitrile	(1)	9.081	41	746509	10.926
30) Di-Isopropyl Ether	(1)	9.288	45	1878415	9.494
31) 1,1-Dichloroethane	(1)	9.625	63	1299727	10.495
32) Acrylonitrile	(1)	9.739	53	572464	10.491
33) Ethyl Tert-Butyl Ether	(1)	10.055	59	1624061	9.927
34) Vinyl Acetate	(1)	10.098	43	2110868	12.760
35) cis-1,2-Dichloroethene	(1)	10.707	61	832034	10.461
36) 1,2-Dichloroethene (total)	(1)		61	1755156	20.822
37)*Bromochloromethane	(1)	11.100	130	581988	10.000
38) Cyclohexane	(1)	11.115	56	875042	9.373

* = 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/HP26379.i/18jun13.b/ff00222.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 19:33 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.208	83	1586267	10.678
40) Ethyl Acetate	(1)	11.416	43	1625609	10.192
41) Methyl Acrylate	(1)	11.451	55	1139927	10.419
42) Carbon Tetrachloride	(1)	11.509	117	1765235	10.160
43) Tetrahydrofuran	(1)	11.545	42	795480	10.731
44) 1,1,1-Trichloroethane	(1)	11.638	97	1686698	10.149
45) 2-Butanone	(1)	11.802	43	1543938	10.472
46) Isooctane	(2)	12.046	57	2888548	10.868
47) Heptane	(2)	12.204	71	532366M	10.583
48) Benzene	(2)	12.325	78	2053283	10.877
49) Tert-Amyl Methyl Ether	(2)	12.490	73	1360385	10.573
50) 1,2-Dichloroethane	(2)	12.691	62	1107985	10.899
51) Trichloroethene	(2)	13.342	130	943030	10.551
52)*1,4-Difluorobenzene	(2)	13.393	114	1552121	10.000
53) Dibromomethane	(2)	14.095	174	1198245	10.918
54) Ethyl Acrylate	(2)	14.231	55	1308382	10.120
55) 1,2-Dichloropropane	(2)	14.267	63	901262	10.872
56) Bromodichloromethane	(2)	14.338	83	1703580	11.000
57) Methyl Methacrylate	(2)	14.575	69	514563	10.351
58) 1,4-Dioxane	(2)	14.675	88	416760	10.910
59) cis-1,3-Dichloropropene	(2)	15.405	75	1063246	10.550
60) Octane	(3)	15.427	43	1825694	11.487
61) Toluene	(3)	15.799	91	2348725	10.267
62) 4-Methyl-2-Pentanone	(2)	16.401	43	1932444	10.863
63) Tetrachloroethene	(3)	16.430	166	1849380	10.503
64) trans-1,3-Dichloropropene	(3)	16.458	75	1093031	10.823
65) 1,3-Dichloropropene (total)	(3)		75	2156277	21.015
66) Ethyl Methacrylate	(3)	16.673	69	942149	10.300
67) 1,1,2-Trichloroethane	(3)	16.731	97	1131124	10.503
68) Dibromochloromethane	(3)	17.024	127	1468314	10.528
69) 1,2-Dibromoethane	(3)	17.440	107	1584357	10.443
70) 2-Hexanone	(3)	17.733	43	1842757	10.636
71)*Chlorobenzene-d5	(3)	18.228	117	1695833	10.000
72) Chlorobenzene	(3)	18.256	112	2396360	10.428
73) Ethylbenzene	(3)	18.271	91	3354577	10.705
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	1538758	10.263
75) m/p-Xylene	(3)	18.493	91	2300813	10.607
76) o-Xylene	(3)	19.188	91	2192431	10.528

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

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on 06/14/2018 at 15:09.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00222.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 19:33 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	4493244	21.136
78) Styrene	(3)	19.266	104	1857717	11.137
79) Bromoform	(3)	19.338	173	2196994	10.427
80) Cumene	(3)	19.667	105	3488282	11.275
81) n-Propylbenzene	(3)	20.319	120	1100555	11.060
82) Bromobenzene	(3)	20.334	156	1815187	11.041
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	2514514	10.352
84) 4-Ethyltoluene	(3)	20.484	105	3830274	11.726
85) 2-Chlorotoluene	(3)	20.599	126	1158975	11.382
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	3607334	11.917
87) 1,2,3-Trichloropropane	(3)	20.677	110	842017	10.487
88) Alpha Methyl Styrene	(3)	21.014	118	1454150	11.415
89) tert-Butylbenzene	(3)	21.129	119	3629045	12.611
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	3420479	11.833
91) sec-Butylbenzene	(3)	21.387	105	5041992	11.730
92) p-Isopropyltoluene	(3)	21.566	119	4143950	11.985
93) 1,3-Dichlorobenzene	(3)	21.716	146	2860136	10.296
94) 1,4-Dichlorobenzene	(3)	21.838	146	2795898	10.435
95) n-Butylbenzene	(3)	22.139	92	2364050	11.763
96) Benzyl Chloride	(3)	22.167	126	739999	10.984
97) Hexachloroethane	(3)	22.389	117	1448087	10.428
98) 1,2-Dichlorobenzene	(3)	22.425	146	2627496	10.543
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	1283209	10.105
100) Hexachlorobutadiene	(3)	24.546	225	2135630	9.348
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	1723183	9.652
102) Naphthalene	(3)	25.233	128	2640797	10.109

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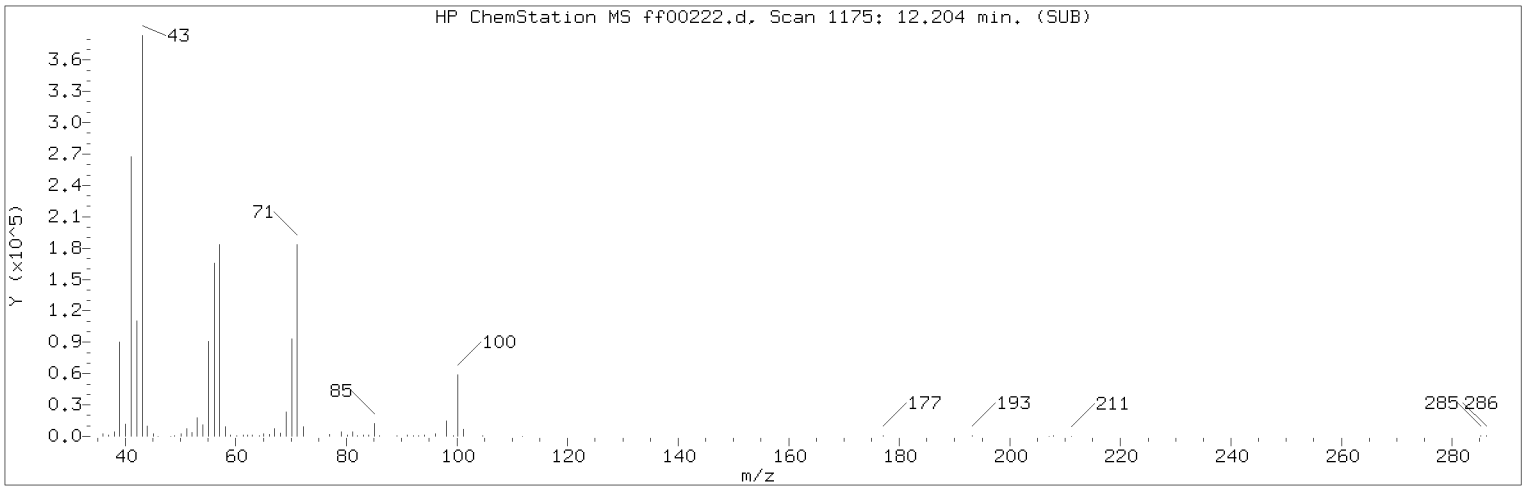
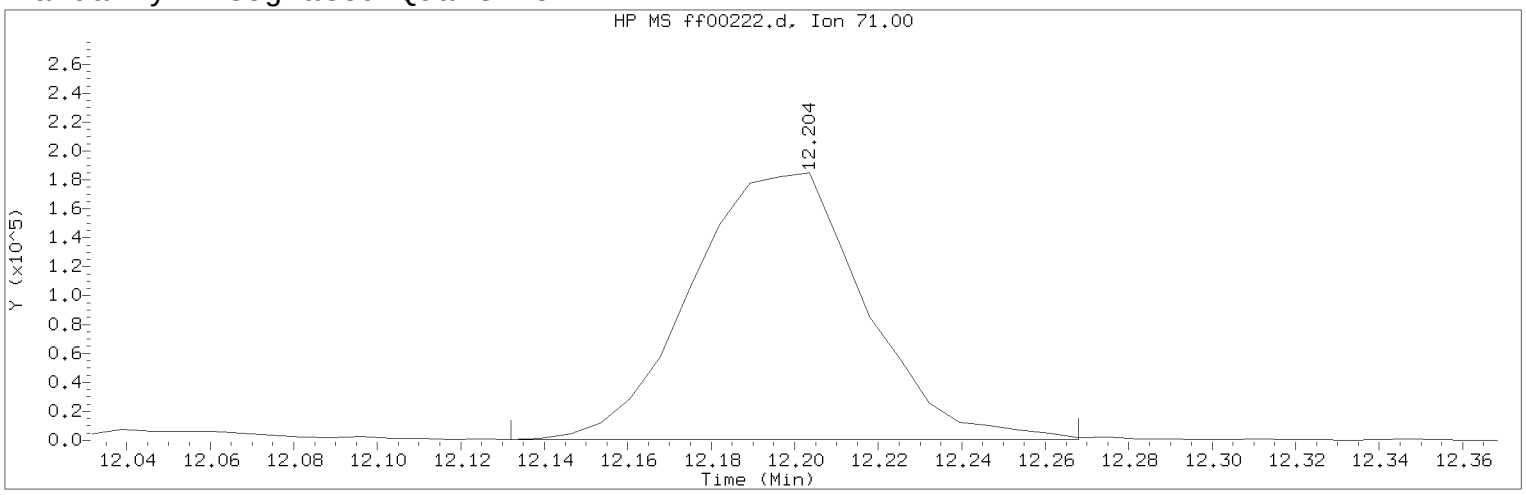
on 06/14/2018 at 15:09.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18jun13.b/ff00222.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 19:33 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

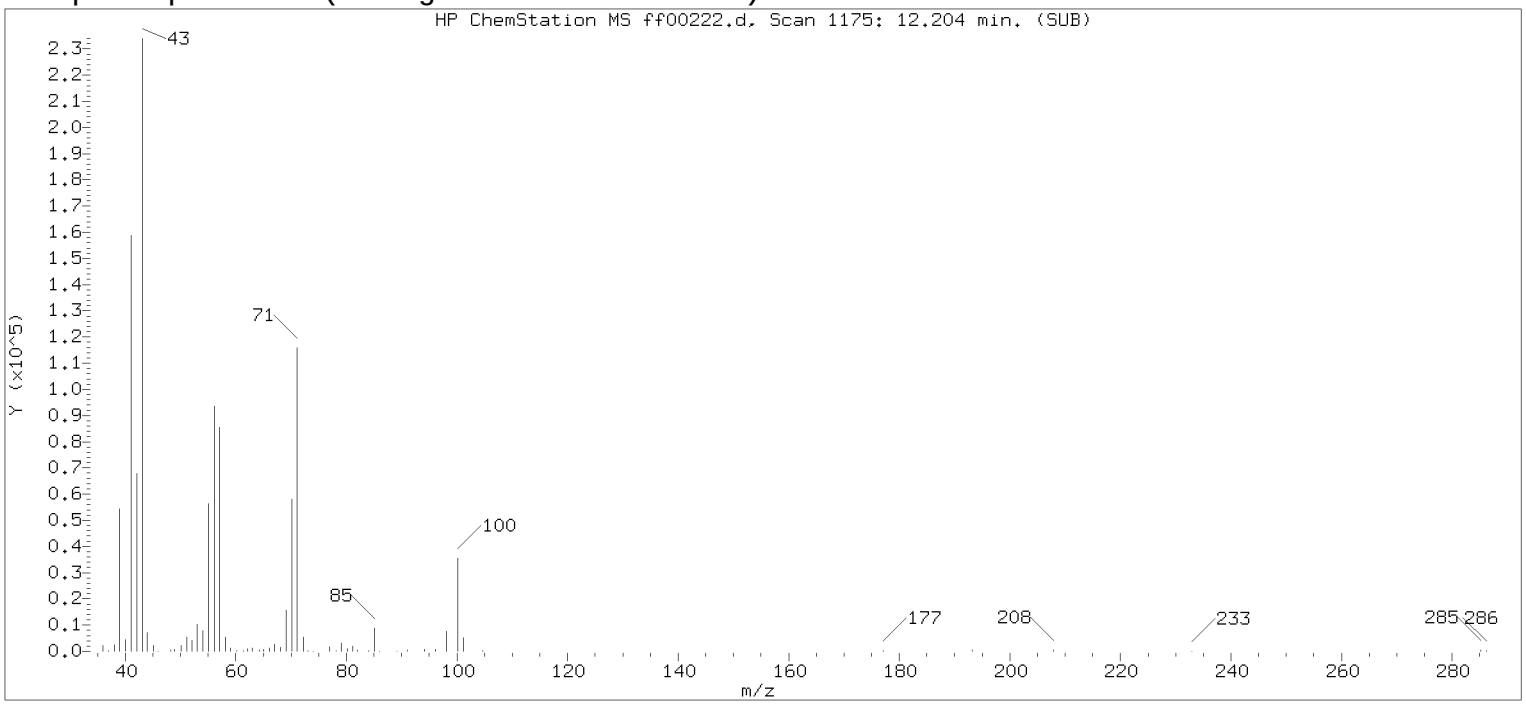
Compound Number : 47
Compound Name : Heptane
Scan Number : 1175
Retention Time (minutes): 12.204
Quant Ion : 71.00
Area (flag) : 532366M
Concentration (ppb(v)) : 10.5825
Integration start scan : 1164 Integration stop scan: 1183
Y at integration start : 387 Y at integration end: 387

Reason for manual integration: improper integration

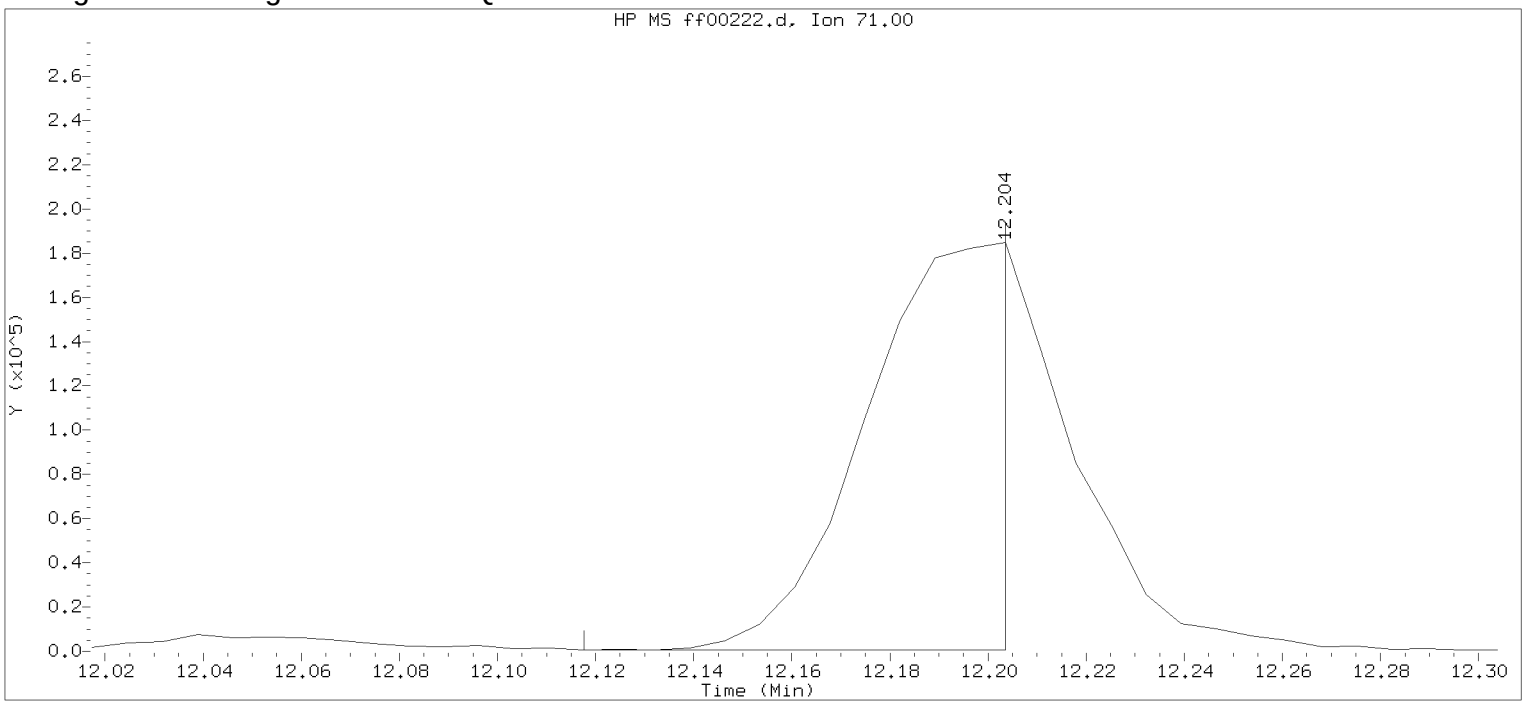
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:09.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 09:14.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



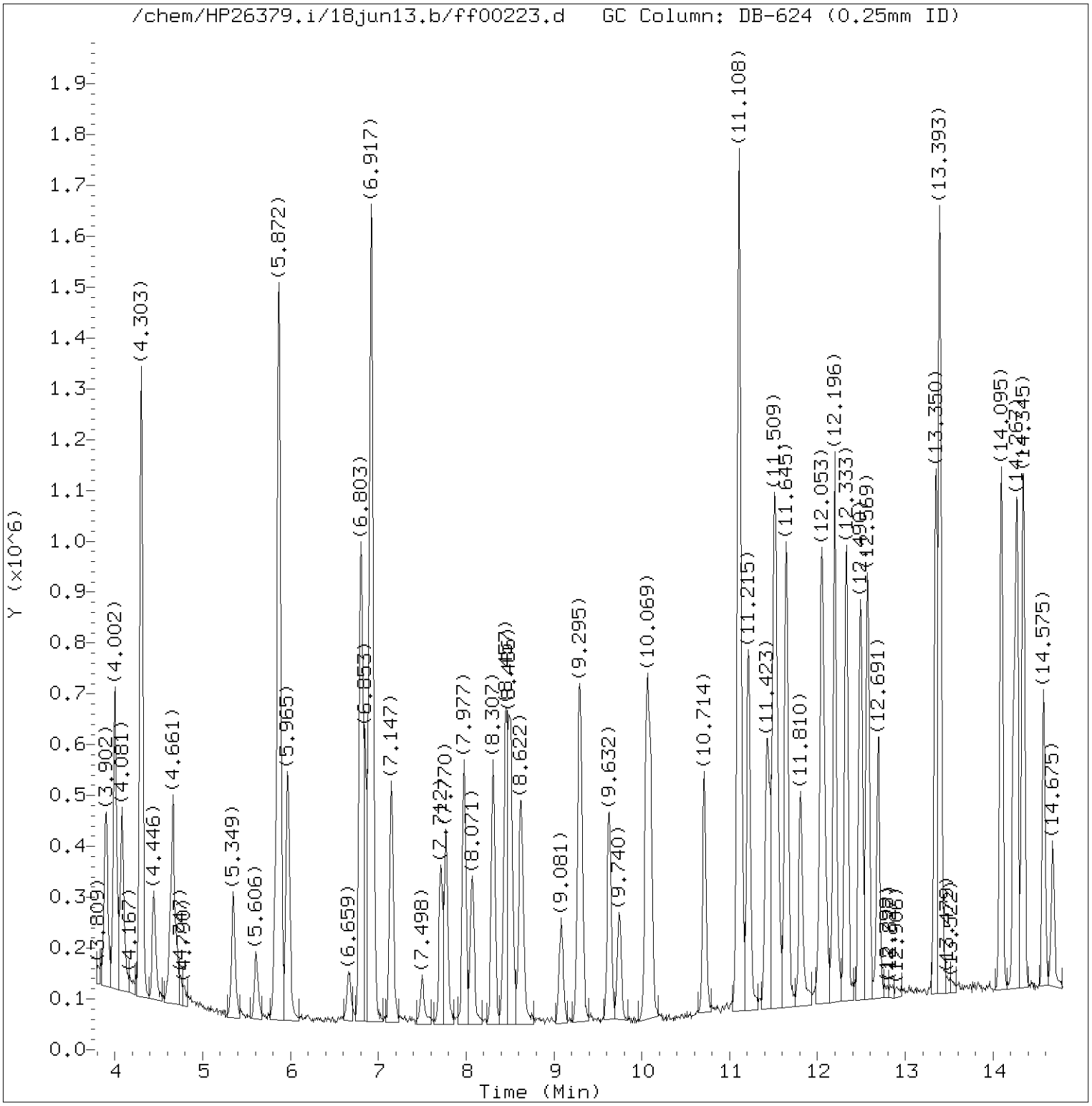
Data File: /chem/HP26379.i/18jun13.b/ff00222.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 19:33 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 13-JUN-2018 14:32
Date, time and analyst ID of latest file update: 13-Jun-2018 20:01 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 47
Compound Name : Heptane
Scan Number : 1175
Retention Time (minutes): 12.204
Quant Ion : 71.00
Area : 347198
Concentration (ppb(v)) : 6.2125
Integration start scan : 1162 Integration stop scan: 1174
Y at integration start : 534 Y at integration end: 534

Digitally signed by Jacob E. Bailey on 06/14/2018 at 15:09.
Target 3.5 esignature used for this page



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00223.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 20:04 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

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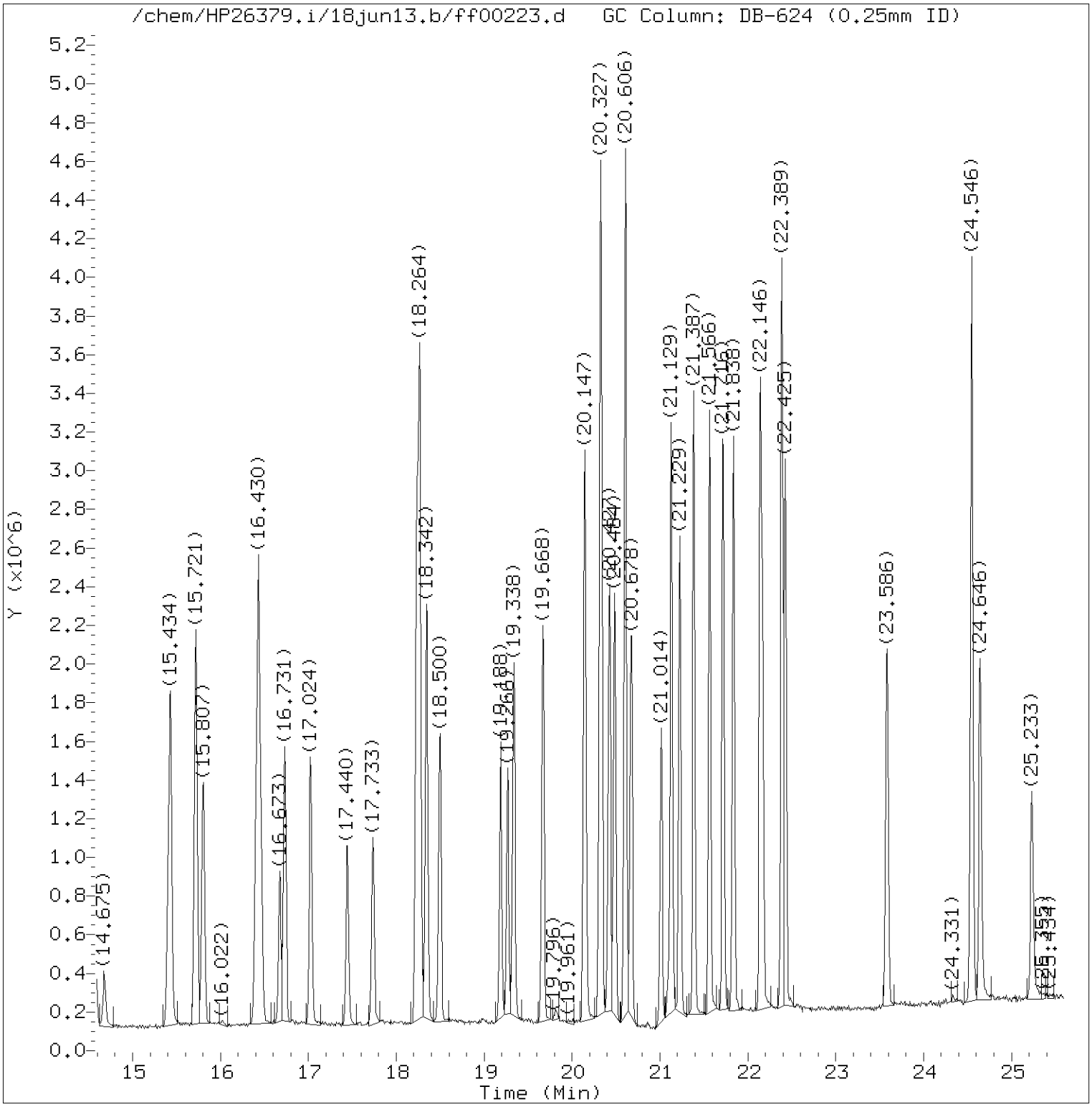
on 06/14/2018 at 15:09.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00223.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 20:04 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

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on 06/14/2018 at 15:09.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00223.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 20:04 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.895	41	298343	5.300
2) Dichlorodifluoromethane	(1)	4.002	85	917690	5.385
3) Chlorodifluoromethane	(1)	4.081	51	684868	5.092
4) Freon 114	(1)	4.303	85	909520	5.082
5) Chloromethane	(1)	4.446	50	364908	6.121
6) Vinyl Chloride	(1)	4.632	62	195233	5.277
7) 1,3-Butadiene	(1)	4.668	54	151335	4.810
8) Bromomethane	(1)	5.341	94	267229	5.142
9) Chloroethane	(1)	5.606	64	178609	5.448
10) Bromoethene	(1)	5.829	106	250742	5.117
11) Pentane	(1)	5.864	43	551036	4.886
12) Trichlorofluoromethane	(1)	5.872	101	955690	4.957
13) Dichlorofluoromethane	(1)	5.965	67	737967	5.429
14) Ethanol	(1)	6.659	45	127154	4.936
15) Freon123a	(1)	6.803	67	716280	5.498
16) 1,1-Dichloroethene	(1)	6.853	61	456763	4.965
17) Freon 113	(1)	6.910	103	554801	5.008
18) Carbon Disulfide	(1)	6.932	76	800908	5.319
19) Methyl Iodide	(1)	7.147	142	828901	5.601
20) Acrolein	(1)	7.498	56	103960	5.301
21) Isopropanol	(1)	7.712	45	489293	4.836
22) 3-Chloropropene	(1)	7.770	41	453859	5.513
23) Methylene Chloride	(1)	7.970	84	304836	5.906
24) Acetone	(1)	8.071	43	569870	5.051
25) trans-1,2-Dichloroethene	(1)	8.307	61	457076	5.136
26) Hexane	(1)	8.450	56	348858	4.898
27) Methyl t-Butyl Ether	(1)	8.508	73	691224	4.763
28) tert-Butyl Alcohol	(1)	8.629	59	656217	5.455
29) Acetonitrile	(1)	9.081	41	372282	5.455
30) Di-Isopropyl Ether	(1)	9.295	45	916859	4.639
31) 1,1-Dichloroethane	(1)	9.632	63	640204	5.175
32) Acrylonitrile	(1)	9.740	53	273785	5.023
33) Ethyl Tert-Butyl Ether	(1)	10.069	59	758368	4.640
34) Vinyl Acetate	(1)	10.105	43	929634	5.626
35) cis-1,2-Dichloroethene	(1)	10.714	61	394784	4.969
36) 1,2-Dichloroethene (total)	(1)		61	851860	10.105
37)*Bromochloromethane	(1)	11.101	130	581358	10.000
38) Cyclohexane	(1)	11.122	56	425146	4.559

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:09.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00223.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 20:04 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	773887	5.215
40) Ethyl Acetate	(1)	11.423	43	799068	5.016
41) Methyl Acrylate	(1)	11.459	55	525146	4.805
42) Carbon Tetrachloride	(1)	11.509	117	874728	5.040
43) Tetrahydrofuran	(1)	11.545	42	353869	4.779
44) 1,1,1-Trichloroethane	(1)	11.645	97	838894	5.053
45) 2-Butanone	(1)	11.810	43	743749	5.050
46) Isooctane	(2)	12.053	57	1312784	4.912
47) Heptane	(2)	12.196	71	246260	4.868
48) Benzene	(2)	12.333	78	985806	5.194
49) Tert-Amyl Methyl Ether	(2)	12.497	73	623044	4.816
50) 1,2-Dichloroethane	(2)	12.691	62	549872	5.379
51) Trichloroethene	(2)	13.343	130	472323	5.255
52)*1,4-Difluorobenzene	(2)	13.393	114	1560683	10.000
53) Dibromomethane	(2)	14.095	174	592857	5.372
54) Ethyl Acrylate	(2)	14.231	55	614514	4.727
55) 1,2-Dichloropropane	(2)	14.267	63	428521	5.141
56) Bromodichloromethane	(2)	14.338	83	818251	5.254
57) Methyl Methacrylate	(2)	14.575	69	229532	4.592
58) 1,4-Dioxane	(2)	14.675	88	183200	4.769
59) cis-1,3-Dichloropropene	(2)	15.406	75	498426	4.919
60) Octane	(3)	15.434	43	787904	5.058
61) Toluene	(3)	15.807	91	1121033	5.000
62) 4-Methyl-2-Pentanone	(2)	16.401	43	886792	4.958
63) Tetrachloroethene	(3)	16.430	166	885374	5.130
64) trans-1,3-Dichloropropene	(3)	16.466	75	506897	5.121
65) 1,3-Dichloropropene (total)	(3)		75	1005323	9.997
66) Ethyl Methacrylate	(3)	16.673	69	412008	4.596
67) 1,1,2-Trichloroethane	(3)	16.731	97	536908	5.086
68) Dibromochloromethane	(3)	17.024	127	693978	5.077
69) 1,2-Dibromoethane	(3)	17.440	107	756431	5.087
70) 2-Hexanone	(3)	17.733	43	830768	4.892
71)*Chlorobenzene-d5	(3)	18.235	117	1662146	10.000
72) Chlorobenzene	(3)	18.264	112	1165031	5.173
73) Ethylbenzene	(3)	18.271	91	1513108	4.927
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	765849	5.212
75) m/p-Xylene	(3)	18.500	91	1042704	4.904
76) o-Xylene	(3)	19.188	91	972956	4.767

* = 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/HP26379.i/18jun13.b/ff00223.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 20:04 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	2015660	9.674
78) Styrene	(3)	19.266	104	781670	4.781
79) Bromoform	(3)	19.338	173	1049354	5.081
80) Cumene	(3)	19.668	105	1495414	4.931
81) n-Propylbenzene	(3)	20.319	120	491051	5.035
82) Bromobenzene	(3)	20.334	156	858862	5.330
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	1262345	5.302
84) 4-Ethyltoluene	(3)	20.484	105	1629153	5.089
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	1587742	5.351
85) 2-Chlorotoluene	(3)	20.606	126	524638	5.257
87) 1,2,3-Trichloropropane	(3)	20.678	110	411026	5.223
88) Alpha Methyl Styrene	(3)	21.014	118	566564	4.537
89) tert-Butylbenzene	(3)	21.129	119	1525879	5.410
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	1515907	5.351
91) sec-Butylbenzene	(3)	21.387	105	2239571	5.316
92) p-Isopropyltoluene	(3)	21.566	119	1749899	5.164
93) 1,3-Dichlorobenzene	(3)	21.723	146	1423030	5.227
94) 1,4-Dichlorobenzene	(3)	21.838	146	1351667	5.147
95) n-Butylbenzene	(3)	22.139	92	1024533	5.201
96) Benzyl Chloride	(3)	22.167	126	326536	4.945
97) Hexachloroethane	(3)	22.389	117	702592	5.162
98) 1,2-Dichlorobenzene	(3)	22.425	146	1296724	5.309
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	603039	4.845
100) Hexachlorobutadiene	(3)	24.546	225	1109980	4.957
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	845554	4.832
102) Naphthalene	(3)	25.233	128	1227835	4.795

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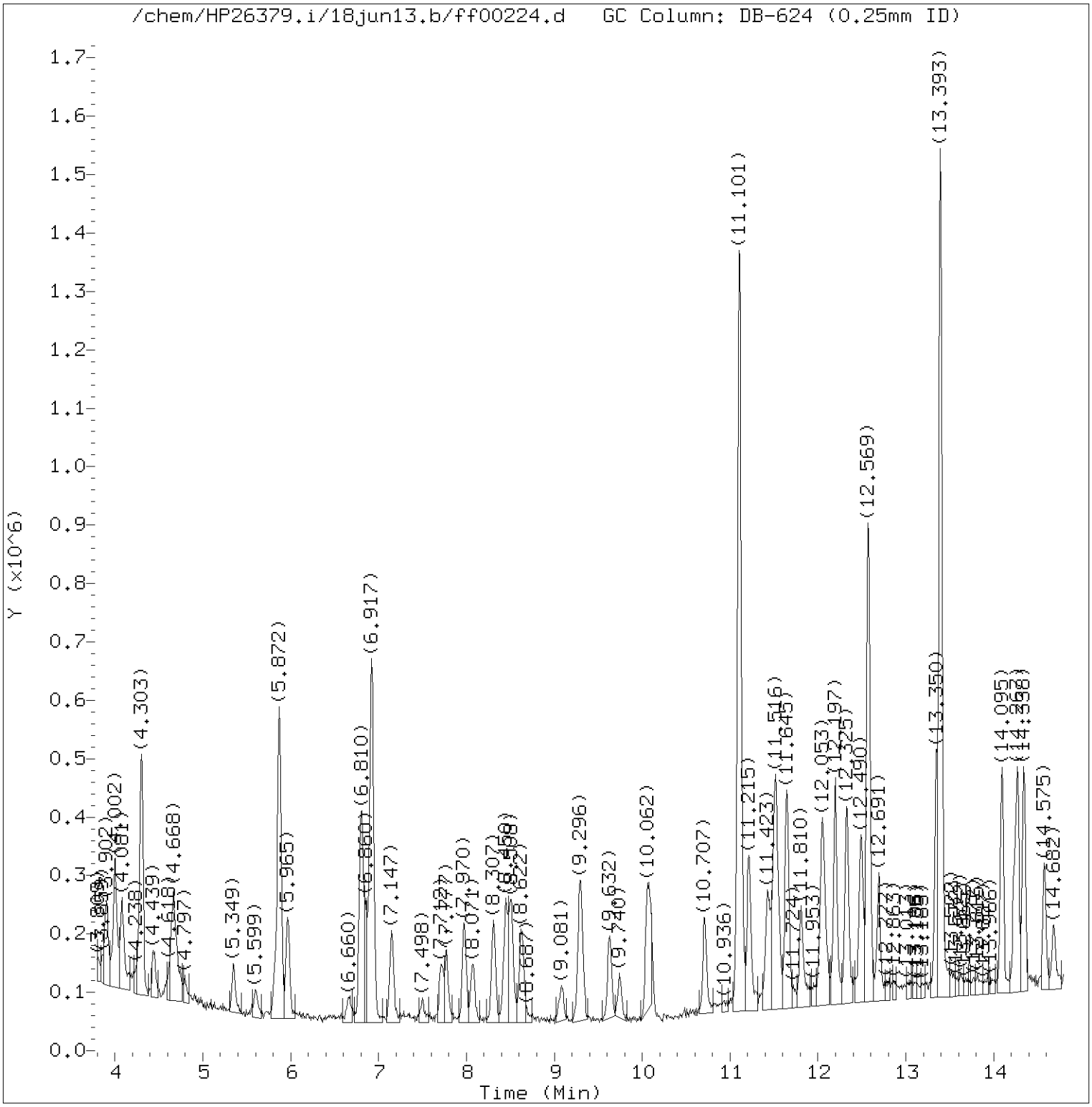
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00224.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 20:34 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

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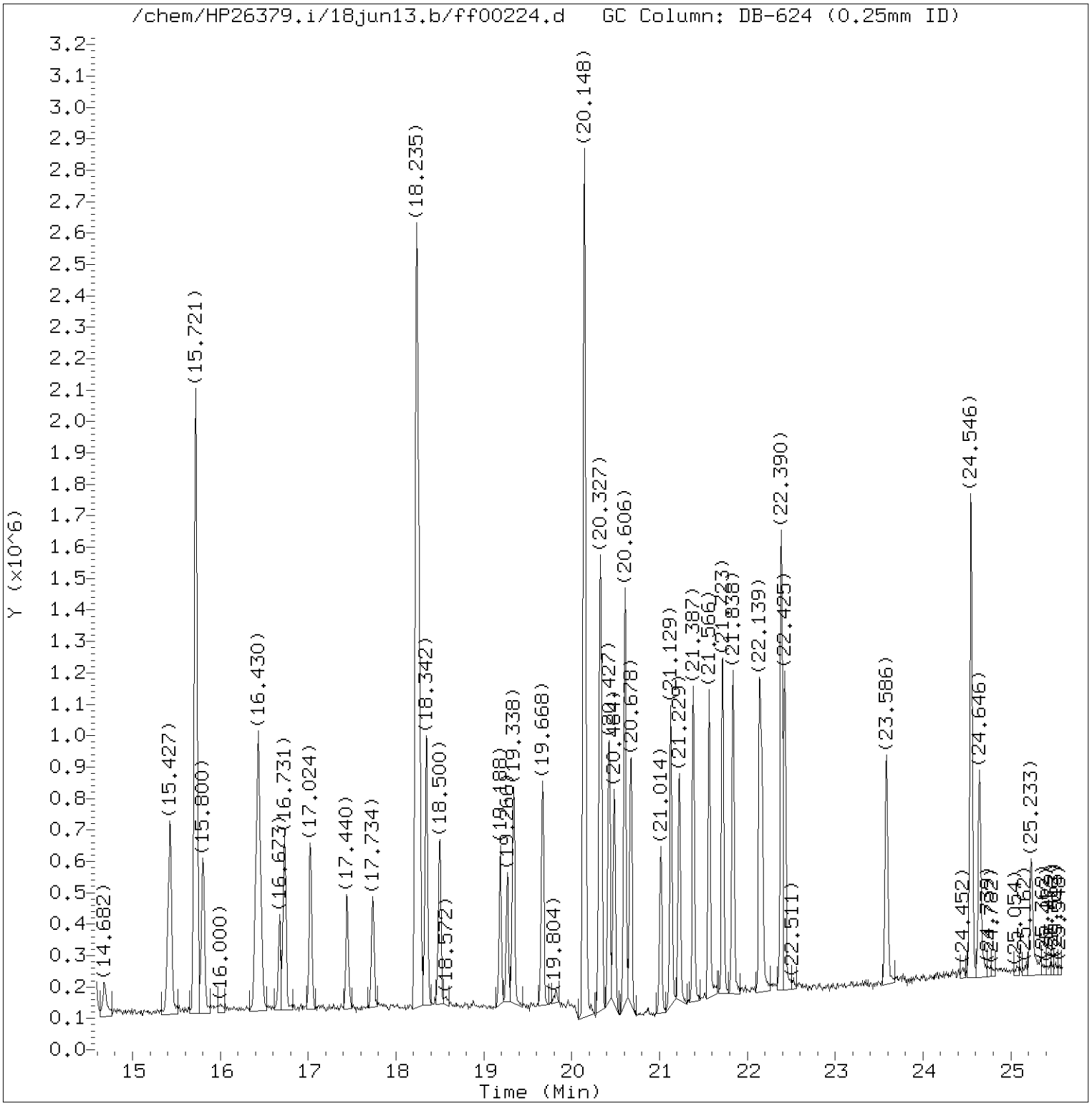
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00224.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 20:34 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

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Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00224.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 20:34 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	105840	1.918
2) Dichlorodifluoromethane	(1)	3.995	85	318826	1.908
3) Chlorodifluoromethane	(1)	4.081	51	260026	1.972
4) Freon 114	(1)	4.303	85	337228	1.922
5) Chloromethane	(1)	4.439	50	128404	2.197
6) Vinyl Chloride	(1)	4.632	62	71217	1.963
7) 1,3-Butadiene	(1)	4.661	54	63979	2.074
8) Bromomethane	(1)	5.349	94	91317	1.792
9) Chloroethane	(1)	5.607	64	60194	1.872
10) Bromoethene	(1)	5.829	106	82833	1.724
11) Pentane	(1)	5.872	43	192213	1.738
12) Trichlorofluoromethane	(1)	5.879	101	381977	2.020
13) Dichlorofluoromethane	(1)	5.965	67	251411	1.886
14) Ethanol	(1)	6.667	45	47745	1.890
15) Freon123a	(1)	6.810	67	285295	2.233
16) 1,1-Dichloroethene	(1)	6.853	61	160788	1.782
17) Freon 113	(1)	6.910	103	233447	2.149
18) Carbon Disulfide	(1)	6.932	76	255711	1.732
19) Methyl Iodide	(1)	7.147	142	271977	1.874
20) Acrolein	(1)	7.498	56	34501	1.794
21) Isopropanol	(1)	7.720	45	166084	1.674
22) 3-Chloropropene	(1)	7.777	41	146039	1.809
23) Methylene Chloride	(1)	7.970	84	104842	2.072
24) Acetone	(1)	8.071	43	201295	1.819
25) trans-1,2-Dichloroethene	(1)	8.307	61	157818	1.809
26) Hexane	(1)	8.457	56	133503	1.912
27) Methyl t-Butyl Ether	(1)	8.508	73	241322	1.696
28) tert-Butyl Alcohol	(1)	8.629	59	240093	2.035
29) Acetonitrile	(1)	9.081	41	119546	1.786
30) Di-Isopropyl Ether	(1)	9.288	45	334219	1.725
31) 1,1-Dichloroethane	(1)	9.632	63	230299	1.899
32) Acrylonitrile	(1)	9.740	53	90017	1.684
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	257734	1.608
34) Vinyl Acetate	(1)	10.098	43	289697	1.788
35) cis-1,2-Dichloroethene	(1)	10.714	61	140376	1.802
36) 1,2-Dichloroethene (total)	(1)		61	298194	3.610
37)*Bromochloromethane	(1)	11.101	130	570047	10.000
38) Cyclohexane	(1)	11.129	56	152651	1.669

* = 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/HP26379.i/18jun13.b/ff00224.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 20:34 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.222	83	277769	1.909
40) Ethyl Acetate	(1)	11.423	43	272934	1.747
41) Methyl Acrylate	(1)	11.466	55	176643	1.648
42) Carbon Tetrachloride	(1)	11.516	117	336680	1.978
43) Tetrahydrofuran	(1)	11.545	42	112335	1.547
44) 1,1,1-Trichloroethane	(1)	11.645	97	328423	2.018
45) 2-Butanone	(1)	11.810	43	255668	1.770
46) Isooctane	(2)	12.068	57	432479	1.693
47) Heptane	(2)	12.204	71	80018	1.655
48) Benzene	(2)	12.325	78	357206	1.969
49) Tert-Amyl Methyl Ether	(2)	12.490	73	219250	1.773
50) 1,2-Dichloroethane	(2)	12.691	62	200388	2.051
51) Trichloroethene	(2)	13.350	130	169024	1.967
52)*1,4-Difluorobenzene	(2)	13.393	114	1491961	10.000
53) Dibromomethane	(2)	14.095	174	215679	2.044
54) Ethyl Acrylate	(2)	14.231	55	223532	1.799
55) 1,2-Dichloropropane	(2)	14.274	63	160504	2.014
56) Bromodichloromethane	(2)	14.345	83	302741	2.034
57) Methyl Methacrylate	(2)	14.575	69	83760	1.753
58) 1,4-Dioxane	(2)	14.682	88	62666	1.707
59) cis-1,3-Dichloropropene	(2)	15.406	75	179716	1.855
60) Octane	(3)	15.434	43	261216	1.740
61) Toluene	(3)	15.800	91	420341	1.945
62) 4-Methyl-2-Pentanone	(2)	16.401	43	321520	1.880
63) Tetrachloroethene	(3)	16.437	166	344426	2.071
64) trans-1,3-Dichloropropene	(3)	16.466	75	179364	1.880
65) 1,3-Dichloropropene (total)	(3)		75	359080	3.705
66) Ethyl Methacrylate	(3)	16.673	69	152169	1.761
67) 1,1,2-Trichloroethane	(3)	16.731	97	217810	2.141
68) Dibromochloromethane	(3)	17.024	127	267014	2.027
69) 1,2-Dibromoethane	(3)	17.440	107	293253	2.046
70) 2-Hexanone	(3)	17.734	43	305834	1.869
71)*Chlorobenzene-d5	(3)	18.235	117	1601948	10.000
72) Chlorobenzene	(3)	18.264	112	445805	2.054
73) Ethylbenzene	(3)	18.271	91	547873	1.851
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	314349	2.220
75) m/p-Xylene	(3)	18.500	91	370220	1.807
76) o-Xylene	(3)	19.188	91	351524	1.787

* = 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/HP26379.i/18jun13.b/ff00224.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 20:34 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	721744	3.594
78) Styrene	(3)	19.266	104	261099	1.657
79) Bromoform	(3)	19.338	173	416038	2.090
80) Cumene	(3)	19.668	105	518635	1.775
81) n-Propylbenzene	(3)	20.319	120	165556	1.761
82) Bromobenzene	(3)	20.334	156	304844	1.963
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	498597	2.173
84) 4-Ethyltoluene	(3)	20.484	105	516244	1.673
85) 2-Chlorotoluene	(3)	20.599	126	175432	1.824
86) 1,3,5-Trimethylbenzene	(3)	20.613	105	466818	1.633
87) 1,2,3-Trichloropropane	(3)	20.678	110	167328	2.206
88) Alpha Methyl Styrene	(3)	21.014	118	196566	1.633
89) tert-Butylbenzene	(3)	21.129	119	434096	1.597
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	461508	1.690
91) sec-Butylbenzene	(3)	21.387	105	698268	1.720
92) p-Isopropyltoluene	(3)	21.566	119	543863	1.665
93) 1,3-Dichlorobenzene	(3)	21.723	146	517118	1.971
94) 1,4-Dichlorobenzene	(3)	21.838	146	486619	1.923
95) n-Butylbenzene	(3)	22.139	92	304385	1.603
96) Benzyl Chloride	(3)	22.167	126	122340	1.922
97) Hexachloroethane	(3)	22.390	117	263056	2.005
98) 1,2-Dichlorobenzene	(3)	22.425	146	478013	2.030
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	228835	1.908
100) Hexachlorobutadiene	(3)	24.546	225	438059	2.030
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	312063	1.850
102) Naphthalene	(3)	25.233	128	398205	1.614

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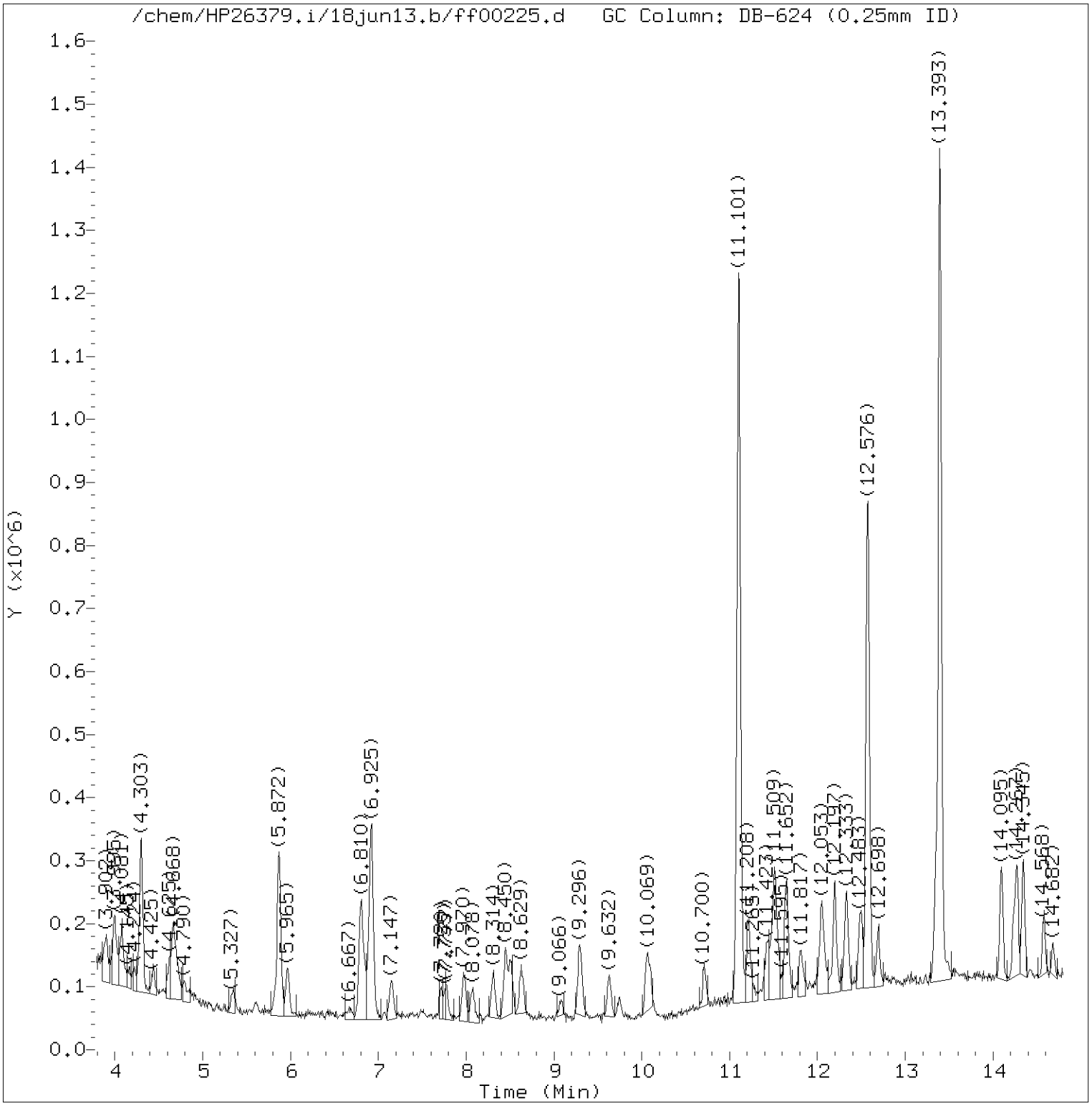
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00225.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 21:05 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

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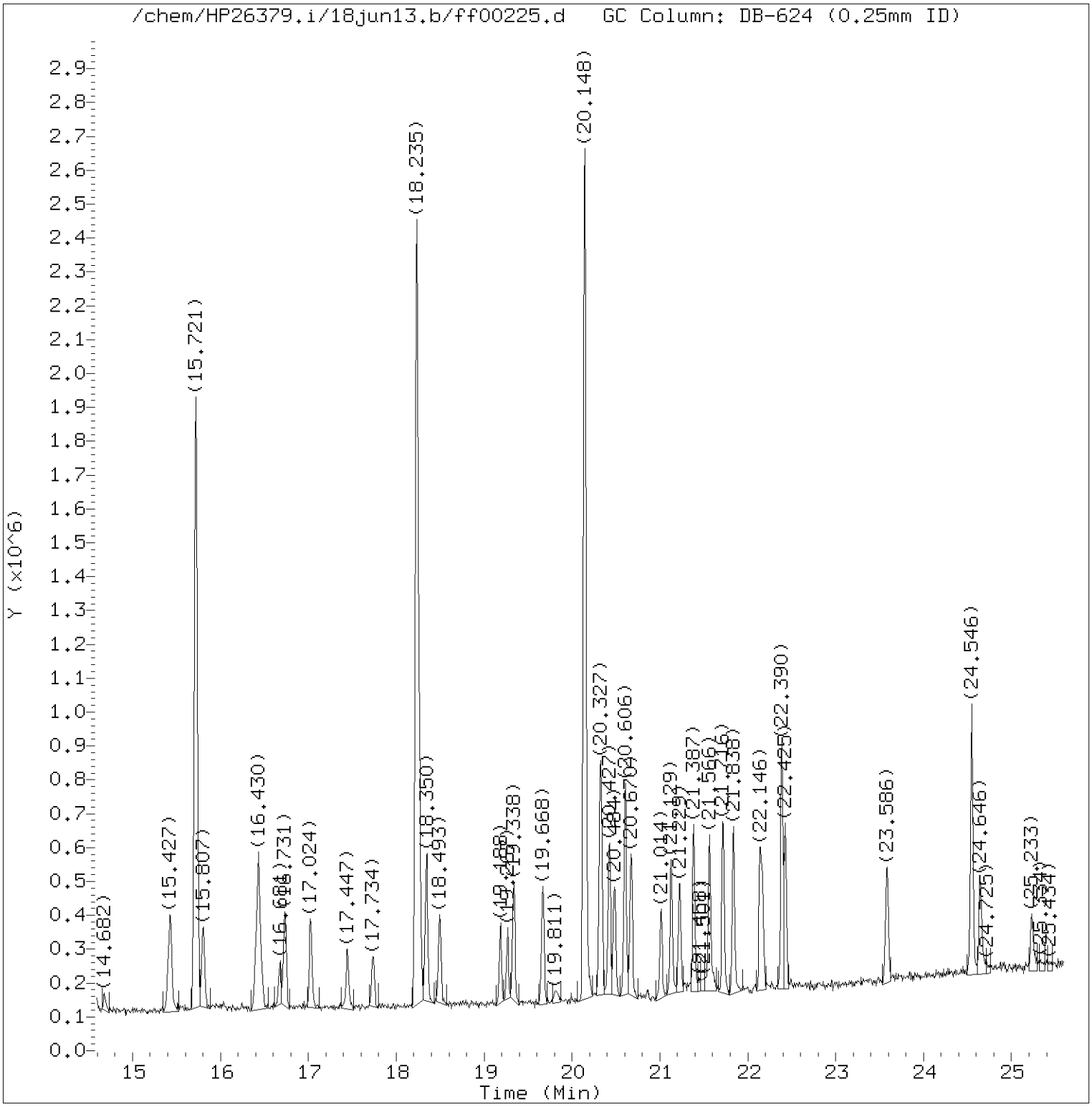
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00225.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 21:05 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

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Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00225.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 21:05 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.887	41	39205	0.741
2) Dichlorodifluoromethane	(1)	3.995	85	124657	0.779
3) Chlorodifluoromethane	(1)	4.081	51	124474	0.985
4) Freon 114	(1)	4.296	85	171531	1.020
5) Chloromethane	(1)	4.439	50	65650MA	0.997
6) Vinyl Chloride	(1)	4.625	62	27588	0.794
7) 1,3-Butadiene	(1)	4.661	54	30113	1.019
8) Bromomethane	(1)	5.342	94	36715	0.752
9) Chloroethane	(1)	5.599	64	24089	0.782
10) Bromoethene	(1)	5.821	106	31199	0.678
11) Pentane	(1)	5.864	43	81023	0.765
12) Trichlorofluoromethane	(1)	5.872	101	193920	1.071
13) Dichlorofluoromethane	(1)	5.965	67	98034	0.768
14) Ethanol	(1)	6.667	45	20808	0.860
15) Freon123a	(1)	6.803	67	150088	1.226
16) 1,1-Dichloroethene	(1)	6.853	61	66854	0.773
17) Freon 113	(1)	6.910	103	117406	1.128
18) Carbon Disulfide	(1)	6.932	76	100731	0.712
19) Methyl Iodide	(1)	7.147	142	104755	0.753
20) Acrolein	(1)	7.490	56	12747M	0.648
21) Isopropanol	(1)	7.720	45	73481	0.773
22) 3-Chloropropene	(1)	7.777	41	56212	0.727
23) Methylene Chloride	(1)	7.985	84	38565	0.795
24) Acetone	(1)	8.078	43	88404	0.834
25) trans-1,2-Dichloroethene	(1)	8.300	61	65111	0.779
26) Hexane	(1)	8.436	56	59754	0.893
27) Methyl t-Butyl Ether	(1)	8.515	73	112332	0.824
28) tert-Butyl Alcohol	(1)	8.629	59	110228	0.975
29) Acetonitrile	(1)	9.081	41	47219	0.736
30) Di-Isopropyl Ether	(1)	9.296	45	146191	0.787
31) 1,1-Dichloroethane	(1)	9.632	63	103530	0.891
32) Acrylonitrile	(1)	9.754	53	39078	0.763
33) Ethyl Tert-Butyl Ether	(1)	10.069	59	105865	0.690
34) Vinyl Acetate	(1)	10.105	43	114899M	0.705
35) cis-1,2-Dichloroethene	(1)	10.714	61	52587	0.705
36) 1,2-Dichloroethene (total)	(1)		61	117698	1.483
37)*Bromochloromethane	(1)	11.108	130	546165	10.000
38) Cyclohexane	(1)	11.129	56	69444	0.793

M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:09.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00225.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 21:05 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	127956	0.918
40) Ethyl Acetate	(1)	11.430	43	126187	0.843
41) Methyl Acrylate	(1)	11.452	55	72037	0.702
42) Carbon Tetrachloride	(1)	11.516	117	167926	1.030
43) Tetrahydrofuran	(1)	11.552	42	50171	0.721
44) 1,1,1-Trichloroethane	(1)	11.652	97	158835	1.018
45) 2-Butanone	(1)	11.803	43	113731	0.822
46) Isooctane	(2)	12.053	57	185250	0.801
47) Heptane	(2)	12.189	71	36673	0.838
48) Benzene	(2)	12.333	78	165864	1.010
49) Tert-Amyl Methyl Ether	(2)	12.497	73	95712	0.855
50) 1,2-Dichloroethane	(2)	12.698	62	86632	0.980
51) Trichloroethene	(2)	13.350	130	76071	0.978
52)*1,4-Difluorobenzene	(2)	13.393	114	1350085	10.000
53) Dibromomethane	(2)	14.095	174	94392	0.989
54) Ethyl Acrylate	(2)	14.224	55	109671	0.975
55) 1,2-Dichloropropane	(2)	14.274	63	78420	1.088
56) Bromodichloromethane	(2)	14.338	83	144294	1.071
57) Methyl Methacrylate	(2)	14.582	69	39833	0.921
58) 1,4-Dioxane	(2)	14.682	88	28203	0.849
59) cis-1,3-Dichloropropene	(2)	15.406	75	85277	0.973
60) Octane	(3)	15.434	43	119004M	0.784
61) Toluene	(3)	15.807	91	205176	0.997
62) 4-Methyl-2-Pentanone	(2)	16.401	43	157141	1.016
63) Tetrachloroethene	(3)	16.437	166	169940	1.073
64) trans-1,3-Dichloropropene	(3)	16.466	75	83203	0.916
65) 1,3-Dichloropropene (total)	(3)		75	168480	1.826
66) Ethyl Methacrylate	(3)	16.681	69	68214	0.829
67) 1,1,2-Trichloroethane	(3)	16.731	97	108433	1.120
68) Dibromochloromethane	(3)	17.024	127	137737	1.098
69) 1,2-Dibromoethane	(3)	17.440	107	144955	1.063
70) 2-Hexanone	(3)	17.734	43	134059	0.860
71)*Chlorobenzene-d5	(3)	18.235	117	1524961	10.000
72) Chlorobenzene	(3)	18.257	112	222466	1.077
73) Ethylbenzene	(3)	18.264	91	277079	0.983
74) 1,1,1,2-Tetrachloroethane	(3)	18.350	131	153376	1.138
75) m/p-Xylene	(3)	18.493	91	175163	0.898
76) o-Xylene	(3)	19.188	91	164881	0.880

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

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on 06/14/2018 at 15:09.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00225.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 21:05 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	340044	1.779
78) Styrene	(3)	19.267	104	120762	0.805
79) Bromoform	(3)	19.338	173	204084	1.077
80) Cumene	(3)	19.668	105	236526	0.850
81) n-Propylbenzene	(3)	20.319	120	73930	0.826
82) Bromobenzene	(3)	20.327	156	149536	1.011
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	262272	1.201
84) 4-Ethyltoluene	(3)	20.484	105	242453	0.825
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	223550	0.821
85) 2-Chlorotoluene	(3)	20.606	126	80568	0.880
87) 1,2,3-Trichloropropane	(3)	20.678	110	84729	1.174
88) Alpha Methyl Styrene	(3)	21.014	118	104605	0.913
89) tert-Butylbenzene	(3)	21.129	119	192028	0.742
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	199589	0.768
91) sec-Butylbenzene	(3)	21.387	105	311358	0.806
92) p-Isopropyltoluene	(3)	21.566	119	236190	0.760
93) 1,3-Dichlorobenzene	(3)	21.723	146	244614	0.979
94) 1,4-Dichlorobenzene	(3)	21.838	146	235206	0.976
95) n-Butylbenzene	(3)	22.146	92	130329	0.721
96) Benzyl Chloride	(3)	22.160	126	53121	0.877
97) Hexachloroethane	(3)	22.390	117	132049	1.057
98) 1,2-Dichlorobenzene	(3)	22.425	146	226503	1.011
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	109629	0.960
100) Hexachlorobutadiene	(3)	24.546	225	225083	1.096
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	127603	0.795
102) Naphthalene	(3)	25.233	128	178993	0.762

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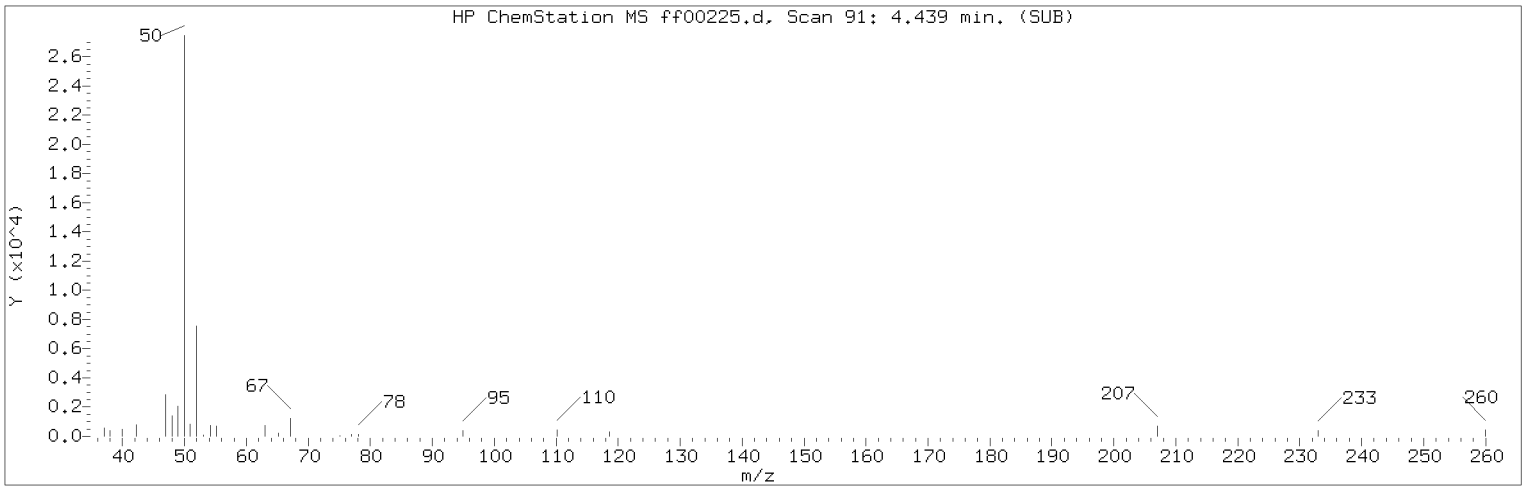
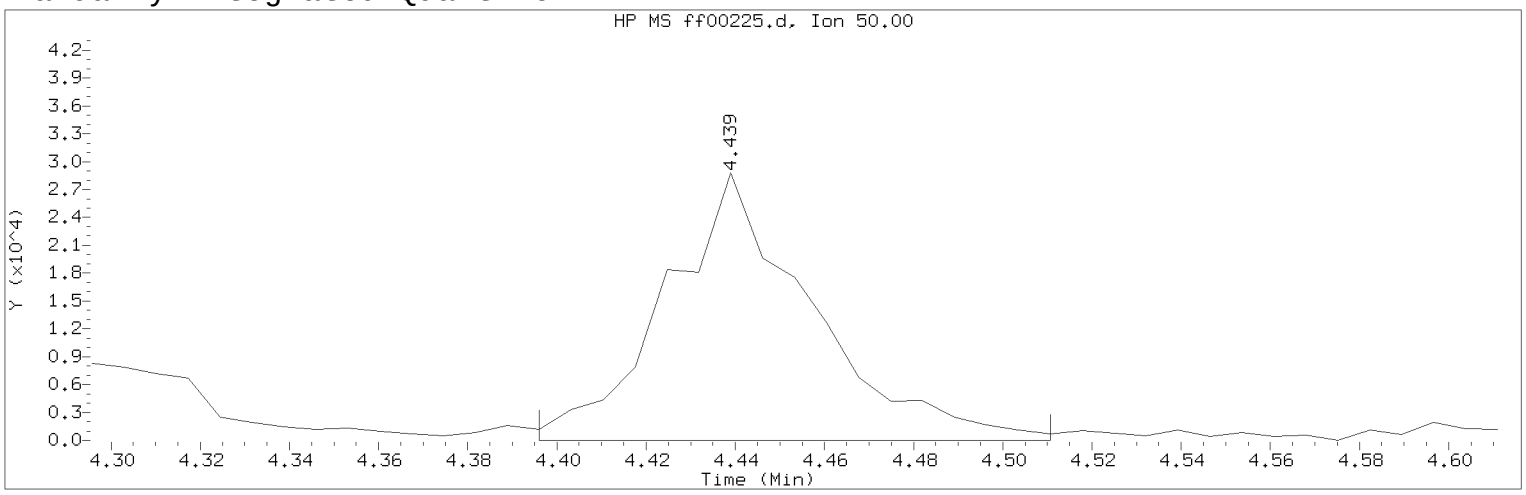
on 06/14/2018 at 15:09.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18jun13.b/ff00225.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 21:05 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

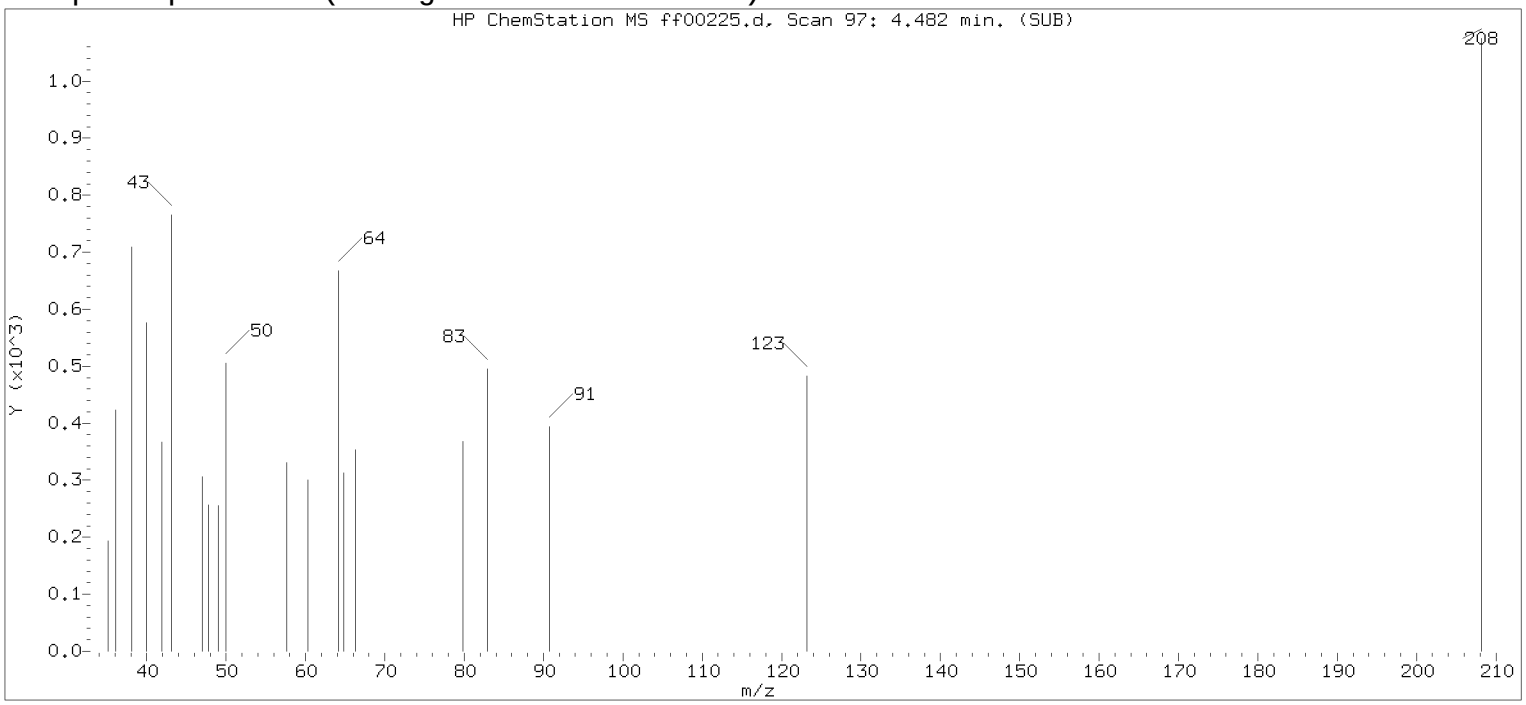
Compound Number : 5
Compound Name : Chloromethane
Scan Number : 91
Retention Time (minutes): 4.439
Quant Ion : 50.00
Area (flag) : 65650MA
Concentration (ppb(v)) : 0.9975
Integration start scan : 84 Integration stop scan: 100
Y at integration start : 7 Y at integration end: 7

Reason for manual integration: improper integration

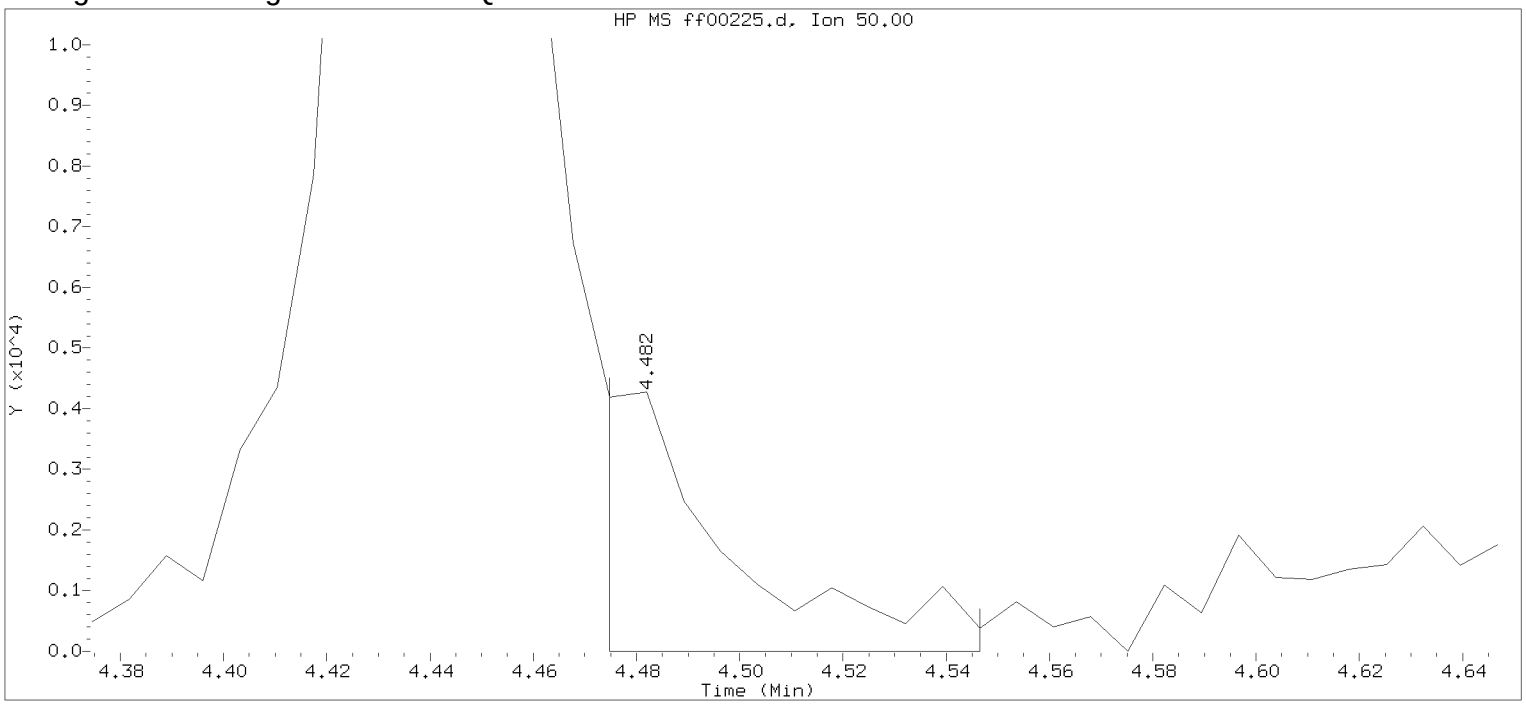
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:09.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 09:14.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18jun13.b/ff00225.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 21:05 Analyst ID: jeb07445

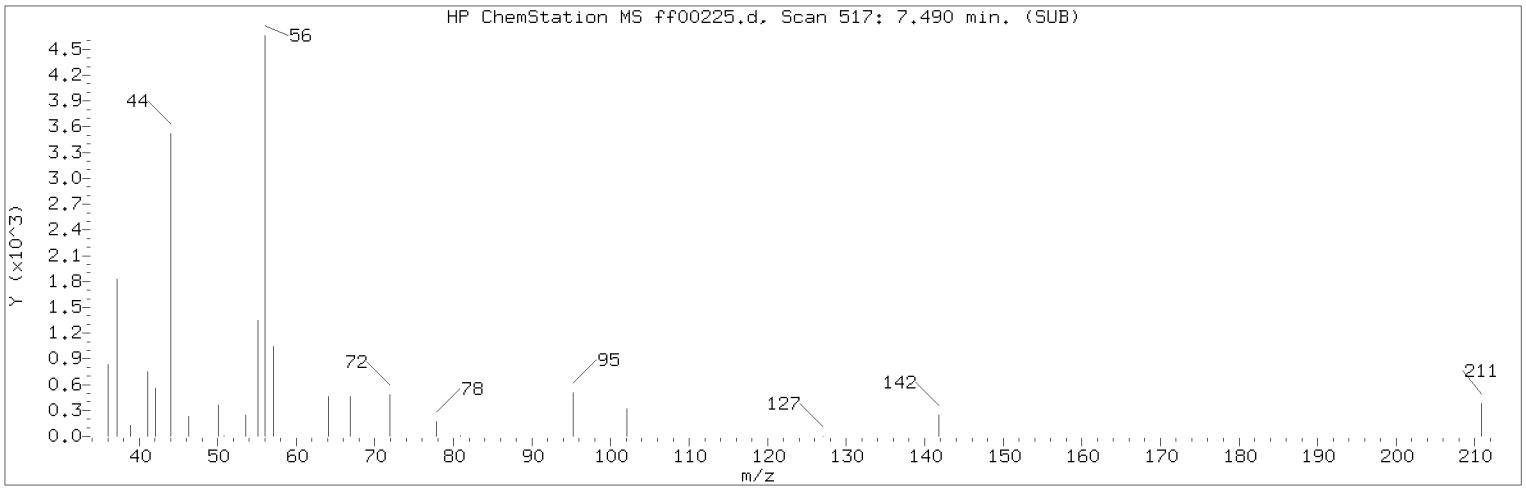
Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 13-JUN-2018 14:32
Date, time and analyst ID of latest file update: 13-Jun-2018 21:34 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

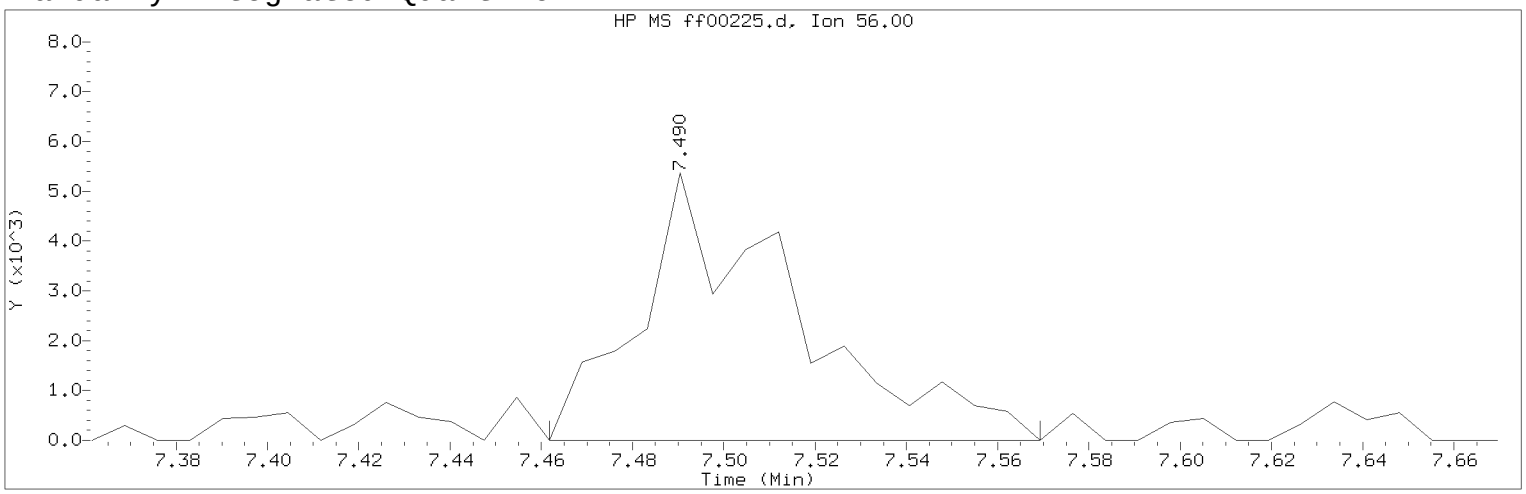
Compound Number : 5
Compound Name : Chloromethane
Scan Number : 97
Retention Time (minutes): 4.482
Quant Ion : 50.00
Area : 6780
Concentration (ppb(v)) : 0.1065
Integration start scan : 95 Integration stop scan: 105
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/14/2018 at 15:09.
Target 3.5 esignature used for jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18jun13.b/ff00225.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 21:05 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

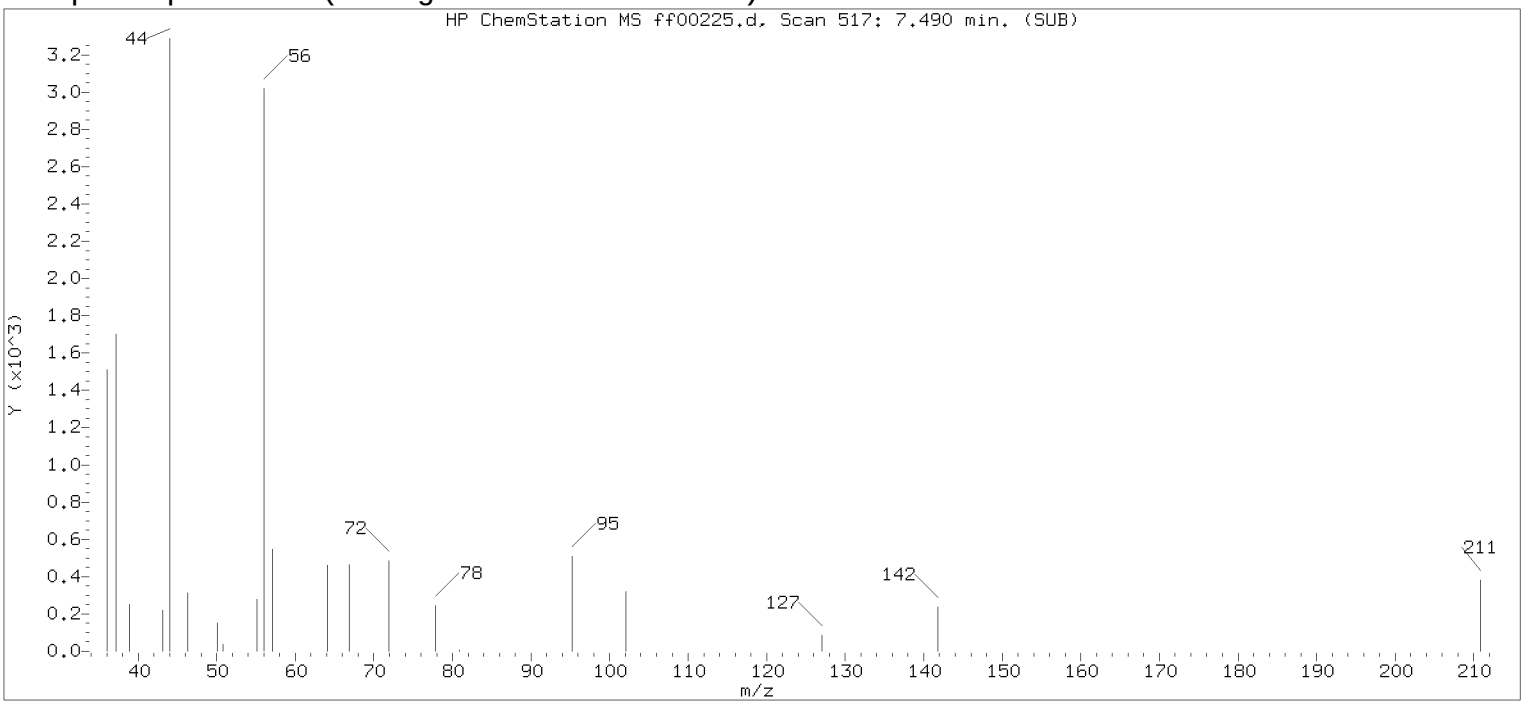
Compound Number : 20
Compound Name : Acrolein
Scan Number : 517
Retention Time (minutes): 7.490
Quant Ion : 56.00
Area (flag) : 12747M
Concentration (ppb(v)) : 0.6484
Integration start scan : 512 Integration stop scan: 527
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

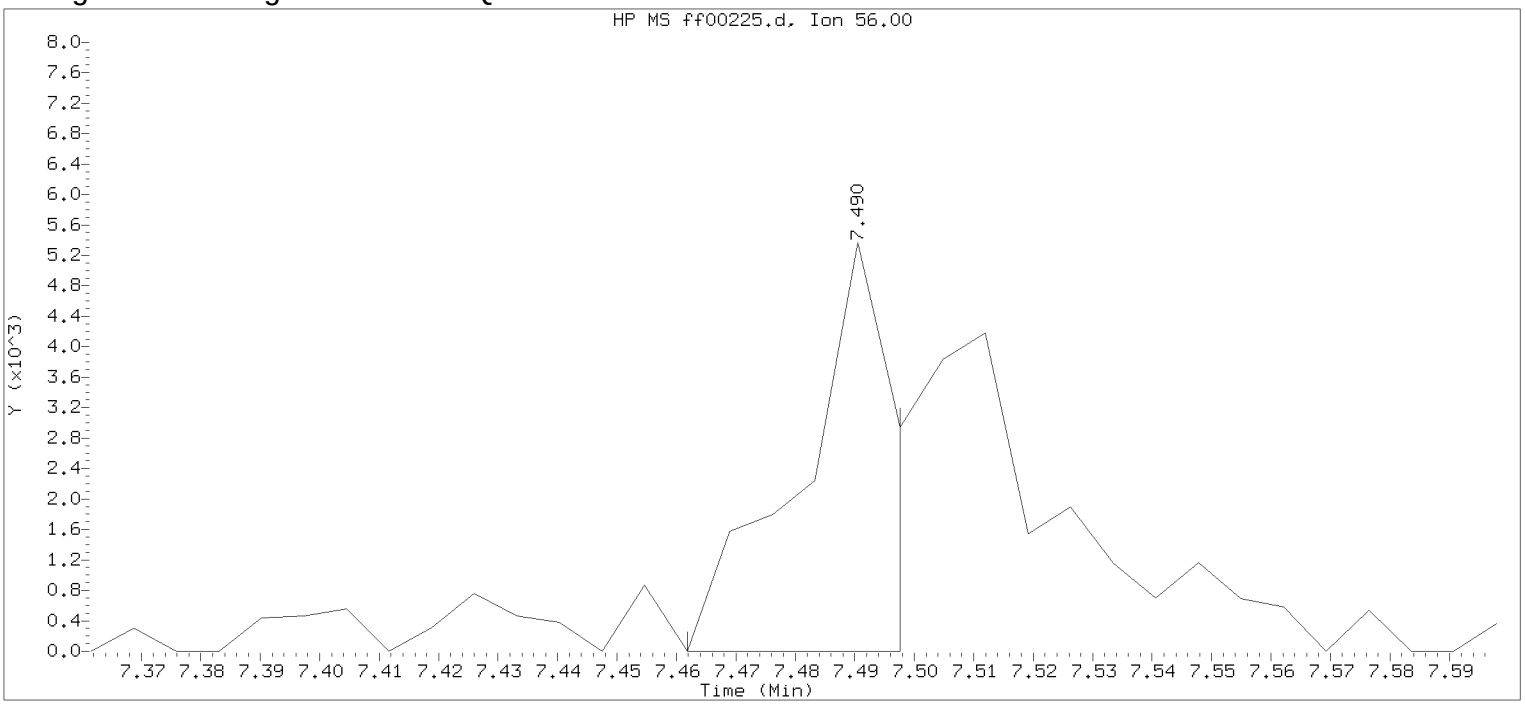
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:09.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 09:14.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18jun13.b/ff00225.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 21:05 Analyst ID: jeb07445

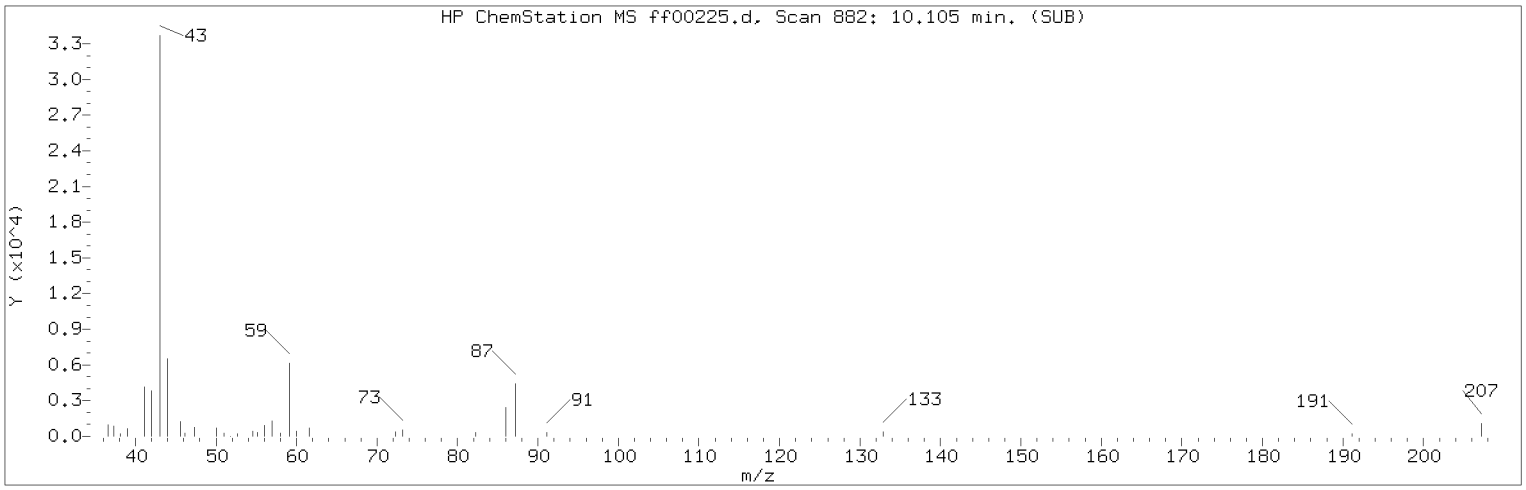
Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 13-JUN-2018 14:32
Date, time and analyst ID of latest file update: 13-Jun-2018 21:34 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

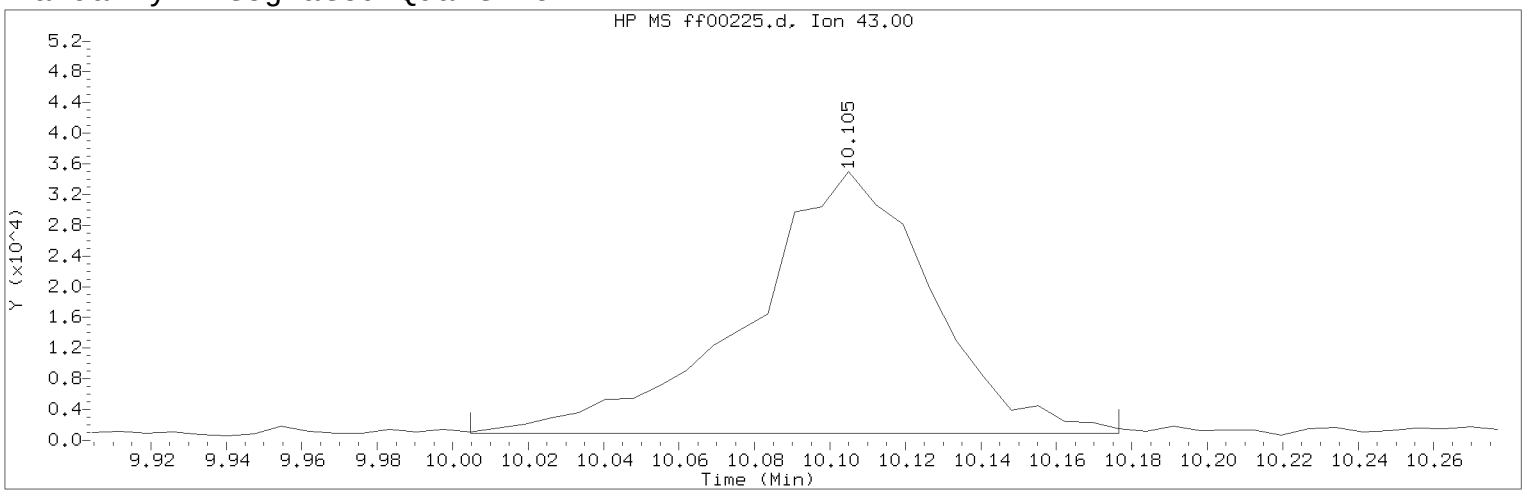
Compound Number : 20
Compound Name : Acrolein
Scan Number : 517
Retention Time (minutes): 7.490
Quant Ion : 56.00
Area : 5347
Concentration (ppb(v)) : 0.2004
Integration start scan : 512 Integration stop scan: 517
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/14/2018 at 15:09.
Target 3.5 esignature used for this page

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18jun13.b/ff00225.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 21:05 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

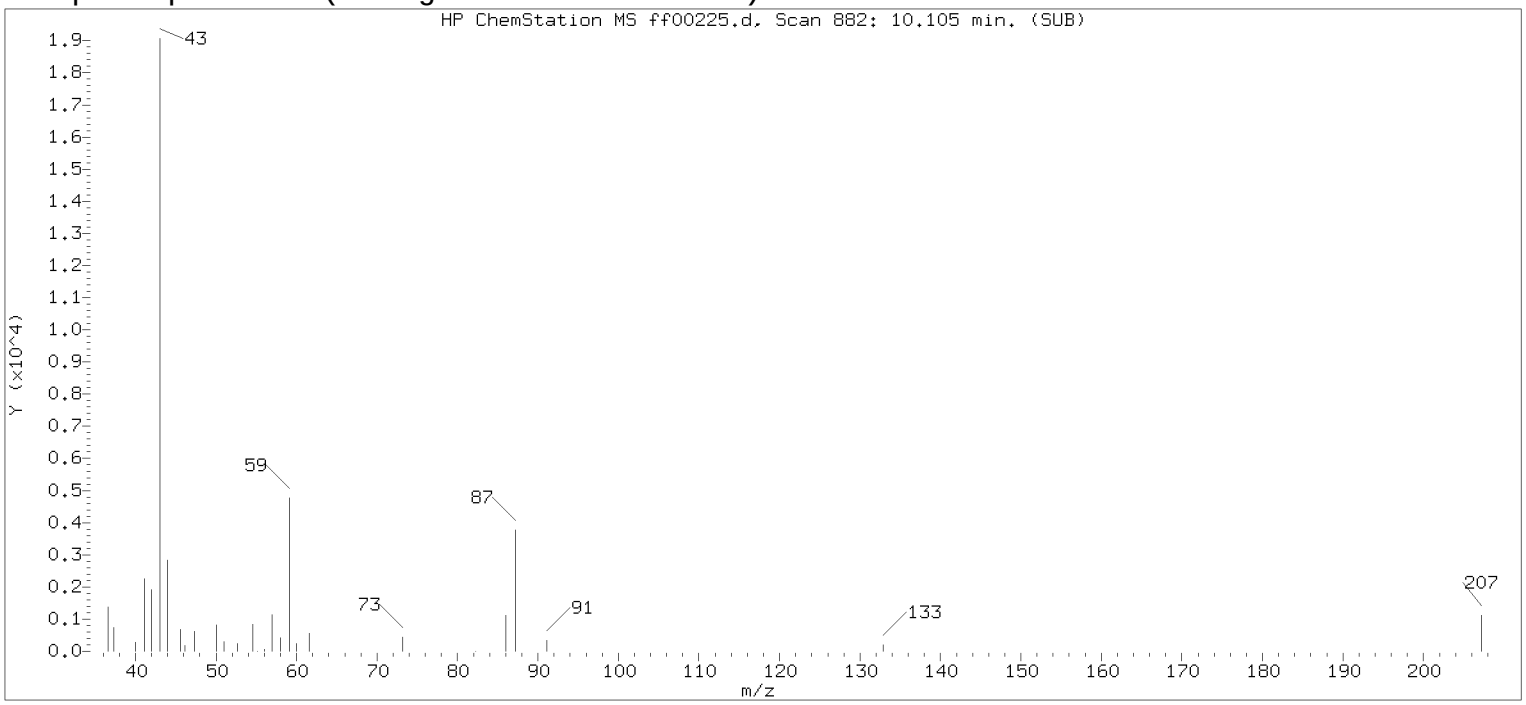
Compound Number : 34
Compound Name : Vinyl Acetate
Scan Number : 882
Retention Time (minutes): 10.105
Quant Ion : 43.00
Area (flag) : 114899M
Concentration (ppb(v)) : 0.7050
Integration start scan : 867 Integration stop scan: 891
Y at integration start : 955 Y at integration end: 955

Reason for manual integration: improper integration

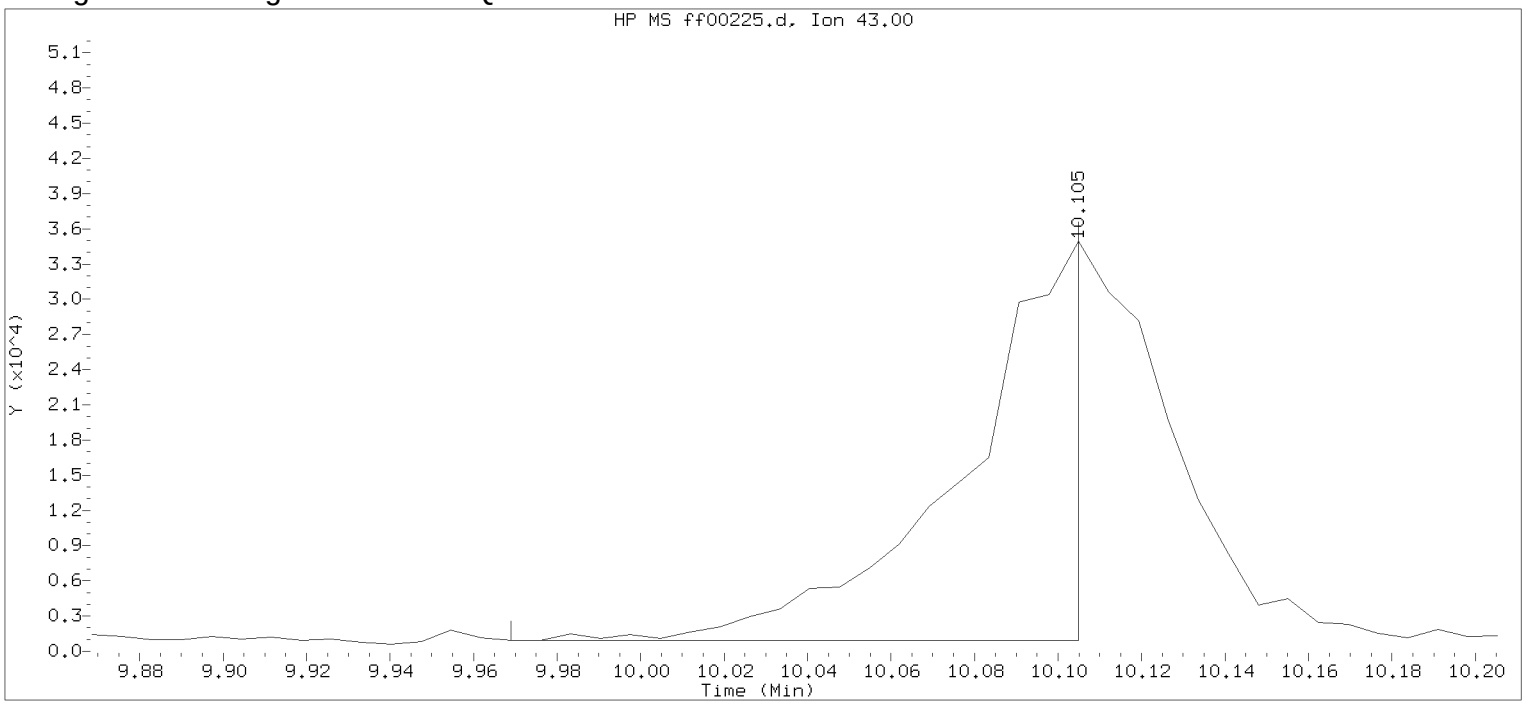
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:09.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 09:14.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18jun13.b/ff00225.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 21:05 Analyst ID: jeb07445

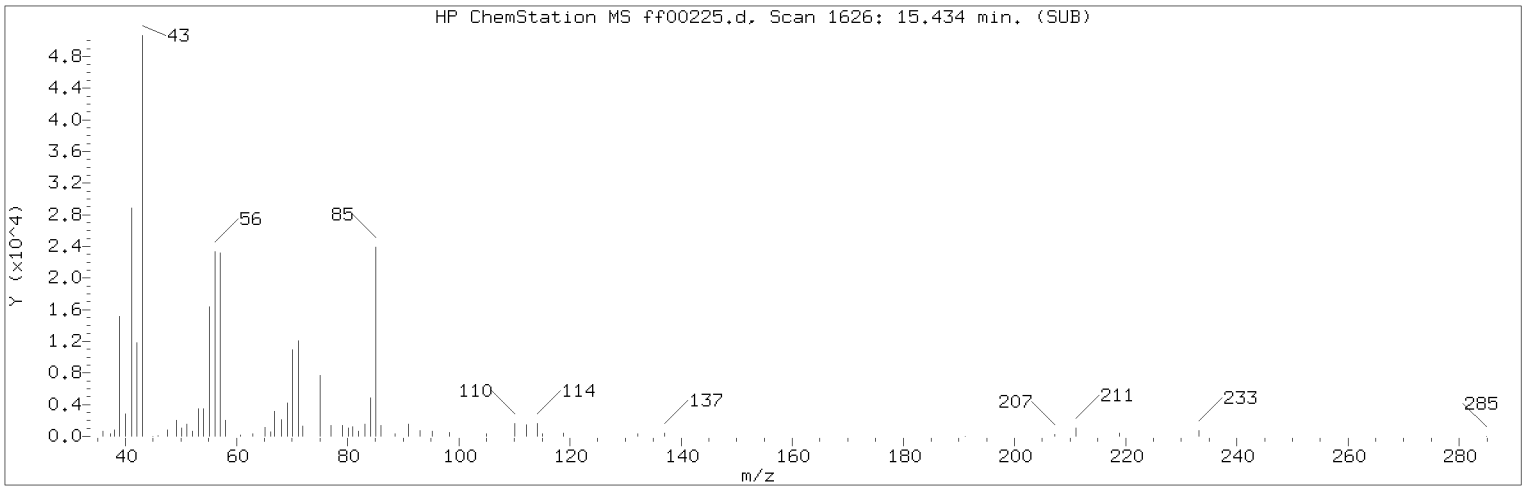
Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 13-JUN-2018 14:32
Date, time and analyst ID of latest file update: 13-Jun-2018 21:34 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

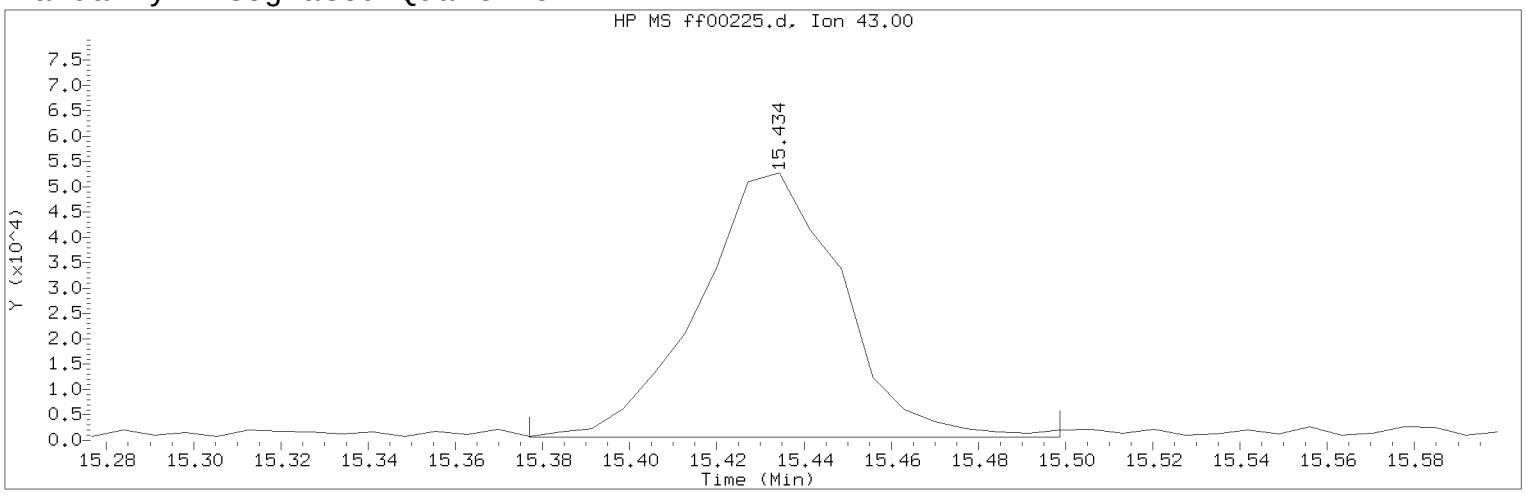
Compound Number : 34
Compound Name : Vinyl Acetate
Scan Number : 882
Retention Time (minutes): 10.105
Quant Ion : 43.00
Area : 62976
Concentration (ppb(v)) : 0.2984
Integration start scan : 862 Integration stop scan: 881
Y at integration start : 956 Y at integration end: 956

Digitally signed by Jacob E. Bailey on 06/14/2018 at 15:09.
Target 3.5 esignature used. ED1 Page 1425

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18jun13.b/ff00225.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 21:05 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

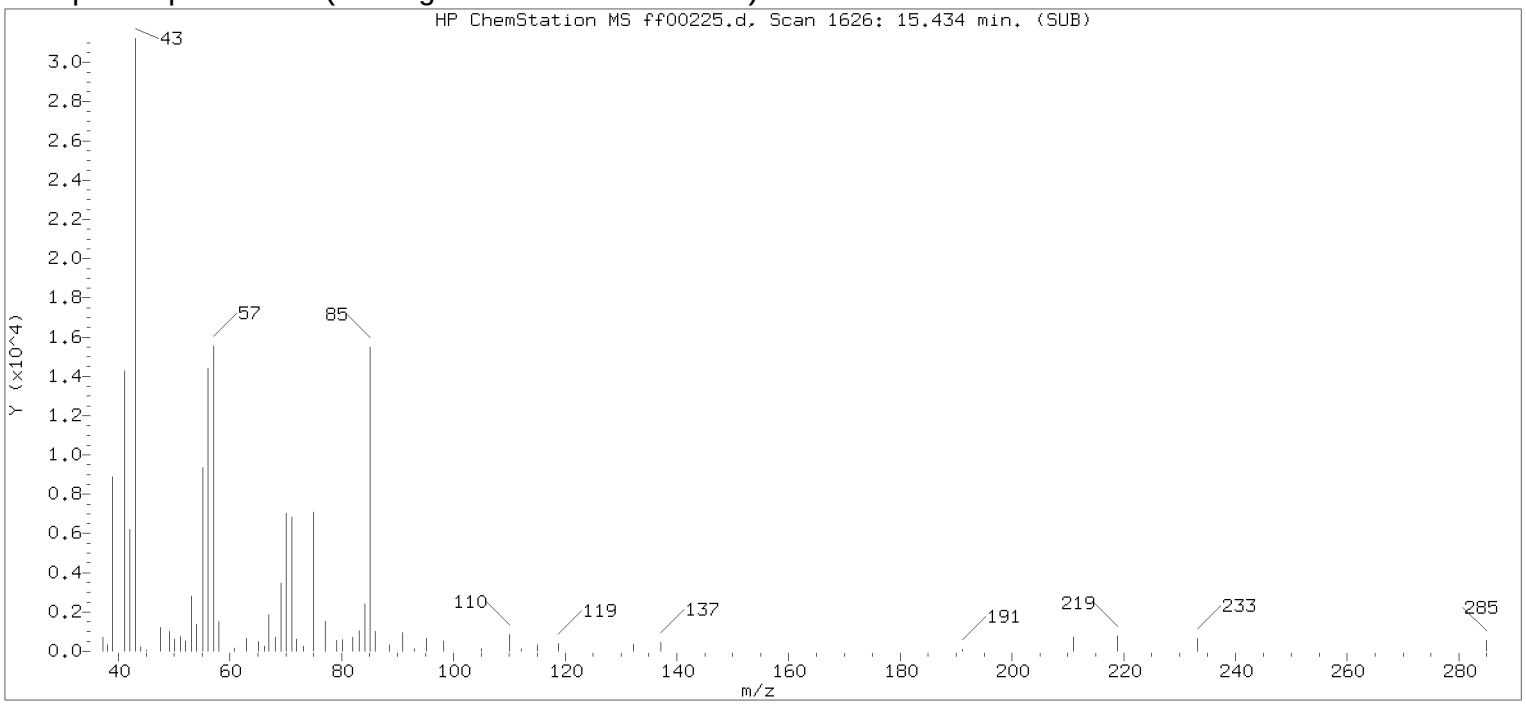
Compound Number : 60
Compound Name : Octane
Scan Number : 1626
Retention Time (minutes): 15.434
Quant Ion : 43.00
Area (flag) : 119004M
Concentration (ppb(v)) : 0.7839
Integration start scan : 1617 Integration stop scan: 1634
Y at integration start : 611 Y at integration end: 611

Reason for manual integration: improper integration

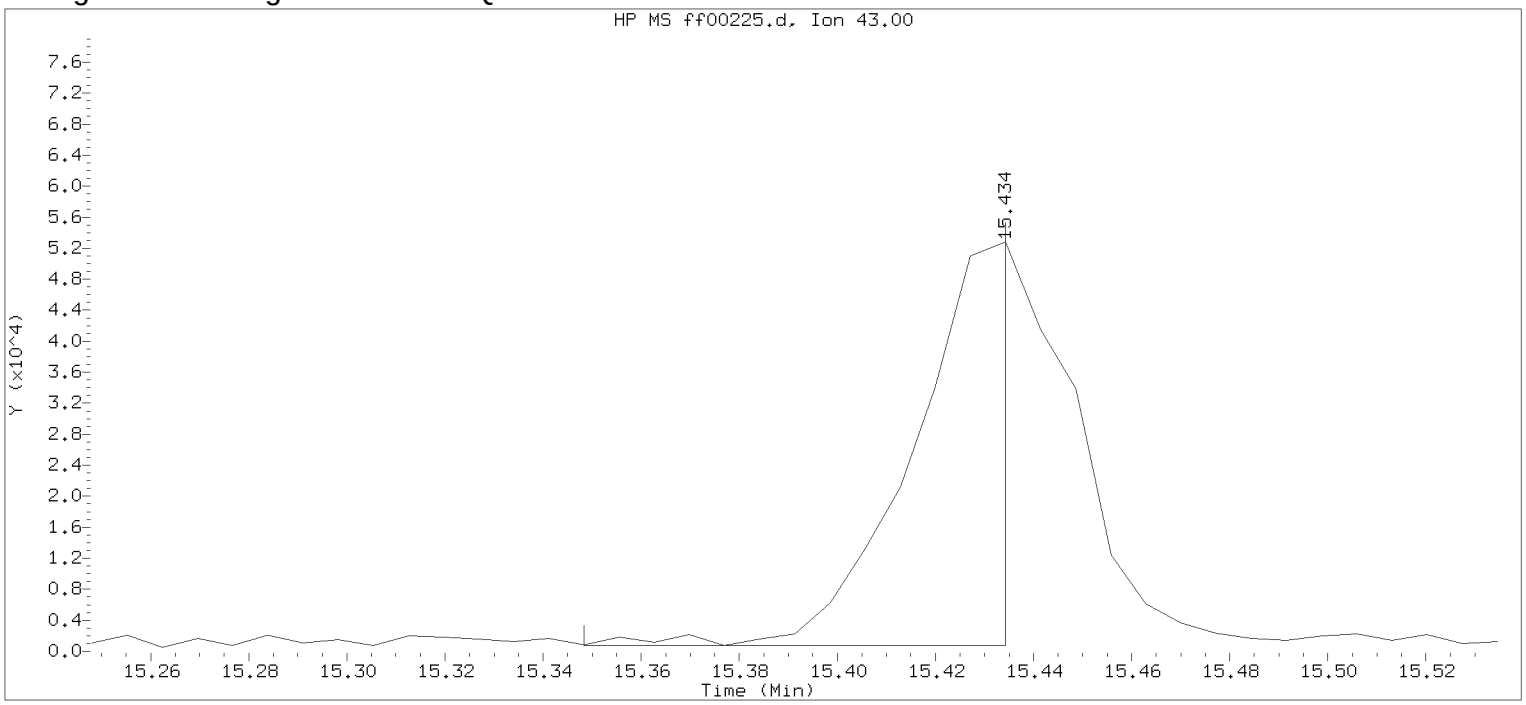
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:09.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 09:14.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



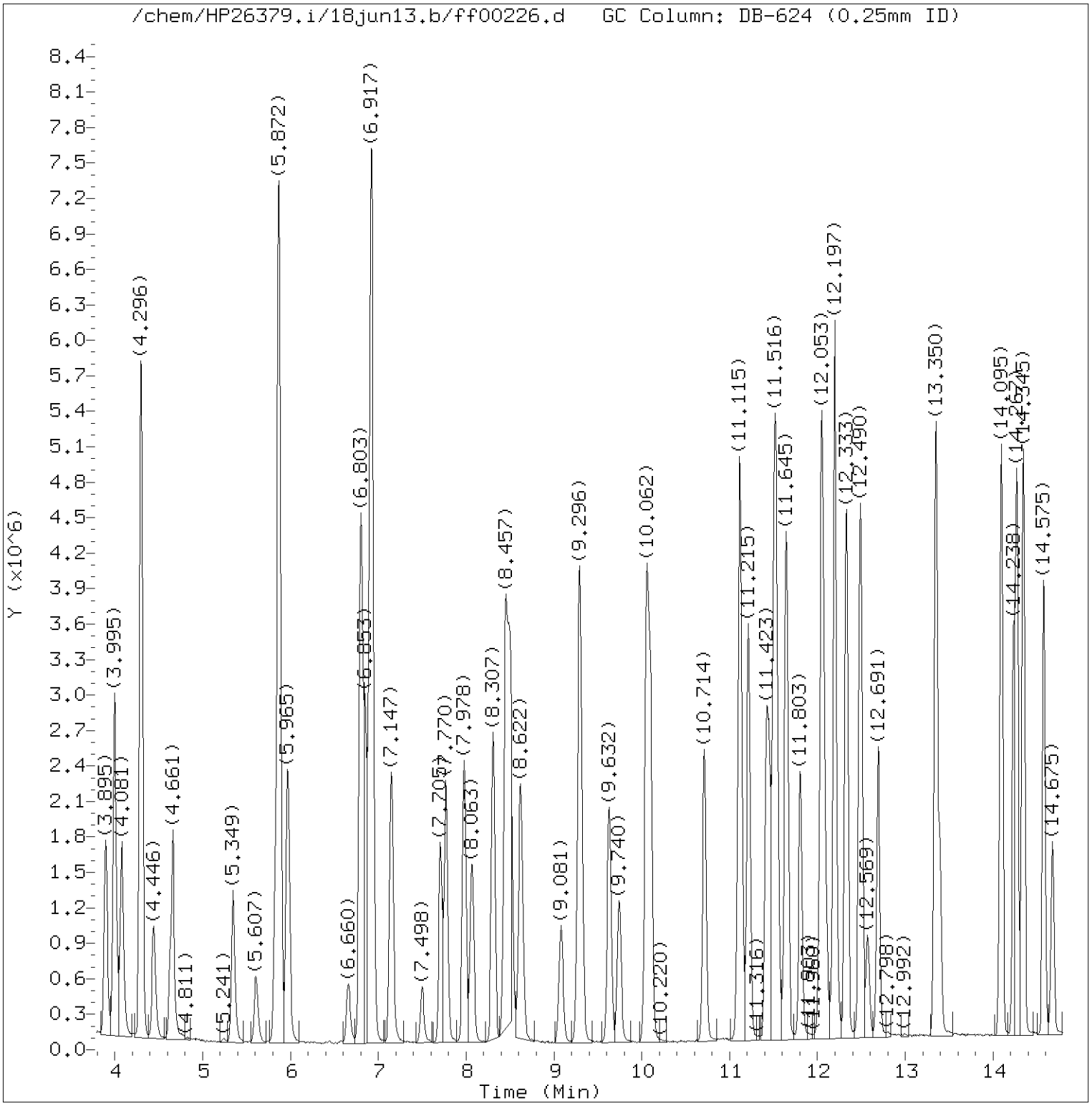
Data File: /chem/HP26379.i/18jun13.b/ff00225.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 21:05 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 13-JUN-2018 14:32
Date, time and analyst ID of latest file update: 13-Jun-2018 21:34 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 60
Compound Name : Octane
Scan Number : 1626
Retention Time (minutes): 15.434
Quant Ion : 43.00
Area : 65688
Concentration (ppb(v)) : 0.3791
Integration start scan : 1613 Integration stop scan: 1625
Y at integration start : 773 Y at integration end: 773

Digitally signed by Jacob E. Bailey on 06/14/2018 at 15:09.
Target 3.5 esignature used for GLED1 page 1425



Total Ion Chromatogram (TIC)

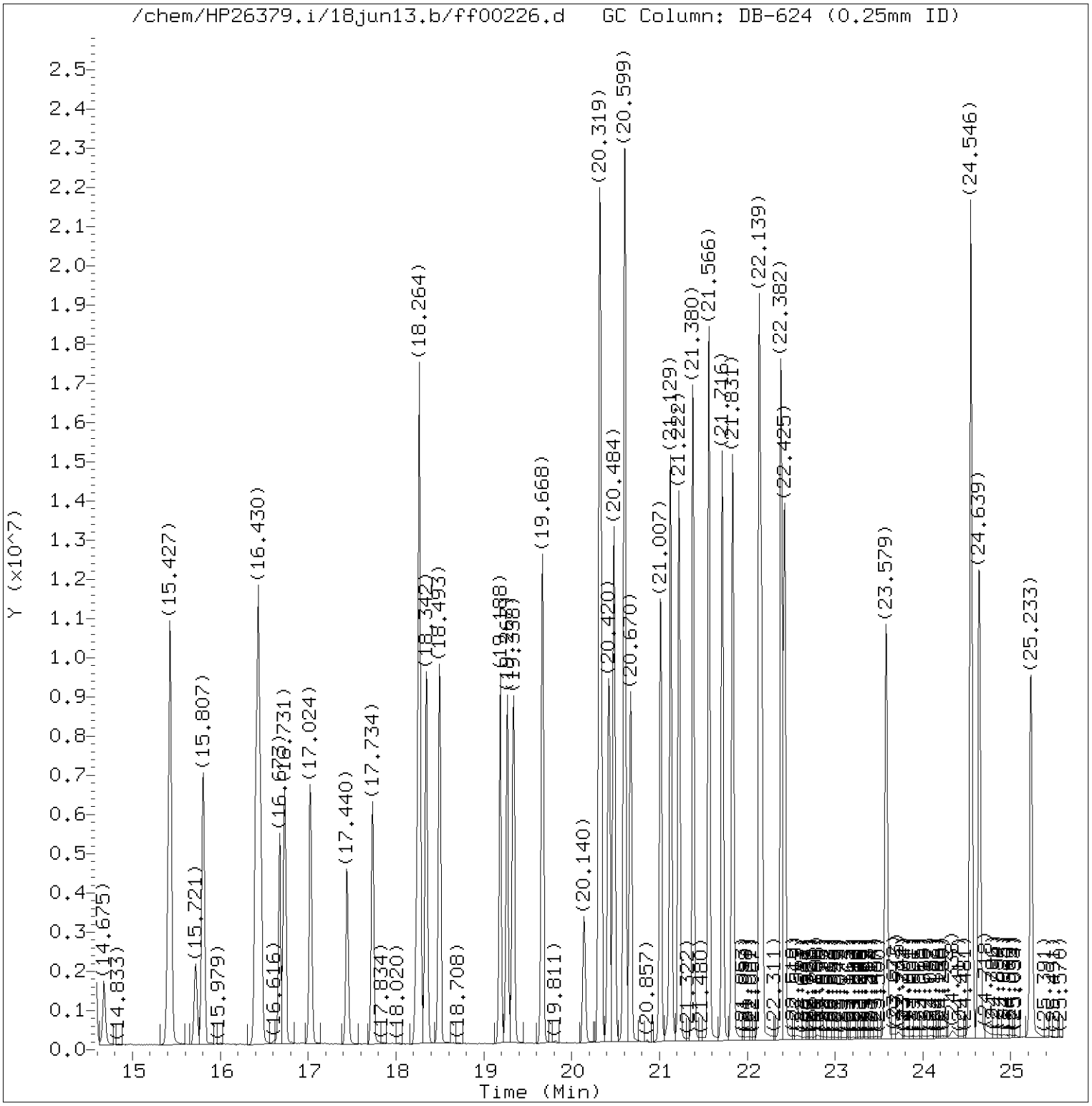
Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00226.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 21:36 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:10.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00226.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 21:36 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:10.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00226.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 21:36 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.895	41	1472702	26.317
2) Dichlorodifluoromethane	(1)	3.995	85	4440963	26.212
3) Chlorodifluoromethane	(1)	4.081	51	3334370	24.938
4) Freon 114	(1)	4.296	85	4361103	24.513
5) Chloromethane	(1)	4.446	50	1745434	25.062
6) Vinyl Chloride	(1)	4.632	62	936993	25.476
7) 1,3-Butadiene	(1)	4.661	54	740240	23.665
8) Bromomethane	(1)	5.349	94	1376705	26.648
9) Chloroethane	(1)	5.607	64	839887	25.770
10) Bromoethene	(1)	5.829	106	1348095	27.673
11) Pentane	(1)	5.864	43	3198135	28.528
12) Trichlorofluoromethane	(1)	5.872	101	4694419	24.492
13) Dichlorofluoromethane	(1)	5.965	67	3547313	26.253
14) Ethanol	(1)	6.660	45	665643	25.992
15) Freon123a	(1)	6.803	67	3469788	26.791
16) 1,1-Dichloroethene	(1)	6.853	61	2518988	27.542
17) Freon 113	(1)	6.910	103	2607463	23.678
18) Carbon Disulfide	(1)	6.932	76	4159259	27.785
19) Methyl Iodide	(1)	7.147	142	4160460	28.277
20) Acrolein	(1)	7.498	56	583420	28.047
21) Isopropanol	(1)	7.705	45	2767898	27.519
22) 3-Chloropropene	(1)	7.770	41	2642947	32.293
23) Methylene Chloride	(1)	7.978	84	1544123	30.095
24) Acetone	(1)	8.063	43	3005121	26.792
25) trans-1,2-Dichloroethene	(1)	8.307	61	2358617	26.660
26) Hexane	(1)	8.450	56	1917940	27.088
27) Methyl t-Butyl Ether	(1)	8.500	73	4159724	28.836
28) tert-Butyl Alcohol	(1)	8.622	59	3458636	28.921
29) Acetonitrile	(1)	9.081	41	1809158	26.665
30) Di-Isopropyl Ether	(1)	9.296	45	5609614	28.551
31) 1,1-Dichloroethane	(1)	9.632	63	3132386	25.471
32) Acrylonitrile	(1)	9.747	53	1493325	27.558
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	4883412	30.059
34) Vinyl Acetate	(1)	10.105	43	5951365	34.511
35) cis-1,2-Dichloroethene	(1)	10.714	61	2159428	27.339
36) 1,2-Dichloroethene (total)	(1)		61	4518045	54.000
37)*Bromochloromethane	(1)	11.108	130	577933	10.000
38) Cyclohexane	(1)	11.122	56	2721556	29.355

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:10.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00226.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 21:36 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	3709251	25.143
40) Ethyl Acetate	(1)	11.423	43	4290621	27.091
41) Methyl Acrylate	(1)	11.452	55	3164491	29.128
42) Carbon Tetrachloride	(1)	11.509	117	4302811	24.940
43) Tetrahydrofuran	(1)	11.545	42	2158271	29.319
44) 1,1,1-Trichloroethane	(1)	11.645	97	4102941	24.861
45) 2-Butanone	(1)	11.803	43	3969795	27.116
46) Isooctane	(2)	12.053	57	8363483	28.685
47) Heptane	(2)	12.197	71	1591849	28.845
48) Benzene	(2)	12.333	78	5066291	24.464
49) Tert-Amyl Methyl Ether	(2)	12.490	73	3875996	27.459
50) 1,2-Dichloroethane	(2)	12.691	62	2674666	23.983
51) Trichloroethene	(2)	13.350	130	2364096	24.110
52)*1,4-Difluorobenzene	(2)	13.393	114	1702719	10.000
53) Dibromomethane	(2)	14.095	174	2835681	23.553
54) Ethyl Acrylate	(2)	14.231	55	3689762	26.016
55) 1,2-Dichloropropane	(2)	14.267	63	2153283	23.679
56) Bromodichloromethane	(2)	14.345	83	3950619	23.253
57) Methyl Methacrylate	(2)	14.582	69	1467857	26.916
58) 1,4-Dioxane	(2)	14.675	88	1170162	27.923
59) cis-1,3-Dichloropropene	(2)	15.406	75	2825462	25.557
60) Octane	(3)	15.434	43	5270748	30.546
61) Toluene	(3)	15.807	91	5964452	25.508
62) 4-Methyl-2-Pentanone	(2)	16.401	43	4950611	25.368
63) Tetrachloroethene	(3)	16.430	166	4304376	23.917
64) trans-1,3-Dichloropropene	(3)	16.466	75	2659569	25.764
65) 1,3-Dichloropropene (total)	(3)		75	5485031	52.301
66) Ethyl Methacrylate	(3)	16.673	69	2621312	28.038
67) 1,1,2-Trichloroethane	(3)	16.731	97	2515873	22.856
68) Dibromochloromethane	(3)	17.024	127	3348036	23.486
69) 1,2-Dibromoethane	(3)	17.440	107	3672495	23.684
70) 2-Hexanone	(3)	17.734	43	4820717	27.221
71)*Chlorobenzene-d5	(3)	18.235	117	1733322	10.000
72) Chlorobenzene	(3)	18.256	112	5644844	24.033
73) Ethylbenzene	(3)	18.271	91	8290100	25.884
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	3433058	22.403
75) m/p-Xylene	(3)	18.493	91	6113241	27.572
76) o-Xylene	(3)	19.188	91	5958742	27.994

* = Compound is an internal standard.

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on 06/14/2018 at 15:10.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00226.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 21:36 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	12071983	55.557
78) Styrene	(3)	19.267	104	4941506	28.983
79) Bromoform	(3)	19.338	173	5098654	23.675
80) Cumene	(3)	19.668	105	9081760	28.719
81) n-Propylbenzene	(3)	20.319	120	2851454	28.036
82) Bromobenzene	(3)	20.334	156	4157647	24.741
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	5422423	21.841
84) 4-Ethyltoluene	(3)	20.484	105	9578254M	28.690
85) 2-Chlorotoluene	(3)	20.599	126	2805197	26.953
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	8512524	27.513
87) 1,2,3-Trichloropropane	(3)	20.670	110	1784595	21.747
88) Alpha Methyl Styrene	(3)	21.014	118	3975322	30.530
89) tert-Butylbenzene	(3)	21.129	119	8209424	27.911
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	8372484	28.339
91) sec-Butylbenzene	(3)	21.380	105	12065765	27.463
92) p-Isopropyltoluene	(3)	21.566	119	10395181	29.414
93) 1,3-Dichlorobenzene	(3)	21.716	146	6817274	24.011
94) 1,4-Dichlorobenzene	(3)	21.831	146	6774831	24.739
95) n-Butylbenzene	(3)	22.139	92	6144291	29.912
96) Benzyl Chloride	(3)	22.160	126	1850178	26.868
97) Hexachloroethane	(3)	22.382	117	3476193	24.491
98) 1,2-Dichlorobenzene	(3)	22.425	146	6406819	25.151
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	3590727	27.665
100) Hexachlorobutadiene	(3)	24.546	225	6040743	25.869
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	5425763	29.733
102) Naphthalene	(3)	25.233	128	9755333	36.534

M = Compound was manually integrated.

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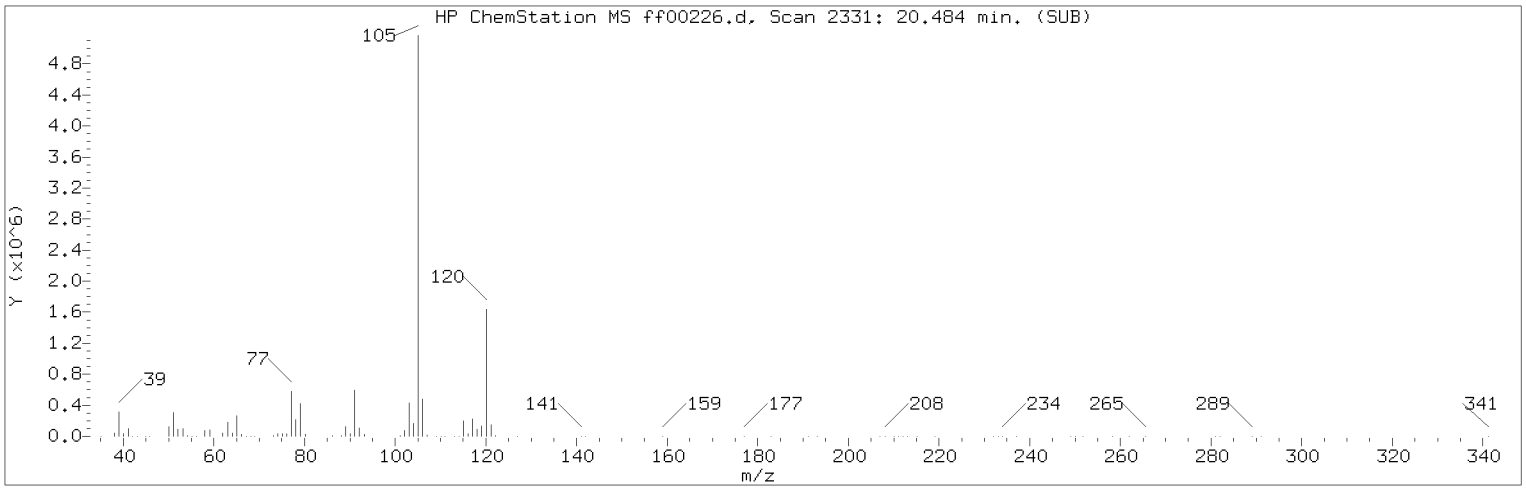
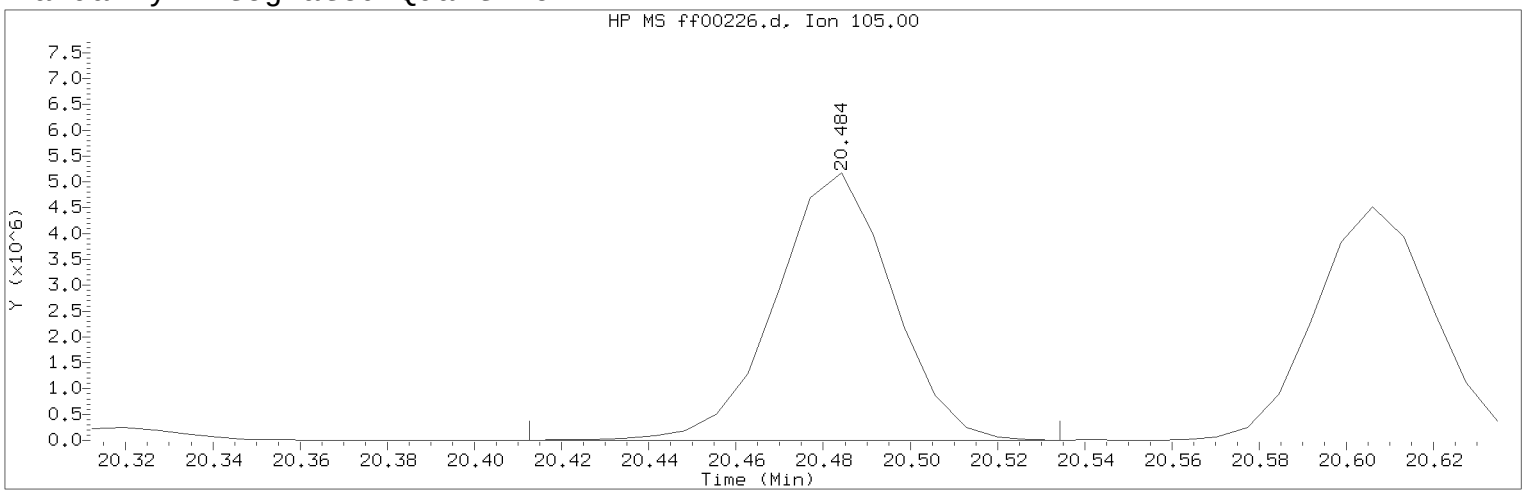
on 06/14/2018 at 15:10.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18jun13.b/ff00226.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 21:36 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

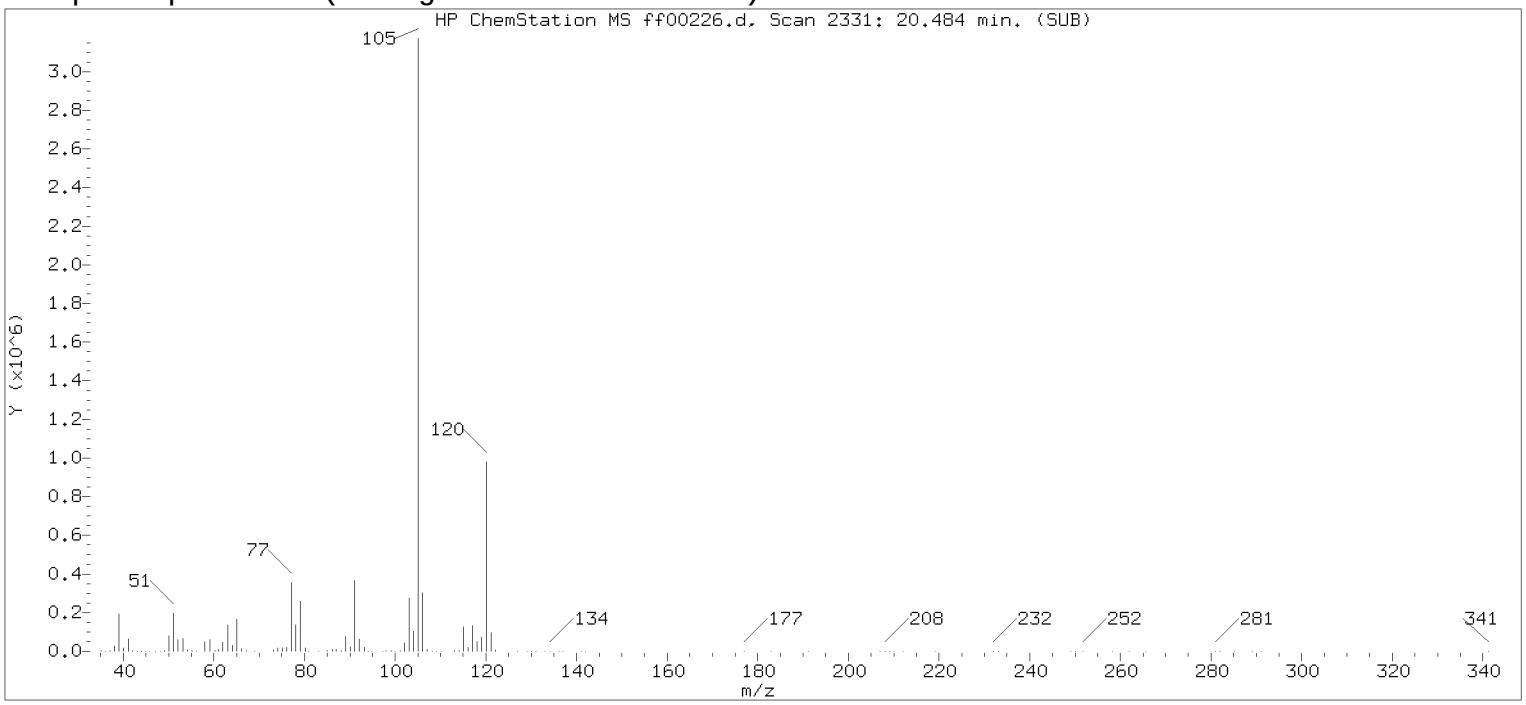
Compound Number : 84
Compound Name : 4-Ethyltoluene
Scan Number : 2331
Retention Time (minutes): 20.484
Quant Ion : 105.00
Area (flag) : 9578254M
Concentration (ppb(v)) : 28.6898
Integration start scan : 2320 Integration stop scan: 2337
Y at integration start : 711 Y at integration end: 711

Reason for manual integration: improper integration

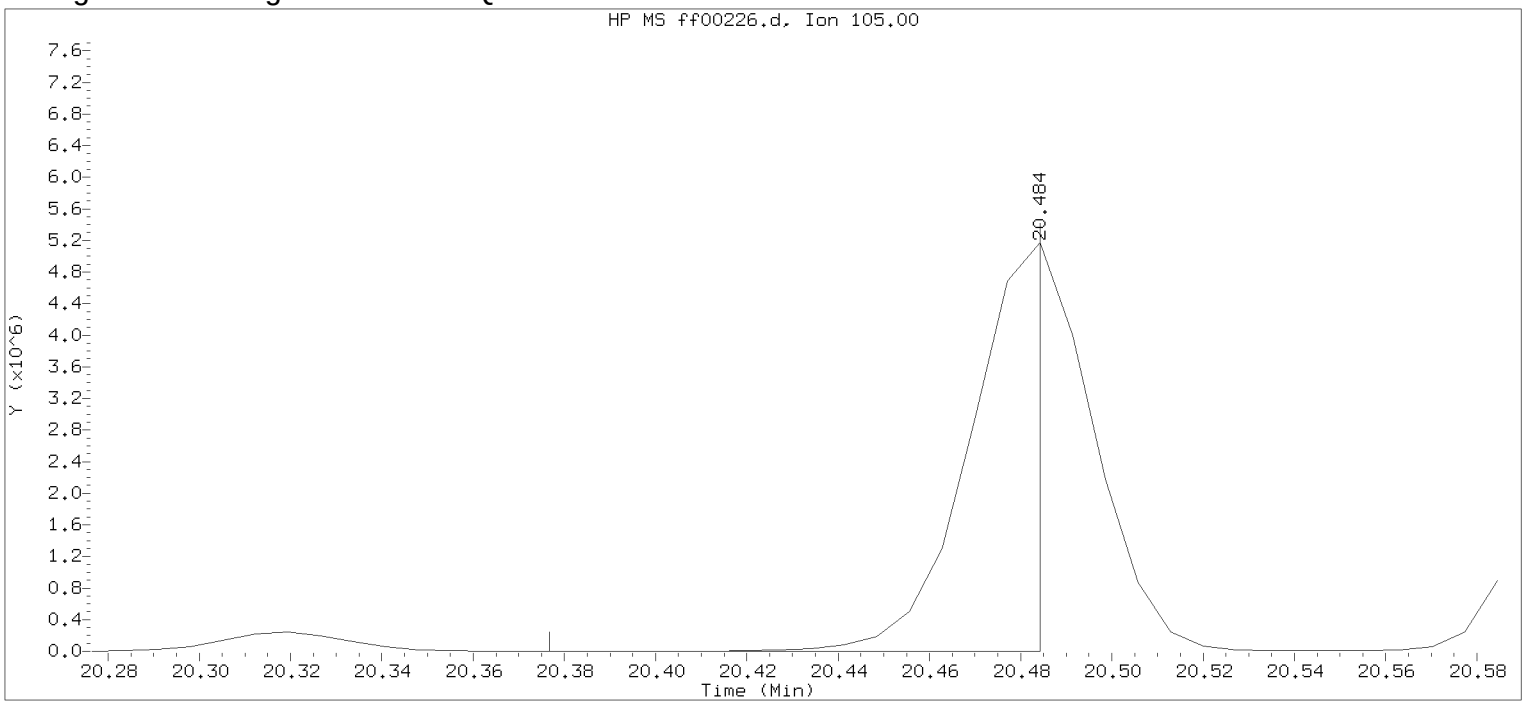
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:10.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 09:14.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



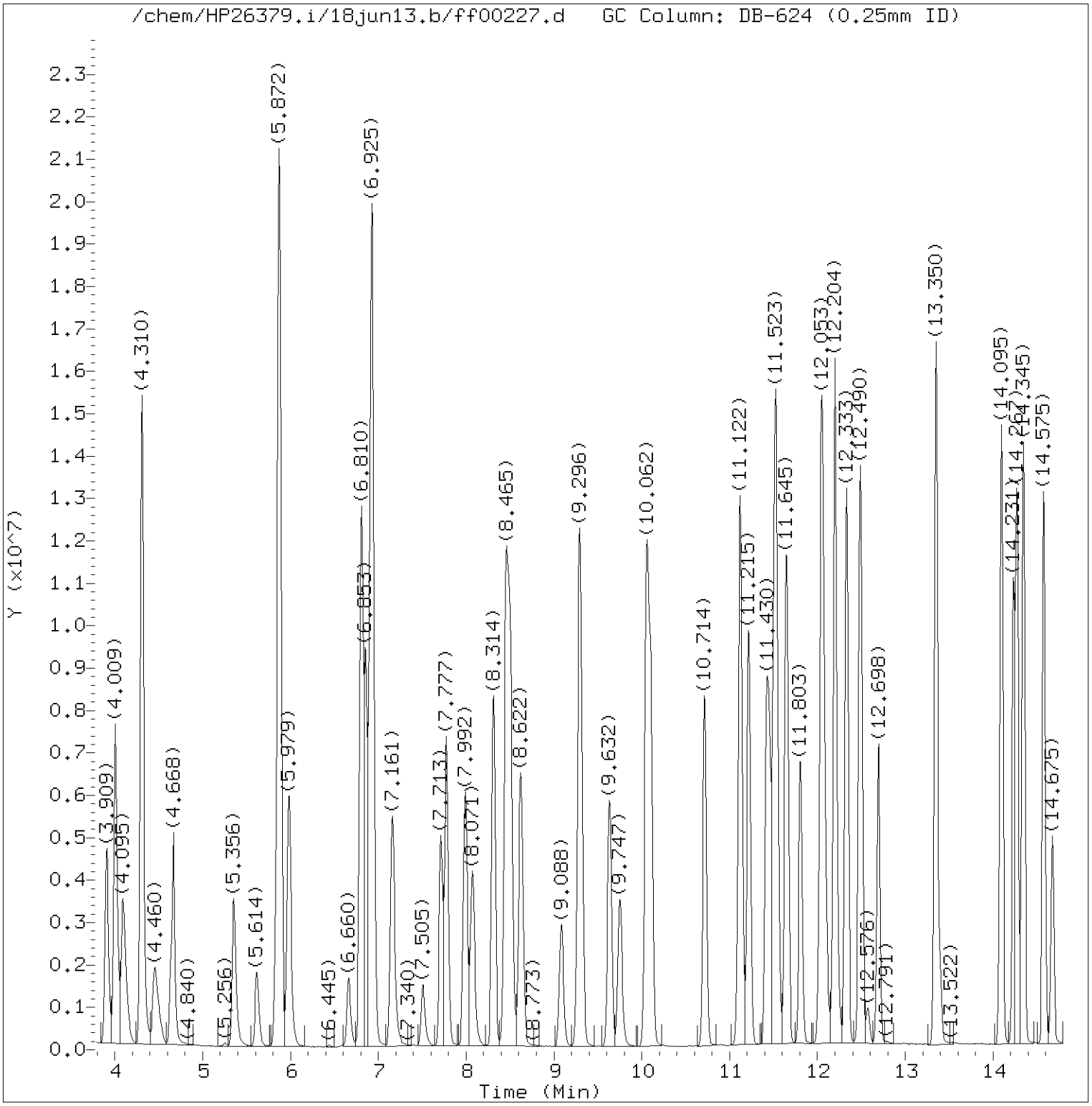
Data File: /chem/HP26379.i/18jun13.b/ff00226.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 21:36 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 13-JUN-2018 14:32
Date, time and analyst ID of latest file update: 13-Jun-2018 22:05 Unknown

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compound Number : 84
Compound Name : 4-Ethyltoluene
Scan Number : 2331
Retention Time (minutes): 20.484
Quant Ion : 105.00
Area : 5296439
Concentration (ppb(v)) : 15.0460
Integration start scan : 2315 Integration stop scan: 2330
Y at integration start : 1041 Y at integration end: 1041

Digitally signed by Jacob E. Bailey on 06/14/2018 at 15:10.
Target 3.5 esignature used for this page



Total Ion Chromatogram (TIC)

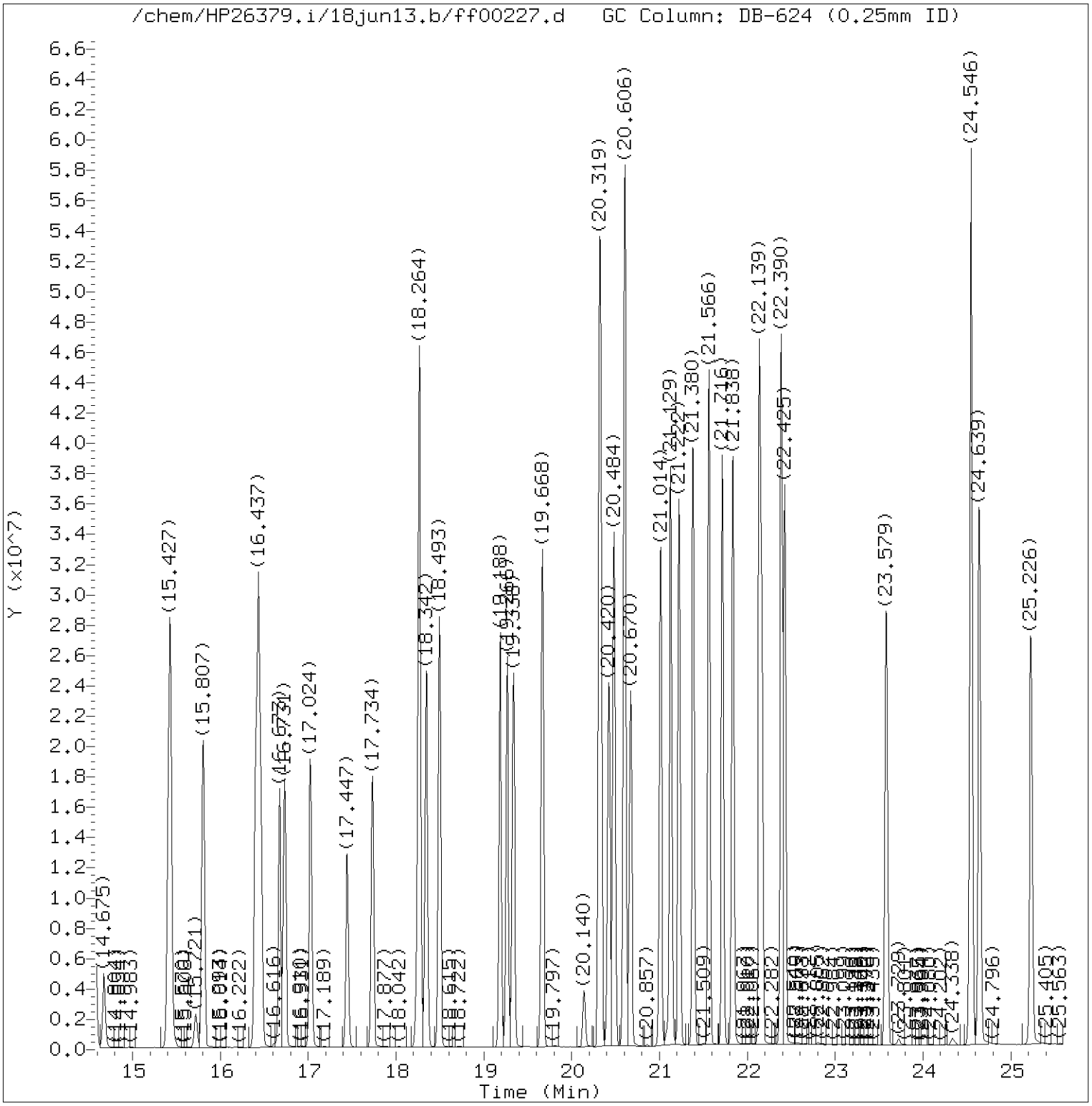
Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00227.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 22:07 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 15:12
Date, time and analyst ID of latest file update: 14-Jun-2018 15:12 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:12.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00227.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 22:07 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 15:12
Date, time and analyst ID of latest file update: 14-Jun-2018 15:12 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:12.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00227.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 22:07 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 15:12
Date, time and analyst ID of latest file update: 14-Jun-2018 15:12 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.909	41	4714216	82.410
2) Dichlorodifluoromethane	(1)	4.009	85	12798981	73.902
3) Chlorodifluoromethane	(1)	4.095	51	9477988	69.345
4) Freon 114	(1)	4.310	85	12344748	67.877
5) Chloromethane	(1)	4.460	50	4961616	69.691
6) Vinyl Chloride	(1)	4.640	62	2788977	74.179
7) 1,3-Butadiene	(1)	4.668	54	2255267	70.530
8) Bromomethane	(1)	5.356	94	4208311	79.685
9) Chloroethane	(1)	5.614	64	2583936	77.557
10) Bromoethene	(1)	5.836	106	4478650	89.934
11) Pentane	(1)	5.872	43	9956884	86.886
12) Trichlorofluoromethane	(1)	5.879	101	12732350	64.982
13) Dichlorofluoromethane	(1)	5.979	67	10065286	72.872
14) Ethanol	(1)	6.660	45	2320282	88.631
15) Freon123a	(1)	6.810	67	9633479	72.765
16) 1,1-Dichloroethene	(1)	6.860	61	8011060	85.686
17) Freon 113	(1)	6.917	103	6923375	61.503
18) Carbon Disulfide	(1)	6.939	76	12148353	79.388
19) Methyl Iodide	(1)	7.161	142	11591807	77.071
20) Acrolein	(1)	7.505	56	2093827	98.467
21) Isopropanol	(1)	7.713	45	9536816	92.756
22) 3-Chloropropene	(1)	7.777	41	8529846M	101.954
23) Methylene Chloride	(1)	7.992	84	4423339	84.336
24) Acetone	(1)	8.071	43	8824425	76.963
25) trans-1,2-Dichloroethene	(1)	8.314	61	7515406	83.101
26) Hexane	(1)	8.457	56	5548628	76.661
27) Methyl t-Butyl Ether	(1)	8.500	73	12419535	84.222
28) tert-Butyl Alcohol	(1)	8.622	59	11156580	91.262
29) Acetonitrile	(1)	9.088	41	5438460	78.414
30) Di-Isopropyl Ether	(1)	9.296	45	18714018	93.177
31) 1,1-Dichloroethane	(1)	9.632	63	9297260	73.956
32) Acrylonitrile	(1)	9.747	53	4804254	86.728
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	16079429M	96.820
34) Vinyl Acetate	(1)	10.105	43	18455759	104.693
35) cis-1,2-Dichloroethene	(1)	10.714	61	7128347	88.285
36) 1,2-Dichloroethene (total)	(1)		61	14643753	171.386
37)*Bromochloromethane	(1)	11.108	130	590786	10.000
38) Cyclohexane	(1)	11.122	56	8953135	94.469

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

Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:12.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00227.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 22:07 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 15:12
Date, time and analyst ID of latest file update: 14-Jun-2018 15:12 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	10675086	70.787
40) Ethyl Acetate	(1)	11.423	43	13343697	82.418
41) Methyl Acrylate	(1)	11.459	55	10153000	91.421
42) Carbon Tetrachloride	(1)	11.516	117	11842085	67.145
43) Tetrahydrofuran	(1)	11.538	42	6866819	91.253
44) 1,1,1-Trichloroethane	(1)	11.652	97	11252446	66.699
45) 2-Butanone	(1)	11.810	43	12056138	80.558
46) Isooctane	(2)	12.053	57	26321719M	79.486
47) Heptane	(2)	12.204	71	5040608	80.417
48) Benzene	(2)	12.333	78	14828057	63.042
49) Tert-Amyl Methyl Ether	(2)	12.490	73	12791000	79.783
50) 1,2-Dichloroethane	(2)	12.698	62	7714156	60.900
51) Trichloroethene	(2)	13.350	130	7541351	67.716
52)*1,4-Difluorobenzene	(2)	13.393	114	1933919	10.000
53) Dibromomethane	(2)	14.095	174	8429495	61.644
54) Ethyl Acrylate	(2)	14.231	55	12711203	78.910
55) 1,2-Dichloropropane	(2)	14.274	63	6092361	58.986
56) Bromodichloromethane	(2)	14.345	83	11227096	58.180
57) Methyl Methacrylate	(2)	14.575	69	5082259	82.053
58) 1,4-Dioxane	(2)	14.675	88	3785366	79.529
59) cis-1,3-Dichloropropene	(2)	15.406	75	9128757	72.700
60) Octane	(3)	15.434	43	15069217	79.905
61) Toluene	(3)	15.807	91	17588803	68.825
62) 4-Methyl-2-Pentanone	(2)	16.401	43	14768360	66.628
63) Tetrachloroethene	(3)	16.437	166	11818258	60.084
64) trans-1,3-Dichloropropene	(3)	16.466	75	7951221	70.477
65) 1,3-Dichloropropene (total)	(3)		75	17079978	149.014
66) Ethyl Methacrylate	(3)	16.673	69	8722128	85.361
67) 1,1,2-Trichloroethane	(3)	16.731	97	6973123	57.962
68) Dibromochloromethane	(3)	17.024	127	9607797	61.666
69) 1,2-Dibromoethane	(3)	17.440	107	10739304	63.368
70) 2-Hexanone	(3)	17.734	43	14557871	75.214
71)*Chlorobenzene-d5	(3)	18.235	117	1894400	10.000
72) Chlorobenzene	(3)	18.256	112	15415099	60.051
73) Ethylbenzene	(3)	18.278	91	20698855	59.132
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	9235917	55.146
75) m/p-Xylene	(3)	18.493	91	17882482	73.797
76) o-Xylene	(3)	19.188	91	17918601	78.599

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

Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:12.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00227.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 22:07 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 15:12
Date, time and analyst ID of latest file update: 14-Jun-2018 15:12 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	35801083	150.753
78) Styrene	(3)	19.266	104	14832827	79.602
79) Bromoform	(3)	19.338	173	14364417	61.028
80) Cumene	(3)	19.675	105	21592464	62.476
81) n-Propylbenzene	(3)	20.319	120	8238470	74.114
82) Bromobenzene	(3)	20.327	156	10896010	59.326
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	14122179	52.045
84) 4-Ethyltoluene	(3)	20.491	105	21755227	59.623
85) 2-Chlorotoluene	(3)	20.599	126	7489227	65.840
86) 1,3,5-Trimethylbenzene	(3)	20.613	105	19963742	59.038
87) 1,2,3-Trichloropropane	(3)	20.670	110	4772183	53.208
88) Alpha Methyl Styrene	(3)	21.014	118	12396031	87.106
89) tert-Butylbenzene	(3)	21.136	119	19825840	61.673
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	19392513	60.058
91) sec-Butylbenzene	(3)	21.394	105	21670399	45.130
92) p-Isopropyltoluene	(3)	21.573	119	19751896	51.138
93) 1,3-Dichlorobenzene	(3)	21.723	146	16670347	53.722
94) 1,4-Dichlorobenzene	(3)	21.838	146	16805043	56.147
95) n-Butylbenzene	(3)	22.139	92	16721031	74.482
96) Benzyl Chloride	(3)	22.168	126	5263942	69.942
97) Hexachloroethane	(3)	22.390	117	9609927	61.950
98) 1,2-Dichlorobenzene	(3)	22.425	146	16605960	59.647
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	10408927	73.377
100) Hexachlorobutadiene	(3)	24.546	225	16590474	65.005
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	16183185	81.142
102) Naphthalene	(3)	25.240	128	24405563	83.629

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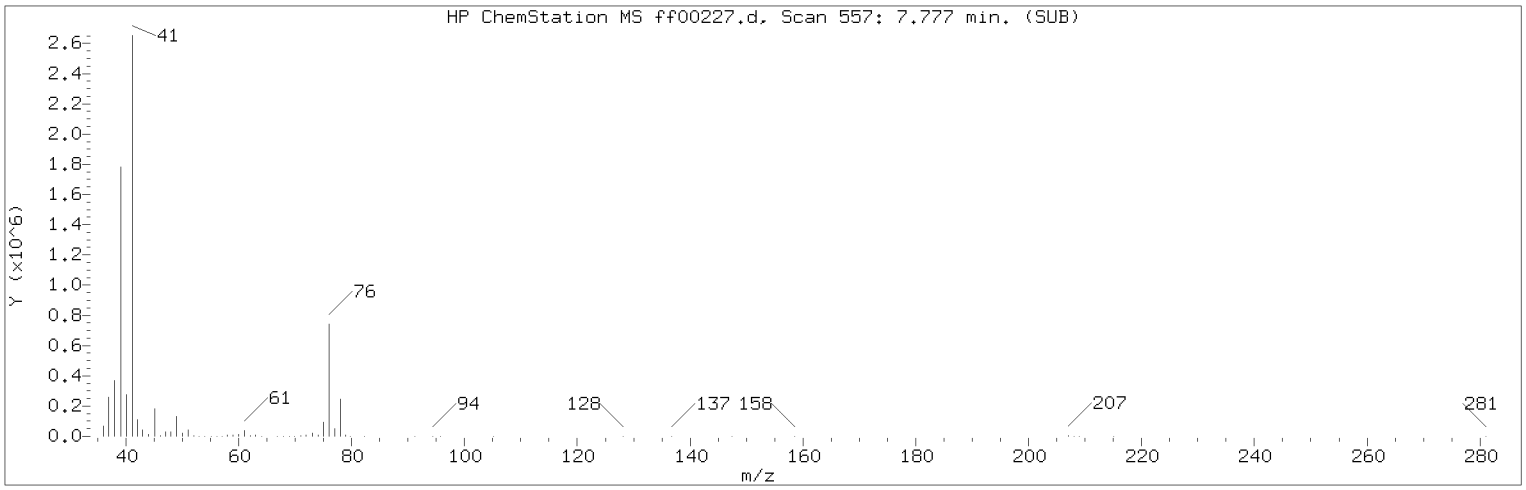
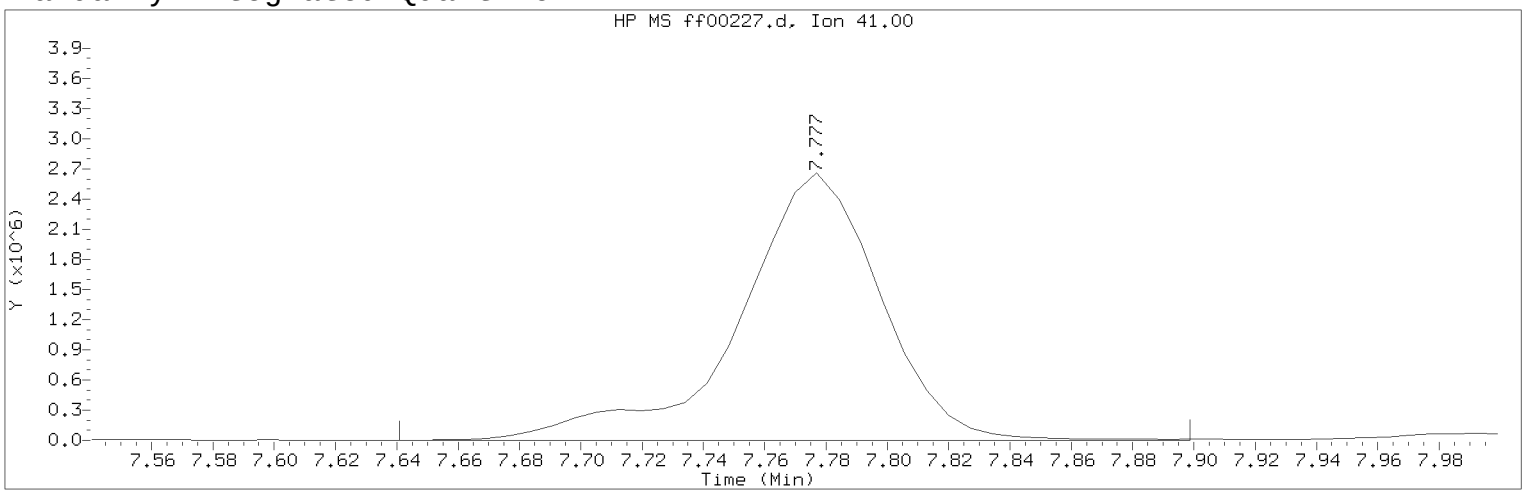
on 06/14/2018 at 15:12.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18jun13.b/ff00227.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 22:07 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 15:12
Date, time and analyst ID of latest file update: 14-Jun-2018 15:12 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

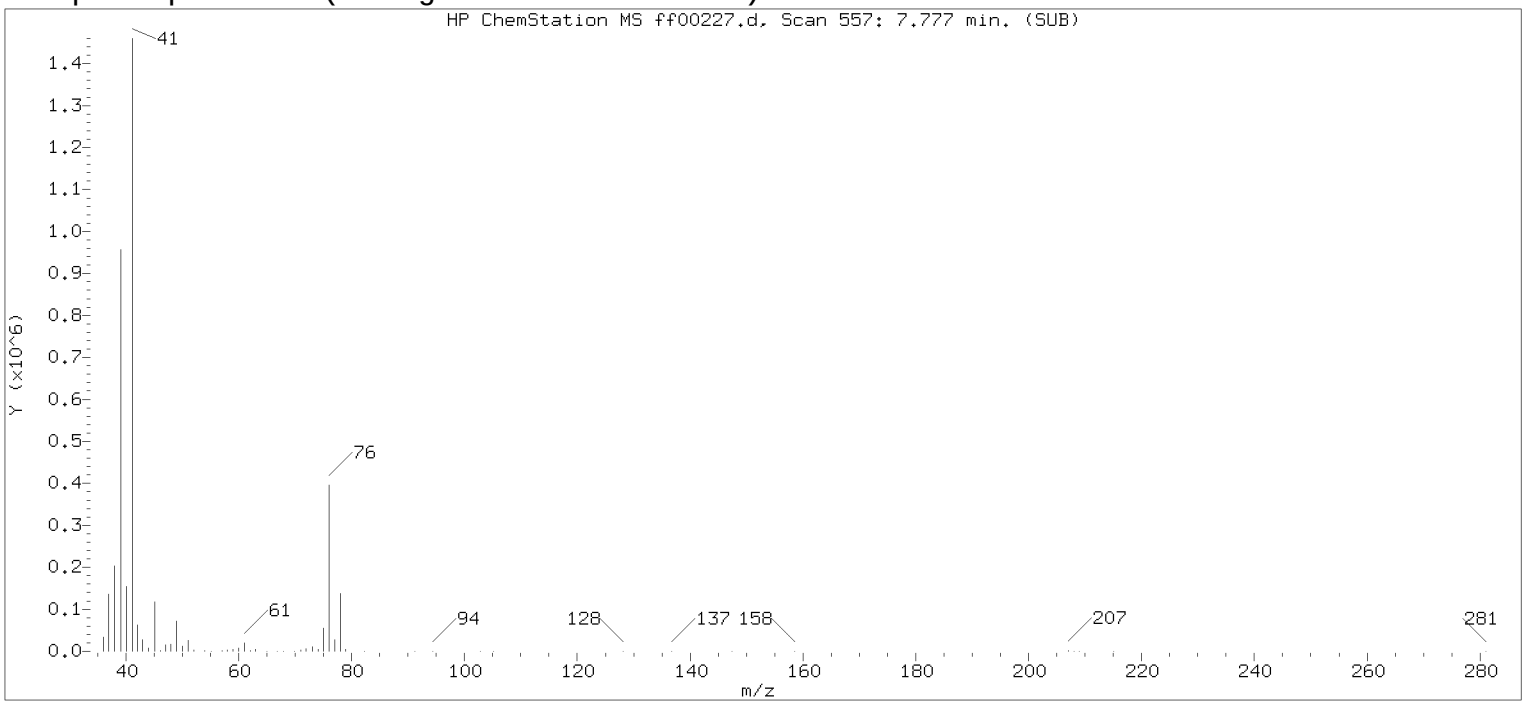
Compound Number : 22
Compound Name : 3-Chloropropene
Scan Number : 557
Retention Time (minutes): 7.777
Quant Ion : 41.00
Area (flag) : 8529846M
Concentration (ppb(v)) : 101.9539
Integration start scan : 537 Integration stop scan: 573
Y at integration start : 1382 Y at integration end: 1382

Reason for manual integration: improper integration

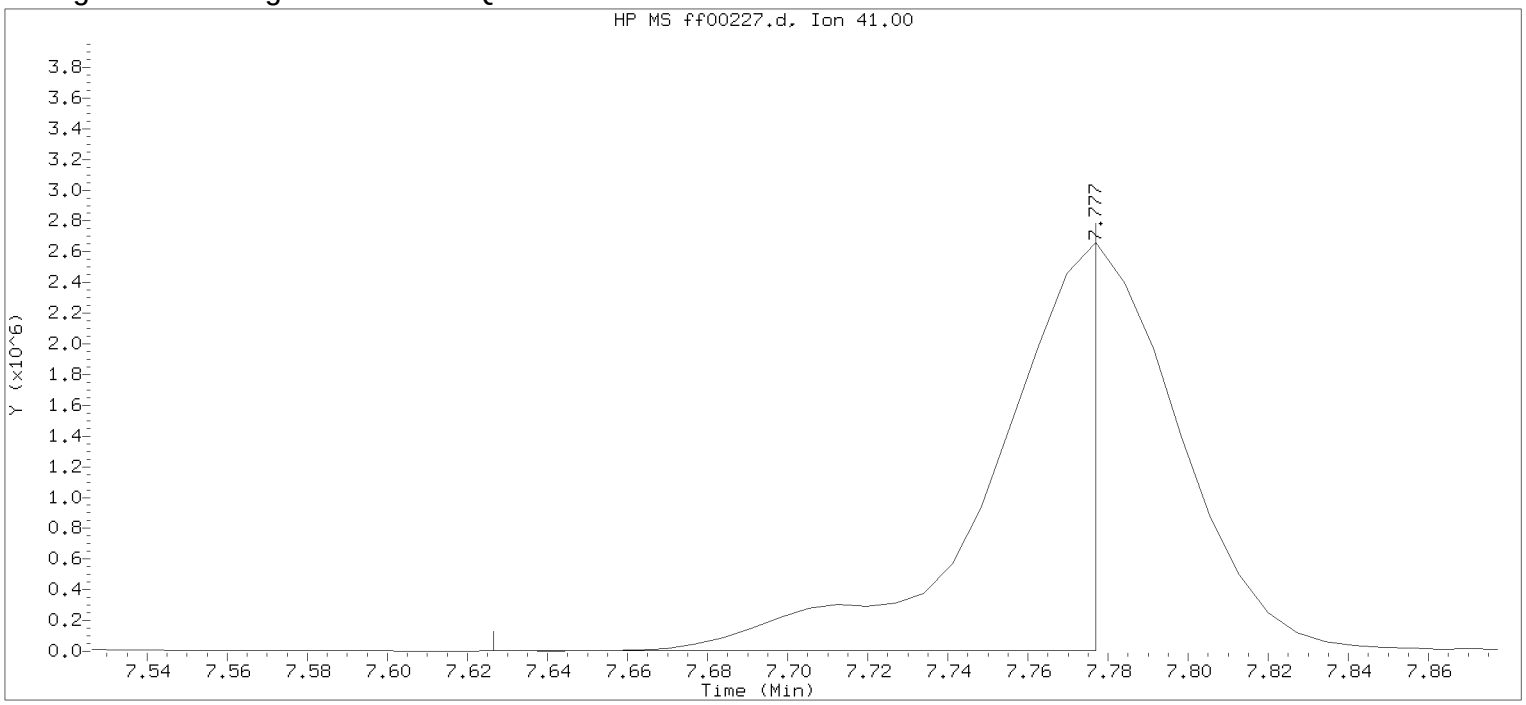
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:12.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 09:14.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18jun13.b/ff00227.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 22:07 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 13-JUN-2018 14:32
Date, time and analyst ID of latest file update: 13-Jun-2018 22:35 Unknown

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compound Number : 22
Compound Name : 3-Chloropropene
Scan Number : 557
Retention Time (minutes): 7.777
Quant Ion : 41.00
Area : 4646303
Concentration (ppb(v)) : 46.5516
Integration start scan : 535 Integration stop scan: 556
Y at integration start : 2341 Y at integration end: 2341

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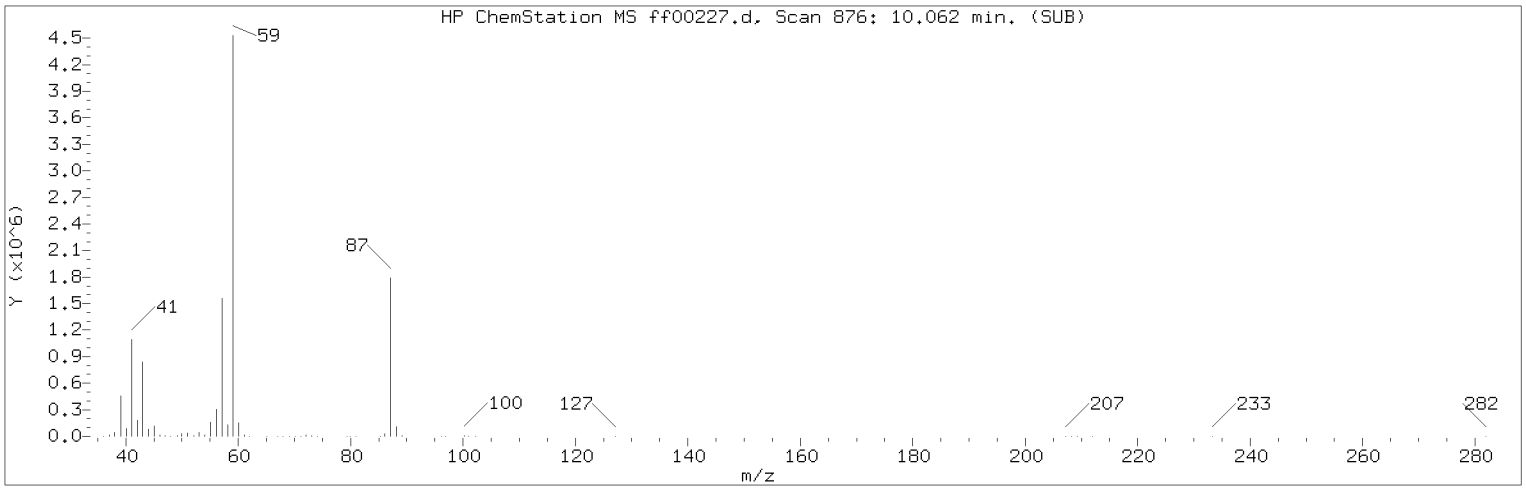
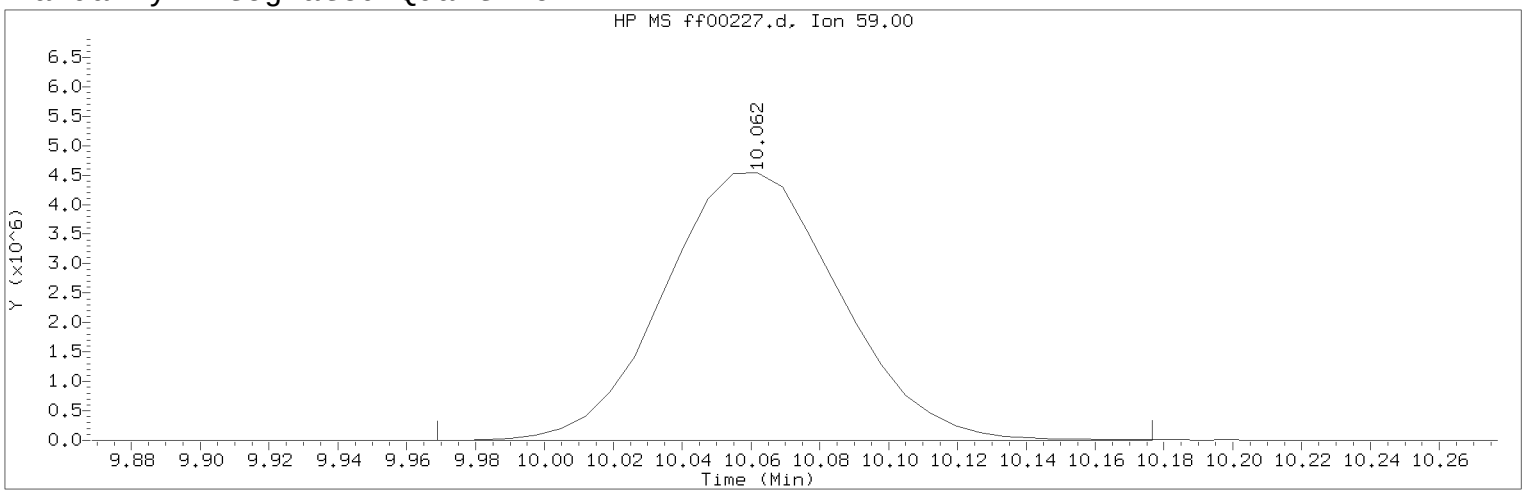
Target 3.5 esignature used. ED1 Page 1485

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18jun13.b/ff00227.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 22:07 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 15:12
Date, time and analyst ID of latest file update: 14-Jun-2018 15:12 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

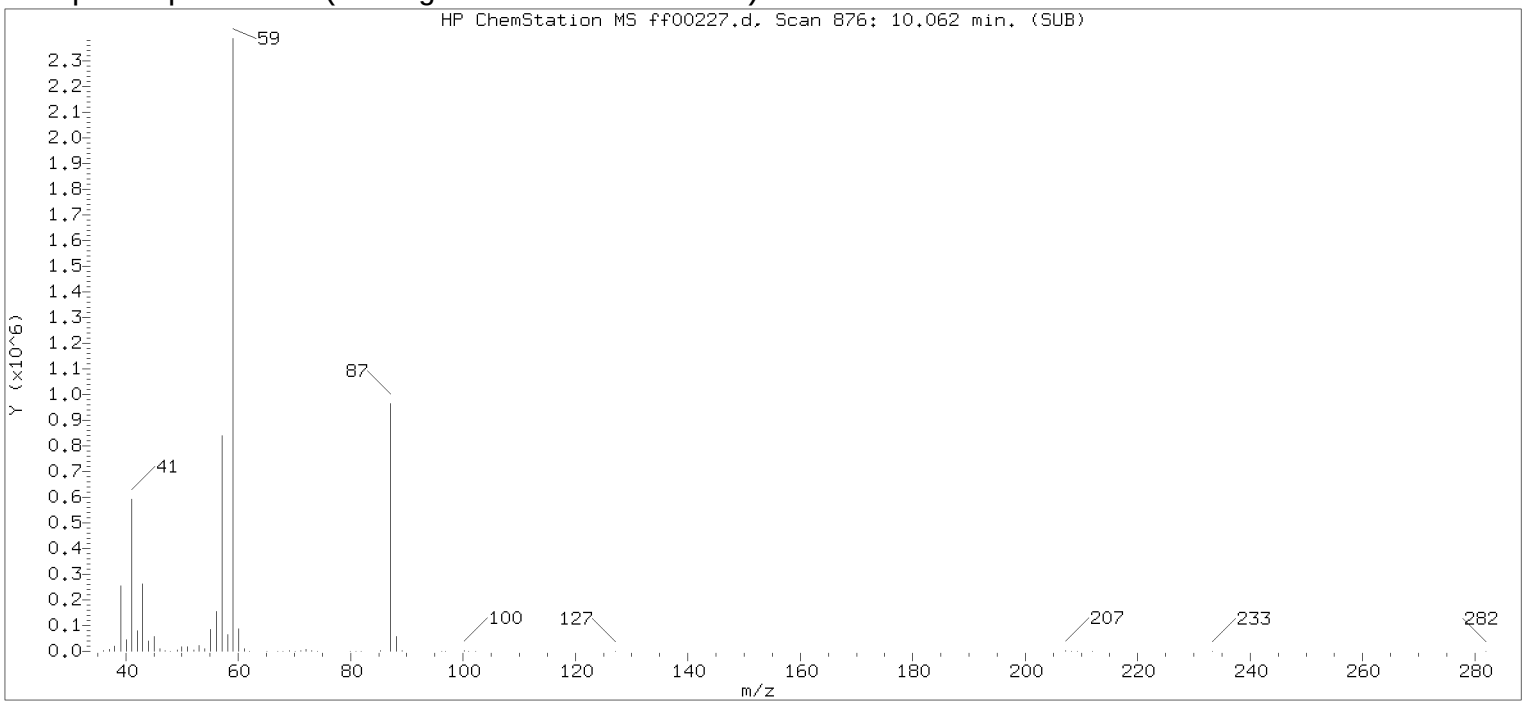
Compound Number : 33
Compound Name : Ethyl Tert-Butyl Ether
Scan Number : 876
Retention Time (minutes): 10.062
Quant Ion : 59.00
Area (flag) : 16079429M
Concentration (ppb(v)) : 96.8202
Integration start scan : 862 Integration stop scan: 891
Y at integration start : 491 Y at integration end: 491

Reason for manual integration: improper integration

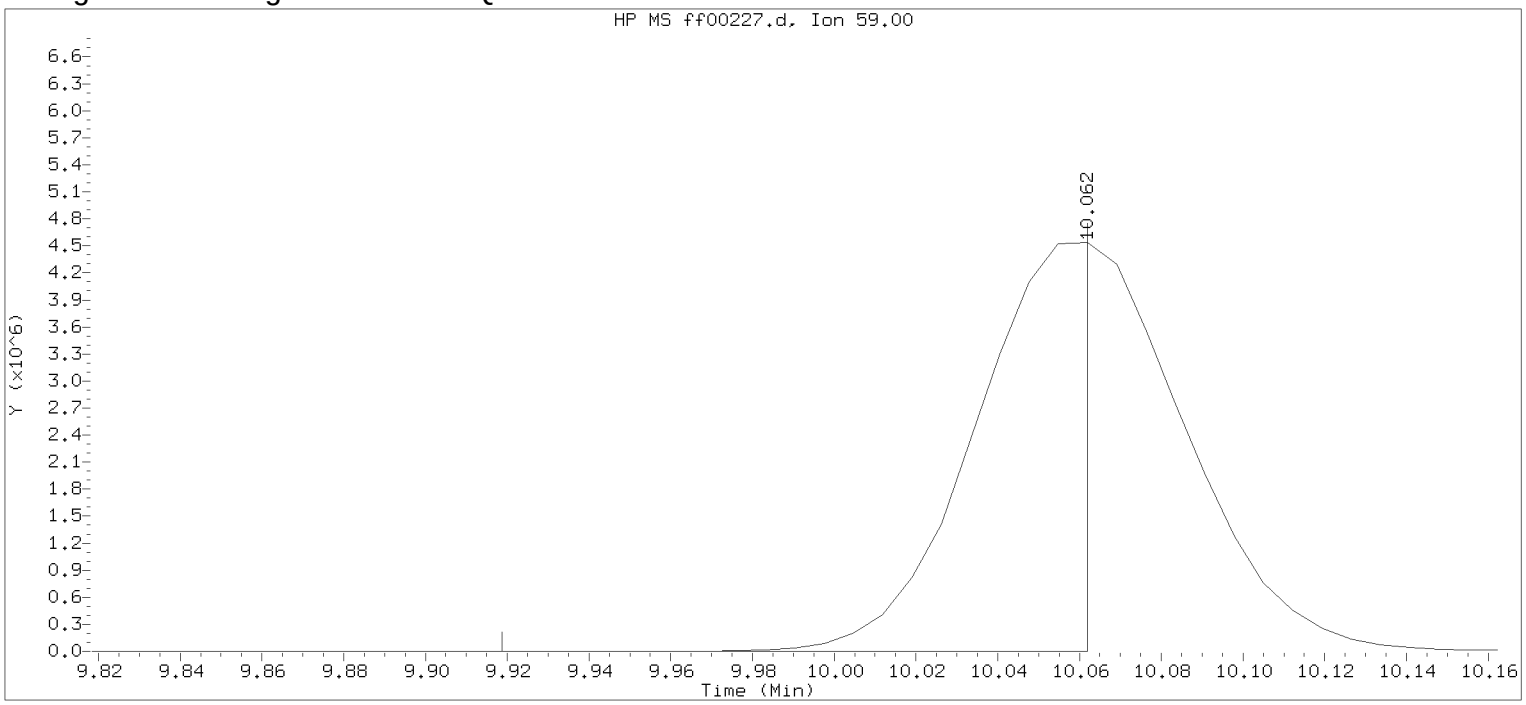
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:12.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 09:14.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18jun13.b/ff00227.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 22:07 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 13-JUN-2018 14:32
Date, time and analyst ID of latest file update: 13-Jun-2018 22:35 Unknown

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compound Number : 33
Compound Name : Ethyl Tert-Butyl Ether
Scan Number : 876
Retention Time (minutes): 10.062
Quant Ion : 59.00
Area : 8383146
Concentration (ppb(v)) : 34.1803
Integration start scan : 855 Integration stop scan: 875
Y at integration start : 446 Y at integration end: 446

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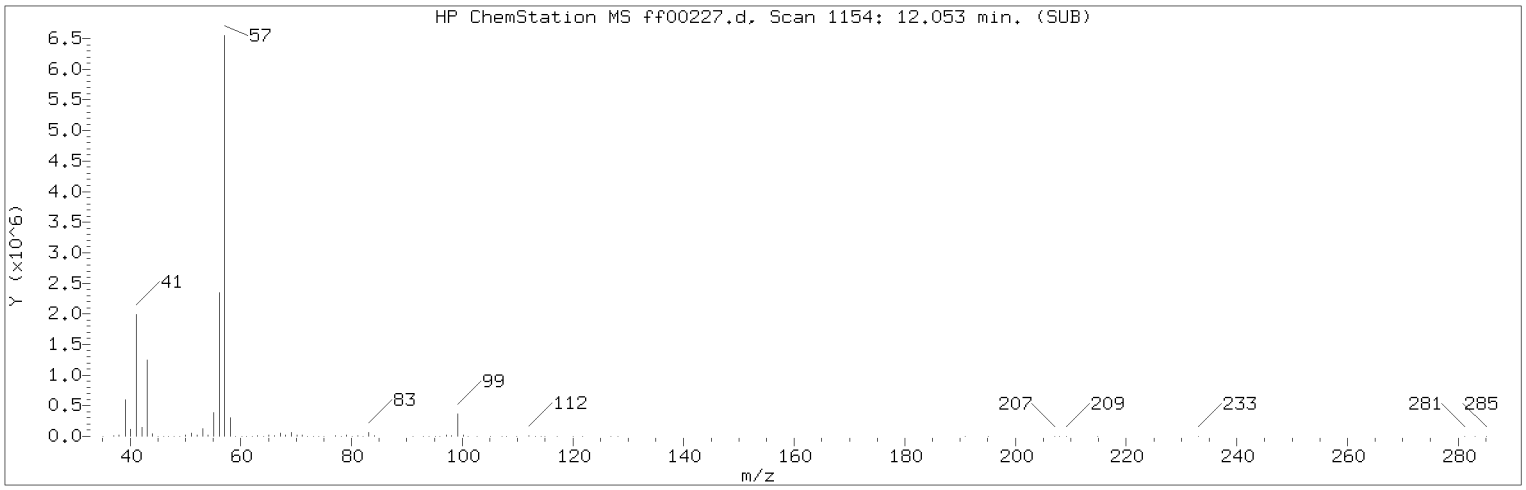
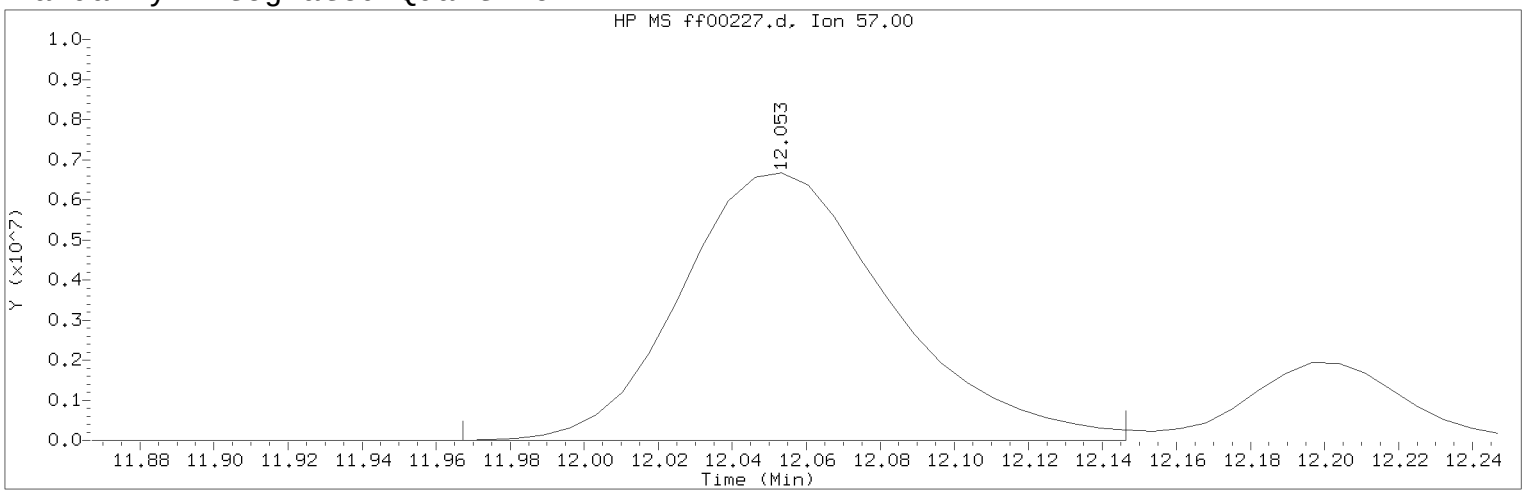
Target 3.5 esignature used for this page

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18jun13.b/ff00227.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 22:07 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 15:12
Date, time and analyst ID of latest file update: 14-Jun-2018 15:12 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

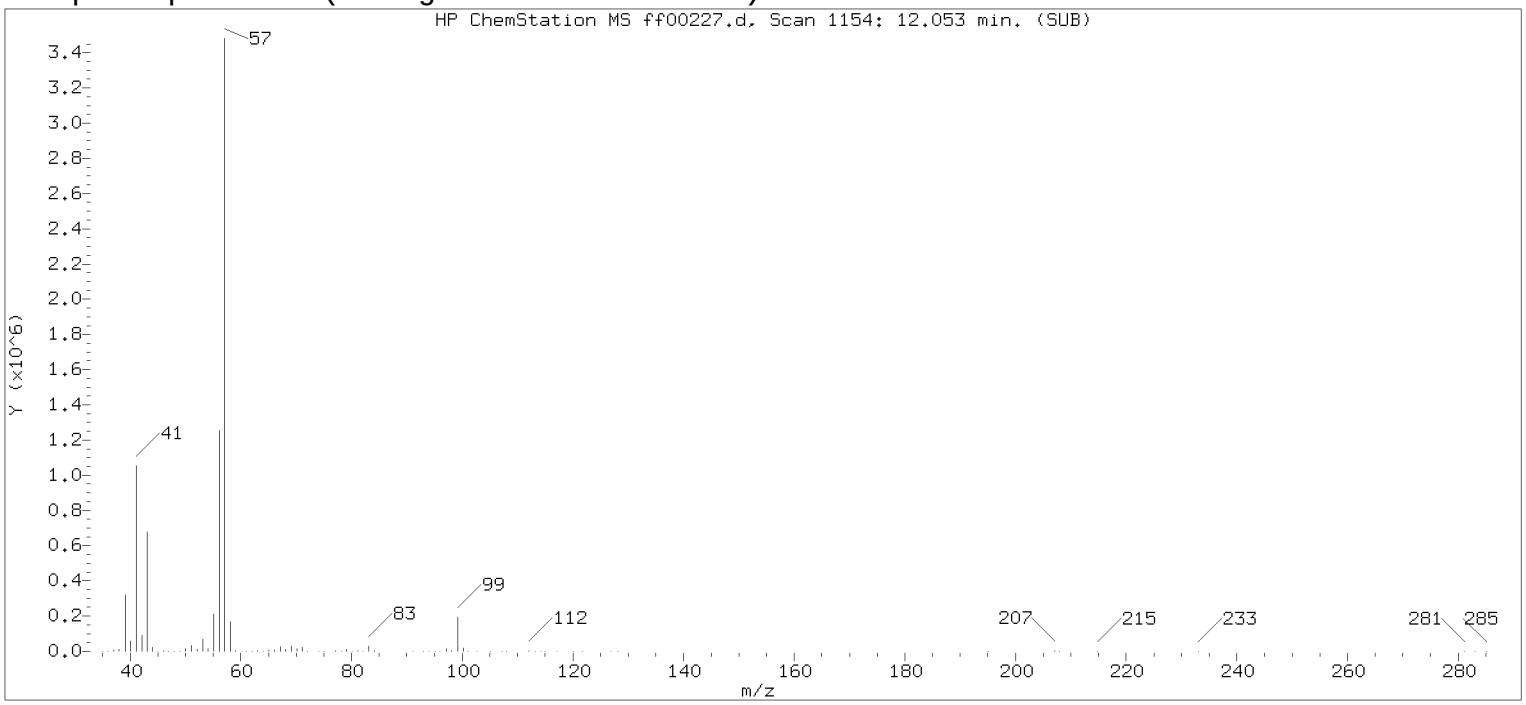
Compound Number : 46
Compound Name : Isooctane
Scan Number : 1154
Retention Time (minutes): 12.053
Quant Ion : 57.00
Area (flag) : 26321719M
Concentration (ppb(v)) : 79.4858
Integration start scan : 1141 Integration stop scan: 1166
Y at integration start : 3654 Y at integration end: 3654

Reason for manual integration: improper integration

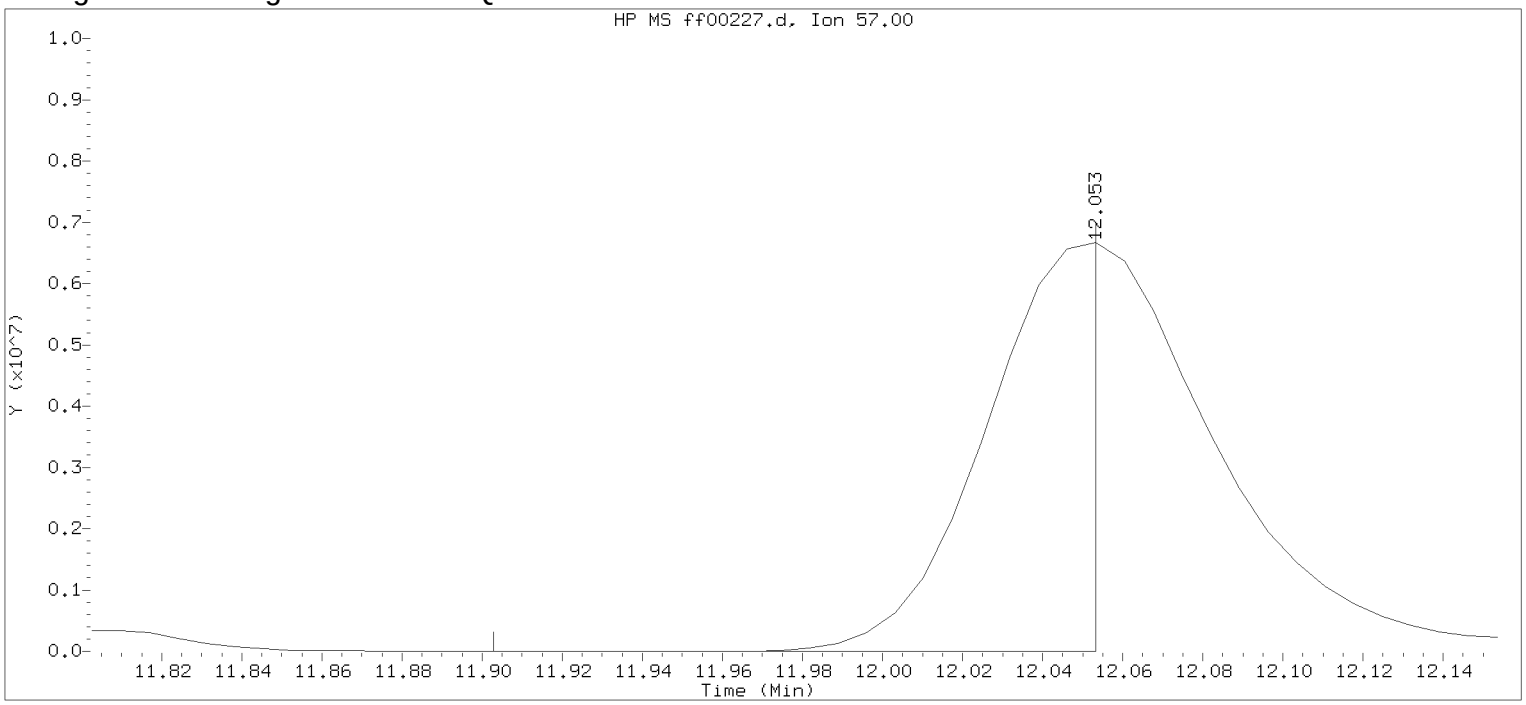
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:12.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 09:14.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18jun13.b/ff00227.d Instrument ID: HP26379.i
Injection date and time: 13-JUN-2018 22:07 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 13-JUN-2018 14:32
Date, time and analyst ID of latest file update: 13-Jun-2018 22:35 Unknown

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compound Number : 46
Compound Name : Isooctane
Scan Number : 1154
Retention Time (minutes): 12.053
Quant Ion : 57.00
Area : 12283992
Concentration (ppb(v)) : 34.9828
Integration start scan : 1132 Integration stop scan: 1153
Y at integration start : 1661 Y at integration end: 1661

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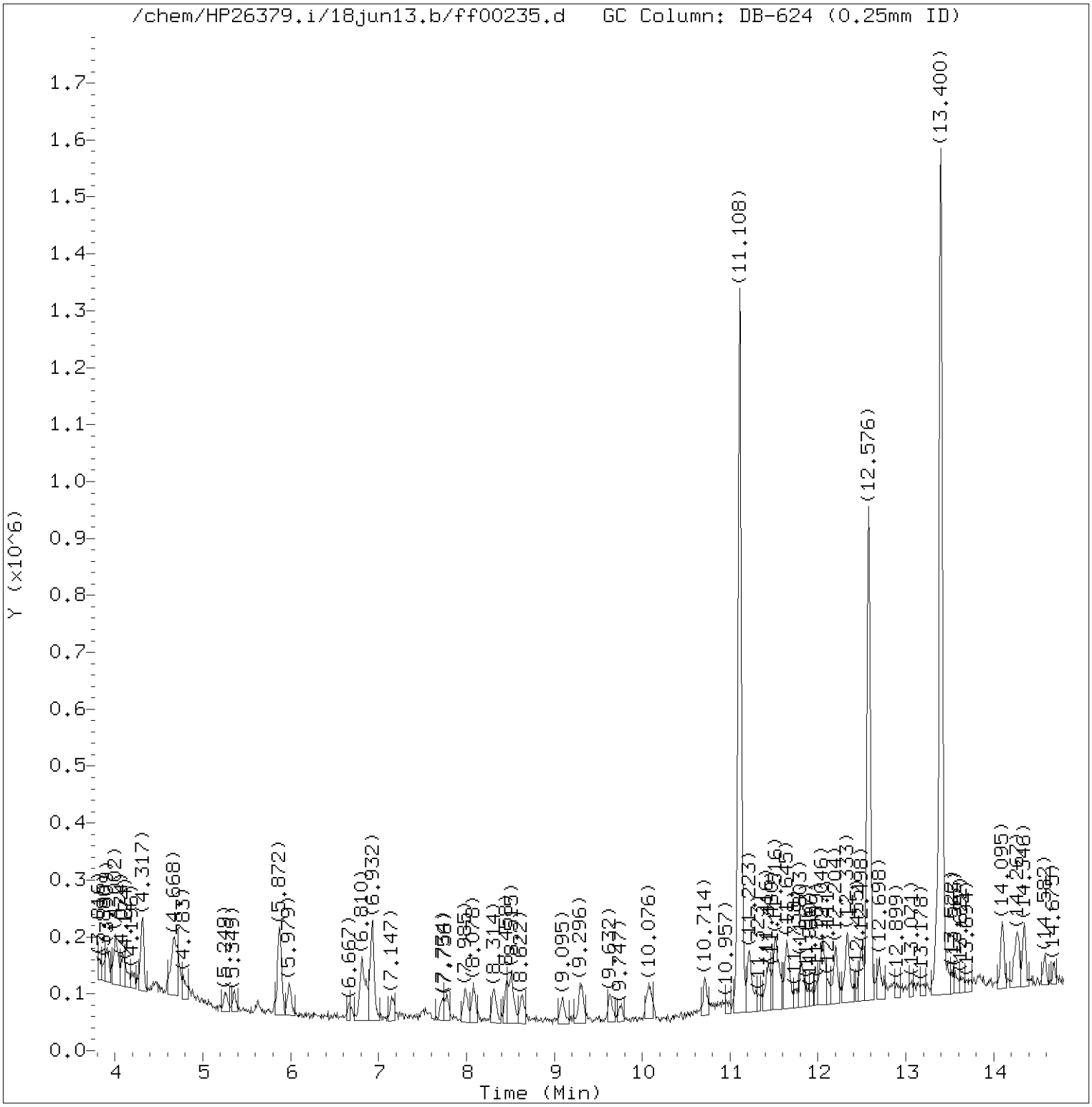
Target 3.5 esignature used for jeb07445



Total Ion Chromatogram (TIC)

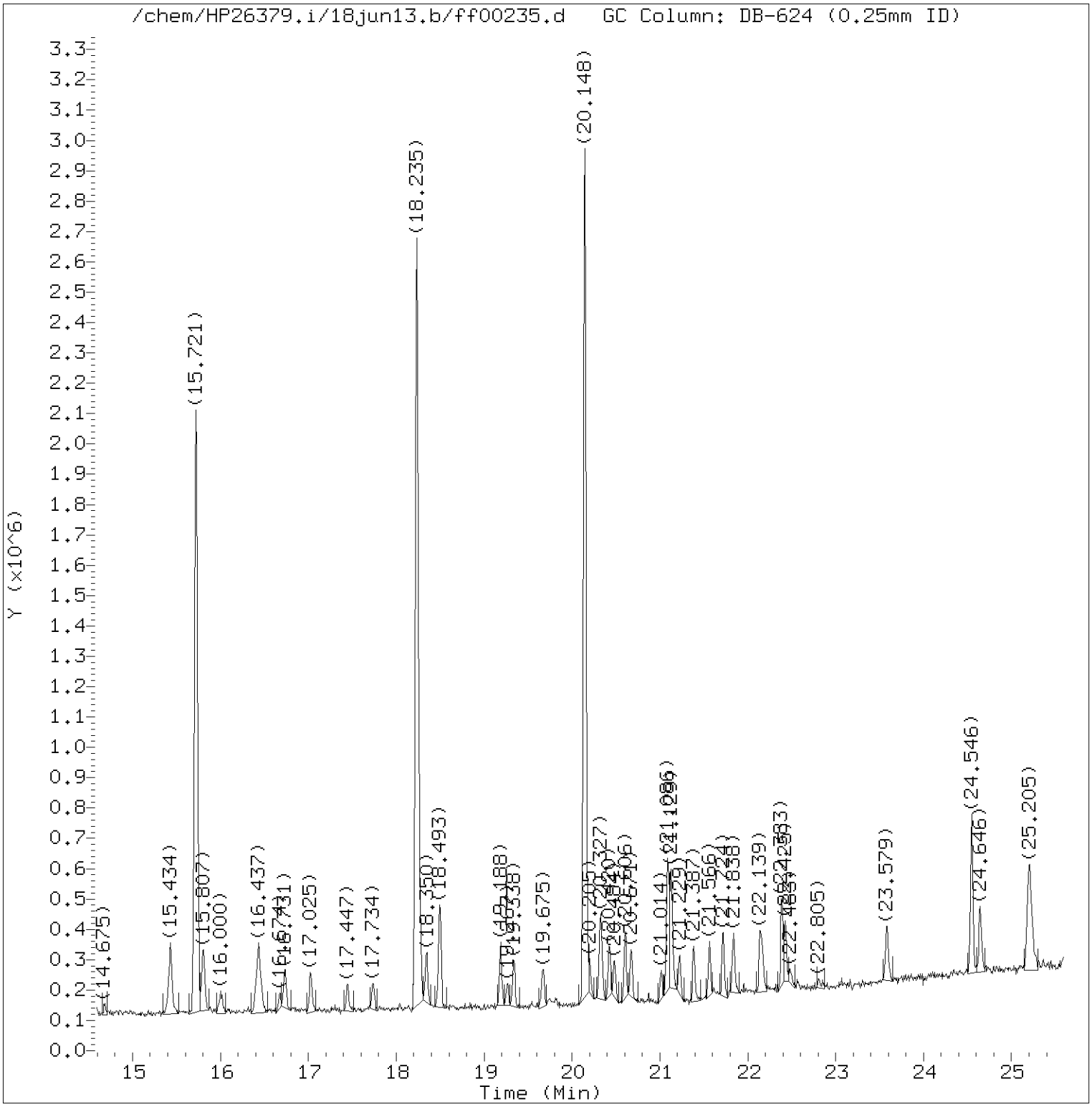
Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00235.d Instrument ID: HP26379.i
Injection date and time: 14-JUN-2018 02:13 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 15:12
Date, time and analyst ID of latest file update: 15-Jun-2018 09:16 jbs01304

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

Digitally signed by Jeffrey B. Smith
on 06/15/2018 at 09:17.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00235.d Instrument ID: HP26379.i
Injection date and time: 14-JUN-2018 02:13 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 15:12
Date, time and analyst ID of latest file update: 15-Jun-2018 09:16 jbs01304

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

Digitally signed by Jeffrey B. Smith
on 06/15/2018 at 09:17.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00235.d Instrument ID: HP26379.i
Injection date and time: 14-JUN-2018 02:13 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 15:12
Date, time and analyst ID of latest file update: 15-Jun-2018 09:16 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.909	41	33976	0.591
2) Dichlorodifluoromethane	(1)	4.002	85	94707	0.544
3) Chlorodifluoromethane	(1)	4.095	51	69048	0.503
4) Freon 114	(1)	4.310	85	102665	0.562
5) Chloromethane	(1)	4.453	50	43604	0.609
6) Vinyl Chloride	(1)	4.640	62	22264	0.589
7) 1,3-Butadiene	(1)	4.668	54	22023	0.685
8) Bromomethane	(1)	5.349	94	38623	0.728
9) Chloroethane	(1)	5.614	64	21599	0.645
10) Bromoethene	(1)	5.836	106	26375	0.527
11) Pentane	(1)	5.857	43	58980	0.512
12) Trichlorofluoromethane	(1)	5.879	101	102088	0.518
13) Dichlorofluoromethane	(1)	5.986	67	84803	0.611
14) Ethanol	(1)	6.667	45	44208	1.680
15) Freon123a	(1)	6.810	67	80831	0.607
16) 1,1-Dichloroethene	(1)	6.860	61	49421	0.526
17) Freon 113	(1)	6.925	103	60255	0.533
18) Carbon Disulfide	(1)	6.939	76	85812	0.558
19) Methyl Iodide	(1)	7.168	142	67188	0.444
20) Acrolein	(1)	7.512	56	16148	0.756
21) Isopropanol	(1)	7.727	45	58854	0.570
22) 3-Chloropropene	(1)	7.784	41	56616	0.673
23) Methylene Chloride	(1)	7.999	84	34582	0.656
24) Acetone	(1)	8.078	43	134049	1.163
25) trans-1,2-Dichloroethene	(1)	8.314	61	52243	0.575
26) Hexane	(1)	8.450	56	44429	0.611
27) Methyl t-Butyl Ether	(1)	8.515	73	91862	0.620
28) tert-Butyl Alcohol	(1)	8.644	59	58078	0.473
29) Acetonitrile	(1)	9.095	41	69695	1.000
30) Di-Isopropyl Ether	(1)	9.310	45	89226	0.442
31) 1,1-Dichloroethane	(1)	9.639	63	71453	0.565
32) Acrylonitrile	(1)	9.747	53	38902	0.699
33) Ethyl Tert-Butyl Ether	(1)	10.069	59	65764	0.394
34) Vinyl Acetate	(1)	10.105	43	86405	0.488
35) cis-1,2-Dichloroethene	(1)	10.721	61	38521	0.475
36) 1,2-Dichloroethene (total)	(1)		61	90764	1.049
37)*Bromochloromethane	(1)	11.108	130	593800	10.000
38) Cyclohexane	(1)	11.122	56	43786	0.460

* = Compound is an internal standard.

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on 06/15/2018 at 09:17.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00235.d Instrument ID: HP26379.i
Injection date and time: 14-JUN-2018 02:13 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 15:12
Date, time and analyst ID of latest file update: 15-Jun-2018 09:16 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.223	83	79671	0.526
40) Ethyl Acetate	(1)	11.423	43	81027	0.498
41) Methyl Acrylate	(1)	11.473	55	50946	0.456
42) Carbon Tetrachloride	(1)	11.516	117	81242	0.458
43) Tetrahydrofuran	(1)	11.559	42	34257	0.453
44) 1,1,1-Trichloroethane	(1)	11.645	97	80352	0.474
45) 2-Butanone	(1)	11.803	43	100270	0.667
46) Isooctane	(2)	12.061	57	119766	0.461
47) Heptane	(2)	12.204	71	20011	0.407
48) Benzene	(2)	12.326	78	107950	0.585
49) Tert-Amyl Methyl Ether	(2)	12.498	73	53450	0.425
50) 1,2-Dichloroethane	(2)	12.698	62	56645	0.570
51) Trichloroethene	(2)	13.350	130	48169	0.552
52)*1,4-Difluorobenzene	(2)	13.400	114	1516216	10.000
53) Dibromomethane	(2)	14.102	174	56678	0.529
54) Ethyl Acrylate	(2)	14.231	55	58151	0.460
55) 1,2-Dichloropropane	(2)	14.267	63	41407	0.511
56) Bromodichloromethane	(2)	14.338	83	80804	0.534
57) Methyl Methacrylate	(2)	14.582	69	20686	0.426
58) 1,4-Dioxane	(2)	14.682	88	18567	0.498
59) cis-1,3-Dichloropropene	(2)	15.413	75	47577	0.483
60) Octane	(3)	15.434	43	112205	0.663
61) Toluene	(3)	15.807	91	170003	0.741
62) 4-Methyl-2-Pentanone	(2)	16.401	43	80185	0.461
63) Tetrachloroethene	(3)	16.430	166	79736	0.451
64) trans-1,3-Dichloropropene	(3)	16.466	75	44209	0.436
65) 1,3-Dichloropropene (total)	(3)		75	91786	0.920
66) Ethyl Methacrylate	(3)	16.674	69	30869	0.336
67) 1,1,2-Trichloroethane	(3)	16.731	97	51663	0.478
68) Dibromochloromethane	(3)	17.025	127	63385	0.453
69) 1,2-Dibromoethane	(3)	17.440	107	68596	0.451
70) 2-Hexanone	(3)	17.741	43	82743	0.476
71)*Chlorobenzene-d5	(3)	18.235	117	1701280	10.000
72) Chlorobenzene	(3)	18.257	112	96225	0.417
73) Ethylbenzene	(3)	18.271	91	244738	0.779
74) 1,1,1,2-Tetrachloroethane	(3)	18.350	131	66808	0.444
75) m/p-Xylene	(3)	18.500	91	240557	1.105
76) o-Xylene	(3)	19.188	91	151467	0.740

* = Compound is an internal standard.

Digitally signed by Jeffrey B. Smith
on 06/15/2018 at 09:17.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00235.d Instrument ID: HP26379.i
Injection date and time: 14-JUN-2018 02:13 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 15:12
Date, time and analyst ID of latest file update: 15-Jun-2018 09:16 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	392024	1.845
78) Styrene	(3)	19.274	104	47819	0.286
79) Bromoform	(3)	19.338	173	85611	0.405
80) Cumene	(3)	19.668	105	99386	0.320
81) n-Propylbenzene	(3)	20.320	120	31167	0.312
82) Bromobenzene	(3)	20.327	156	62414	0.378
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	108750	0.446
84) 4-Ethyltoluene	(3)	20.484	105	101349	0.309
85) 2-Chlorotoluene	(3)	20.599	126	29077	0.285
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	84823	0.279
87) 1,2,3-Trichloropropane	(3)	20.671	110	33014	0.410
88) Alpha Methyl Styrene	(3)	21.014	118	40409	0.316
89) tert-Butylbenzene	(3)	21.129	119	129933	0.450
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	88289	0.304
91) sec-Butylbenzene	(3)	21.387	105	128013	0.297
92) p-Isopropyltoluene	(3)	21.566	119	99784	0.288
93) 1,3-Dichlorobenzene	(3)	21.724	146	101283	0.363
94) 1,4-Dichlorobenzene	(3)	21.838	146	95718	0.356
95) n-Butylbenzene	(3)	22.139	92	56094	0.278
96) Benzyl Chloride	(3)	22.168	126	23838	0.353
97) Hexachloroethane	(3)	22.390	117	60024	0.431
98) 1,2-Dichlorobenzene	(3)	22.425	146	100173	0.401
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	58161	0.457
100) Hexachlorobutadiene	(3)	24.546	225	148310	0.647
101) 1,2,4-Trichlorobenzene	(3)	24.639	180	99613	0.556
102) Naphthalene	(3)	25.233	128	150706	0.575

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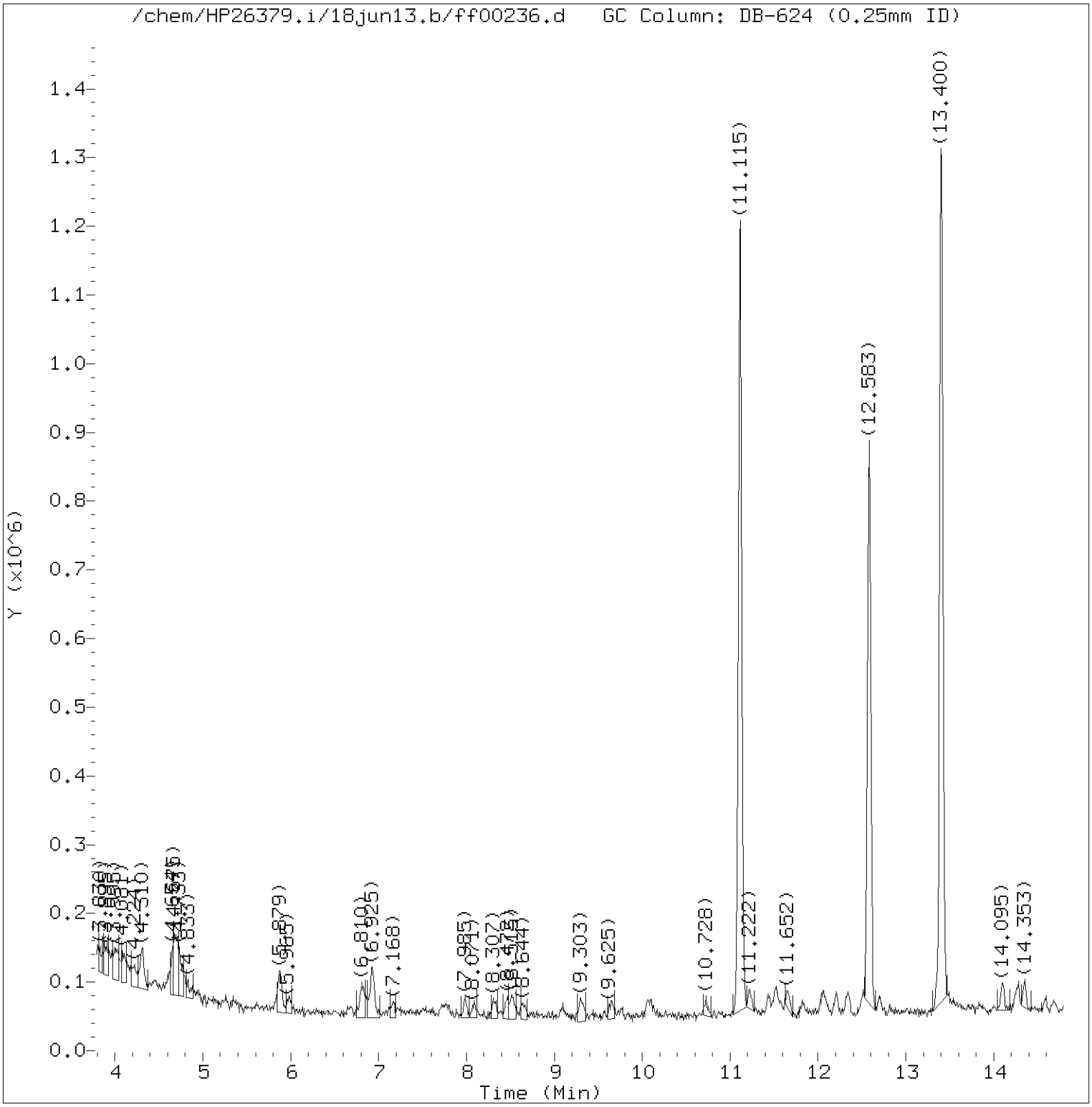
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

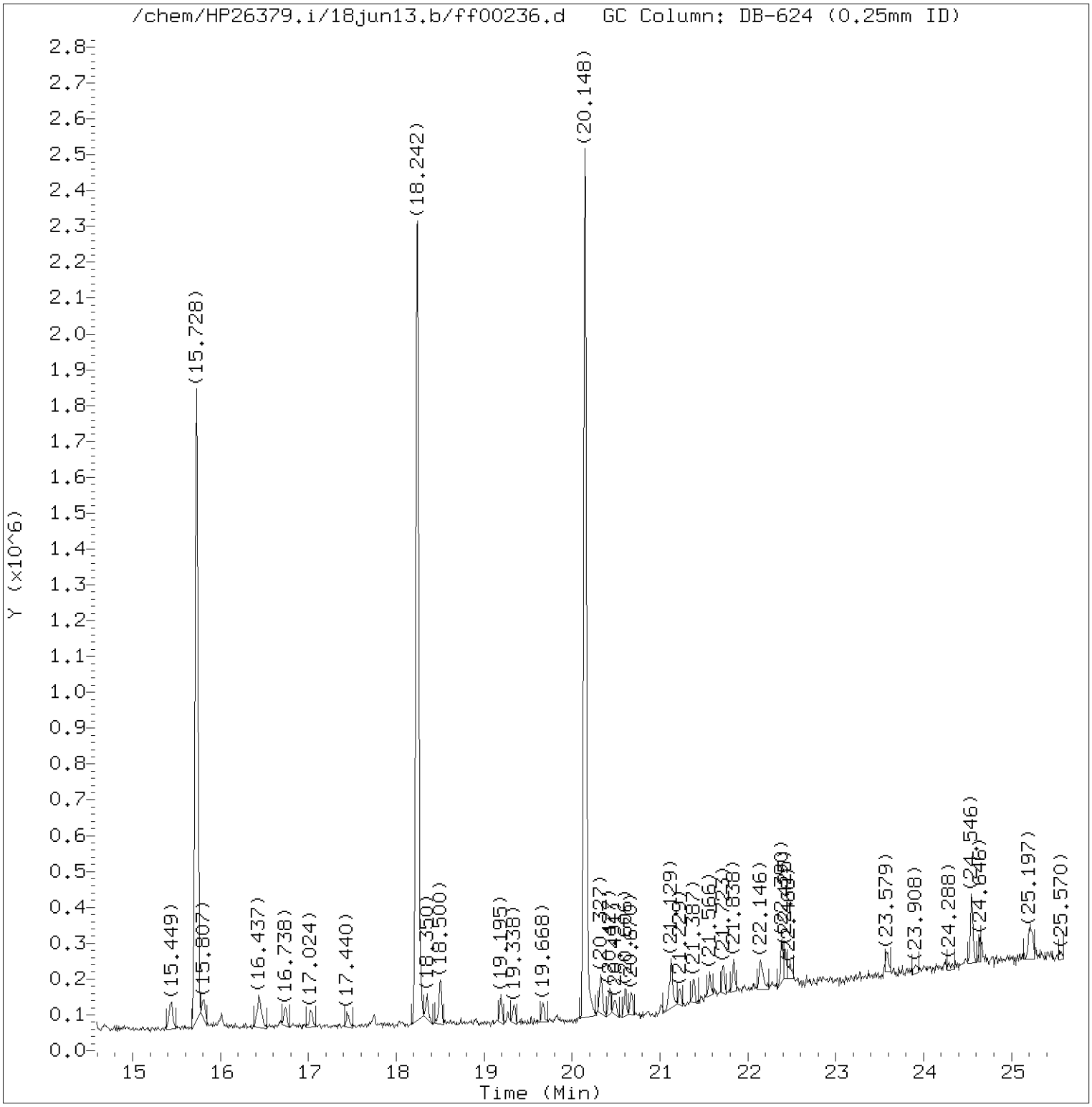
Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00236.d Instrument ID: HP26379.i
Injection date and time: 14-JUN-2018 02:44 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 15:12
Date, time and analyst ID of latest file update: 15-Jun-2018 09:16 jbs01304

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

Digitally signed by Jeffrey B. Smith
on 06/15/2018 at 09:17.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00236.d Instrument ID: HP26379.i
Injection date and time: 14-JUN-2018 02:44 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 15:12
Date, time and analyst ID of latest file update: 15-Jun-2018 09:16 jbs01304

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

Digitally signed by Jeffrey B. Smith
on 06/15/2018 at 09:17.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00236.d Instrument ID: HP26379.i
Injection date and time: 14-JUN-2018 02:44 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 15:12
Date, time and analyst ID of latest file update: 15-Jun-2018 09:16 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.916	41	13318	0.241
2) Dichlorodifluoromethane	(1)	4.002	85	37315	0.223
3) Chlorodifluoromethane	(1)	4.095	51	26328	0.199
4) Freon 114	(1)	4.310	85	36210	0.206
5) Chloromethane	(1)	4.446	50	16046	0.233
6) Vinyl Chloride	(1)	4.654	62	8655	0.238
7) 1,3-Butadiene	(1)	4.683	54	9848	0.319
8) Bromomethane	(1)	5.370	94	14413M	0.283
9) Chloroethane	(1)	5.599	64	11033M	0.343
10) Bromoethene	(1)	5.836	106	9092	0.189
11) Pentane	(1)	5.879	43	24898	0.225
12) Trichlorofluoromethane	(1)	5.886	101	40758	0.215
13) Dichlorofluoromethane	(1)	5.965	67	28479	0.213
14) Ethanol	(1)	6.681	45	23086	0.913
15) Freon123a	(1)	6.810	67	31165	0.244
16) 1,1-Dichloroethene	(1)	6.867	61	16856	0.187
17) Freon 113	(1)	6.932	103	23872	0.220
18) Carbon Disulfide	(1)	6.932	76	29875	0.202
19) Methyl Iodide	(1)	7.161	142	30605	0.211
20) Acrolein	(1)	7.505	56	5154	0.251
21) Isopropanol	(1)	7.727	45	22773	0.229
22) 3-Chloropropene	(1)	7.784	41	20240	0.250
23) Methylene Chloride	(1)	7.985	84	12058	0.238
24) Acetone	(1)	8.085	43	55780	0.504
25) trans-1,2-Dichloroethene	(1)	8.307	61	18164	0.208
26) Hexane	(1)	8.450	56	18819	0.269
27) Methyl t-Butyl Ether	(1)	8.515	73	33829	0.238
28) tert-Butyl Alcohol	(1)	8.644	59	25262	0.214
29) Acetonitrile	(1)	9.095	41	26381	0.394
30) Di-Isopropyl Ether	(1)	9.310	45	34095	0.176
31) 1,1-Dichloroethane	(1)	9.639	63	26327	0.217
32) Acrylonitrile	(1)	9.754	53	13229	0.247
33) Ethyl Tert-Butyl Ether	(1)	10.076	59	25125	0.157
34) Vinyl Acetate	(1)	10.112	43	32039	0.188
35) cis-1,2-Dichloroethene	(1)	10.699	61	11585	0.149
36) 1,2-Dichloroethene (total)	(1)		61	29749	0.357
37)*Bromochloromethane	(1)	11.115	130	570576	10.000
38) Cyclohexane	(1)	11.136	56	15588	0.170

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

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on 06/15/2018 at 09:17.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00236.d Instrument ID: HP26379.i
Injection date and time: 14-JUN-2018 02:44 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 15:12
Date, time and analyst ID of latest file update: 15-Jun-2018 09:16 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	31315	0.215
40) Ethyl Acetate	(1)	11.423	43	33945	0.217
41) Methyl Acrylate	(1)	11.459	55	22771	0.212
42) Carbon Tetrachloride	(1)	11.523	117	32899	0.193
43) Tetrahydrofuran	(1)	11.573	42	19616	0.270
44) 1,1,1-Trichloroethane	(1)	11.645	97	31745	0.195
45) 2-Butanone	(1)	11.817	43	38619	0.267
46) Isooctane	(2)	12.060	57	43705	0.189
47) Heptane	(2)	12.211	71	5931	0.135
48) Benzene	(2)	12.340	78	36254	0.220
49) Tert-Amyl Methyl Ether	(2)	12.505	73	22607	0.202
50) 1,2-Dichloroethane	(2)	12.698	62	21716	0.245
51) Trichloroethene	(2)	13.357	130	15009	0.193
52)*1,4-Difluorobenzene	(2)	13.407	114	1353209	10.000
53) Dibromomethane	(2)	14.095	174	18664	0.195
54) Ethyl Acrylate	(2)	14.245	55	24419	0.217
55) 1,2-Dichloropropane	(2)	14.281	63	15762	0.218
56) Bromodichloromethane	(2)	14.353	83	29662	0.220
57) Methyl Methacrylate	(2)	14.589	69	8670	0.200
58) 1,4-Dioxane	(2)	14.689	88	4946	0.149
59) cis-1,3-Dichloropropene	(2)	15.413	75	16591	0.189
60) Octane	(3)	15.441	43	37273	0.242
61) Toluene	(3)	15.807	91	62274	0.299
62) 4-Methyl-2-Pentanone	(2)	16.408	43	29144	0.188
63) Tetrachloroethene	(3)	16.444	166	31057	0.194
64) trans-1,3-Dichloropropene	(3)	16.473	75	17658	0.192
65) 1,3-Dichloropropene (total)	(3)		75	34249	0.381
66) Ethyl Methacrylate	(3)	16.688	69	10560	0.127
67) 1,1,2-Trichloroethane	(3)	16.745	97	18964	0.193
68) Dibromochloromethane	(3)	17.032	127	24325	0.191
69) 1,2-Dibromoethane	(3)	17.454	107	27575	0.199
70) 2-Hexanone	(3)	17.741	43	29489	0.187
71)*Chlorobenzene-d5	(3)	18.242	117	1545165	10.000
72) Chlorobenzene	(3)	18.264	112	35346	0.169
73) Ethylbenzene	(3)	18.278	91	85944	0.301
74) 1,1,1,2-Tetrachloroethane	(3)	18.350	131	22294	0.163
75) m/p-Xylene	(3)	18.500	91	79537	0.402
76) o-Xylene	(3)	19.188	91	50456	0.271

* = Compound is an internal standard.

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Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00236.d Instrument ID: HP26379.i
Injection date and time: 14-JUN-2018 02:44 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 15:12
Date, time and analyst ID of latest file update: 15-Jun-2018 09:16 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	129993	0.674
78) Styrene	(3)	19.274	104	16442	0.108
79) Bromoform	(3)	19.338	173	30552	0.159
80) Cumene	(3)	19.668	105	34761	0.123
81) n-Propylbenzene	(3)	20.312	120	7720	0.085
82) Bromobenzene	(3)	20.334	156	22605	0.151
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	37966	0.172
84) 4-Ethyltoluene	(3)	20.491	105	32891	0.111
86) 1,3,5-Trimethylbenzene	(3)	20.613	105	25040	0.091
85) 2-Chlorotoluene	(3)	20.613	126	11129	0.120
87) 1,2,3-Trichloropropane	(3)	20.678	110	14909	0.204
88) Alpha Methyl Styrene	(3)	21.014	118	11740	0.101
89) tert-Butylbenzene	(3)	21.136	119	46533	0.177
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	29767	0.113
91) sec-Butylbenzene	(3)	21.387	105	46980	0.120
92) p-Isopropyltoluene	(3)	21.573	119	40412	0.128
93) 1,3-Dichlorobenzene	(3)	21.723	146	38695	0.153
94) 1,4-Dichlorobenzene	(3)	21.838	146	35249	0.144
95) n-Butylbenzene	(3)	22.146	92	21229	0.116
96) Benzyl Chloride	(3)	22.175	126	8875	0.145
97) Hexachloroethane	(3)	22.382	117	23883	0.189
98) 1,2-Dichlorobenzene	(3)	22.425	146	39648	0.175
99) 1,2-Dibromo-3-chloropropane	(3)	23.593	157	21545	0.186
100) Hexachlorobutadiene	(3)	24.546	225	55361	0.266
101) 1,2,4-Trichlorobenzene	(3)	24.653	180	34992	0.215
102) Naphthalene	(3)	25.240	128	54703	0.230

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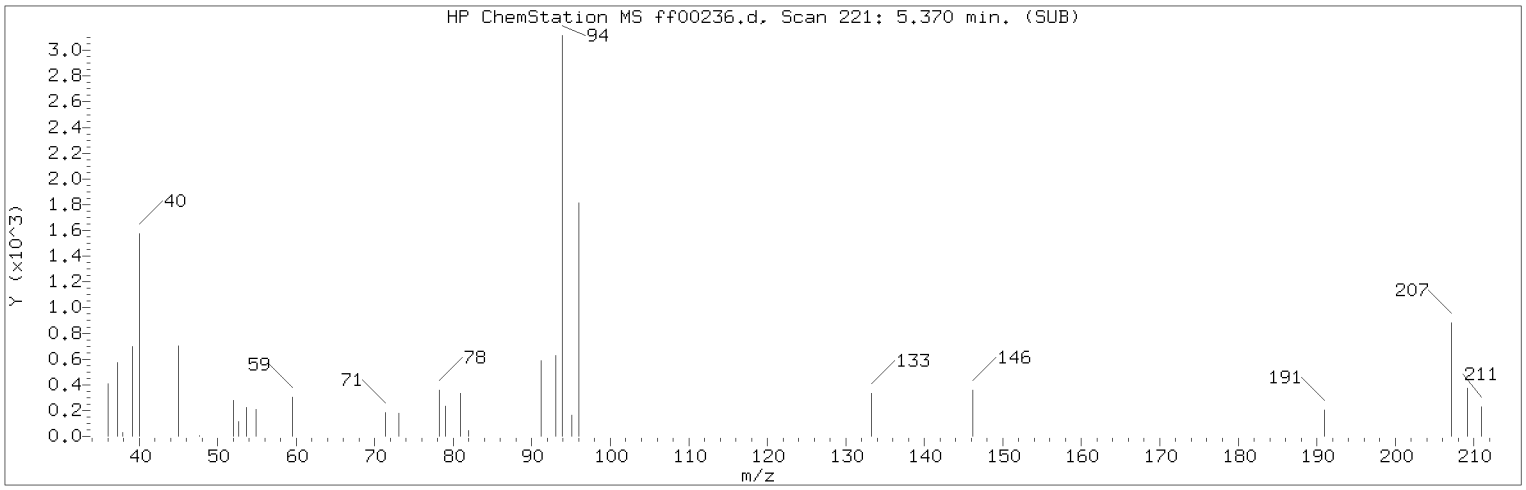
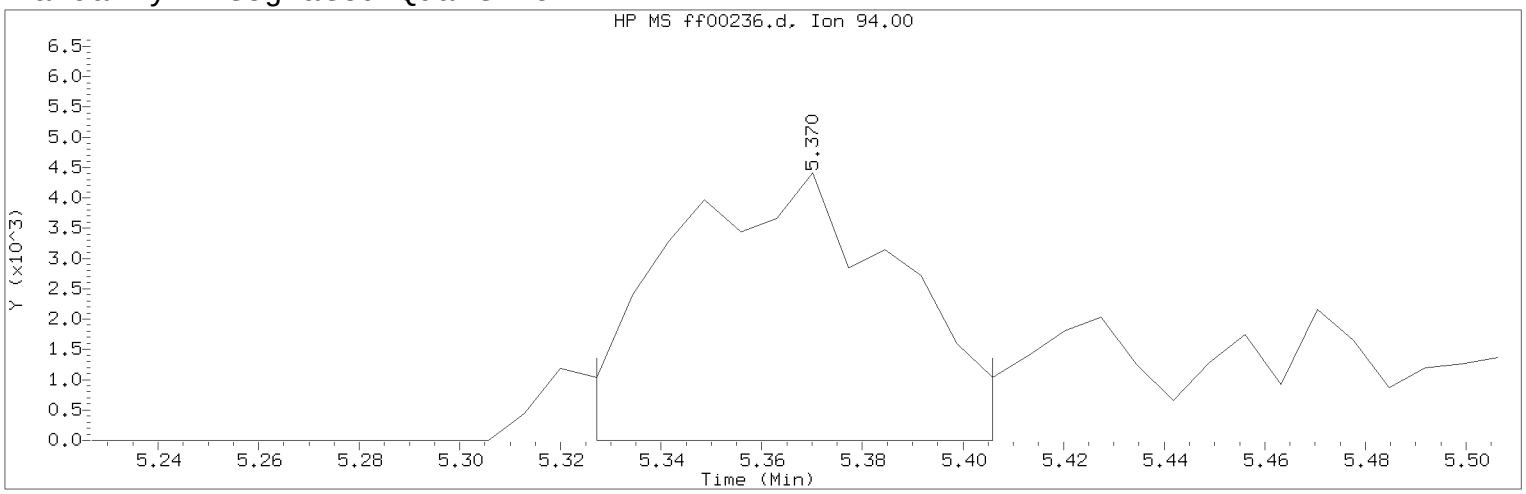
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18jun13.b/ff00236.d Instrument ID: HP26379.i
Injection date and time: 14-JUN-2018 02:44 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 15:12
Date, time and analyst ID of latest file update: 15-Jun-2018 09:16 jbs01304

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

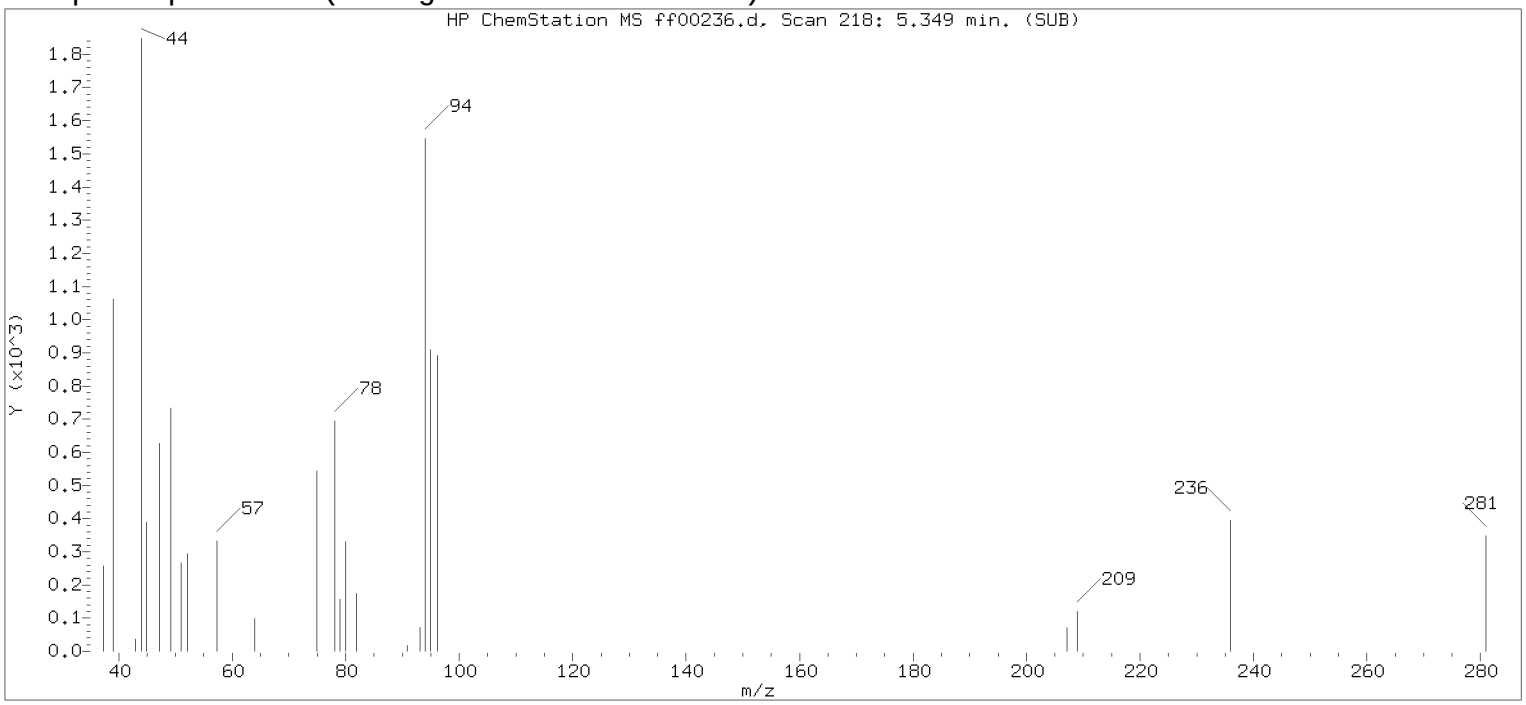
Compound Number : 8
Compound Name : Bromomethane
Scan Number : 221
Retention Time (minutes): 5.370
Quant Ion : 94.00
Area (flag) : 14413M
Concentration (ppb(v)) : 0.2826
Integration start scan : 214 Integration stop scan: 225
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

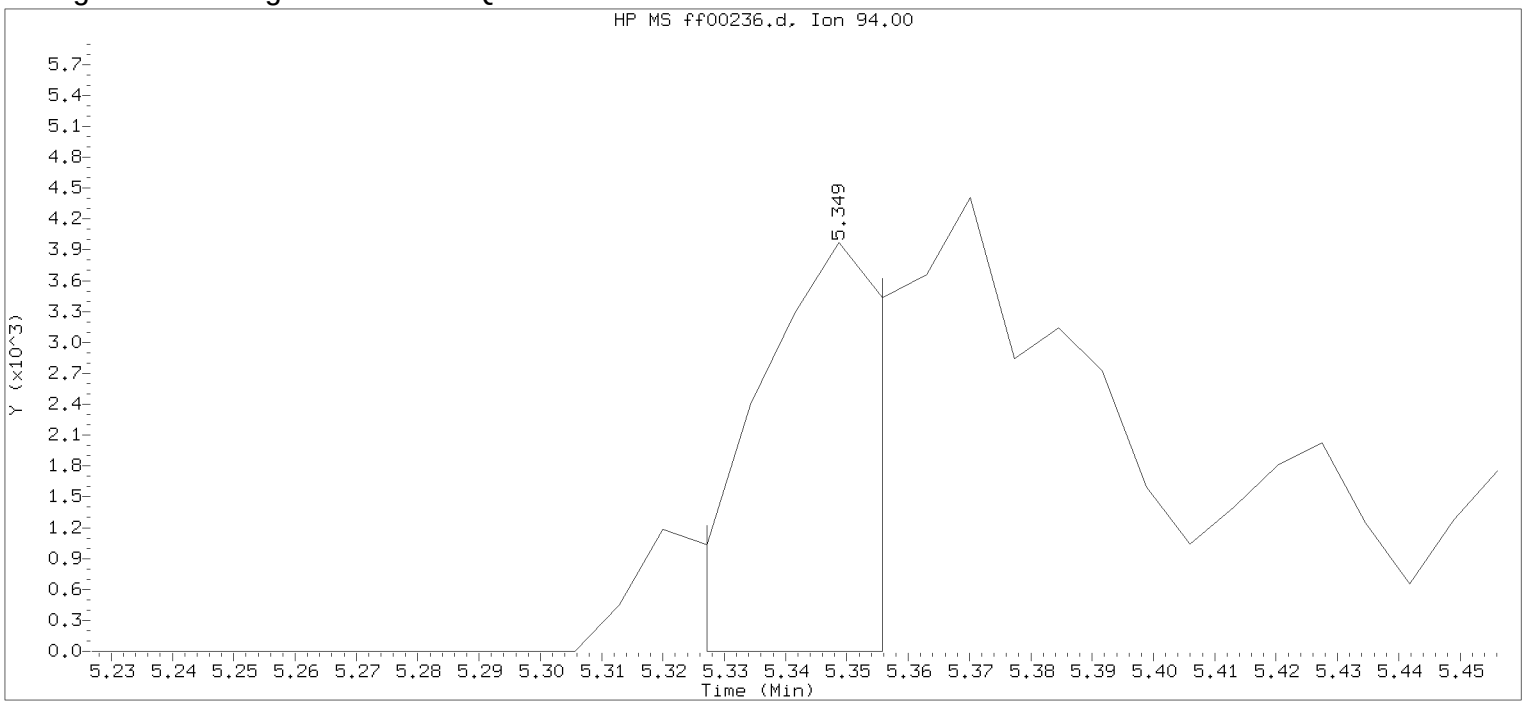
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/15/2018 at 09:17.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 09:17.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18jun13.b/ff00236.d Instrument ID: HP26379.i
Injection date and time: 14-JUN-2018 02:44 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 13-JUN-2018 14:32
Date, time and analyst ID of latest file update: 14-Jun-2018 03:12 Unknown

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

Compound Number : 8
Compound Name : Bromomethane
Scan Number : 218
Retention Time (minutes): 5.349
Quant Ion : 94.00
Area : 5108
Concentration (ppb(v)) : 0.1025
Integration start scan : 214 Integration stop scan: 218
Y at integration start : 0 Y at integration end: 0

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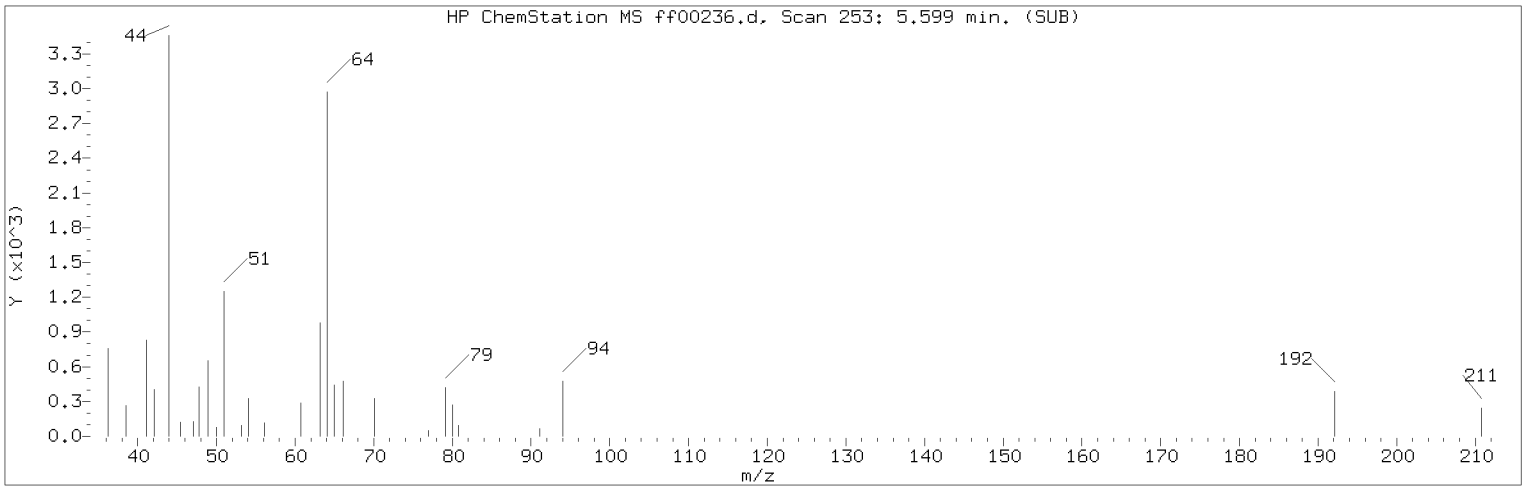
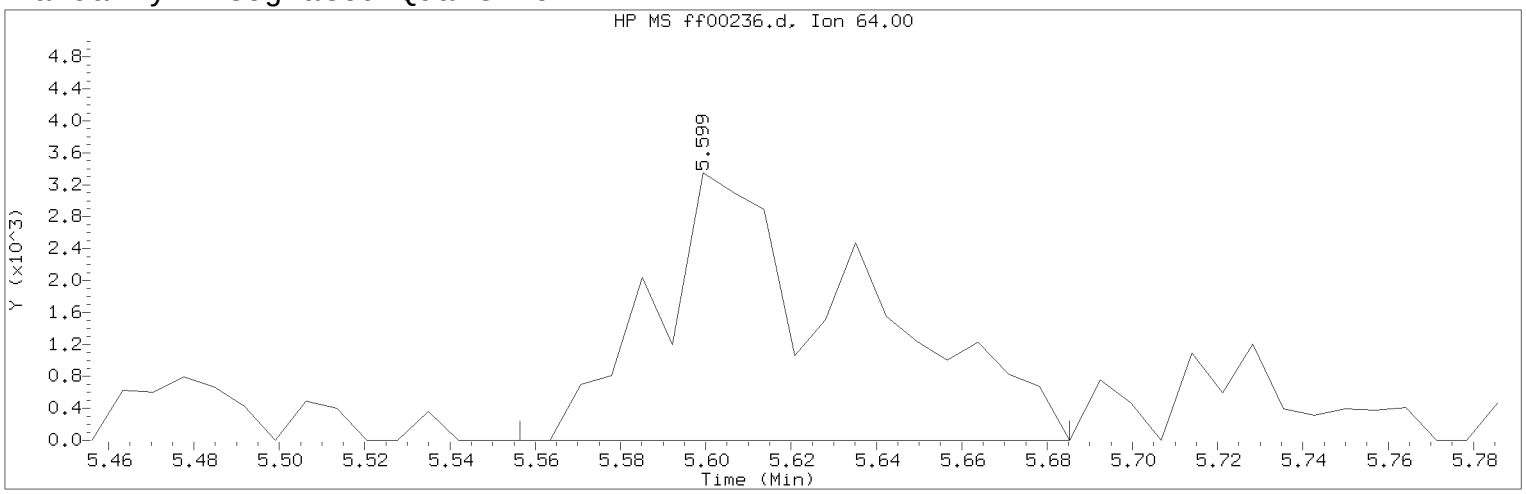
Target 3.5 esignature used. GLED1 Page 1354 of 1687

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18jun13.b/ff00236.d Instrument ID: HP26379.i
Injection date and time: 14-JUN-2018 02:44 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 15:12
Date, time and analyst ID of latest file update: 15-Jun-2018 09:16 jbs01304

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

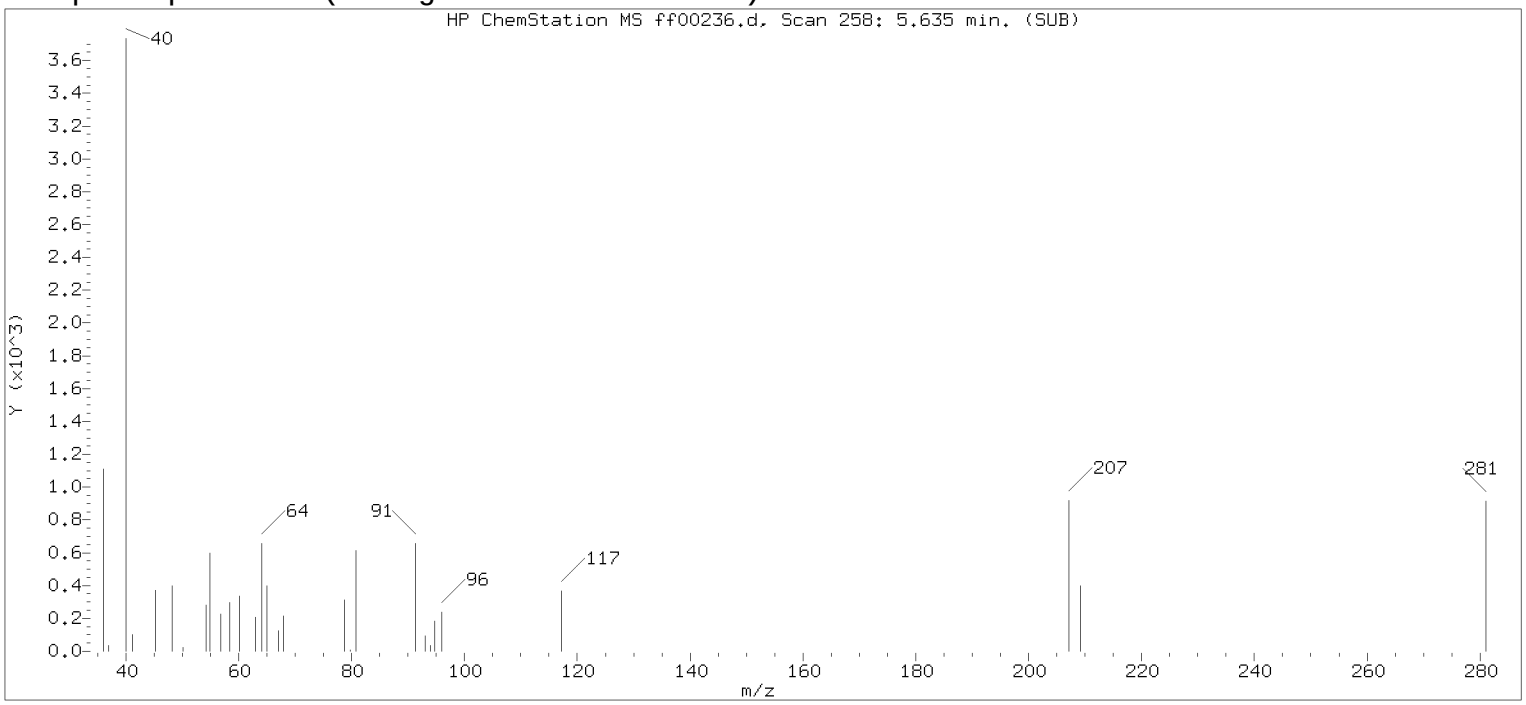
Compound Number : 9
Compound Name : Chloroethane
Scan Number : 253
Retention Time (minutes): 5.599
Quant Ion : 64.00
Area (flag) : 11033M
Concentration (ppb(v)) : 0.3429
Integration start scan : 246 Integration stop scan: 264
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

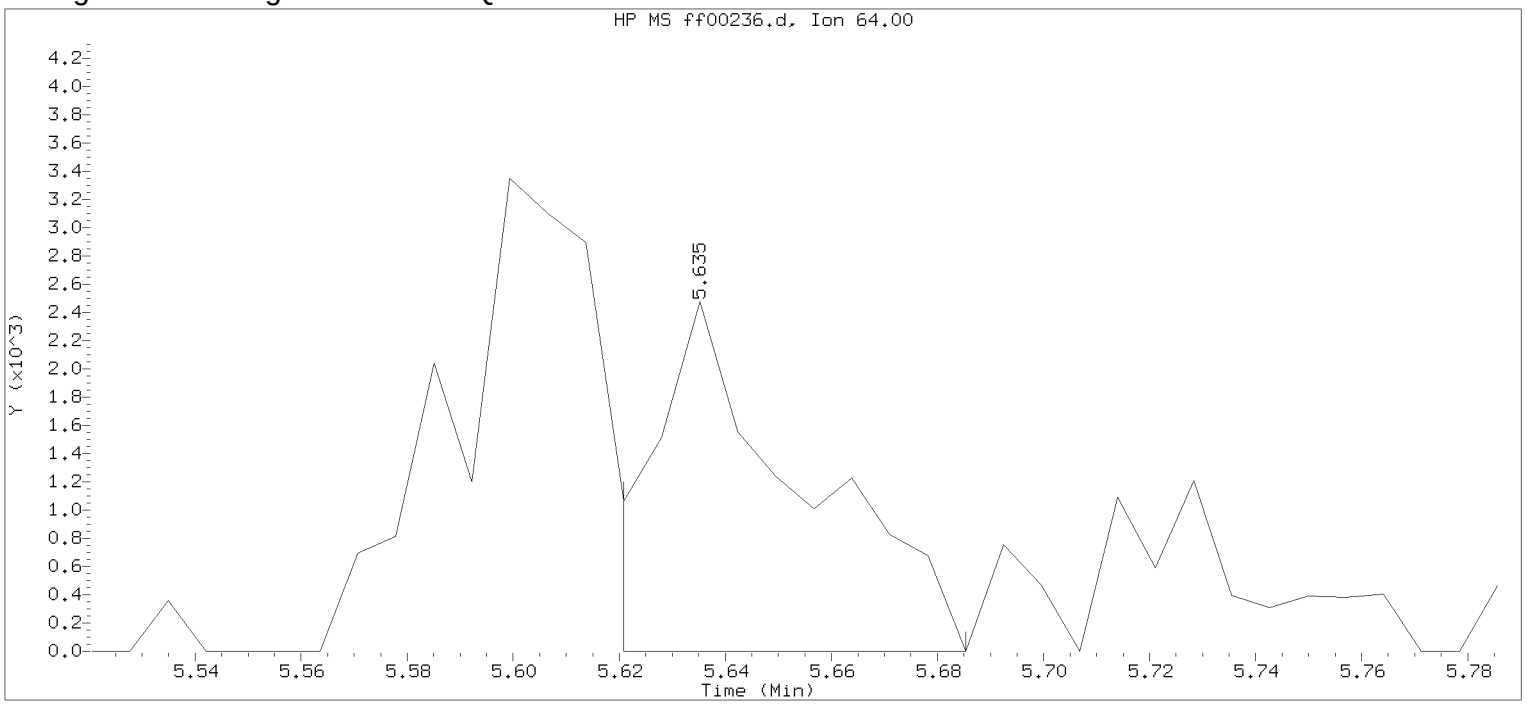
Analyst responsible for change: Digitally signed by Jeffrey B. Smith on 06/15/2018 at 09:17. Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 09:17.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18jun13.b/ff00236.d Instrument ID: HP26379.i
Injection date and time: 14-JUN-2018 02:44 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 13-JUN-2018 14:32
Date, time and analyst ID of latest file update: 14-Jun-2018 03:12 Unknown

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

Compound Number : 9
Compound Name : Chloroethane
Scan Number : 258
Retention Time (minutes): 5.635
Quant Ion : 64.00
Area : 4750
Concentration (ppb(v)) : 0.1416
Integration start scan : 255 Integration stop scan: 264
Y at integration start : 0 Y at integration end: 0

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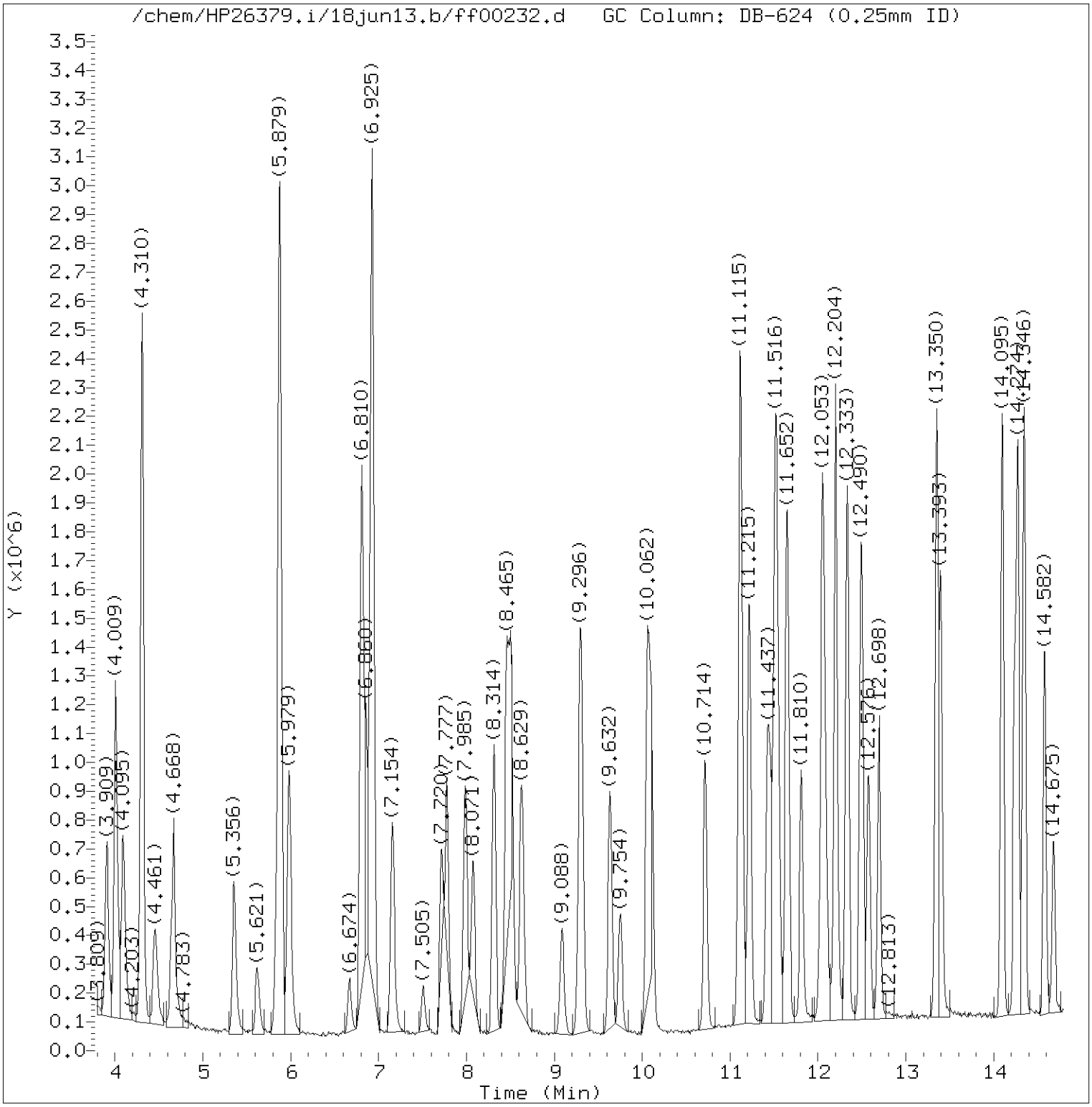
Target 3.5 esignature used. GLED1 Page 1354 of 1687



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00232.d Instrument ID: HP26379.i
Injection date and time: 14-JUN-2018 00:41 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: LCSF10 Lab Sample ID: LCSF10

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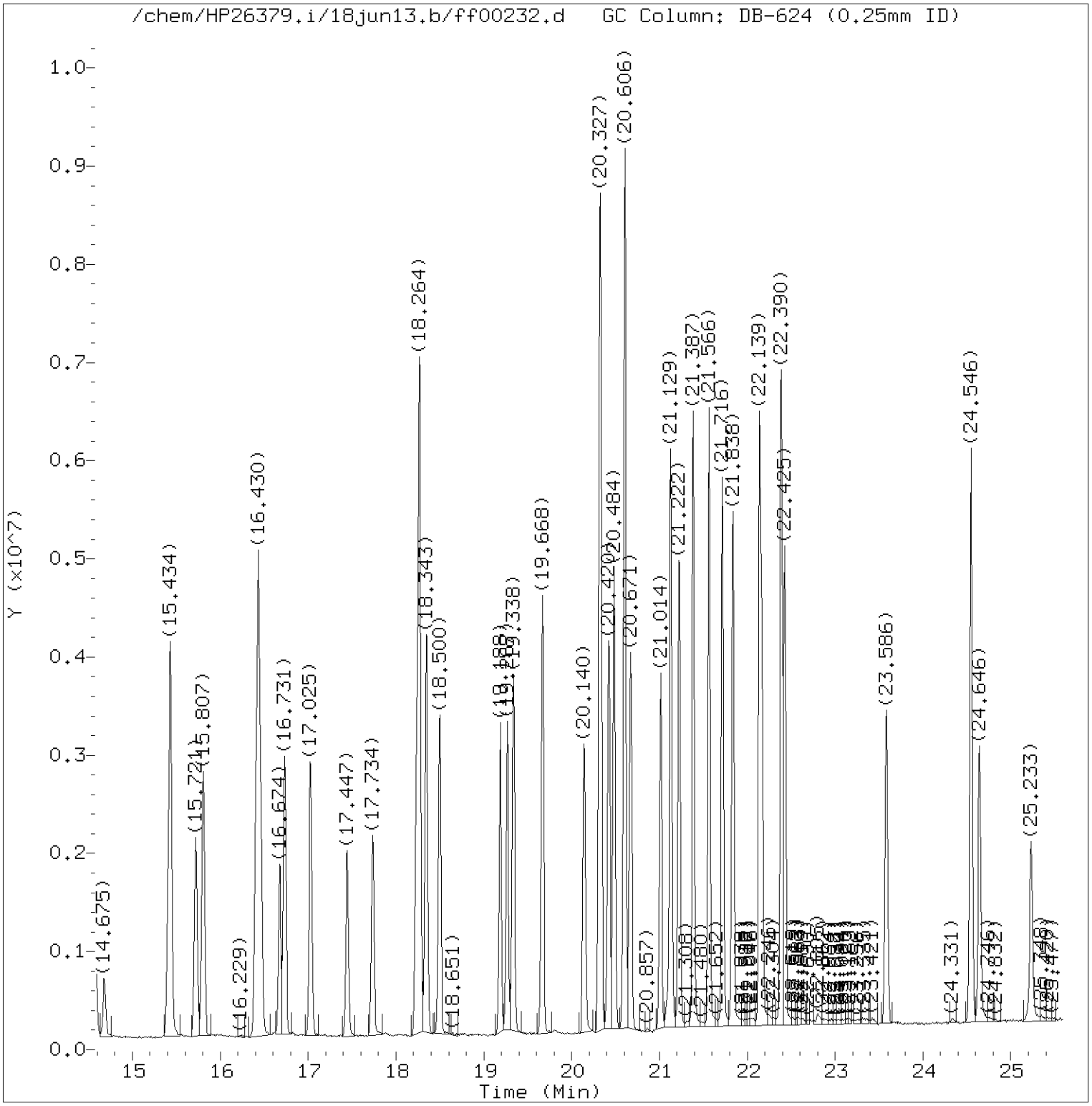
on 06/14/2018 at 15:13.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00232.d Instrument ID: HP26379.i
Injection date and time: 14-JUN-2018 00:41 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: LCSF10 Lab Sample ID: LCSF10

Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:13.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00232.d Instrument ID: HP26379.i
Injection date and time: 14-JUN-2018 00:41 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: LCSF10 Lab Sample ID: LCSF10

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.909	41	557344	10.229
2) Dichlorodifluoromethane	(1)	4.009	85	1864270	11.301
3) Chlorodifluoromethane	(1)	4.095	51	1439143	11.054
4) Freon 114	(1)	4.310	85	1866437	10.774
5) Chloromethane	(1)	4.461	50	711910	10.498
6) Vinyl Chloride	(1)	4.640	62	390218	10.896
7) 1,3-Butadiene	(1)	4.668	54	298421	9.798
8) Bromomethane	(1)	5.356	94	607444	12.075
9) Chloroethane	(1)	5.614	64	340955	10.744
10) Bromoethene	(1)	5.836	106	510506	10.762
11) Pentane	(1)	5.872	43	1089199	9.978
12) Trichlorofluoromethane	(1)	5.879	101	1958730	10.495
13) Dichlorofluoromethane	(1)	5.979	67	1535069	11.668
14) Ethanol	(1)	6.667	45	237793	9.536
15) Freon123a	(1)	6.810	67	1469188	11.650
16) 1,1-Dichloroethene	(1)	6.860	61	933728	10.485
17) Freon 113	(1)	6.925	103	1059914	9.885
18) Carbon Disulfide	(1)	6.939	76	1646974	11.299
19) Methyl Iodide	(1)	7.154	142	1408208	9.829
20) Acrolein	(1)	7.505	56	216909	10.709
21) Isopropanol	(1)	7.713	45	1053818	10.760
22) 3-Chloropropene	(1)	7.784	41	1039613	13.045
23) Methylene Chloride	(1)	7.985	84	625629	12.523
24) Acetone	(1)	8.078	43	1198343	10.972
25) trans-1,2-Dichloroethene	(1)	8.314	61	901731	10.468
26) Hexane	(1)	8.465	56	706515	10.248
27) Methyl t-Butyl Ether	(1)	8.515	73	1509485	10.747
28) tert-Butyl Alcohol	(1)	8.622	59	1344251	11.544
29) Acetonitrile	(1)	9.088	41	704687	10.667
30) Di-Isopropyl Ether	(1)	9.303	45	1887431	9.866
31) 1,1-Dichloroethane	(1)	9.632	63	1314616	10.978
32) Acrylonitrile	(1)	9.747	53	549458	10.413
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	1637518	10.351
34) Vinyl Acetate	(1)	10.112	43	2106487	12.545
35) cis-1,2-Dichloroethene	(1)	10.714	61	814382	10.589
36) 1,2-Dichloroethene (total)	(1)		61	1716113	21.057
37)*Bromochloromethane	(1)	11.115	130	562741	10.000
38) Cyclohexane	(1)	11.129	56	909001	10.069

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/14/2018 at 15:13.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00232.d Instrument ID: HP26379.i
Injection date and time: 14-JUN-2018 00:41 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: LCSF10 Lab Sample ID: LCSF10

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.222	83	1591016	11.076
40) Ethyl Acetate	(1)	11.423	43	1604320	10.403
41) Methyl Acrylate	(1)	11.459	55	1147516	10.848
42) Carbon Tetrachloride	(1)	11.509	117	1792055	10.667
43) Tetrahydrofuran	(1)	11.552	42	812506	11.335
44) 1,1,1-Trichloroethane	(1)	11.652	97	1692615	10.533
45) 2-Butanone	(1)	11.810	43	1536119	10.776
46) Isooctane	(2)	12.053	57	2864607	10.801
47) Heptane	(2)	12.204	71	542641	10.809
48) Benzene	(2)	12.333	78	2058666	10.928
49) Tert-Amyl Methyl Ether	(2)	12.490	73	1335886	10.404
50) 1,2-Dichloroethane	(2)	12.698	62	1128027	11.119
51) Trichloroethene	(2)	13.350	130	957485	10.735
52)*1,4-Difluorobenzene	(2)	13.400	114	1548912	10.000
53) Dibromomethane	(2)	14.095	174	1191182	10.876
54) Ethyl Acrylate	(2)	14.231	55	1276899	9.897
55) 1,2-Dichloropropane	(2)	14.274	63	881278	10.653
56) Bromodichloromethane	(2)	14.346	83	1669379	10.801
57) Methyl Methacrylate	(2)	14.575	69	504555	10.171
58) 1,4-Dioxane	(2)	14.682	88	424164	11.127
59) cis-1,3-Dichloropropene	(2)	15.413	75	1063279	10.573
60) Octane	(3)	15.434	43	1771454	10.684
61) Toluene	(3)	15.807	91	2324542	10.346
62) 4-Methyl-2-Pentanone	(2)	16.401	43	1866880	10.516
63) Tetrachloroethene	(3)	16.437	166	1794773	10.378
64) trans-1,3-Dichloropropene	(3)	16.466	75	1080674	10.895
65) 1,3-Dichloropropene (total)	(3)		75	2143953	21.467
66) Ethyl Methacrylate	(3)	16.674	69	905666	10.081
67) 1,1,2-Trichloroethane	(3)	16.731	97	1094932	10.352
68) Dibromochloromethane	(3)	17.025	127	1448114	10.572
69) 1,2-Dibromoethane	(3)	17.447	107	1528642	10.259
70) 2-Hexanone	(3)	17.734	43	1689429	9.928
71)*Chlorobenzene-d5	(3)	18.235	117	1665543	10.000
72) Chlorobenzene	(3)	18.264	112	2297481	10.180
73) Ethylbenzene	(3)	18.271	91	3174047	10.314
74) 1,1,1,2-Tetrachloroethane	(3)	18.350	131	1471439	9.993
75) m/p-Xylene	(3)	18.500	91	2164091	10.158
76) o-Xylene	(3)	19.188	91	2040315	9.975

* = Compound is an internal standard.

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on 06/14/2018 at 15:13.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00232.d Instrument ID: HP26379.i
Injection date and time: 14-JUN-2018 00:41 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: LCSF10 Lab Sample ID: LCSF10

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	4204406	20.133
78) Styrene	(3)	19.267	104	1757377	10.727
79) Bromoform	(3)	19.338	173	2110456	10.198
80) Cumene	(3)	19.668	105	3186480	10.487
81) n-Propylbenzene	(3)	20.320	120	999644	10.229
82) Bromobenzene	(3)	20.327	156	1686287	10.443
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	2308576	9.677
84) 4-Ethyltoluene	(3)	20.484	105	3317487	10.341
85) 2-Chlorotoluene	(3)	20.599	126	1047977	10.479
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	3124080	10.508
87) 1,2,3-Trichloropropane	(3)	20.671	110	777041	9.854
88) Alpha Methyl Styrene	(3)	21.014	118	1264308	10.105
89) tert-Butylbenzene	(3)	21.129	119	3032926	10.731
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	2910180	10.251
91) sec-Butylbenzene	(3)	21.387	105	4306790	10.202
92) p-Isopropyltoluene	(3)	21.566	119	3386169	9.971
93) 1,3-Dichlorobenzene	(3)	21.716	146	2536293	9.297
94) 1,4-Dichlorobenzene	(3)	21.838	146	2415173	9.178
95) n-Butylbenzene	(3)	22.139	92	1876870	9.509
96) Benzyl Chloride	(3)	22.168	126	650162	9.826
97) Hexachloroethane	(3)	22.390	117	1333109	9.775
98) 1,2-Dichlorobenzene	(3)	22.425	146	2259952	9.233
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	1053022	8.443
100) Hexachlorobutadiene	(3)	24.546	225	1657867	7.388
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	1276438	7.279
102) Naphthalene	(3)	25.233	128	1941503	7.567

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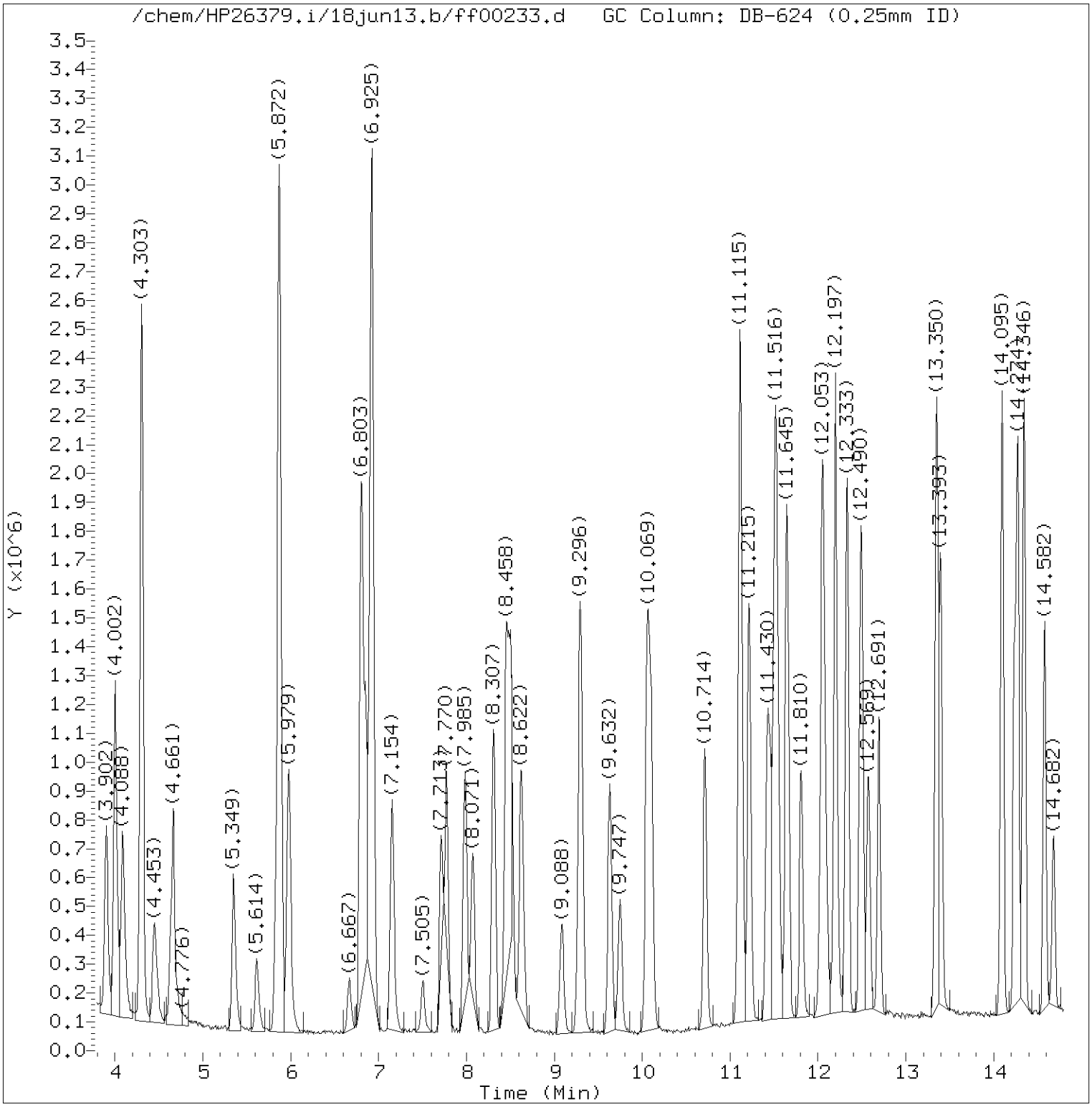
on 06/14/2018 at 15:13.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00233.d Instrument ID: HP26379.i
Injection date and time: 14-JUN-2018 01:12 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: LCSDF10 Lab Sample ID: LCSDF10

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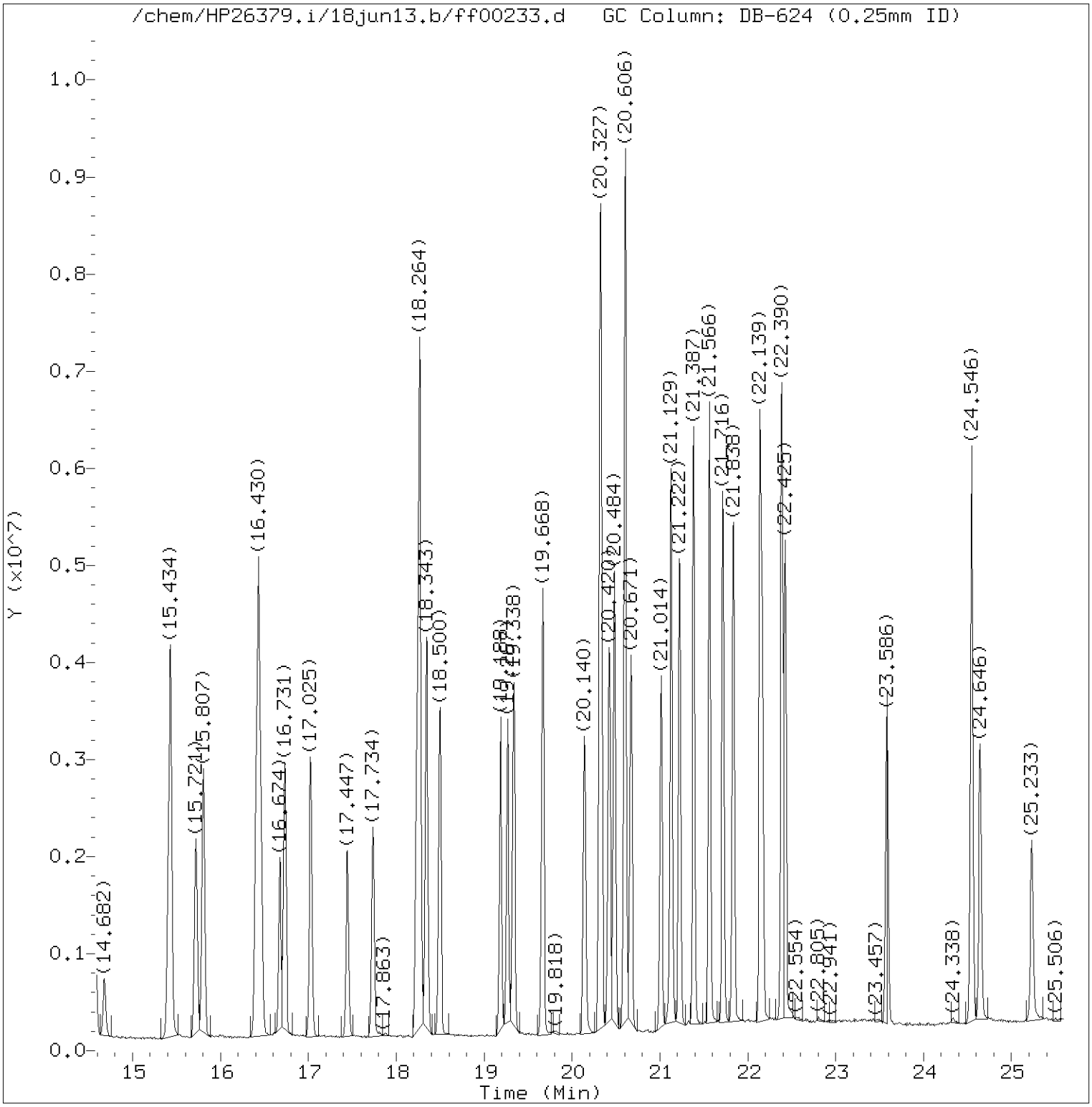
on 06/14/2018 at 15:14.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00233.d Instrument ID: HP26379.i
Injection date and time: 14-JUN-2018 01:12 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: LCSDF10 Lab Sample ID: LCSDF10

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on 06/14/2018 at 15:14.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00233.d Instrument ID: HP26379.i
Injection date and time: 14-JUN-2018 01:12 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: LCSDF10 Lab Sample ID: LCSDF10

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	614591	11.305
2) Dichlorodifluoromethane	(1)	4.002	85	1839327	11.175
3) Chlorodifluoromethane	(1)	4.088	51	1447469	11.144
4) Freon 114	(1)	4.303	85	1898388	10.983
5) Chloromethane	(1)	4.453	50	735057	10.864
6) Vinyl Chloride	(1)	4.640	62	410703	11.494
7) 1,3-Butadiene	(1)	4.668	54	311444	10.249
8) Bromomethane	(1)	5.349	94	616694	12.287
9) Chloroethane	(1)	5.614	64	366385	11.572
10) Bromoethene	(1)	5.836	106	564284	11.923
11) Pentane	(1)	5.872	43	1173462	10.775
12) Trichlorofluoromethane	(1)	5.879	101	1983512	10.652
13) Dichlorofluoromethane	(1)	5.979	67	1541898	11.746
14) Ethanol	(1)	6.660	45	245503	9.868
15) Freon123a	(1)	6.803	67	1485503	11.807
16) 1,1-Dichloroethene	(1)	6.853	61	1004461	11.305
17) Freon 113	(1)	6.917	103	1091133	10.199
18) Carbon Disulfide	(1)	6.939	76	1655669	11.385
19) Methyl Iodide	(1)	7.154	142	1528976	10.697
20) Acrolein	(1)	7.505	56	236820	11.719
21) Isopropanol	(1)	7.713	45	1127730	11.541
22) 3-Chloropropene	(1)	7.777	41	1098073	13.810
23) Methylene Chloride	(1)	7.978	84	649137	13.023
24) Acetone	(1)	8.071	43	1237998	11.361
25) trans-1,2-Dichloroethene	(1)	8.307	61	969426	11.279
26) Hexane	(1)	8.465	56	747954	10.874
27) Methyl t-Butyl Ether	(1)	8.501	73	1574767	11.237
28) tert-Butyl Alcohol	(1)	8.622	59	1430391	12.312
29) Acetonitrile	(1)	9.088	41	715961	10.862
30) Di-Isopropyl Ether	(1)	9.288	45	2067565	10.832
31) 1,1-Dichloroethane	(1)	9.632	63	1329893	11.131
32) Acrylonitrile	(1)	9.747	53	602768	11.450
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	1705680	10.807
34) Vinyl Acetate	(1)	10.105	43	2202038	13.144
35) cis-1,2-Dichloroethene	(1)	10.714	61	846501	11.032
36) 1,2-Dichloroethene (total)	(1)		61	1815927	22.311
37)*Bromochloromethane	(1)	11.101	130	561455	10.000
38) Cyclohexane	(1)	11.122	56	981399	10.896

* = Compound is an internal standard.

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on 06/14/2018 at 15:14.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00233.d Instrument ID: HP26379.i
Injection date and time: 14-JUN-2018 01:12 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: LCSDF10 Lab Sample ID: LCSDF10

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	1558573	10.875
40) Ethyl Acetate	(1)	11.423	43	1662328	10.804
41) Methyl Acrylate	(1)	11.459	55	1195968	11.332
42) Carbon Tetrachloride	(1)	11.509	117	1787618	10.665
43) Tetrahydrofuran	(1)	11.545	42	836600	11.698
44) 1,1,1-Trichloroethane	(1)	11.645	97	1684680	10.508
45) 2-Butanone	(1)	11.803	43	1570856	11.045
46) Isooctane	(2)	12.061	57	3024652	10.897
47) Heptane	(2)	12.197	71	571712	10.882
48) Benzene	(2)	12.333	78	2093027	10.616
49) Tert-Amyl Methyl Ether	(2)	12.490	73	1454092	10.821
50) 1,2-Dichloroethane	(2)	12.698	62	1137780	10.716
51) Trichloroethene	(2)	13.350	130	976563	10.461
52)*1,4-Difluorobenzene	(2)	13.400	114	1621018	10.000
53) Dibromomethane	(2)	14.095	174	1231475	10.744
54) Ethyl Acrylate	(2)	14.231	55	1380632	10.225
55) 1,2-Dichloropropane	(2)	14.274	63	882726	10.196
56) Bromodichloromethane	(2)	14.346	83	1680984	10.393
57) Methyl Methacrylate	(2)	14.582	69	537025	10.344
58) 1,4-Dioxane	(2)	14.682	88	427753	10.722
59) cis-1,3-Dichloropropene	(2)	15.406	75	1098467	10.437
60) Octane	(3)	15.434	43	1876629	11.071
61) Toluene	(3)	15.807	91	2409840	10.491
62) 4-Methyl-2-Pentanone	(2)	16.401	43	1965001	10.576
63) Tetrachloroethene	(3)	16.437	166	1806240	10.216
64) trans-1,3-Dichloropropene	(3)	16.466	75	1083597	10.685
65) 1,3-Dichloropropene (total)	(3)		75	2182064	21.122
66) Ethyl Methacrylate	(3)	16.674	69	945129	10.290
67) 1,1,2-Trichloroethane	(3)	16.731	97	1117620	10.335
68) Dibromochloromethane	(3)	17.032	127	1435609	10.251
69) 1,2-Dibromoethane	(3)	17.447	107	1566901	10.286
70) 2-Hexanone	(3)	17.734	43	1746713	10.040
71)*Chlorobenzene-d5	(3)	18.235	117	1702806	10.000
72) Chlorobenzene	(3)	18.264	112	2342172	10.151
73) Ethylbenzene	(3)	18.271	91	3272054	10.399
74) 1,1,1,2-Tetrachloroethane	(3)	18.343	131	1486973	9.877
75) m/p-Xylene	(3)	18.500	91	2251403	10.336
76) o-Xylene	(3)	19.188	91	2119343	10.135

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on 06/14/2018 at 15:14.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun13.b/ff00233.d Instrument ID: HP26379.i
Injection date and time: 14-JUN-2018 01:12 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun13.b/to-15.m Sublist used: all
Calibration date and time: 14-JUN-2018 12:49
Date, time and analyst ID of latest file update: 14-Jun-2018 12:49 jeb07445

Sample Name: LCSDF10 Lab Sample ID: LCSDF10

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	4370746	20.471
78) Styrene	(3)	19.267	104	1836499	10.965
79) Bromoform	(3)	19.338	173	2100136	9.926
80) Cumene	(3)	19.668	105	3314608	10.670
81) n-Propylbenzene	(3)	20.320	120	1004643	10.055
82) Bromobenzene	(3)	20.327	156	1696684	10.277
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	2291403	9.395
84) 4-Ethyltoluene	(3)	20.484	105	3384475	10.319
85) 2-Chlorotoluene	(3)	20.599	126	1064538	10.412
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	3180925	10.465
87) 1,2,3-Trichloropropane	(3)	20.671	110	758366	9.407
88) Alpha Methyl Styrene	(3)	21.014	118	1309296	10.235
89) tert-Butylbenzene	(3)	21.129	119	3014752	10.433
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	2918149	10.054
91) sec-Butylbenzene	(3)	21.387	105	4359456	10.100
92) p-Isopropyltoluene	(3)	21.566	119	3476801	10.014
93) 1,3-Dichlorobenzene	(3)	21.716	146	2550063	9.142
94) 1,4-Dichlorobenzene	(3)	21.838	146	2452675	9.117
95) n-Butylbenzene	(3)	22.139	92	1917973	9.505
96) Benzyl Chloride	(3)	22.168	126	657813	9.724
97) Hexachloroethane	(3)	22.390	117	1321098	9.475
98) 1,2-Dichlorobenzene	(3)	22.425	146	2257604	9.021
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	1085336	8.512
100) Hexachlorobutadiene	(3)	24.553	225	1647211	7.180
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	1315302	7.337
102) Naphthalene	(3)	25.233	128	2029617	7.737

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on 06/14/2018 at 15:14.
Target 3.5 esignature user ID: jeb07445

Lancaster Laboratories
Volatiles in Air
Runlog for Agilent GC/MS System HP26379 **HP #06**

Data Directory Path is - D:\data\18jun15\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
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jeb07445	FF00272.D	VBLKF11	06/15/2018	13:58	F1816630AA	
jeb07445	FF00273.D	LCSF12	06/15/2018	14:45	F1816630AA	
jeb07445	FF00274.D	LCSDF12	06/15/2018	15:16	F1816630AA	
jeb07445	FF00275.D	9661706	06/15/2018	16:07	F1816630AA	
jeb07445	FF00276.D	9661707	06/15/2018	16:38	F1816630AA	
jeb07445	FF00277.D	9661708	06/15/2018	17:09	F1816630AA	
jeb07445	FF00278.D	9660702	06/15/2018	17:39	F1816630AA	
jeb07445	FF00279.D	9660703	06/15/2018	18:10	F1816630AA	
jeb07445	FF00280.D	9660704	06/15/2018	18:41	F1816630AA	
jeb07445	FF00281.D	9660702	06/15/2018	19:12	F1816630AA	
jeb07445	FF00282.D	VBLKF11	06/15/2018	19:43	F1816630AA	
jeb07445	FF00283.D	cc504	06/15/2018	20:13	F1816630AA	
jeb07445	FF00284.D	9660704	06/15/2018	20:44	F1816630AA	100

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKF12
Canister ID:	N/A	Lab File ID:	ff00272.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/15/2018
Injection Volume:	200 cc	Analyzed Time:	13:58
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
115-07-1	Propene	0.50	U
75-71-8	Dichlorodifluoromethane	0.20	U
75-45-6	Chlorodifluoromethane	0.20	U
76-14-2	Freon 114	0.20	U
74-87-3	Chloromethane	0.20	U
75-01-4	Vinyl Chloride	0.20	U
106-99-0	1,3-Butadiene	0.40	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.20	U
593-60-2	Bromoethene	0.40	U
75-43-4	Dichlorofluoromethane	0.20	U
75-69-4	Trichlorofluoromethane	0.20	U
109-66-0	Pentane	0.50	U
64-17-5	Ethanol	0.50	U
107-02-8	Acrolein	1.0	U
75-35-4	1,1-Dichloroethene	0.20	U
76-13-1	Freon 113	0.50	U
67-64-1	Acetone	0.50	U
74-88-4	Methyl Iodide	0.20	U
75-15-0	Carbon Disulfide	1.0	U
67-63-0	Isopropanol	0.50	U
75-05-8	Acetonitrile	0.50	U
107-05-1	3-Chloropropene	0.20	U
75-09-2	Methylene Chloride	0.20	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKF12
Canister ID:	N/A	Lab File ID:	ff00272.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/15/2018
Injection Volume:	200 cc	Analyzed Time:	13:58
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-65-0	tert-Butyl Alcohol	0.50	U
107-13-1	Acrylonitrile	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.20	U
1634-04-4	Methyl t-Butyl Ether	0.20	U
110-54-3	Hexane	0.20	U
75-34-3	1,1-Dichloroethane	0.20	U
108-05-4	Vinyl Acetate	1.0	U
108-20-3	Di-Isopropyl Ether	0.20	U
637-92-3	Ethyl Tert-Butyl Ether	0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	U
540-59-0	1,2-Dichloroethene (total)	0.20	U
78-93-3	2-Butanone	0.50	U
141-78-6	Ethyl Acetate	0.50	U
96-33-3	Methyl Acrylate	0.20	U
109-99-9	Tetrahydrofuran	0.50	U
67-66-3	Chloroform	0.20	U
71-55-6	1,1,1-Trichloroethane	0.20	U
110-82-7	Cyclohexane	0.20	U
56-23-5	Carbon Tetrachloride	0.20	U
71-43-2	Benzene	0.20	U
107-06-2	1,2-Dichloroethane	0.20	U
540-84-1	Isooctane	0.20	U
994-05-8	Tert-Amyl Methyl Ether	0.20	U
142-82-5	Heptane	0.50	U

Abbreviations:
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E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKF12
Canister ID:	N/A	Lab File ID:	ff00272.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/15/2018
Injection Volume:	200 cc	Analyzed Time:	13:58
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
79-01-6	Trichloroethene	0.20	U
140-88-5	Ethyl Acrylate	0.20	U
78-87-5	1,2-Dichloropropane	0.20	U
74-95-3	Dibromomethane	0.20	U
123-91-1	1,4-Dioxane	0.50	U
80-62-6	Methyl Methacrylate	0.20	U
75-27-4	Bromodichloromethane	0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	U
108-10-1	4-Methyl-2-Pentanone	0.50	U
108-88-3	Toluene	0.20	U
111-65-9	Octane	0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	U
542-75-6	1,3-Dichloropropene (total)	0.20	U
97-63-2	Ethyl Methacrylate	0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	U
127-18-4	Tetrachloroethene	0.20	U
591-78-6	2-Hexanone	0.50	U
124-48-1	Dibromochloromethane	0.20	U
106-93-4	1,2-Dibromoethane	0.20	U
108-90-7	Chlorobenzene	0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	U
100-41-4	Ethylbenzene	0.20	U
179601-23-1	m/p-Xylene	0.20	U
95-47-6	o-Xylene	0.20	U

Abbreviations:
U = The compound is less than the limit being reported.
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E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKF12
Canister ID:	N/A	Lab File ID:	ff00272.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/15/2018
Injection Volume:	200 cc	Analyzed Time:	13:58
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
1330-20-7	Xylene (total)	0.20	U
100-42-5	Styrene	0.20	U
75-25-2	Bromoform	0.20	U
98-82-8	Cumene	0.20	U
108-86-1	Bromobenzene	0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U
96-18-4	1,2,3-Trichloropropane	0.20	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.20	U
622-96-8	4-Ethyltoluene	0.20	U
108-67-8	1,3,5-Trimethylbenzene	0.20	U
98-83-9	Alpha Methyl Styrene	0.20	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.20	U
135-98-8	sec-Butylbenzene	0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	U
99-87-6	p-Isopropyltoluene	0.20	U
100-44-7	Benzyl Chloride	0.50	U
95-50-1	1,2-Dichlorobenzene	0.20	U
104-51-8	n-Butylbenzene	0.20	U
67-72-1	Hexachloroethane	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

Abbreviations:
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E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKF12
Canister ID:	N/A	Lab File ID:	ff00272.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/15/2018
Injection Volume:	200 cc	Analyzed Time:	13:58
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
87-68-3	Hexachlorobutadiene	0.40	U
91-20-3	Naphthalene	0.40	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 LCS File ID: ff00273.d LCSD File ID: ff00274.d

Batch: F1816630AA LCS Injected: 06/15/2018 LCSD Injected: 06/15/2018

Method: EPA TO-15 LCS Client ID: LCSF12 LCSD Client ID: LCSDF12

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	10.00	9.32	10.38	93	104	78-126	11	25	YES
Dichlorodifluoromethane	10.00	10.60	10.57	106	106	74-133	0	25	YES
Chlorodifluoromethane	10.00	10.53	10.65	105	106	70-138	1	25	YES
Freon 114	10.00	10.07	10.26	101	103	66-126	2	25	YES
Chloromethane	10.00	10.13	10.61	101	106	65-140	5	25	YES
Vinyl Chloride	10.00	11.09	10.91	111	109	75-130	2	25	YES
1,3-Butadiene	10.00	10.08	9.95	101	99	72-122	1	25	YES
Bromomethane	10.00	11.21	11.33	112	113	71-133	1	25	YES
Chloroethane	10.00	10.49	11.14	105	111	76-129	6	25	YES
Bromoethene	10.00	9.79	10.64	98	106	77-123	8	25	YES
Dichlorofluoromethane	10.00	10.95	11.13	110	111	75-137	2	25	YES
Trichlorofluoromethane	10.00	9.80	9.75	98	98	73-132	0	25	YES
Pentane	10.00	9.19	9.82	92	98	69-125	7	25	YES
Ethanol	10.00	7.93	8.96	79	90	56-149	12	25	YES
Acrolein	10.00	9.04	10.40	90	104	54-132	14	25	YES
1,1-Dichloroethene	10.00	9.34	10.21	93	102	70-129	9	25	YES
Freon 113	10.00	9.30	9.37	93	94	66-119	1	25	YES
Acetone	10.00	10.41	10.68	104	107	71-136	3	25	YES
Methyl Iodide	10.00	8.54	9.42	85	94	72-127	10	25	YES
Carbon Disulfide	10.00	10.45	10.60	105	106	72-128	1	25	YES
Isopropanol	10.00	9.33	10.19	93	102	69-160	9	25	YES
Acetonitrile	10.00	10.14	10.46	101	105	56-136	3	25	YES
3-Chloropropene	10.00	11.78	12.79	118	128	67-141	8	25	YES
Methylene Chloride	10.00	11.51	12.23	115	122	69-128	6	25	YES
tert-Butyl Alcohol	10.00	10.04	10.84	100	108	71-154	8	25	YES
Acrylonitrile	10.00	9.67	10.39	97	104	68-135	7	25	YES
trans-1,2-Dichloroethene	10.00	9.35	10.09	93	101	77-128	8	25	YES
Methyl t-Butyl Ether	10.00	9.21	9.77	92	98	71-119	6	25	YES
Hexane	10.00	9.62	10.30	96	103	70-118	7	25	YES
1,1-Dichloroethane	10.00	9.99	10.33	100	103	74-129	3	25	YES
Vinyl Acetate	10.00	10.92	11.78	109	118	75-161	8	25	YES
Di-Isopropyl Ether	10.00	8.49	9.45	85	95	71-122	11	25	YES
Ethyl Tert-Butyl Ether	10.00	8.63	9.53	86	95	68-121	10	25	YES
cis-1,2-Dichloroethene	10.00	9.07	9.95	91	99	76-126	9	25	YES
2-Butanone	10.00	9.57	10.11	96	101	75-126	5	25	YES
Ethyl Acetate	10.00	9.18	9.63	92	96	73-124	5	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 LCS File ID: ff00273.d LCSD File ID: ff00274.d

Batch: F1816630AA LCS Injected: 06/15/2018 LCSD Injected: 06/15/2018

Method: EPA TO-15 LCS Client ID: LCSF12 LCSD Client ID: LCSDF12

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	10.00	9.44	9.90	94	99	75-125	5	25	YES
Tetrahydrofuran	10.00	10.14	10.73	101	107	67-127	6	25	YES
Chloroform	10.00	10.22	10.30	102	103	75-127	1	25	YES
1,1,1-Trichloroethane	10.00	9.60	9.78	96	98	74-122	2	25	YES
Cyclohexane	10.00	8.59	9.57	86	96	70-118	11	25	YES
Carbon Tetrachloride	10.00	9.71	9.70	97	97	72-127	0	25	YES
Benzene	10.00	11.10	11.30	111	113	76-123	2	25	YES
1,2-Dichloroethane	10.00	11.18	11.17	112	112	72-138	0	25	YES
Isooctane	10.00	10.41	10.74	104	107	74-127	3	25	YES
Tert-Amyl Methyl Ether	10.00	9.51	10.05	95	100	78-124	5	25	YES
Heptane	10.00	10.25	10.89	102	109	74-122	6	25	YES
Trichloroethene	10.00	10.13	10.26	101	103	76-118	1	25	YES
Ethyl Acrylate	10.00	9.07	9.04	91	90	71-126	0	25	YES
1,2-Dichloropropane	10.00	10.91	10.71	109	107	75-127	2	25	YES
Dibromomethane	10.00	10.79	10.65	108	106	76-124	1	25	YES
1,4-Dioxane	10.00	10.69	10.90	107	109	76-124	2	25	YES
Methyl Methacrylate	10.00	9.15	9.56	91	96	73-117	4	25	YES
Bromodichloromethane	10.00	10.87	10.32	109	103	75-134	5	25	YES
cis-1,3-Dichloropropene	10.00	9.83	9.88	98	99	51-120	1	25	YES
4-Methyl-2-Pentanone	10.00	10.18	9.97	102	100	79-131	2	25	YES
Toluene	10.00	9.96	10.00	100	100	78-119	0	25	YES
Octane	10.00	10.25	10.44	102	104	73-122	2	25	YES
trans-1,3-Dichloropropene	10.00	10.39	10.32	104	103	76-131	1	25	YES
Ethyl Methacrylate	10.00	9.08	9.02	91	90	69-137	1	25	YES
1,1,2-Trichloroethane	10.00	10.53	10.04	105	100	76-127	5	25	YES
Tetrachloroethene	10.00	10.42	10.27	104	103	68-123	1	25	YES
2-Hexanone	10.00	9.47	8.96	95	90	74-134	6	25	YES
Dibromochloromethane	10.00	10.22	9.43	102	94	74-131	8	25	YES
1,2-Dibromoethane	10.00	9.86	9.58	99	96	73-121	3	25	YES
Chlorobenzene	10.00	9.89	9.93	99	99	76-117	0	25	YES
1,1,1,2-Tetrachloroethane	10.00	9.98	9.45	100	95	73-137	5	25	YES
Ethylbenzene	10.00	9.79	9.92	98	99	77-117	1	25	YES
m/p-Xylene	10.00	9.42	9.76	94	98	78-119	4	25	YES
o-Xylene	10.00	8.93	9.11	89	91	78-121	2	25	YES
Xylene (total)	20.00	18.35	18.87	92	94	79-120	3	25	YES
Styrene	10.00	9.84	9.91	98	99	77-143	1	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 LCS File ID: ff00273.d LCSD File ID: ff00274.d

Batch: F1816630AA LCS Injected: 06/15/2018 LCSD Injected: 06/15/2018

Method: EPA TO-15 LCS Client ID: LCSF12 LCSD Client ID: LCSDF12

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	9.91	9.02	99	90	58-144	9	25	YES
Cumene	10.00	9.42	9.91	94	99	80-133	5	25	YES
Bromobenzene	10.00	10.08	9.96	101	100	74-118	1	25	YES
1,1,2,2-Tetrachloroethane	10.00	9.70	9.17	97	92	72-133	6	25	YES
1,2,3-Trichloropropane	10.00	9.62	9.55	96	96	71-127	1	25	YES
n-Propylbenzene	10.00	9.21	9.52	92	95	73-120	3	25	YES
2-Chlorotoluene	10.00	10.24	10.49	102	105	74-123	2	25	YES
4-Ethyltoluene	10.00	9.43	10.08	94	101	73-130	7	25	YES
1,3,5-Trimethylbenzene	10.00	10.05	10.16	100	102	72-130	1	25	YES
Alpha Methyl Styrene	10.00	8.99	8.92	90	89	71-138	1	25	YES
tert-Butylbenzene	10.00	9.43	10.00	94	100	78-138	6	25	YES
1,2,4-Trimethylbenzene	10.00	9.36	9.99	94	100	70-138	6	25	YES
sec-Butylbenzene	10.00	9.40	9.92	94	99	79-139	5	25	YES
1,3-Dichlorobenzene	10.00	8.85	8.99	88	90	75-129	2	25	YES
1,4-Dichlorobenzene	10.00	8.75	9.04	88	90	74-123	3	25	YES
p-Isopropyltoluene	10.00	9.04	9.55	90	95	75-145	5	25	YES
Benzyl Chloride	10.00	9.41	9.00	94	90	49-163	4	25	YES
1,2-Dichlorobenzene	10.00	8.66	9.02	87	90	71-126	4	25	YES
n-Butylbenzene	10.00	8.81	9.17	88	92	72-143	4	25	YES
Hexachloroethane	10.00	9.13	8.66	91	87	59-135	5	25	YES
1,2-Dibromo-3-chloropropane	10.00	7.79	7.69	78	77	52-156	1	25	YES
1,2,4-Trichlorobenzene	10.00	6.01	7.13	60	71	45-156	17	25	YES
Hexachlorobutadiene	10.00	6.69	7.05	67	70	49-154	5	25	YES
Naphthalene	10.00	5.73	6.82	57	68	39-152	17	25	YES

COMMENTS:

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FORM 04
VOLATILE ORGANICS IN AIR
METHOD BLANK SUMMARY

SDG No.:

Lab Sample ID: VBLKF12 Analyzed Date: 06/15/2018

Lab File ID: ff00272.d Analyzed Time: 13:58

Instrument ID: 26379

THIS BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS AND LCSD:

LAB SAMPLE ID	LAB FILE ID	CANISTER ID	DATE ANALYZED	TIME ANALYZED
LCSF12	ff00273.d	N/A	06/15/2018	14:45
LCSDF12	ff00274.d	N/A	06/15/2018	15:16
9661706	ff00275.d	1098	06/15/2018	16:07
9661707	ff00276.d	1058	06/15/2018	16:38
9661708	ff00277.d	915	06/15/2018	17:09
9660702	ff00278.d	1434	06/15/2018	17:39
9660703	ff00279.d	1474	06/15/2018	18:10
9660704	ff00280.d	1481	06/15/2018	18:41
9660702	ff00281.d	1434	06/15/2018	19:12
cc504	ff00283.d	504	06/15/2018	20:13
9660704DL	ff00284.d	1481	06/15/2018	20:44

COMMENTS:

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

SDG No.:

Lab File ID: ff00270.d

BFB Injection Date: 06/15/2018

Instrument ID: 26379

BFB Injection Time: 12:18

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0% - 40.0% of mass 95	23.35
75	30.0% - 66.0% of mass 95	47.51
95	Base peak, 100% relative abundance	100.00
96	5.0% - 9.0% of mass 95	6.51
173	< 2.0% of mass 174	1.00 (0.96)
174	> 50.0% of mass 95	104.03
175	4.0% - 9.0% of mass 174	7.43 (7.14)
176	93.0% - 101.0% of mass 174	101.13 (97.20)
177	5.0% - 9.0% of mass 176	6.01 (5.94)

THIS CHECK APPLIES TO THE FOLLOWING:

LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD010	ff00271.d	06/15/2018	13:07
VBLKF12	ff00272.d	06/15/2018	13:58
LCSF12	ff00273.d	06/15/2018	14:45
LCSDF12	ff00274.d	06/15/2018	15:16
9661706	ff00275.d	06/15/2018	16:07
9661707	ff00276.d	06/15/2018	16:38
9661708	ff00277.d	06/15/2018	17:09
9660702	ff00278.d	06/15/2018	17:39
9660703	ff00279.d	06/15/2018	18:10
9660704	ff00280.d	06/15/2018	18:41
9660702	ff00281.d	06/15/2018	19:12
cc504	ff00283.d	06/15/2018	20:13
9660704DL	ff00284.d	06/15/2018	20:44

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: ff00271.d

Calibration Date: 06/15/2018

Instrument ID: 26379

Calibration Time: 13:07

Init. Calib. Date(s): 06/13/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
Propene	0.968	0.886	9.152	10	-8
Dichlorodifluoromethane	2.932	3.157	10.769	10	8
Chlorodifluoromethane	2.314	2.335	10.091	10	1
Freon 114	3.078	3.110	10.104	10	1
Chloromethane	1.205	1.170	9.713	10	-3
Vinyl Chloride	0.636	0.660	10.373	10	4
1,3-Butadiene	0.541	0.551	10.186	10	2
Bromomethane	0.894	1.010	11.303	10	13
Chloroethane	0.564	0.556	9.861	10	-1
Bromoethene	0.843	0.758	8.993	10	-10
Dichlorofluoromethane	2.338	2.488	10.641	10	6
Trichlorofluoromethane	3.317	3.224	9.720	10	-3
Pentane	1.940	1.708	8.804	10	-12
Ethanol	0.443	0.360	8.116	10	-19
Freon123a	2.241	2.143	10.616	11.1	-4
Acrolein	0.360	0.292	8.116	10	-19
1,1-Dichloroethene	1.583	1.424	8.996	10	-10
Freon 113	1.905	1.782	9.351	10	-6
Acetone	1.941	1.912	9.851	10	-1
Methyl Iodide	2.546	1.972	7.747	10	-23
Carbon Disulfide	2.590	2.776	10.717	10	7
Isopropanol	1.740	1.486	8.540	10	-15
Acetonitrile	1.174	1.233	10.505	10	5
3-Chloropropene	1.416	1.234	9.675	11.1	-13
Methylene Chloride	0.888	0.965	12.065	11.1	9
tert-Butyl Alcohol	2.069	1.816	9.744	11.1	-12
Acrylonitrile	0.938	0.849	9.051	10	-9
trans-1,2-Dichloroethene	1.531	1.403	9.166	10	-8
Methyl t-Butyl Ether	2.496	2.164	8.670	10	-13
Hexane	1.225	1.155	9.424	10	-6
1,1-Dichloroethane	2.128	2.097	9.856	10	-1
Vinyl Acetate	2.984	2.825	10.605	11.2	-5
Di-Isopropyl Ether	3.400	2.713	7.981	10	-20
Ethyl Tert-Butyl Ether	2.811	2.278	8.104	10	-19
cis-1,2-Dichloroethene	1.367	1.222	8.938	10	-11
2-Butanone	2.533	2.349	9.274	10	-7
Ethyl Acetate	2.740	2.478	9.044	10	-10
Methyl Acrylate	1.880	1.672	8.894	10	-11
Tetrahydrofuran	1.274	1.207	9.480	10	-5

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: ff00271.d

Calibration Date: 06/15/2018

Instrument ID: 26379

Calibration Time: 13:07

Init. Calib. Date(s): 06/13/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
Chloroform	2.553	2.585	10.128	10	1
1,1,1-Trichloroethane	2.856	2.681	9.389	10	-6
Cyclohexane	1.604	1.256	7.831	10	-22
Carbon Tetrachloride	2.985	2.847	9.536	10	-5
Benzene	1.216	1.410	11.596	10	16
1,2-Dichloroethane	0.655	0.768	11.730	10	17
Isooctane	1.712	1.813	10.587	10	6
Tert-Amyl Methyl Ether	0.829	0.835	10.067	10	1
Heptane	0.324	0.351	10.840	10	8
Trichloroethene	0.576	0.568	9.861	10	-1
Ethyl Acrylate	0.833	0.739	8.878	10	-11
1,2-Dichloropropane	0.534	0.598	11.188	10	12
Dibromomethane	0.707	0.794	11.224	10	12
1,4-Dioxane	0.246	0.276	11.210	10	12
Methyl Methacrylate	0.320	0.288	8.989	10	-10
Bromodichloromethane	0.998	1.148	11.504	10	15
cis-1,3-Dichloropropene	0.649	0.649	9.997	10	0
4-Methyl-2-Pentanone	1.146	1.172	10.223	10	2
Toluene	1.349	1.343	9.953	10	0
Octane	0.996	1.004	10.082	10	1
trans-1,3-Dichloropropene	0.596	0.631	10.587	10	6
Ethyl Methacrylate	0.539	0.488	9.041	10	-10
1,1,2-Trichloroethane	0.635	0.681	10.724	10	7
Tetrachloroethene	1.038	1.130	10.880	10	9
2-Hexanone	1.022	0.978	9.574	10	-4
Dibromochloromethane	0.822	0.815	9.911	10	-1
1,2-Dibromoethane	0.895	0.886	9.904	10	-1
Chlorobenzene	1.355	1.418	10.468	10	5
1,1,1,2-Tetrachloroethane	0.884	0.904	10.225	10	2
Ethylbenzene	1.848	1.885	10.203	10	2
m/p-Xylene	1.279	1.275	9.968	10	0
o-Xylene	1.228	1.097	8.929	10	-11
Styrene	0.984	1.020	10.371	10	4
Bromoform	1.242	1.256	10.106	10	1
Cumene	1.824	1.908	10.458	10	5
Bromobenzene	0.970	1.097	11.318	10	13
1,1,2,2-Tetrachloroethane	1.432	1.523	10.634	10	6
1,2,3-Trichloropropane	0.473	0.504	10.651	10	7
n-Propylbenzene	0.587	0.648	11.036	10	10

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: ff00271.d

Calibration Date: 06/15/2018

Instrument ID: 26379

Calibration Time: 13:07

Init. Calib. Date(s): 06/13/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
2-Chlorotoluene	0.600	0.713	11.870	10	19
4-Ethyltoluene	1.926	2.228	11.569	10	16
1,3,5-Trimethylbenzene	1.785	2.135	11.961	10	20
Alpha Methyl Styrene	0.751	0.752	10.012	10	0
tert-Butylbenzene	1.697	2.038	12.010	10	20
1,2,4-Trimethylbenzene	1.704	2.014	11.816	10	18
sec-Butylbenzene	2.535	3.018	11.907	10	19
1,3-Dichlorobenzene	1.638	1.719	10.495	10	5
1,4-Dichlorobenzene	1.580	1.681	10.638	10	6
p-Isopropyltoluene	2.039	2.369	11.620	10	16
Benzyl Chloride	0.397	0.429	10.810	10	8
1,2-Dichlorobenzene	1.470	1.558	10.600	10	6
n-Butylbenzene	1.185	1.372	11.580	10	16
Hexachloroethane	0.819	0.856	10.451	10	5
1,2-Dibromo-3-chloropropane	0.749	0.744	9.934	10	-1
1,2,4-Trichlorobenzene	1.053	0.937	8.904	10	-11
Hexachlorobutadiene	1.347	1.259	9.344	10	-7
Naphthalene	1.541	1.374	8.922	10	-11

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

Continuing Calibration
Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP26379.i/18jun13.b/ff00222.d
/chem/HP26379.i/18jun13.b/ff00223.d
/chem/HP26379.i/18jun13.b/ff00224.d
/chem/HP26379.i/18jun13.b/ff00225.d
/chem/HP26379.i/18jun13.b/ff00226.d
/chem/HP26379.i/18jun13.b/ff00227.d

** ICAL Area and RT are the average from the above standards.

Current Continuing Calibration Standard:

/chem/HP26379.i/18jun15.b/ff00271.d

Area Summary

Internal Standard Name	File ID: ff00271.d	ICAL Area	Low Limit	High Limit	In Spec
Bromochloromethane	675888	574713	344828	804598	Yes
1,4-Difluorobenzene	1579865	1598581	959149	2238013	Yes
Chlorobenzene-d5	1810250	1685435	1011261	2359609	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

RT Summary

Internal Standard Name	File ID: ff00271.d	ICAL RT	In Spec
Bromochloromethane	11.108	11.104	Yes
1,4-Difluorobenzene	13.393	13.393	Yes
Chlorobenzene-d5	18.235	18.234	Yes

A "No" indicates the retention time is greater than 30 seconds from the RT of the referenced ICAL average.

Comments:_____

_____

Page 1 of 1

Report generated on 06/15/2018 at 13:40

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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: 06/15/2018

Lab File ID: ff00271.d Analyzed Time: 13:07

Instrument ID: 26379

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	R.T.	Area	R.T.	Area	R.T.
24 HOUR STANDARD	675888	11.11	1579865	13.39	1810250	18.23
UPPER LIMIT	946243	11.44	2211811	13.72	2534350	18.56
LOWER LIMIT	405533	10.78	947919	13.06	1086150	17.90
LAB SAMPLE ID						
VBLKF12	677098	11.10	1409717	13.40	1615511	18.24
LCSF12	676747	11.10	1695402	13.39	1838873	18.23
LCSDF12	672278	11.11	1732545	13.40	1923908	18.23
9661706	670018	11.11	1773119	13.39	2102542	18.23
9661707	542030	11.11	1603496	13.40	1925165	18.23
9661708	613701	11.11	1449238	13.40	1755743	18.23
9660702	597005	11.11	1325636	13.40	1613389	18.24
9660703	634341	11.11	1203318	13.40	1513243	18.24
9660704	592916	11.10	1234783	13.40	1740873	18.24
9660702	581707	11.11	1236693	13.40	1552932	18.23
cc504	635697	11.11	1160933	13.40	1470540	18.23
9660704DL	576419	11.11	1083724	13.40	1613668	18.23

* = 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.

Data File: /chem/HP26379.i/18jun15.b/ff00270.d

Date : 15-JUN-2018 12:18

Client ID: BFB

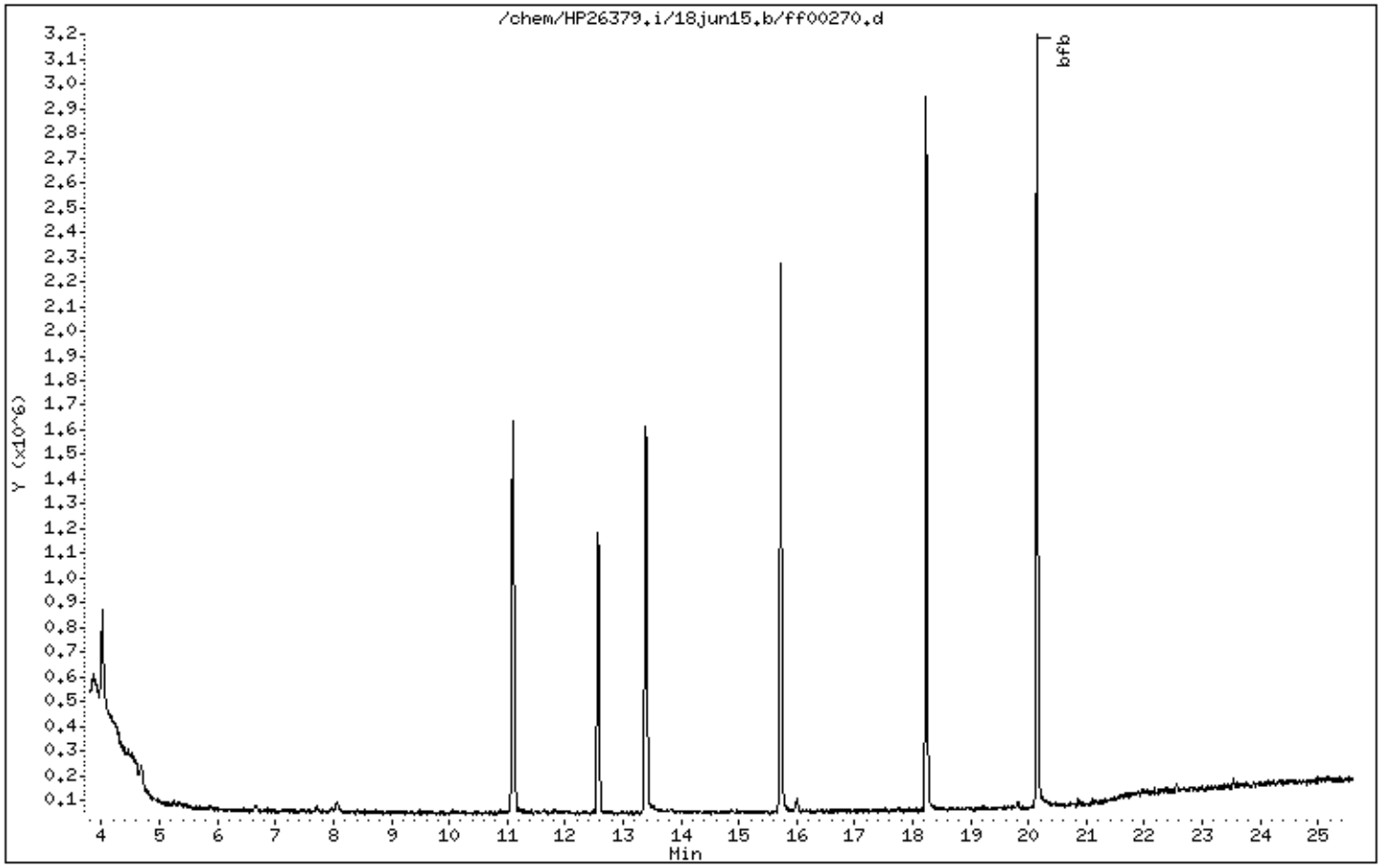
Instrument: HP26379.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25



Digitally signed by Jacob E. Bailey on 06/15/2018 at 15:08.
Target 3.5 esignature user ID: jeb07445

Data File: /chem/HP26379.i/18jun15.b/ff00270.d

Date : 15-JUN-2018 12:18

Client ID: BFB

Instrument: HP26379.i

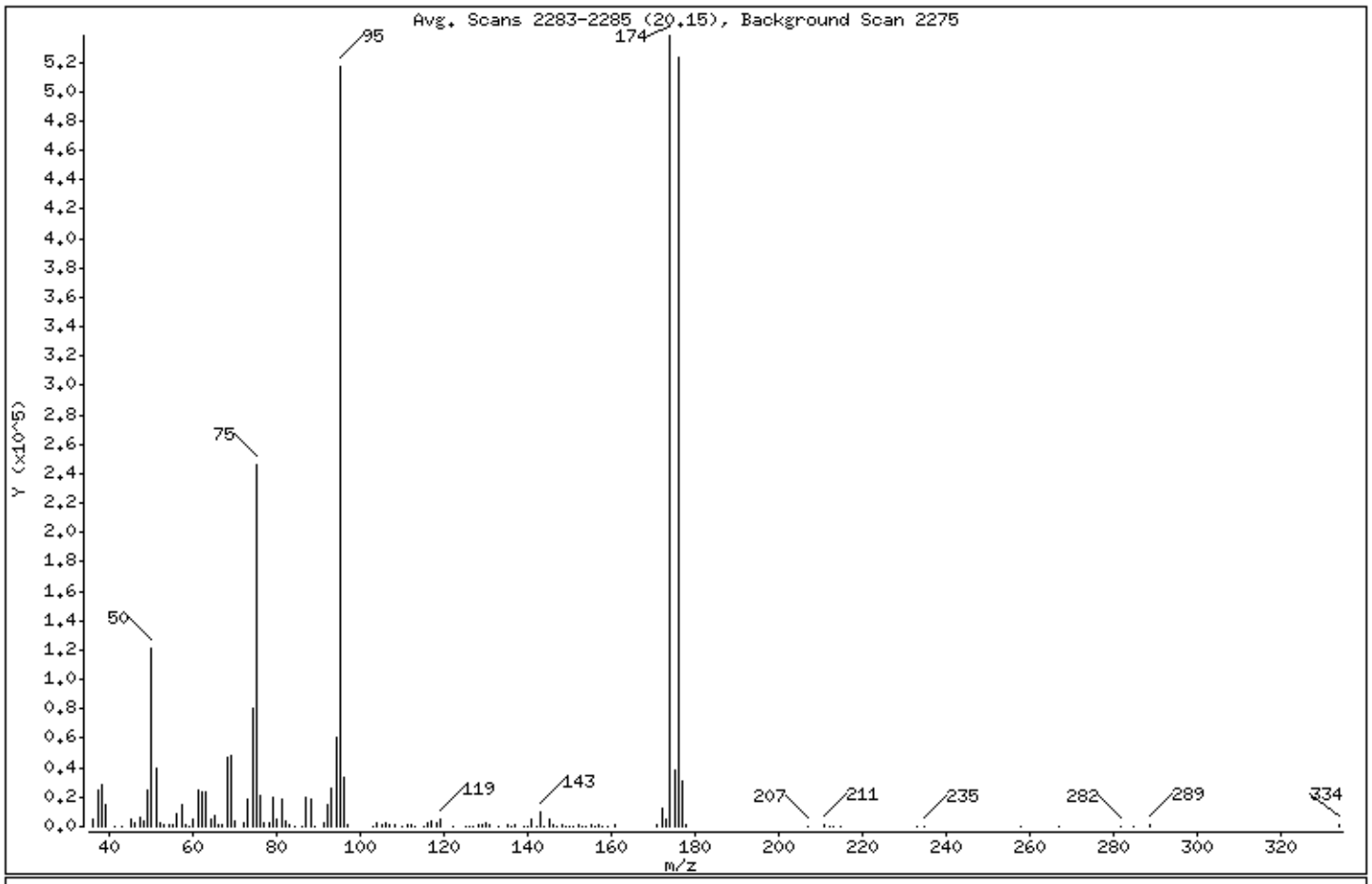
Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	23.35
75	30.00 - 66.00% of mass 95	47.51
96	5.00 - 9.00% of mass 95	6.51
173	Less than 2.00% of mass 174	1.00 (0.96)
174	50.00 - 120.00% of mass 95	104.03
175	4.00 - 9.00% of mass 174	7.43 (7.14)
176	93.00 - 101.00% of mass 174	101.13 (97.20)
177	5.00 - 9.00% of mass 176	6.01 (5.94)

Digitally signed by Jacob E. Bailey on 06/15/2018 at 15:08.
Target 3.5 esignature user ID: jeb07445

Date : 15-JUN-2018 12:18

Client ID: BFB Instrument: HP26379.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624 Column diameter: 0.25

Data File: ff00270.d
Spectrum: Avg. Scans 2283-2285 (20,15), Background Scan 2275
Location of Maximum: 174.00
Number of points: 126

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	5436	72.00	2336	112.00	1254	152.00	628
37.00	25072	73.00	18704	113.00	416	153.00	104
38.00	28352	74.00	80528	115.00	580	154.00	353
39.00	14532	75.00	245696	116.00	2324	155.00	1374
41.00	59	76.00	21080	117.00	3546	156.00	492
43.00	200	77.00	3061	118.00	2688	157.00	1464
45.00	4601	78.00	2670	119.00	4796	158.00	467
46.00	1927	79.00	19768	122.00	228	159.00	509
47.00	6354	80.00	5328	125.00	138	161.00	630
48.00	3283	81.00	18568	126.00	490	171.00	1840
49.00	25096	82.00	3806	127.00	102	172.00	12689
50.00	120760	83.00	987	128.00	1749	173.00	5165
51.00	39008	84.00	146	129.00	1317	174.00	538048
52.00	2513	86.00	526	130.00	2105	175.00	38408
53.00	1630	87.00	19664	131.00	1139	176.00	523008
54.00	759	88.00	18848	133.00	350	177.00	31088
55.00	740	89.00	100	135.00	939	178.00	985
56.00	8436	91.00	2184	136.00	325	207.00	59
57.00	15165	92.00	14945	137.00	1073	211.00	670
58.00	1092	93.00	25544	139.00	345	212.00	105
59.00	104	94.00	60360	140.00	574	213.00	106
60.00	5515	95.00	517184	141.00	4653	215.00	261
61.00	24520	96.00	33680	142.00	572	233.00	592
62.00	24000	97.00	1346	143.00	9979	235.00	127
63.00	22944	103.00	415	144.00	590	258.00	105
64.00	4568	104.00	2451	145.00	4472	267.00	124
65.00	8038	105.00	1057	146.00	815	282.00	592
66.00	1281	106.00	2476	147.00	386	285.00	36
67.00	1015	107.00	853	148.00	868	289.00	1038
68.00	47440	108.00	662	149.00	116	334.00	903
69.00	48312	110.00	336	150.00	362		
70.00	3961	111.00	752	151.00	254		

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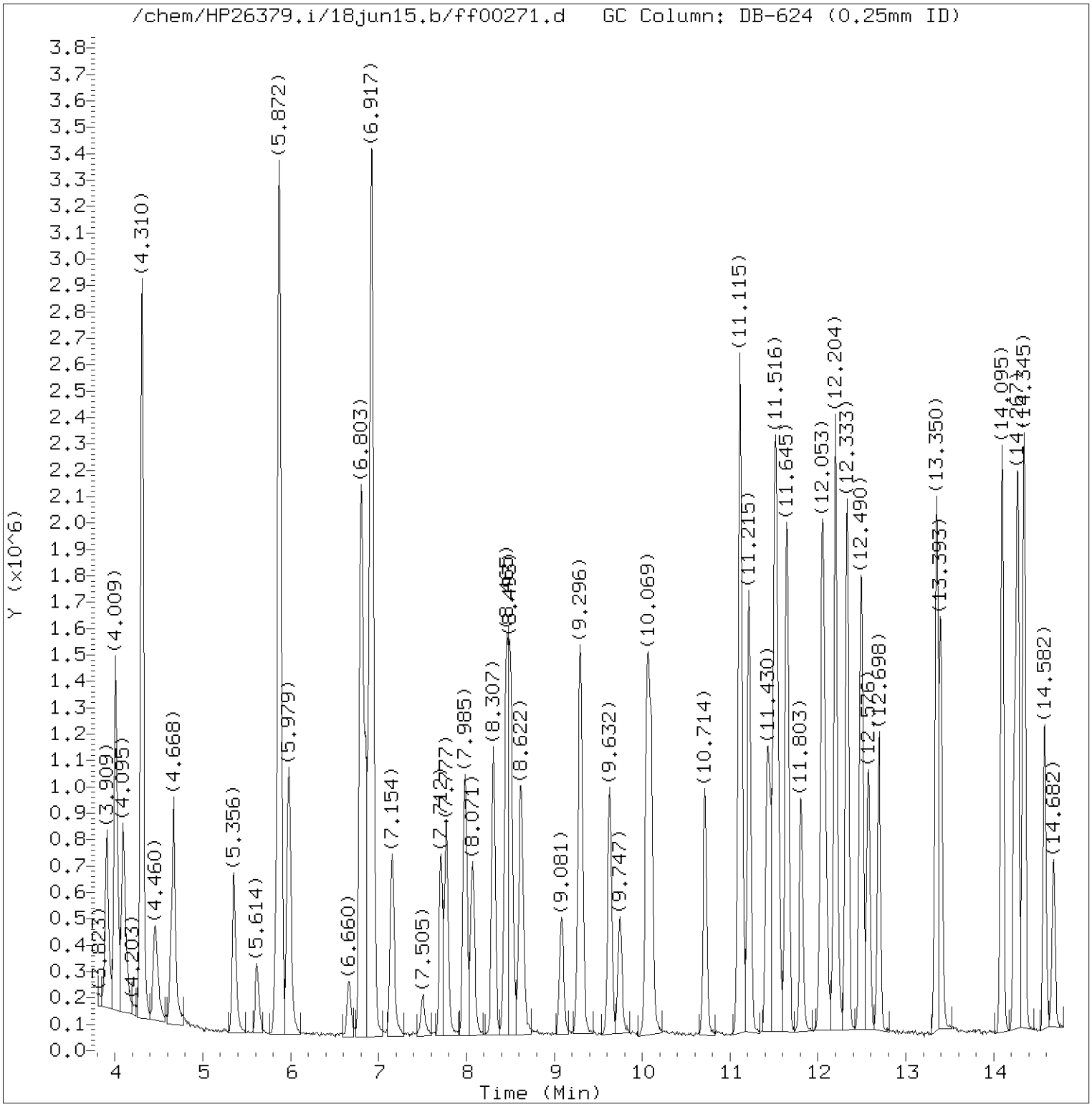
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

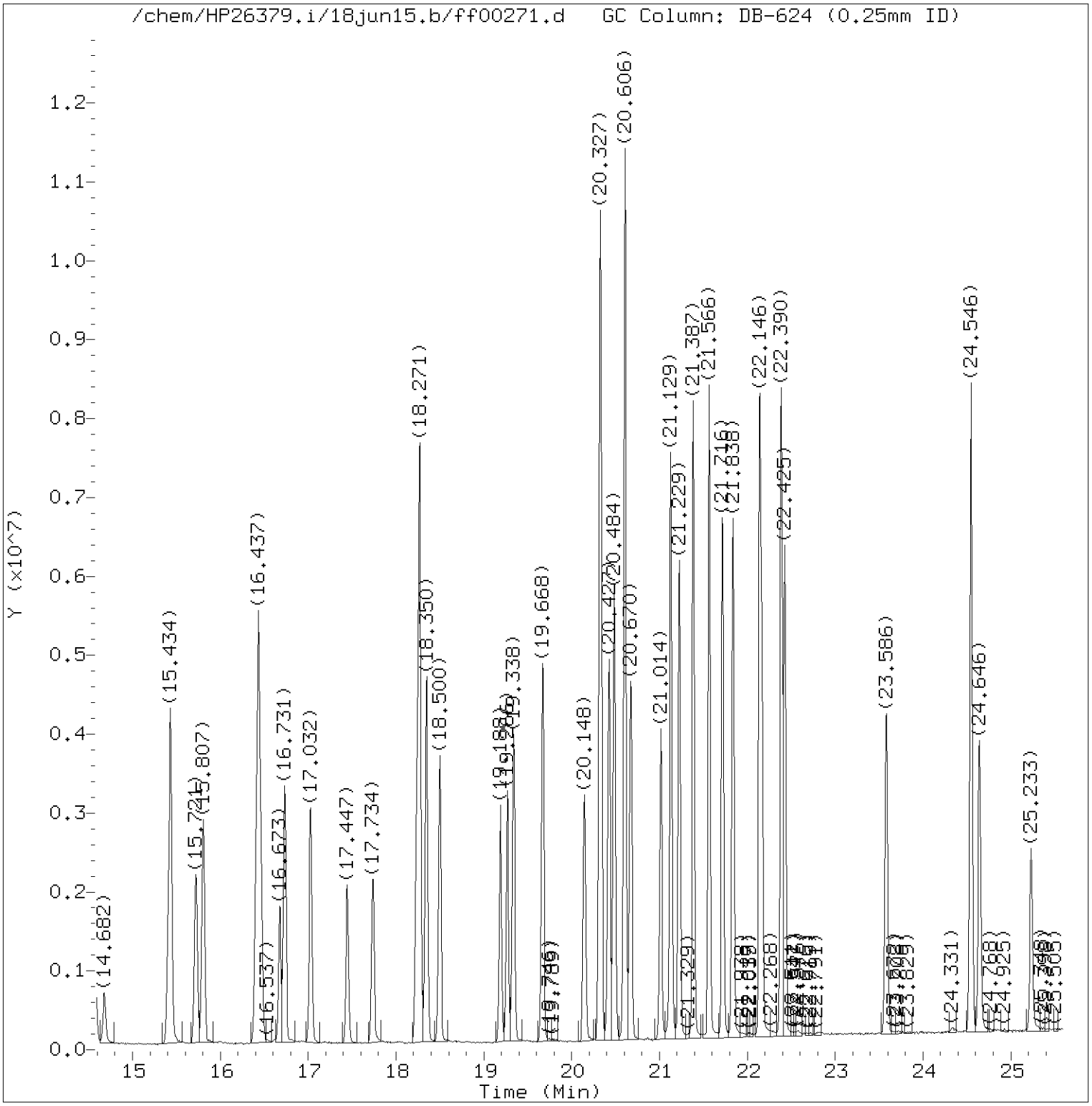
Target Revision 3.5

Data File: /chem/HP26379.i/18jun15.b/ff00271.d Instrument ID: HP26379.i
Injection date and time: 15-JUN-2018 13:07 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: all
Calibration date and time: 15-JUN-2018 13:41
Date, time and analyst ID of latest file update: 15-Jun-2018 13:41 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 06/15/2018 at 15:08.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

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Data File: /chem/HP26379.i/18jun15.b/ff00271.d Instrument ID: HP26379.i
Injection date and time: 15-JUN-2018 13:07 Analyst ID: jeb07445

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Calibration date and time: 15-JUN-2018 13:41
Date, time and analyst ID of latest file update: 15-Jun-2018 13:41 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 06/15/2018 at 15:08.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun15.b/ff00271.d Instrument ID: HP26379.i
Injection date and time: 15-JUN-2018 13:07 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: all
Calibration date and time: 15-JUN-2018 13:41
Date, time and analyst ID of latest file update: 15-Jun-2018 13:41 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.909	41	598975	9.152
2) Dichlorodifluoromethane	(1)	4.009	85	2133668	10.769
3) Chlorodifluoromethane	(1)	4.095	51	1577954	10.091
4) Freon 114	(1)	4.310	85	2102286	10.104
5) Chloromethane	(1)	4.460	50	791108	9.713
6) Vinyl Chloride	(1)	4.640	62	446174	10.373
7) 1,3-Butadiene	(1)	4.668	54	372606	10.186
8) Bromomethane	(1)	5.356	94	682897	11.303
9) Chloroethane	(1)	5.614	64	375853	9.861
10) Bromoethene	(1)	5.836	106	512339	8.993
11) Pentane	(1)	5.872	43	1154315	8.804
12) Trichlorofluoromethane	(1)	5.879	101	2178794	9.720
13) Dichlorofluoromethane	(1)	5.979	67	1681467M	10.641
14) Ethanol	(1)	6.667	45	243082	8.116
15) Freon123a	(1)	6.803	67	1607878	10.616
16) 1,1-Dichloroethene	(1)	6.853	61	962231	8.996
17) Freon 113	(1)	6.917	103	1204237	9.351
18) Carbon Disulfide	(1)	6.939	76	1876176	10.717
19) Methyl Iodide	(1)	7.154	142	1333072	7.747
20) Acrolein	(1)	7.512	56	197448	8.116
21) Isopropanol	(1)	7.712	45	1004542	8.540
22) 3-Chloropropene	(1)	7.770	41	926094	9.675
23) Methylene Chloride	(1)	7.985	84	723975	12.065
24) Acetone	(1)	8.071	43	1292154	9.851
25) trans-1,2-Dichloroethene	(1)	8.307	61	948381	9.166
26) Hexane	(1)	8.450	56	780356	9.424
27) Methyl t-Butyl Ether	(1)	8.508	73	1462652	8.670
28) tert-Butyl Alcohol	(1)	8.622	59	1362719	9.744
29) Acetonitrile	(1)	9.081	41	833549	10.505
30) Di-Isopropyl Ether	(1)	9.296	45	1833913	7.981
31) 1,1-Dichloroethane	(1)	9.632	63	1417464	9.856
32) Acrylonitrile	(1)	9.747	53	573628	9.051
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	1539777	8.104
34) Vinyl Acetate	(1)	10.105	43	2138787	10.605
35) cis-1,2-Dichloroethene	(1)	10.714	61	825671	8.938
36) 1,2-Dichloroethene (total)	(1)		61	1774052	18.105
37)*Bromochloromethane	(1)	11.108	130	675888	10.000
38) Cyclohexane	(1)	11.129	56	849041	7.831

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

Digitally signed by Jacob E. Bailey
on 06/15/2018 at 15:08.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun15.b/ff00271.d Instrument ID: HP26379.i
Injection date and time: 15-JUN-2018 13:07 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: all
Calibration date and time: 15-JUN-2018 13:41
Date, time and analyst ID of latest file update: 15-Jun-2018 13:41 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	1747413	10.128
40) Ethyl Acetate	(1)	11.423	43	1675151	9.044
41) Methyl Acrylate	(1)	11.452	55	1130056	8.894
42) Carbon Tetrachloride	(1)	11.516	117	1924101	9.536
43) Tetrahydrofuran	(1)	11.545	42	816133	9.480
44) 1,1,1-Trichloroethane	(1)	11.645	97	1812196	9.389
45) 2-Butanone	(1)	11.810	43	1587833	9.274
46) Isooctane	(2)	12.053	57	2863943	10.587
47) Heptane	(2)	12.204	71	555058	10.840
48) Benzene	(2)	12.333	78	2228131	11.596
49) Tert-Amyl Methyl Ether	(2)	12.497	73	1318458	10.067
50) 1,2-Dichloroethane	(2)	12.698	62	1213776	11.730
51) Trichloroethene	(2)	13.350	130	897108	9.861
52)*1,4-Difluorobenzene	(2)	13.393	114	1579865	10.000
53) Dibromomethane	(2)	14.095	174	1253862	11.224
54) Ethyl Acrylate	(2)	14.231	55	1168271	8.878
55) 1,2-Dichloropropane	(2)	14.274	63	943977	11.188
56) Bromodichloromethane	(2)	14.345	83	1813564	11.504
57) Methyl Methacrylate	(2)	14.582	69	454849	8.989
58) 1,4-Dioxane	(2)	14.682	88	435862	11.210
59) cis-1,3-Dichloropropene	(2)	15.406	75	1025519	9.997
60) Octane	(3)	15.434	43	1816942	10.082
61) Toluene	(3)	15.807	91	2430556	9.953
62) 4-Methyl-2-Pentanone	(2)	16.408	43	1851060	10.223
63) Tetrachloroethene	(3)	16.437	166	2044988	10.880
64) trans-1,3-Dichloropropene	(3)	16.466	75	1141398	10.587
65) 1,3-Dichloropropene (total)	(3)		75	2166917	19.784
66) Ethyl Methacrylate	(3)	16.681	69	882757	9.041
67) 1,1,2-Trichloroethane	(3)	16.731	97	1232836	10.724
68) Dibromochloromethane	(3)	17.032	127	1475608	9.911
69) 1,2-Dibromoethane	(3)	17.447	107	1603994	9.904
70) 2-Hexanone	(3)	17.741	43	1770763	9.574
71)*Chlorobenzene-d5	(3)	18.235	117	1810250	10.000
72) Chlorobenzene	(3)	18.264	112	2567717	10.468
73) Ethylbenzene	(3)	18.271	91	3412863	10.203
74) 1,1,1,2-Tetrachloroethane	(3)	18.350	131	1636470	10.225
75) m/p-Xylene	(3)	18.500	91	2308133	9.968
76) o-Xylene	(3)	19.188	91	1985022	8.929

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/15/2018 at 15:08.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun15.b/ff00271.d Instrument ID: HP26379.i
Injection date and time: 15-JUN-2018 13:07 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: all
Calibration date and time: 15-JUN-2018 13:41
Date, time and analyst ID of latest file update: 15-Jun-2018 13:41 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	4293155	18.918
78) Styrene	(3)	19.266	104	1846759	10.371
79) Bromoform	(3)	19.338	173	2273012	10.106
80) Cumene	(3)	19.668	105	3454009	10.458
81) n-Propylbenzene	(3)	20.319	120	1172311	11.036
82) Bromobenzene	(3)	20.334	156	1986293	11.318
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	2757173	10.634
84) 4-Ethyltoluene	(3)	20.484	105	4033739	11.569
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	3865054	11.961
85) 2-Chlorotoluene	(3)	20.606	126	1290192	11.870
87) 1,2,3-Trichloropropane	(3)	20.678	110	912826	10.651
88) Alpha Methyl Styrene	(3)	21.014	118	1361580	10.012
89) tert-Butylbenzene	(3)	21.129	119	3689414	12.010
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	3645807	11.816
91) sec-Butylbenzene	(3)	21.387	105	5463578	11.907
92) p-Isopropyltoluene	(3)	21.566	119	4288905	11.620
93) 1,3-Dichlorobenzene	(3)	21.723	146	3111935	10.495
94) 1,4-Dichlorobenzene	(3)	21.838	146	3042625	10.638
95) n-Butylbenzene	(3)	22.139	92	2484207	11.580
96) Benzyl Chloride	(3)	22.167	126	777473	10.810
97) Hexachloroethane	(3)	22.390	117	1549145	10.451
98) 1,2-Dichlorobenzene	(3)	22.425	146	2819916	10.600
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	1346617	9.934
100) Hexachlorobutadiene	(3)	24.546	225	2278905	9.344
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	1696864	8.904
102) Naphthalene	(3)	25.233	128	2488073	8.922

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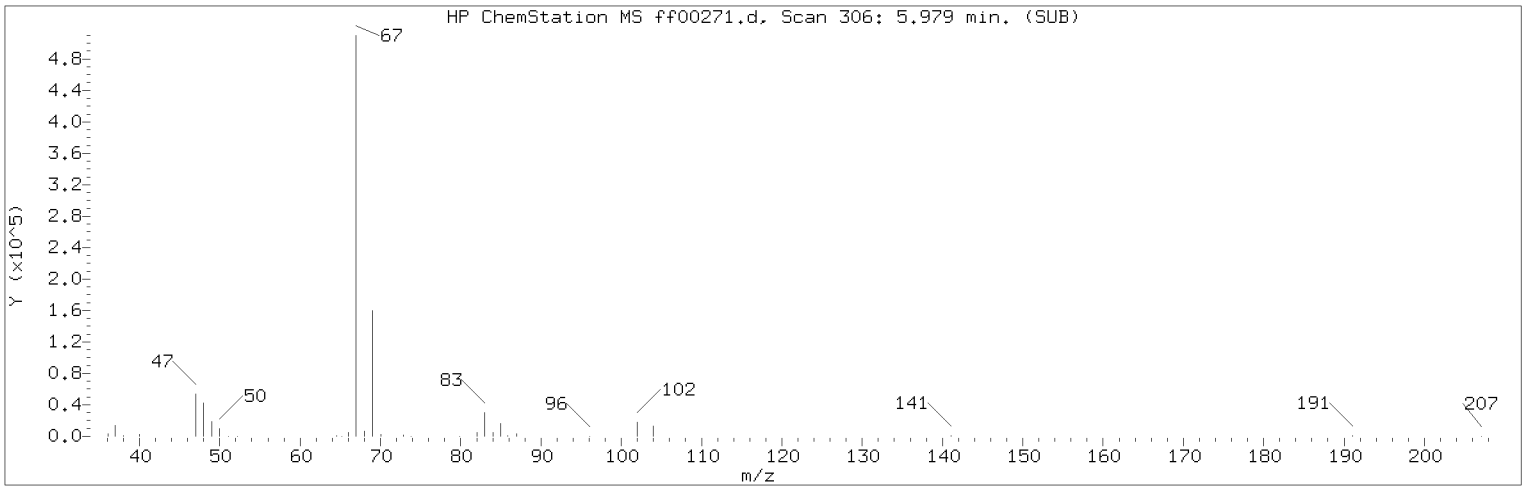
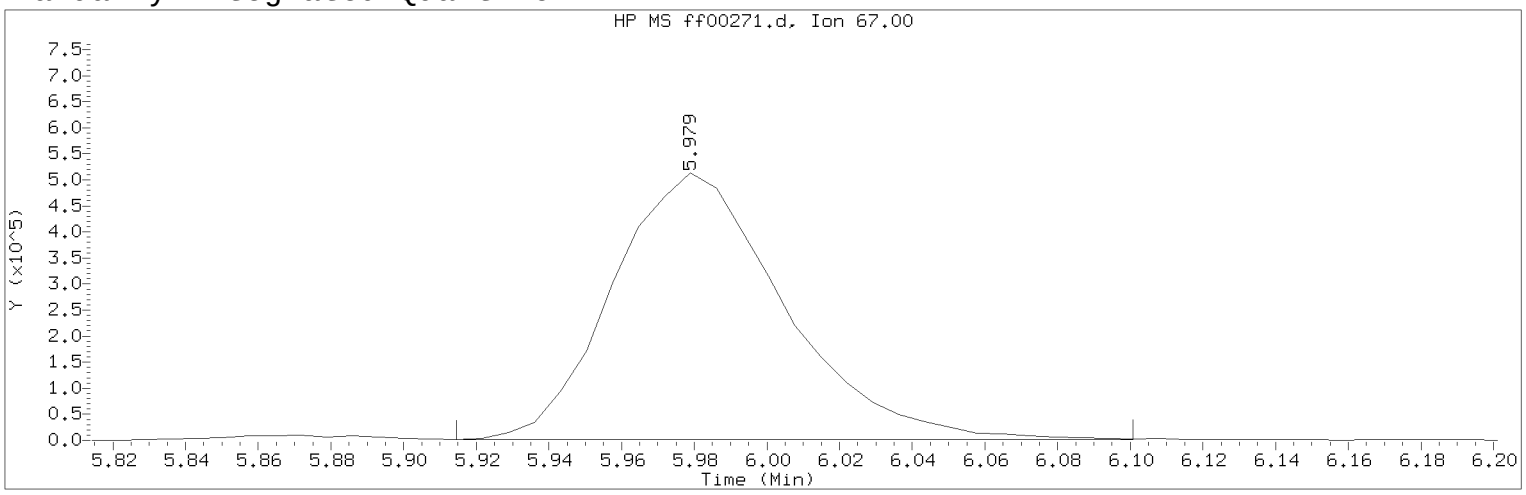
on 06/15/2018 at 15:08.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18jun15.b/ff00271.d Instrument ID: HP26379.i
Injection date and time: 15-JUN-2018 13:07 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: all
Calibration date and time: 15-JUN-2018 13:41
Date, time and analyst ID of latest file update: 15-Jun-2018 13:41 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

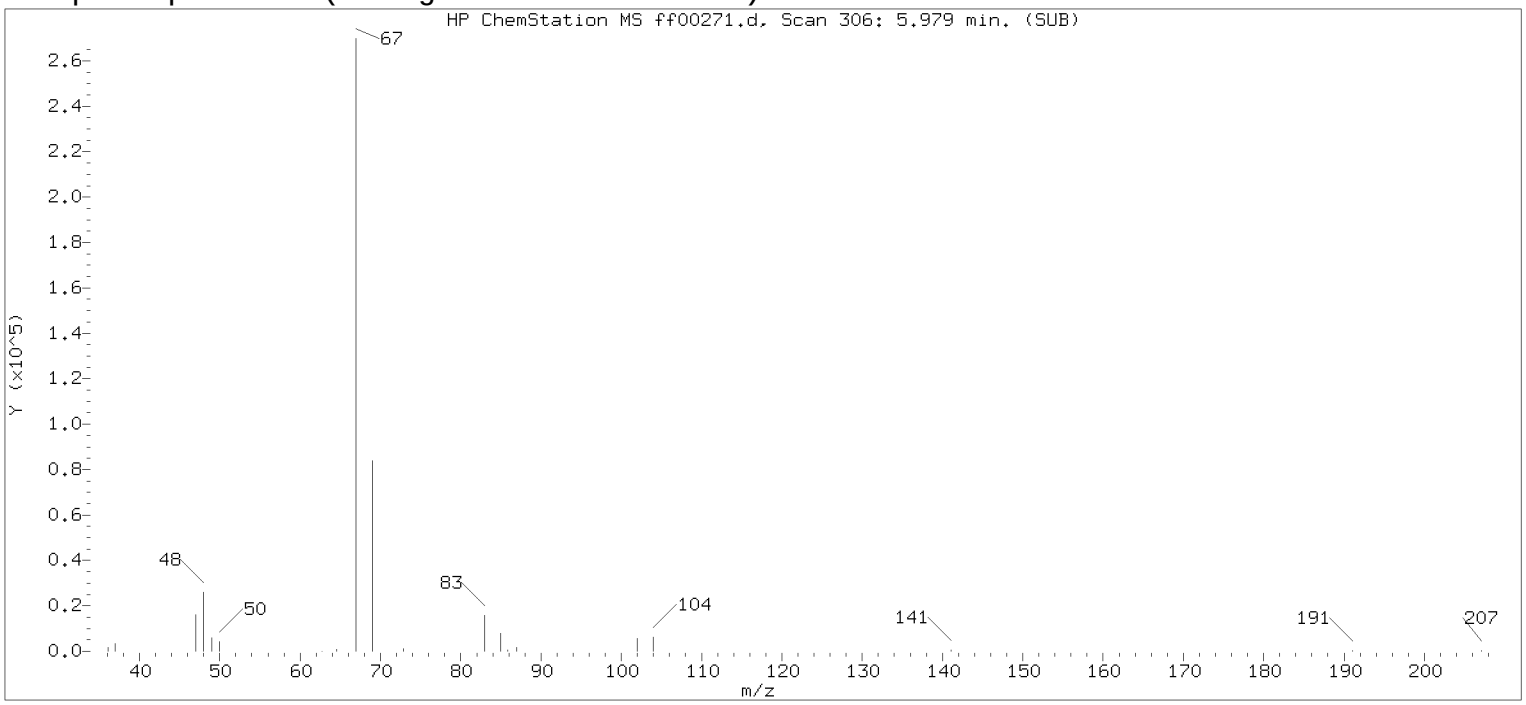
Compound Number : 13
Compound Name : Dichlorofluoromethane
Scan Number : 306
Retention Time (minutes): 5.979
Quant Ion : 67.00
Area (flag) : 1681467M
Concentration (ppb(v)) : 10.6408
Integration start scan : 296 Integration stop scan: 322
Y at integration start : 942 Y at integration end: 942

Reason for manual integration: improper integration

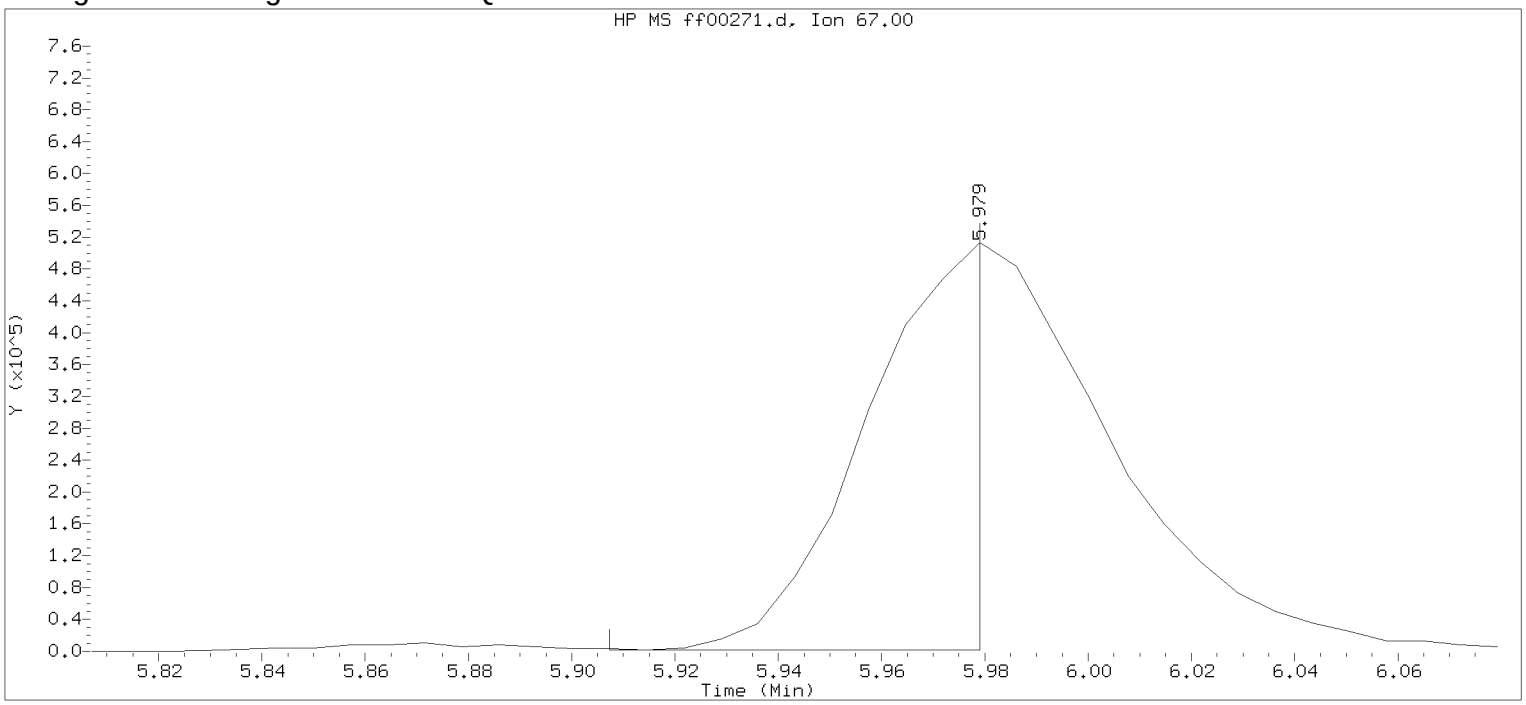
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/15/2018 at 15:08.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/18/2018 at 14:00.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18jun15.b/ff00271.d Instrument ID: HP26379.i
Injection date and time: 15-JUN-2018 13:07 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: all
Calibration date and time: 06-JUN-2018 10:34
Date, time and analyst ID of latest file update: 15-Jun-2018 13:36 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 13
Compound Name : Dichlorofluoromethane
Scan Number : 306
Retention Time (minutes): 5.979
Quant Ion : 67.00
Area : 750467
Concentration (ppb(v)) : 5.0670
Integration start scan : 295 Integration stop scan: 305
Y at integration start : 1320 Y at integration end: 1320

Digitally signed by Jacob E. Bailey on 06/15/2018 at 15:08.
Target 3.5 esignature used. GLED1 Page 1491 of 1687

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

VBLKF12

Data file: /chem/HP26379.i/18jun15.b/ff00272.d Injection date and time: **15-JUN-2018 13:58**
Data file Sample Info. Line: VBLKF12;200;F1816630AA;VBLKF12;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1816630AA**
Date, time and analyst ID of latest file update: 15-Jun-2018 15:08 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun15.b/ff00272.d**

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 15-JUN-2018 13:41
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun15.b/ff00271.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.101(0.007)	1021	130	677098 (0)	10.00		405533 - 946243
52) 1,4-Difluorobenzene	13.400(-0.007)	1342	114	1409717 (-11)	10.00		947919 - 2211811
71) Chlorobenzene-d5	18.235(0.000)	2017	117	1615511 (-11)	10.00		1086150 - 2534350

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)			Not Detected					0.5	1
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)			Not Detected					0.2	1
7) 1,3-Butadiene	(1)			Not Detected					0.4	2
8) Bromomethane	(1)			Not Detected					0.5	1
9) Chloroethane	(1)			Not Detected					0.2	1
10) Bromoethene	(1)			Not Detected					0.4	2
13) Dichlorofluoromethane	(1)			Not Detected					0.2	1
12) Trichlorofluoromethane	(1)			Not Detected					0.2	1
11) Pentane	(1)			Not Detected					0.5	1
14) Ethanol	(1)			Not Detected					0.5	2
15) Freon123a	(1)			Not Detected					0.2	1
20) Acrolein	(1)			Not Detected					1	2
16) 1,1-Dichloroethene	(1)			Not Detected					0.2	1
17) Freon 113	(1)			Not Detected					0.5	2
24) Acetone	(1)			Not Detected					0.5	2
19) Methyl Iodide	(1)			Not Detected					0.2	1
18) Carbon Disulfide	(1)			Not Detected					1	1
21) Isopropanol	(1)			Not Detected					0.5	2
29) Acetonitrile	(1)			Not Detected					0.5	2
22) 3-Chloropropene	(1)			Not Detected					0.2	1
23) Methylene Chloride	(1)			Not Detected					0.2	1
28) tert-Butyl Alcohol	(1)			Not Detected					0.5	1
32) Acrylonitrile	(1)			Not Detected					0.5	2
25) trans-1,2-Dichloroethene	(1)			Not Detected					0.2	1
27) Methyl t-Butyl Ether	(1)			Not Detected					0.2	1
26) Hexane	(1)			Not Detected					0.2	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.2	1
34) Vinyl Acetate	(1)			Not Detected					1	1
30) Di-Isopropyl Ether	(1)			Not Detected					0.2	1
33) Ethyl Tert-Butyl Ether	(1)			Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.2	1
36) 1,2-Dichloroethene (total)	(1)			Not Detected					0.2	1
45) 2-Butanone	(1)			Not Detected					0.5	2
40) Ethyl Acetate	(1)			Not Detected					0.5	1
41) Methyl Acrylate	(1)			Not Detected					0.2	1
43) Tetrahydrofuran	(1)			Not Detected					0.5	1
39) Chloroform	(1)			Not Detected					0.2	1
44) 1,1,1-Trichloroethane	(1)			Not Detected					0.2	1
38) Cyclohexane	(1)			Not Detected					0.2	1

Digitally signed by Jacob E. Bailey on 06/15/2018 at 15:08. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18jun15.b/ff00272.d Injection date and time: **15-JUN-2018 13:58**
Data file Sample Info. Line: VBLKF12;200;F1816630AA;VBLKF12;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1816630AA**
Date, time and analyst ID of latest file update: 15-Jun-2018 15:08 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun15.b/ff00272.d**

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 15-JUN-2018 13:41
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun15.b/ff00271.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
42) Carbon Tetrachloride	(1)			Not Detected					0.2	1
48) Benzene	(2)			Not Detected					0.2	1
50) 1,2-Dichloroethane	(2)			Not Detected					0.2	1
46) Isooctane	(2)			Not Detected					0.2	1
49) Tert-Amyl Methyl Ether	(2)			Not Detected					0.2	1
47) Heptane	(2)			Not Detected					0.5	1
51) Trichloroethene	(2)			Not Detected					0.2	1
54) Ethyl Acrylate	(2)			Not Detected					0.2	1
55) 1,2-Dichloropropane	(2)			Not Detected					0.2	1
53) Dibromomethane	(2)			Not Detected					0.2	1
58) 1,4-Dioxane	(2)			Not Detected					0.5	1
57) Methyl Methacrylate	(2)			Not Detected					0.2	1
56) Bromodichloromethane	(2)			Not Detected					0.2	1
59) cis-1,3-Dichloropropene	(2)			Not Detected					0.2	1
62) 4-Methyl-2-Pentanone	(2)			Not Detected					0.5	2
61) Toluene	(3)			Not Detected					0.2	1
60) Octane	(3)			Not Detected					0.2	1
64) trans-1,3-Dichloropropene	(3)			Not Detected					0.2	1
65) 1,3-Dichloropropene (total)	(3)			Not Detected					0.2	1
66) Ethyl Methacrylate	(3)			Not Detected					0.2	1
67) 1,1,2-Trichloroethane	(3)			Not Detected					0.2	1
63) Tetrachloroethene	(3)			Not Detected					0.2	1
70) 2-Hexanone	(3)			Not Detected					0.5	2
68) Dibromochloromethane	(3)			Not Detected					0.2	1
69) 1,2-Dibromoethane	(3)			Not Detected					0.2	1
72) Chlorobenzene	(3)			Not Detected					0.2	1
74) 1,1,1,2-Tetrachloroethane	(3)			Not Detected					0.2	1
73) Ethylbenzene	(3)			Not Detected					0.2	1
75) m/p-Xylene	(3)			Not Detected					0.2	1
76) o-Xylene	(3)			Not Detected					0.2	1
77) Xylene (total)	(3)			Not Detected					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
82) Bromobenzene	(3)			Not Detected					0.2	1
83) 1,1,2,2-Tetrachloroethane	(3)			Not Detected					0.2	1
87) 1,2,3-Trichloropropane	(3)			Not Detected					0.2	1
81) n-Propylbenzene	(3)			Not Detected					0.5	1
85) 2-Chlorotoluene	(3)			Not Detected					0.2	1
84) 4-Ethyltoluene	(3)			Not Detected					0.2	1
86) 1,3,5-Trimethylbenzene	(3)			Not Detected					0.2	1
88) Alpha Methyl Styrene	(3)			Not Detected					0.2	1
89) tert-Butylbenzene	(3)			Not Detected					0.5	1
90) 1,2,4-Trimethylbenzene	(3)			Not Detected					0.2	1
91) sec-Butylbenzene	(3)			Not Detected					0.2	1
93) 1,3-Dichlorobenzene	(3)			Not Detected					0.2	1
94) 1,4-Dichlorobenzene	(3)			Not Detected					0.2	1
92) p-Isopropyltoluene	(3)			Not Detected					0.2	1
96) Benzyl Chloride	(3)			Not Detected					0.5	1
98) 1,2-Dichlorobenzene	(3)			Not Detected					0.2	1
95) n-Butylbenzene	(3)			Not Detected					0.2	1
97) Hexachloroethane	(3)			Not Detected					0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)			Not Detected					0.2	1
101) 1,2,4-Trichlorobenzene	(3)			Not Detected					0.5	2

Digitally signed by Jacob E. Bailey on 06/15/2018 at 15:08. Target 3.5 esignature user ID: jeb07445

Data file: /chem/HP26379.i/18jun15.b/ff00272.d Injection date and time: **15-JUN-2018 13:58**
Data file Sample Info. Line: VBLKF12;200;F1816630AA;VBLKF12;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1816630AA**
Date, time and analyst ID of latest file update: 15-Jun-2018 15:08 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun15.b/ff00272.d**

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 15-JUN-2018 13:41
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun15.b/ff00271.d**

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

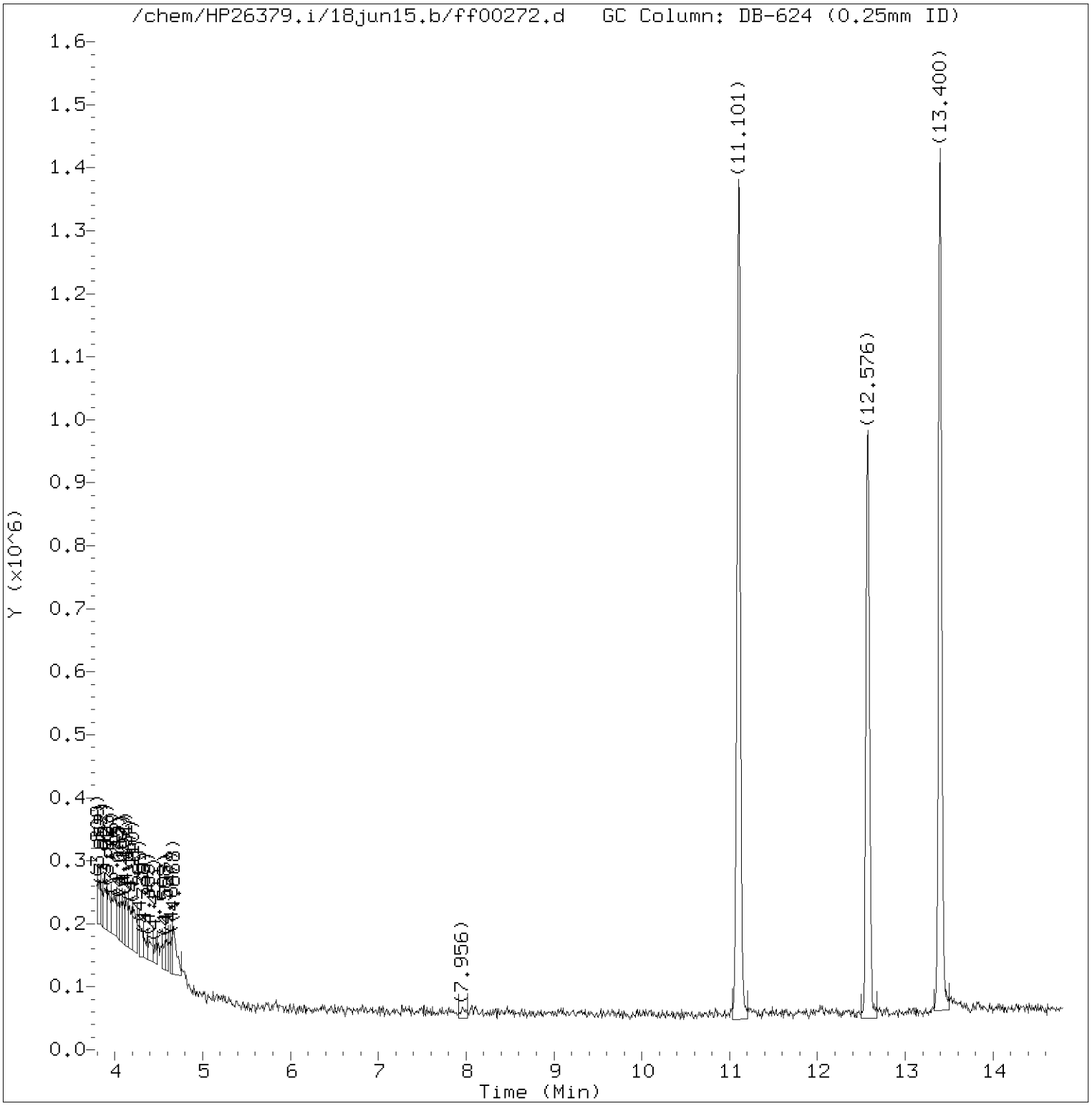
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
100) Hexachlorobutadiene	(3)				Not Detected					0.4	2
102) Naphthalene	(3)				Not Detected					0.4	1

Total number of targets = 99

Digitally signed by Jacob E. Bailey on 06/15/2018 at 15:08. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/18/2018 at 10:58. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

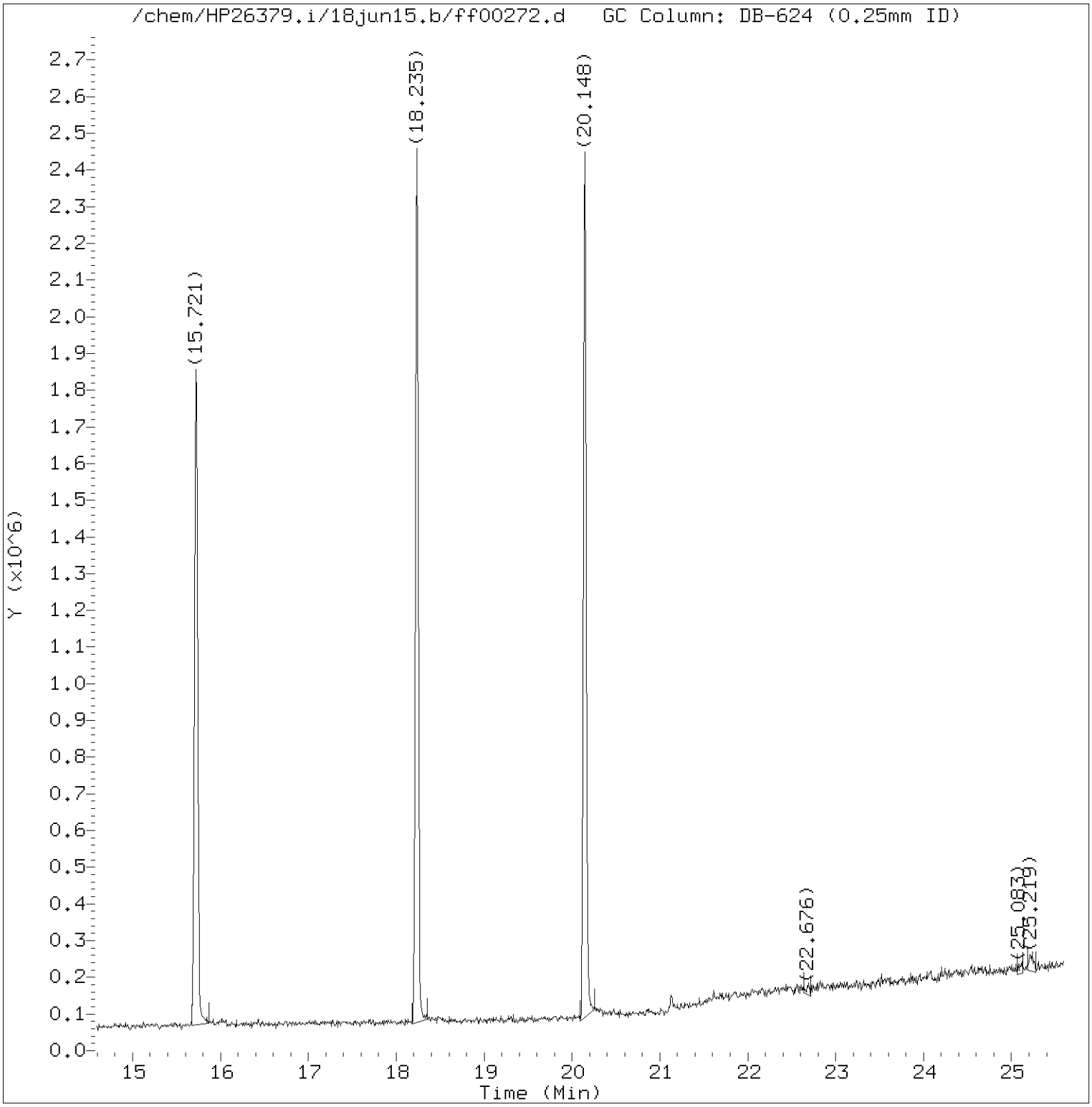
Target Revision 3.5

Data File: /chem/HP26379.i/18jun15.b/ff00272.d Instrument ID: HP26379.i
Injection date and time: 15-JUN-2018 13:58 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: all
Calibration date and time: 15-JUN-2018 13:41
Date, time and analyst ID of latest file update: 15-Jun-2018 15:08 jeb07445

Sample Name: VBLKF12 Lab Sample ID: VBLKF12

Digitally signed by Jacob E. Bailey
on 06/15/2018 at 15:08.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun15.b/ff00272.d Instrument ID: HP26379.i
Injection date and time: 15-JUN-2018 13:58 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: all
Calibration date and time: 15-JUN-2018 13:41
Date, time and analyst ID of latest file update: 15-Jun-2018 15:08 jeb07445

Sample Name: VBLKF12 Lab Sample ID: VBLKF12

Digitally signed by Jacob E. Bailey
on 06/15/2018 at 15:08.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun15.b/ff00272.d Instrument ID: HP26379.i
Injection date and time: 15-JUN-2018 13:58 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: all
Calibration date and time: 15-JUN-2018 13:41
Date, time and analyst ID of latest file update: 15-Jun-2018 15:08 jeb07445

Sample Name: VBLKF12 Lab Sample ID: VBLKF12

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
37)*Bromochloromethane	(1)	11.101	130	677098	10.000
52)*1,4-Difluorobenzene	(2)	13.400	114	1409717	10.000
71)*Chlorobenzene-d5	(3)	18.235	117	1615511	10.000

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/15/2018 at 15:08.
Target 3.5 esignature user ID: jeb07445

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

Data file: /chem/HP26379.i/18jun15.b/ff00273.d
Injection date and time: **15-JUN-2018 14:45**
Data file Sample Info. Line: LCSF12;200;F1816630AA;LCSF12;0;3;LCS;
Instrument ID: **HP26379.i** Batch: **F1816630AA**
Date, time and analyst ID of latest file update: 15-Jun-2018 15:21 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun15.b/ff00272.d**

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 15-JUN-2018 13:41
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun15.b/ff00271.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.101(0.007)	1021	130	676747 (0)	10.00		405533 - 946243
52) 1,4-Difluorobenzene	13.393(0.000)	1341	114	1695402 (7)	10.00		947919 - 2211811
71) Chlorobenzene-d5	18.228(0.007)	2016	117	1838873 (2)	10.00		1086150 - 2534350

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)	3.909(-0.000)	41	610441	9.316	9.32			0.5	1
2) Dichlorodifluoromethane	(1)	4.002(0.000)	85	2103314	10.602	10.60			0.2	1
3) Chlorodifluoromethane	(1)	4.088(0.000)	51	1649084	10.533	10.53			0.2	1
4) Freon 114	(1)	4.310(-0.000)	85	2097553	10.068	10.07			0.2	1
5) Chloromethane	(1)	4.453(0.000)	50	826475	10.134	10.13			0.2	1
6) Vinyl Chloride	(1)	4.640(-0.000)	62	477424	11.085	11.09			0.2	1
7) 1,3-Butadiene	(1)	4.668(-0.000)	54	369118	10.077	10.08			0.4	2
8) Bromomethane	(1)	5.349(0.000)	94	677980	11.207	11.21			0.5	1
9) Chloroethane	(1)	5.614(-0.000)	64	400471	10.493	10.49			0.2	1
10) Bromoethene	(1)	5.836(-0.000)	106	558547	9.791	9.79			0.4	2
13) Dichlorofluoromethane	(1)	5.979(-0.000)	67	1733163	10.954	10.95			0.2	1
12) Trichlorofluoromethane	(1)	5.872(0.000)	101	2199544	9.800	9.80			0.2	1
11) Pentane	(1)	5.864(0.000)	43	1206976	9.194	9.19			0.5	1
14) Ethanol	(1)	6.660(0.000)	45	237677	7.926	7.93			0.5	2
15) Freon123a	(1)	6.803(-0.000)	67	1680834	11.083	11.08			0.2	1
20) Acrolein	(1)	7.498(0.000)	56	220305	9.044	9.04			1	2
16) 1,1-Dichloroethene	(1)	6.853(-0.000)	61	999991	9.337	9.34			0.2	1
17) Freon 113	(1)	6.910(0.000)	103	1199372	9.301	9.30			0.5	2
24) Acetone	(1)	8.071(-0.000)	43	1367751	10.414	10.41			0.5	2
19) Methyl Iodide	(1)	7.154(-0.000)	142	1472157	8.545	8.54			0.2	1
18) Carbon Disulfide	(1)	6.932(0.000)	76	1832079	10.452	10.45			1	1
21) Isopropanol	(1)	7.705(0.000)	45	1098659	9.328	9.33			0.5	2
29) Acetonitrile	(1)	9.081(-0.000)	41	805601	10.140	10.14			0.5	2
22) 3-Chloropropene	(1)	7.770(-0.000)	41	1128573	11.776	11.78			0.2	1
23) Methylene Chloride	(1)	7.978(0.000)	84	691490	11.509	11.51			0.2	1
28) tert-Butyl Alcohol	(1)	8.622(-0.000)	59	1406142	10.041	10.04			0.5	1
32) Acrylonitrile	(1)	9.740(0.000)	53	613781	9.673	9.67			0.5	2
25) trans-1,2-Dichloroethene	(1)	8.307(-0.000)	61	968297	9.347	9.35			0.2	1
27) Methyl t-Butyl Ether	(1)	8.508(-0.000)	73	1555493	9.209	9.21			0.2	1
26) Hexane	(1)	8.450(-0.000)	56	797633	9.620	9.62			0.2	1
31) 1,1-Dichloroethane	(1)	9.625(0.000)	63	1438601	9.990	9.99			0.2	1
34) Vinyl Acetate	(1)	10.098(0.000)	43	2205285	10.921	10.92			1	1
30) Di-Isopropyl Ether	(1)	9.288(0.000)	45	1954093	8.494	8.49			0.2	1
33) Ethyl Tert-Butyl Ether	(1)	10.062(-0.000)	59	1641361	8.628	8.63			0.2	1
35) cis-1,2-Dichloroethene	(1)	10.714(-0.000)	61	839032	9.072	9.07			0.2	1
36) 1,2-Dichloroethene (total)	(1)		61	1807329	18.418	18.42			0.2	1
45) 2-Butanone	(1)	11.803(-0.000)	43	1641419M	9.575	9.57			0.5	2
40) Ethyl Acetate	(1)	11.416(-0.000)	43	1702518	9.180	9.18			0.5	1
41) Methyl Acrylate	(1)	11.452(-0.000)	55	1200828	9.439	9.44			0.2	1
43) Tetrahydrofuran	(1)	11.545(-0.000)	42	874445	10.144	10.14			0.5	1
39) Chloroform	(1)	11.208(-0.000)	83	1764679	10.215	10.22			0.2	1
44) 1,1,1-Trichloroethane	(1)	11.645(-0.000)	97	1855630	9.602	9.60			0.2	1
38) Cyclohexane	(1)	11.122(0.000)	56	932209	8.587	8.59			0.2	1

M = Compound was manually integrated.

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18jun15.b/ff00273.d Injection date and time: **15-JUN-2018 14:45**
Data file Sample Info. Line: LCSF12;200;F1816630AA;LCSF12;0;3;LCS; Instrument ID: **HP26379.i** Batch: **F1816630AA**
Date, time and analyst ID of latest file update: 15-Jun-2018 15:21 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun15.b/ff00272.d**

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 15-JUN-2018 13:41
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun15.b/ff00271.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
42) Carbon Tetrachloride	(1)	11.502(0.000)	117	1962690	9.715	9.71			0.2	1
48) Benzene	(2)	12.326(0.000)	78	2289115	11.101	11.10			0.2	1
50) 1,2-Dichloroethane	(2)	12.691(0.000)	62	1241075	11.176	11.18			0.2	1
46) Isooctane	(2)	12.053(-0.000)	57	3022249	10.410	10.41			0.2	1
49) Tert-Amyl Methyl Ether	(2)	12.490(0.000)	73	1336496	9.509	9.51			0.2	1
47) Heptane	(2)	12.189(0.001)	71	563097	10.247	10.25			0.5	1
51) Trichloroethene	(2)	13.350(-0.000)	130	989179	10.132	10.13			0.2	1
54) Ethyl Acrylate	(2)	14.231(0.000)	55	1280465	9.067	9.07			0.2	1
55) 1,2-Dichloropropane	(2)	14.267(0.000)	63	988249	10.914	10.91			0.2	1
53) Dibromomethane	(2)	14.088(0.000)	174	1293962	10.794	10.79			0.2	1
58) 1,4-Dioxane	(2)	14.675(0.000)	88	446102	10.691	10.69			0.5	1
57) Methyl Methacrylate	(2)	14.575(0.000)	69	496752	9.148	9.15			0.2	1
56) Bromodichloromethane	(2)	14.338(0.000)	83	1839211	10.872	10.87			0.2	1
59) cis-1,3-Dichloropropene	(2)	15.406(0.000)	75	1081933	9.828	9.83			0.2	1
62) 4-Methyl-2-Pentanone	(2)	16.401(0.000)	43	1978283	10.181	10.18			0.5	2
61) Toluene	(3)	15.800(0.000)	91	2470839	9.960	9.96			0.2	1
60) Octane	(3)	15.434(-0.000)	43	1876015	10.248	10.25			0.2	1
64) trans-1,3-Dichloropropene	(3)	16.459(0.000)	75	1137619	10.388	10.39			0.2	1
65) 1,3-Dichloropropene (total)	(3)		75	2219552	20.216	20.22			0.2	1
66) Ethyl Methacrylate	(3)	16.674(0.000)	69	900874	9.083	9.08			0.2	1
67) 1,1,2-Trichloroethane	(3)	16.731(-0.000)	97	1229726	10.530	10.53			0.2	1
63) Tetrachloroethene	(3)	16.430(0.000)	166	1989959	10.422	10.42			0.2	1
70) 2-Hexanone	(3)	17.734(0.000)	43	1778960	9.469	9.47			0.5	2
68) Dibromochloromethane	(3)	17.024(0.000)	127	1546308	10.224	10.22			0.2	1
69) 1,2-Dibromoethane	(3)	17.440(0.000)	107	1621899	9.859	9.86			0.2	1
72) Chlorobenzene	(3)	18.256(-0.000)	112	2463461	9.886	9.89			0.2	1
74) 1,1,1,2-Tetrachloroethane	(3)	18.342(-0.000)	131	1622481	9.980	9.98			0.2	1
73) Ethylbenzene	(3)	18.271(-0.000)	91	3327987	9.794	9.79			0.2	1
75) m/p-Xylene	(3)	18.493(-0.000)	91	2215280	9.418	9.42			0.2	1
76) o-Xylene	(3)	19.188(-0.000)	91	2017007	8.932	8.93			0.2	1
77) Xylene (total)	(3)		91	4232287	18.350	18.35			0.2	1
78) Styrene	(3)	19.266(-0.000)	104	1779271	9.837	9.84			0.2	1
79) Bromoform	(3)	19.338(-0.000)	173	2264704	9.912	9.91			0.2	1
80) Cumene	(3)	19.668(-0.000)	105	3160164	9.420	9.42			0.2	1
82) Bromobenzene	(3)	20.327(-0.000)	156	1796413	10.076	10.08			0.2	1
83) 1,1,2,2-Tetrachloroethane	(3)	20.420(-0.000)	83	2555143	9.701	9.70			0.2	1
87) 1,2,3-Trichloropropane	(3)	20.670(-0.000)	110	837681	9.622	9.62			0.2	1
81) n-Propylbenzene	(3)	20.320(-0.000)	120	993496	9.207	9.21			0.5	1
85) 2-Chlorotoluene	(3)	20.599(-0.000)	126	1130692	10.240	10.24			0.2	1
84) 4-Ethyltoluene	(3)	20.484(-0.000)	105	3341388	9.434	9.43			0.2	1
86) 1,3,5-Trimethylbenzene	(3)	20.606(-0.000)	105	3298571	10.049	10.05			0.2	1
88) Alpha Methyl Styrene	(3)	21.014(-0.000)	118	1241707	8.989	8.99			0.2	1
89) tert-Butylbenzene	(3)	21.129(-0.000)	119	2941604	9.427	9.43			0.5	1
90) 1,2,4-Trimethylbenzene	(3)	21.222(-0.000)	105	2934755	9.363	9.36			0.2	1
91) sec-Butylbenzene	(3)	21.387(-0.000)	105	4381687	9.401	9.40			0.2	1
93) 1,3-Dichlorobenzene	(3)	21.716(-0.000)	146	2664289	8.845	8.85			0.2	1
94) 1,4-Dichlorobenzene	(3)	21.838(-0.000)	146	2542939	8.753	8.75			0.2	1
92) p-Isopropyltoluene	(3)	21.566(-0.000)	119	3388953	9.039	9.04			0.2	1
96) Benzyl Chloride	(3)	22.160(-0.000)	126	687592	9.412	9.41			0.5	1
98) 1,2-Dichlorobenzene	(3)	22.425(-0.000)	146	2339108	8.656	8.66			0.2	1
95) n-Butylbenzene	(3)	22.139(-0.000)	92	1920554	8.813	8.81			0.2	1
97) Hexachloroethane	(3)	22.382(-0.000)	117	1375519	9.135	9.13			0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)	23.586(-0.000)	157	1072461	7.789	7.79			0.2	1
101) 1,2,4-Trichlorobenzene	(3)	24.646(-0.000)	180	1163077	6.008	6.01			0.5	2

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18jun15.b/ff00273.d Injection date and time: **15-JUN-2018 14:45**
Data file Sample Info. Line: LCSF12;200;F1816630AA;LCSF12;0;3;LCS; Instrument ID: **HP26379.i** Batch: **F1816630AA**
Date, time and analyst ID of latest file update: 15-Jun-2018 15:21 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun15.b/ff00272.d**

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 15-JUN-2018 13:41
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun15.b/ff00271.d**

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

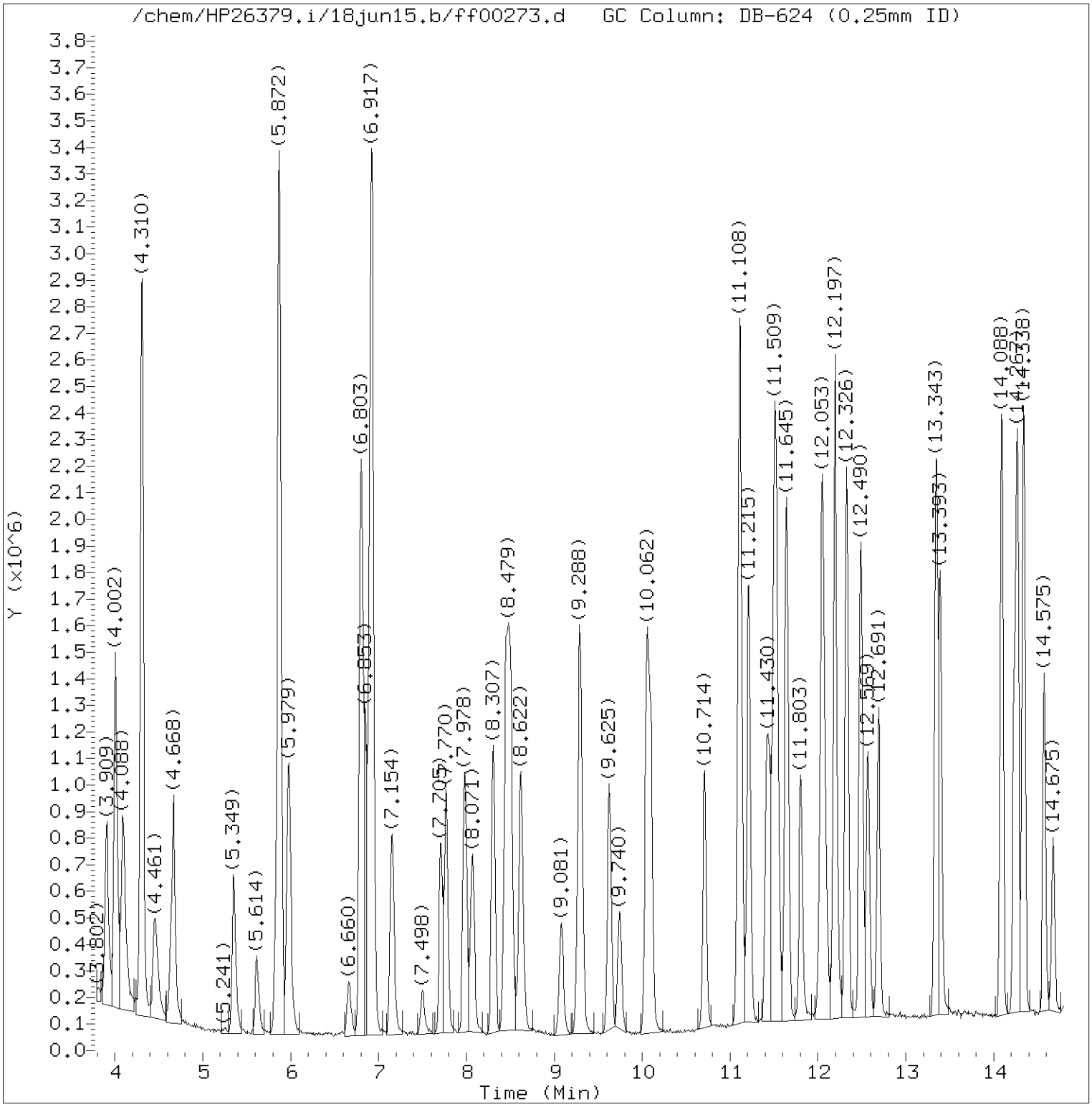
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
100) Hexachlorobutadiene	(3)	24.546(-0.000)	225	1657411	6.690	6.69			0.4	2
102) Naphthalene	(3)	25.233(-0.000)	128	1622204	5.727	5.73			0.4	1

Total number of targets = 99

Digitally signed by Jacob E. Bailey on 06/15/2018 at 15:21. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/18/2018 at 10:58. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

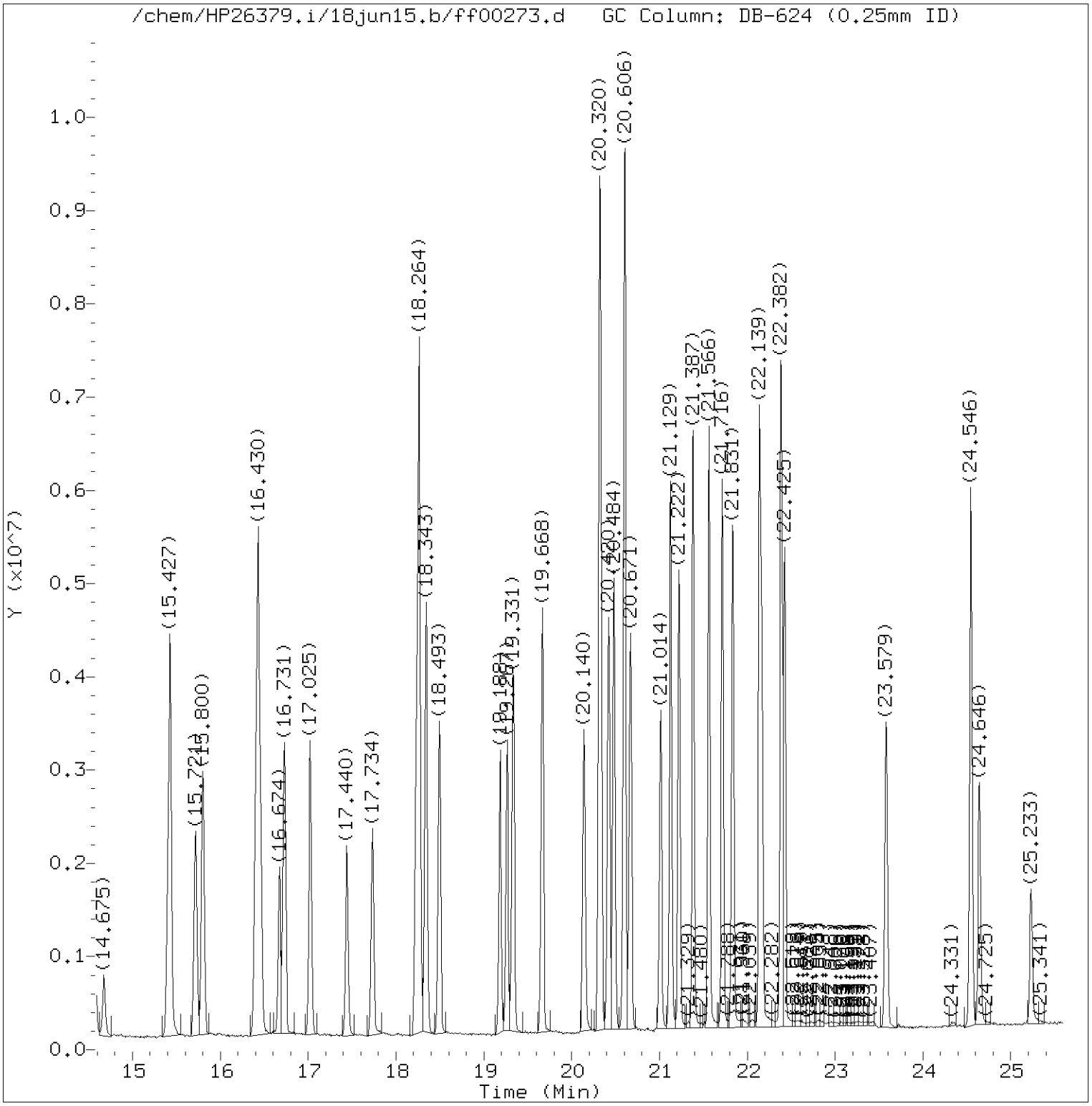
Target Revision 3.5

Data File: /chem/HP26379.i/18jun15.b/ff00273.d Instrument ID: HP26379.i
Injection date and time: 15-JUN-2018 14:45 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: all
Calibration date and time: 15-JUN-2018 13:41
Date, time and analyst ID of latest file update: 15-Jun-2018 15:21 jeb07445

Sample Name: LCSF12 Lab Sample ID: LCSF12

Digitally signed by Jacob E. Bailey
on 06/15/2018 at 15:21.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun15.b/ff00273.d Instrument ID: HP26379.i
Injection date and time: 15-JUN-2018 14:45 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: all
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Sample Name: LCSF12 Lab Sample ID: LCSF12

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Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun15.b/ff00273.d Instrument ID: HP26379.i
Injection date and time: 15-JUN-2018 14:45 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: all
Calibration date and time: 15-JUN-2018 13:41
Date, time and analyst ID of latest file update: 15-Jun-2018 15:21 jeb07445

Sample Name: LCSF12 Lab Sample ID: LCSF12

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.909	41	610441	9.316
2) Dichlorodifluoromethane	(1)	4.002	85	2103314	10.602
3) Chlorodifluoromethane	(1)	4.088	51	1649084	10.533
4) Freon 114	(1)	4.310	85	2097553	10.068
5) Chloromethane	(1)	4.453	50	826475	10.134
6) Vinyl Chloride	(1)	4.640	62	477424	11.085
7) 1,3-Butadiene	(1)	4.668	54	369118	10.077
8) Bromomethane	(1)	5.349	94	677980	11.207
9) Chloroethane	(1)	5.614	64	400471	10.493
10) Bromoethene	(1)	5.836	106	558547	9.791
11) Pentane	(1)	5.864	43	1206976	9.194
12) Trichlorofluoromethane	(1)	5.872	101	2199544	9.800
13) Dichlorofluoromethane	(1)	5.979	67	1733163	10.954
14) Ethanol	(1)	6.660	45	237677	7.926
15) Freon123a	(1)	6.803	67	1680834	11.083
16) 1,1-Dichloroethene	(1)	6.853	61	999991	9.337
17) Freon 113	(1)	6.910	103	1199372	9.301
18) Carbon Disulfide	(1)	6.932	76	1832079	10.452
19) Methyl Iodide	(1)	7.154	142	1472157	8.545
20) Acrolein	(1)	7.498	56	220305	9.044
21) Isopropanol	(1)	7.705	45	1098659	9.328
22) 3-Chloropropene	(1)	7.770	41	1128573	11.776
23) Methylene Chloride	(1)	7.978	84	691490	11.509
24) Acetone	(1)	8.071	43	1367751	10.414
25) trans-1,2-Dichloroethene	(1)	8.307	61	968297	9.347
26) Hexane	(1)	8.450	56	797633	9.620
27) Methyl t-Butyl Ether	(1)	8.508	73	1555493	9.209
28) tert-Butyl Alcohol	(1)	8.622	59	1406142	10.041
29) Acetonitrile	(1)	9.081	41	805601	10.140
30) Di-Isopropyl Ether	(1)	9.288	45	1954093	8.494
31) 1,1-Dichloroethane	(1)	9.625	63	1438601	9.990
32) Acrylonitrile	(1)	9.740	53	613781	9.673
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	1641361	8.628
34) Vinyl Acetate	(1)	10.098	43	2205285	10.921
35) cis-1,2-Dichloroethene	(1)	10.714	61	839032	9.072
36) 1,2-Dichloroethene (total)	(1)		61	1807329	18.418
37)*Bromochloromethane	(1)	11.101	130	676747	10.000
38) Cyclohexane	(1)	11.122	56	932209	8.587

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/15/2018 at 15:21.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun15.b/ff00273.d Instrument ID: HP26379.i
Injection date and time: 15-JUN-2018 14:45 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: all
Calibration date and time: 15-JUN-2018 13:41
Date, time and analyst ID of latest file update: 15-Jun-2018 15:21 jeb07445

Sample Name: LCSF12 Lab Sample ID: LCSF12

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.208	83	1764679	10.215
40) Ethyl Acetate	(1)	11.416	43	1702518	9.180
41) Methyl Acrylate	(1)	11.452	55	1200828	9.439
42) Carbon Tetrachloride	(1)	11.502	117	1962690	9.715
43) Tetrahydrofuran	(1)	11.545	42	874445	10.144
44) 1,1,1-Trichloroethane	(1)	11.645	97	1855630	9.602
45) 2-Butanone	(1)	11.803	43	1641419M	9.575
46) Isooctane	(2)	12.053	57	3022249	10.410
47) Heptane	(2)	12.189	71	563097	10.247
48) Benzene	(2)	12.326	78	2289115	11.101
49) Tert-Amyl Methyl Ether	(2)	12.490	73	1336496	9.509
50) 1,2-Dichloroethane	(2)	12.691	62	1241075	11.176
51) Trichloroethene	(2)	13.350	130	989179	10.132
52)*1,4-Difluorobenzene	(2)	13.393	114	1695402	10.000
53) Dibromomethane	(2)	14.088	174	1293962	10.794
54) Ethyl Acrylate	(2)	14.231	55	1280465	9.067
55) 1,2-Dichloropropane	(2)	14.267	63	988249	10.914
56) Bromodichloromethane	(2)	14.338	83	1839211	10.872
57) Methyl Methacrylate	(2)	14.575	69	496752	9.148
58) 1,4-Dioxane	(2)	14.675	88	446102	10.691
59) cis-1,3-Dichloropropene	(2)	15.406	75	1081933	9.828
60) Octane	(3)	15.434	43	1876015	10.248
61) Toluene	(3)	15.800	91	2470839	9.960
62) 4-Methyl-2-Pentanone	(2)	16.401	43	1978283	10.181
63) Tetrachloroethene	(3)	16.430	166	1989959	10.422
64) trans-1,3-Dichloropropene	(3)	16.459	75	1137619	10.388
65) 1,3-Dichloropropene (total)	(3)		75	2219552	20.216
66) Ethyl Methacrylate	(3)	16.674	69	900874	9.083
67) 1,1,2-Trichloroethane	(3)	16.731	97	1229726	10.530
68) Dibromochloromethane	(3)	17.025	127	1546308	10.224
69) 1,2-Dibromoethane	(3)	17.440	107	1621899	9.859
70) 2-Hexanone	(3)	17.734	43	1778960	9.469
71)*Chlorobenzene-d5	(3)	18.228	117	1838873	10.000
72) Chlorobenzene	(3)	18.257	112	2463461	9.886
73) Ethylbenzene	(3)	18.271	91	3327987	9.794
74) 1,1,1,2-Tetrachloroethane	(3)	18.343	131	1622481	9.980
75) m/p-Xylene	(3)	18.493	91	2215280	9.418
76) o-Xylene	(3)	19.188	91	2017007	8.932

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

Digitally signed by Jacob E. Bailey
on 06/15/2018 at 15:21.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun15.b/ff00273.d Instrument ID: HP26379.i
Injection date and time: 15-JUN-2018 14:45 Analyst ID: jeb07445

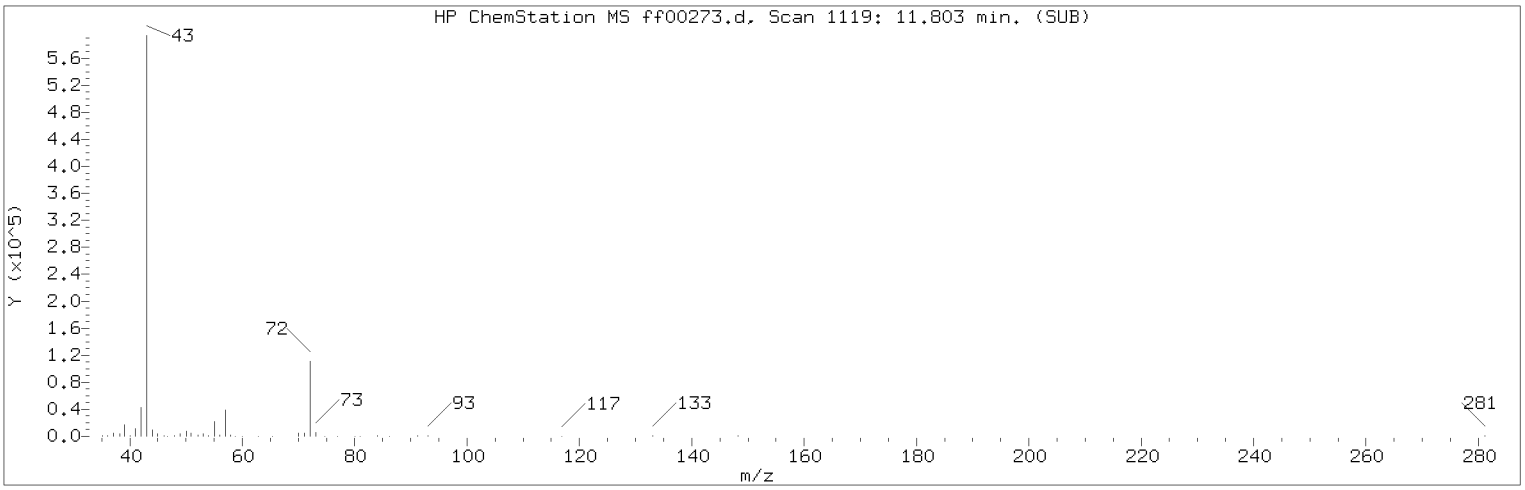
Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: all
Calibration date and time: 15-JUN-2018 13:41
Date, time and analyst ID of latest file update: 15-Jun-2018 15:21 jeb07445

Sample Name: LCSF12 Lab Sample ID: LCSF12

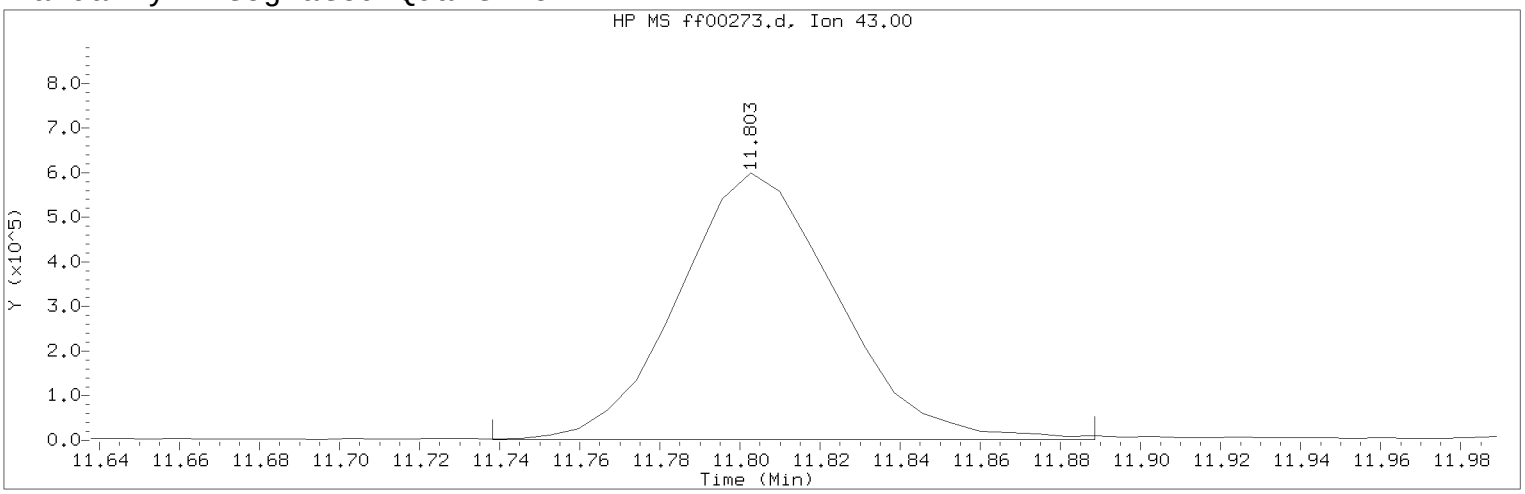
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	4232287	18.350
78) Styrene	(3)	19.267	104	1779271	9.837
79) Bromoform	(3)	19.338	173	2264704	9.912
80) Cumene	(3)	19.668	105	3160164	9.420
81) n-Propylbenzene	(3)	20.320	120	993496	9.207
82) Bromobenzene	(3)	20.327	156	1796413	10.076
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	2555143	9.701
84) 4-Ethyltoluene	(3)	20.484	105	3341388	9.434
85) 2-Chlorotoluene	(3)	20.599	126	1130692	10.240
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	3298571	10.049
87) 1,2,3-Trichloropropane	(3)	20.671	110	837681	9.622
88) Alpha Methyl Styrene	(3)	21.014	118	1241707	8.989
89) tert-Butylbenzene	(3)	21.129	119	2941604	9.427
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	2934755	9.363
91) sec-Butylbenzene	(3)	21.387	105	4381687	9.401
92) p-Isopropyltoluene	(3)	21.566	119	3388953	9.039
93) 1,3-Dichlorobenzene	(3)	21.716	146	2664289	8.845
94) 1,4-Dichlorobenzene	(3)	21.838	146	2542939	8.753
95) n-Butylbenzene	(3)	22.139	92	1920554	8.813
96) Benzyl Chloride	(3)	22.160	126	687592	9.412
97) Hexachloroethane	(3)	22.382	117	1375519	9.135
98) 1,2-Dichlorobenzene	(3)	22.425	146	2339108	8.656
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	1072461	7.789
100) Hexachlorobutadiene	(3)	24.546	225	1657411	6.690
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	1163077	6.008
102) Naphthalene	(3)	25.233	128	1622204	5.727

Digitally signed by Jacob E. Bailey
on 06/15/2018 at 15:21.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18jun15.b/ff00273.d Instrument ID: HP26379.i
Injection date and time: 15-JUN-2018 14:45 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: all
Calibration date and time: 15-JUN-2018 13:41
Date, time and analyst ID of latest file update: 15-Jun-2018 15:21 jeb07445

Sample Name: LCSF12 Lab Sample ID: LCSF12

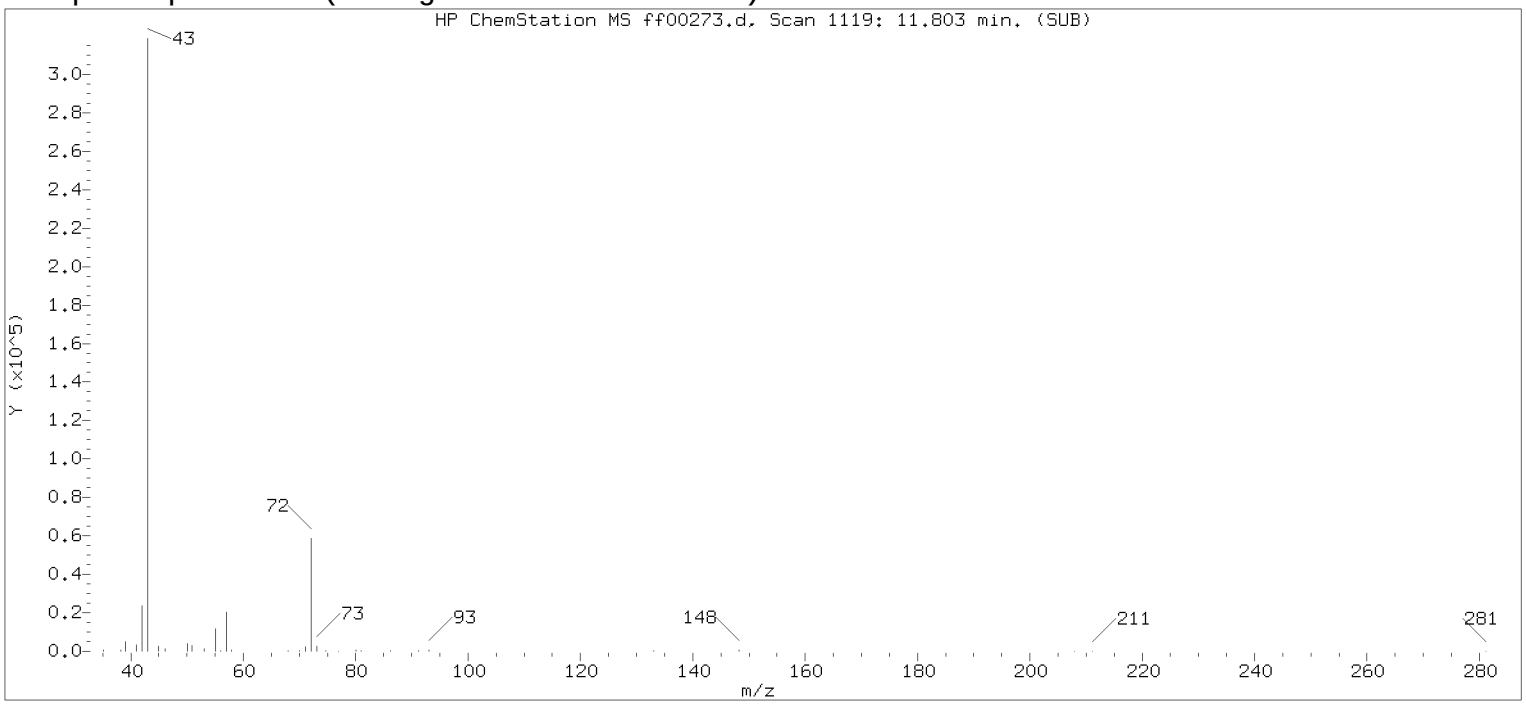
Compound Number : 45
Compound Name : 2-Butanone
Scan Number : 1119
Retention Time (minutes): 11.803
Quant Ion : 43.00
Area (flag) : 1641419M
Concentration (ppb(v)) : 9.5746
Integration start scan : 1109 Integration stop scan: 1130
Y at integration start : 1541 Y at integration end: 1922

Reason for manual integration: improper integration

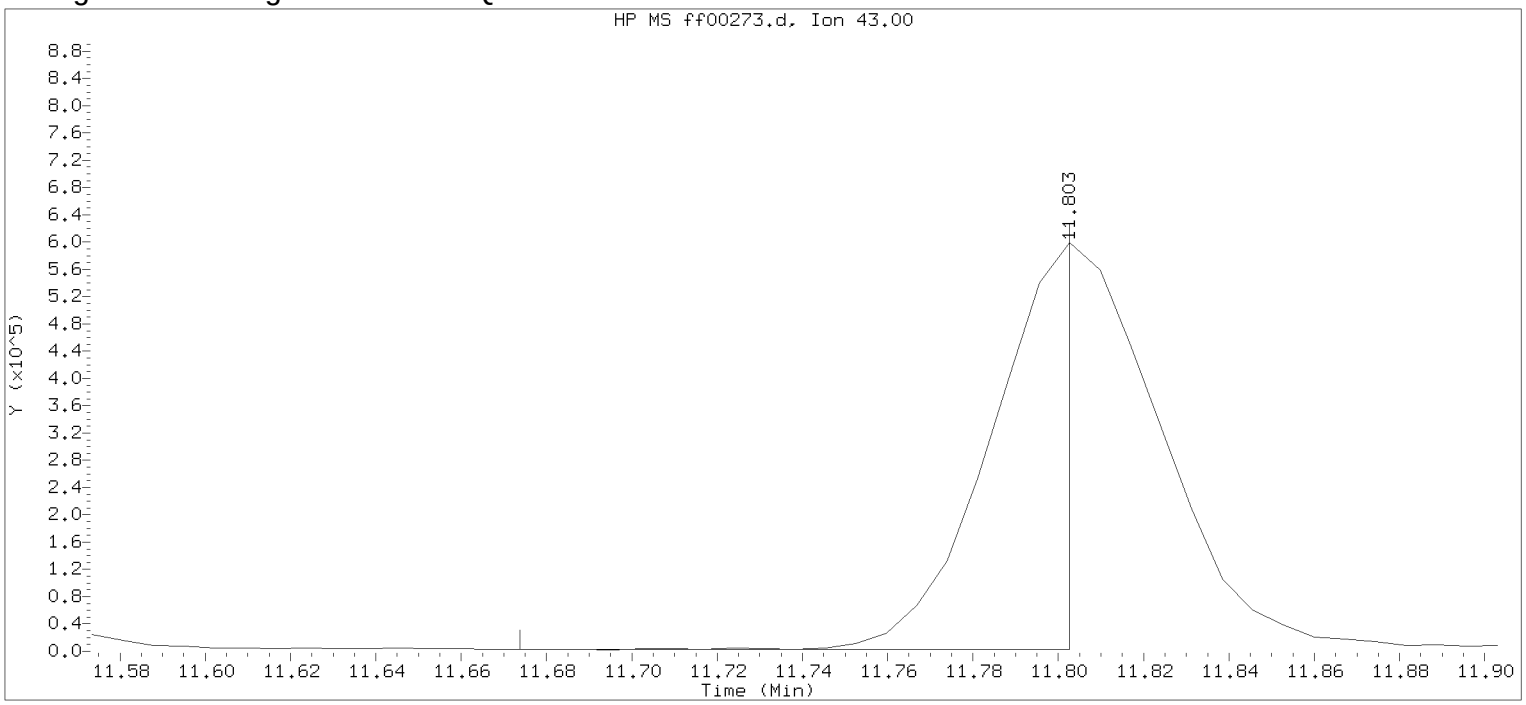
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/15/2018 at 15:21.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/18/2018 at 10:58.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18jun15.b/ff00273.d Instrument ID: HP26379.i
Injection date and time: 15-JUN-2018 14:45 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: all
Calibration date and time: 15-JUN-2018 13:41
Date, time and analyst ID of latest file update: 15-Jun-2018 15:14 Unknown

Sample Name: LCSF12 Lab Sample ID: LCSF12

Compound Number : 45
Compound Name : 2-Butanone
Scan Number : 1119
Retention Time (minutes): 11.803
Quant Ion : 43.00
Area : 740450
Concentration (ppb(v)) : 4.3191
Integration start scan : 1100 Integration stop scan: 1118
Y at integration start : 2489 Y at integration end: 2489

Digitally signed by Jacob E. Bailey on 06/15/2018 at 15:21.
Target 3.5 esignature used.

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

LCSDF12

Data file: /chem/HP26379.i/18jun15.b/ff00274.d Injection date and time: **15-JUN-2018 15:16**
Data file Sample Info. Line: LCSDF12;200;F1816630AA;LCSDF12;0;3;LCSD; Instrument ID: **HP26379.i** Batch: **F1816630AA**
Date, time and analyst ID of latest file update: 15-Jun-2018 15:43 Unknown

Blank Data file reference: **/chem/HP26379.i/18jun15.b/ff00272.d**

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 15-JUN-2018 13:41
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun15.b/ff00271.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.115(-0.007)	1023	130	672278 (-1)	10.00		405533 - 946243
52) 1,4-Difluorobenzene	13.400(-0.007)	1342	114	1732545 (10)	10.00		947919 - 2211811
71) Chlorobenzene-d5	18.235(0.000)	2017	117	1923908 (6)	10.00		1086150 - 2534350

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)	3.902(0.000)	41	675577	10.378	10.38			0.5	1
2) Dichlorodifluoromethane	(1)	4.009(0.000)	85	2083345	10.571	10.57			0.2	1
3) Chlorodifluoromethane	(1)	4.095(0.000)	51	1655777	10.646	10.65			0.2	1
4) Freon 114	(1)	4.310(0.000)	85	2123533	10.261	10.26			0.2	1
5) Chloromethane	(1)	4.453(0.000)	50	859543	10.610	10.61			0.2	1
6) Vinyl Chloride	(1)	4.640(0.000)	62	466646	10.907	10.91			0.2	1
7) 1,3-Butadiene	(1)	4.668(0.000)	54	362005	9.949	9.95			0.4	2
8) Bromomethane	(1)	5.356(0.000)	94	680891	11.330	11.33			0.5	1
9) Chloroethane	(1)	5.621(-0.000)	64	422441	11.143	11.14			0.2	1
10) Bromoethene	(1)	5.836(0.000)	106	603120	10.643	10.64			0.4	2
13) Dichlorofluoromethane	(1)	5.979(0.000)	67	1749778	11.133	11.13			0.2	1
12) Trichlorofluoromethane	(1)	5.879(0.000)	101	2174527	9.753	9.75			0.2	1
11) Pentane	(1)	5.864(0.000)	43	1280273	9.818	9.82			0.5	1
14) Ethanol	(1)	6.667(0.000)	45	266988	8.962	8.96			0.5	2
15) Freon123a	(1)	6.810(-0.000)	67	1673987	11.111	11.11			0.2	1
20) Acrolein	(1)	7.505(0.001)	56	251758	10.404	10.40			1	2
16) 1,1-Dichloroethene	(1)	6.860(-0.000)	61	1086734	10.215	10.21			0.2	1
17) Freon 113	(1)	6.917(0.000)	103	1199953	9.367	9.37			0.5	2
24) Acetone	(1)	8.078(-0.000)	43	1393900	10.683	10.68			0.5	2
19) Methyl Iodide	(1)	7.154(0.000)	142	1612712	9.423	9.42			0.2	1
18) Carbon Disulfide	(1)	6.939(0.000)	76	1846178	10.602	10.60			1	1
21) Isopropanol	(1)	7.712(0.000)	45	1192052	10.189	10.19			0.5	2
29) Acetonitrile	(1)	9.088(-0.000)	41	825671	10.462	10.46			0.5	2
22) 3-Chloropropene	(1)	7.777(-0.000)	41	1217657	12.790	12.79			0.2	1
23) Methylene Chloride	(1)	7.985(0.000)	84	729727	12.227	12.23			0.2	1
28) tert-Butyl Alcohol	(1)	8.629(-0.000)	59	1508600	10.845	10.84			0.5	1
32) Acrylonitrile	(1)	9.754(-0.000)	53	655008	10.391	10.39			0.5	2
25) trans-1,2-Dichloroethene	(1)	8.314(-0.000)	61	1038156	10.088	10.09			0.2	1
27) Methyl t-Butyl Ether	(1)	8.508(0.000)	73	1639573	9.771	9.77			0.2	1
26) Hexane	(1)	8.450(0.000)	56	848212	10.299	10.30			0.2	1
31) 1,1-Dichloroethane	(1)	9.632(0.000)	63	1478166	10.333	10.33			0.2	1
34) Vinyl Acetate	(1)	10.112(-0.000)	43	2363491	11.782	11.78			1	1
30) Di-Isopropyl Ether	(1)	9.303(-0.000)	45	2159822	9.450	9.45			0.2	1
33) Ethyl Tert-Butyl Ether	(1)	10.069(-0.000)	59	1801865	9.535	9.53			0.2	1
35) cis-1,2-Dichloroethene	(1)	10.721(-0.000)	61	914138	9.949	9.95			0.2	1
36) 1,2-Dichloroethene (total)	(1)		61	1952294	20.037	20.04			0.2	1
45) 2-Butanone	(1)	11.810(0.000)	43	1721799	10.110	10.11			0.5	2
40) Ethyl Acetate	(1)	11.423(0.000)	43	1774849	9.634	9.63			0.5	1
41) Methyl Acrylate	(1)	11.459(0.000)	55	1251618	9.904	9.90			0.2	1
43) Tetrahydrofuran	(1)	11.552(0.000)	42	919188	10.734	10.73			0.5	1
39) Chloroform	(1)	11.222(0.000)	83	1768339	10.305	10.30			0.2	1
44) 1,1,1-Trichloroethane	(1)	11.652(0.000)	97	1877389	9.779	9.78			0.2	1
38) Cyclohexane	(1)	11.129(0.000)	56	1031761	9.567	9.57			0.2	1

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Data file: /chem/HP26379.i/18jun15.b/ff00274.d Injection date and time: **15-JUN-2018 15:16**
Data file Sample Info. Line: LCSDF12;200;F1816630AA;LCSDF12;0;3;LCSD; Instrument ID: **HP26379.i** Batch: **F1816630AA**
Date, time and analyst ID of latest file update: 15-Jun-2018 15:43 Unknown

Blank Data file reference: **/chem/HP26379.i/18jun15.b/ff00272.d**

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 15-JUN-2018 13:41
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun15.b/ff00271.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
42) Carbon Tetrachloride	(1)	11.516(0.000)	117	1945789	9.695	9.70			0.2	1
48) Benzene	(2)	12.340(-0.000)	78	2380583	11.298	11.30			0.2	1
50) 1,2-Dichloroethane	(2)	12.698(0.000)	62	1267155	11.166	11.17			0.2	1
46) Isooctane	(2)	12.060(-0.000)	57	3184816	10.735	10.74			0.2	1
49) Tert-Amyl Methyl Ether	(2)	12.497(0.000)	73	1442976	10.047	10.05			0.2	1
47) Heptane	(2)	12.204(0.000)	71	611278	10.886	10.89			0.5	1
51) Trichloroethene	(2)	13.350(0.000)	130	1023759	10.261	10.26			0.2	1
54) Ethyl Acrylate	(2)	14.238(0.000)	55	1304832	9.042	9.04			0.2	1
55) 1,2-Dichloropropane	(2)	14.274(0.000)	63	991107	10.711	10.71			0.2	1
53) Dibromomethane	(2)	14.102(0.000)	174	1304139	10.645	10.65			0.2	1
58) 1,4-Dioxane	(2)	14.682(0.000)	88	464620	10.896	10.90			0.5	1
57) Methyl Methacrylate	(2)	14.582(0.000)	69	530283	9.556	9.56			0.2	1
56) Bromodichloromethane	(2)	14.345(0.000)	83	1784249	10.321	10.32			0.2	1
59) cis-1,3-Dichloropropene	(2)	15.413(0.000)	75	1111437	9.880	9.88			0.2	1
62) 4-Methyl-2-Pentanone	(2)	16.408(0.000)	43	1980116	9.972	9.97			0.5	2
61) Toluene	(3)	15.807(0.000)	91	2595610	10.001	10.00			0.2	1
60) Octane	(3)	15.441(-0.000)	43	1999155	10.438	10.44			0.2	1
64) trans-1,3-Dichloropropene	(3)	16.466(0.000)	75	1182042	10.317	10.32			0.2	1
65) 1,3-Dichloropropene (total)	(3)		75	2293479	20.197	20.20			0.2	1
66) Ethyl Methacrylate	(3)	16.680(0.000)	69	935684	9.017	9.02			0.2	1
67) 1,1,2-Trichloroethane	(3)	16.738(-0.000)	97	1227027	10.043	10.04			0.2	1
63) Tetrachloroethene	(3)	16.437(0.000)	166	2051708	10.271	10.27			0.2	1
70) 2-Hexanone	(3)	17.741(0.000)	43	1760295	8.955	8.96			0.5	2
68) Dibromochloromethane	(3)	17.032(0.000)	127	1491686	9.427	9.43			0.2	1
69) 1,2-Dibromoethane	(3)	17.447(0.000)	107	1649147	9.582	9.58			0.2	1
72) Chlorobenzene	(3)	18.264(0.000)	112	2588750	9.930	9.93			0.2	1
74) 1,1,1,2-Tetrachloroethane	(3)	18.350(0.000)	131	1607726	9.452	9.45			0.2	1
73) Ethylbenzene	(3)	18.278(-0.000)	91	3528167	9.925	9.92			0.2	1
75) m/p-Xylene	(3)	18.500(0.000)	91	2401848	9.760	9.76			0.2	1
76) o-Xylene	(3)	19.195(-0.000)	91	2153303	9.114	9.11			0.2	1
77) Xylene (total)	(3)		91	4555151	18.874	18.87			0.2	1
78) Styrene	(3)	19.274(-0.000)	104	1875028	9.908	9.91			0.2	1
79) Bromoform	(3)	19.338(0.000)	173	2157260	9.025	9.02			0.2	1
80) Cumene	(3)	19.675(-0.000)	105	3477928	9.909	9.91			0.2	1
82) Bromobenzene	(3)	20.334(0.000)	156	1858398	9.963	9.96			0.2	1
83) 1,1,2,2-Tetrachloroethane	(3)	20.427(0.000)	83	2526824	9.169	9.17			0.2	1
87) 1,2,3-Trichloropropane	(3)	20.678(0.000)	110	870078	9.552	9.55			0.2	1
81) n-Propylbenzene	(3)	20.326(-0.000)	120	1075091	9.523	9.52			0.5	1
85) 2-Chlorotoluene	(3)	20.606(0.000)	126	1211430	10.487	10.49			0.2	1
84) 4-Ethyltoluene	(3)	20.484(0.000)	105	3735938	10.082	10.08			0.2	1
86) 1,3,5-Trimethylbenzene	(3)	20.613(-0.000)	105	3488765	10.159	10.16			0.2	1
88) Alpha Methyl Styrene	(3)	21.014(0.000)	118	1289435	8.922	8.92			0.2	1
89) tert-Butylbenzene	(3)	21.129(0.000)	119	3266212	10.005	10.00			0.5	1
90) 1,2,4-Trimethylbenzene	(3)	21.229(0.000)	105	3274741	9.986	9.99			0.2	1
91) sec-Butylbenzene	(3)	21.387(0.000)	105	4836246	9.917	9.92			0.2	1
93) 1,3-Dichlorobenzene	(3)	21.723(0.000)	146	2832170	8.987	8.99			0.2	1
94) 1,4-Dichlorobenzene	(3)	21.838(0.000)	146	2746567	9.036	9.04			0.2	1
92) p-Isopropyltoluene	(3)	21.566(0.000)	119	3744176	9.545	9.55			0.2	1
96) Benzyl Chloride	(3)	22.167(0.000)	126	687834	8.999	9.00			0.5	1
98) 1,2-Dichlorobenzene	(3)	22.425(0.000)	146	2551589	9.024	9.02			0.2	1
95) n-Butylbenzene	(3)	22.139(0.000)	92	2090547	9.169	9.17			0.2	1
97) Hexachloroethane	(3)	22.390(0.000)	117	1363577	8.655	8.66			0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)	23.586(0.000)	157	1108508	7.695	7.69			0.2	1
101) 1,2,4-Trichlorobenzene	(3)	24.646(0.000)	180	1443649	7.127	7.13			0.5	2

Digitally signed by Jacob E. Bailey on 06/15/2018 at 15:44. Target 3.5 esignature user ID: jeb07445

Data file: /chem/HP26379.i/18jun15.b/ff00274.d Injection date and time: **15-JUN-2018 15:16**
Data file Sample Info. Line: LCSDF12;200;F1816630AA;LCSDF12;0;3;LCSD; Instrument ID: **HP26379.i** Batch: **F1816630AA**
Date, time and analyst ID of latest file update: 15-Jun-2018 15:43 Unknown

Blank Data file reference: **/chem/HP26379.i/18jun15.b/ff00272.d**

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 15-JUN-2018 13:41
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun15.b/ff00271.d**

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

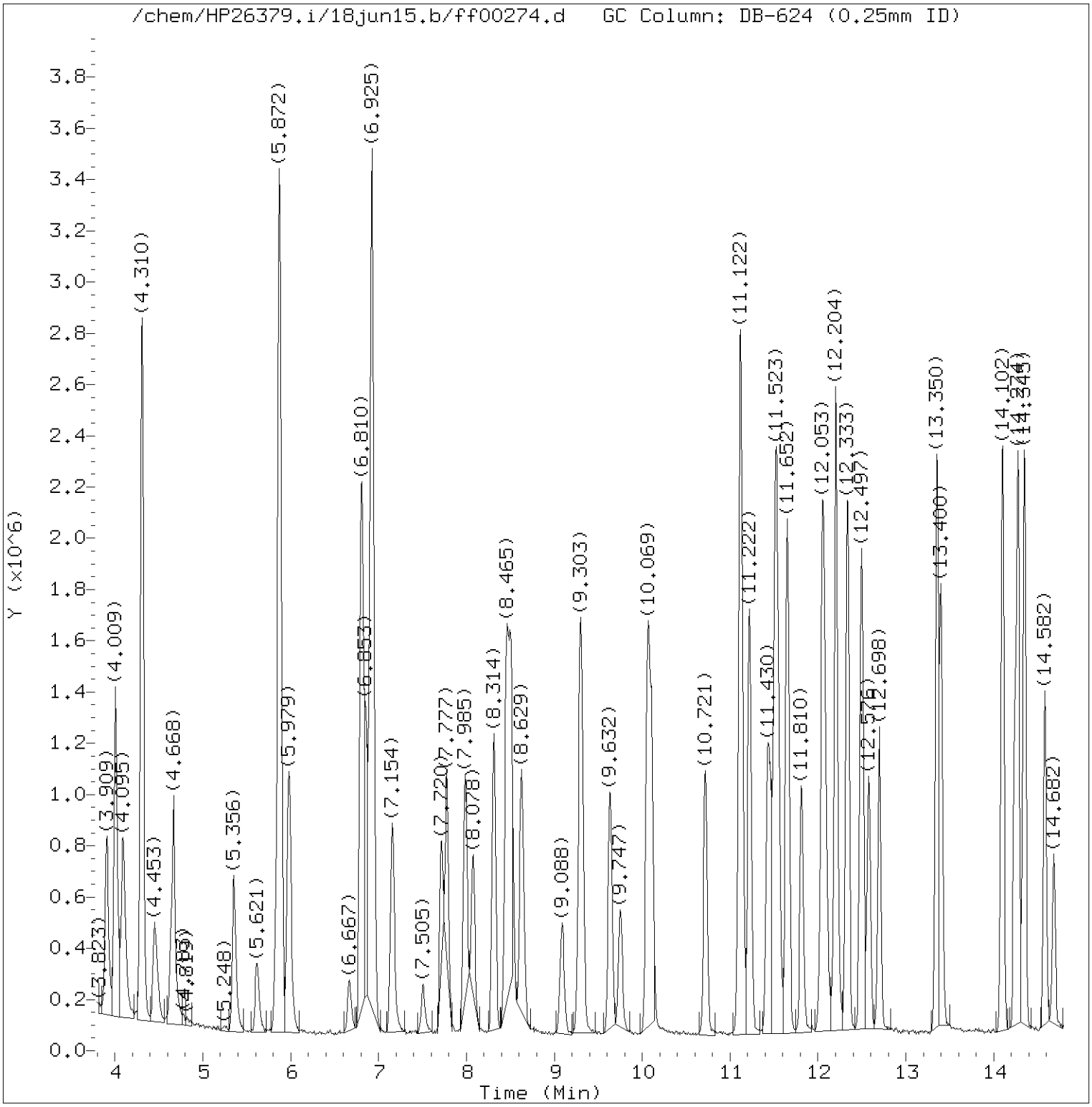
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
100) Hexachlorobutadiene	(3)	24.546(0.000)	225	1826544	7.047	7.05			0.4	2
102) Naphthalene	(3)	25.233(0.000)	128	2021216	6.820	6.82			0.4	1

Total number of targets = 99

Digitally signed by Jacob E. Bailey on 06/15/2018 at 15:44. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/18/2018 at 10:58. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

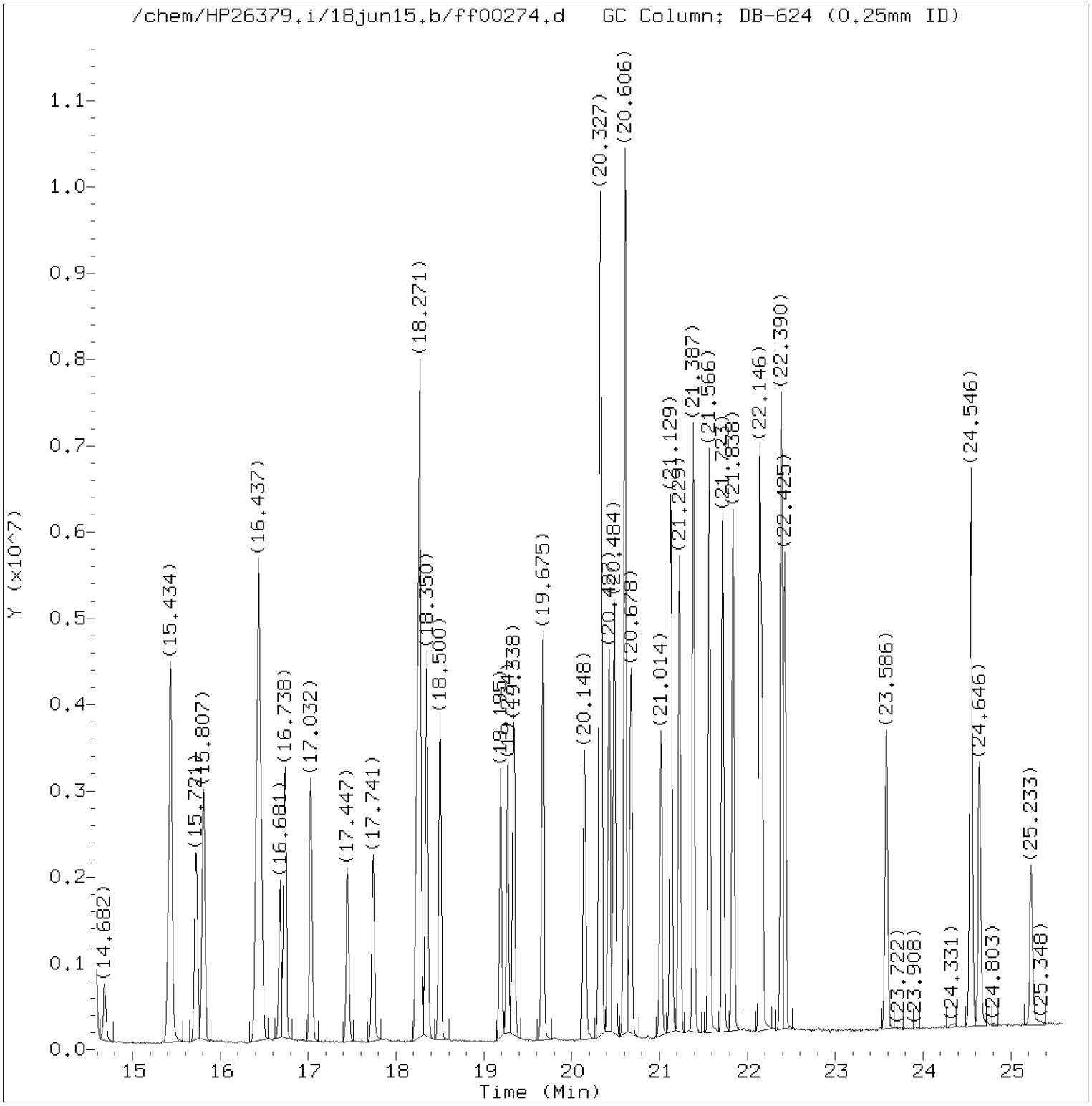
Target Revision 3.5

Data File: /chem/HP26379.i/18jun15.b/ff00274.d Instrument ID: HP26379.i
Injection date and time: 15-JUN-2018 15:16 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: all
Calibration date and time: 15-JUN-2018 13:41
Date, time and analyst ID of latest file update: 15-Jun-2018 15:43 Unknown

Sample Name: LCSDF12 Lab Sample ID: LCSDF12

Digitally signed by Jacob E. Bailey
on 06/15/2018 at 15:44.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun15.b/ff00274.d Instrument ID: HP26379.i
Injection date and time: 15-JUN-2018 15:16 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: all
Calibration date and time: 15-JUN-2018 13:41
Date, time and analyst ID of latest file update: 15-Jun-2018 15:43 Unknown

Sample Name: LCSDF12 Lab Sample ID: LCSDF12

Digitally signed by Jacob E. Bailey
on 06/15/2018 at 15:44.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun15.b/ff00274.d Instrument ID: HP26379.i
Injection date and time: 15-JUN-2018 15:16 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: all
Calibration date and time: 15-JUN-2018 13:41
Date, time and analyst ID of latest file update: 15-Jun-2018 15:43 Unknown

Sample Name: LCSDF12 Lab Sample ID: LCSDF12

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	675577	10.378
2) Dichlorodifluoromethane	(1)	4.009	85	2083345	10.571
3) Chlorodifluoromethane	(1)	4.095	51	1655777	10.646
4) Freon 114	(1)	4.310	85	2123533	10.261
5) Chloromethane	(1)	4.453	50	859543	10.610
6) Vinyl Chloride	(1)	4.640	62	466646	10.907
7) 1,3-Butadiene	(1)	4.668	54	362005	9.949
8) Bromomethane	(1)	5.356	94	680891	11.330
9) Chloroethane	(1)	5.621	64	422441	11.143
10) Bromoethene	(1)	5.836	106	603120	10.643
11) Pentane	(1)	5.864	43	1280273	9.818
12) Trichlorofluoromethane	(1)	5.879	101	2174527	9.753
13) Dichlorofluoromethane	(1)	5.979	67	1749778	11.133
14) Ethanol	(1)	6.667	45	266988	8.962
15) Freon123a	(1)	6.810	67	1673987	11.111
16) 1,1-Dichloroethene	(1)	6.860	61	1086734	10.215
17) Freon 113	(1)	6.917	103	1199953	9.367
18) Carbon Disulfide	(1)	6.939	76	1846178	10.602
19) Methyl Iodide	(1)	7.154	142	1612712	9.423
20) Acrolein	(1)	7.505	56	251758	10.404
21) Isopropanol	(1)	7.712	45	1192052	10.189
22) 3-Chloropropene	(1)	7.777	41	1217657	12.790
23) Methylene Chloride	(1)	7.985	84	729727	12.227
24) Acetone	(1)	8.078	43	1393900	10.683
25) trans-1,2-Dichloroethene	(1)	8.314	61	1038156	10.088
26) Hexane	(1)	8.450	56	848212	10.299
27) Methyl t-Butyl Ether	(1)	8.508	73	1639573	9.771
28) tert-Butyl Alcohol	(1)	8.629	59	1508600	10.845
29) Acetonitrile	(1)	9.088	41	825671	10.462
30) Di-Isopropyl Ether	(1)	9.303	45	2159822	9.450
31) 1,1-Dichloroethane	(1)	9.632	63	1478166	10.333
32) Acrylonitrile	(1)	9.754	53	655008	10.391
33) Ethyl Tert-Butyl Ether	(1)	10.069	59	1801865	9.535
34) Vinyl Acetate	(1)	10.112	43	2363491	11.782
35) cis-1,2-Dichloroethene	(1)	10.721	61	914138	9.949
36) 1,2-Dichloroethene (total)	(1)		61	1952294	20.037
37)*Bromochloromethane	(1)	11.115	130	672278	10.000
38) Cyclohexane	(1)	11.129	56	1031761	9.567

* = Compound is an internal standard.

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on 06/15/2018 at 15:44.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun15.b/ff00274.d Instrument ID: HP26379.i
Injection date and time: 15-JUN-2018 15:16 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: all
Calibration date and time: 15-JUN-2018 13:41
Date, time and analyst ID of latest file update: 15-Jun-2018 15:43 Unknown

Sample Name: LCSDF12 Lab Sample ID: LCSDF12

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.222	83	1768339	10.305
40) Ethyl Acetate	(1)	11.423	43	1774849	9.634
41) Methyl Acrylate	(1)	11.459	55	1251618	9.904
42) Carbon Tetrachloride	(1)	11.516	117	1945789	9.695
43) Tetrahydrofuran	(1)	11.552	42	919188	10.734
44) 1,1,1-Trichloroethane	(1)	11.652	97	1877389	9.779
45) 2-Butanone	(1)	11.810	43	1721799	10.110
46) Isooctane	(2)	12.060	57	3184816	10.735
47) Heptane	(2)	12.204	71	611278	10.886
48) Benzene	(2)	12.340	78	2380583	11.298
49) Tert-Amyl Methyl Ether	(2)	12.497	73	1442976	10.047
50) 1,2-Dichloroethane	(2)	12.698	62	1267155	11.166
51) Trichloroethene	(2)	13.350	130	1023759	10.261
52)*1,4-Difluorobenzene	(2)	13.400	114	1732545	10.000
53) Dibromomethane	(2)	14.102	174	1304139	10.645
54) Ethyl Acrylate	(2)	14.238	55	1304832	9.042
55) 1,2-Dichloropropane	(2)	14.274	63	991107	10.711
56) Bromodichloromethane	(2)	14.345	83	1784249	10.321
57) Methyl Methacrylate	(2)	14.582	69	530283	9.556
58) 1,4-Dioxane	(2)	14.682	88	464620	10.896
59) cis-1,3-Dichloropropene	(2)	15.413	75	1111437	9.880
60) Octane	(3)	15.441	43	1999155	10.438
61) Toluene	(3)	15.807	91	2595610	10.001
62) 4-Methyl-2-Pentanone	(2)	16.408	43	1980116	9.972
63) Tetrachloroethene	(3)	16.437	166	2051708	10.271
64) trans-1,3-Dichloropropene	(3)	16.466	75	1182042	10.317
65) 1,3-Dichloropropene (total)	(3)		75	2293479	20.197
66) Ethyl Methacrylate	(3)	16.681	69	935684	9.017
67) 1,1,2-Trichloroethane	(3)	16.738	97	1227027	10.043
68) Dibromochloromethane	(3)	17.032	127	1491686	9.427
69) 1,2-Dibromoethane	(3)	17.447	107	1649147	9.582
70) 2-Hexanone	(3)	17.741	43	1760295	8.955
71)*Chlorobenzene-d5	(3)	18.235	117	1923908	10.000
72) Chlorobenzene	(3)	18.264	112	2588750	9.930
73) Ethylbenzene	(3)	18.278	91	3528167	9.925
74) 1,1,1,2-Tetrachloroethane	(3)	18.350	131	1607726	9.452
75) m/p-Xylene	(3)	18.500	91	2401848	9.760
76) o-Xylene	(3)	19.195	91	2153303	9.114

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/15/2018 at 15:44.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun15.b/ff00274.d Instrument ID: HP26379.i
Injection date and time: 15-JUN-2018 15:16 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: all
Calibration date and time: 15-JUN-2018 13:41
Date, time and analyst ID of latest file update: 15-Jun-2018 15:43 Unknown

Sample Name: LCSDF12 Lab Sample ID: LCSDF12

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	4555151	18.874
78) Styrene	(3)	19.274	104	1875028	9.908
79) Bromoform	(3)	19.338	173	2157260	9.025
80) Cumene	(3)	19.675	105	3477928	9.909
81) n-Propylbenzene	(3)	20.327	120	1075091	9.523
82) Bromobenzene	(3)	20.334	156	1858398	9.963
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	2526824	9.169
84) 4-Ethyltoluene	(3)	20.484	105	3735938	10.082
85) 2-Chlorotoluene	(3)	20.606	126	1211430	10.487
86) 1,3,5-Trimethylbenzene	(3)	20.613	105	3488765	10.159
87) 1,2,3-Trichloropropane	(3)	20.678	110	870078	9.552
88) Alpha Methyl Styrene	(3)	21.014	118	1289435	8.922
89) tert-Butylbenzene	(3)	21.129	119	3266212	10.005
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	3274741	9.986
91) sec-Butylbenzene	(3)	21.387	105	4836246	9.917
92) p-Isopropyltoluene	(3)	21.566	119	3744176	9.545
93) 1,3-Dichlorobenzene	(3)	21.723	146	2832170	8.987
94) 1,4-Dichlorobenzene	(3)	21.838	146	2746567	9.036
95) n-Butylbenzene	(3)	22.139	92	2090547	9.169
96) Benzyl Chloride	(3)	22.167	126	687834	8.999
97) Hexachloroethane	(3)	22.390	117	1363577	8.655
98) 1,2-Dichlorobenzene	(3)	22.425	146	2551589	9.024
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	1108508	7.695
100) Hexachlorobutadiene	(3)	24.546	225	1826544	7.047
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	1443649	7.127
102) Naphthalene	(3)	25.233	128	2021216	6.820

Digitally signed by Jacob E. Bailey
on 06/15/2018 at 15:44.
Target 3.5 esignature user ID: jeb07445

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

Data file: /chem/HP26379.i/18jun15.b/ff00283.d Injection date and time: **15-JUN-2018 20:13**
Data file Sample Info. Line: cc504;200;F1816630AA;cc504;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1816630AA**
Date, time and analyst ID of latest file update: 18-Jun-2018 12:05 jeb07445

Blank Data file reference: **Does not exist or can't be found**

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 15-JUN-2018 13:41
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun15.b/ff00271.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.108(0.000)	1022	130	635697 (-6)	10.00		405533 - 946243
52) 1,4-Difluorobenzene	13.400(-0.007)	1342	114	1160933 (-27)	10.00		947919 - 2211811
71) Chlorobenzene-d5	18.235(0.000)	2017	117	1470540 (-19)	10.00		1086150 - 2534350

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)			Not Detected					0.5	1
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)			Not Detected					0.2	1
7) 1,3-Butadiene	(1)			Not Detected					0.4	2
8) Bromomethane	(1)			Not Detected					0.5	1
9) Chloroethane	(1)			Not Detected					0.2	1
10) Bromoethene	(1)			Not Detected					0.4	2
13) Dichlorofluoromethane	(1)			Not Detected					0.2	1
12) Trichlorofluoromethane	(1)			Not Detected					0.2	1
11) Pentane	(1)			Not Detected					0.5	1
14) Ethanol	(1)			Not Detected					0.5	2
15) Freon123a	(1)			Not Detected					0.2	1
20) Acrolein	(1)			Not Detected					1	2
16) 1,1-Dichloroethene	(1)			Not Detected					0.2	1
17) Freon 113	(1)			Not Detected					0.5	2
24) Acetone	(1)			Not Detected					0.5	2
19) Methyl Iodide	(1)			Not Detected					0.2	1
18) Carbon Disulfide	(1)			Not Detected					1	1
21) Isopropanol	(1)			Not Detected					0.5	2
29) Acetonitrile	(1)			Not Detected					0.5	2
22) 3-Chloropropene	(1)			Not Detected					0.2	1
23) Methylene Chloride	(1)			Not Detected					0.2	1
28) tert-Butyl Alcohol	(1)			Not Detected					0.5	1
32) Acrylonitrile	(1)			Not Detected					0.5	2
25) trans-1,2-Dichloroethene	(1)			Not Detected					0.2	1
27) Methyl t-Butyl Ether	(1)			Not Detected					0.2	1
26) Hexane	(1)			Not Detected					0.2	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.2	1
34) Vinyl Acetate	(1)			Not Detected					1	1
30) Di-Isopropyl Ether	(1)			Not Detected					0.2	1
33) Ethyl Tert-Butyl Ether	(1)			Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.2	1
36) 1,2-Dichloroethene (total)	(1)			Not Detected					0.2	1
45) 2-Butanone	(1)			Not Detected					0.5	2
40) Ethyl Acetate	(1)			Not Detected					0.5	1
41) Methyl Acrylate	(1)			Not Detected					0.2	1
43) Tetrahydrofuran	(1)			Not Detected					0.5	1
39) Chloroform	(1)			Not Detected					0.2	1
44) 1,1,1-Trichloroethane	(1)			Not Detected					0.2	1
38) Cyclohexane	(1)			Not Detected					0.2	1

Digitally signed by Jacob E. Bailey on 06/18/2018 at 12:11. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18jun15.b/ff00283.d Injection date and time: **15-JUN-2018 20:13**
Data file Sample Info. Line: cc504;200;F1816630AA;cc504;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1816630AA**
Date, time and analyst ID of latest file update: 18-Jun-2018 12:05 jeb07445

Blank Data file reference: **Does not exist or can't be found**

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 15-JUN-2018 13:41
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun15.b/ff00271.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
42) Carbon Tetrachloride	(1)				Not Detected					0.2	1
48) Benzene	(2)				Not Detected					0.2	1
50) 1,2-Dichloroethane	(2)				Not Detected					0.2	1
46) Isooctane	(2)				Not Detected					0.2	1
49) Tert-Amyl Methyl Ether	(2)				Not Detected					0.2	1
47) Heptane	(2)				Not Detected					0.5	1
51) Trichloroethene	(2)				Not Detected					0.2	1
54) Ethyl Acrylate	(2)				Not Detected					0.2	1
55) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
53) Dibromomethane	(2)				Not Detected					0.2	1
58) 1,4-Dioxane	(2)				Not Detected					0.5	1
57) Methyl Methacrylate	(2)				Not Detected					0.2	1
56) Bromodichloromethane	(2)				Not Detected					0.2	1
59) cis-1,3-Dichloropropene	(2)				Not Detected					0.2	1
62) 4-Methyl-2-Pentanone	(2)				Not Detected					0.5	2
61) Toluene	(3)				Not Detected					0.2	1
60) Octane	(3)				Not Detected					0.2	1
64) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
65) 1,3-Dichloropropene (total)	(3)				Not Detected					0.2	1
66) Ethyl Methacrylate	(3)				Not Detected					0.2	1
67) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
63) Tetrachloroethene	(3)				Not Detected					0.2	1
70) 2-Hexanone	(3)				Not Detected					0.5	2
68) Dibromochloromethane	(3)				Not Detected					0.2	1
69) 1,2-Dibromoethane	(3)				Not Detected					0.2	1
72) Chlorobenzene	(3)				Not Detected					0.2	1
74) 1,1,1,2-Tetrachloroethane	(3)				Not Detected					0.2	1
73) Ethylbenzene	(3)				Not Detected					0.2	1
75) m/p-Xylene	(3)				Not Detected					0.2	1
76) o-Xylene	(3)				Not Detected					0.2	1
77) Xylene (total)	(3)				Not Detected					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
82) Bromobenzene	(3)				Not Detected					0.2	1
83) 1,1,2,2-Tetrachloroethane	(3)				Not Detected					0.2	1
87) 1,2,3-Trichloropropane	(3)				Not Detected					0.2	1
81) n-Propylbenzene	(3)				Not Detected					0.5	1
85) 2-Chlorotoluene	(3)				Not Detected					0.2	1
84) 4-Ethyltoluene	(3)				Not Detected					0.2	1
86) 1,3,5-Trimethylbenzene	(3)				Not Detected					0.2	1
88) Alpha Methyl Styrene	(3)				Not Detected					0.2	1
89) tert-Butylbenzene	(3)				Not Detected					0.5	1
90) 1,2,4-Trimethylbenzene	(3)				Not Detected					0.2	1
91) sec-Butylbenzene	(3)				Not Detected					0.2	1
93) 1,3-Dichlorobenzene	(3)				Not Detected					0.2	1
94) 1,4-Dichlorobenzene	(3)				Not Detected					0.2	1
92) p-Isopropyltoluene	(3)				Not Detected					0.2	1
96) Benzyl Chloride	(3)				Not Detected					0.5	1
98) 1,2-Dichlorobenzene	(3)				Not Detected					0.2	1
95) n-Butylbenzene	(3)				Not Detected					0.2	1
97) Hexachloroethane	(3)				Not Detected					0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)				Not Detected					0.2	1
101) 1,2,4-Trichlorobenzene	(3)				Not Detected					0.5	2

Digitally signed by Jacob E. Bailey on 06/18/2018 at 12:11. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18jun15.b/ff00283.d Injection date and time: **15-JUN-2018 20:13**
Data file Sample Info. Line: cc504;200;F1816630AA;cc504;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1816630AA**
Date, time and analyst ID of latest file update: 18-Jun-2018 12:05 jeb07445

Blank Data file reference: **Does not exist or can't be found**

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 15-JUN-2018 13:41
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun15.b/ff00271.d**

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

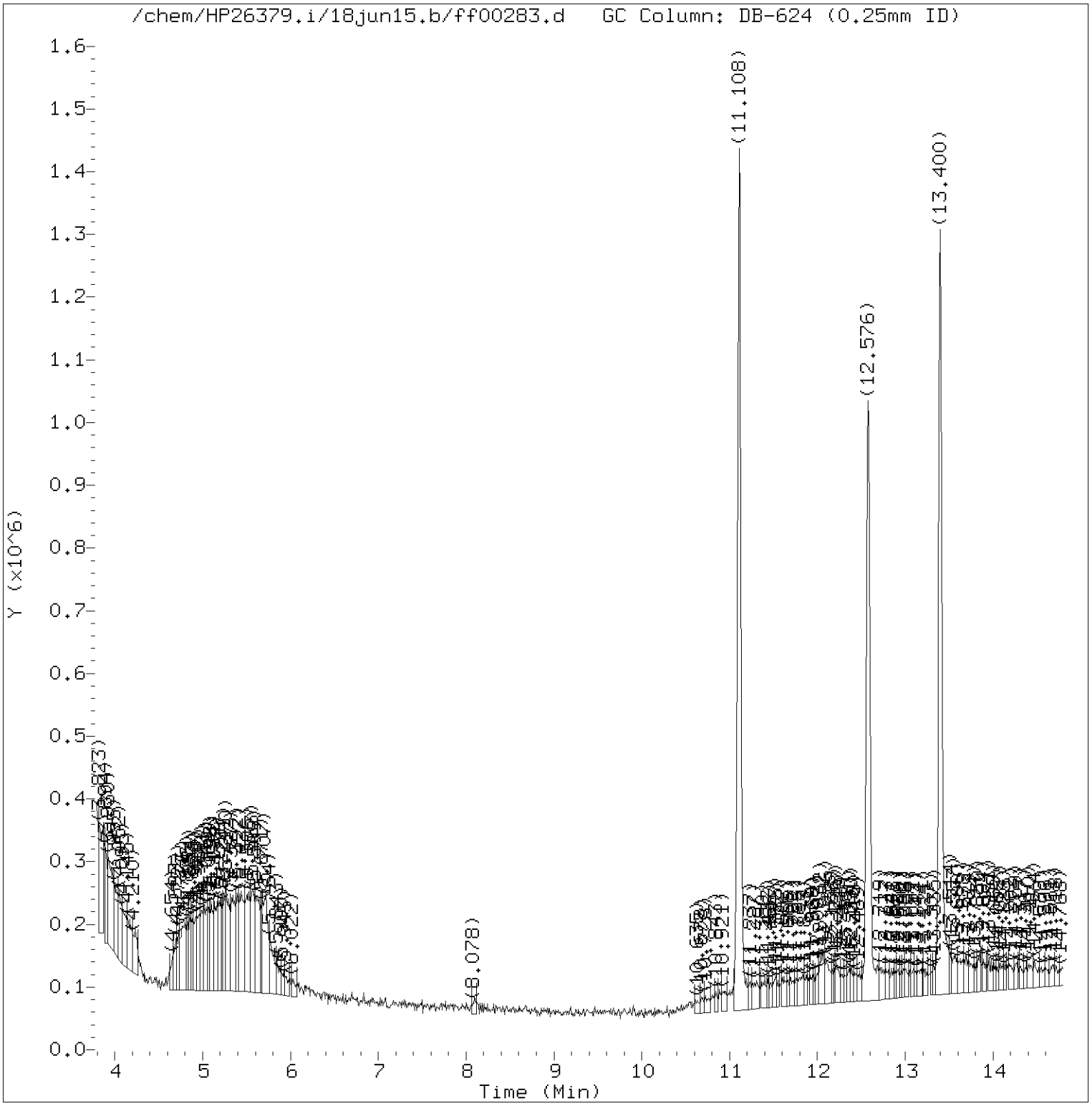
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
100) Hexachlorobutadiene	(3)				Not Detected					0.4	2
102) Naphthalene	(3)				Not Detected					0.4	1

Total number of targets = 99

Digitally signed by Jacob E. Bailey on 06/18/2018 at 12:11. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/18/2018 at 14:29. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

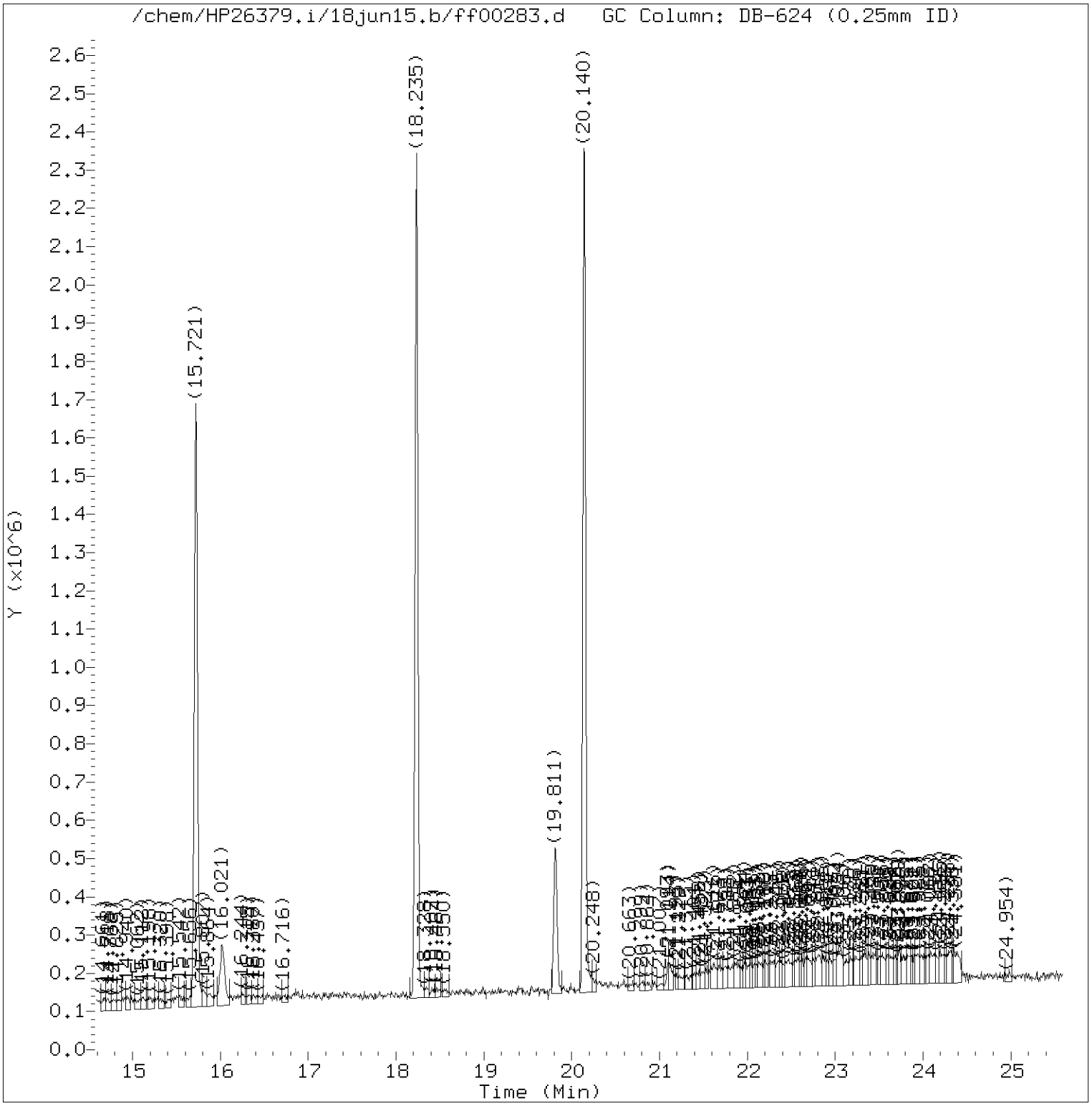
Target Revision 3.5

Data File: /chem/HP26379.i/18jun15.b/ff00283.d Instrument ID: HP26379.i
Injection date and time: 15-JUN-2018 20:13 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: all
Calibration date and time: 15-JUN-2018 13:41
Date, time and analyst ID of latest file update: 18-Jun-2018 12:05 jeb07445

Sample Name: cc504 Lab Sample ID: cc504

Digitally signed by Jacob E. Bailey
on 06/18/2018 at 12:11.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun15.b/ff00283.d Instrument ID: HP26379.i
Injection date and time: 15-JUN-2018 20:13 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: all
Calibration date and time: 15-JUN-2018 13:41
Date, time and analyst ID of latest file update: 18-Jun-2018 12:05 jeb07445

Sample Name: cc504 Lab Sample ID: cc504

Digitally signed by Jacob E. Bailey
on 06/18/2018 at 12:11.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun15.b/ff00283.d Instrument ID: HP26379.i
Injection date and time: 15-JUN-2018 20:13 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun15.b/to-15.m Sublist used: all
Calibration date and time: 15-JUN-2018 13:41
Date, time and analyst ID of latest file update: 18-Jun-2018 12:05 jeb07445

Sample Name: cc504 Lab Sample ID: cc504

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
37)*Bromochloromethane	(1)	11.108	130	635697	10.000
52)*1,4-Difluorobenzene	(2)	13.400	114	1160933	10.000
71)*Chlorobenzene-d5	(3)	18.235	117	1470540	10.000

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/18/2018 at 12:11.
Target 3.5 esignature user ID: jeb07445

Lancaster Laboratories
Volatiles in Air
Runlog for Agilent GC/MS System HP26379 **HP #06**

Data Directory Path is - D:\data\18jun18\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
jeb07445	FF00290.D	50NGBFB	06/18/2018	12:12		
jeb07445	FF00291.D	VSTD010	06/18/2018	13:02		
jeb07445	FF00292.D	VBLKF13	06/18/2018	13:48	F1816930AA	
jeb07445	FF00293.D	LCSF13	06/18/2018	14:35	F1816930AA	
jeb07445	FF00294.D	LCSDF13	06/18/2018	15:06	F1816930AA	
jeb07445	FF00295.D	9662464	06/18/2018	15:55	F1816930AA	100
jeb07445	FF00296.D	9662465	06/18/2018	16:26	F1816930AA	100
jeb07445	FF00297.D	9662466	06/18/2018	16:56	F1816930AA	
jeb07445	FF00298.D	9662466DL	06/18/2018	17:27	F1816930AA	
jeb07445	FF00299.D	9662465DL	06/18/2018	17:58	F1816930AA	100
jeb07445	FF00300.D	9662467	06/18/2018	18:28	F1816930AA	
jeb07445	FF00301.D	9662466DL2	06/18/2018	18:59	F1816930AA	
jeb07445	FF00302.D	9662464	06/18/2018	19:30	F1816930AA	100
jeb07445	FF00303.D	VBLKF13	06/18/2018	20:00	F1816930AA	
jeb07445	FF00304.D	cc518	06/18/2018	20:31	F1816930AA	
jeb07445	FF00305.D	cc525	06/18/2018	21:02	F1816930AA	
jeb07445	FF00306.D	9662719DL	06/18/2018	21:33	F1816930AA	100
jeb07445	FF00307.D	9662719DL	06/19/2018	08:18	F1816930AA	100

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKF13
Canister ID:	N/A	Lab File ID:	ff00292.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/18/2018
Injection Volume:	200 cc	Analyzed Time:	13:48
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
115-07-1	Propene	0.50	U
75-71-8	Dichlorodifluoromethane	0.20	U
75-45-6	Chlorodifluoromethane	0.20	U
76-14-2	Freon 114	0.20	U
74-87-3	Chloromethane	0.20	U
75-01-4	Vinyl Chloride	0.20	U
106-99-0	1,3-Butadiene	0.40	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.20	U
593-60-2	Bromoethene	0.40	U
75-43-4	Dichlorofluoromethane	0.20	U
75-69-4	Trichlorofluoromethane	0.20	U
109-66-0	Pentane	0.50	U
64-17-5	Ethanol	0.50	U
107-02-8	Acrolein	1.0	U
75-35-4	1,1-Dichloroethene	0.20	U
76-13-1	Freon 113	0.50	U
67-64-1	Acetone	0.50	U
74-88-4	Methyl Iodide	0.20	U
75-15-0	Carbon Disulfide	1.0	U
67-63-0	Isopropanol	0.50	U
75-05-8	Acetonitrile	0.50	U
107-05-1	3-Chloropropene	0.20	U
75-09-2	Methylene Chloride	0.20	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKF13
Canister ID:	N/A	Lab File ID:	ff00292.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/18/2018
Injection Volume:	200 cc	Analyzed Time:	13:48
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-65-0	tert-Butyl Alcohol	0.50	U
107-13-1	Acrylonitrile	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.20	U
1634-04-4	Methyl t-Butyl Ether	0.20	U
110-54-3	Hexane	0.20	U
75-34-3	1,1-Dichloroethane	0.20	U
108-05-4	Vinyl Acetate	1.0	U
108-20-3	Di-Isopropyl Ether	0.20	U
637-92-3	Ethyl Tert-Butyl Ether	0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	U
540-59-0	1,2-Dichloroethene (total)	0.20	U
78-93-3	2-Butanone	0.50	U
141-78-6	Ethyl Acetate	0.50	U
96-33-3	Methyl Acrylate	0.20	U
109-99-9	Tetrahydrofuran	0.50	U
67-66-3	Chloroform	0.20	U
71-55-6	1,1,1-Trichloroethane	0.20	U
110-82-7	Cyclohexane	0.20	U
56-23-5	Carbon Tetrachloride	0.20	U
71-43-2	Benzene	0.20	U
107-06-2	1,2-Dichloroethane	0.20	U
540-84-1	Isooctane	0.20	U
994-05-8	Tert-Amyl Methyl Ether	0.20	U
142-82-5	Heptane	0.50	U

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKF13
Canister ID:	N/A	Lab File ID:	ff00292.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/18/2018
Injection Volume:	200 cc	Analyzed Time:	13:48
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
79-01-6	Trichloroethene	0.20	U
140-88-5	Ethyl Acrylate	0.20	U
78-87-5	1,2-Dichloropropane	0.20	U
74-95-3	Dibromomethane	0.20	U
123-91-1	1,4-Dioxane	0.50	U
80-62-6	Methyl Methacrylate	0.20	U
75-27-4	Bromodichloromethane	0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	U
108-10-1	4-Methyl-2-Pentanone	0.50	U
108-88-3	Toluene	0.20	U
111-65-9	Octane	0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	U
542-75-6	1,3-Dichloropropene (total)	0.20	U
97-63-2	Ethyl Methacrylate	0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	U
127-18-4	Tetrachloroethene	0.20	U
591-78-6	2-Hexanone	0.50	U
124-48-1	Dibromochloromethane	0.20	U
106-93-4	1,2-Dibromoethane	0.20	U
108-90-7	Chlorobenzene	0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	U
100-41-4	Ethylbenzene	0.20	U
179601-23-1	m/p-Xylene	0.20	U
95-47-6	o-Xylene	0.20	U

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKF13
Canister ID:	N/A	Lab File ID:	ff00292.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/18/2018
Injection Volume:	200 cc	Analyzed Time:	13:48
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
1330-20-7	Xylene (total)	0.20	U
100-42-5	Styrene	0.20	U
75-25-2	Bromoform	0.20	U
98-82-8	Cumene	0.20	U
108-86-1	Bromobenzene	0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U
96-18-4	1,2,3-Trichloropropane	0.20	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.20	U
622-96-8	4-Ethyltoluene	0.20	U
108-67-8	1,3,5-Trimethylbenzene	0.20	U
98-83-9	Alpha Methyl Styrene	0.20	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.20	U
135-98-8	sec-Butylbenzene	0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	U
99-87-6	p-Isopropyltoluene	0.20	U
100-44-7	Benzyl Chloride	0.50	U
95-50-1	1,2-Dichlorobenzene	0.20	U
104-51-8	n-Butylbenzene	0.20	U
67-72-1	Hexachloroethane	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

Abbreviations:
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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKF13
Canister ID:	N/A	Lab File ID:	ff00292.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/18/2018
Injection Volume:	200 cc	Analyzed Time:	13:48
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
87-68-3	Hexachlorobutadiene	0.40	U
91-20-3	Naphthalene	0.40	U

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 LCS File ID: ff00293.d LCSD File ID: ff00294.d

Batch: F1816930AA LCS Injected: 06/18/2018 LCSD Injected: 06/18/2018

Method: EPA TO-15 LCS Client ID: LCSF13 LCSD Client ID: LCSDF13

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	10.00	9.85	10.54	99	105	78-126	7	25	YES
Dichlorodifluoromethane	10.00	10.62	10.90	106	109	74-133	3	25	YES
Chlorodifluoromethane	10.00	10.55	10.82	105	108	70-138	3	25	YES
Freon 114	10.00	10.16	10.19	102	102	66-126	0	25	YES
Chloromethane	10.00	10.19	11.00	102	110	65-140	8	25	YES
Vinyl Chloride	10.00	11.03	11.31	110	113	75-130	2	25	YES
1,3-Butadiene	10.00	10.24	9.86	102	99	72-122	4	25	YES
Bromomethane	10.00	11.65	11.78	116	118	71-133	1	25	YES
Chloroethane	10.00	10.27	10.93	103	109	76-129	6	25	YES
Bromoethene	10.00	10.03	10.81	100	108	77-123	8	25	YES
Dichlorofluoromethane	10.00	11.02	11.50	110	115	75-137	4	25	YES
Trichlorofluoromethane	10.00	9.82	9.83	98	98	73-132	0	25	YES
Pentane	10.00	9.39	10.20	94	102	69-125	8	25	YES
Ethanol	10.00	9.06	9.25	91	93	56-149	2	25	YES
Acrolein	10.00	9.68	10.37	97	104	54-132	7	25	YES
1,1-Dichloroethene	10.00	9.59	10.44	96	104	70-129	8	25	YES
Freon 113	10.00	9.29	9.48	93	95	66-119	2	25	YES
Acetone	10.00	10.72	10.98	107	110	71-136	2	25	YES
Methyl Iodide	10.00	8.56	9.50	86	95	72-127	10	25	YES
Carbon Disulfide	10.00	10.74	11.05	107	110	72-128	3	25	YES
Isopropanol	10.00	9.70	10.95	97	110	69-160	12	25	YES
Acetonitrile	10.00	10.23	10.64	102	106	56-136	4	25	YES
3-Chloropropene	10.00	12.36	13.21	124	132	67-141	7	25	YES
Methylene Chloride	10.00	12.17	12.35	122	124	69-128	1	25	YES
tert-Butyl Alcohol	10.00	10.47	11.02	105	110	71-154	5	25	YES
Acrylonitrile	10.00	10.03	10.62	100	106	68-135	6	25	YES
trans-1,2-Dichloroethene	10.00	9.75	10.44	98	104	77-128	7	25	YES
Methyl t-Butyl Ether	10.00	9.49	10.12	95	101	71-119	6	25	YES
Hexane	10.00	9.90	10.30	99	103	70-118	4	25	YES
1,1-Dichloroethane	10.00	10.19	10.84	102	108	74-129	6	25	YES
Vinyl Acetate	10.00	11.48	12.35	115	124	75-161	7	25	YES
Di-Isopropyl Ether	10.00	8.91	9.77	89	98	71-122	9	25	YES
Ethyl Tert-Butyl Ether	10.00	9.00	9.86	90	99	68-121	9	25	YES
cis-1,2-Dichloroethene	10.00	9.49	10.34	95	103	76-126	9	25	YES
2-Butanone	10.00	9.94	10.36	99	104	75-126	4	25	YES
Ethyl Acetate	10.00	9.57	10.03	96	100	73-124	5	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 LCS File ID: ff00293.d LCSD File ID: ff00294.d

Batch: F1816930AA LCS Injected: 06/18/2018 LCSD Injected: 06/18/2018

Method: EPA TO-15 LCS Client ID: LCSF13 LCSD Client ID: LCSDF13

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	10.00	9.84	10.30	98	103	75-125	5	25	YES
Tetrahydrofuran	10.00	10.46	10.86	105	109	67-127	4	25	YES
Chloroform	10.00	10.19	10.47	102	105	75-127	3	25	YES
1,1,1-Trichloroethane	10.00	9.71	9.83	97	98	74-122	1	25	YES
Cyclohexane	10.00	8.91	9.86	89	99	70-118	10	25	YES
Carbon Tetrachloride	10.00	9.89	9.83	99	98	72-127	1	25	YES
Benzene	10.00	10.75	11.28	107	113	76-123	5	25	YES
1,2-Dichloroethane	10.00	10.86	11.14	109	111	72-138	3	25	YES
Isooctane	10.00	10.53	11.01	105	110	74-127	4	25	YES
Tert-Amyl Methyl Ether	10.00	9.86	10.41	99	104	78-124	5	25	YES
Heptane	10.00	10.60	11.12	106	111	74-122	5	25	YES
Trichloroethene	10.00	10.13	10.56	101	106	76-118	4	25	YES
Ethyl Acrylate	10.00	9.51	9.40	95	94	71-126	1	25	YES
1,2-Dichloropropane	10.00	10.76	10.86	108	109	75-127	1	25	YES
Dibromomethane	10.00	10.73	10.78	107	108	76-124	0	25	YES
1,4-Dioxane	10.00	10.42	11.18	104	112	76-124	7	25	YES
Methyl Methacrylate	10.00	9.49	9.22	95	92	73-117	3	25	YES
Bromodichloromethane	10.00	10.56	10.43	106	104	75-134	1	25	YES
cis-1,3-Dichloropropene	10.00	10.33	10.25	103	102	51-120	1	25	YES
4-Methyl-2-Pentanone	10.00	10.47	10.20	105	102	79-131	3	25	YES
Toluene	10.00	9.85	10.30	99	103	78-119	4	25	YES
Octane	10.00	10.23	10.70	102	107	73-122	5	25	YES
trans-1,3-Dichloropropene	10.00	10.28	10.56	103	106	76-131	3	25	YES
Ethyl Methacrylate	10.00	9.10	9.21	91	92	69-137	1	25	YES
1,1,2-Trichloroethane	10.00	10.27	10.29	103	103	76-127	0	25	YES
Tetrachloroethene	10.00	10.21	10.52	102	105	68-123	3	25	YES
2-Hexanone	10.00	9.47	9.40	95	94	74-134	1	25	YES
Dibromochloromethane	10.00	10.15	9.62	101	96	74-131	5	25	YES
1,2-Dibromoethane	10.00	9.79	9.80	98	98	73-121	0	25	YES
Chlorobenzene	10.00	9.75	10.03	97	100	76-117	3	25	YES
1,1,1,2-Tetrachloroethane	10.00	9.79	9.56	98	96	73-137	2	25	YES
Ethylbenzene	10.00	9.59	10.05	96	101	77-117	5	25	YES
m/p-Xylene	10.00	9.16	10.06	92	101	78-119	9	25	YES
o-Xylene	10.00	8.90	9.26	89	93	78-121	4	25	YES
Xylene (total)	20.00	18.06	19.32	90	97	79-120	7	25	YES
Styrene	10.00	9.70	10.18	97	102	77-143	5	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 LCS File ID: ff00293.d LCSD File ID: ff00294.d

Batch: F1816930AA LCS Injected: 06/18/2018 LCSD Injected: 06/18/2018

Method: EPA TO-15 LCS Client ID: LCSF13 LCSD Client ID: LCSDF13

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	9.80	9.19	98	92	58-144	6	25	YES
Cumene	10.00	9.27	10.02	93	100	80-133	8	25	YES
Bromobenzene	10.00	9.80	10.18	98	102	74-118	4	25	YES
1,1,2,2-Tetrachloroethane	10.00	9.40	9.42	94	94	72-133	0	25	YES
1,2,3-Trichloropropane	10.00	9.55	9.34	95	93	71-127	2	25	YES
n-Propylbenzene	10.00	9.19	9.81	92	98	73-120	7	25	YES
2-Chlorotoluene	10.00	9.92	10.73	99	107	74-123	8	25	YES
4-Ethyltoluene	10.00	9.21	10.20	92	102	73-130	10	25	YES
1,3,5-Trimethylbenzene	10.00	9.49	10.37	95	104	72-130	9	25	YES
Alpha Methyl Styrene	10.00	8.93	8.95	89	89	71-138	0	25	YES
tert-Butylbenzene	10.00	10.73	10.86	107	109	78-138	1	25	YES
1,2,4-Trimethylbenzene	10.00	9.51	10.33	95	103	70-138	8	25	YES
sec-Butylbenzene	10.00	9.41	10.16	94	102	79-139	8	25	YES
1,3-Dichlorobenzene	10.00	8.65	9.15	87	92	75-129	6	25	YES
1,4-Dichlorobenzene	10.00	8.55	8.96	86	90	74-123	5	25	YES
p-Isopropyltoluene	10.00	9.08	9.89	91	99	75-145	9	25	YES
Benzyl Chloride	10.00	9.74	9.45	97	94	49-163	3	25	YES
1,2-Dichlorobenzene	10.00	8.58	9.12	86	91	71-126	6	25	YES
n-Butylbenzene	10.00	8.90	9.32	89	93	72-143	5	25	YES
Hexachloroethane	10.00	9.16	8.87	92	89	59-135	3	25	YES
1,2-Dibromo-3-chloropropane	10.00	8.15	8.09	81	81	52-156	1	25	YES
1,2,4-Trichlorobenzene	10.00	6.42	7.27	64	73	45-156	12	25	YES
Hexachlorobutadiene	10.00	6.69	7.24	67	72	49-154	8	25	YES
Naphthalene	10.00	6.70	7.56	67	76	39-152	12	25	YES

COMMENTS:

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FORM 04
VOLATILE ORGANICS IN AIR
METHOD BLANK SUMMARY

SDG No.:

Lab Sample ID: VBLKF13 Analyzed Date: 06/18/2018

Lab File ID: ff00292.d Analyzed Time: 13:48

Instrument ID: 26379

THIS BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS AND LCSD:

LAB SAMPLE ID	LAB FILE ID	CANISTER ID	DATE ANALYZED	TIME ANALYZED
LCSF13	ff00293.d	N/A	06/18/2018	14:35
LCSDF13	ff00294.d	N/A	06/18/2018	15:06
9662464	ff00295.d	1510	06/18/2018	15:55
9662465	ff00296.d	1523	06/18/2018	16:26
9662466	ff00297.d	1286	06/18/2018	16:56
9662465DL	ff00299.d	1523	06/18/2018	17:58
9662467	ff00300.d	1282	06/18/2018	18:28
9662466DL	ff00301.d	1286	06/18/2018	18:59
9662464	ff00302.d	1510	06/18/2018	19:30
cc518	ff00304.d	518	06/18/2018	20:31
cc525	ff00305.d	525	06/18/2018	21:02
9662719DL	ff00307.d	1136	06/19/2018	08:18

COMMENTS:

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

SDG No.:

Lab File ID: ff00290.d

BFB Injection Date: 06/18/2018

Instrument ID: 26379

BFB Injection Time: 12:12

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0% - 40.0% of mass 95	22.96
75	30.0% - 66.0% of mass 95	45.12
95	Base peak, 100% relative abundance	100.00
96	5.0% - 9.0% of mass 95	6.52
173	< 2.0% of mass 174	1.13 (1.11)
174	> 50.0% of mass 95	101.77
175	4.0% - 9.0% of mass 174	7.38 (7.25)
176	93.0% - 101.0% of mass 174	96.77 (95.09)
177	5.0% - 9.0% of mass 176	6.18 (6.38)

THIS CHECK APPLIES TO THE FOLLOWING:

LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD010	ff00291.d	06/18/2018	13:02
VBLKF13	ff00292.d	06/18/2018	13:48
LCSF13	ff00293.d	06/18/2018	14:35
LCSDF13	ff00294.d	06/18/2018	15:06
9662464	ff00295.d	06/18/2018	15:55
9662465	ff00296.d	06/18/2018	16:26
9662466	ff00297.d	06/18/2018	16:56
9662465DL	ff00299.d	06/18/2018	17:58
9662467	ff00300.d	06/18/2018	18:28
9662466DL	ff00301.d	06/18/2018	18:59
9662464	ff00302.d	06/18/2018	19:30
cc518	ff00304.d	06/18/2018	20:31
cc525	ff00305.d	06/18/2018	21:02
9662719DL	ff00307.d	06/19/2018	08:18

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: ff00291.d

Calibration Date: 06/18/2018

Instrument ID: 26379

Calibration Time: 13:02

Init. Calib. Date(s): 06/13/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
Propene	0.968	0.891	9.200	10	-8
Dichlorodifluoromethane	2.932	3.041	10.373	10	4
Chlorodifluoromethane	2.314	2.320	10.027	10	0
Freon 114	3.078	3.080	10.006	10	0
Chloromethane	1.205	1.189	9.868	10	-1
Vinyl Chloride	0.636	0.655	10.286	10	3
1,3-Butadiene	0.541	0.539	9.964	10	0
Bromomethane	0.894	0.987	11.038	10	10
Chloroethane	0.564	0.559	9.914	10	-1
Bromoethene	0.843	0.781	9.267	10	-7
Dichlorofluoromethane	2.338	2.422	10.361	10	4
Trichlorofluoromethane	3.317	3.135	9.454	10	-5
Pentane	1.940	1.785	9.200	10	-8
Ethanol	0.443	0.409	9.232	10	-8
Freon123a	2.241	2.142	10.609	11.1	-4
Acrolein	0.360	0.320	8.900	10	-11
1,1-Dichloroethene	1.583	1.457	9.204	10	-8
Freon 113	1.905	1.765	9.262	10	-7
Acetone	1.941	1.990	10.254	10	3
Methyl Iodide	2.546	2.049	8.047	10	-20
Carbon Disulfide	2.590	2.767	10.683	10	7
Isopropanol	1.740	1.554	8.929	10	-11
Acetonitrile	1.174	1.252	10.665	10	7
3-Chloropropene	1.416	1.239	9.710	11.1	-13
Methylene Chloride	0.888	0.927	11.593	11.1	4
tert-Butyl Alcohol	2.069	1.842	9.882	11.1	-11
Acrylonitrile	0.938	0.907	9.678	10	-3
trans-1,2-Dichloroethene	1.531	1.457	9.519	10	-5
Methyl t-Butyl Ether	2.496	2.193	8.787	10	-12
Hexane	1.225	1.157	9.447	10	-6
1,1-Dichloroethane	2.128	2.099	9.862	10	-1
Vinyl Acetate	2.984	2.973	11.158	11.2	0
Di-Isopropyl Ether	3.400	2.831	8.327	10	-17
Ethyl Tert-Butyl Ether	2.811	2.390	8.502	10	-15
cis-1,2-Dichloroethene	1.367	1.272	9.309	10	-7
2-Butanone	2.533	2.398	9.466	10	-5
Ethyl Acetate	2.740	2.526	9.219	10	-8
Methyl Acrylate	1.880	1.695	9.019	10	-10
Tetrahydrofuran	1.274	1.220	9.576	10	-4

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: ff00291.d

Calibration Date: 06/18/2018

Instrument ID: 26379

Calibration Time: 13:02

Init. Calib. Date(s): 06/13/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
Chloroform	2.553	2.502	9.800	10	-2
1,1,1-Trichloroethane	2.856	2.627	9.199	10	-8
Cyclohexane	1.604	1.308	8.154	10	-18
Carbon Tetrachloride	2.985	2.756	9.230	10	-8
Benzene	1.216	1.357	11.155	10	12
1,2-Dichloroethane	0.655	0.739	11.284	10	13
Isooctane	1.712	1.811	10.575	10	6
Tert-Amyl Methyl Ether	0.829	0.844	10.187	10	2
Heptane	0.324	0.343	10.570	10	6
Trichloroethene	0.576	0.576	10.008	10	0
Ethyl Acrylate	0.833	0.739	8.875	10	-11
1,2-Dichloropropane	0.534	0.587	10.994	10	10
Dibromomethane	0.707	0.760	10.753	10	8
1,4-Dioxane	0.246	0.263	10.680	10	7
Methyl Methacrylate	0.320	0.296	9.253	10	-7
Bromodichloromethane	0.998	1.078	10.800	10	8
cis-1,3-Dichloropropene	0.649	0.641	9.867	10	-1
4-Methyl-2-Pentanone	1.146	1.173	10.237	10	2
Toluene	1.349	1.353	10.027	10	0
Octane	0.996	1.031	10.359	10	4
trans-1,3-Dichloropropene	0.596	0.647	10.872	10	9
Ethyl Methacrylate	0.539	0.496	9.194	10	-8
1,1,2-Trichloroethane	0.635	0.677	10.653	10	7
Tetrachloroethene	1.038	1.149	11.067	10	11
2-Hexanone	1.022	1.009	9.874	10	-1
Dibromochloromethane	0.822	0.822	9.996	10	0
1,2-Dibromoethane	0.895	0.892	9.966	10	0
Chlorobenzene	1.355	1.417	10.458	10	5
1,1,1,2-Tetrachloroethane	0.884	0.908	10.269	10	3
Ethylbenzene	1.848	1.935	10.472	10	5
m/p-Xylene	1.279	1.306	10.207	10	2
o-Xylene	1.228	1.151	9.374	10	-6
Styrene	0.984	1.017	10.340	10	3
Bromoform	1.242	1.232	9.915	10	-1
Cumene	1.824	1.937	10.618	10	6
Bromobenzene	0.970	1.077	11.109	10	11
1,1,2,2-Tetrachloroethane	1.432	1.476	10.308	10	3
1,2,3-Trichloropropane	0.473	0.494	10.425	10	4
n-Propylbenzene	0.587	0.638	10.877	10	9

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: ff00291.d

Calibration Date: 06/18/2018

Instrument ID: 26379

Calibration Time: 13:02

Init. Calib. Date(s): 06/13/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
2-Chlorotoluene	0.600	0.683	11.379	10	14
4-Ethyltoluene	1.926	2.230	11.575	10	16
1,3,5-Trimethylbenzene	1.785	2.116	11.855	10	19
Alpha Methyl Styrene	0.751	0.765	10.180	10	2
tert-Butylbenzene	1.697	2.011	11.852	10	19
1,2,4-Trimethylbenzene	1.704	2.006	11.767	10	18
sec-Butylbenzene	2.535	2.966	11.700	10	17
1,3-Dichlorobenzene	1.638	1.710	10.442	10	4
1,4-Dichlorobenzene	1.580	1.672	10.580	10	6
p-Isopropyltoluene	2.039	2.359	11.570	10	16
Benzyl Chloride	0.397	0.449	11.307	10	13
1,2-Dichlorobenzene	1.470	1.558	10.602	10	6
n-Butylbenzene	1.185	1.376	11.610	10	16
Hexachloroethane	0.819	0.828	10.115	10	1
1,2-Dibromo-3-chloropropane	0.749	0.756	10.101	10	1
1,2,4-Trichlorobenzene	1.053	0.986	9.361	10	-6
Hexachlorobutadiene	1.347	1.284	9.530	10	-5
Naphthalene	1.541	1.470	9.542	10	-5

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

Continuing Calibration
Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP26379.i/18jun13.b/ff00222.d
/chem/HP26379.i/18jun13.b/ff00223.d
/chem/HP26379.i/18jun13.b/ff00224.d
/chem/HP26379.i/18jun13.b/ff00225.d
/chem/HP26379.i/18jun13.b/ff00226.d
/chem/HP26379.i/18jun13.b/ff00227.d

** ICAL Area and RT are the average from the above standards.

Current Continuing Calibration Standard:

/chem/HP26379.i/18jun18.b/ff00291.d

Area Summary

Internal Standard Name	File ID: ff00291.d	ICAL Area	Low Limit	High Limit	In Spec
Bromochloromethane	694543	574713	344828	804598	Yes
1,4-Difluorobenzene	1671263	1598581	959149	2238013	Yes
Chlorobenzene-d5	1844783	1685435	1011261	2359609	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

RT Summary

Internal Standard Name	File ID: ff00291.d	ICAL RT	In Spec
Bromochloromethane	11.108	11.104	Yes
1,4-Difluorobenzene	13.400	13.393	Yes
Chlorobenzene-d5	18.235	18.234	Yes

A "No" indicates the retention time is greater than 30 seconds from the RT of the referenced ICAL average.

Comments:_____

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Page 1 of 1

Report generated on 06/18/2018 at 13:30

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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: 06/18/2018

Lab File ID: ff00291.d Analyzed Time: 13:02

Instrument ID: 26379

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	R.T.	Area	R.T.	Area	R.T.
24 HOUR STANDARD	694543	11.11	1671263	13.40	1844783	18.24
UPPER LIMIT	972360	11.44	2339768	13.73	2582696	18.57
LOWER LIMIT	416726	10.78	1002758	13.07	1106870	17.91
LAB SAMPLE ID						
VBLKF13	660027	11.10	1521907	13.39	1715492	18.24
LCSF13	674000	11.10	1726512	13.39	1891271	18.23
LCSDF13	661813	11.11	1723062	13.40	1898945	18.23
9662464	663140	11.10	1662632	13.39	1922551	18.23
9662465	617335	11.09	1560652	13.39	1908859	18.23
9662466	591040	11.12	1444800	13.40	1743840	18.24
9662465DL	596543	11.11	1346006	13.40	1622354	18.23
9662467	578470	11.11	1250114	13.40	1571282	18.23
9662466DL	559133	11.11	1110501	13.39	1405518	18.23
9662464	609225	11.10	1289273	13.39	1628723	18.24
cc518	618387	11.11	1179660	13.40	1444512	18.24
cc525	630752	11.11	1133538	13.40	1435787	18.24
9662719DL	638612	11.10	1189309	13.39	1434796	18.23

* = 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.

Data File: /chem/HP26379.i/18jun18.b/ff00290.d

Page 1

Date : 18-JUN-2018 12:12

Client ID: BFB

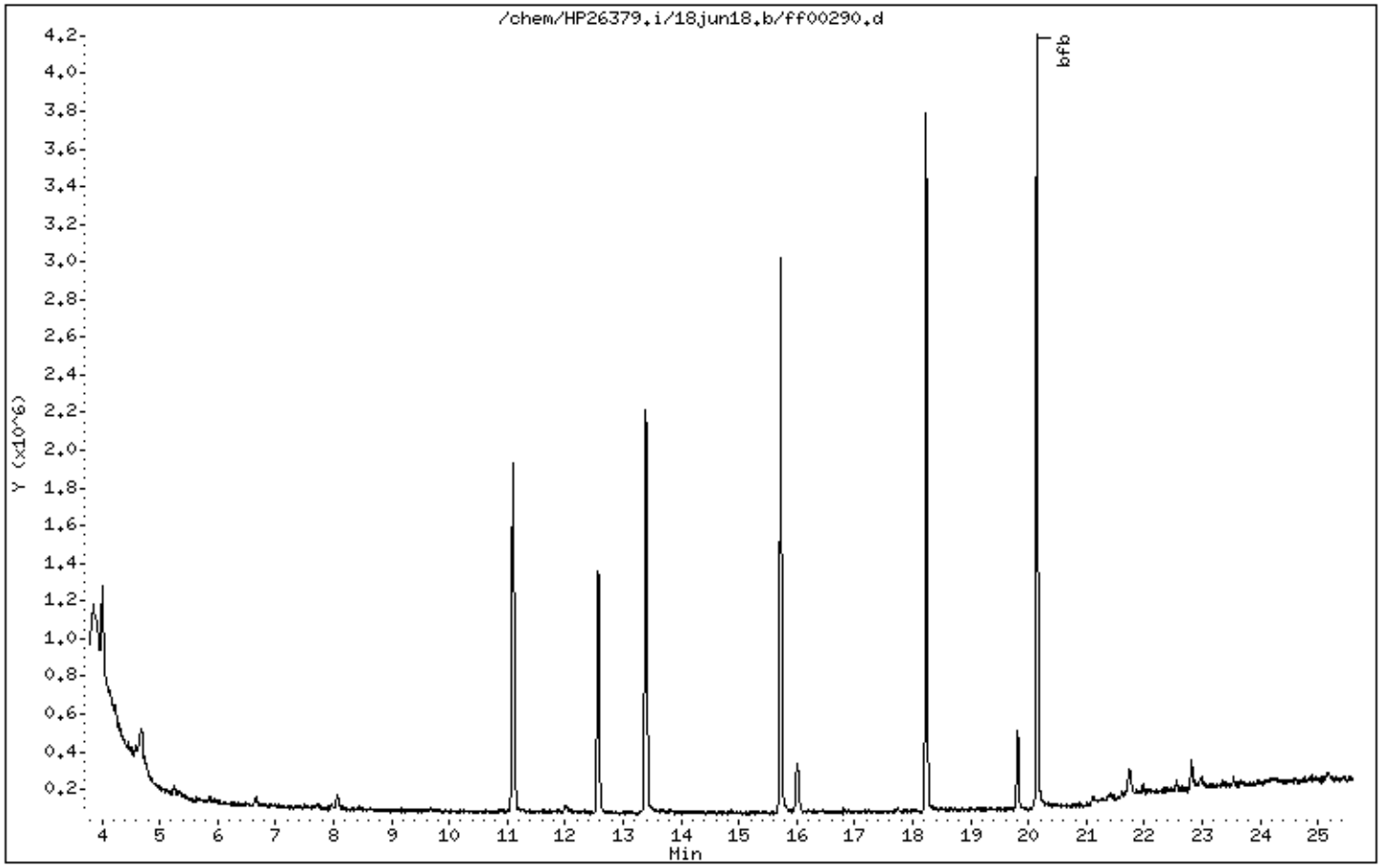
Instrument: HP26379.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25



Digitally signed by Jacob E. Bailey on 06/18/2018 at 14:47.
Target 3.5 esignature user ID: jeb07445

Data File: /chem/HP26379.i/18jun18.b/ff00290.d

Date : 18-JUN-2018 12:12

Client ID: BFB

Instrument: HP26379.i

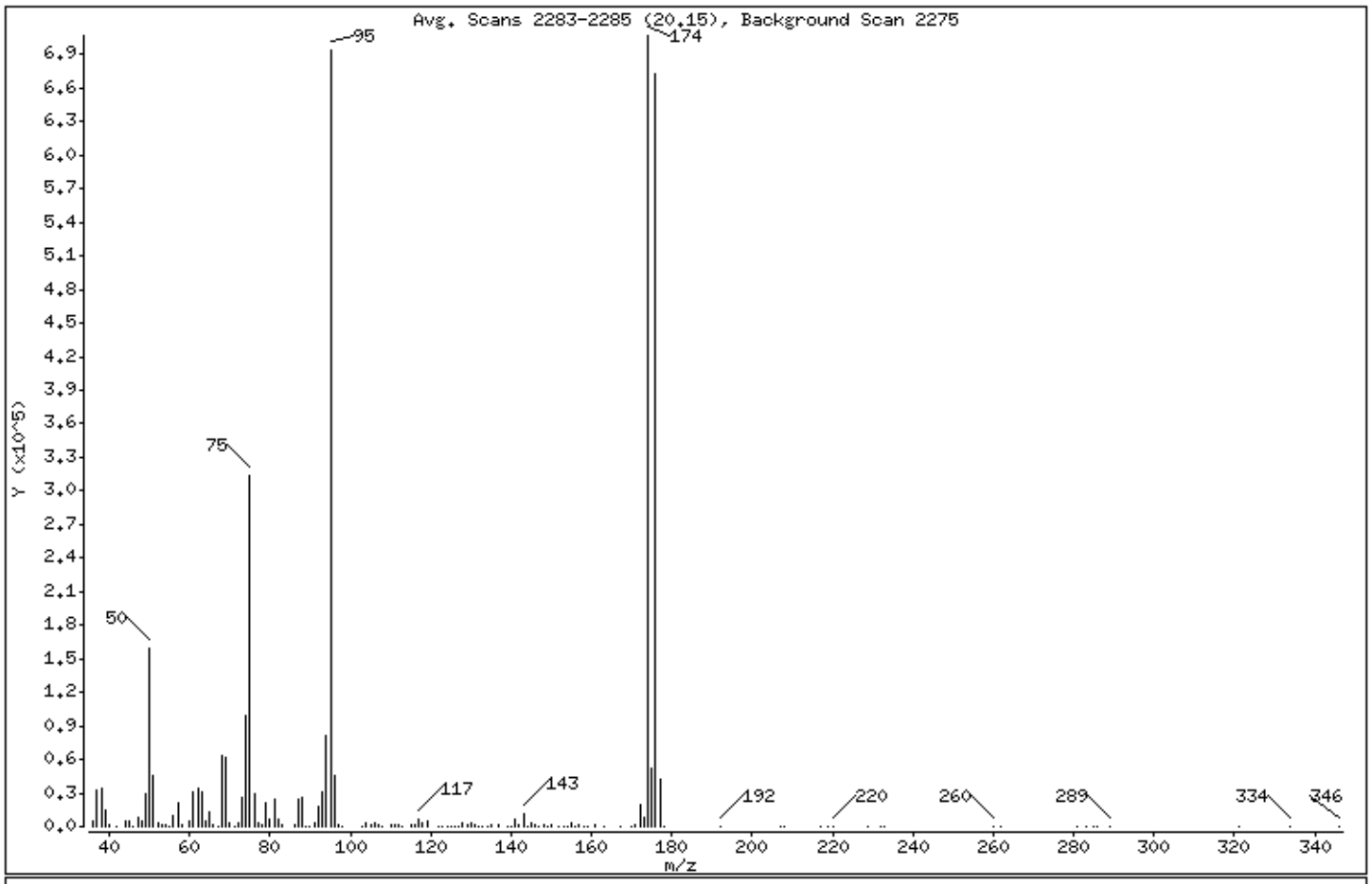
Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	22.96
75	30.00 - 66.00% of mass 95	45.12
96	5.00 - 9.00% of mass 95	6.52
173	Less than 2.00% of mass 174	1.13 (1.11)
174	50.00 - 120.00% of mass 95	101.77
175	4.00 - 9.00% of mass 174	7.38 (7.25)
176	93.00 - 101.00% of mass 174	96.77 (95.09)
177	5.00 - 9.00% of mass 176	6.18 (6.38)

Digitally signed by Jacob E. Bailey on 06/18/2018 at 14:47.
Target 3.5 esignature user ID: jeb07445

Date : 18-JUN-2018 12:12

Client ID: BFB Instrument: HP26379.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624 Column diameter: 0.25

Data File: ff00290.d
Spectrum: Avg. Scans 2283-2285 (20,15), Background Scan 2275
Location of Maximum: 174.00
Number of points: 139

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4829	74.00	99480	117.00	5759	157.00	1908
37.00	32888	75.00	313344	118.00	2581	158.00	243
38.00	34688	76.00	29208	119.00	5478	159.00	561
39.00	14076	77.00	2950	122.00	373	161.00	875
40.00	1092	78.00	2345	123.00	338	163.00	381
42.00	782	79.00	21824	124.00	473	167.00	132
44.00	4677	80.00	5938	125.00	139	170.00	343
45.00	5441	81.00	24656	126.00	510	171.00	2153
46.00	645	82.00	5832	127.00	442	172.00	20224
47.00	8709	83.00	1020	128.00	2782	173.00	7843
48.00	4511	86.00	1053	129.00	1496	174.00	706816
49.00	29416	87.00	23824	130.00	2510	175.00	51224
50.00	159424	88.00	26648	131.00	1511	176.00	672064
51.00	45808	89.00	301	132.00	177	177.00	42896
52.00	2779	90.00	120	133.00	373	178.00	734
53.00	1687	91.00	2688	134.00	164	192.00	246
54.00	1235	92.00	18136	135.00	2316	207.00	103
55.00	512	93.00	31608	137.00	1725	208.00	182
56.00	9491	94.00	80824	139.00	388	217.00	190
57.00	20328	95.00	694528	140.00	765	219.00	282
58.00	1834	96.00	45264	141.00	7049	220.00	297
60.00	5685	97.00	1664	142.00	935	229.00	139
61.00	30448	98.00	218	143.00	11862	232.00	115
62.00	34424	103.00	383	144.00	741	233.00	271
63.00	30304	104.00	2909	145.00	3889	260.00	658
64.00	4516	105.00	1202	146.00	1454	262.00	122
65.00	12301	106.00	3159	147.00	295	281.00	102
66.00	983	107.00	1014	148.00	1391	283.00	175
67.00	217	108.00	549	149.00	728	285.00	237
68.00	63912	110.00	819	150.00	824	286.00	384
69.00	61672	111.00	1072	152.00	112	289.00	621
70.00	3616	112.00	1663	153.00	693	321.00	107
71.00	449	113.00	496	154.00	573	334.00	812
72.00	3073	115.00	1497	155.00	2595	346.00	162
73.00	25304	116.00	2231	156.00	784		

Digitally signed by Jacob E. Bailey on 06/18/2018 at 14:47.
Target 3.5 esignature user ID: jeb07445

Date : 18-JUN-2018 12:12

Client ID: BFB Instrument: HP26379.i

Sample Info: 50NGBFB;;;BFB;0;;;

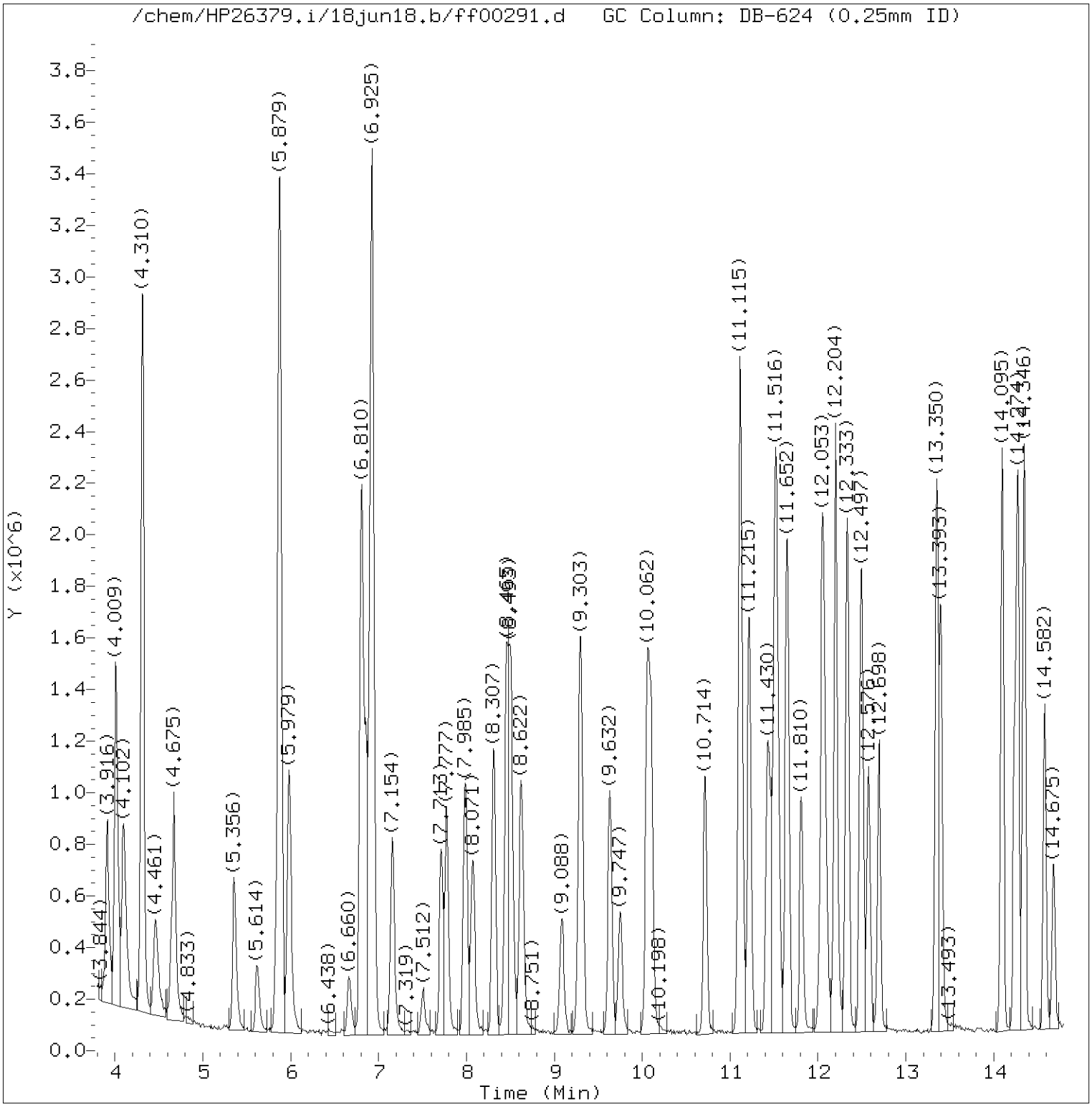
Operator: jeb07445

Column phase: DB-624 Column diameter: 0.25

Data File: ff00290.d
Spectrum: Avg. Scans 2283-2285 (20,15), Background Scan 2275
Location of Maximum: 174.00
Number of points: 139

m/z	Y	m/z	Y	m/z	Y	m/z	Y

Digitally signed by Jacob E. Bailey on 06/18/2018 at 14:47.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

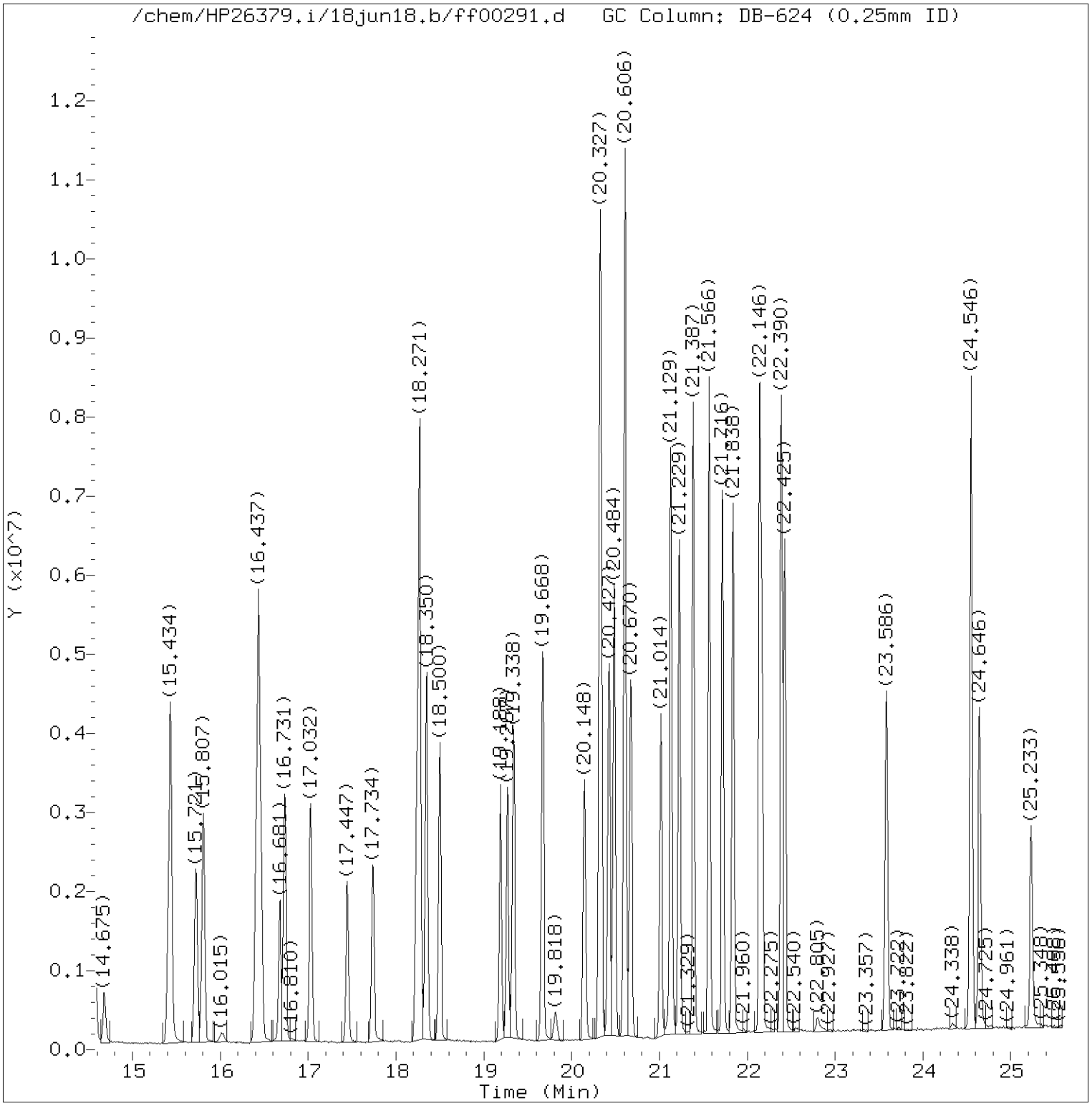
Target Revision 3.5

Data File: /chem/HP26379.i/18jun18.b/ff00291.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 13:02 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 13:31
Date, time and analyst ID of latest file update: 18-Jun-2018 13:31 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 06/18/2018 at 14:46.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun18.b/ff00291.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 13:02 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 13:31
Date, time and analyst ID of latest file update: 18-Jun-2018 13:31 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 06/18/2018 at 14:46.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun18.b/ff00291.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 13:02 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 13:31
Date, time and analyst ID of latest file update: 18-Jun-2018 13:31 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.916	41	618688	9.200
2) Dichlorodifluoromethane	(1)	4.009	85	2112090	10.373
3) Chlorodifluoromethane	(1)	4.102	51	1611174	10.027
4) Freon 114	(1)	4.310	85	2139306	10.006
5) Chloromethane	(1)	4.468	50	825900	9.868
6) Vinyl Chloride	(1)	4.647	62	454676	10.286
7) 1,3-Butadiene	(1)	4.675	54	374574	9.964
8) Bromomethane	(1)	5.356	94	685323	11.038
9) Chloroethane	(1)	5.621	64	388295	9.914
10) Bromoethene	(1)	5.836	106	542515	9.267
11) Pentane	(1)	5.872	43	1239516	9.200
12) Trichlorofluoromethane	(1)	5.879	101	2177727	9.454
13) Dichlorofluoromethane	(1)	5.979	67	1682380	10.361
14) Ethanol	(1)	6.667	45	284134	9.232
15) Freon123a	(1)	6.803	67	1651198	10.609
16) 1,1-Dichloroethene	(1)	6.860	61	1011608	9.204
17) Freon 113	(1)	6.917	103	1225769	9.262
18) Carbon Disulfide	(1)	6.939	76	1921944	10.683
19) Methyl Iodide	(1)	7.154	142	1422874	8.047
20) Acrolein	(1)	7.505	56	222500	8.900
21) Isopropanol	(1)	7.713	45	1079317	8.929
22) 3-Chloropropene	(1)	7.777	41	955000	9.710
23) Methylene Chloride	(1)	7.992	84	714806	11.593
24) Acetone	(1)	8.071	43	1382218	10.254
25) trans-1,2-Dichloroethene	(1)	8.307	61	1012042	9.519
26) Hexane	(1)	8.457	56	803853	9.447
27) Methyl t-Butyl Ether	(1)	8.508	73	1523338	8.787
28) tert-Butyl Alcohol	(1)	8.622	59	1420225	9.882
29) Acetonitrile	(1)	9.088	41	869602	10.665
30) Di-Isopropyl Ether	(1)	9.303	45	1966059	8.327
31) 1,1-Dichloroethane	(1)	9.632	63	1457558	9.862
32) Acrylonitrile	(1)	9.754	53	630267	9.678
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	1660006	8.502
34) Vinyl Acetate	(1)	10.112	43	2312528	11.158
35) cis-1,2-Dichloroethene	(1)	10.714	61	883592	9.309
36) 1,2-Dichloroethene (total)	(1)		61	1895634	18.827
37)*Bromochloromethane	(1)	11.108	130	694543	10.000
38) Cyclohexane	(1)	11.122	56	908506	8.154

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/18/2018 at 14:46.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun18.b/ff00291.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 13:02 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 13:31
Date, time and analyst ID of latest file update: 18-Jun-2018 13:31 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	1737454	9.800
40) Ethyl Acetate	(1)	11.423	43	1754688M	9.219
41) Methyl Acrylate	(1)	11.459	55	1177589	9.019
42) Carbon Tetrachloride	(1)	11.516	117	1913851	9.230
43) Tetrahydrofuran	(1)	11.545	42	847155	9.576
44) 1,1,1-Trichloroethane	(1)	11.652	97	1824508	9.199
45) 2-Butanone	(1)	11.810	43	1665407	9.466
46) Isooctane	(2)	12.053	57	3026171	10.575
47) Heptane	(2)	12.204	71	572537	10.570
48) Benzene	(2)	12.333	78	2267355	11.155
49) Tert-Amyl Methyl Ether	(2)	12.490	73	1411329	10.187
50) 1,2-Dichloroethane	(2)	12.698	62	1235209	11.284
51) Trichloroethene	(2)	13.350	130	963209	10.008
52)*1,4-Difluorobenzene	(2)	13.400	114	1671263	10.000
53) Dibromomethane	(2)	14.095	174	1270679	10.753
54) Ethyl Acrylate	(2)	14.231	55	1235484	8.875
55) 1,2-Dichloropropane	(2)	14.274	63	981321	10.994
56) Bromodichloromethane	(2)	14.346	83	1800966	10.800
57) Methyl Methacrylate	(2)	14.582	69	495282	9.253
58) 1,4-Dioxane	(2)	14.675	88	439309	10.680
59) cis-1,3-Dichloropropene	(2)	15.413	75	1070700	9.867
60) Octane	(3)	15.434	43	1902444	10.359
61) Toluene	(3)	15.807	91	2495448	10.027
62) 4-Methyl-2-Pentanone	(2)	16.408	43	1960924	10.237
63) Tetrachloroethene	(3)	16.437	166	2119916	11.067
64) trans-1,3-Dichloropropene	(3)	16.466	75	1194448	10.872
65) 1,3-Dichloropropene (total)	(3)		75	2265148	20.294
66) Ethyl Methacrylate	(3)	16.681	69	914863	9.194
67) 1,1,2-Trichloroethane	(3)	16.731	97	1248032	10.653
68) Dibromochloromethane	(3)	17.032	127	1516608	9.996
69) 1,2-Dibromoethane	(3)	17.447	107	1644791	9.966
70) 2-Hexanone	(3)	17.734	43	1861147	9.874
71)*Chlorobenzene-d5	(3)	18.235	117	1844783	10.000
72) Chlorobenzene	(3)	18.264	112	2614197	10.458
73) Ethylbenzene	(3)	18.271	91	3569712	10.472
74) 1,1,1,2-Tetrachloroethane	(3)	18.350	131	1674834	10.269
75) m/p-Xylene	(3)	18.500	91	2408585	10.207
76) o-Xylene	(3)	19.188	91	2123684	9.374

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

Digitally signed by Jacob E. Bailey
on 06/18/2018 at 14:46.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun18.b/ff00291.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 13:02 Analyst ID: jeb07445

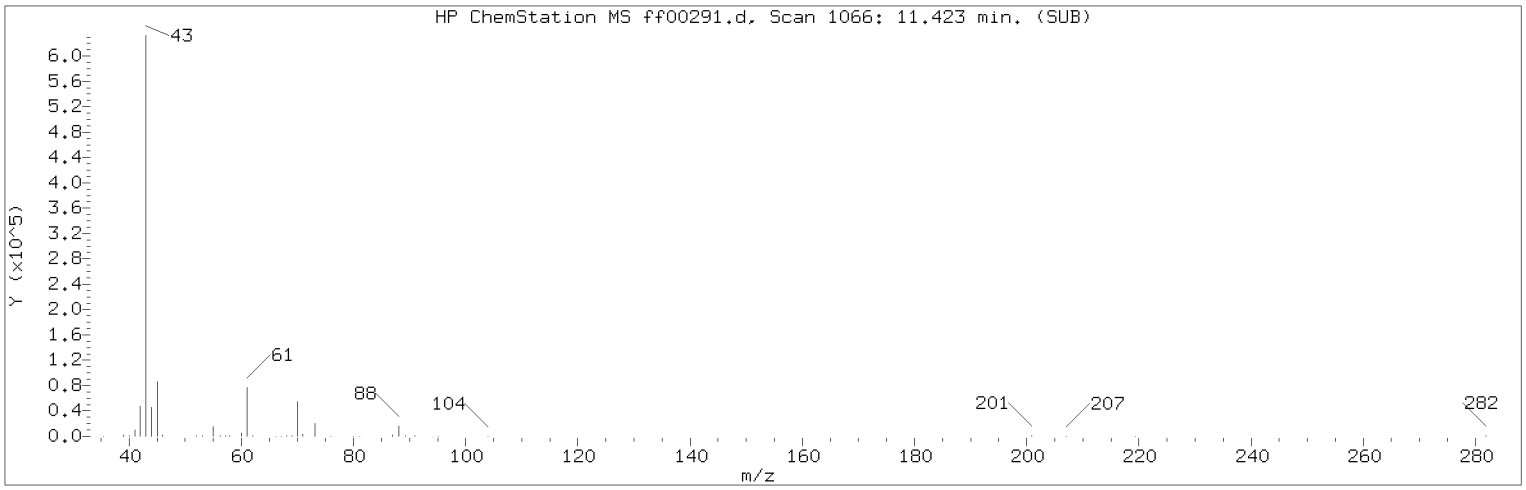
Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 13:31
Date, time and analyst ID of latest file update: 18-Jun-2018 13:31 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

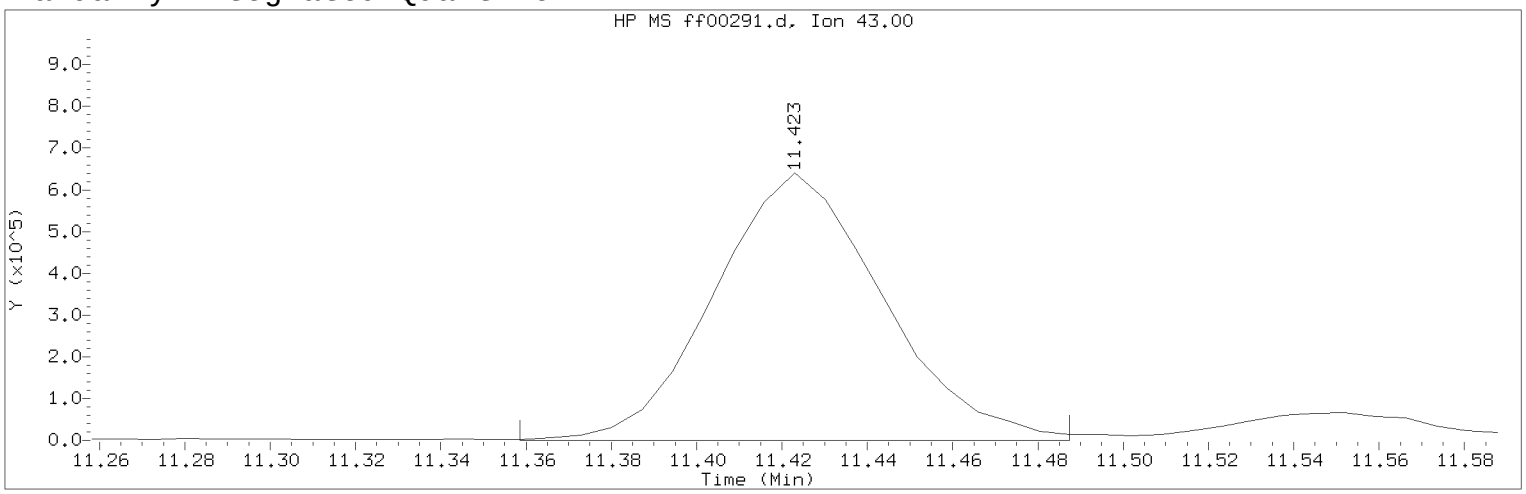
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	4532269	19.598
78) Styrene	(3)	19.267	104	1876333	10.340
79) Bromoform	(3)	19.338	173	2272622	9.915
80) Cumene	(3)	19.668	105	3573456	10.618
81) n-Propylbenzene	(3)	20.319	120	1177448	10.877
82) Bromobenzene	(3)	20.334	156	1986938	11.109
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	2723788	10.308
84) 4-Ethyltoluene	(3)	20.484	105	4112999	11.575
85) 2-Chlorotoluene	(3)	20.606	126	1260416	11.379
86) 1,3,5-Trimethylbenzene	(3)	20.613	105	3903769	11.855
87) 1,2,3-Trichloropropane	(3)	20.670	110	910516	10.425
88) Alpha Methyl Styrene	(3)	21.014	118	1410783	10.180
89) tert-Butylbenzene	(3)	21.129	119	3710092	11.852
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	3700113	11.767
91) sec-Butylbenzene	(3)	21.387	105	5471048	11.700
92) p-Isopropyltoluene	(3)	21.566	119	4351963	11.570
93) 1,3-Dichlorobenzene	(3)	21.723	146	3155305	10.442
94) 1,4-Dichlorobenzene	(3)	21.838	146	3083857	10.580
95) n-Butylbenzene	(3)	22.139	92	2538186	11.610
96) Benzyl Chloride	(3)	22.168	126	828704	11.307
97) Hexachloroethane	(3)	22.390	117	1527947	10.115
98) 1,2-Dichlorobenzene	(3)	22.425	146	2874414	10.602
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	1395372	10.101
100) Hexachlorobutadiene	(3)	24.546	225	2368515	9.530
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	1818108	9.361
102) Naphthalene	(3)	25.233	128	2711726	9.542

Digitally signed by Jacob E. Bailey
on 06/18/2018 at 14:46.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18jun18.b/ff00291.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 13:02 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 13:31
Date, time and analyst ID of latest file update: 18-Jun-2018 13:31 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

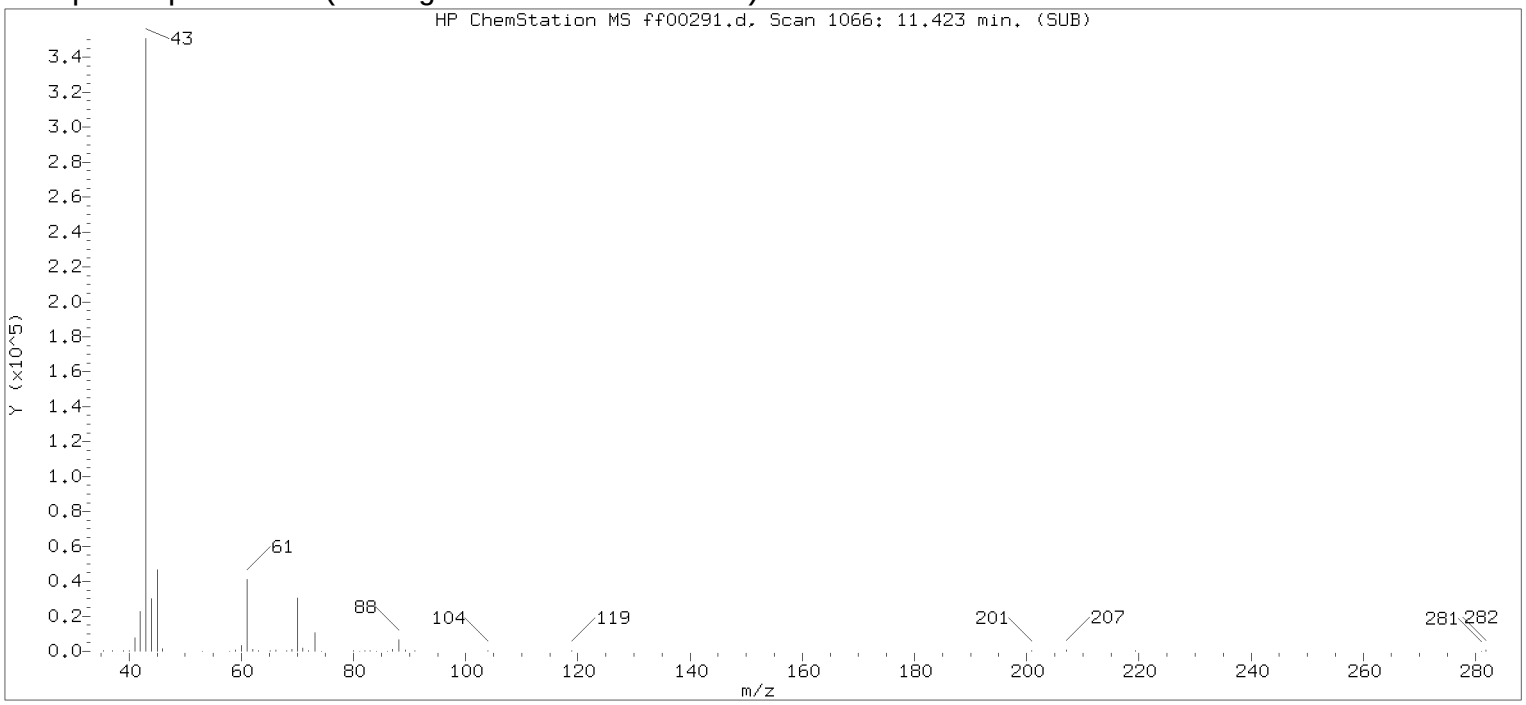
Compound Number : 40
Compound Name : Ethyl Acetate
Scan Number : 1066
Retention Time (minutes): 11.423
Quant Ion : 43.00
Area (flag) : 1754688M
Concentration (ppb(v)) : 9.2188
Integration start scan : 1056 Integration stop scan: 1074
Y at integration start : 432 Y at integration end: 432

Reason for manual integration: improper integration

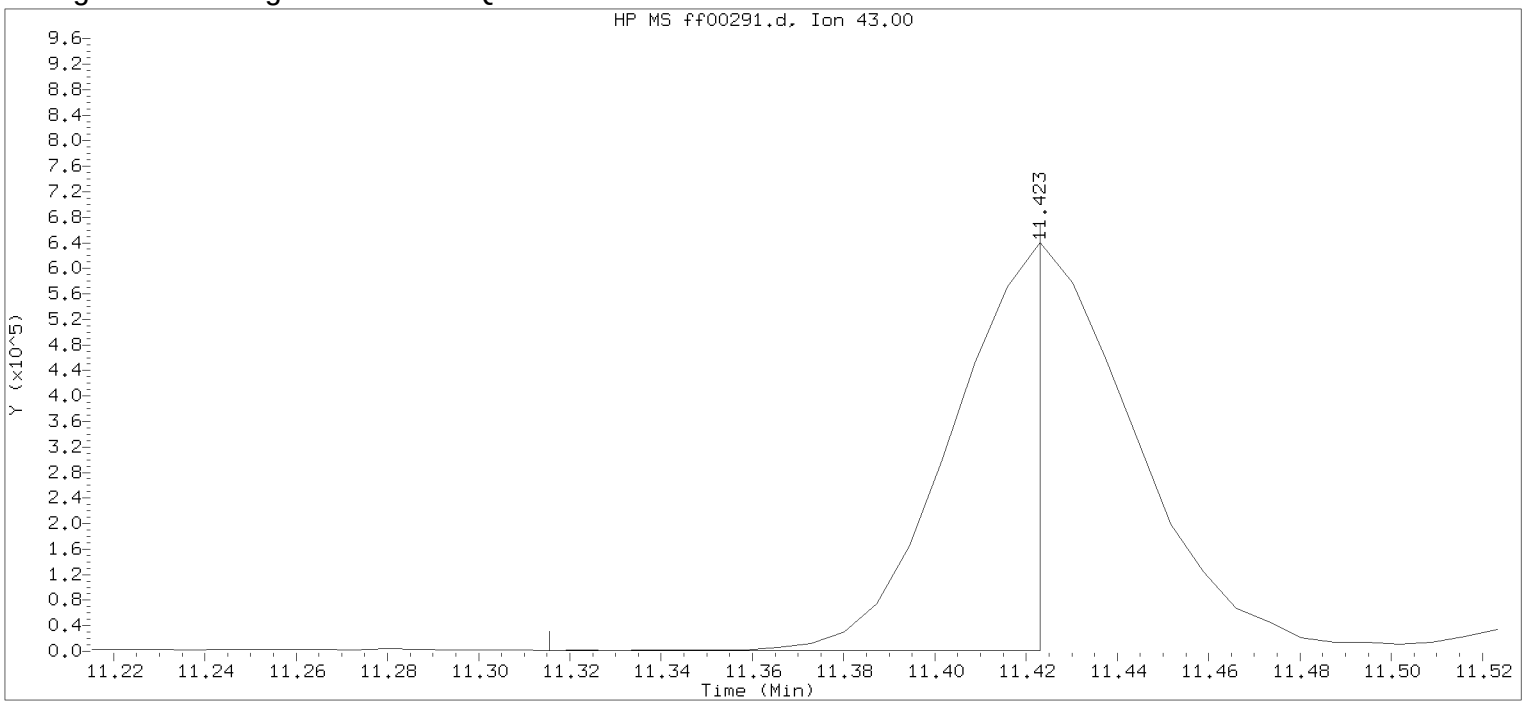
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/18/2018 at 14:46.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/19/2018 at 15:46.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18jun18.b/ff00291.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 13:02 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 12:10
Date, time and analyst ID of latest file update: 18-Jun-2018 13:29 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 40
Compound Name : Ethyl Acetate
Scan Number : 1066
Retention Time (minutes): 11.423
Quant Ion : 43.00
Area : 825280
Concentration (ppb(v)) : 4.3359
Integration start scan : 1050 Integration stop scan: 1065
Y at integration start : 1409 Y at integration end: 1409

Digitally signed by Jacob E. Bailey on 06/18/2018 at 14:46.
Target 3.5 esignature used. GLED1 Page 1648 of 1687

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

VBLKF13

Data file: /chem/HP26379.i/18jun18.b/ff00292.d Injection date and time: **18-JUN-2018 13:48**
Data file Sample Info. Line: VBLKF13;200;F1816930AA;VBLKF13;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1816930AA**
Date, time and analyst ID of latest file update: 18-Jun-2018 14:46 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun18.b/ff00292.d**

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 18-JUN-2018 13:31
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun18.b/ff00291.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.101(0.007)	1021	130	660027 (-5)	10.00		416726 - 972360
52) 1,4-Difluorobenzene	13.393(0.007)	1341	114	1521907 (-9)	10.00		1002758 - 2339768
71) Chlorobenzene-d5	18.235(0.000)	2017	117	1715492 (-7)	10.00		1106870 - 2582696

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)			Not Detected					0.5	1
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)			Not Detected					0.2	1
7) 1,3-Butadiene	(1)			Not Detected					0.4	2
8) Bromomethane	(1)			Not Detected					0.5	1
9) Chloroethane	(1)			Not Detected					0.2	1
10) Bromoethene	(1)			Not Detected					0.4	2
13) Dichlorofluoromethane	(1)			Not Detected					0.2	1
12) Trichlorofluoromethane	(1)			Not Detected					0.2	1
11) Pentane	(1)			Not Detected					0.5	1
14) Ethanol	(1)			Not Detected					0.5	2
15) Freon123a	(1)			Not Detected					0.2	1
20) Acrolein	(1)			Not Detected					1	2
16) 1,1-Dichloroethene	(1)			Not Detected					0.2	1
17) Freon 113	(1)			Not Detected					0.5	2
24) Acetone	(1)			Not Detected					0.5	2
19) Methyl Iodide	(1)			Not Detected					0.2	1
18) Carbon Disulfide	(1)			Not Detected					1	1
21) Isopropanol	(1)			Not Detected					0.5	2
29) Acetonitrile	(1)			Not Detected					0.5	2
22) 3-Chloropropene	(1)			Not Detected					0.2	1
23) Methylene Chloride	(1)			Not Detected					0.2	1
28) tert-Butyl Alcohol	(1)			Not Detected					0.5	1
32) Acrylonitrile	(1)			Not Detected					0.5	2
25) trans-1,2-Dichloroethene	(1)			Not Detected					0.2	1
27) Methyl t-Butyl Ether	(1)			Not Detected					0.2	1
26) Hexane	(1)			Not Detected					0.2	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.2	1
34) Vinyl Acetate	(1)			Not Detected					1	1
30) Di-Isopropyl Ether	(1)			Not Detected					0.2	1
33) Ethyl Tert-Butyl Ether	(1)			Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.2	1
36) 1,2-Dichloroethene (total)	(1)			Not Detected					0.2	1
45) 2-Butanone	(1)			Not Detected					0.5	2
40) Ethyl Acetate	(1)			Not Detected					0.5	1
41) Methyl Acrylate	(1)			Not Detected					0.2	1
43) Tetrahydrofuran	(1)			Not Detected					0.5	1
39) Chloroform	(1)			Not Detected					0.2	1
44) 1,1,1-Trichloroethane	(1)			Not Detected					0.2	1
38) Cyclohexane	(1)			Not Detected					0.2	1

Digitally signed by Jacob E. Bailey on 06/18/2018 at 14:46. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18jun18.b/ff00292.d Injection date and time: **18-JUN-2018 13:48**
Data file Sample Info. Line: VBLKF13;200;F1816930AA;VBLKF13;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1816930AA**
Date, time and analyst ID of latest file update: 18-Jun-2018 14:46 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun18.b/ff00292.d**

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 18-JUN-2018 13:31
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun18.b/ff00291.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
42) Carbon Tetrachloride	(1)				Not Detected					0.2	1
48) Benzene	(2)				Not Detected					0.2	1
50) 1,2-Dichloroethane	(2)				Not Detected					0.2	1
46) Isooctane	(2)				Not Detected					0.2	1
49) Tert-Amyl Methyl Ether	(2)				Not Detected					0.2	1
47) Heptane	(2)				Not Detected					0.5	1
51) Trichloroethene	(2)				Not Detected					0.2	1
54) Ethyl Acrylate	(2)				Not Detected					0.2	1
55) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
53) Dibromomethane	(2)				Not Detected					0.2	1
58) 1,4-Dioxane	(2)				Not Detected					0.5	1
57) Methyl Methacrylate	(2)				Not Detected					0.2	1
56) Bromodichloromethane	(2)				Not Detected					0.2	1
59) cis-1,3-Dichloropropene	(2)				Not Detected					0.2	1
62) 4-Methyl-2-Pentanone	(2)				Not Detected					0.5	2
61) Toluene	(3)				Not Detected					0.2	1
60) Octane	(3)				Not Detected					0.2	1
64) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
65) 1,3-Dichloropropene (total)	(3)				Not Detected					0.2	1
66) Ethyl Methacrylate	(3)				Not Detected					0.2	1
67) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
63) Tetrachloroethene	(3)				Not Detected					0.2	1
70) 2-Hexanone	(3)				Not Detected					0.5	2
68) Dibromochloromethane	(3)				Not Detected					0.2	1
69) 1,2-Dibromoethane	(3)				Not Detected					0.2	1
72) Chlorobenzene	(3)				Not Detected					0.2	1
74) 1,1,1,2-Tetrachloroethane	(3)				Not Detected					0.2	1
73) Ethylbenzene	(3)				Not Detected					0.2	1
75) m/p-Xylene	(3)				Not Detected					0.2	1
76) o-Xylene	(3)				Not Detected					0.2	1
77) Xylene (total)	(3)				Not Detected					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
82) Bromobenzene	(3)				Not Detected					0.2	1
83) 1,1,2,2-Tetrachloroethane	(3)				Not Detected					0.2	1
87) 1,2,3-Trichloropropane	(3)				Not Detected					0.2	1
81) n-Propylbenzene	(3)				Not Detected					0.5	1
85) 2-Chlorotoluene	(3)				Not Detected					0.2	1
84) 4-Ethyltoluene	(3)				Not Detected					0.2	1
86) 1,3,5-Trimethylbenzene	(3)				Not Detected					0.2	1
88) Alpha Methyl Styrene	(3)				Not Detected					0.2	1
89) tert-Butylbenzene	(3)				Not Detected					0.5	1
90) 1,2,4-Trimethylbenzene	(3)				Not Detected					0.2	1
91) sec-Butylbenzene	(3)				Not Detected					0.2	1
93) 1,3-Dichlorobenzene	(3)				Not Detected					0.2	1
94) 1,4-Dichlorobenzene	(3)				Not Detected					0.2	1
92) p-Isopropyltoluene	(3)				Not Detected					0.2	1
96) Benzyl Chloride	(3)				Not Detected					0.5	1
98) 1,2-Dichlorobenzene	(3)				Not Detected					0.2	1
95) n-Butylbenzene	(3)				Not Detected					0.2	1
97) Hexachloroethane	(3)				Not Detected					0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)				Not Detected					0.2	1
101) 1,2,4-Trichlorobenzene	(3)				Not Detected					0.5	2

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Data file: /chem/HP26379.i/18jun18.b/ff00292.d Injection date and time: **18-JUN-2018 13:48**
Data file Sample Info. Line: VBLKF13;200;F1816930AA;VBLKF13;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1816930AA**
Date, time and analyst ID of latest file update: 18-Jun-2018 14:46 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun18.b/ff00292.d**

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 18-JUN-2018 13:31
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun18.b/ff00291.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
100) Hexachlorobutadiene	(3)				Not Detected					0.4	2
102) Naphthalene	(3)				Not Detected					0.4	1

Total number of targets = 99

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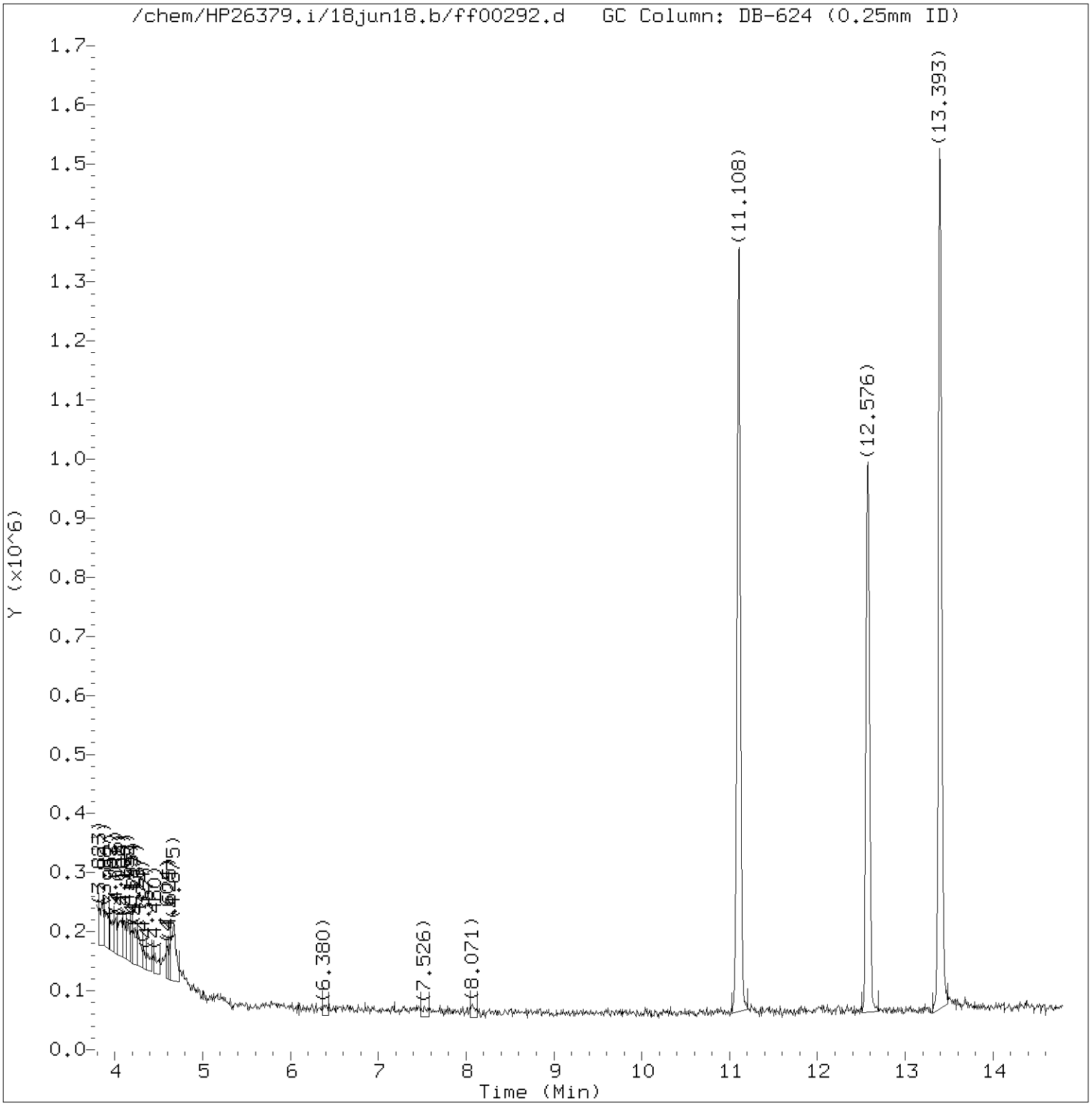
Secondary review performed and digitally signed by Jeffrey B. Smith on 06/19/2018 at 15:46. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

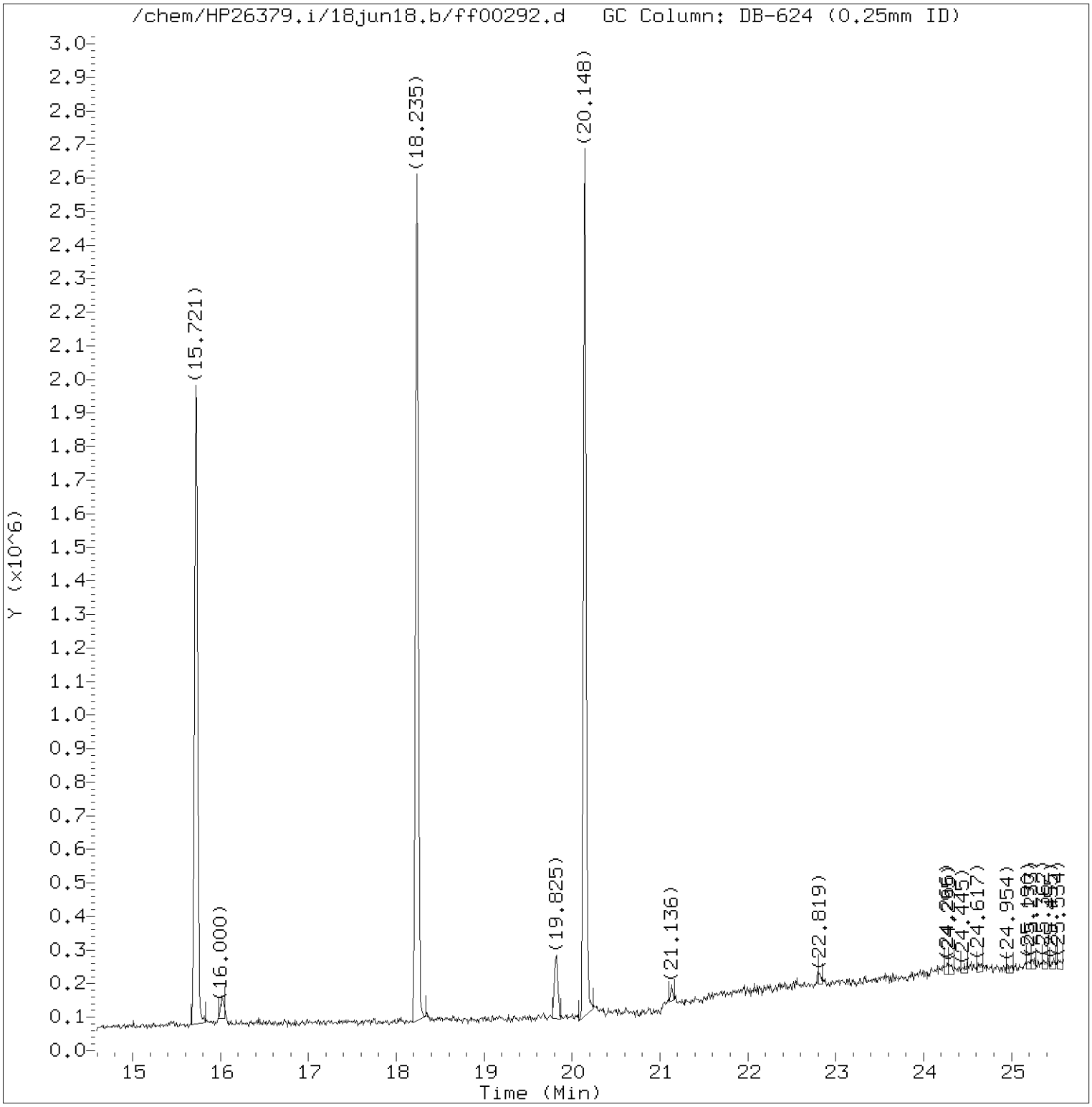
Target Revision 3.5

Data File: /chem/HP26379.i/18jun18.b/ff00292.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 13:48 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 13:31
Date, time and analyst ID of latest file update: 18-Jun-2018 14:46 jeb07445

Sample Name: VBLKF13 Lab Sample ID: VBLKF13

Digitally signed by Jacob E. Bailey
on 06/18/2018 at 14:46.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun18.b/ff00292.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 13:48 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 13:31
Date, time and analyst ID of latest file update: 18-Jun-2018 14:46 jeb07445

Sample Name: VBLKF13 Lab Sample ID: VBLKF13

Digitally signed by Jacob E. Bailey
on 06/18/2018 at 14:46.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun18.b/ff00292.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 13:48 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 13:31
Date, time and analyst ID of latest file update: 18-Jun-2018 14:46 jeb07445

Sample Name: VBLKF13 Lab Sample ID: VBLKF13

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
37)*Bromochloromethane	(1)	11.101	130	660027	10.000
52)*1,4-Difluorobenzene	(2)	13.393	114	1521907	10.000
71)*Chlorobenzene-d5	(3)	18.235	117	1715492	10.000

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/18/2018 at 14:46.
Target 3.5 esignature user ID: jeb07445

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

LCSF13

Data file: /chem/HP26379.i/18jun18.b/ff00293.d Injection date and time: **18-JUN-2018 14:35**
Data file Sample Info. Line: LCSF13;200;F1816930AA;LCSF13;0;3;LCS; Instrument ID: **HP26379.i** Batch: **F1816930AA**
Date, time and analyst ID of latest file update: 18-Jun-2018 15:09 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun18.b/ff00292.d**

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 18-JUN-2018 13:31
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun18.b/ff00291.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.101(0.007)	1021	130	674000 (-3)	10.00		416726 - 972360
52) 1,4-Difluorobenzene	13.393(0.007)	1341	114	1726512 (3)	10.00		1002758 - 2339768
71) Chlorobenzene-d5	18.228(0.007)	2016	117	1891271 (3)	10.00		1106870 - 2582696

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)	3.895(0.001)	41	643086	9.854	9.85			0.5	1
2) Dichlorodifluoromethane	(1)	4.002(0.000)	85	2099044	10.624	10.62			0.2	1
3) Chlorodifluoromethane	(1)	4.088(0.001)	51	1644715	10.548	10.55			0.2	1
4) Freon 114	(1)	4.303(0.000)	85	2108762	10.163	10.16			0.2	1
5) Chloromethane	(1)	4.446(0.001)	50	827469	10.188	10.19			0.2	1
6) Vinyl Chloride	(1)	4.632(0.001)	62	473236	11.033	11.03			0.2	1
7) 1,3-Butadiene	(1)	4.661(0.001)	54	373603	10.241	10.24			0.4	2
8) Bromomethane	(1)	5.349(0.000)	94	701859	11.649	11.65			0.5	1
9) Chloroethane	(1)	5.607(0.000)	64	390444	10.272	10.27			0.2	1
10) Bromoethene	(1)	5.829(0.000)	106	569701	10.028	10.03			0.4	2
13) Dichlorofluoromethane	(1)	5.972(0.000)	67	1736217	11.018	11.02			0.2	1
12) Trichlorofluoromethane	(1)	5.872(0.000)	101	2195182	9.820	9.82			0.2	1
11) Pentane	(1)	5.864(0.000)	43	1227379	9.388	9.39			0.5	1
14) Ethanol	(1)	6.652(0.000)	45	270581	9.060	9.06			0.5	2
15) Freon123a	(1)	6.796(0.000)	67	1658324	10.979	10.98			0.2	1
20) Acrolein	(1)	7.498(0.000)	56	234751	9.677	9.68			1	2
16) 1,1-Dichloroethene	(1)	6.846(0.000)	61	1022854	9.590	9.59			0.2	1
17) Freon 113	(1)	6.910(0.000)	103	1193282	9.292	9.29			0.5	2
24) Acetone	(1)	8.064(0.000)	43	1402664	10.723	10.72			0.5	2
19) Methyl Iodide	(1)	7.147(0.000)	142	1468136	8.556	8.56			0.2	1
18) Carbon Disulfide	(1)	6.925(0.000)	76	1874200	10.736	10.74			1	1
21) Isopropanol	(1)	7.705(0.000)	45	1138241	9.704	9.70			0.5	2
29) Acetonitrile	(1)	9.074(0.000)	41	809253	10.228	10.23			0.5	2
22) 3-Chloropropene	(1)	7.770(0.000)	41	1179393	12.356	12.36			0.2	1
23) Methylene Chloride	(1)	7.985(0.000)	84	728402	12.173	12.17			0.2	1
28) tert-Butyl Alcohol	(1)	8.615(0.000)	59	1460331	10.471	10.47			0.5	1
32) Acrylonitrile	(1)	9.732(0.001)	53	634033	10.033	10.03			0.5	2
25) trans-1,2-Dichloroethene	(1)	8.300(0.000)	61	1005999	9.750	9.75			0.2	1
27) Methyl t-Butyl Ether	(1)	8.500(0.000)	73	1596682	9.491	9.49			0.2	1
26) Hexane	(1)	8.450(0.000)	56	817595	9.901	9.90			0.2	1
31) 1,1-Dichloroethane	(1)	9.625(0.000)	63	1461764	10.192	10.19			0.2	1
34) Vinyl Acetate	(1)	10.098(0.000)	43	2309492	11.484	11.48			1	1
30) Di-Isopropyl Ether	(1)	9.288(0.000)	45	2041819	8.911	8.91			0.2	1
33) Ethyl Tert-Butyl Ether	(1)	10.062(-0.000)	59	1705338	9.001	9.00			0.2	1
35) cis-1,2-Dichloroethene	(1)	10.707(0.000)	61	873743	9.485	9.49			0.2	1
36) 1,2-Dichloroethene (total)	(1)		61	1879742	19.236	19.24			0.2	1
45) 2-Butanone	(1)	11.803(-0.000)	43	1697571M	9.943	9.94			0.5	2
40) Ethyl Acetate	(1)	11.416(-0.000)	43	1768525M	9.575	9.57			0.5	1
41) Methyl Acrylate	(1)	11.452(-0.000)	55	1246234	9.836	9.84			0.2	1
43) Tetrahydrofuran	(1)	11.538(-0.000)	42	897748	10.457	10.46			0.5	1
39) Chloroform	(1)	11.208(-0.000)	83	1752436	10.186	10.19			0.2	1
44) 1,1,1-Trichloroethane	(1)	11.638(0.000)	97	1869036	9.711	9.71			0.2	1
38) Cyclohexane	(1)	11.115(0.000)	56	963640	8.912	8.91			0.2	1

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey on 06/18/2018 at 15:09. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18jun18.b/ff00293.d Injection date and time: **18-JUN-2018 14:35**
Data file Sample Info. Line: LCSF13;200;F1816930AA;LCSF13;0;3;LCS; Instrument ID: **HP26379.i** Batch: **F1816930AA**
Date, time and analyst ID of latest file update: 18-Jun-2018 15:09 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun18.b/ff00292.d**

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 18-JUN-2018 13:31
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun18.b/ff00291.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
42) Carbon Tetrachloride	(1)	11.509(-0.000)	117	1990090	9.891	9.89			0.2	1
48) Benzene	(2)	12.326(0.000)	78	2257253	10.750	10.75			0.2	1
50) 1,2-Dichloroethane	(2)	12.691(0.000)	62	1227833	10.858	10.86			0.2	1
46) Isooctane	(2)	12.046(0.000)	57	3113814	10.533	10.53			0.2	1
49) Tert-Amyl Methyl Ether	(2)	12.490(-0.000)	73	1410806	9.857	9.86			0.2	1
47) Heptane	(2)	12.197(0.000)	71	593044	10.598	10.60			0.5	1
51) Trichloroethene	(2)	13.343(0.000)	130	1007293	10.131	10.13			0.2	1
54) Ethyl Acrylate	(2)	14.231(-0.000)	55	1368217	9.514	9.51			0.2	1
55) 1,2-Dichloropropane	(2)	14.267(-0.000)	63	991850	10.757	10.76			0.2	1
53) Dibromomethane	(2)	14.095(-0.000)	174	1309786	10.729	10.73			0.2	1
58) 1,4-Dioxane	(2)	14.682(-0.001)	88	442881	10.423	10.42			0.5	1
57) Methyl Methacrylate	(2)	14.575(-0.000)	69	524625	9.488	9.49			0.2	1
56) Bromodichloromethane	(2)	14.338(-0.000)	83	1819389	10.561	10.56			0.2	1
59) cis-1,3-Dichloropropene	(2)	15.406(-0.000)	75	1157612	10.326	10.33			0.2	1
62) 4-Methyl-2-Pentanone	(2)	16.401(-0.000)	43	2072593	10.474	10.47			0.5	2
61) Toluene	(3)	15.800(0.000)	91	2513706	9.852	9.85			0.2	1
60) Octane	(3)	15.434(-0.000)	43	1926081	10.230	10.23			0.2	1
64) trans-1,3-Dichloropropene	(3)	16.459(0.000)	75	1158004	10.281	10.28			0.2	1
65) 1,3-Dichloropropene (total)	(3)		75	2315616	20.608	20.61			0.2	1
66) Ethyl Methacrylate	(3)	16.674(0.000)	69	928573	9.103	9.10			0.2	1
67) 1,1,2-Trichloroethane	(3)	16.731(-0.000)	97	1233329	10.269	10.27			0.2	1
63) Tetrachloroethene	(3)	16.430(0.000)	166	2004809	10.209	10.21			0.2	1
70) 2-Hexanone	(3)	17.734(-0.000)	43	1830542	9.473	9.47			0.5	2
68) Dibromochloromethane	(3)	17.024(0.000)	127	1578758	10.150	10.15			0.2	1
69) 1,2-Dibromoethane	(3)	17.440(0.000)	107	1655716	9.786	9.79			0.2	1
72) Chlorobenzene	(3)	18.256(-0.000)	112	2498256	9.748	9.75			0.2	1
74) 1,1,1,2-Tetrachloroethane	(3)	18.342(-0.000)	131	1636120	9.785	9.79			0.2	1
73) Ethylbenzene	(3)	18.271(-0.000)	91	3351295	9.590	9.59			0.2	1
75) m/p-Xylene	(3)	18.493(-0.000)	91	2216038	9.160	9.16			0.2	1
76) o-Xylene	(3)	19.188(-0.000)	91	2067658	8.902	8.90			0.2	1
77) Xylene (total)	(3)		91	4283696	18.063	18.06			0.2	1
78) Styrene	(3)	19.266(-0.000)	104	1803650	9.695	9.70			0.2	1
79) Bromoform	(3)	19.331(-0.000)	173	2302976	9.800	9.80			0.2	1
80) Cumene	(3)	19.668(-0.000)	105	3198057	9.269	9.27			0.2	1
82) Bromobenzene	(3)	20.327(-0.000)	156	1797238	9.802	9.80			0.2	1
83) 1,1,2,2-Tetrachloroethane	(3)	20.420(-0.000)	83	2547295	9.403	9.40			0.2	1
87) 1,2,3-Trichloropropane	(3)	20.670(-0.000)	110	855051	9.549	9.55			0.2	1
81) n-Propylbenzene	(3)	20.320(-0.000)	120	1019428	9.186	9.19			0.5	1
85) 2-Chlorotoluene	(3)	20.599(-0.000)	126	1126299	9.918	9.92			0.2	1
84) 4-Ethyltoluene	(3)	20.484(-0.000)	105	3353780	9.207	9.21			0.2	1
86) 1,3,5-Trimethylbenzene	(3)	20.606(-0.000)	105	3203861	9.490	9.49			0.2	1
88) Alpha Methyl Styrene	(3)	21.014(-0.000)	118	1268177	8.926	8.93			0.2	1
89) tert-Butylbenzene	(3)	21.129(-0.000)	119	3442431	10.726	10.73			0.5	1
90) 1,2,4-Trimethylbenzene	(3)	21.222(-0.000)	105	3064149	9.505	9.51			0.2	1
91) sec-Butylbenzene	(3)	21.387(-0.000)	105	4509512	9.407	9.41			0.2	1
93) 1,3-Dichlorobenzene	(3)	21.716(-0.000)	146	2679829	8.650	8.65			0.2	1
94) 1,4-Dichlorobenzene	(3)	21.838(-0.000)	146	2556005	8.554	8.55			0.2	1
92) p-Isopropyltoluene	(3)	21.566(-0.000)	119	3499533	9.075	9.08			0.2	1
96) Benzyl Chloride	(3)	22.168(-0.000)	126	732133	9.744	9.74			0.5	1
98) 1,2-Dichlorobenzene	(3)	22.425(-0.000)	146	2383629	8.576	8.58			0.2	1
95) n-Butylbenzene	(3)	22.139(-0.000)	92	1994700	8.900	8.90			0.2	1
97) Hexachloroethane	(3)	22.382(-0.000)	117	1418377	9.159	9.16			0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)	23.586(-0.000)	157	1153985	8.148	8.15			0.2	1
101) 1,2,4-Trichlorobenzene	(3)	24.646(-0.000)	180	1278647	6.422	6.42			0.5	2

Digitally signed by Jacob E. Bailey on 06/18/2018 at 15:09. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18jun18.b/ff00293.d Injection date and time: **18-JUN-2018 14:35**
Data file Sample Info. Line: LCSF13;200;F1816930AA;LCSF13;0;3;LCS; Instrument ID: **HP26379.i** Batch: **F1816930AA**
Date, time and analyst ID of latest file update: 18-Jun-2018 15:09 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun18.b/ff00292.d**

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 18-JUN-2018 13:31
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun18.b/ff00291.d**

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

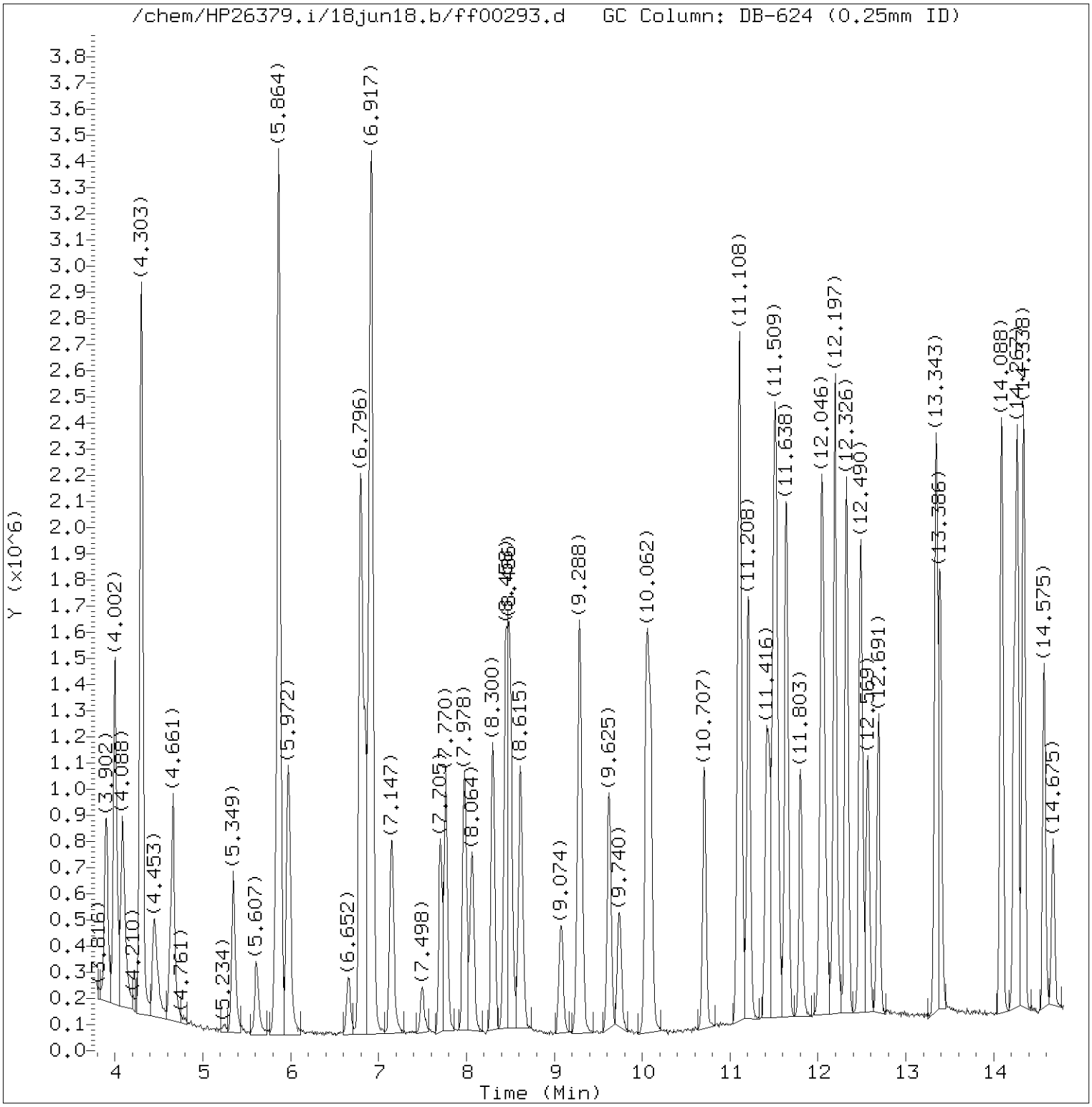
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
100) Hexachlorobutadiene	(3)	24.546(-0.000)	225	1704795	6.691	6.69			0.4	2
102) Naphthalene	(3)	25.233(-0.000)	128	1951700	6.699	6.70			0.4	1

Total number of targets = 99

Digitally signed by Jacob E. Bailey on 06/18/2018 at 15:09. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/19/2018 at 15:46. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

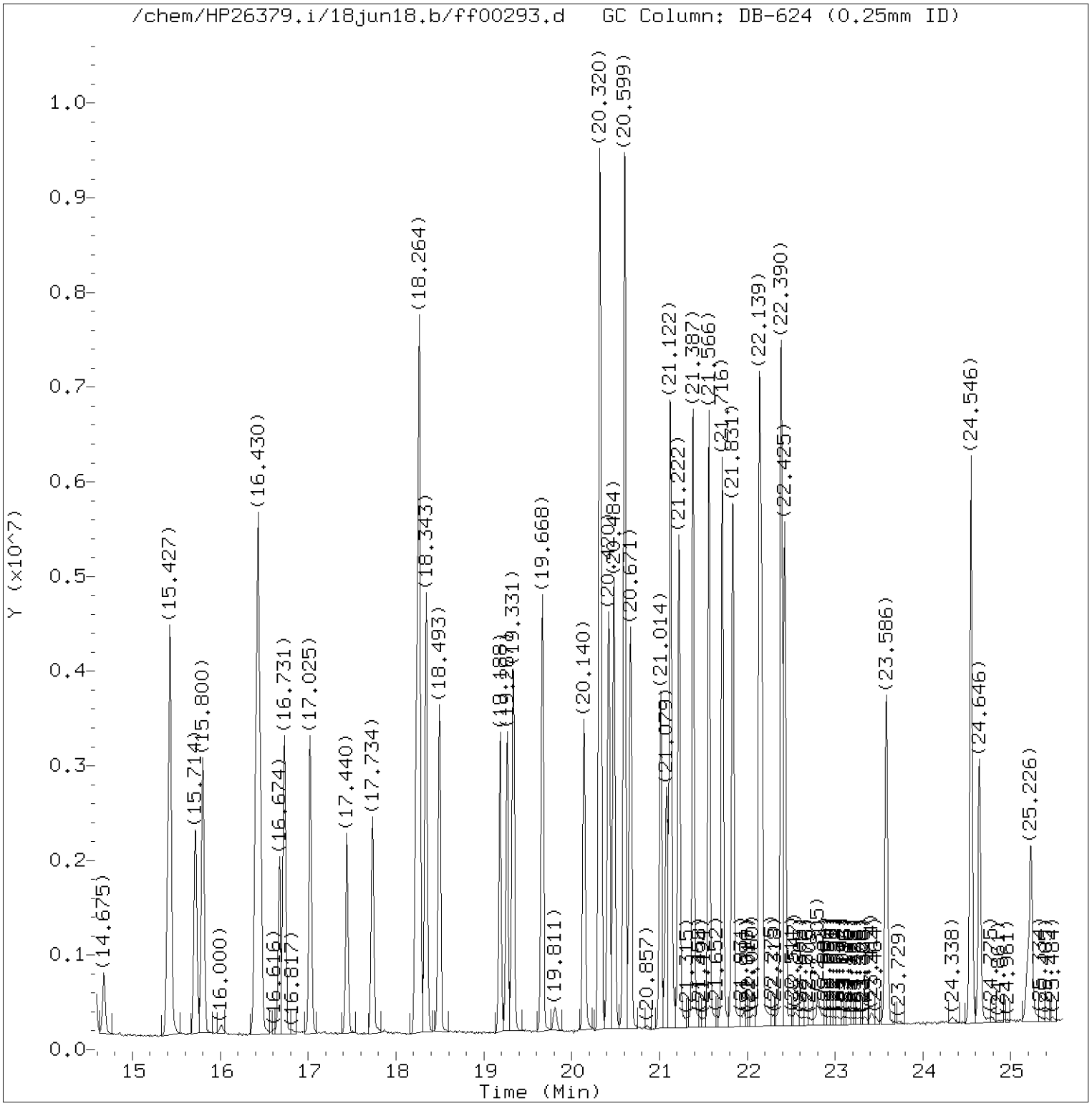
Target Revision 3.5

Data File: /chem/HP26379.i/18jun18.b/ff00293.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 14:35 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 13:31
Date, time and analyst ID of latest file update: 18-Jun-2018 15:09 jeb07445

Sample Name: LCSF13 Lab Sample ID: LCSF13

Digitally signed by Jacob E. Bailey
on 06/18/2018 at 15:09.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun18.b/ff00293.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 14:35 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 13:31
Date, time and analyst ID of latest file update: 18-Jun-2018 15:09 jeb07445

Sample Name: LCSF13 Lab Sample ID: LCSF13

Digitally signed by Jacob E. Bailey
on 06/18/2018 at 15:09.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun18.b/ff00293.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 14:35 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 13:31
Date, time and analyst ID of latest file update: 18-Jun-2018 15:09 jeb07445

Sample Name: LCSF13 Lab Sample ID: LCSF13

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.895	41	643086	9.854
2) Dichlorodifluoromethane	(1)	4.002	85	2099044	10.624
3) Chlorodifluoromethane	(1)	4.088	51	1644715	10.548
4) Freon 114	(1)	4.303	85	2108762	10.163
5) Chloromethane	(1)	4.446	50	827469	10.188
6) Vinyl Chloride	(1)	4.632	62	473236	11.033
7) 1,3-Butadiene	(1)	4.661	54	373603	10.241
8) Bromomethane	(1)	5.349	94	701859	11.649
9) Chloroethane	(1)	5.607	64	390444	10.272
10) Bromoethene	(1)	5.829	106	569701	10.028
11) Pentane	(1)	5.864	43	1227379	9.388
12) Trichlorofluoromethane	(1)	5.872	101	2195182	9.820
13) Dichlorofluoromethane	(1)	5.972	67	1736217	11.018
14) Ethanol	(1)	6.652	45	270581	9.060
15) Freon123a	(1)	6.796	67	1658324	10.979
16) 1,1-Dichloroethene	(1)	6.846	61	1022854	9.590
17) Freon 113	(1)	6.910	103	1193282	9.292
18) Carbon Disulfide	(1)	6.925	76	1874200	10.736
19) Methyl Iodide	(1)	7.147	142	1468136	8.556
20) Acrolein	(1)	7.498	56	234751	9.677
21) Isopropanol	(1)	7.705	45	1138241	9.704
22) 3-Chloropropene	(1)	7.770	41	1179393	12.356
23) Methylene Chloride	(1)	7.985	84	728402	12.173
24) Acetone	(1)	8.064	43	1402664	10.723
25) trans-1,2-Dichloroethene	(1)	8.300	61	1005999	9.750
26) Hexane	(1)	8.450	56	817595	9.901
27) Methyl t-Butyl Ether	(1)	8.501	73	1596682	9.491
28) tert-Butyl Alcohol	(1)	8.615	59	1460331	10.471
29) Acetonitrile	(1)	9.074	41	809253	10.228
30) Di-Isopropyl Ether	(1)	9.288	45	2041819	8.911
31) 1,1-Dichloroethane	(1)	9.625	63	1461764	10.192
32) Acrylonitrile	(1)	9.733	53	634033	10.033
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	1705338	9.001
34) Vinyl Acetate	(1)	10.098	43	2309492	11.484
35) cis-1,2-Dichloroethene	(1)	10.707	61	873743	9.485
36) 1,2-Dichloroethene (total)	(1)		61	1879742	19.236
37)*Bromochloromethane	(1)	11.101	130	674000	10.000
38) Cyclohexane	(1)	11.115	56	963640	8.912

* = Compound is an internal standard.

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on 06/18/2018 at 15:09.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun18.b/ff00293.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 14:35 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 13:31
Date, time and analyst ID of latest file update: 18-Jun-2018 15:09 jeb07445

Sample Name: LCSF13 Lab Sample ID: LCSF13

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.208	83	1752436	10.186
40) Ethyl Acetate	(1)	11.416	43	1768525M	9.575
41) Methyl Acrylate	(1)	11.452	55	1246234	9.836
42) Carbon Tetrachloride	(1)	11.509	117	1990090	9.891
43) Tetrahydrofuran	(1)	11.538	42	897748	10.457
44) 1,1,1-Trichloroethane	(1)	11.638	97	1869036	9.711
45) 2-Butanone	(1)	11.803	43	1697571M	9.943
46) Isooctane	(2)	12.046	57	3113814	10.533
47) Heptane	(2)	12.197	71	593044	10.598
48) Benzene	(2)	12.326	78	2257253	10.750
49) Tert-Amyl Methyl Ether	(2)	12.490	73	1410806	9.857
50) 1,2-Dichloroethane	(2)	12.691	62	1227833	10.858
51) Trichloroethene	(2)	13.343	130	1007293	10.131
52)*1,4-Difluorobenzene	(2)	13.393	114	1726512	10.000
53) Dibromomethane	(2)	14.095	174	1309786	10.729
54) Ethyl Acrylate	(2)	14.231	55	1368217	9.514
55) 1,2-Dichloropropane	(2)	14.267	63	991850	10.757
56) Bromodichloromethane	(2)	14.338	83	1819389	10.561
57) Methyl Methacrylate	(2)	14.575	69	524625	9.488
58) 1,4-Dioxane	(2)	14.682	88	442881	10.423
59) cis-1,3-Dichloropropene	(2)	15.406	75	1157612	10.326
60) Octane	(3)	15.434	43	1926081	10.230
61) Toluene	(3)	15.800	91	2513706	9.852
62) 4-Methyl-2-Pentanone	(2)	16.401	43	2072593	10.474
63) Tetrachloroethene	(3)	16.430	166	2004809	10.209
64) trans-1,3-Dichloropropene	(3)	16.459	75	1158004	10.281
65) 1,3-Dichloropropene (total)	(3)		75	2315616	20.608
66) Ethyl Methacrylate	(3)	16.674	69	928573	9.103
67) 1,1,2-Trichloroethane	(3)	16.731	97	1233329	10.269
68) Dibromochloromethane	(3)	17.025	127	1578758	10.150
69) 1,2-Dibromoethane	(3)	17.440	107	1655716	9.786
70) 2-Hexanone	(3)	17.734	43	1830542	9.473
71)*Chlorobenzene-d5	(3)	18.228	117	1891271	10.000
72) Chlorobenzene	(3)	18.257	112	2498256	9.748
73) Ethylbenzene	(3)	18.271	91	3351295	9.590
74) 1,1,1,2-Tetrachloroethane	(3)	18.343	131	1636120	9.785
75) m/p-Xylene	(3)	18.493	91	2216038	9.160
76) o-Xylene	(3)	19.188	91	2067658	8.902

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

Digitally signed by Jacob E. Bailey
on 06/18/2018 at 15:09.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun18.b/ff00293.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 14:35 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 13:31
Date, time and analyst ID of latest file update: 18-Jun-2018 15:09 jeb07445

Sample Name: LCSF13 Lab Sample ID: LCSF13

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	4283696	18.063
78) Styrene	(3)	19.267	104	1803650	9.695
79) Bromoform	(3)	19.331	173	2302976	9.800
80) Cumene	(3)	19.668	105	3198057	9.269
81) n-Propylbenzene	(3)	20.320	120	1019428	9.186
82) Bromobenzene	(3)	20.327	156	1797238	9.802
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	2547295	9.403
84) 4-Ethyltoluene	(3)	20.484	105	3353780	9.207
85) 2-Chlorotoluene	(3)	20.599	126	1126299	9.918
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	3203861	9.490
87) 1,2,3-Trichloropropane	(3)	20.671	110	855051	9.549
88) Alpha Methyl Styrene	(3)	21.014	118	1268177	8.926
89) tert-Butylbenzene	(3)	21.129	119	3442431	10.726
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	3064149	9.505
91) sec-Butylbenzene	(3)	21.387	105	4509512	9.407
92) p-Isopropyltoluene	(3)	21.566	119	3499533	9.075
93) 1,3-Dichlorobenzene	(3)	21.716	146	2679829	8.650
94) 1,4-Dichlorobenzene	(3)	21.838	146	2556005	8.554
95) n-Butylbenzene	(3)	22.139	92	1994700	8.900
96) Benzyl Chloride	(3)	22.168	126	732133	9.744
97) Hexachloroethane	(3)	22.382	117	1418377	9.159
98) 1,2-Dichlorobenzene	(3)	22.425	146	2383629	8.576
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	1153985	8.148
100) Hexachlorobutadiene	(3)	24.546	225	1704795	6.691
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	1278647	6.422
102) Naphthalene	(3)	25.233	128	1951700	6.699

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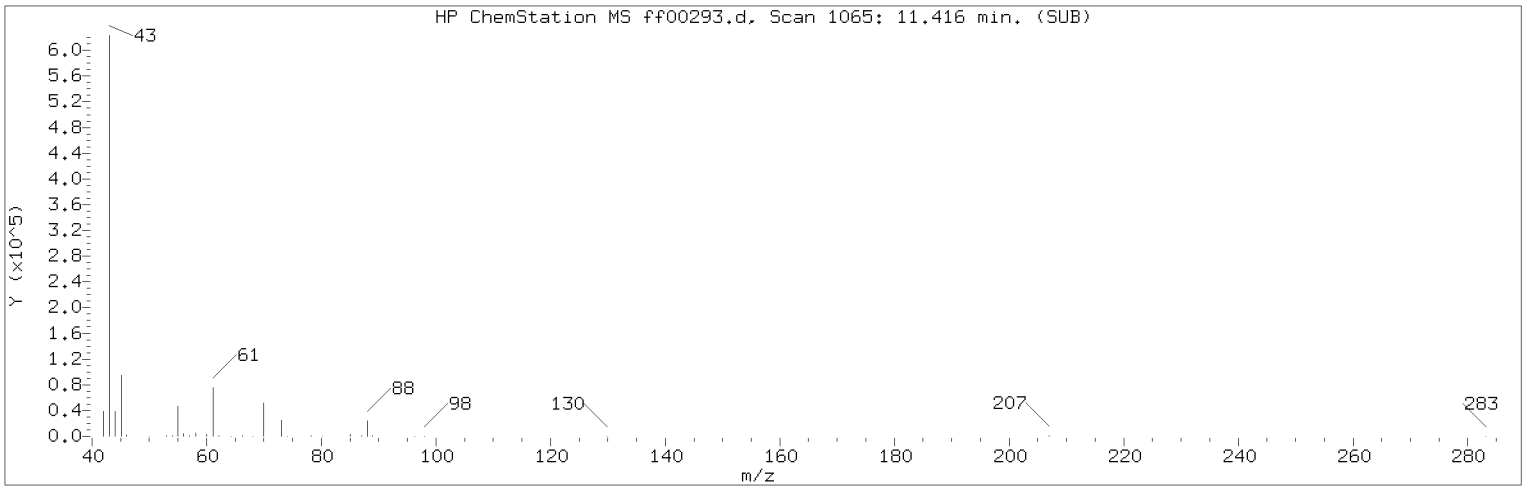
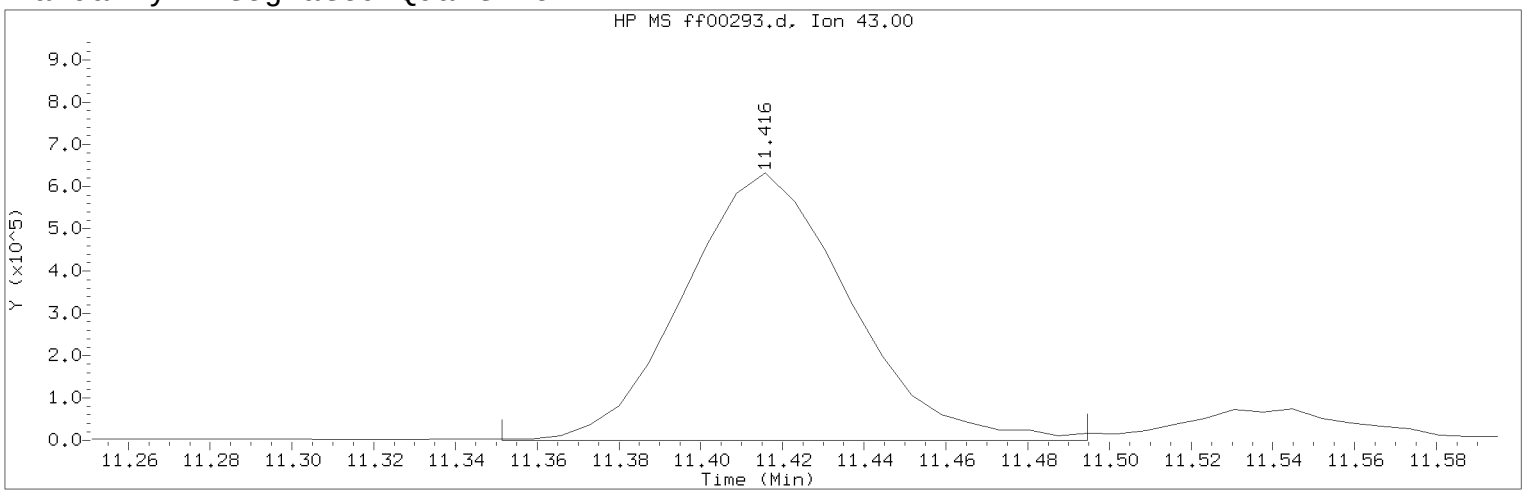
on 06/18/2018 at 15:09.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18jun18.b/ff00293.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 14:35 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 13:31
Date, time and analyst ID of latest file update: 18-Jun-2018 15:09 jeb07445

Sample Name: LCSF13 Lab Sample ID: LCSF13

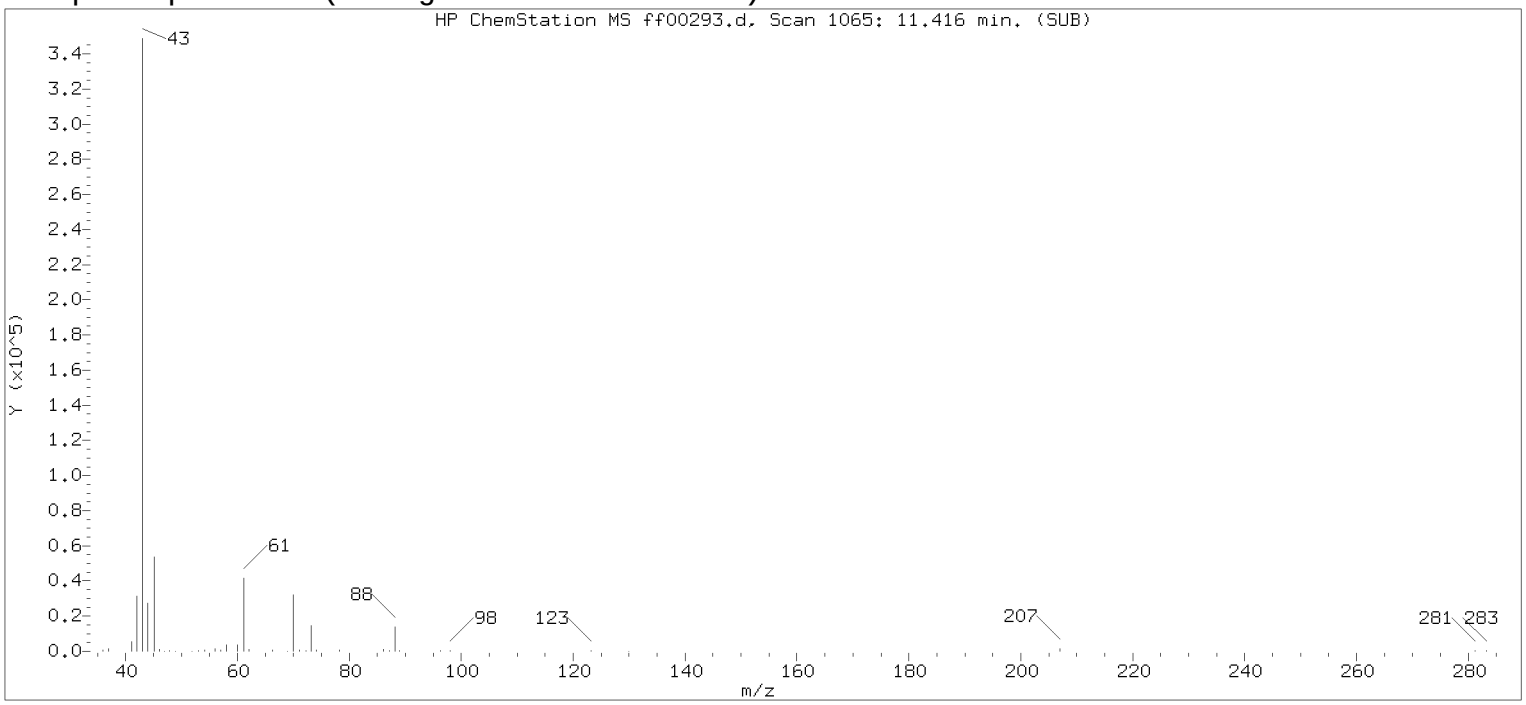
Compound Number : 40
Compound Name : Ethyl Acetate
Scan Number : 1065
Retention Time (minutes): 11.416
Quant Ion : 43.00
Area (flag) : 1768525M
Concentration (ppb(v)) : 9.5747
Integration start scan : 1055 Integration stop scan: 1075
Y at integration start : 675 Y at integration end: 675

Reason for manual integration: improper integration

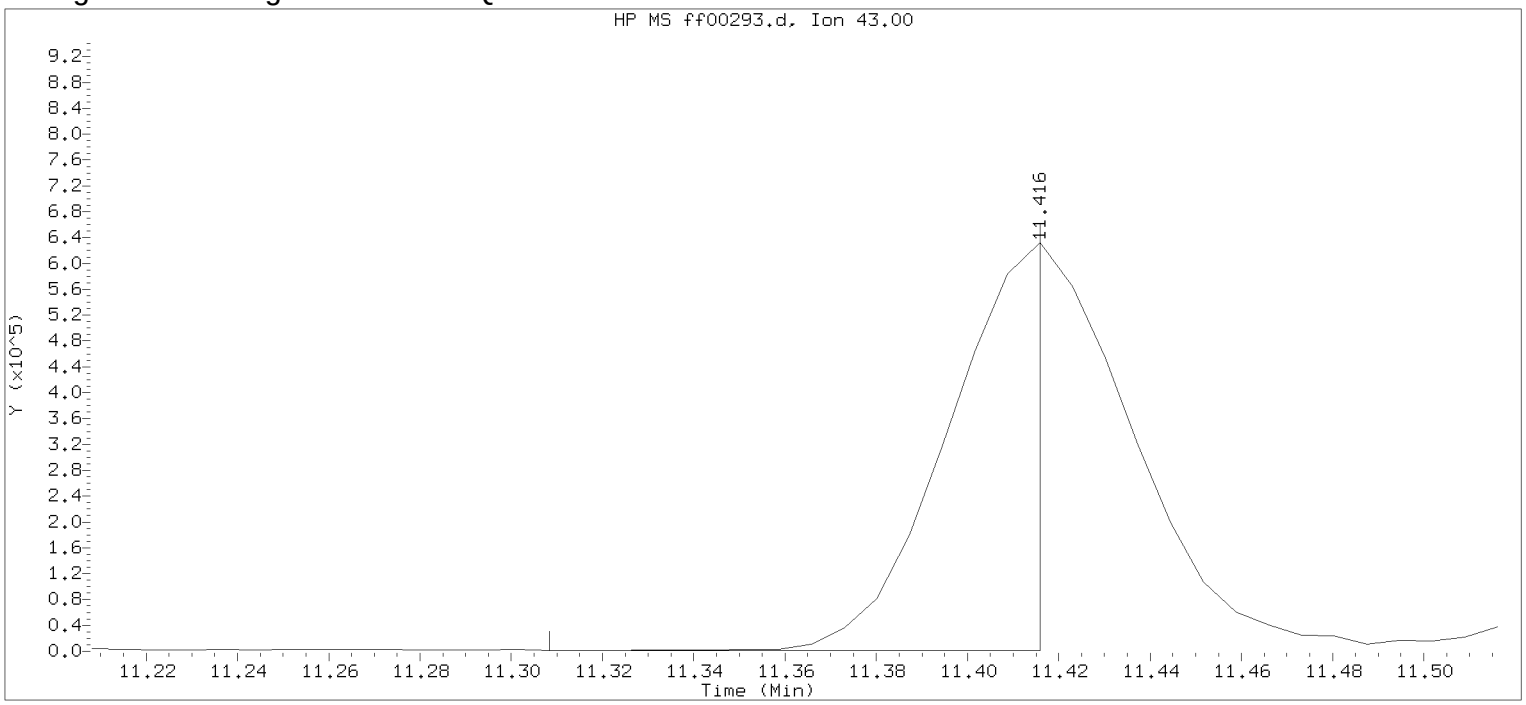
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/18/2018 at 15:09.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/19/2018 at 15:46.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18jun18.b/ff00293.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 14:35 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 13:31
Date, time and analyst ID of latest file update: 18-Jun-2018 15:04 Unknown

Sample Name: LCSF13 Lab Sample ID: LCSF13

Compound Number : 40
Compound Name : Ethyl Acetate
Scan Number : 1065
Retention Time (minutes): 11.416
Quant Ion : 43.00
Area : 854140
Concentration (ppb(v)) : 4.6243
Integration start scan : 1049 Integration stop scan: 1064
Y at integration start : 1019 Y at integration end: 1019

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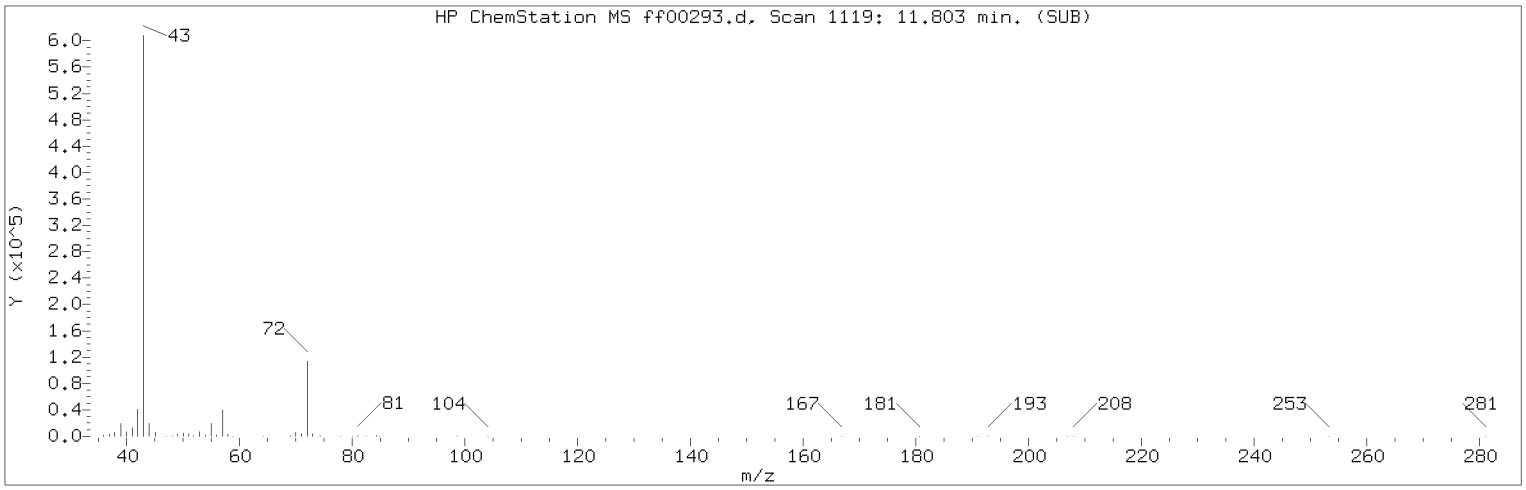
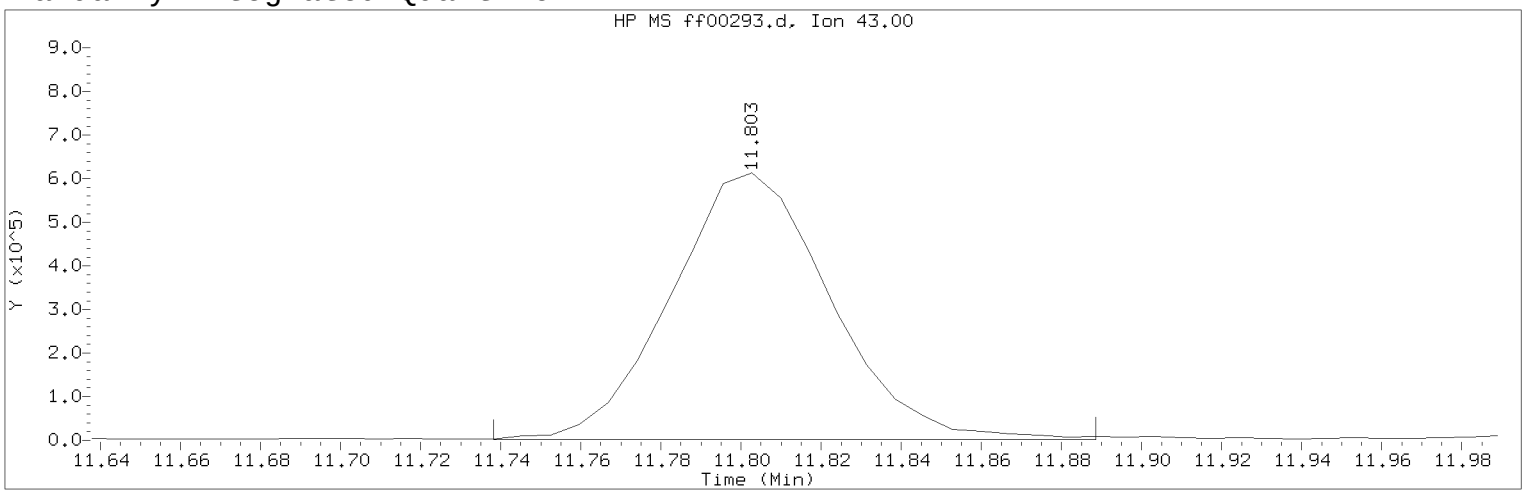
Target 3.5 esignature used. ED1 Page 1464

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18jun18.b/ff00293.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 14:35 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 13:31
Date, time and analyst ID of latest file update: 18-Jun-2018 15:09 jeb07445

Sample Name: LCSF13 Lab Sample ID: LCSF13

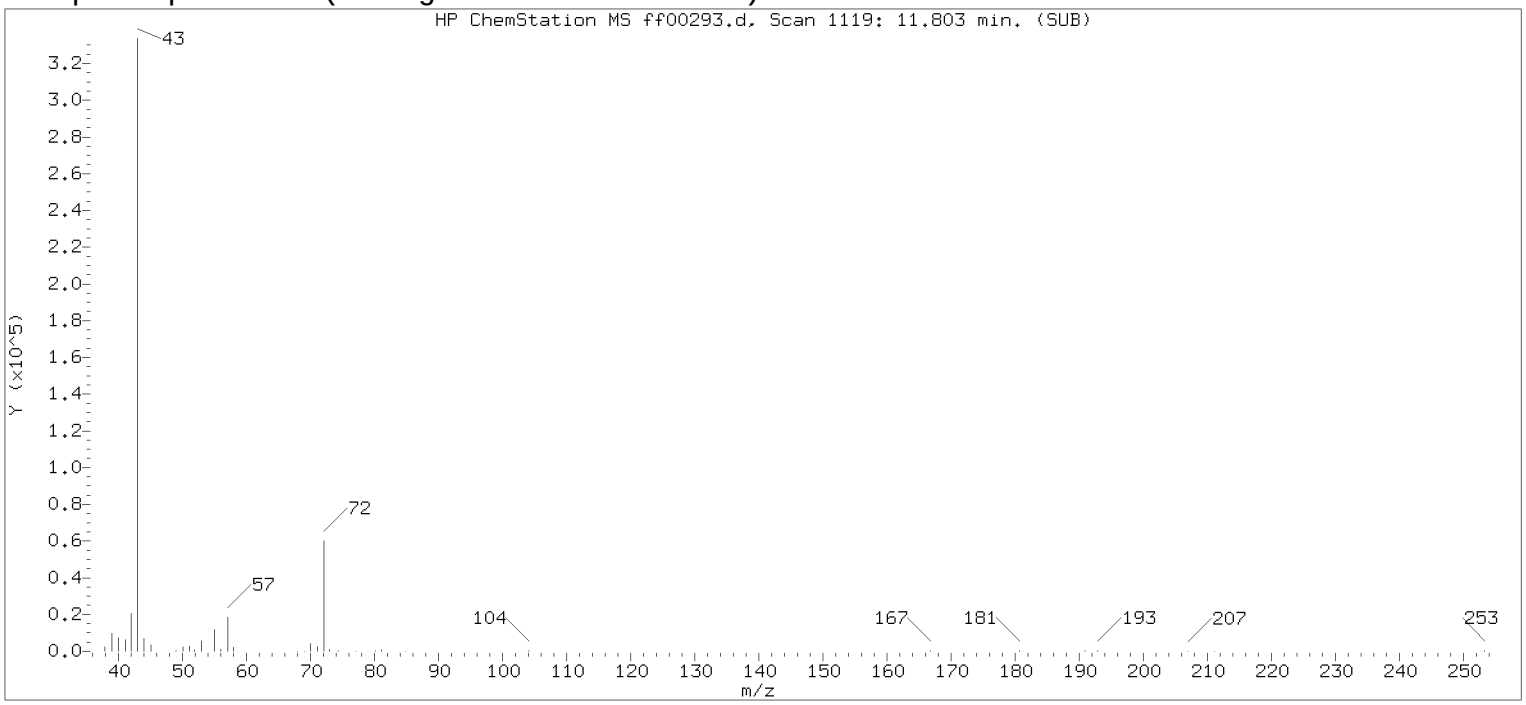
Compound Number : 45
Compound Name : 2-Butanone
Scan Number : 1119
Retention Time (minutes): 11.803
Quant Ion : 43.00
Area (flag) : 1697571M
Concentration (ppb(v)) : 9.9425
Integration start scan : 1109 Integration stop scan: 1130
Y at integration start : 1361 Y at integration end: 1361

Reason for manual integration: improper integration

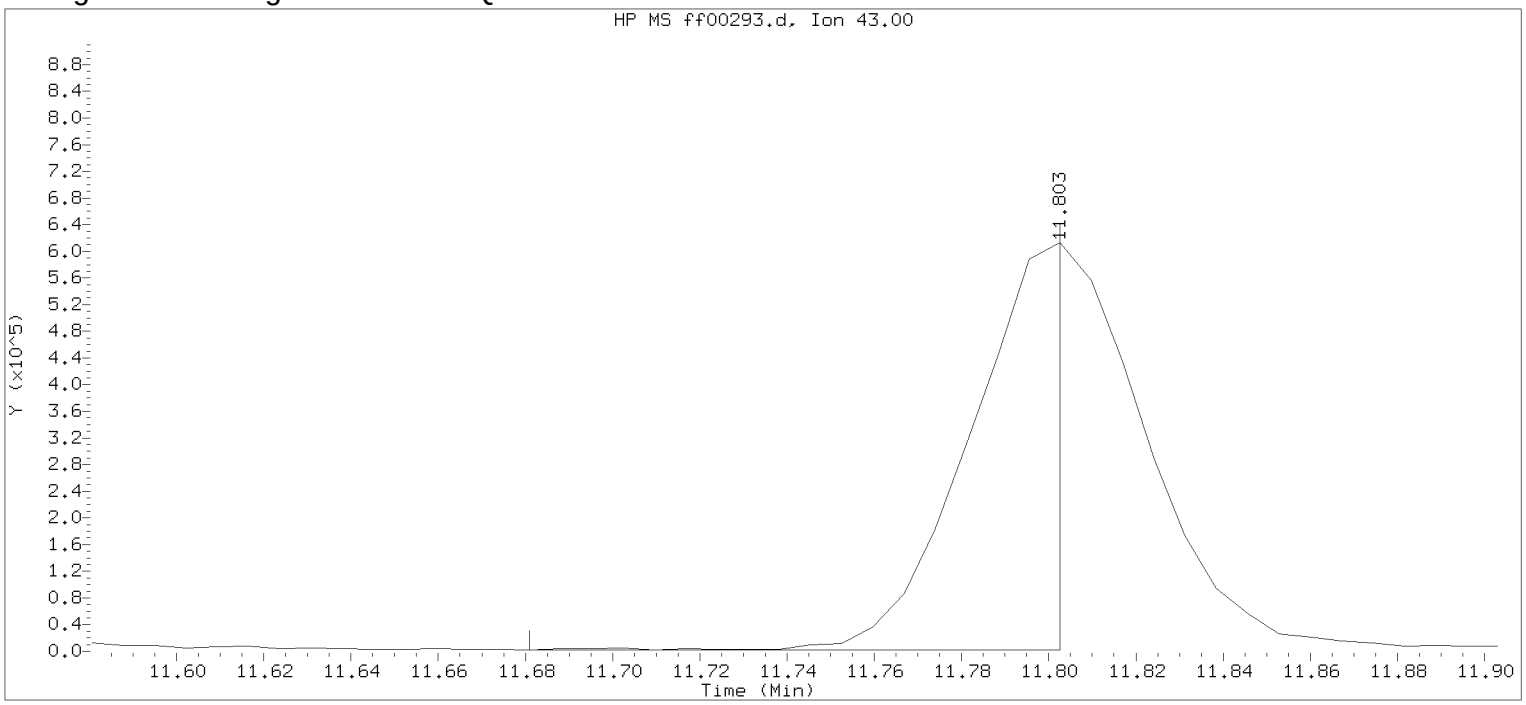
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/18/2018 at 15:09.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/19/2018 at 15:46.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18jun18.b/ff00293.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 14:35 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 13:31
Date, time and analyst ID of latest file update: 18-Jun-2018 15:04 Unknown

Sample Name: LCSF13 Lab Sample ID: LCSF13

Compound Number : 45
Compound Name : 2-Butanone
Scan Number : 1119
Retention Time (minutes): 11.803
Quant Ion : 43.00
Area : 844485
Concentration (ppb(v)) : 4.9461
Integration start scan : 1101 Integration stop scan: 1118
Y at integration start : 2396 Y at integration end: 2396

Digitally signed by Jacob E. Bailey on 06/18/2018 at 15:09.
Target 3.5 esignature used. LED1 Page 1445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18jun18.b/ff00294.d Injection date and time: **18-JUN-2018 15:06**
Data file Sample Info. Line: LCSDF13;200;F1816930AA;LCSDF13;0;3;LCSD; Instrument ID: **HP26379.i** Batch: **F1816930AA**
Date, time and analyst ID of latest file update: 18-Jun-2018 15:38 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun18.b/ff00292.d**

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 18-JUN-2018 13:31
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun18.b/ff00291.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.108(0.000)	1022	130	661813 (-5)	10.00		416726 - 972360
52) 1,4-Difluorobenzene	13.400(0.000)	1342	114	1723062 (3)	10.00		1002758 - 2339768
71) Chlorobenzene-d5	18.235(0.000)	2017	117	1898945 (3)	10.00		1106870 - 2582696

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)	3.909(0.000)	41	675712	10.544	10.54			0.5	1
2) Dichlorodifluoromethane	(1)	4.002(0.000)	85	2114767	10.900	10.90			0.2	1
3) Chlorodifluoromethane	(1)	4.088(0.001)	51	1656117	10.816	10.82			0.2	1
4) Freon 114	(1)	4.303(0.000)	85	2076219	10.191	10.19			0.2	1
5) Chloromethane	(1)	4.453(0.001)	50	877103	10.998	11.00			0.2	1
6) Vinyl Chloride	(1)	4.632(0.001)	62	476236	11.307	11.31			0.2	1
7) 1,3-Butadiene	(1)	4.668(0.000)	54	353171	9.860	9.86			0.4	2
8) Bromomethane	(1)	5.349(0.000)	94	697155	11.784	11.78			0.5	1
9) Chloroethane	(1)	5.621(0.000)	64	407812	10.927	10.93			0.2	1
10) Bromoethene	(1)	5.836(0.000)	106	603103	10.811	10.81			0.4	2
13) Dichlorofluoromethane	(1)	5.979(0.000)	67	1780070	11.504	11.50			0.2	1
12) Trichlorofluoromethane	(1)	5.879(0.000)	101	2158182	9.833	9.83			0.2	1
11) Pentane	(1)	5.864(0.000)	43	1310016	10.205	10.20			0.5	1
14) Ethanol	(1)	6.660(0.000)	45	271317	9.252	9.25			0.5	2
15) Freon123a	(1)	6.803(0.000)	67	1673408	11.283	11.28			0.2	1
20) Acrolein	(1)	7.505(0.000)	56	246918	10.366	10.37			1	2
16) 1,1-Dichloroethene	(1)	6.853(0.000)	61	1093200	10.438	10.44			0.2	1
17) Freon 113	(1)	6.917(0.000)	103	1195575	9.481	9.48			0.5	2
24) Acetone	(1)	8.078(-0.000)	43	1410150	10.979	10.98			0.5	2
19) Methyl Iodide	(1)	7.154(0.000)	142	1600055	9.497	9.50			0.2	1
18) Carbon Disulfide	(1)	6.939(0.000)	76	1893940	11.048	11.05			1	1
21) Isopropanol	(1)	7.712(0.000)	45	1261725	10.955	10.95			0.5	2
29) Acetonitrile	(1)	9.088(0.000)	41	826722	10.641	10.64			0.5	2
22) 3-Chloropropene	(1)	7.777(0.000)	41	1237879	13.208	13.21			0.2	1
23) Methylene Chloride	(1)	7.985(0.000)	84	725663	12.351	12.35			0.2	1
28) tert-Butyl Alcohol	(1)	8.629(-0.000)	59	1509497	11.023	11.02			0.5	1
32) Acrylonitrile	(1)	9.747(0.000)	53	659311	10.625	10.62			0.5	2
25) trans-1,2-Dichloroethene	(1)	8.307(0.000)	61	1057622	10.439	10.44			0.2	1
27) Methyl t-Butyl Ether	(1)	8.508(0.000)	73	1671871	10.121	10.12			0.2	1
26) Hexane	(1)	8.450(0.000)	56	835159	10.300	10.30			0.2	1
31) 1,1-Dichloroethane	(1)	9.632(0.000)	63	1527082	10.844	10.84			0.2	1
34) Vinyl Acetate	(1)	10.105(0.000)	43	2439429	12.353	12.35			1	1
30) Di-Isopropyl Ether	(1)	9.296(0.000)	45	2197567	9.767	9.77			0.2	1
33) Ethyl Tert-Butyl Ether	(1)	10.062(0.000)	59	1834723	9.862	9.86			0.2	1
35) cis-1,2-Dichloroethene	(1)	10.714(0.000)	61	935083	10.338	10.34			0.2	1
36) 1,2-Dichloroethene (total)	(1)		61	1992705	20.778	20.78			0.2	1
45) 2-Butanone	(1)	11.810(-0.000)	43	1737665	10.365	10.36			0.5	2
40) Ethyl Acetate	(1)	11.430(-0.000)	43	1819589	10.033	10.03			0.5	1
41) Methyl Acrylate	(1)	11.459(-0.000)	55	1280846	10.295	10.30			0.2	1
43) Tetrahydrofuran	(1)	11.552(-0.000)	42	915633	10.862	10.86			0.5	1
39) Chloroform	(1)	11.222(-0.000)	83	1768454	10.468	10.47			0.2	1
44) 1,1,1-Trichloroethane	(1)	11.652(-0.000)	97	1858279	9.833	9.83			0.2	1
38) Cyclohexane	(1)	11.122(-0.000)	56	1046753	9.859	9.86			0.2	1

Digitally signed by Jacob E. Bailey on 06/18/2018 at 15:39. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18jun18.b/ff00294.d Injection date and time: **18-JUN-2018 15:06**
Data file Sample Info. Line: LCSDF13;200;F1816930AA;LCSDF13;0;3;LCSD; Instrument ID: **HP26379.i** Batch: **F1816930AA**
Date, time and analyst ID of latest file update: 18-Jun-2018 15:38 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun18.b/ff00292.d**

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 18-JUN-2018 13:31
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun18.b/ff00291.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
42) Carbon Tetrachloride	(1)	11.516(-0.000)	117	1941873	9.829	9.83			0.2	1
48) Benzene	(2)	12.333(0.000)	78	2364850	11.285	11.28			0.2	1
50) 1,2-Dichloroethane	(2)	12.698(0.000)	62	1256835	11.136	11.14			0.2	1
46) Isooctane	(2)	12.060(-0.000)	57	3247305	11.006	11.01			0.2	1
49) Tert-Amyl Methyl Ether	(2)	12.497(-0.000)	73	1487429	10.413	10.41			0.2	1
47) Heptane	(2)	12.204(0.000)	71	620735	11.115	11.12			0.5	1
51) Trichloroethene	(2)	13.357(-0.000)	130	1047438	10.556	10.56			0.2	1
54) Ethyl Acrylate	(2)	14.238(-0.000)	55	1349655	9.404	9.40			0.2	1
55) 1,2-Dichloropropane	(2)	14.274(-0.000)	63	999314	10.859	10.86			0.2	1
53) Dibromomethane	(2)	14.095(-0.000)	174	1312895	10.776	10.78			0.2	1
58) 1,4-Dioxane	(2)	14.682(-0.000)	88	474140	11.181	11.18			0.5	1
57) Methyl Methacrylate	(2)	14.582(-0.000)	69	509072	9.225	9.22			0.2	1
56) Bromodichloromethane	(2)	14.345(-0.000)	83	1792626	10.426	10.43			0.2	1
59) cis-1,3-Dichloropropene	(2)	15.413(-0.000)	75	1146660	10.249	10.25			0.2	1
62) 4-Methyl-2-Pentanone	(2)	16.408(-0.000)	43	2015018	10.203	10.20			0.5	2
61) Toluene	(3)	15.807(0.000)	91	2638503	10.300	10.30			0.2	1
60) Octane	(3)	15.441(-0.000)	43	2023323	10.703	10.70			0.2	1
64) trans-1,3-Dichloropropene	(3)	16.466(0.000)	75	1194304	10.561	10.56			0.2	1
65) 1,3-Dichloropropene (total)	(3)		75	2340964	20.810	20.81			0.2	1
66) Ethyl Methacrylate	(3)	16.681(0.000)	69	942940	9.206	9.21			0.2	1
67) 1,1,2-Trichloroethane	(3)	16.738(-0.000)	97	1240583	10.287	10.29			0.2	1
63) Tetrachloroethene	(3)	16.437(0.000)	166	2074961	10.524	10.52			0.2	1
70) 2-Hexanone	(3)	17.741(-0.000)	43	1822874	9.395	9.40			0.5	2
68) Dibromochloromethane	(3)	17.032(0.000)	127	1502862	9.623	9.62			0.2	1
69) 1,2-Dibromoethane	(3)	17.447(0.000)	107	1664689	9.799	9.80			0.2	1
72) Chlorobenzene	(3)	18.264(-0.000)	112	2582121	10.035	10.03			0.2	1
74) 1,1,1,2-Tetrachloroethane	(3)	18.350(-0.000)	131	1605285	9.562	9.56			0.2	1
73) Ethylbenzene	(3)	18.278(-0.000)	91	3528031	10.055	10.05			0.2	1
75) m/p-Xylene	(3)	18.500(-0.000)	91	2442548	10.056	10.06			0.2	1
76) o-Xylene	(3)	19.195(-0.000)	91	2159741	9.261	9.26			0.2	1
77) Xylene (total)	(3)		91	4602289	19.317	19.32			0.2	1
78) Styrene	(3)	19.274(-0.000)	104	1900689	10.176	10.18			0.2	1
79) Bromoform	(3)	19.338(-0.000)	173	2168984	9.193	9.19			0.2	1
80) Cumene	(3)	19.675(-0.000)	105	3472550	10.023	10.02			0.2	1
82) Bromobenzene	(3)	20.334(-0.000)	156	1874696	10.183	10.18			0.2	1
83) 1,1,2,2-Tetrachloroethane	(3)	20.427(-0.000)	83	2561153	9.416	9.42			0.2	1
87) 1,2,3-Trichloropropane	(3)	20.670(-0.000)	110	839734	9.340	9.34			0.2	1
81) n-Propylbenzene	(3)	20.319(-0.000)	120	1093254	9.811	9.81			0.5	1
85) 2-Chlorotoluene	(3)	20.606(-0.000)	126	1224020	10.735	10.73			0.2	1
84) 4-Ethyltoluene	(3)	20.484(-0.000)	105	3729754	10.197	10.20			0.2	1
86) 1,3,5-Trimethylbenzene	(3)	20.613(-0.000)	105	3514274	10.368	10.37			0.2	1
88) Alpha Methyl Styrene	(3)	21.014(-0.000)	118	1276490	8.948	8.95			0.2	1
89) tert-Butylbenzene	(3)	21.129(-0.000)	119	3499520	10.860	10.86			0.5	1
90) 1,2,4-Trimethylbenzene	(3)	21.229(-0.000)	105	3342295	10.326	10.33			0.2	1
91) sec-Butylbenzene	(3)	21.387(-0.000)	105	4889603	10.159	10.16			0.2	1
93) 1,3-Dichlorobenzene	(3)	21.723(-0.000)	146	2846622	9.152	9.15			0.2	1
94) 1,4-Dichlorobenzene	(3)	21.838(-0.000)	146	2687801	8.959	8.96			0.2	1
92) p-Isopropyltoluene	(3)	21.566(-0.000)	119	3829937	9.892	9.89			0.2	1
96) Benzyl Chloride	(3)	22.167(-0.000)	126	712642	9.446	9.45			0.5	1
98) 1,2-Dichlorobenzene	(3)	22.425(-0.000)	146	2546536	9.125	9.12			0.2	1
95) n-Butylbenzene	(3)	22.139(-0.000)	92	2097809	9.322	9.32			0.2	1
97) Hexachloroethane	(3)	22.390(-0.000)	117	1378838	8.867	8.87			0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)	23.586(-0.000)	157	1149797	8.086	8.09			0.2	1
101) 1,2,4-Trichlorobenzene	(3)	24.646(-0.000)	180	1453805	7.272	7.27			0.5	2

Digitally signed by Jacob E. Bailey on 06/18/2018 at 15:39. Target 3.5 esignature user ID: jeb07445

Data file: /chem/HP26379.i/18jun18.b/ff00294.d Injection date and time: **18-JUN-2018 15:06**
Data file Sample Info. Line: LCSDF13;200;F1816930AA;LCSDF13;0;3;LCSD; Instrument ID: **HP26379.i** Batch: **F1816930AA**
Date, time and analyst ID of latest file update: 18-Jun-2018 15:38 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun18.b/ff00292.d**

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 18-JUN-2018 13:31
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun18.b/ff00291.d**

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

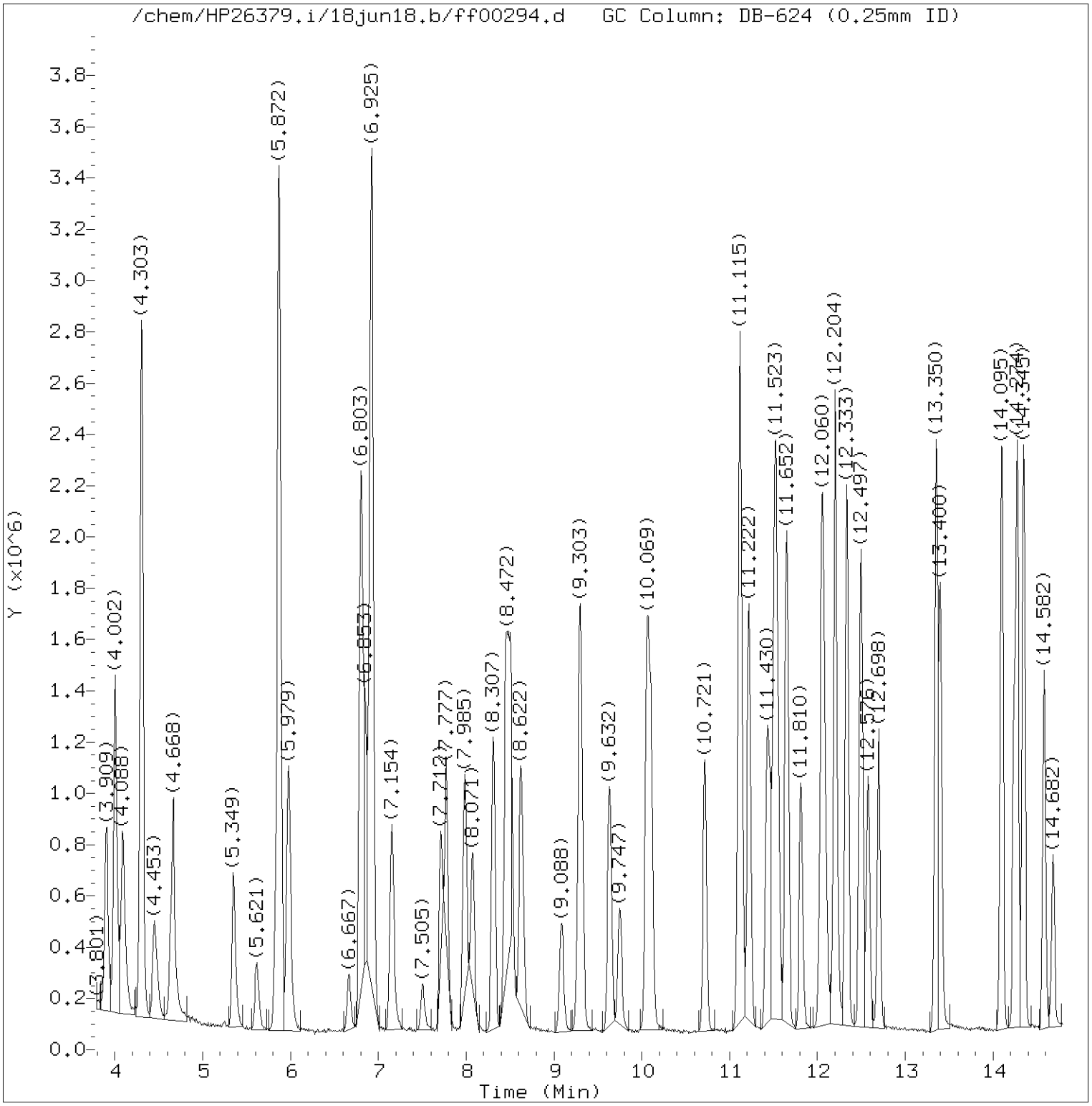
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
100) Hexachlorobutadiene	(3)	24.553(-0.000)	225	1853150	7.244	7.24			0.4	2
102) Naphthalene	(3)	25.233(-0.000)	128	2211411	7.560	7.56			0.4	1

Total number of targets = 99

Digitally signed by Jacob E. Bailey on 06/18/2018 at 15:39. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/19/2018 at 15:46. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

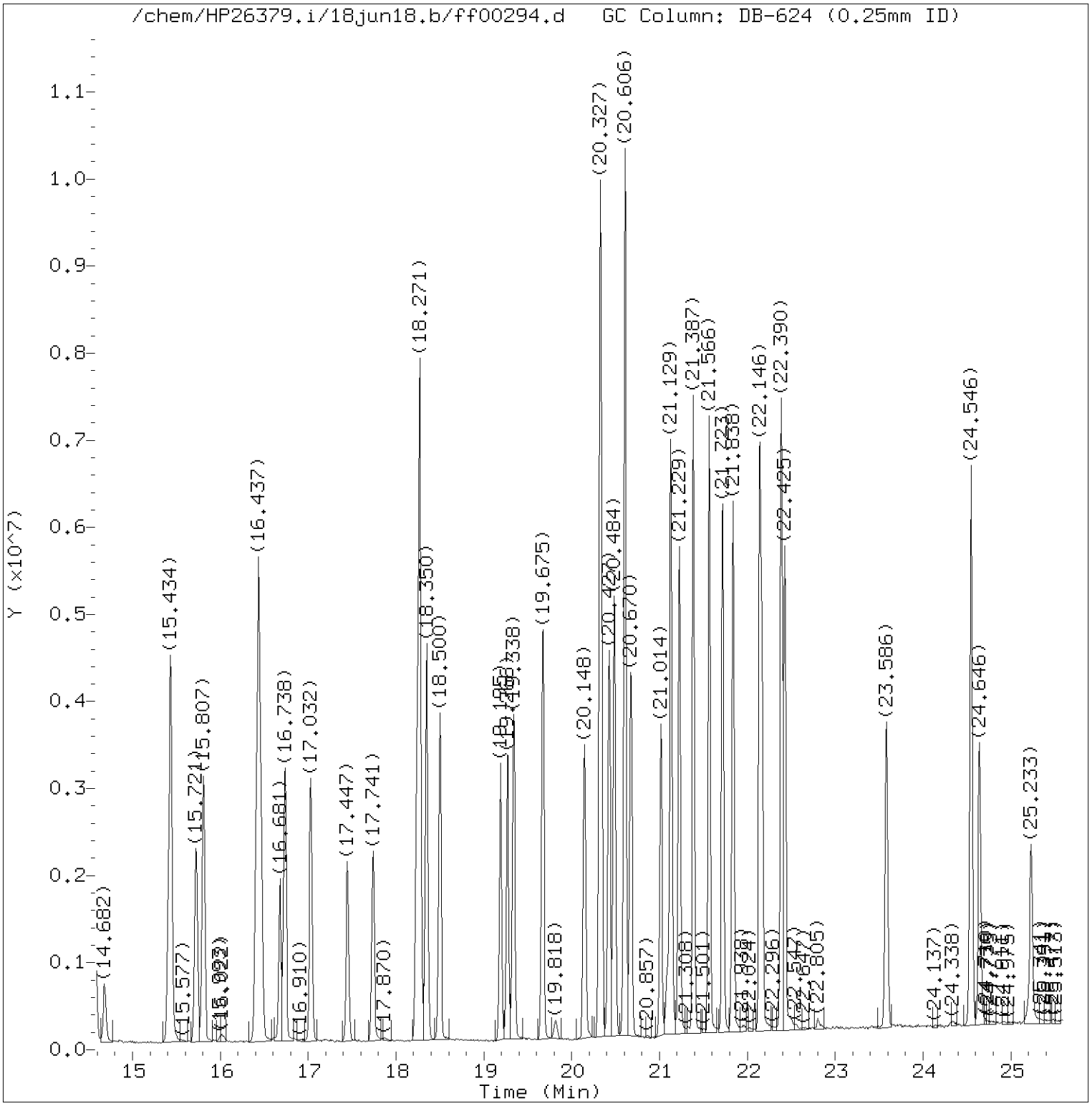
Target Revision 3.5

Data File: /chem/HP26379.i/18jun18.b/ff00294.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 15:06 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 13:31
Date, time and analyst ID of latest file update: 18-Jun-2018 15:38 jeb07445

Sample Name: LCSDF13 Lab Sample ID: LCSDF13

Digitally signed by Jacob E. Bailey
on 06/18/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun18.b/ff00294.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 15:06 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 13:31
Date, time and analyst ID of latest file update: 18-Jun-2018 15:38 jeb07445

Sample Name: LCSDF13 Lab Sample ID: LCSDF13

Digitally signed by Jacob E. Bailey
on 06/18/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun18.b/ff00294.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 15:06 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 13:31
Date, time and analyst ID of latest file update: 18-Jun-2018 15:38 jeb07445

Sample Name: LCSDF13 Lab Sample ID: LCSDF13

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.909	41	675712	10.544
2) Dichlorodifluoromethane	(1)	4.002	85	2114767	10.900
3) Chlorodifluoromethane	(1)	4.088	51	1656117	10.816
4) Freon 114	(1)	4.303	85	2076219	10.191
5) Chloromethane	(1)	4.453	50	877103	10.998
6) Vinyl Chloride	(1)	4.632	62	476236	11.307
7) 1,3-Butadiene	(1)	4.668	54	353171	9.860
8) Bromomethane	(1)	5.349	94	697155	11.784
9) Chloroethane	(1)	5.621	64	407812	10.927
10) Bromoethene	(1)	5.836	106	603103	10.811
11) Pentane	(1)	5.864	43	1310016	10.205
12) Trichlorofluoromethane	(1)	5.879	101	2158182	9.833
13) Dichlorofluoromethane	(1)	5.979	67	1780070	11.504
14) Ethanol	(1)	6.660	45	271317	9.252
15) Freon123a	(1)	6.803	67	1673408	11.283
16) 1,1-Dichloroethene	(1)	6.853	61	1093200	10.438
17) Freon 113	(1)	6.917	103	1195575	9.481
18) Carbon Disulfide	(1)	6.939	76	1893940	11.048
19) Methyl Iodide	(1)	7.154	142	1600055	9.497
20) Acrolein	(1)	7.505	56	246918	10.366
21) Isopropanol	(1)	7.712	45	1261725	10.955
22) 3-Chloropropene	(1)	7.777	41	1237879	13.208
23) Methylene Chloride	(1)	7.985	84	725663	12.351
24) Acetone	(1)	8.078	43	1410150	10.979
25) trans-1,2-Dichloroethene	(1)	8.307	61	1057622	10.439
26) Hexane	(1)	8.450	56	835159	10.300
27) Methyl t-Butyl Ether	(1)	8.508	73	1671871	10.121
28) tert-Butyl Alcohol	(1)	8.629	59	1509497	11.023
29) Acetonitrile	(1)	9.088	41	826722	10.641
30) Di-Isopropyl Ether	(1)	9.296	45	2197567	9.767
31) 1,1-Dichloroethane	(1)	9.632	63	1527082	10.844
32) Acrylonitrile	(1)	9.747	53	659311	10.625
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	1834723	9.862
34) Vinyl Acetate	(1)	10.105	43	2439429	12.353
35) cis-1,2-Dichloroethene	(1)	10.714	61	935083	10.338
36) 1,2-Dichloroethene (total)	(1)		61	1992705	20.778
37)*Bromochloromethane	(1)	11.108	130	661813	10.000
38) Cyclohexane	(1)	11.122	56	1046753	9.859

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/18/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun18.b/ff00294.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 15:06 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 13:31
Date, time and analyst ID of latest file update: 18-Jun-2018 15:38 jeb07445

Sample Name: LCSDF13 Lab Sample ID: LCSDF13

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.222	83	1768454	10.468
40) Ethyl Acetate	(1)	11.430	43	1819589	10.033
41) Methyl Acrylate	(1)	11.459	55	1280846	10.295
42) Carbon Tetrachloride	(1)	11.516	117	1941873	9.829
43) Tetrahydrofuran	(1)	11.552	42	915633	10.862
44) 1,1,1-Trichloroethane	(1)	11.652	97	1858279	9.833
45) 2-Butanone	(1)	11.810	43	1737665	10.365
46) Isooctane	(2)	12.060	57	3247305	11.006
47) Heptane	(2)	12.204	71	620735	11.115
48) Benzene	(2)	12.333	78	2364850	11.285
49) Tert-Amyl Methyl Ether	(2)	12.497	73	1487429	10.413
50) 1,2-Dichloroethane	(2)	12.698	62	1256835	11.136
51) Trichloroethene	(2)	13.357	130	1047438	10.556
52)*1,4-Difluorobenzene	(2)	13.400	114	1723062	10.000
53) Dibromomethane	(2)	14.095	174	1312895	10.776
54) Ethyl Acrylate	(2)	14.238	55	1349655	9.404
55) 1,2-Dichloropropane	(2)	14.274	63	999314	10.859
56) Bromodichloromethane	(2)	14.345	83	1792626	10.426
57) Methyl Methacrylate	(2)	14.582	69	509072	9.225
58) 1,4-Dioxane	(2)	14.682	88	474140	11.181
59) cis-1,3-Dichloropropene	(2)	15.413	75	1146660	10.249
60) Octane	(3)	15.441	43	2023323	10.703
61) Toluene	(3)	15.807	91	2638503	10.300
62) 4-Methyl-2-Pentanone	(2)	16.408	43	2015018	10.203
63) Tetrachloroethene	(3)	16.437	166	2074961	10.524
64) trans-1,3-Dichloropropene	(3)	16.466	75	1194304	10.561
65) 1,3-Dichloropropene (total)	(3)		75	2340964	20.810
66) Ethyl Methacrylate	(3)	16.681	69	942940	9.206
67) 1,1,2-Trichloroethane	(3)	16.738	97	1240583	10.287
68) Dibromochloromethane	(3)	17.032	127	1502862	9.623
69) 1,2-Dibromoethane	(3)	17.447	107	1664689	9.799
70) 2-Hexanone	(3)	17.741	43	1822874	9.395
71)*Chlorobenzene-d5	(3)	18.235	117	1898945	10.000
72) Chlorobenzene	(3)	18.264	112	2582121	10.035
73) Ethylbenzene	(3)	18.278	91	3528031	10.055
74) 1,1,1,2-Tetrachloroethane	(3)	18.350	131	1605285	9.562
75) m/p-Xylene	(3)	18.500	91	2442548	10.056
76) o-Xylene	(3)	19.195	91	2159741	9.261

* = Compound is an internal standard.

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on 06/18/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun18.b/ff00294.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 15:06 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 13:31
Date, time and analyst ID of latest file update: 18-Jun-2018 15:38 jeb07445

Sample Name: LCSDF13 Lab Sample ID: LCSDF13

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	4602289	19.317
78) Styrene	(3)	19.274	104	1900689	10.176
79) Bromoform	(3)	19.338	173	2168984	9.193
80) Cumene	(3)	19.675	105	3472550	10.023
81) n-Propylbenzene	(3)	20.319	120	1093254	9.811
82) Bromobenzene	(3)	20.334	156	1874696	10.183
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	2561153	9.416
84) 4-Ethyltoluene	(3)	20.484	105	3729754	10.197
85) 2-Chlorotoluene	(3)	20.606	126	1224020	10.735
86) 1,3,5-Trimethylbenzene	(3)	20.613	105	3514274	10.368
87) 1,2,3-Trichloropropane	(3)	20.670	110	839734	9.340
88) Alpha Methyl Styrene	(3)	21.014	118	1276490	8.948
89) tert-Butylbenzene	(3)	21.129	119	3499520	10.860
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	3342295	10.326
91) sec-Butylbenzene	(3)	21.387	105	4889603	10.159
92) p-Isopropyltoluene	(3)	21.566	119	3829937	9.892
93) 1,3-Dichlorobenzene	(3)	21.723	146	2846622	9.152
94) 1,4-Dichlorobenzene	(3)	21.838	146	2687801	8.959
95) n-Butylbenzene	(3)	22.139	92	2097809	9.322
96) Benzyl Chloride	(3)	22.167	126	712642	9.446
97) Hexachloroethane	(3)	22.390	117	1378838	8.867
98) 1,2-Dichlorobenzene	(3)	22.425	146	2546536	9.125
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	1149797	8.086
100) Hexachlorobutadiene	(3)	24.553	225	1853150	7.244
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	1453805	7.272
102) Naphthalene	(3)	25.233	128	2211411	7.560

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on 06/18/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

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

cc518

Data file: /chem/HP26379.i/18jun18.b/ff00304.d Injection date and time: **18-JUN-2018 20:31**
Data file Sample Info. Line: cc518;200;F1816930AA;cc518;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1816930AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 12:19 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun18.b/ff00292.d**

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 18-JUN-2018 19:11
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun18.b/ff00291.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.108(0.000)	1022	130	618387 (-11)	10.00		416726 - 972360
52) 1,4-Difluorobenzene	13.400(0.000)	1342	114	1179660 (-29)	10.00		1002758 - 2339768
71) Chlorobenzene-d5	18.235(0.000)	2017	117	1444512 (-22)	10.00		1106870 - 2582696

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)			Not Detected					0.5	1
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)			Not Detected					0.2	1
7) 1,3-Butadiene	(1)			Not Detected					0.4	2
8) Bromomethane	(1)			Not Detected					0.5	1
9) Chloroethane	(1)			Not Detected					0.2	1
10) Bromoethene	(1)			Not Detected					0.4	2
13) Dichlorofluoromethane	(1)			Not Detected					0.2	1
12) Trichlorofluoromethane	(1)			Not Detected					0.2	1
11) Pentane	(1)			Not Detected					0.5	1
14) Ethanol	(1)			Not Detected					0.5	2
15) Freon123a	(1)			Not Detected					0.2	1
20) Acrolein	(1)			Not Detected					1	2
16) 1,1-Dichloroethene	(1)			Not Detected					0.2	1
17) Freon 113	(1)			Not Detected					0.5	2
24) Acetone	(1)	8.092(-0.001)	43	66240	0.552	0.55		J	0.5	2
19) Methyl Iodide	(1)			Not Detected					0.2	1
18) Carbon Disulfide	(1)			Not Detected					1	1
21) Isopropanol	(1)			Not Detected					0.5	2
29) Acetonitrile	(1)			Not Detected					0.5	2
22) 3-Chloropropene	(1)			Not Detected					0.2	1
23) Methylene Chloride	(1)			Not Detected					0.2	1
28) tert-Butyl Alcohol	(1)			Not Detected					0.5	1
32) Acrylonitrile	(1)			Not Detected					0.5	2
25) trans-1,2-Dichloroethene	(1)			Not Detected					0.2	1
27) Methyl t-Butyl Ether	(1)			Not Detected					0.2	1
26) Hexane	(1)			Not Detected					0.2	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.2	1
34) Vinyl Acetate	(1)			Not Detected					1	1
30) Di-Isopropyl Ether	(1)			Not Detected					0.2	1
33) Ethyl Tert-Butyl Ether	(1)			Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.2	1
36) 1,2-Dichloroethene (total)	(1)			Not Detected					0.2	1
45) 2-Butanone	(1)			Not Detected					0.5	2
40) Ethyl Acetate	(1)			Not Detected					0.5	1
41) Methyl Acrylate	(1)			Not Detected					0.2	1
43) Tetrahydrofuran	(1)			Not Detected					0.5	1
39) Chloroform	(1)			Not Detected					0.2	1
44) 1,1,1-Trichloroethane	(1)			Not Detected					0.2	1
38) Cyclohexane	(1)			Not Detected					0.2	1

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18jun18.b/ff00304.d Injection date and time: **18-JUN-2018 20:31**
Data file Sample Info. Line: cc518;200;F1816930AA;cc518;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1816930AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 12:19 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun18.b/ff00292.d**

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 18-JUN-2018 19:11
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun18.b/ff00291.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
42) Carbon Tetrachloride	(1)				Not Detected					0.2	1
48) Benzene	(2)				Not Detected					0.2	1
50) 1,2-Dichloroethane	(2)				Not Detected					0.2	1
46) Isooctane	(2)				Not Detected					0.2	1
49) Tert-Amyl Methyl Ether	(2)				Not Detected					0.2	1
47) Heptane	(2)				Not Detected					0.5	1
51) Trichloroethene	(2)				Not Detected					0.2	1
54) Ethyl Acrylate	(2)				Not Detected					0.2	1
55) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
53) Dibromomethane	(2)				Not Detected					0.2	1
58) 1,4-Dioxane	(2)				Not Detected					0.5	1
57) Methyl Methacrylate	(2)				Not Detected					0.2	1
56) Bromodichloromethane	(2)				Not Detected					0.2	1
59) cis-1,3-Dichloropropene	(2)				Not Detected					0.2	1
62) 4-Methyl-2-Pentanone	(2)				Not Detected					0.5	2
61) Toluene	(3)				Not Detected					0.2	1
60) Octane	(3)				Not Detected					0.2	1
64) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
65) 1,3-Dichloropropene (total)	(3)				Not Detected					0.2	1
66) Ethyl Methacrylate	(3)				Not Detected					0.2	1
67) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
63) Tetrachloroethene	(3)				Not Detected					0.2	1
70) 2-Hexanone	(3)				Not Detected					0.5	2
68) Dibromochloromethane	(3)				Not Detected					0.2	1
69) 1,2-Dibromoethane	(3)				Not Detected					0.2	1
72) Chlorobenzene	(3)				Not Detected					0.2	1
74) 1,1,1,2-Tetrachloroethane	(3)				Not Detected					0.2	1
73) Ethylbenzene	(3)				Not Detected					0.2	1
75) m/p-Xylene	(3)				Not Detected					0.2	1
76) o-Xylene	(3)				Not Detected					0.2	1
77) Xylene (total)	(3)				Not Detected					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
82) Bromobenzene	(3)				Not Detected					0.2	1
83) 1,1,2,2-Tetrachloroethane	(3)				Not Detected					0.2	1
87) 1,2,3-Trichloropropane	(3)				Not Detected					0.2	1
81) n-Propylbenzene	(3)				Not Detected					0.5	1
85) 2-Chlorotoluene	(3)				Not Detected					0.2	1
84) 4-Ethyltoluene	(3)				Not Detected					0.2	1
86) 1,3,5-Trimethylbenzene	(3)				Not Detected					0.2	1
88) Alpha Methyl Styrene	(3)				Not Detected					0.2	1
89) tert-Butylbenzene	(3)				Not Detected					0.5	1
90) 1,2,4-Trimethylbenzene	(3)				Not Detected					0.2	1
91) sec-Butylbenzene	(3)				Not Detected					0.2	1
93) 1,3-Dichlorobenzene	(3)				Not Detected					0.2	1
94) 1,4-Dichlorobenzene	(3)				Not Detected					0.2	1
92) p-Isopropyltoluene	(3)				Not Detected					0.2	1
96) Benzyl Chloride	(3)				Not Detected					0.5	1
98) 1,2-Dichlorobenzene	(3)				Not Detected					0.2	1
95) n-Butylbenzene	(3)				Not Detected					0.2	1
97) Hexachloroethane	(3)				Not Detected					0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)				Not Detected					0.2	1
101) 1,2,4-Trichlorobenzene	(3)				Not Detected					0.5	2

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18jun18.b/ff00304.d Injection date and time: **18-JUN-2018 20:31**
Data file Sample Info. Line: cc518;200;F1816930AA;cc518;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1816930AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 12:19 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun18.b/ff00292.d**

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 18-JUN-2018 19:11
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun18.b/ff00291.d**

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

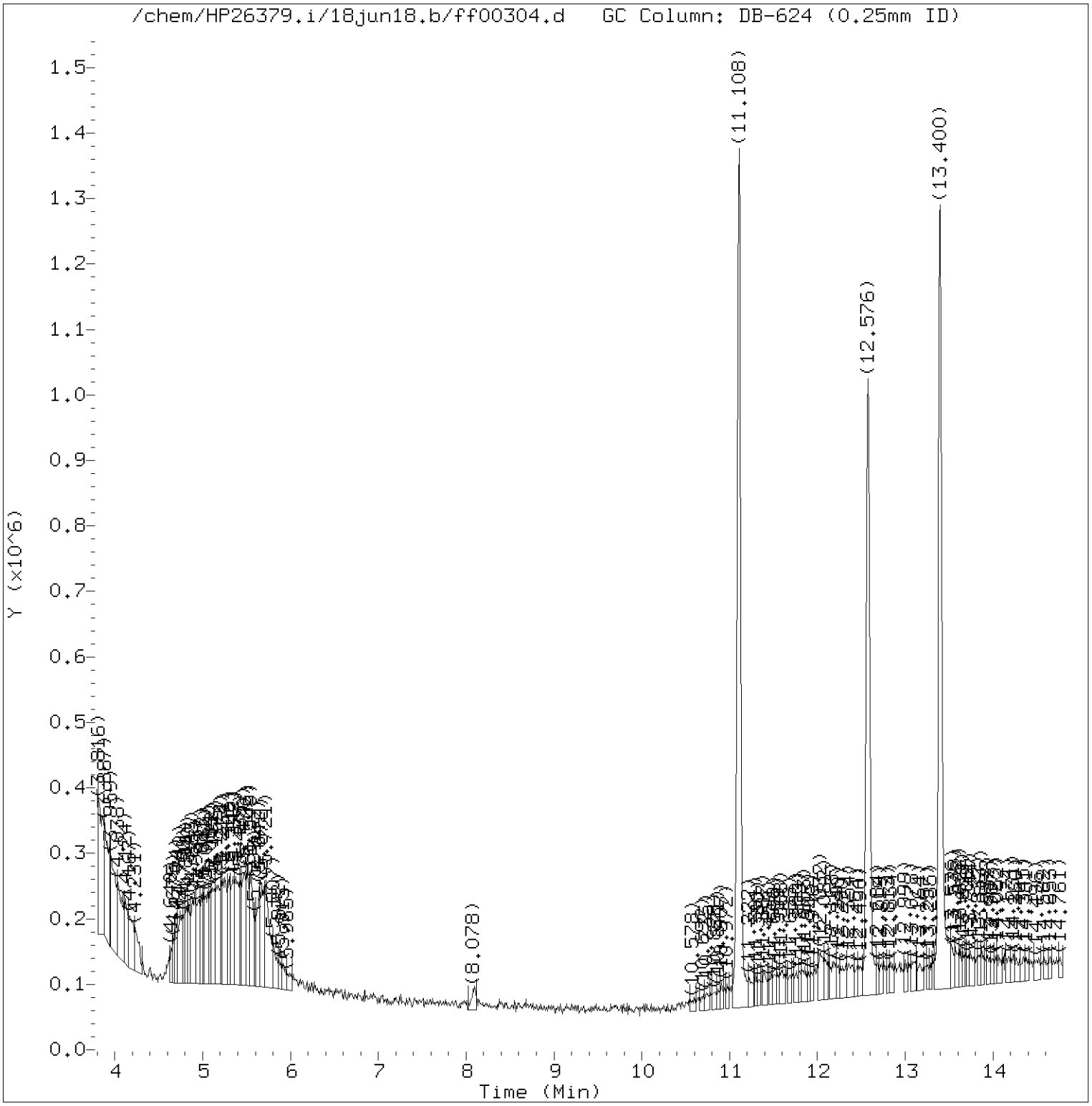
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
100) Hexachlorobutadiene	(3)				Not Detected					0.4	2
102) Naphthalene	(3)				Not Detected					0.4	1

Total number of targets = 99

Digitally signed by Jacob E. Bailey on 06/19/2018 at 12:19. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/19/2018 at 15:50. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

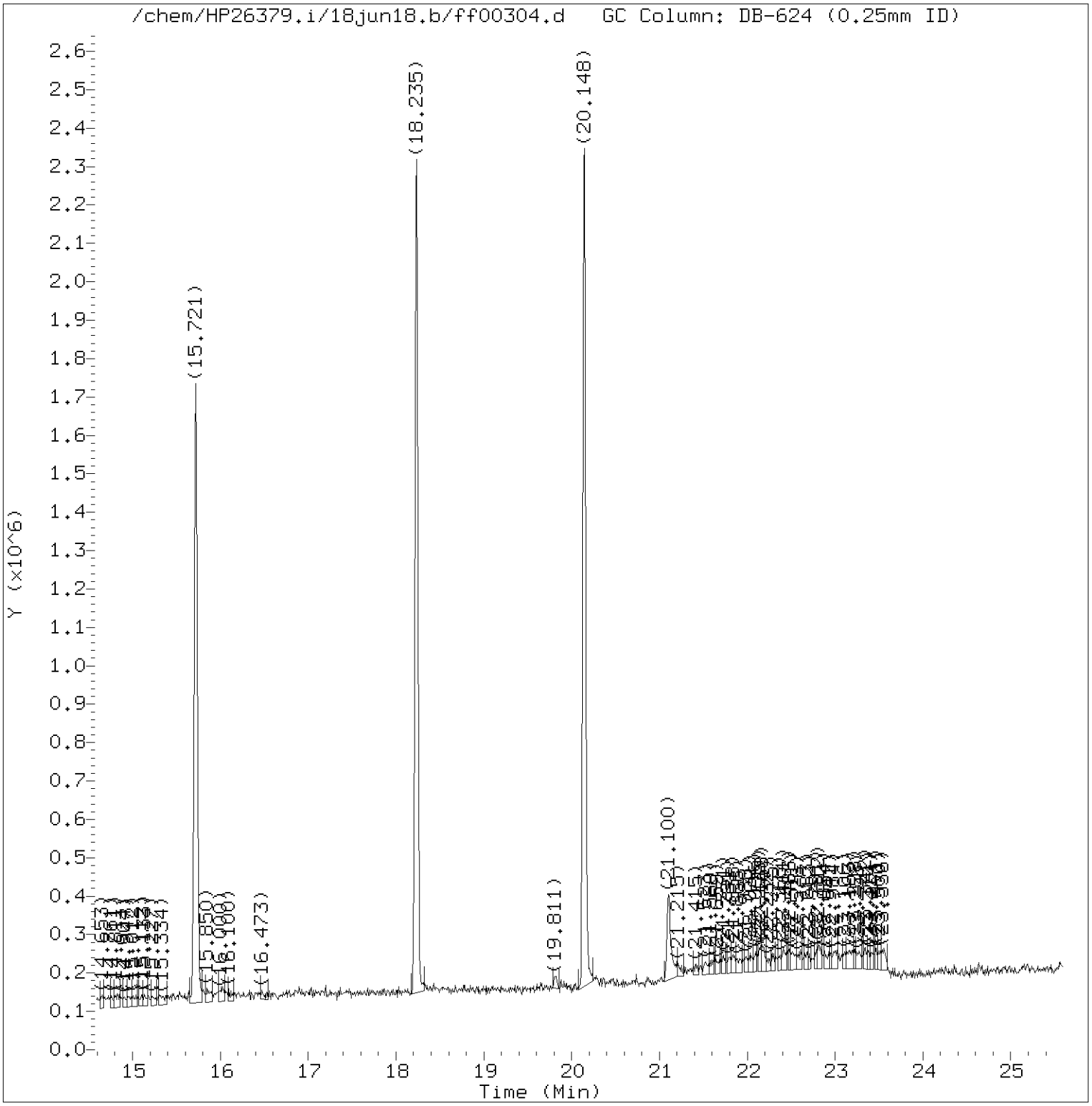
Target Revision 3.5

Data File: /chem/HP26379.i/18jun18.b/ff00304.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 20:31 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 19:11
Date, time and analyst ID of latest file update: 19-Jun-2018 12:19 jeb07445

Sample Name: cc518 Lab Sample ID: cc518

Digitally signed by Jacob E. Bailey
on 06/19/2018 at 12:19.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun18.b/ff00304.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 20:31 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 19:11
Date, time and analyst ID of latest file update: 19-Jun-2018 12:19 jeb07445

Sample Name: cc518 Lab Sample ID: cc518

Digitally signed by Jacob E. Bailey
on 06/19/2018 at 12:19.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun18.b/ff00304.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 20:31 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 19:11
Date, time and analyst ID of latest file update: 19-Jun-2018 12:19 jeb07445

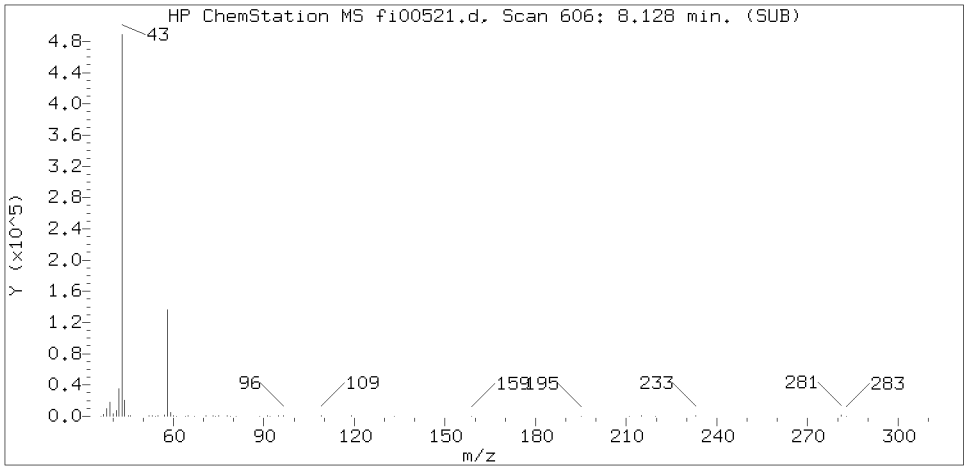
Sample Name: cc518 Lab Sample ID: cc518

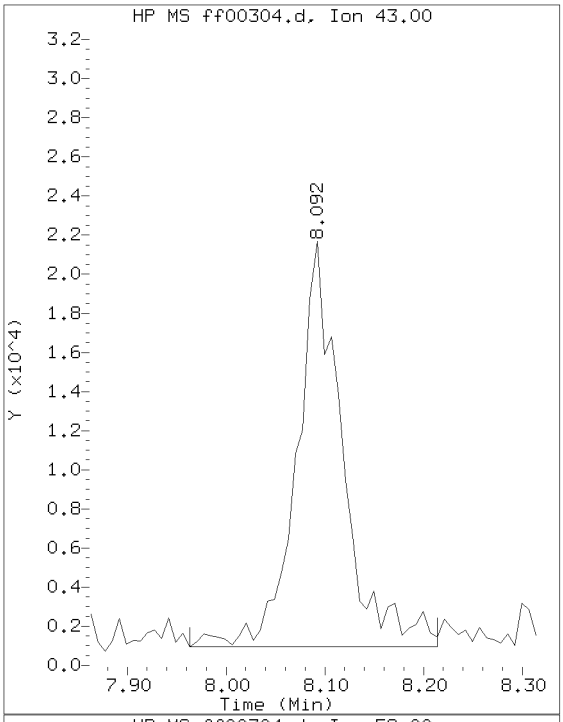
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
24) Acetone	(1)	8.092	43	66240	0.552
37)*Bromochloromethane	(1)	11.108	130	618387	10.000
52)*1,4-Difluorobenzene	(2)	13.400	114	1179660	10.000
71)*Chlorobenzene-d5	(3)	18.235	117	1444512	10.000

* = Compound is an internal standard.

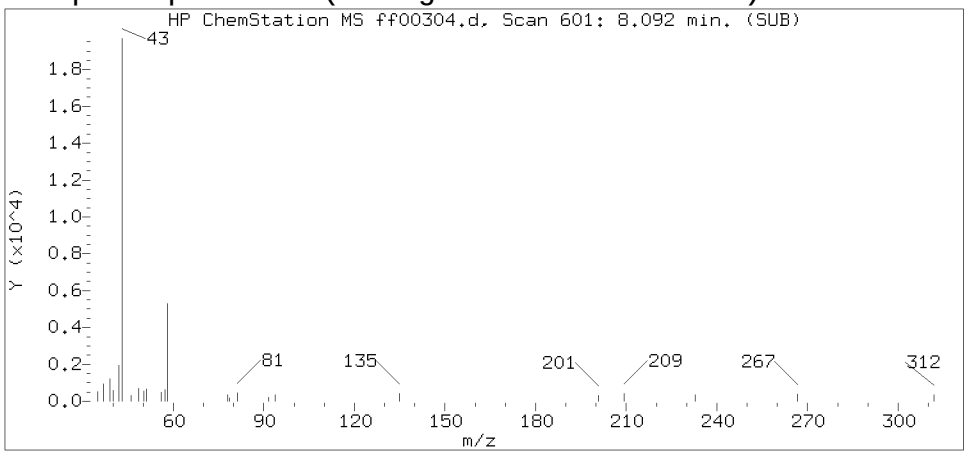
Digitally signed by Jacob E. Bailey
on 06/19/2018 at 12:19.
Target 3.5 esignature user ID: jeb07445

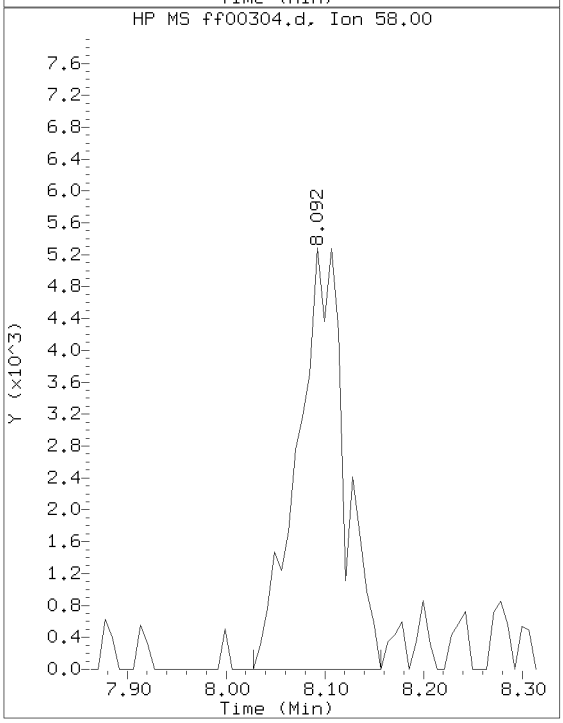
Reference Standard Spectrum for Acetone



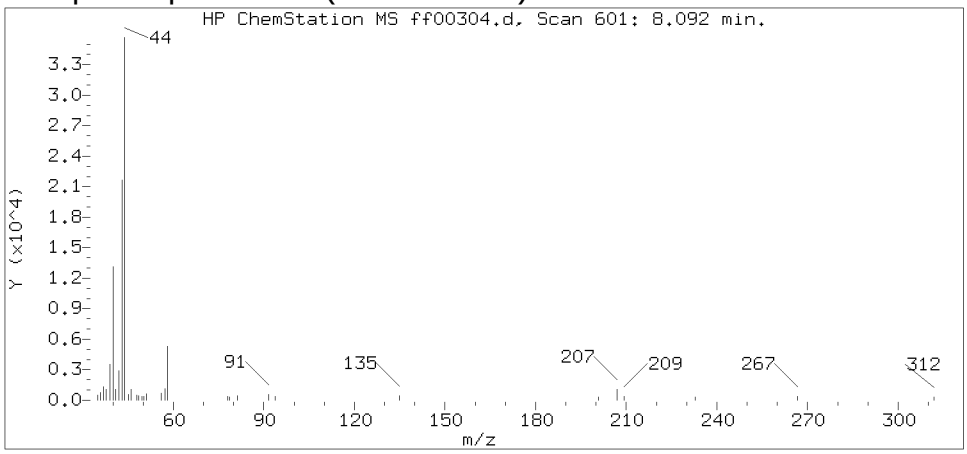


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18jun18.b/ff00304.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 20:31 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 19:11
Date, time and analyst ID of latest file update: 19-Jun-2018 12:19 jeb07445

Sample Name: cc518 Lab Sample ID: cc518

Compound Number : 24
Compound Name : Acetone
Scan Number : 601
Retention Time (minutes): 8.092
Relative Retention Time :-0.00193
Quant Ion : 43.00
Area (flag) : 66240
Concentration (ppb(v)) : 0.5519

Digitally signed by Jacob E. Bailey on 06/19/2018 at 12:19.
Target 3.5 esignature user ID: jeb07445

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

Data file: /chem/HP26379.i/18jun18.b/ff00305.d Injection date and time: **18-JUN-2018 21:02**
Data file Sample Info. Line: cc525;200;F1816930AA;cc525;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1816930AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 12:19 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun18.b/ff00292.d**

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 18-JUN-2018 19:11
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun18.b/ff00291.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.108(0.000)	1022	130	630752 (-9)	10.00		416726 - 972360
52) 1,4-Difluorobenzene	13.400(0.000)	1342	114	1133538 (-32)	10.00		1002758 - 2339768
71) Chlorobenzene-d5	18.235(0.000)	2017	117	1435787 (-22)	10.00		1106870 - 2582696

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)			Not Detected					0.5	1
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)			Not Detected					0.2	1
7) 1,3-Butadiene	(1)			Not Detected					0.4	2
8) Bromomethane	(1)			Not Detected					0.5	1
9) Chloroethane	(1)			Not Detected					0.2	1
10) Bromoethene	(1)			Not Detected					0.4	2
13) Dichlorofluoromethane	(1)			Not Detected					0.2	1
12) Trichlorofluoromethane	(1)			Not Detected					0.2	1
11) Pentane	(1)			Not Detected					0.5	1
14) Ethanol	(1)			Not Detected					0.5	2
15) Freon123a	(1)			Not Detected					0.2	1
20) Acrolein	(1)			Not Detected					1	2
16) 1,1-Dichloroethene	(1)			Not Detected					0.2	1
17) Freon 113	(1)			Not Detected					0.5	2
24) Acetone	(1)			Not Detected					0.5	2
19) Methyl Iodide	(1)			Not Detected					0.2	1
18) Carbon Disulfide	(1)			Not Detected					1	1
21) Isopropanol	(1)			Not Detected					0.5	2
29) Acetonitrile	(1)			Not Detected					0.5	2
22) 3-Chloropropene	(1)			Not Detected					0.2	1
23) Methylene Chloride	(1)			Not Detected					0.2	1
28) tert-Butyl Alcohol	(1)			Not Detected					0.5	1
32) Acrylonitrile	(1)			Not Detected					0.5	2
25) trans-1,2-Dichloroethene	(1)			Not Detected					0.2	1
27) Methyl t-Butyl Ether	(1)			Not Detected					0.2	1
26) Hexane	(1)			Not Detected					0.2	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.2	1
34) Vinyl Acetate	(1)			Not Detected					1	1
30) Di-Isopropyl Ether	(1)			Not Detected					0.2	1
33) Ethyl Tert-Butyl Ether	(1)			Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.2	1
36) 1,2-Dichloroethene (total)	(1)			Not Detected					0.2	1
45) 2-Butanone	(1)			Not Detected					0.5	2
40) Ethyl Acetate	(1)			Not Detected					0.5	1
41) Methyl Acrylate	(1)			Not Detected					0.2	1
43) Tetrahydrofuran	(1)			Not Detected					0.5	1
39) Chloroform	(1)			Not Detected					0.2	1
44) 1,1,1-Trichloroethane	(1)			Not Detected					0.2	1
38) Cyclohexane	(1)			Not Detected					0.2	1

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18jun18.b/ff00305.d Injection date and time: **18-JUN-2018 21:02**
Data file Sample Info. Line: cc525;200;F1816930AA;cc525;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1816930AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 12:19 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun18.b/ff00292.d**

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 18-JUN-2018 19:11
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun18.b/ff00291.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
42) Carbon Tetrachloride	(1)				Not Detected					0.2	1
48) Benzene	(2)				Not Detected					0.2	1
50) 1,2-Dichloroethane	(2)				Not Detected					0.2	1
46) Isooctane	(2)				Not Detected					0.2	1
49) Tert-Amyl Methyl Ether	(2)				Not Detected					0.2	1
47) Heptane	(2)				Not Detected					0.5	1
51) Trichloroethene	(2)				Not Detected					0.2	1
54) Ethyl Acrylate	(2)				Not Detected					0.2	1
55) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
53) Dibromomethane	(2)				Not Detected					0.2	1
58) 1,4-Dioxane	(2)				Not Detected					0.5	1
57) Methyl Methacrylate	(2)				Not Detected					0.2	1
56) Bromodichloromethane	(2)				Not Detected					0.2	1
59) cis-1,3-Dichloropropene	(2)				Not Detected					0.2	1
62) 4-Methyl-2-Pentanone	(2)				Not Detected					0.5	2
61) Toluene	(3)				Not Detected					0.2	1
60) Octane	(3)				Not Detected					0.2	1
64) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
65) 1,3-Dichloropropene (total)	(3)				Not Detected					0.2	1
66) Ethyl Methacrylate	(3)				Not Detected					0.2	1
67) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
63) Tetrachloroethene	(3)				Not Detected					0.2	1
70) 2-Hexanone	(3)				Not Detected					0.5	2
68) Dibromochloromethane	(3)				Not Detected					0.2	1
69) 1,2-Dibromoethane	(3)				Not Detected					0.2	1
72) Chlorobenzene	(3)				Not Detected					0.2	1
74) 1,1,1,2-Tetrachloroethane	(3)				Not Detected					0.2	1
73) Ethylbenzene	(3)				Not Detected					0.2	1
75) m/p-Xylene	(3)				Not Detected					0.2	1
76) o-Xylene	(3)				Not Detected					0.2	1
77) Xylene (total)	(3)				Not Detected					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
82) Bromobenzene	(3)				Not Detected					0.2	1
83) 1,1,2,2-Tetrachloroethane	(3)				Not Detected					0.2	1
87) 1,2,3-Trichloropropane	(3)				Not Detected					0.2	1
81) n-Propylbenzene	(3)				Not Detected					0.5	1
85) 2-Chlorotoluene	(3)				Not Detected					0.2	1
84) 4-Ethyltoluene	(3)				Not Detected					0.2	1
86) 1,3,5-Trimethylbenzene	(3)				Not Detected					0.2	1
88) Alpha Methyl Styrene	(3)				Not Detected					0.2	1
89) tert-Butylbenzene	(3)				Not Detected					0.5	1
90) 1,2,4-Trimethylbenzene	(3)				Not Detected					0.2	1
91) sec-Butylbenzene	(3)				Not Detected					0.2	1
93) 1,3-Dichlorobenzene	(3)				Not Detected					0.2	1
94) 1,4-Dichlorobenzene	(3)				Not Detected					0.2	1
92) p-Isopropyltoluene	(3)				Not Detected					0.2	1
96) Benzyl Chloride	(3)				Not Detected					0.5	1
98) 1,2-Dichlorobenzene	(3)				Not Detected					0.2	1
95) n-Butylbenzene	(3)				Not Detected					0.2	1
97) Hexachloroethane	(3)				Not Detected					0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)				Not Detected					0.2	1
101) 1,2,4-Trichlorobenzene	(3)				Not Detected					0.5	2

Digitally signed by Jacob E. Bailey on 06/19/2018 at 12:19. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18jun18.b/ff00305.d Injection date and time: **18-JUN-2018 21:02**
Data file Sample Info. Line: cc525;200;F1816930AA;cc525;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1816930AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 12:19 jeb07445

Blank Data file reference: **/chem/HP26379.i/18jun18.b/ff00292.d**

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 18-JUN-2018 19:11
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18jun18.b/ff00291.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
100) Hexachlorobutadiene	(3)				Not Detected					0.4	2
102) Naphthalene	(3)				Not Detected					0.4	1

Total number of targets = 99

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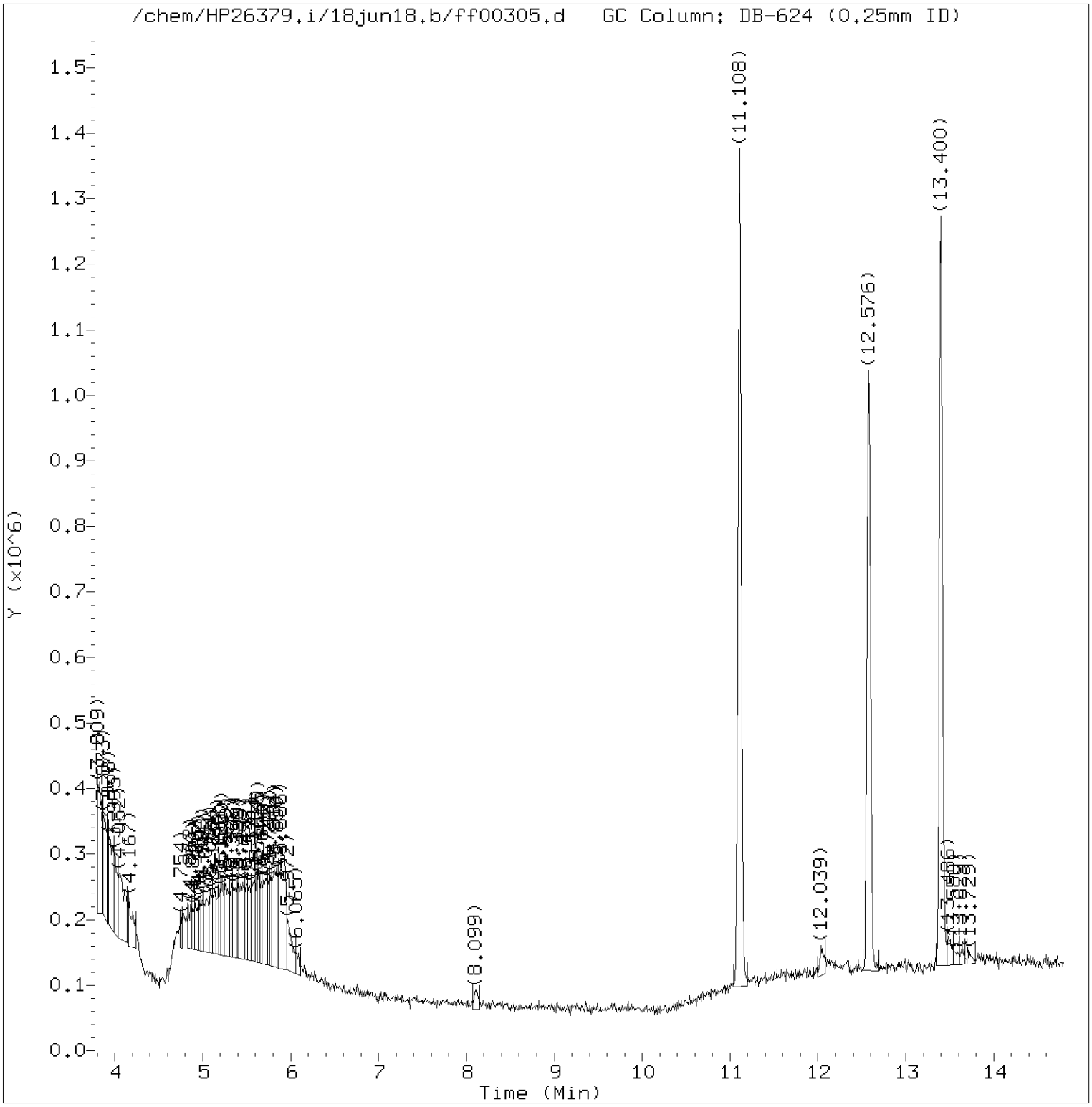
Secondary review performed and digitally signed by Jeffrey B. Smith on 06/19/2018 at 15:50. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

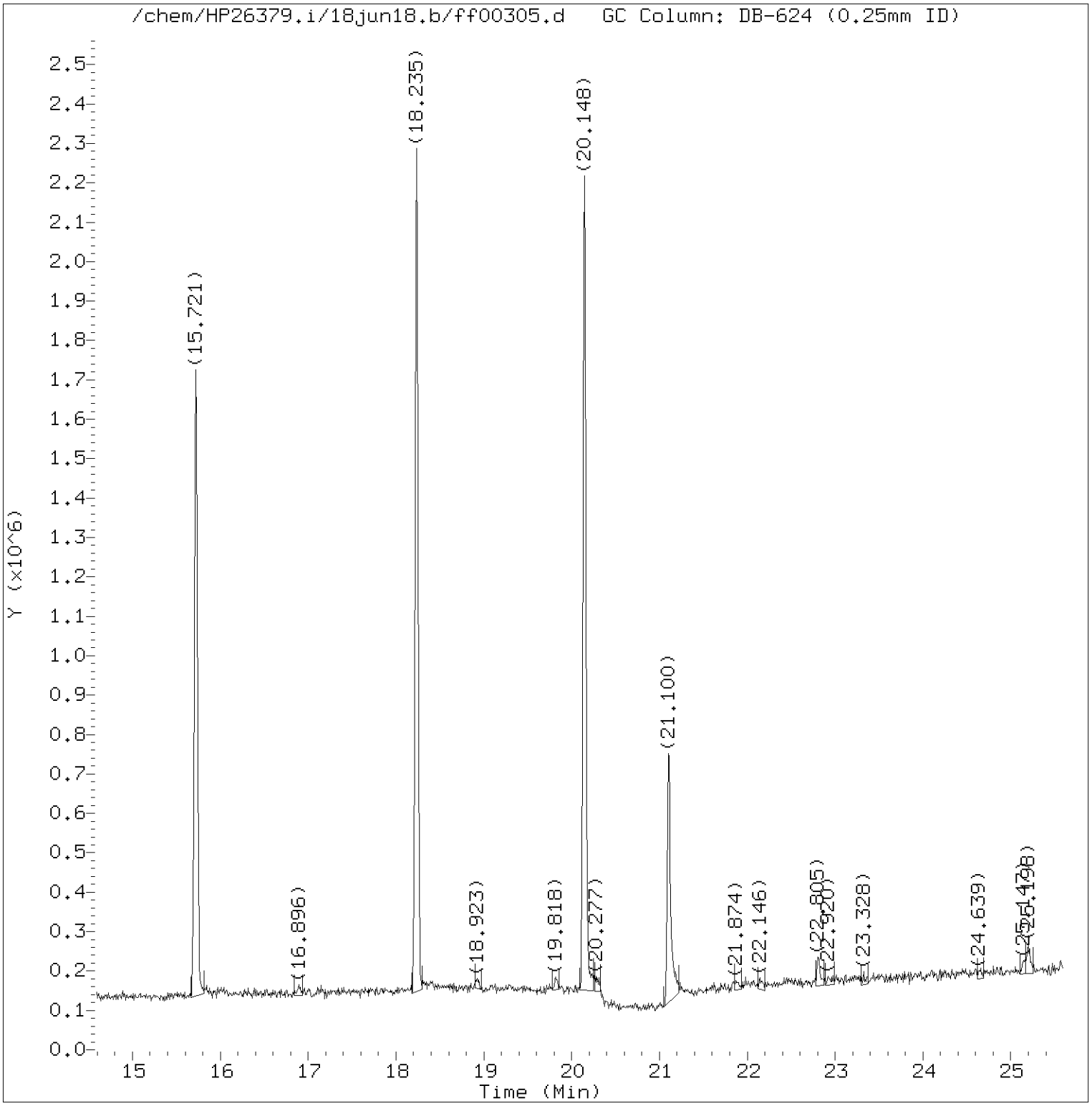
Target Revision 3.5

Data File: /chem/HP26379.i/18jun18.b/ff00305.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 21:02 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 19:11
Date, time and analyst ID of latest file update: 19-Jun-2018 12:19 jeb07445

Sample Name: cc525 Lab Sample ID: cc525

Digitally signed by Jacob E. Bailey
on 06/19/2018 at 12:19.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18jun18.b/ff00305.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 21:02 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 19:11
Date, time and analyst ID of latest file update: 19-Jun-2018 12:19 jeb07445

Sample Name: cc525 Lab Sample ID: cc525

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on 06/19/2018 at 12:19.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18jun18.b/ff00305.d Instrument ID: HP26379.i
Injection date and time: 18-JUN-2018 21:02 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18jun18.b/to-15.m Sublist used: all
Calibration date and time: 18-JUN-2018 19:11
Date, time and analyst ID of latest file update: 19-Jun-2018 12:19 jeb07445

Sample Name: cc525 Lab Sample ID: cc525

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
37)*Bromochloromethane	(1)	11.108	130	630752	10.000
52)*1,4-Difluorobenzene	(2)	13.400	114	1133538	10.000
71)*Chlorobenzene-d5	(3)	18.235	117	1435787	10.000

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/19/2018 at 12:19.
Target 3.5 esignature user ID: jeb07445

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NYSDEC ASP Category B Data Package

Prepared for:

Sunoco c/o Enviro. Assessment
225 Atlantic Avenue
Patchogue NY 11772

Project: DEC-Glencove30-36
Air Samples
Collected on 08/30/18-08/31/18

SDG# GLE02

GROUP	SAMPLE NUMBERS
1983294	9785623-9785625

PA Cert. # 36-00037
NY Cert. # 10670
NJ Cert. # PA011
NC Cert. # 521
TX Cert. # T104704194-18-27
AZ Cert. # AZ0780

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:** **10/10/2018**

Dana M. Kauffman
Manager

Any questions or concerns you might have regarding this data package should be directed to your client representative, Elizabeth Bauer at (717) 556-7290.

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

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Sample Reference List for SDG Number GLE02
with a Data Package Type of NYSDEC B

05936 - Sunoco c/o Enviro. Assessment

Project: DEC-Glencove30-36

Lab Sample Number	Client Sample ID	Collection Date	Date Received
9785623	GCBC_SS	08/30/2018 11:55	09/05/2018 10:00
9785624	GCBC_IA	08/30/2018 12:13	09/05/2018 10:00
9785625	GCBC_OA	08/30/2018 12:33	09/05/2018 10:00

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07090 BTEX/MTBE/Hydrocarbons by GC

Air samples are collected in Tedlar bags or passivated SUMMA canisters. The sample is introduced, using a gas-sampling loop, into a gas chromatograph equipped with a capillary column and interfaced directly to a flame ionization and photoionization detector (FID, PID). The FID is used for the determination of aliphatic hydrocarbons and the PID is used for determination of aromatic hydrocarbons.

Reference: 40 CFR Part 60, Appendix A, EPA Methods 18 & 25, July 1997

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

10341 Helium as Tracer Gas

Air samples are collected in passivated SUMMA canisters. The sample is introduced, using a gas-sampling loop, into a gas chromatograph equipped with a packed column and interfaced directly to a thermal conductivity detector (TCD).

Reference: ASTM D 1946 Standard Practice for Analysis of Reformed Gas by Gas Chromatography, ASTM International

Analysis Reports / Field Chain of Custody

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ANALYSIS REPORT

Prepared by:

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

Prepared for:

Sunoco c/o Enviro. Assessment
225 Atlantic Avenue
Patchogue NY 11772

Report Date: September 18, 2018 16:05

Project: DEC-Glencove30-36

Account #: 05936
Group Number: 1983294
SDG: GLE02
PO Number: DEC-GLENCOVE 30-36
State of Sample Origin: NY

Electronic Copy To	Environmental Assessment & Rem	Attn: John Hofmann
Electronic Copy To	Environmental Assessment & Rem	Attn: Ian Hofmann

Respectfully Submitted,

Elizabeth M. Bauer
Project Manager

(717) 556-7290

To view our laboratory's current scopes of accreditation please go to http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ . Historical copies may be requested through your project manager.

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SAMPLE INFORMATION

Client Sample Description	Sample Collection Date/Time	ELLE#
GCBC_SS Air	08/30/2018 11:55 - 08/31/2018 11:55	9785623
GCBC_IA Air	08/30/2018 12:13 - 08/31/2018 12:14	9785624
GCBC_OA Air	08/30/2018 12:33 - 08/31/2018 12:40	9785625

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

Sample Description: **GCBC_SS Air**
SummaCan# 1263
DEC-Glencove30-36

Project Name: **DEC-Glencove30-36**

Submittal Date/Time: 09/05/2018 10:00
Collection Date/Time: 08/30/2018 11:55 through 08/31/2018 11:55
SDG#: GLE02-01

Sunoco c/o Enviro. Assessment
ELLE Sample #: AQ 9785623
ELLE Group #: 1983294
Matrix: Air

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**ASTM D1946**		**ppm(v)**	**ppm(v)**	**mg/m3**	**mg/m3**	
10341	Helium as Tracer Gas	7440-59-7	N.D.	10,000	N.D.	1,600	2
Volatiles in Air	**EPA 18 mod/EPA 25 mod**		**ppm(v)**	**ppm(v)**	**mg/m3**	**mg/m3**	
07090	Methane	74-82-8	N.D.	4	N.D.	3	2
Volatiles in Air	**EPA TO-15**		**ug/m3**	**ug/m3**	**ppb(v)**	**ppb(v)**	
05298	Acetone	67-64-1	93 J	50	39 J	21	40
05298	Benzene	71-43-2	130	14	42	4.4	40
05298	Bromobenzene	108-86-1	N.D.	26	N.D.	4.0	40
05298	Bromodichloromethane	75-27-4	N.D.	32	N.D.	4.8	40
05298	Bromoform	75-25-2	N.D.	70	N.D.	6.8	40
05298	Bromomethane	74-83-9	N.D.	28	N.D.	7.2	40
05298	1,3-Butadiene	106-99-0	N.D.	15	N.D.	6.8	40
05298	2-Butanone	78-93-3	N.D.	25	N.D.	8.4	40
05298	Carbon Disulfide	75-15-0	N.D.	16	N.D.	5.2	40
05298	Carbon Tetrachloride	56-23-5	N.D.	35	N.D.	5.6	40
05298	Chlorobenzene	108-90-7	N.D.	24	N.D.	5.2	40
05298	Chlorodifluoromethane	75-45-6	N.D.	21	N.D.	6.0	40
05298	Chloroethane	75-00-3	N.D.	20	N.D.	7.6	40
05298	Chloroform	67-66-3	N.D.	18	N.D.	3.7	40
05298	Chloromethane	74-87-3	N.D.	20	N.D.	9.6	40
05298	3-Chloropropene	107-05-1	N.D.	19	N.D.	6.0	40
05298	Cumene	98-82-8	N.D.	47	N.D.	9.6	40
05298	Dibromochloromethane	124-48-1	N.D.	44	N.D.	5.2	40
05298	1,2-Dibromoethane	106-93-4	N.D.	40	N.D.	5.2	40
05298	Dibromomethane	74-95-3	N.D.	40	N.D.	5.6	40
05298	1,2-Dichlorobenzene	95-50-1	N.D.	48	N.D.	8.0	40
05298	1,3-Dichlorobenzene	541-73-1	N.D.	46	N.D.	7.6	40
05298	1,4-Dichlorobenzene	106-46-7	N.D.	41	N.D.	6.8	40
05298	Dichlorodifluoromethane	75-71-8	240	26	48	5.2	40
05298	1,1-Dichloroethane	75-34-3	36 J	14	8.9 J	3.6	40
05298	1,2-Dichloroethane	107-06-2	N.D.	13	N.D.	3.2	40
05298	1,1-Dichloroethene	75-35-4	N.D.	22	N.D.	5.6	40
05298	cis-1,2-Dichloroethene	156-59-2	N.D.	19	N.D.	4.8	40
05298	trans-1,2-Dichloroethene	156-60-5	N.D.	14	N.D.	3.4	40
05298	Dichlorofluoromethane	75-43-4	N.D.	19	N.D.	4.4	40
05298	1,2-Dichloropropane	78-87-5	N.D.	24	N.D.	5.2	40
05298	cis-1,3-Dichloropropene	10061-01-5	N.D.	18	N.D.	4.0	40
05298	trans-1,3-Dichloropropene	10061-02-6	N.D.	22	N.D.	4.8	40
05298	Ethylbenzene	100-41-4	N.D.	33	N.D.	7.6	40
05298	4-Ethyltoluene	622-96-8	N.D.	35	N.D.	7.2	40
05298	Freon 113	76-13-1	14,000	34	1,800	4.4	40

Sample Description: **GCBC_SS Air**
SummaCan# 1263
DEC-Glencove30-36

Project Name: **DEC-Glencove30-36**

Submittal Date/Time: 09/05/2018 10:00
Collection Date/Time: 08/30/2018 11:55 through 08/31/2018 11:55
SDG#: GLE02-01

Sunoco c/o Enviro. Assessment
ELLE Sample #: AQ 9785623
ELLE Group #: 1983294
Matrix: Air

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA TO-15**		**ug/m3**	**ug/m3**	**ppb(v)**	**ppb(v)**	
05298	Freon 114	76-14-2	N.D.	34	N.D.	4.8	40
05298	Heptane	142-82-5	N.D.	38	N.D.	9.2	40
05298	Hexachloroethane	67-72-1	N.D.	100	N.D.	11	40
05298	Hexane	110-54-3	N.D.	18	N.D.	5.2	40
05298	2-Hexanone	591-78-6	N.D.	29	N.D.	7.2	40
05298	Isooctane	540-84-1	N.D.	24	N.D.	5.2	40
05298	Methyl t-Butyl Ether	1634-04-4	N.D.	22	N.D.	6.0	40
05298	4-Methyl-2-pentanone	108-10-1	32 J	25	7.8 J	6.0	40
05298	Methylene Chloride	75-09-2	N.D.	35	N.D.	10	40
05298	Octane	111-65-9	N.D.	75	N.D.	16	40
05298	Pentane	109-66-0	N.D.	15	N.D.	5.2	40
05298	Styrene	100-42-5	N.D.	34	N.D.	8.0	40
05298	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	41	N.D.	6.0	40
05298	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	41	N.D.	6.0	40
05298	Tetrachloroethene	127-18-4	1,400	68	210	10	40
05298	Toluene	108-88-3	84 J	18	22 J	4.8	40
05298	1,1,1-Trichloroethane	71-55-6	39 J	26	7.2 J	4.8	40
05298	1,1,2-Trichloroethane	79-00-5	N.D.	26	N.D.	4.8	40
05298	Trichloroethene	79-01-6	320	39	60	7.2	40
05298	Trichlorofluoromethane	75-69-4	N.D.	34	N.D.	6.0	40
05298	1,2,3-Trichloropropane	96-18-4	N.D.	34	N.D.	5.6	40
05298	1,2,4-Trimethylbenzene	95-63-6	N.D.	55	N.D.	11	40
05298	1,3,5-Trimethylbenzene	108-67-8	N.D.	63	N.D.	13	40
05298	Vinyl Chloride	75-01-4	N.D.	12	N.D.	4.8	40
05298	m/p-Xylene	179601-23-1	930	45	210	10	40
05298	o-Xylene	95-47-6	N.D.	33	N.D.	7.6	40

MDL = Method Detection Limit

Sample Comments

State of New York Certification No. 10670

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10341	Helium as Tracer Gas	ASTM D1946	1	18254HE01	09/11/2018 15:29	Jeffrey B Smith	2
07090	Methane	EPA 18 mod/EPA 25 mod	1	M1826030AA	09/18/2018 01:26	Alexander D Sechrist	2
05298	TO-15 Standard List	EPA TO-15	1	E1824930AA	09/06/2018 18:03	Jacob E Bailey	40

Sample Description: **GCBC_IA Air**
SummaCan# 1176
DEC-Glencove30-36

Sunoco c/o Enviro. Assessment
ELLE Sample #: AQ 9785624
ELLE Group #: 1983294
Matrix: Air

Project Name: **DEC-Glencove30-36**

Submittal Date/Time: 09/05/2018 10:00
Collection Date/Time: 08/30/2018 12:13 through 08/31/2018 12:14
SDG#: GLE02-02

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA 18 mod/EPA 25 mod**		**ppm(v)**	**ppm(v)**	**mg/m3**	**mg/m3**	
07090	Methane	74-82-8	N.D.	2	N.D.	1	1
Volatiles in Air	**EPA TO-15**		**ug/m3**	**ug/m3**	**ppb(v)**	**ppb(v)**	
05298	Acetone	67-64-1	47	1.3	20	0.53	1
05298	Benzene	71-43-2	7.1	0.35	2.2	0.11	1
05298	Bromobenzene	108-86-1	N.D.	0.64	N.D.	0.10	1
05298	Bromodichloromethane	75-27-4	N.D.	0.80	N.D.	0.12	1
05298	Bromoform	75-25-2	N.D.	1.8	N.D.	0.17	1
05298	Bromomethane	74-83-9	N.D.	0.70	N.D.	0.18	1
05298	1,3-Butadiene	106-99-0	N.D.	0.38	N.D.	0.17	1
05298	2-Butanone	78-93-3	5.7	0.62	1.9	0.21	1
05298	Carbon Disulfide	75-15-0	5.4	0.40	1.7	0.13	1
05298	Carbon Tetrachloride	56-23-5	N.D.	0.88	N.D.	0.14	1
05298	Chlorobenzene	108-90-7	N.D.	0.60	N.D.	0.13	1
05298	Chlorodifluoromethane	75-45-6	N.D.	0.53	N.D.	0.15	1
05298	Chloroethane	75-00-3	N.D.	0.50	N.D.	0.19	1
05298	Chloroform	67-66-3	N.D.	0.45	N.D.	0.092	1
05298	Chloromethane	74-87-3	N.D.	0.50	N.D.	0.24	1
05298	3-Chloropropene	107-05-1	N.D.	0.47	N.D.	0.15	1
05298	Cumene	98-82-8	1.7 J	1.2	0.34 J	0.24	1
05298	Dibromochloromethane	124-48-1	N.D.	1.1	N.D.	0.13	1
05298	1,2-Dibromoethane	106-93-4	N.D.	1.0	N.D.	0.13	1
05298	Dibromomethane	74-95-3	N.D.	1.0	N.D.	0.14	1
05298	1,2-Dichlorobenzene	95-50-1	N.D.	1.2	N.D.	0.20	1
05298	1,3-Dichlorobenzene	541-73-1	N.D.	1.1	N.D.	0.19	1
05298	1,4-Dichlorobenzene	106-46-7	N.D.	1.0	N.D.	0.17	1
05298	Dichlorodifluoromethane	75-71-8	2.4 J	0.64	0.48 J	0.13	1
05298	1,1-Dichloroethane	75-34-3	0.52 J	0.36	0.13 J	0.089	1
05298	1,2-Dichloroethane	107-06-2	N.D.	0.32	N.D.	0.080	1
05298	1,1-Dichloroethene	75-35-4	N.D.	0.56	N.D.	0.14	1
05298	cis-1,2-Dichloroethene	156-59-2	0.85 J	0.48	0.22 J	0.12	1
05298	trans-1,2-Dichloroethene	156-60-5	N.D.	0.34	N.D.	0.086	1
05298	Dichlorofluoromethane	75-43-4	N.D.	0.46	N.D.	0.11	1
05298	1,2-Dichloropropane	78-87-5	N.D.	0.60	N.D.	0.13	1
05298	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.45	N.D.	0.10	1
05298	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.54	N.D.	0.12	1
05298	Ethylbenzene	100-41-4	1.1 J	0.83	0.26 J	0.19	1
05298	4-Ethyltoluene	622-96-8	11	0.88	2.2	0.18	1
05298	Freon 113	76-13-1	N.D.	0.84	N.D.	0.11	1
05298	Freon 114	76-14-2	N.D.	0.84	N.D.	0.12	1
05298	Heptane	142-82-5	1.5 J	0.94	0.36 J	0.23	1

Sample Description: **GCBC_IA Air**
SummaCan# 1176
DEC-Glencove30-36

Project Name: **DEC-Glencove30-36**

Submittal Date/Time: 09/05/2018 10:00
Collection Date/Time: 08/30/2018 12:13 through 08/31/2018 12:14
SDG#: GLE02-02

Sunoco c/o Enviro. Assessment
ELLE Sample #: AQ 9785624
ELLE Group #: 1983294
Matrix: Air

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA TO-15**		**ug/m3**	**ug/m3**	**ppb(v)**	**ppb(v)**	
05298	Hexachloroethane	67-72-1	N.D.	2.6	N.D.	0.27	1
05298	Hexane	110-54-3	1.7 J	0.46	0.50 J	0.13	1
05298	2-Hexanone	591-78-6	0.82 J	0.74	0.20 J	0.18	1
05298	Isooctane	540-84-1	1.1 J	0.61	0.23 J	0.13	1
05298	Methyl t-Butyl Ether	1634-04-4	N.D.	0.54	N.D.	0.15	1
05298	4-Methyl-2-pentanone	108-10-1	57	0.61	14	0.15	1
05298	Methylene Chloride	75-09-2	N.D.	0.87	N.D.	0.25	1
05298	Octane	111-65-9	1.9 J	1.9	0.41 J	0.40	1
05298	Pentane	109-66-0	3.9	0.38	1.3	0.13	1
05298	Styrene	100-42-5	0.86 J	0.85	0.20 J	0.20	1
05298	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1.0	N.D.	0.15	1
05298	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1.0	N.D.	0.15	1
05298	Tetrachloroethene	127-18-4	N.D.	1.7	N.D.	0.25	1
05298	Toluene	108-88-3	9.7	0.45	2.6	0.12	1
05298	1,1,1-Trichloroethane	71-55-6	N.D.	0.65	N.D.	0.12	1
05298	1,1,2-Trichloroethane	79-00-5	N.D.	0.65	N.D.	0.12	1
05298	Trichloroethene	79-01-6	N.D.	0.97	N.D.	0.18	1
05298	Trichlorofluoromethane	75-69-4	1.5 J	0.84	0.27 J	0.15	1
05298	1,2,3-Trichloropropane	96-18-4	N.D.	0.84	N.D.	0.14	1
05298	1,2,4-Trimethylbenzene	95-63-6	42	1.4	8.5	0.28	1
05298	1,3,5-Trimethylbenzene	108-67-8	11	1.6	2.2	0.32	1
05298	Vinyl Chloride	75-01-4	N.D.	0.31	N.D.	0.12	1
05298	m/p-Xylene	179601-23-1	150	1.1	35	0.26	1
05298	o-Xylene	95-47-6	8.5	0.83	2.0	0.19	1

MDL = Method Detection Limit

Sample Comments

State of New York Certification No. 10670

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07090	Methane	EPA 18 mod/EPA 25 mod	1	M1826130AA	09/18/2018 13:19	Jeffrey B Smith	1
05298	TO-15 Standard List	EPA TO-15	1	E1824930AA	09/06/2018 17:14	Jacob E Bailey	1

Sample Description: **GCBC_OA Air**
SummaCan# 1374
DEC-Glencove30-36

Sunoco c/o Enviro. Assessment
ELLE Sample #: AQ 9785625
ELLE Group #: 1983294
Matrix: Air

Project Name: **DEC-Glencove30-36**

Submittal Date/Time: 09/05/2018 10:00
Collection Date/Time: 08/30/2018 12:33 through 08/31/2018 12:40
SDG#: GLE02-03

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA 18 mod/EPA 25 mod**		**ppm(v)**	**ppm(v)**	**mg/m3**	**mg/m3**	
07090	Methane	74-82-8	4 J	2	3 J	1	1
Volatiles in Air	**EPA TO-15**		**ug/m3**	**ug/m3**	**ppb(v)**	**ppb(v)**	
05298	Acetone	67-64-1	20	1.3	8.6	0.53	1
05298	Benzene	71-43-2	0.43 J	0.35	0.14 J	0.11	1
05298	Bromobenzene	108-86-1	N.D.	0.64	N.D.	0.10	1
05298	Bromodichloromethane	75-27-4	N.D.	0.80	N.D.	0.12	1
05298	Bromoform	75-25-2	N.D.	1.8	N.D.	0.17	1
05298	Bromomethane	74-83-9	N.D.	0.70	N.D.	0.18	1
05298	1,3-Butadiene	106-99-0	N.D.	0.38	N.D.	0.17	1
05298	2-Butanone	78-93-3	2.8 J	0.62	0.95 J	0.21	1
05298	Carbon Disulfide	75-15-0	N.D.	0.40	N.D.	0.13	1
05298	Carbon Tetrachloride	56-23-5	N.D.	0.88	N.D.	0.14	1
05298	Chlorobenzene	108-90-7	N.D.	0.60	N.D.	0.13	1
05298	Chlorodifluoromethane	75-45-6	N.D.	0.53	N.D.	0.15	1
05298	Chloroethane	75-00-3	N.D.	0.50	N.D.	0.19	1
05298	Chloroform	67-66-3	N.D.	0.45	N.D.	0.092	1
05298	Chloromethane	74-87-3	N.D.	0.50	N.D.	0.24	1
05298	3-Chloropropene	107-05-1	N.D.	0.47	N.D.	0.15	1
05298	Cumene	98-82-8	N.D.	1.2	N.D.	0.24	1
05298	Dibromochloromethane	124-48-1	N.D.	1.1	N.D.	0.13	1
05298	1,2-Dibromoethane	106-93-4	N.D.	1.0	N.D.	0.13	1
05298	Dibromomethane	74-95-3	N.D.	1.0	N.D.	0.14	1
05298	1,2-Dichlorobenzene	95-50-1	N.D.	1.2	N.D.	0.20	1
05298	1,3-Dichlorobenzene	541-73-1	N.D.	1.1	N.D.	0.19	1
05298	1,4-Dichlorobenzene	106-46-7	N.D.	1.0	N.D.	0.17	1
05298	Dichlorodifluoromethane	75-71-8	2.6 J	0.64	0.52 J	0.13	1
05298	1,1-Dichloroethane	75-34-3	N.D.	0.36	N.D.	0.089	1
05298	1,2-Dichloroethane	107-06-2	N.D.	0.32	N.D.	0.080	1
05298	1,1-Dichloroethene	75-35-4	N.D.	0.56	N.D.	0.14	1
05298	cis-1,2-Dichloroethene	156-59-2	N.D.	0.48	N.D.	0.12	1
05298	trans-1,2-Dichloroethene	156-60-5	N.D.	0.34	N.D.	0.086	1
05298	Dichlorofluoromethane	75-43-4	N.D.	0.46	N.D.	0.11	1
05298	1,2-Dichloropropane	78-87-5	N.D.	0.60	N.D.	0.13	1
05298	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.45	N.D.	0.10	1
05298	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.54	N.D.	0.12	1
05298	Ethylbenzene	100-41-4	N.D.	0.83	N.D.	0.19	1
05298	4-Ethyltoluene	622-96-8	N.D.	0.88	N.D.	0.18	1
05298	Freon 113	76-13-1	N.D.	0.84	N.D.	0.11	1
05298	Freon 114	76-14-2	N.D.	0.84	N.D.	0.12	1
05298	Heptane	142-82-5	N.D.	0.94	N.D.	0.23	1

Sample Description: **GCBC_OA Air**
SummaCan# 1374
DEC-Glencove30-36

Project Name: **DEC-Glencove30-36**

Submittal Date/Time: 09/05/2018 10:00
Collection Date/Time: 08/30/2018 12:33 through 08/31/2018 12:40
SDG#: GLE02-03

Sunoco c/o Enviro. Assessment
ELLE Sample #: AQ 9785625
ELLE Group #: 1983294
Matrix: Air

CAT No.	Analysis Name	CAS Number	Final Result	MDL	Final Result	MDL	DF
Volatiles in Air	**EPA TO-15**		**ug/m3**	**ug/m3**	**ppb(v)**	**ppb(v)**	
05298	Hexachloroethane	67-72-1	N.D.	2.6	N.D.	0.27	1
05298	Hexane	110-54-3	0.84 J	0.46	0.24 J	0.13	1
05298	2-Hexanone	591-78-6	N.D.	0.74	N.D.	0.18	1
05298	Isooctane	540-84-1	0.73 J	0.61	0.16 J	0.13	1
05298	Methyl t-Butyl Ether	1634-04-4	N.D.	0.54	N.D.	0.15	1
05298	4-Methyl-2-pentanone	108-10-1	N.D.	0.61	N.D.	0.15	1
05298	Methylene Chloride	75-09-2	1.5 J	0.87	0.43 J	0.25	1
05298	Octane	111-65-9	N.D.	1.9	N.D.	0.40	1
05298	Pentane	109-66-0	2.2 J	0.38	0.75 J	0.13	1
05298	Styrene	100-42-5	N.D.	0.85	N.D.	0.20	1
05298	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1.0	N.D.	0.15	1
05298	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1.0	N.D.	0.15	1
05298	Tetrachloroethene	127-18-4	N.D.	1.7	N.D.	0.25	1
05298	Toluene	108-88-3	2.5 J	0.45	0.65 J	0.12	1
05298	1,1,1-Trichloroethane	71-55-6	N.D.	0.65	N.D.	0.12	1
05298	1,1,2-Trichloroethane	79-00-5	N.D.	0.65	N.D.	0.12	1
05298	Trichloroethene	79-01-6	N.D.	0.97	N.D.	0.18	1
05298	Trichlorofluoromethane	75-69-4	1.5 J	0.84	0.27 J	0.15	1
05298	1,2,3-Trichloropropane	96-18-4	N.D.	0.84	N.D.	0.14	1
05298	1,2,4-Trimethylbenzene	95-63-6	2.1 J	1.4	0.43 J	0.28	1
05298	1,3,5-Trimethylbenzene	108-67-8	N.D.	1.6	N.D.	0.32	1
05298	Vinyl Chloride	75-01-4	N.D.	0.31	N.D.	0.12	1
05298	m/p-Xylene	179601-23-1	2.0 J	1.1	0.46 J	0.26	1
05298	o-Xylene	95-47-6	N.D.	0.83	N.D.	0.19	1

MDL = Method Detection Limit

Sample Comments

State of New York Certification No. 10670

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07090	Methane	EPA 18 mod/EPA 25 mod	1	M1826130AA	09/18/2018 13:47	Jeffrey B Smith	1
05298	TO-15 Standard List	EPA TO-15	1	E1824930AA	09/06/2018 17:41	Jacob E Bailey	1

Quality Control Summary

Client Name: Sunoco c/o Enviro. Assessment Group Number: 1983294
Reported: 09/18/2018 16:05

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.

Method Blank

Analysis Name	Result	MDL	Result	MDL
	ppm(v)	ppm(v)	mg/m3	mg/m3
Batch number: 18254HE01	Sample number(s): 9785623			
Helium as Tracer Gas	N.D.	5,000	N.D.	820
Batch number: M1826030AA	Sample number(s): 9785623			
Methane	N.D.	2	N.D.	1
Batch number: M1826130AA	Sample number(s): 9785624-9785625			
Methane	N.D.	2	N.D.	1
	ug/m3	ug/m3	ppb(v)	ppb(v)
Batch number: E1824930AA	Sample number(s): 9785623-9785625			
Acetone	N.D.	1.3	N.D.	0.53
Benzene	N.D.	0.35	N.D.	0.11
Bromobenzene	N.D.	0.64	N.D.	0.10
Bromodichloromethane	N.D.	0.80	N.D.	0.12
Bromoform	N.D.	1.8	N.D.	0.17
Bromomethane	N.D.	0.70	N.D.	0.18
1,3-Butadiene	N.D.	0.38	N.D.	0.17
2-Butanone	N.D.	0.62	N.D.	0.21
Carbon Disulfide	N.D.	0.40	N.D.	0.13
Carbon Tetrachloride	N.D.	0.88	N.D.	0.14
Chlorobenzene	N.D.	0.60	N.D.	0.13
Chlorodifluoromethane	N.D.	0.53	N.D.	0.15
Chloroethane	N.D.	0.50	N.D.	0.19
Chloroform	N.D.	0.45	N.D.	0.092
Chloromethane	N.D.	0.50	N.D.	0.24
3-Chloropropene	N.D.	0.47	N.D.	0.15
Cumene	N.D.	1.2	N.D.	0.24
Dibromochloromethane	N.D.	1.1	N.D.	0.13
1,2-Dibromoethane	N.D.	1.0	N.D.	0.13
Dibromomethane	N.D.	1.0	N.D.	0.14
1,2-Dichlorobenzene	N.D.	1.2	N.D.	0.20
1,3-Dichlorobenzene	N.D.	1.1	N.D.	0.19
1,4-Dichlorobenzene	N.D.	1.0	N.D.	0.17
Dichlorodifluoromethane	N.D.	0.64	N.D.	0.13
1,1-Dichloroethane	N.D.	0.36	N.D.	0.089
1,2-Dichloroethane	N.D.	0.32	N.D.	0.080
1,1-Dichloroethene	N.D.	0.56	N.D.	0.14
cis-1,2-Dichloroethene	N.D.	0.48	N.D.	0.12
trans-1,2-Dichloroethene	N.D.	0.34	N.D.	0.086
Dichlorofluoromethane	N.D.	0.46	N.D.	0.11

*- 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: Sunoco c/o Enviro. Assessment
Reported: 09/18/2018 16:05

Group Number: 1983294

Method Blank (continued)

Analysis Name	Result ug/m3	MDL ug/m3	Result ppb(v)	MDL ppb(v)
1,2-Dichloropropane	N.D.	0.60	N.D.	0.13
cis-1,3-Dichloropropene	N.D.	0.45	N.D.	0.10
trans-1,3-Dichloropropene	N.D.	0.54	N.D.	0.12
Ethylbenzene	N.D.	0.83	N.D.	0.19
4-Ethyltoluene	N.D.	0.88	N.D.	0.18
Freon 113	N.D.	0.84	N.D.	0.11
Freon 114	N.D.	0.84	N.D.	0.12
Heptane	N.D.	0.94	N.D.	0.23
Hexachloroethane	N.D.	2.6	N.D.	0.27
Hexane	N.D.	0.46	N.D.	0.13
2-Hexanone	N.D.	0.74	N.D.	0.18
Isooctane	N.D.	0.61	N.D.	0.13
Methyl t-Butyl Ether	N.D.	0.54	N.D.	0.15
4-Methyl-2-pentanone	N.D.	0.61	N.D.	0.15
Methylene Chloride	N.D.	0.87	N.D.	0.25
Octane	N.D.	1.9	N.D.	0.40
Pentane	N.D.	0.38	N.D.	0.13
Styrene	N.D.	0.85	N.D.	0.20
1,1,1,2-Tetrachloroethane	N.D.	1.0	N.D.	0.15
1,1,2,2-Tetrachloroethane	N.D.	1.0	N.D.	0.15
Tetrachloroethene	N.D.	1.7	N.D.	0.25
Toluene	N.D.	0.45	N.D.	0.12
1,1,1-Trichloroethane	N.D.	0.65	N.D.	0.12
1,1,2-Trichloroethane	N.D.	0.65	N.D.	0.12
Trichloroethene	N.D.	0.97	N.D.	0.18
Trichlorofluoromethane	N.D.	0.84	N.D.	0.15
1,2,3-Trichloropropane	N.D.	0.84	N.D.	0.14
1,2,4-Trimethylbenzene	N.D.	1.4	N.D.	0.28
1,3,5-Trimethylbenzene	N.D.	1.6	N.D.	0.32
Vinyl Chloride	N.D.	0.31	N.D.	0.12
m/p-Xylene	N.D.	1.1	N.D.	0.26
o-Xylene	N.D.	0.83	N.D.	0.19

LCS/LCSD

Analysis Name	LCS Spike Added ug/m3	LCS Conc ug/m3	LCSD Spike Added ug/m3	LCSD Conc ug/m3	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: E1824930AA	Sample number(s): 9785623-9785625								
Acetone	23.76	24.94	23.76	25.26	105	106	71-136	1	25
Benzene	31.95	31.94	31.95	32.62	100	102	76-123	2	25
Bromobenzene	64.22	61.71	64.22	64.93	96	101	74-118	5	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: Sunoco c/o Enviro. Assessment
Reported: 09/18/2018 16:05

Group Number: 1983294

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/m3	LCS Conc ug/m3	LCSD Spike Added ug/m3	LCSD Conc ug/m3	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bromodichloromethane	67.01	68.72	67.01	68.91	103	103	75-134	0	25
Bromoform	103.37	90.7	103.37	93.02	88	90	69-128	3	25
Bromomethane	38.83	44.32	38.83	44.52	114	115	71-133	0	25
1,3-Butadiene	22.12	21.71	22.12	22.45	98	101	72-122	3	25
2-Butanone	29.49	27.38	29.49	29.09	93	99	75-126	6	25
Carbon Disulfide	31.14	31.76	31.14	32.92	102	106	72-128	4	25
Carbon Tetrachloride	62.91	58.26	62.91	60.47	93	96	72-127	4	25
Chlorobenzene	46.04	46.3	46.04	46.74	101	102	76-117	1	25
Chlorodifluoromethane	35.37	41.87	35.37	41.94	118	119	70-138	0	25
Chloroethane	26.38	28.66	26.38	28.82	109	109	76-129	1	25
Chloroform	48.83	49.51	48.83	51.13	101	105	75-127	3	25
Chloromethane	20.65	19.41	20.65	18.93	94	92	65-140	2	25
3-Chloropropene	31.3	35.74	31.3	36.75	114	117	67-141	3	25
Cumene	49.16	48.68	49.16	48.98	99	100	80-133	1	25
Dibromochloromethane	85.19	82.06	85.19	85.57	96	100	74-131	4	25
1,2-Dibromoethane	76.83	77.75	76.83	80.27	101	104	73-121	3	25
Dibromomethane	71.1	73.86	71.1	73.53	104	103	76-124	0	25
1,2-Dichlorobenzene	60.12	57.03	60.12	59.53	95	99	71-126	4	25
1,3-Dichlorobenzene	60.12	59.13	60.12	61.95	98	103	75-129	5	25
1,4-Dichlorobenzene	60.12	57.86	60.12	58.73	96	98	74-123	2	25
Dichlorodifluoromethane	49.45	54.89	49.45	55.13	111	111	74-133	0	25
1,1-Dichloroethane	40.47	41.48	40.47	42.31	102	105	74-129	2	25
1,2-Dichloroethane	40.47	44.48	40.47	45.14	110	112	72-138	1	25
1,1-Dichloroethene	39.65	41.33	39.65	42.72	104	108	70-129	3	25
cis-1,2-Dichloroethene	39.65	39.56	39.65	40.72	100	103	76-126	3	25
trans-1,2-Dichloroethene	39.65	41.63	39.65	42.2	105	106	77-128	1	25
Dichlorofluoromethane	42.09	47.29	42.09	48.19	112	114	75-137	2	25
1,2-Dichloropropane	46.21	48.18	46.21	48.75	104	105	75-127	1	25
cis-1,3-Dichloropropene	45.39	42.36	45.39	43.13	93	95	51-120	2	25
trans-1,3-Dichloropropene	45.39	43.17	45.39	43.9	95	97	72-119	2	25
Ethylbenzene	43.42	42.93	43.42	42.97	99	99	77-117	0	25
4-Ethyltoluene	49.16	48.82	49.16	49.89	99	101	73-130	2	25
Freon 113	76.64	77.67	76.64	79.25	101	103	66-119	2	25
Freon 114	69.91	76.56	69.91	77.08	110	110	66-126	1	25
Heptane	40.98	39.4	40.98	39.49	96	96	74-122	0	25
Hexachloroethane	96.83	67.73	96.83	69.54	70	72	59-135	3	25
Hexane	35.25	32.43	35.25	33.95	92	96	70-118	5	25
2-Hexanone	40.97	41.38	40.97	41.66	101	102	63-144	1	25
Isooctane	46.72	47.85	46.72	47.94	102	103	74-127	0	25
Methyl t-Butyl Ether	36.05	33.82	36.05	35.07	94	97	71-119	4	25
4-Methyl-2-pentanone	40.97	40.35	40.97	40.71	98	99	68-133	1	25
Methylene Chloride	34.74	39.67	34.74	40.52	114	117	69-128	2	25
Octane	46.72	44.51	46.72	44.96	95	96	73-122	1	25
Pentane	29.51	27.69	29.51	28.58	94	97	69-125	3	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: Sunoco c/o Enviro. Assessment
Reported: 09/18/2018 16:05

Group Number: 1983294

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/m3	LCS Conc ug/m3	LCSD Spike Added ug/m3	LCSD Conc ug/m3	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Styrene	42.6	41.48	42.6	42.7	97	100	76-127	3	25
1,1,1,2-Tetrachloroethane	68.65	66.76	68.65	67.73	97	99	73-124	1	25
1,1,2,2-Tetrachloroethane	68.65	69.3	68.65	70.78	101	103	72-133	2	25
Tetrachloroethene	67.82	70.73	67.82	71.48	104	105	68-123	1	25
Toluene	37.69	37.5	37.69	38.17	100	101	78-119	2	25
1,1,1-Trichloroethane	54.56	53.36	54.56	55.28	98	101	74-122	4	25
1,1,2-Trichloroethane	54.56	56.27	54.56	58.97	103	108	76-127	5	25
Trichloroethene	53.74	54.68	53.74	55.62	102	103	76-118	2	25
Trichlorofluoromethane	56.18	59.56	56.18	61.44	106	109	73-132	3	25
1,2,3-Trichloropropane	60.3	62.34	60.3	63.15	103	105	71-127	1	25
1,2,4-Trimethylbenzene	49.16	48.03	49.16	49.46	98	101	70-138	3	25
1,3,5-Trimethylbenzene	49.16	47.74	49.16	49.17	97	100	72-130	3	25
Vinyl Chloride	25.56	27.73	25.56	27.86	108	109	75-130	0	25
m/p-Xylene	43.42	42.23	43.42	42.9	97	99	78-119	2	25
o-Xylene	43.42	42.59	43.42	43.6	98	100	78-121	2	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

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Acct. # 5936 Group # 1983294 Sample # 9785623-25 Bottle Order (SCR) # 230068

For Eurofins Lancaster Laboratories Environmental use only

Client Information

Client: EAR

Account #:

Project Name/#: DEC-GLENCOVE 30-36, SITE # 130053B

Project Manager: IAN HOFMANN

P.O. #:

Sampler: EAR - SG

Quote #:

Name of state where samples were collected: NY

Turnaround Time Requested (TAT) (circle one)

Standard | Rush (specify) _____

Data Package Required? Yes / No

EDD Required? (Yes) / No

	Temperature (F)		Pressure ("Hg)	
	Start	Stop	Start	Stop
Ambient	87	77	30.0	30.2
Maximum	87	77	30.0	30.2
Minimum	73	66	29.5	29.7

Analyses Requested

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

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	MTBE	BTEX	EPA 18	EPA 25	Helium as tracer	O2/CO2	Library Search
~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~415304~~	~~1176~~	~~1~~	~~3.5~~								
~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~—~~	~~930841~~	~~—~~	~~—~~	~~3.5~~								
GCBC_SS	8/30/18/1155	8/31/18/1155	-30.0	-3.5	~90	~80	930841	1263		3.5	X	X		X	X	X	X	
GCBC_IA	8/30/18/1213	8/31/18/1214	-30.0	-8.0	~90	~80	415304	1176		3.5	X	X		X	X			
GCBC_OA	8/30/18/1233	8/31/18/1240	-27.0	-2.0	—	—	339183	1374			X	X		X	X			

Instructions/QC Requirements & Comments

- CATEGORY B DELIVERABLES REQUESTED.

COPY

EPA 25 (check one)

- METHANE ANALYSIS (MODIFIED EPA 18/25)

☐ 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:
16 CW	8/21/18	EAR		EAR	8/30/18/0900		8/30/18/0700
Relinquished by:	Date/Time:	Received by:	Date/Time:	Relinquished by:	Date/Time:	Received by: FED EX:	Date/Time:
	8/31/18/1500	EAR SHIPPING & RECEIVING	8/31/18/1500	EAR SHIPPING & RECEIVING	9/4/18/1245	807069333466/812002314070	9/4/18/1245
Relinquished by:	Date/Time:	Received by:	Date/Time:	Relinquished by:	Date/Time:	Received by:	Date/Time:
							9/5/18 10:00

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Sample Administration Receipt Documentation Log

Doc Log ID: 226020

Group Number(s): 1983294

Client: EAR

Glencove

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Timestamp:	09/05/2018 10:00
Number of Packages:	2	Number of Projects:	1
State/Province of Origin:	NY		

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:	4
Discrepancy in Container Qty on COC:	No	Air Quality Returns:	No

Unpacked by Katie Hartlove (2114) at 11:02 on 09/05/2018

2425 New Holland Pike
Lancaster, PA 17601-2425
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:

BMQL	Below Minimum Quantitation Level	**mL**	milliliter(s)
C	degrees Celsius	**MPN**	Most Probable Number
cfu	colony forming units	**N.D.**	non-detect
CP Units	cobalt-chloroplatinate units	**ng**	nanogram(s)
F	degrees Fahrenheit	**NTU**	nephelometric turbidity units
g	gram(s)	**pg/L**	picogram/liter
IU	International Units	**RL**	Reporting Limit
kg	kilogram(s)	**TNTC**	Too Numerous To Count
L	liter(s)	**µg**	microgram(s)
lb.	pound(s)	**µL**	microliter(s)
m3	cubic meter(s)	**umhos/cm**	micromhos/cm
meq	milliequivalents	**MCL**	Maximum Contamination Limit
mg	milligram(s)		

<	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.

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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Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
K1	Initial Calibration Blank is above the QC limit and the sample result is ND
K2	Continuing Calibration Blank is above the QC limit and the sample result is ND
K3	Initial Calibration Verification is above the QC limit and the sample result is ND
K4	Continuing Calibration Verification is above the QC limit and the sample result is ND
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.
P^	Concentration difference between the primary and confirmation column > 40%. The higher 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.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

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.

Volatile Organics in Air by GC Data

Case Narrative/Conformance Summary

Volatile Organics in Air by GC

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Case Narrative/Conformance Summary

CLIENT: Sunoco c/o Enviro. Assessment
SDG: GLE02

Volatiles in Air

Fraction: Volatile Organics in Air by GC

Sample #	Client ID	Comments
9785623	GCBC_SS	
9785624	GCBC_IA	
9785625	GCBC_OA	

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

The target analyte is not a component of the spiking solution, therefore, LCS data is not reported.

SAMPLE ANALYSIS:

Samples	Helium as Tracer Gas	Methane
9785623	DF2	DF2
9785624		DF1
9785625		DF1

(Sample number(s): 9785623: Analysis: 10341)
Form I could not be generated due to limitations of the data package software, but the results are summarized on the analytical reports in the beginning of the data package.

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Case Narrative/Conformance Summary

CLIENT: Sunoco c/o Enviro. Assessment
SDG: GLE02

Volatiles in Air

Fraction: Volatile Organics in Air by GC

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	

Calculations

A response factor for each calibration compound is determined for each calibration level as follows:

$$Response\ Factor = \frac{Area\ Counts}{Conc\ (Volume)}$$

Where:

Area Counts = Integrated area of the chromatographic peak of interest

Conc x Volume = Concentration in ppm(v) of compound in the calibration standard x sample volume in µL (nominal volume is 100 µL)

The average response factor for each calibration compound is calculated as the mean of the three individual response factors:

$$Average\ RF = \frac{(RF1 + RF2 + RF3 \ldots RF6)}{6}$$

Where:

RF1, RF2, and RF3... RF6 are the response factors from the six calibration levels.

Concentration of a single compound in a sample is calculated as follows:

$$Conc\ (x) = \frac{Area\ (x)}{Average\ RF\ (x)} \times \frac{Nominal\ Volume\ (\mu L)}{Loop\ size\ (\mu L)}$$

Where:

Conc (x) = Concentration of compound(x) in the sample

Area (x) = Integrated area for compound(x) in the sample analysis

Average RF (x) = The average response factor for compound(x) from the initial calibration

Nominal Volume = 100 µL, the volume of sample upon which the calibration is based

Loop size (µL) = The size of the sample loop used to introduce the sample, in µL

Concentration of a range of compounds in a sample is calculated as follows:

$$Conc\,(x) = \frac{Area\,(x_1 + x_2 + x_3 + x_n)}{Average\,RF\,(x)} \times \frac{Nominal\,Volume\,(\mu\mu L}{Loop\,size\,(\mu\mu L}$$

Where:

Conc (x) = Concentration of a range of compounds(x) in the sample

Area (x) = Sum of integrated areas for a range of compounds(x) in the sample analysis

Average RF (x) = The average response factor for the chosen compound(x) from the initial calibration

Nominal Volume = 100 µL, the volume of sample upon which the calibration is based

Loop size (µL) = The size of the sample loop used to introduce the sample, in µL

The % RSD, relative standard deviation over the three calibration levels for each compound, is calculated as follows:

$$\%RSD = \frac{SD_{RRF}}{\overline{RRF}} \times 100$$

Where:

SD_{RRF} = Standard deviation of six response factors

$\overline{RRF}$ = Mean Initial Calibration Relative Response Factor per compound

The % Difference for a compound in the continuing calibration standard is calculated as:

$$\%\ Difference\ (x) = \frac{|(Average\,RF\,(x) - CCRF\,(x))|}{Average\,RF\,(x)} \times 100$$

Where:

Average RF (x) = The average response factor for compound (x) from the initial calibration

CCRF (x) = The response factor for compound(x) in the continuing calibration standard analysis

Quality Control and Calibration Summary Forms

Volatile Organics in Air by GC

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Quality Control Reference List
Volatiles in Air

CLIENT: Sunoco c/o Enviro. Assessment
SDG: GLE02

Fraction: Volatile Organics in Air by GC

Analysis	Batch Number	Sample Number	Analysis Date
Helium as Tracer Gas	18254HE01	BLANKB	09/11/2018 13:50
		9785623	09/11/2018 15:29
Methane	M1826030AA	VBLK260B	09/17/2018 15:26
		9785623	09/18/2018 01:26
Methane	M1826130AA	VBLK261B	09/18/2018 11:13
		9785624	09/18/2018 13:19
		9785625	09/18/2018 13:47

Fraction: Volatile Organics in Air by GC

18254HE01 / BLANKB **Analyte**	**Analysis Date**	**Blank Results**	**Units**	**MDL**	**LOQ**
Helium as Tracer Gas	09/11/18	N.D.	ppm(v)	5000	5000

M1826030AA / VBLK260B **Analyte**	**Analysis Date**	**Blank Results**	**Units**	**MDL**	**LOQ**
Methane	09/17/18	N.D.	ppm(v)	2	5

M1826130AA / VBLK261B **Analyte**	**Analysis Date**	**Blank Results**	**Units**	**MDL**	**LOQ**
Methane	09/18/18	N.D.	ppm(v)	2	5

Fraction: Volatile Organics in Air by GC

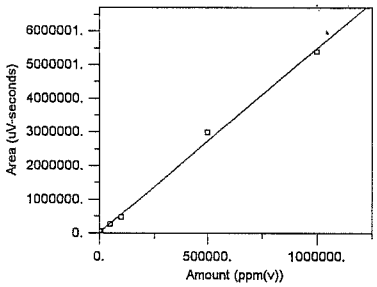
07090: Methane Analyte Name	Default MDL	Default LOQ	Units
Methane	2	5	ppm(v)

10341: Helium as Tracer Gas Analyte Name	Default MDL	Default LOQ	Units
Helium as Tracer Gas	5,000	5,000	ppm(v)

1 HELIUM

Retention time = 2.060 min., Search window = 0.100 min.
Low alarm amount = 0, High alarm amount = 0
Group number = 0, Component constant = 0
No retention time reference component
Single peak quantification by area

Level	Amount	Area	Area/Amt	Source	Date and time
1	5000.000	26739.1	5.347825	15321.11A	11/17/2015 12:01
2	10000.000	45952.7	4.595267	15321.10A	11/17/2015 12:01
3	50000.000	252656.2	5.053124	15321.09A	11/17/2015 12:01
4	100000.000	462261.8	4.622618	15321.08A	11/17/2015 12:02
5	500000.000	2990971.0	5.981942	15321.07A	11/17/2015 12:02
6	1000000.000	5372120.0	5.37212	15321.06A	11/17/2015 12:03



Calibration formula: Y = 5.486 X
Fit type = Linear with equal weighting, forced to origin
Coefficient of determination = 0.9966, Average error = 8.92%
Average CF = 5.1621 with RSD = 10.16%

mgp 1758
11/18/15

Calibration File Name: **C:\CPWIN\DATA1\HE15321.CAL** Version = 1
External standard calibration
No injection volume correction
No sample weight correction
Area reject threshold = 0
Reference peak area reject threshold = 0
Amount units = ppm(v)
1 components with 6 levels each

Theoretical Standard Concentrations for EPA Methods 18 and 25 / TO-3 (modified)

Compound Name	MDL0.2 [ppm(v)]	VSTD001 [ppm(v)]	VSTD005 [ppm(v)]	VSTD010 [ppm(v)]	VSTD025 [ppm(v)]	VSTD100 [ppm(v)]	VSTD500 [ppm(v)]
Methane	0.2	1	5	10	25	100	500
Ethane	0.2	1	5	10	25	100	n/a
Propane	0.2	1	5	10	25	100	n/a
Butane	0.2	1	5	10	25	100	n/a
Pentane	0.2	1	5	10	25	100	n/a
Methyl t-butyl Ether	0.2	1	5	10	25	100	n/a
Hexane	0.2	1	5	10	25	100	n/a
Decane	0.04	0.2	1	2	5	20	n/a
Octane	0.2	1	5	10	25	100	n/a
Benzene	0.2	1	5	10	25	100	n/a
Toluene	0.2	1	5	10	25	100	n/a
Ethylbenzene	0.2	1	5	10	25	100	n/a
m/p-Xylene	0.4	2	10	20	50	200	n/a
o-Xylene	0.2	1	5	10	25	100	n/a

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FORM 06
VOLATILE ORGANICS IN AIR
INITIAL CALIBRATION DATA

SDG No.:

Instrument ID: 58309 Cal. Start Date: 09/17/2018 Cal. End Date: 09/17/2018

Cal. Start Time: 12:10 Cal. End Time: 14:47

FID File IDs:

RF 1 =	RF 5 =	RF 10 =	RF 25 =	RF 100 =	RF 500 =
18260.0007.d	18260.0006.d	18260.0011.d	18260.0008.d	18260.0009.d	18260.0010.d

PID File IDs:

RF 1 =	RF 5 =	RF 10 =	RF 25 =	RF 100 =	RF 500 =
18260B.0007.d	18260B.0006.d	18260B.0011.d	18260B.0008.d	18260B.0009.d	18260B.0010.d

	COMPOUND		RF 1	RF 5	RF 10	RF 25	RF 100	RF 500	$\overline{RF}$	% RSD	Cal. Method	
	Methane		****	3167	3451	2805	3313	3023	3152	8	AVG	
	Ethane		7326	5646	6155	5345	6253	****	6145	12	AVG	
	Propane		9178	8096	9187	7856	9201	****	8703	8	AVG	
	Butane		11750	10495	11788	10388	12256	****	11335	7	AVG	
	Pentane		14822	12488	14100	12467	14708	****	13717	8	AVG	
+	MTBE		2125	2086	2255	1956	2236	****	2132	6	AVG	
	Hexane		14605	14190	16305	14407	17111	****	15324	9	AVG	
+	Benzene		3475	3135	3544	3066	3523	****	3349	7	AVG	
+	Toluene		2062	2060	2491	2194	2679	****	2297	12	AVG	
	Octane		13465	15839	18451	16402	19969	****	16825	15	AVG	
+	Ethylbenzene		1617	1661	2022	1666	2013	****	1796	11	AVG	
+	m/p-Xylene		2523	2322	2725	2175	2575	****	2464	9	AVG	
+	o-Xylene		2638	2446	2618	1940	2236	****	2376	12	AVG	
	Decane	#	27890	6173	9713	6104	9456	****	11867	77	AVG	#

Average % RSD: 14

* Maximum %RSD = 25%.
\+ Compound reported from PID file
\# Decane is used as a retention time marker only.

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 58309 LCS FID File ID: 18260.0013.d LCSD FID File ID: 18260.0014.d

Batch: M1826030AA LCS PID File ID: 18260B.0013.d LCSD PID File ID: 18260B.0014.d

Dilution Factor: 1 LCS Injected: 09/17/2018 LCSD Injected: 09/17/2018

Method: EPA 18 mod/EPA 25 mod LCS Injected Time: 16:04 LCSD Injected Time: 16:37

LCS Client ID: LCS260 LCSD Client ID: LCSD260

COMPOUND	SPIKE LEVEL	LCS CONC. (ppm(v))	LCSD CONC. (ppm(v))	LCS %REC	LCSD %REC	RANGE	%RPD	RPD MAX	IN SPEC
Benzene	10.00	11.57	11.62	116	116	65 - 118	0	30	YES
Toluene	10.00	14.79	14.67	148	147	79 - 149	1	30	YES
Ethylbenzene	10.00	12.27	12.24	123	122	62 - 123	0	30	YES
Xylene (total)	30.00	37.13	35.31	124	118	58 - 125	5	30	YES

COMMENTS:
Applies to Sample(s): 9777751-9777753

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab FID File ID: 18261.0000.d
Calibration Date: 09/18/2018

Lab PID File ID: 18261B.0000.d
Calibration Time: 10:39

Instrument ID: 58309
Init. Calib. Date(s): 09/17/2018

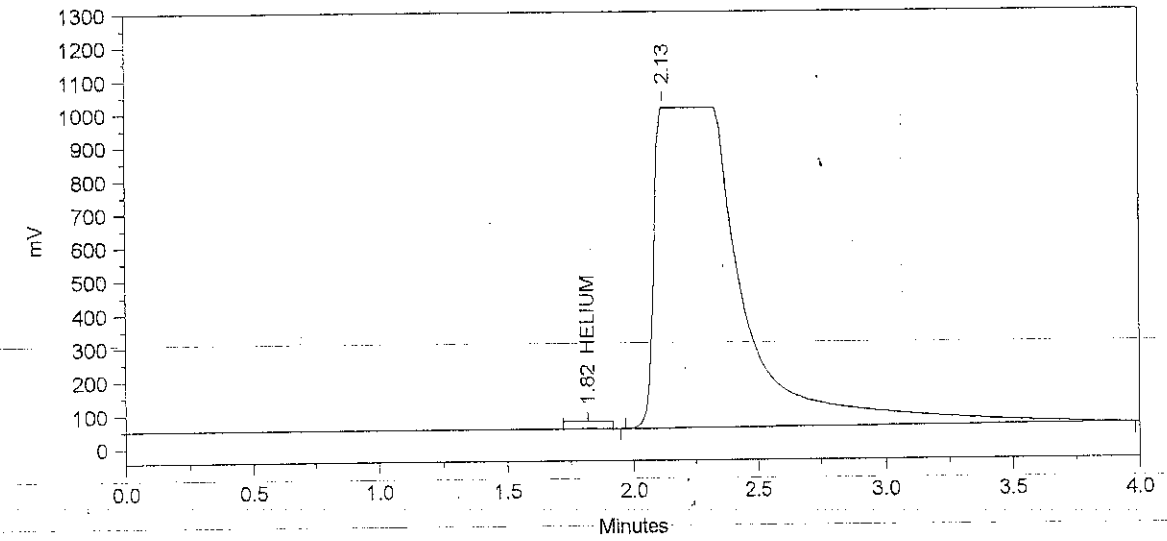
	COMPOUND		$\overline{RF}$	RF	ACTUAL CONC.	TRUE CONC.	%DRIFT
	Methane		3152	3333	10.576	10	6
	Ethane		6145	6443	10.485	10	5
	Propane		8703	9201	10.572	10	6
	Butane		11335	12087	10.663	10	7
	Pentane		13717	14653	10.683	10	7
+	MTBE		2132	2292	10.753	10	8
	Hexane		15324	16435	10.725	10	7
+	Benzene		3349	3672	10.965	10	10
+	Toluene		2297	2618	11.397	10	14
	Octane		16825	20091	11.941	10	19
+	Ethylbenzene		1796	2164	12.050	10	20
+	m/p-Xylene		2464	2930	23.786	20	19
+	o-Xylene		2376	2592	10.910	10	9
	Decane	#	11867	9250	1.559	2	-22 #

* Maximum %DRIFT = 25%.
+ Compound reported from PID file
# Decane is used as a retention time marker only.

Sample Data

Volatile Organics in Air by GC

9785623 DF2



Sample Name: **9785623 DF2**
Acquired from FIXED GASES--TCD via port 1 on 9/11/18 03:29:58pm by 1304
RT-Msieve 5A

Data File: **C:\CPWIN\DATA1\2018DATA\18254\18254.07R**
Date Stamp: 9/11/18 03:29:58pm
Sequence File: 18254.SEQ #7
Method File: C:\CPWIN\DATA1\FGHE.MET
Version 50. Date Stamp: 4/18/18 02:43:30pm
Calibration File: C:\CPWIN\DATA1\HE18108.CAL
Version 1. Date Stamp: 4/18/18 02:43:14pm

Run Time = 4.0 min Sample Rate = 1.0 per sec.
Amount Inj. = 1.000 Dilution Factor = 1.000
Sample Weight = 1.000 Int Std Amount = 1.000

Starting Peak Width = 0.05 min. Peak Threshold = 5 Area Reject = 0

PK#	Ret Time	Name	Amount	Amount%	Area	Area%	Type	Width	Height	Height%	
1	1.819	HELIUM	863.6758	100.000	4738.3	0.020	BB	0.050	1582.29	0.162	< MDL
2	2.125		0.0000	0.000	23210410.0	99.980	BB	0.397	973809.50	99.838	

Total Area = 23215140.0, Total Amount = 863.676, Total Height = 975391.8, Sample Units = ppm(v)

ND

9/20/18

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE02

Sample Media:	Tedlar	Lab Sample ID:	9785623
Canister ID:	N/A	FID File ID:	18260.0032.d
Injection Volume:	100 cc	PID File ID:	
Instrument ID:	58309	Date Collected:	08/30/2018
Analyzed Date:	09/18/2018	Date Received:	09/05/2018
Analyzed Time:	01:26	Dilution Factor	2

Concentration Units: ppm(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
74-82-8	Methane	4	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.
- Compounds MTBE, Benzene, Toluene, Ethylbenzene, m/p-Xylene, o-Xylene and Xylene (total)are reported from PID file

Analysis Summary for GC Volatiles in Air

FID Data file: /chem/A58309.i/18sep17.b/18260.0032.d Injection date and time: **18-SEP-2018 01:26**
FID Data file Sample Info. Line: 9785623 Instrument ID: **A58309.i** Batch: **M1826030AA**
Date, time and analyst ID of latest FID file update: 18-Sep-2018 08:32 ads07818

FID Blank Data file reference: **/chem/A58309.i/18sep17.b/18260B.0012.d**

FID Method used: /chem/A58309.i/18sep17.b/gc_fid.m FID Sublist used: **6626**
FID Calibration date and time (Last Method Edit): 17-SEP-2018 15:46
FID Mid Level Daily Calibration Standard Reference: **/chem/A58309.i/18sep17.b/18260.0011.d**

Sampling Media: Tedlar Bag Bottle code: N/A Matrix: AIR On-Column Amount units: ppm(v) In Sample Concentration units: ppm(v)

Sample Concentration Formula: On-Column Amount * DF * IVn/IVa Dilution Factor (DF): 2
Nominal Injection Volume (IVn): 100 cc Actual injection Volume (IVa): 100 cc

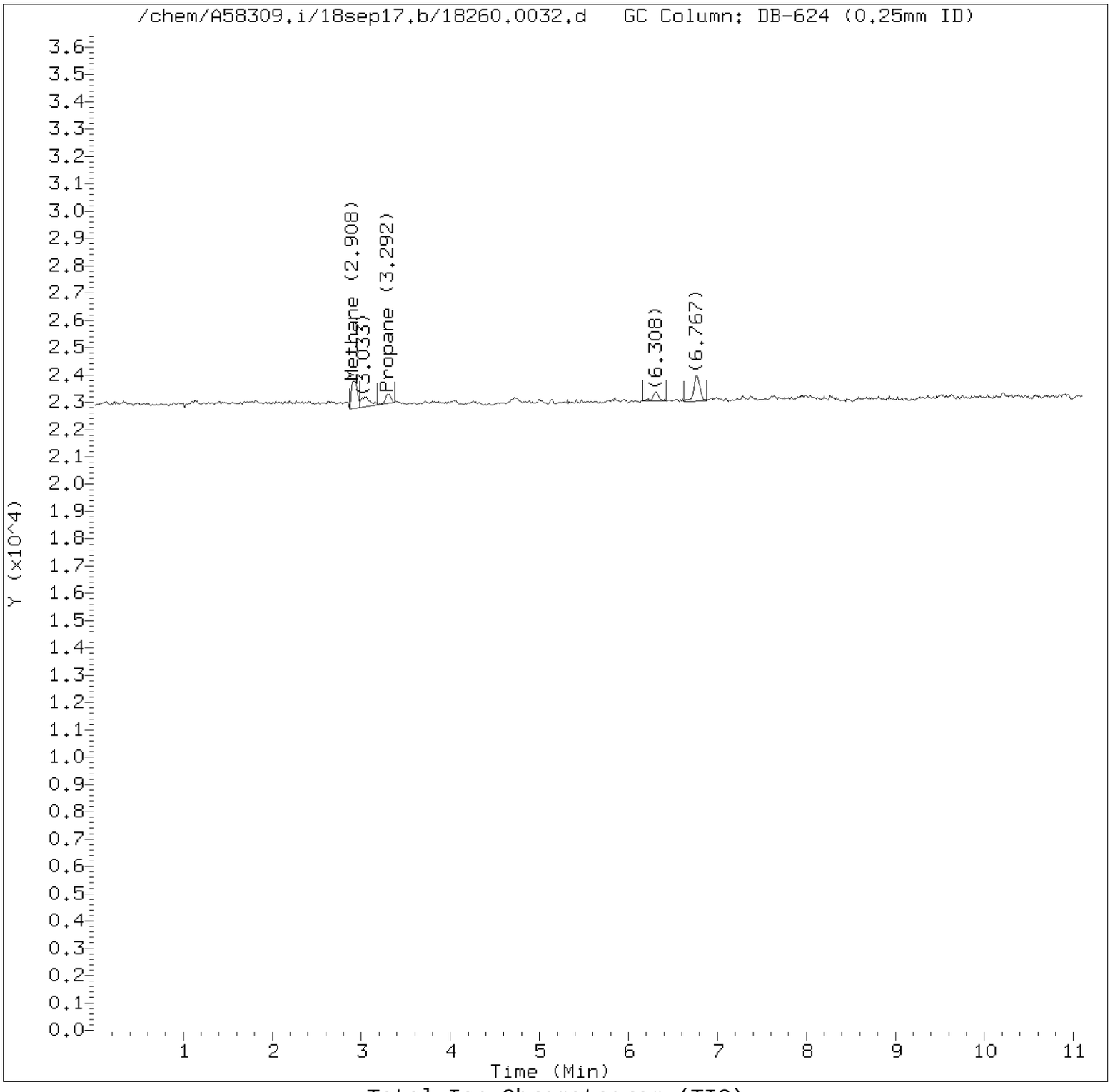
Analysis Comments:

Single Component, Summary, and Range Target Compounds	Expected RT(±window)	RT Low Limit	RT	RT High Limit	Area	On-Column Concentration (ppm(v))	In Sample Concentration (ppm(v))	Blank Conc.	Qual.	Reporting Limit (on-column)	LOQ
1) Methane	2.908(±0.03)	2.878	N.D.	2.938		Not Detected				2	5

Total number of FID targets = 1 Total number of PID targets = None Scheduled for Reporting

Digitally signed by Alexander D. Sechrist on 09/18/2018 at 08:34. Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 14:37. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

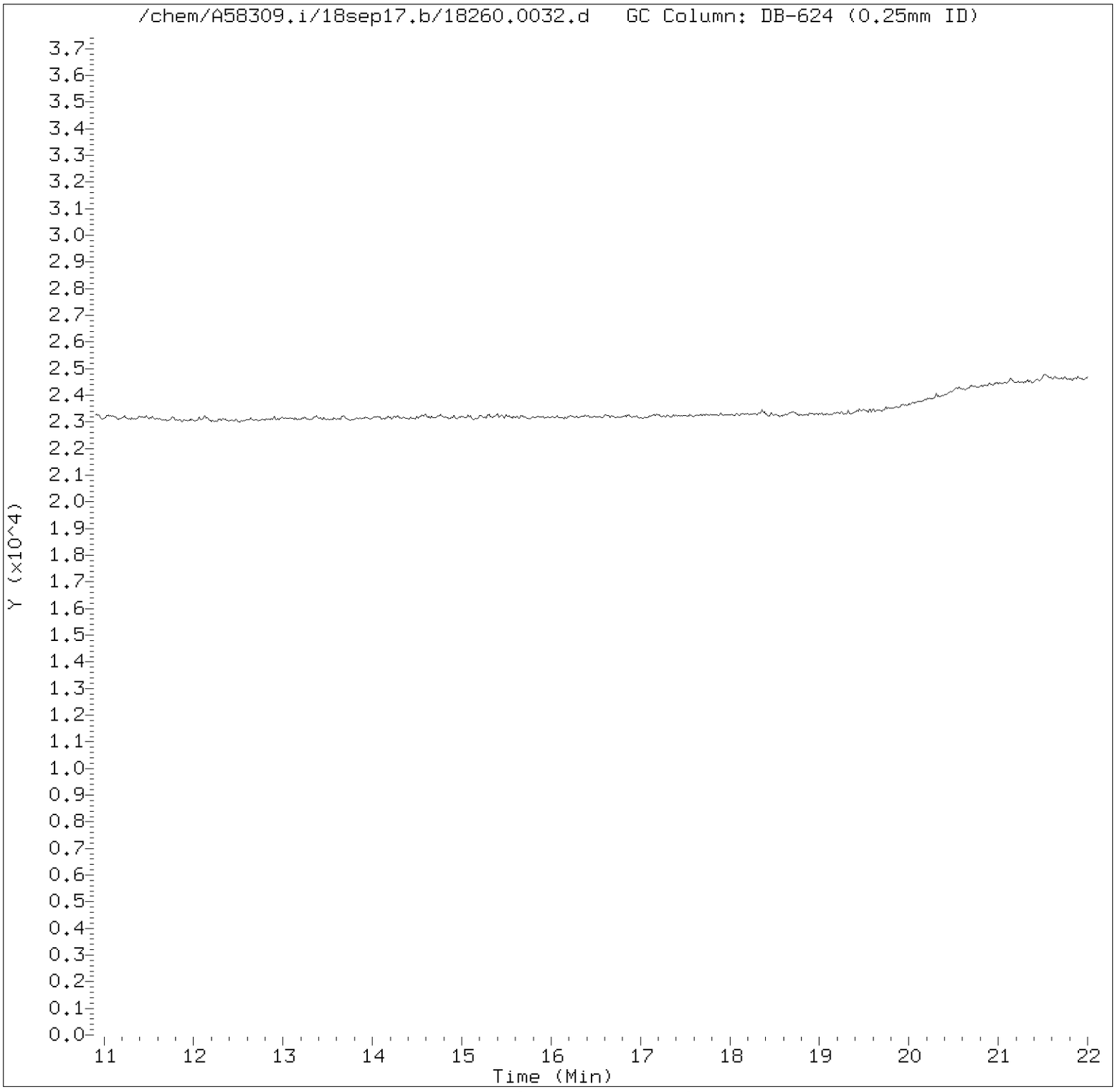
Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0032.d Instrument ID: A58309.i
Injection date and time: 18-SEP-2018 01:26 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 18-Sep-2018 08:32 ads07818

Sample Name: 9785623 Lab Sample ID: 9785623

Digitally signed by Alexander D. Sechrist
on 09/18/2018 at 08:34.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0032.d Instrument ID: A58309.i
Injection date and time: 18-SEP-2018 01:26 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 18-Sep-2018 08:32 ads07818

Sample Name: 9785623 Lab Sample ID: 9785623

Digitally signed by Alexander D. Sechrist
on 09/18/2018 at 08:34.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0032.d Instrument ID: A58309.i
Injection date and time: 18-SEP-2018 01:26 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 18-Sep-2018 08:32 ads07818

Sample Name: 9785623 Lab Sample ID: 9785623

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))

No integrated signals resulted in on-column concentrations above the reporting limit.

Digitally signed by Alexander D. Sechrist
on 09/18/2018 at 08:34.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0032.d Instrument ID: A58309.i
Injection date and time: 18-SEP-2018 01:26 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 18-Sep-2018 08:32 ads07818

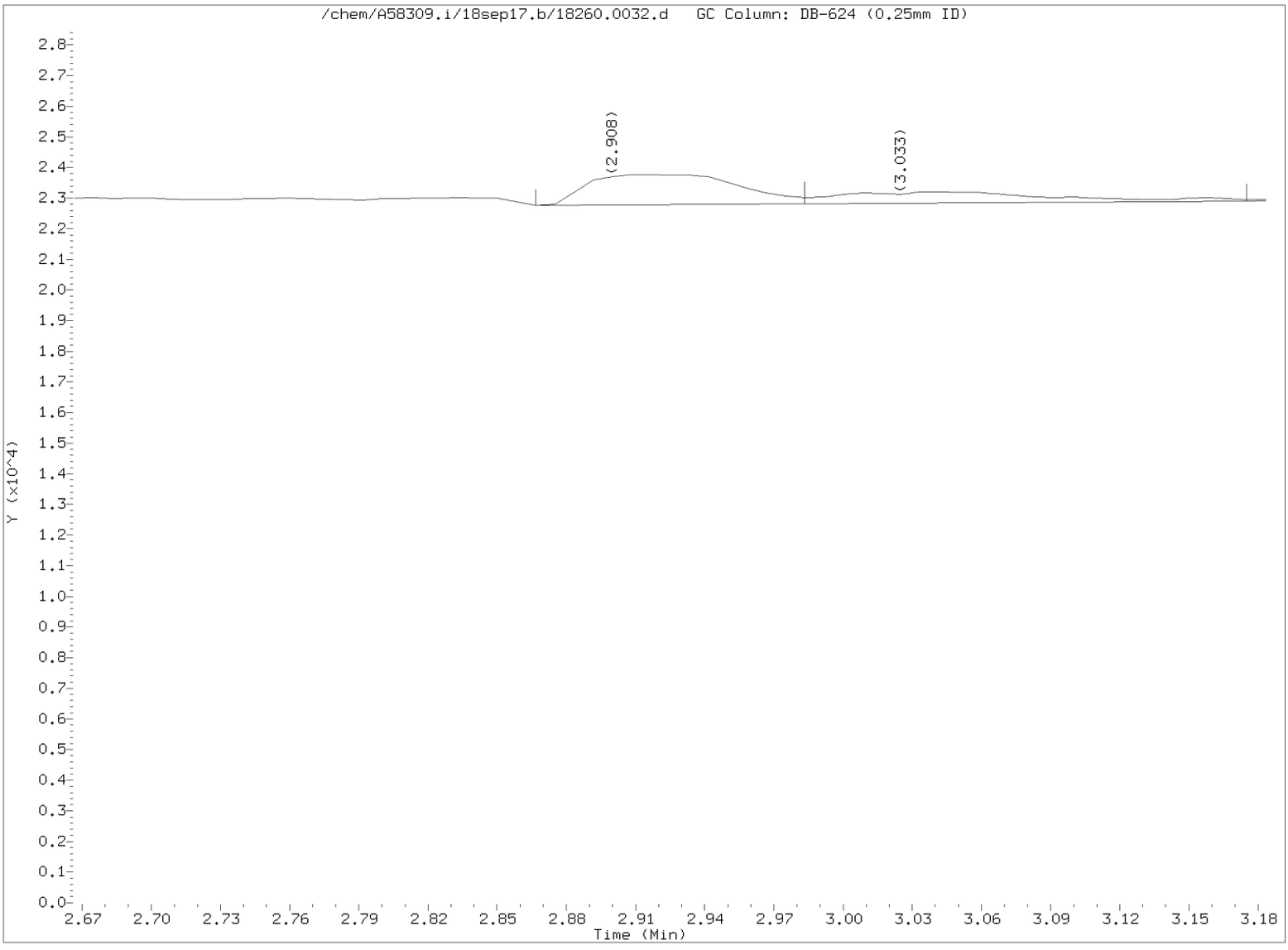
Sample Name: 9785623 Lab Sample ID: 9785623

RT	Area	Peak Label(s) and Range	Compound #s
2.908	4520M	Methane	
3.033	2490M		
3.292	1593	Propane	
6.308	1612		
6.767	4613		

M = Peak was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/18/2018 at 08:34.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep17.b/18260.0032.d Instrument ID: A58309.i
Injection date and time: 18-SEP-2018 01:26 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 18-Sep-2018 08:32 ads07818

Sample Name: 9785623 Lab Sample ID: 9785623

Retention Time (minutes): 2.908
Area (flag) : 4520M
Integration start time : 2.867 Integration stop time: 2.983
Y at integration start : 22762 Y at integration end: 22815

Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/18/2018 at 08:34.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 14:37.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep17.b/18260.0032.d Instrument ID: A58309.i
Injection date and time: 18-SEP-2018 01:26 Analyst ID:

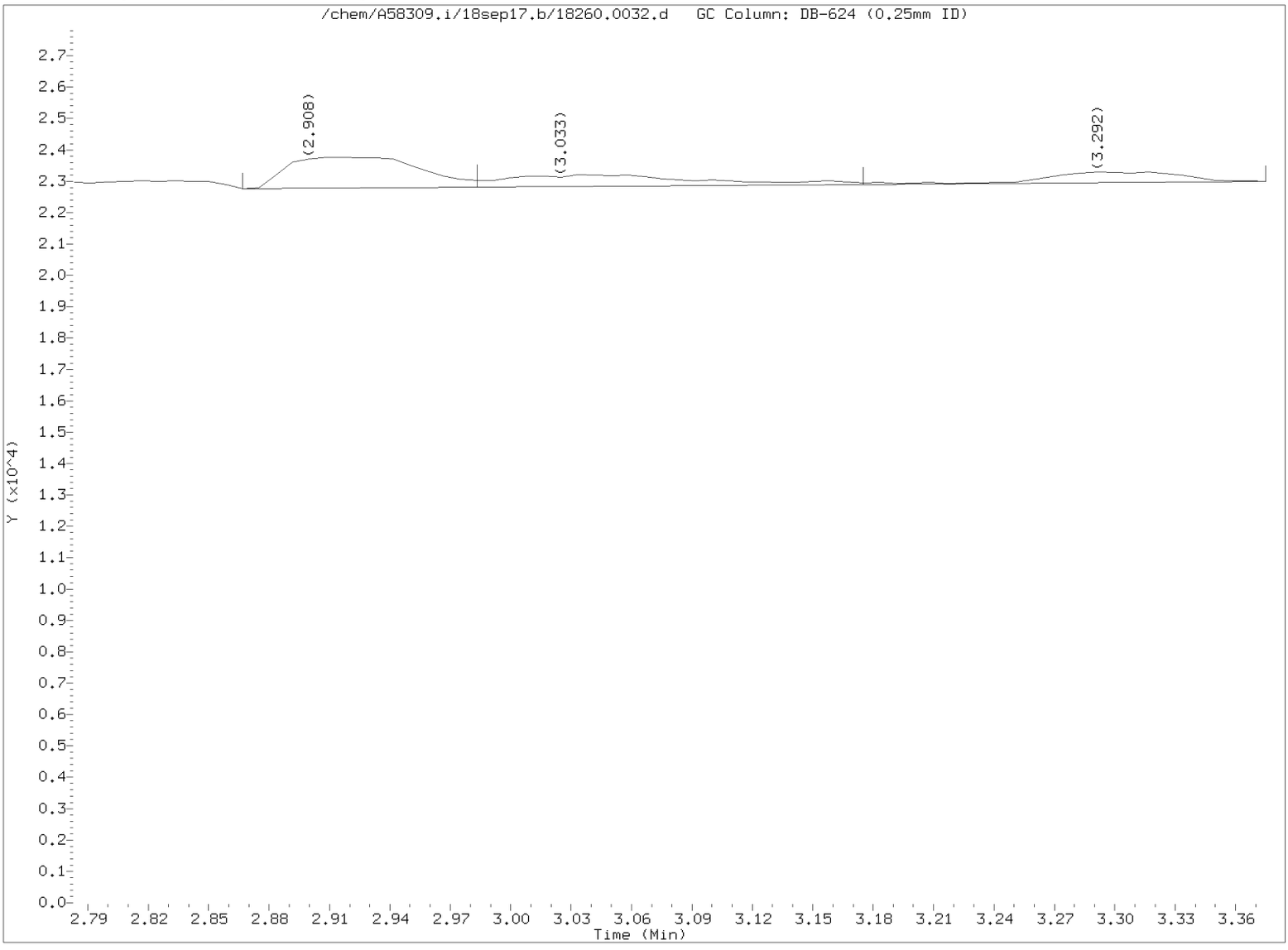
Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 18-Sep-2018 01:54 Unknown

Sample Name: 9785623 Lab Sample ID: 9785623

No signal was originally integrated at 2.908 minutes.

Digitally signed by Alexander D. Sechrist on 09/18/2018 at 08:34.
Target 3.5 esignature user ID: LA02

Manually Integrated Signal



Data File: /chem/A58309.i/18sep17.b/18260.0032.d Instrument ID: A58309.i
Injection date and time: 18-SEP-2018 01:26 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: 6626
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 18-Sep-2018 08:32 ads07818

Sample Name: 9785623 Lab Sample ID: 9785623

Retention Time (minutes): 3.033
Area (flag) : 2490M
Integration start time : 2.983 Integration stop time: 3.175
Y at integration start : 22815 Y at integration end: 22900

Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: Digitally signed by Alexander D. Sechrist
on 09/18/2018 at 08:34.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 14:37.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep17.b/18260.0032.d Instrument ID: A58309.i
Injection date and time: 18-SEP-2018 01:26 Analyst ID:

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 18-Sep-2018 01:54 Unknown

Sample Name: 9785623 Lab Sample ID: 9785623

No signal was originally integrated at 3.033 minutes.

Digitally signed by Alexander D. Sechrist on 09/18/2018 at 08:34.
Target 3.5 esignature user ID: LEO2018

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE02

Sample Media:	Tedlar	Lab Sample ID:	9785624
Canister ID:	N/A	FID File ID:	18261.0004.d
Injection Volume:	100 cc	PID File ID:	
Instrument ID:	58309	Date Collected:	08/30/2018
Analyzed Date:	09/18/2018	Date Received:	09/05/2018
Analyzed Time:	13:19	Dilution Factor	1

Concentration Units: ppm(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
74-82-8	Methane	2	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.
- Compounds MTBE, Benzene, Toluene, Ethylbenzene, m/p-Xylene, o-Xylene and Xylene (total)are reported from PID file

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

9785624

FID Data file: /chem/A58309.i/18sep18.b/18261.0004.d Injection date and time: **18-SEP-2018 13:19**
FID Data file Sample Info. Line: 9785624 Instrument ID: **A58309.i** Batch: **M1826130AA**
Date, time and analyst ID of latest FID file update: 18-Sep-2018 15:18 jbs01304

FID Blank Data file reference: **/chem/A58309.i/18sep18.b/18261B.0001.d**

FID Method used: /chem/A58309.i/18sep18.b/gc_fid.m FID Sublist used: **6626**
FID Calibration date and time (Last Method Edit): 18-SEP-2018 12:56
FID Mid Level Daily Calibration Standard Reference: **/chem/A58309.i/18sep18.b/18261.0000.d**

PID Data file: /chem/A58309.i/18sep18.b/18261B.0004.d Injection date and time: **18-SEP-2018 13:19**
PID Data file Sample Info. Line: 9785624 Instrument ID: **A58309.i** Batch: **M1826130AA**
Date, time and analyst ID of latest PID file update: 18-Sep-2018 13:47 Unknown

PID Blank Data file reference: **/chem/A58309.i/18sep18.b/18261.0001.d**

PID Method used: /chem/A58309.i/18sep18.b/gc_pid.m PID Sublist used: **07090**
PID Calibration date and time (Last Method Edit): 18-SEP-2018 12:56
PID Mid Level Daily Calibration Standard Reference: **/chem/A58309.i/18sep18.b/18261B.0000.d**

Sampling Media: Tedlar Bag Bottle code: N/A Matrix: AIR On-Column Amount units: ppm(v) In Sample Concentration units: ppm(v)

Sample Concentration Formula: On-Column Amount * DF * IVn/IVa Dilution Factor (DF): 1
Nominal Injection Volume (IVn): 100 cc Actual injection Volume (IVa): 100 cc

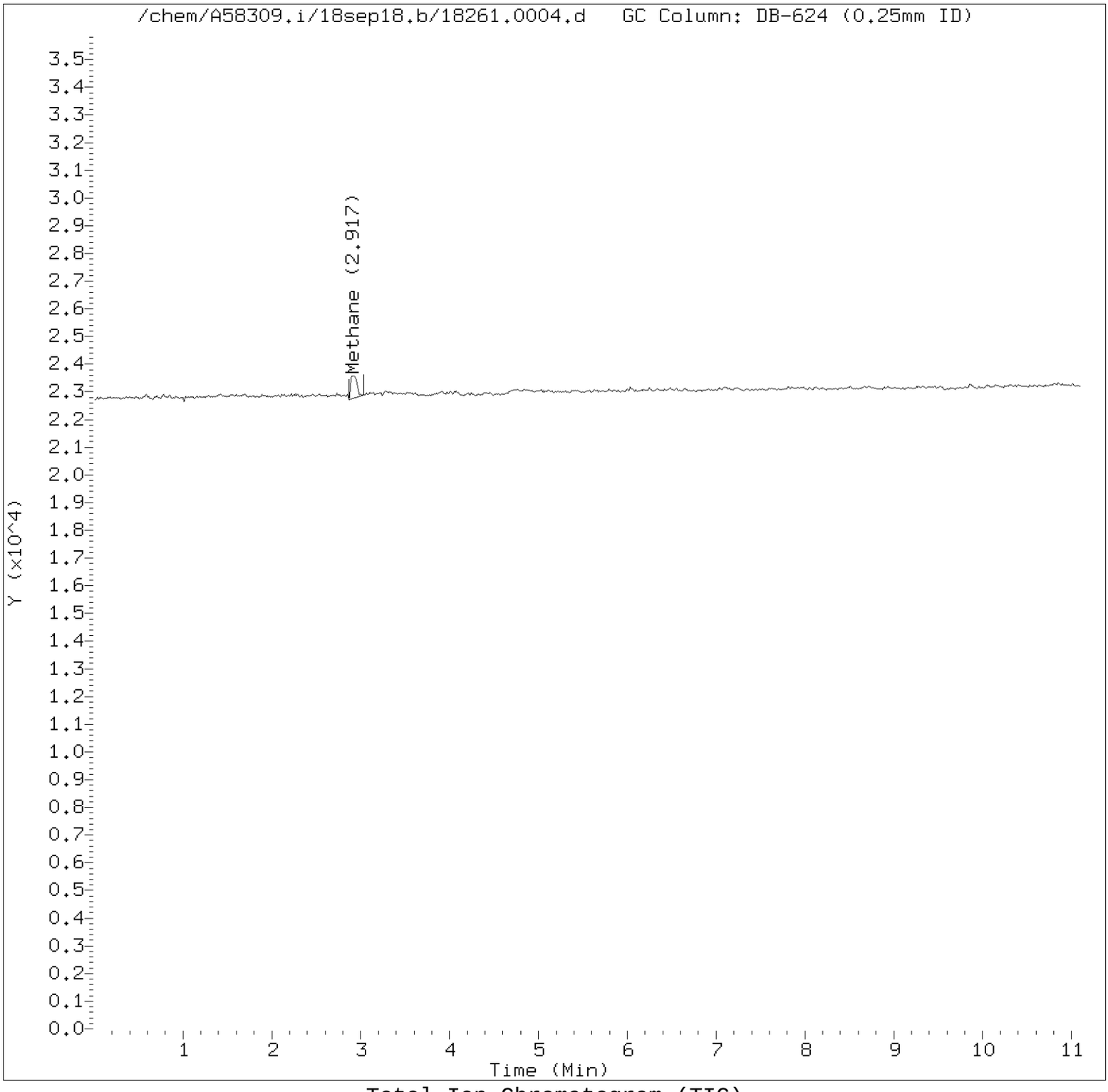
Analysis Comments:

Single Component, Summary, and Range Target Compounds	Expected RT(±window)	RT Low Limit	RT	RT High Limit	Area	On-Column Concentration (ppm(v))	In Sample Concentration (ppm(v))	Blank Conc.	Qual.	Reporting Limit (on-column)	LOQ
1) Methane	2.908(±0.03)	2.878	N.D.	2.938		Not Detected				2	5
1) MTBE	8.183(±0.03)	8.153	N.D.	8.213		Not Detected				0.5	1
2) Benzene	11.383(±0.06)	11.323	N.D.	11.443		Not Detected				0.5	1
3) Toluene	14.458(±0.03)	14.428	N.D.	14.488		Not Detected				0.8	1
4) Ethylbenzene	16.908(±0.04)	16.868	N.D.	16.948		Not Detected				0.4	1
5) m/p-Xylene	17.092(±0.04)	17.052	N.D.	17.132		Not Detected				0.7	2
6) o-Xylene	17.767(±0.04)	17.727	N.D.	17.807		Not Detected				0.7	2
7) Xylene (total)						Not Detected				0.7	2

Total number of FID targets = 1 Total number of PID targets = 7

Digitally signed by Jeffrey B. Smith on 09/18/2018 at 15:19. Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 10/08/2018 at 10:31. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

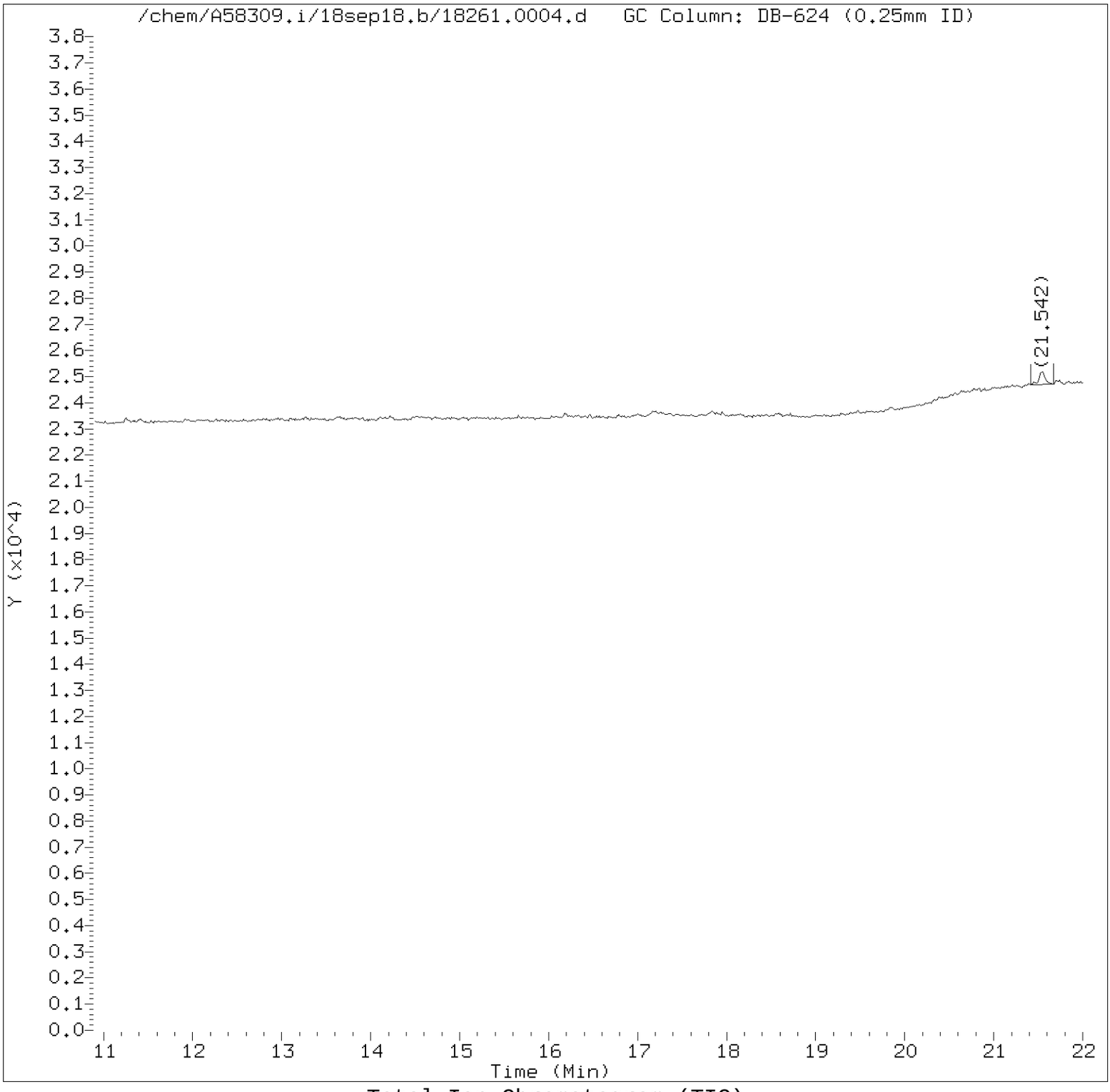
Target Revision 3.5

Data File: /chem/A58309.i/18sep18.b/18261.0004.d Instrument ID: A58309.i
Injection date and time: 18-SEP-2018 13:19 Analyst ID:

Method used: /chem/A58309.i/18sep18.b/gc_fid.m Sublist used: 6626
Calibration date and time: 18-SEP-2018 12:56
Date, time and analyst ID of latest file update: 18-Sep-2018 15:18 jbs01304

Sample Name: 9785624 Lab Sample ID: 9785624

Digitally signed by Jeffrey B. Smith
on 09/18/2018 at 15:19.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep18.b/18261.0004.d Instrument ID: A58309.i
Injection date and time: 18-SEP-2018 13:19 Analyst ID:

Method used: /chem/A58309.i/18sep18.b/gc_fid.m Sublist used: 6626
Calibration date and time: 18-SEP-2018 12:56
Date, time and analyst ID of latest file update: 18-Sep-2018 15:18 jbs01304

Sample Name: 9785624 Lab Sample ID: 9785624

Digitally signed by Jeffrey B. Smith
on 09/18/2018 at 15:19.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep18.b/18261.0004.d Instrument ID: A58309.i
Injection date and time: 18-SEP-2018 13:19 Analyst ID:

Method used: /chem/A58309.i/18sep18.b/gc_fid.m Sublist used: 6626
Calibration date and time: 18-SEP-2018 12:56
Date, time and analyst ID of latest file update: 18-Sep-2018 15:18 jbs01304

Sample Name: 9785624 Lab Sample ID: 9785624

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))

No integrated signals resulted in on-column concentrations above the reporting limit.

Digitally signed by Jeffrey B. Smith
on 09/18/2018 at 15:19.
Target 3.5 esignature user ID: jbs01304

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep18.b/18261.0004.d Instrument ID: A58309.i
Injection date and time: 18-SEP-2018 13:19 Analyst ID:

Method used: /chem/A58309.i/18sep18.b/gc_fid.m Sublist used: 6626
Calibration date and time: 18-SEP-2018 12:56
Date, time and analyst ID of latest file update: 18-Sep-2018 15:18 jbs01304

Sample Name: 9785624 Lab Sample ID: 9785624

RT	Area	Peak Label(s) and Range	Compound #s
2.917	4044	Methane	
21.542	2346		

Digitally signed by Jeffrey B. Smith
on 09/18/2018 at 15:19.
Target 3.5 esignature user ID: jbs01304

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE02

Sample Media:	Tedlar	Lab Sample ID:	9785625
Canister ID:	N/A	FID File ID:	18261.0005.d
Injection Volume:	100 cc	PID File ID:	
Instrument ID:	58309	Date Collected:	08/30/2018
Analyzed Date:	09/18/2018	Date Received:	09/05/2018
Analyzed Time:	13:47	Dilution Factor	1

Concentration Units: ppm(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
74-82-8	Methane	4	J

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.
- Compounds MTBE, Benzene, Toluene, Ethylbenzene, m/p-Xylene, o-Xylene and Xylene (total)are reported from PID file

Analysis Summary for GC Volatiles in Air

FID Data file: /chem/A58309.i/18sep18.b/18261.0005.d Injection date and time: **18-SEP-2018 13:47**
FID Data file Sample Info. Line: 9785625 Instrument ID: **A58309.i** Batch: **M1826130AA**
Date, time and analyst ID of latest FID file update: 18-Sep-2018 15:18 jbs01304

FID Blank Data file reference: **/chem/A58309.i/18sep18.b/18261B.0001.d**

FID Method used: /chem/A58309.i/18sep18.b/gc_fid.m FID Sublist used: **6626**
FID Calibration date and time (Last Method Edit): 18-SEP-2018 12:56
FID Mid Level Daily Calibration Standard Reference: **/chem/A58309.i/18sep18.b/18261.0000.d**

PID Data file: /chem/A58309.i/18sep18.b/18261B.0005.d Injection date and time: **18-SEP-2018 13:47**
PID Data file Sample Info. Line: 9785625 Instrument ID: **A58309.i** Batch: **M1826130AA**
Date, time and analyst ID of latest PID file update: 18-Sep-2018 14:15 Unknown

PID Blank Data file reference: **/chem/A58309.i/18sep18.b/18261.0001.d**

PID Method used: /chem/A58309.i/18sep18.b/gc_pid.m PID Sublist used: **07090**
PID Calibration date and time (Last Method Edit): 18-SEP-2018 12:56
PID Mid Level Daily Calibration Standard Reference: **/chem/A58309.i/18sep18.b/18261B.0000.d**

Sampling Media: Tedlar Bag Bottle code: N/A Matrix: AIR On-Column Amount units: ppm(v) In Sample Concentration units: ppm(v)

Sample Concentration Formula: On-Column Amount * DF * IVn/IVa Dilution Factor (DF): 1
Nominal Injection Volume (IVn): 100 cc Actual injection Volume (IVa): 100 cc

Analysis Comments:

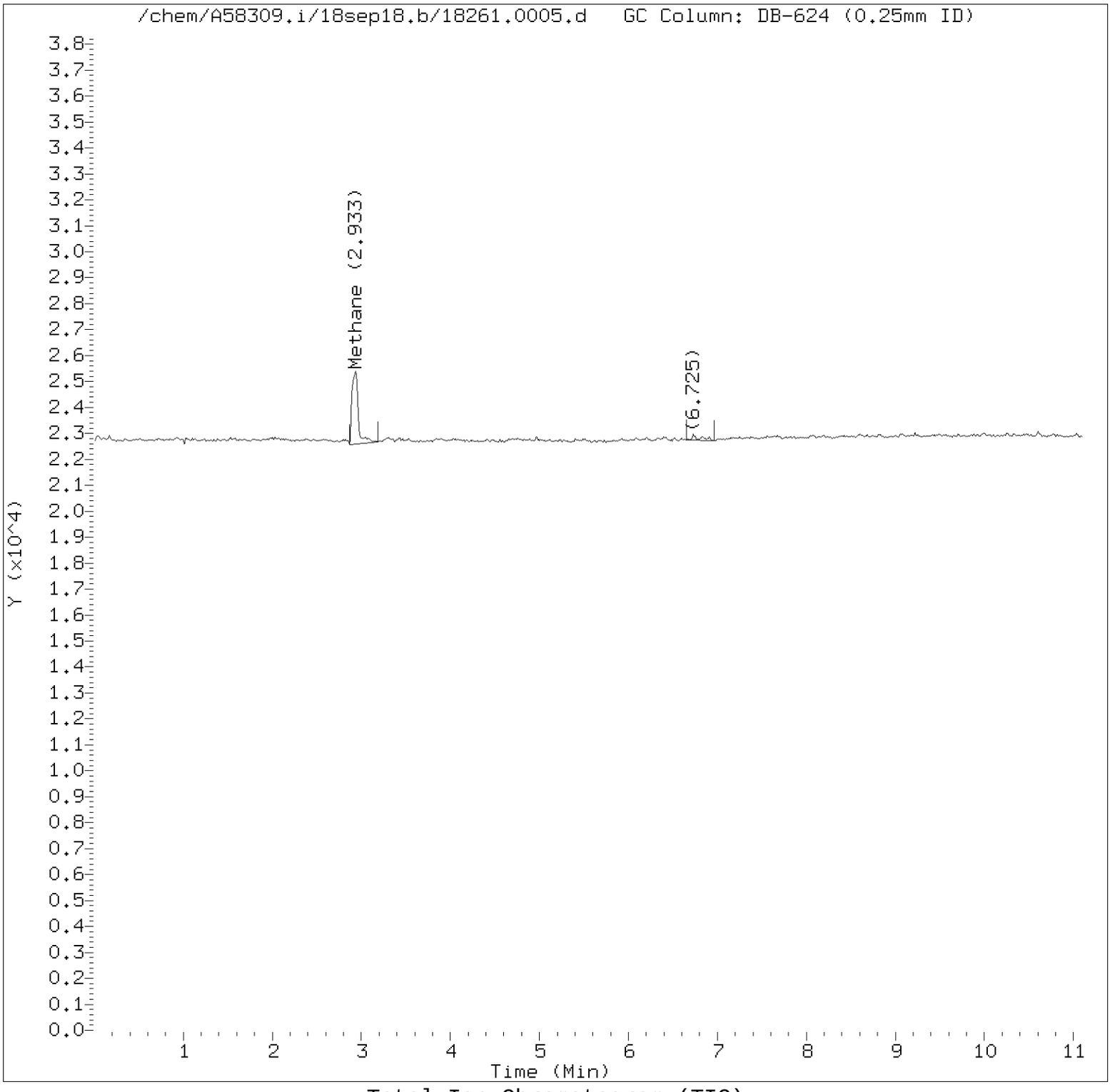
Single Component, Summary, and Range Target Compounds	Expected RT(±window)	RT Low Limit	RT	RT High Limit	Area	On-Column Concentration (ppm(v))	In Sample Concentration (ppm(v))	Blank Conc.	Qual.	Reporting Limit (on-column)	LOQ
1) Methane	2.908(±0.03)	2.878	2.933	2.938	13856	4.396	4.40		J	2	5
1) MTBE	8.183(±0.03)	8.153	N.D.	8.213		Not Detected				0.5	1
2) Benzene	11.383(±0.06)	11.323	N.D.	11.443		Not Detected				0.5	1
3) Toluene	14.458(±0.03)	14.428	N.D.	14.488		Not Detected				0.8	1
4) Ethylbenzene	16.908(±0.04)	16.868	N.D.	16.948		Not Detected				0.4	1
5) m/p-Xylene	17.092(±0.04)	17.052	N.D.	17.132		Not Detected				0.7	2
6) o-Xylene	17.767(±0.04)	17.727	N.D.	17.807		Not Detected				0.7	2
7) Xylene (total)						Not Detected				0.7	2

NIB = Compound not in referenced method blank sublist.

Total number of FID targets = 1 Total number of PID targets = 7

Digitally signed by Jeffrey B. Smith on 09/18/2018 at 15:19. Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 10/08/2018 at 10:31. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

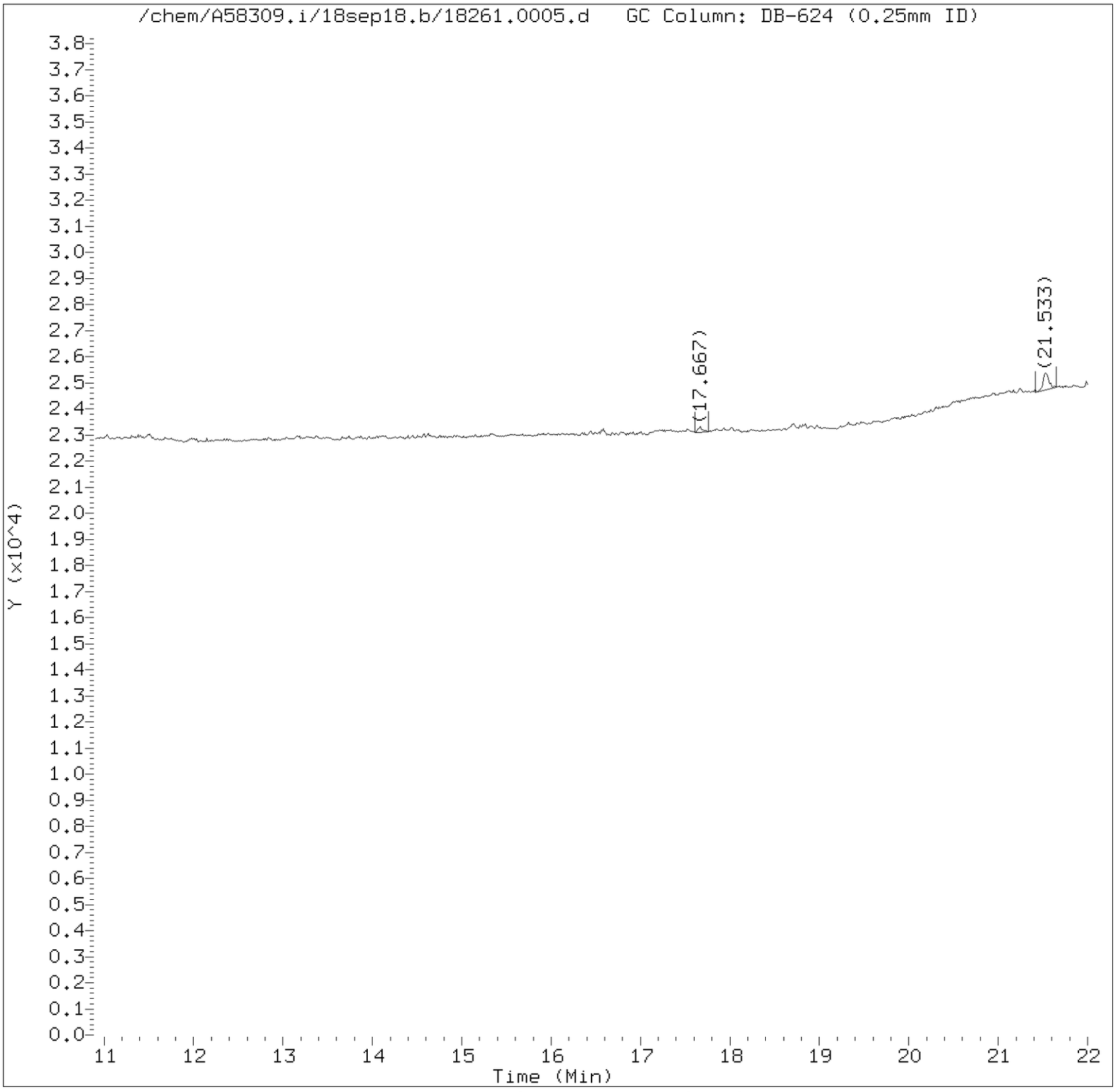
Target Revision 3.5

Data File: /chem/A58309.i/18sep18.b/18261.0005.d Instrument ID: A58309.i
Injection date and time: 18-SEP-2018 13:47 Analyst ID:

Method used: /chem/A58309.i/18sep18.b/gc_fid.m Sublist used: 6626
Calibration date and time: 18-SEP-2018 12:56
Date, time and analyst ID of latest file update: 18-Sep-2018 15:18 jbs01304

Sample Name: 9785625 Lab Sample ID: 9785625

Digitally signed by Jeffrey B. Smith
on 09/18/2018 at 15:19.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep18.b/18261.0005.d Instrument ID: A58309.i
Injection date and time: 18-SEP-2018 13:47 Analyst ID:

Method used: /chem/A58309.i/18sep18.b/gc_fid.m Sublist used: 6626
Calibration date and time: 18-SEP-2018 12:56
Date, time and analyst ID of latest file update: 18-Sep-2018 15:18 jbs01304

Sample Name: 9785625 Lab Sample ID: 9785625

Digitally signed by Jeffrey B. Smith
on 09/18/2018 at 15:19.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep18.b/18261.0005.d Instrument ID: A58309.i
Injection date and time: 18-SEP-2018 13:47 Analyst ID:

Method used: /chem/A58309.i/18sep18.b/gc_fid.m Sublist used: 6626
Calibration date and time: 18-SEP-2018 12:56
Date, time and analyst ID of latest file update: 18-Sep-2018 15:18 jbs01304

Sample Name: 9785625 Lab Sample ID: 9785625

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) Methane	2.908(±0.03)	2.933	13856	4.396

Digitally signed by Jeffrey B. Smith
on 09/18/2018 at 15:19.
Target 3.5 esignature user ID: jbs01304

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep18.b/18261.0005.d Instrument ID: A58309.i
Injection date and time: 18-SEP-2018 13:47 Analyst ID:

Method used: /chem/A58309.i/18sep18.b/gc_fid.m Sublist used: 6626
Calibration date and time: 18-SEP-2018 12:56
Date, time and analyst ID of latest file update: 18-Sep-2018 15:18 jbs01304

Sample Name: 9785625 Lab Sample ID: 9785625

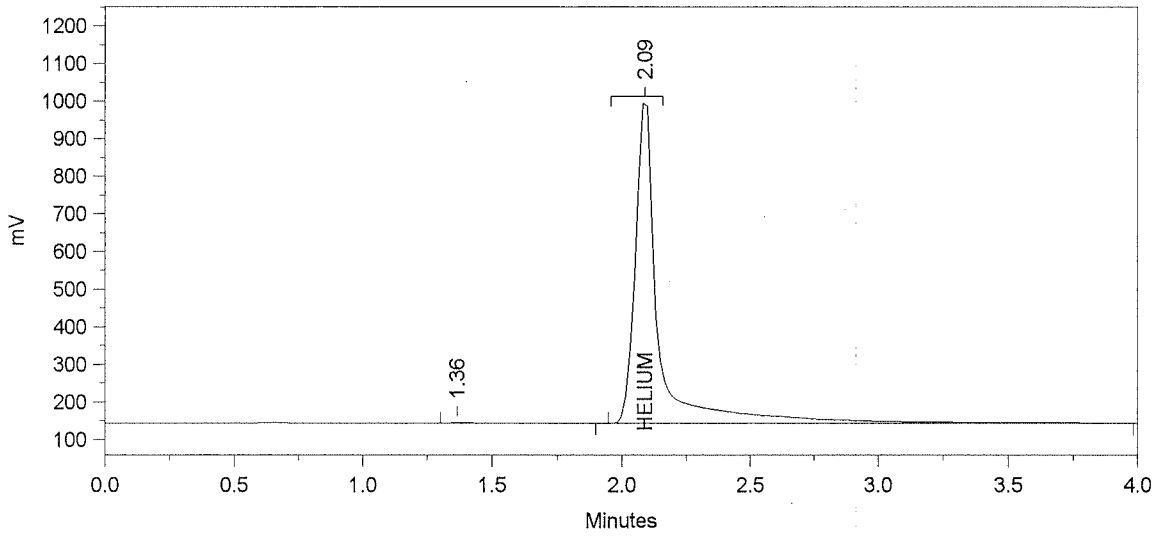
RT	Area	Peak Label(s) and Range	Compound #s
2.933	13856	Methane	
6.725	1406		
17.667	729		
21.533	2918		

Digitally signed by Jeffrey B. Smith
on 09/18/2018 at 15:19.
Target 3.5 esignature user ID: jbs01304

Standards Data

Volatile Organics in Air by GC

VSTD100%



Sample Name: **VSTD100%**
Acquired from FIXED GASES--TCD via port 1 on 11/17/15 10:53:29am by 1304
RT-Msieve 5A

Data File: **C:\CPWIN\DATA1\2015DATA\15321\15321.06R**
Date Stamp: 11/17/15 10:53:30am
Sequence File: 15320.SEQ #6
Method File: C:\CPWIN\DATA1\FGHE.MET
Version 47. Date Stamp: 11/17/15 12:05:20pm
Calibration File: C:\CPWIN\DATA1\HE15321.CAL
Version 1. Date Stamp: 11/17/15 12:04:54pm

Run Time = 4.0 min Sample Rate = 1.0 per sec.
Amount Inj. = 1.000 Dilution Factor = 1.000
Sample Weight = 1.000 Int Std Amount = 1.000

Starting Peak Width = 0.05 min. Peak Threshold = 5 Area Reject = 0

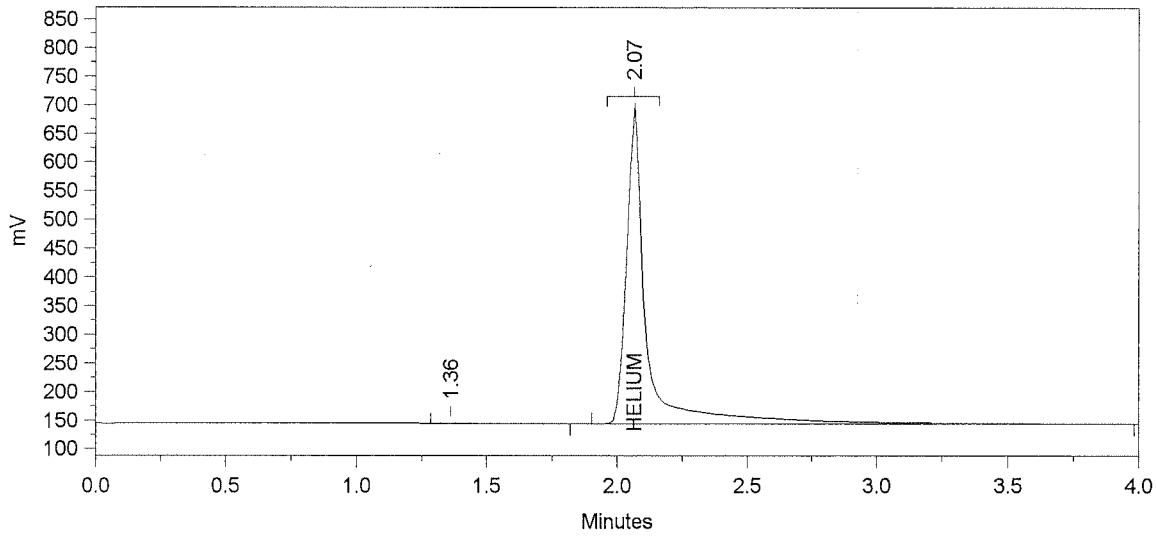
PK#	Ret Time	Name	Amount	Amount%	Area	Area%	Type	Width	Height	Height%
1	1.365		0.0000	0.000	8365.8	0.155	BB	0.211	661.07	0.075
2	2.091	HELIUM	979199.7000	100.000	5372120.0	99.845	BB	0.102	875179.20	99.925

Total Area = 5380486.0, Total Amount = 979199.7, Total Height = 875840.3, Sample Units = ppm(v)

AD57818 11/17/15

mp1758
11/18/15

VSTD50%



Sample Name: **VSTD50%**
Acquired from FIXED GASES--TCD via port 1 on 11/17/15 11:02:02am by 1304
RT-Msieve 5A

Data File: **C:\CPWIN\DATA1\2015DATA\15321\15321.07R**
Date Stamp: 11/17/15 11:02:04am
Sequence File: 15320.SEQ #7
Method File: C:\CPWIN\DATA1\FGHE.MET
Version 47. Date Stamp: 11/17/15 12:05:20pm
Calibration File: C:\CPWIN\DATA1\HE15321.CAL
Version 1. Date Stamp: 11/17/15 12:04:54pm

Run Time = 4.0 min Sample Rate = 1.0 per sec.
Amount Inj. = 1.000 Dilution Factor = 1.000
Sample Weight = 1.000 Int Std Amount = 1.000

Starting Peak Width = 0.05 min. Peak Threshold = 5 Area Reject = 0

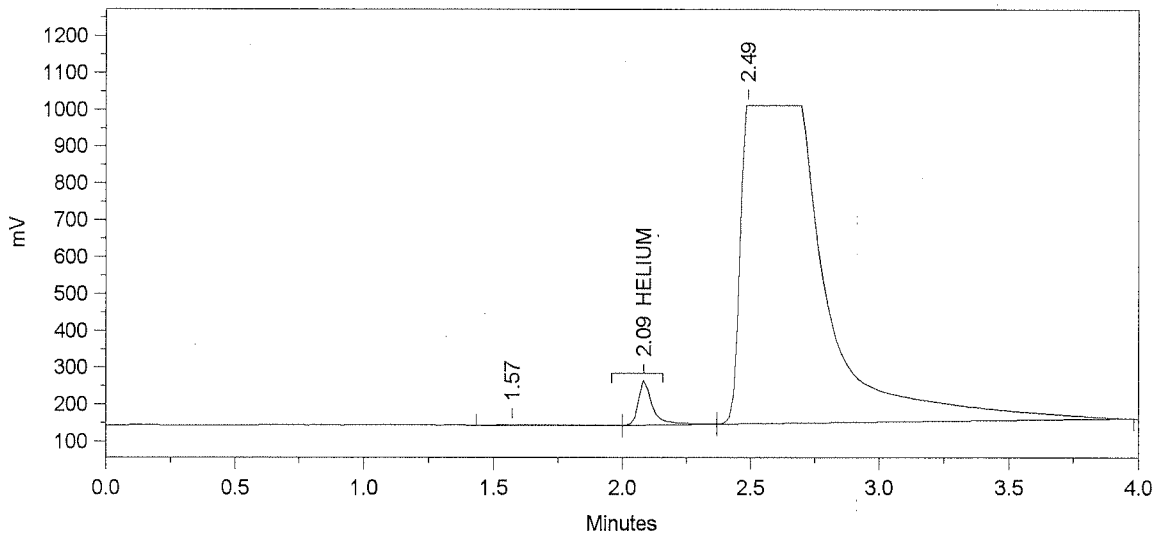
PK#	Ret Time	Name	Amount	Amount%	Area	Area%	Type	Width	Height	Height%
1	1.363		0.0000	0.000	5061.0	0.169	BB	0.205	412.28	0.074
2	2.065	HELIUM	545177.3000	100.000	2990971.0	99.831	BB	0.089	560136.00	99.926

Total Area = 2996032.0, Total Amount = 545177.3, Total Height = 560548.3, Sample Units = ppm(v)

AD57818 11/17/15

mpl758
11/18/15

VSTD10%



Sample Name: **VSTD10%**
Acquired from FIXED GASES--TCD via port 1 on 11/17/15 11:13:45am by 1304
RT-Msieve 5A

Data File: **C:\CPWIN\DATA1\2015DATA\15321\15321.08R**
Date Stamp: 11/17/15 11:13:48am
Sequence File: 15320.SEQ #8
Method File: C:\CPWIN\DATA1\FGHE.MET
Version 47. Date Stamp: 11/17/15 12:05:20pm
Calibration File: C:\CPWIN\DATA1\HE15321.CAL
Version 1. Date Stamp: 11/17/15 12:04:54pm

Run Time = 4.0 min Sample Rate = 1.0 per sec.
Amount Inj. = 1.000 Dilution Factor = 1.000
Sample Weight = 1.000 Int Std Amount = 1.000

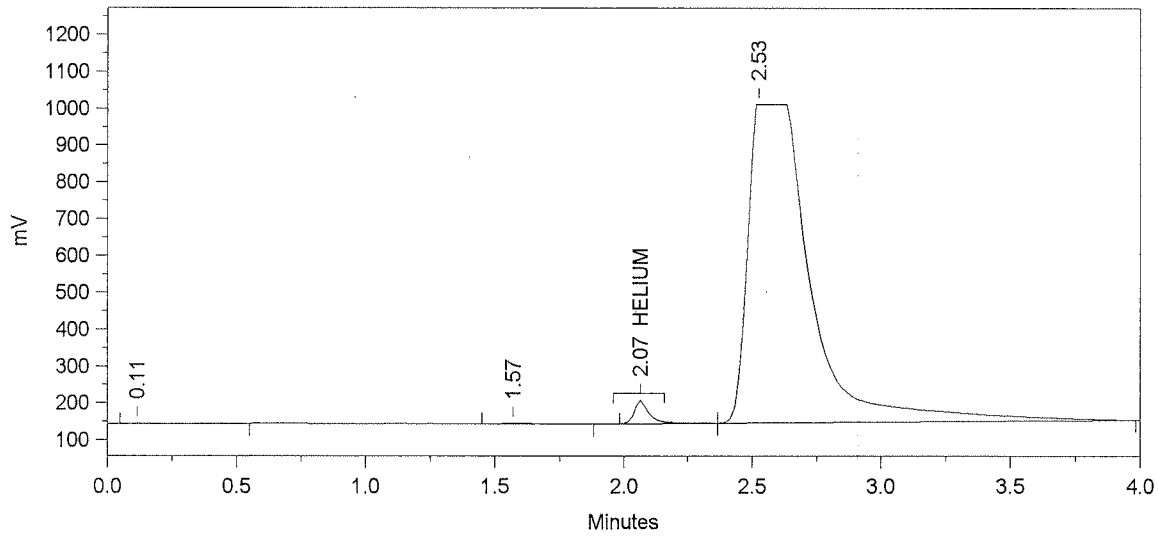
Starting Peak Width = 0.05 min. Peak Threshold = 5 Area Reject = 0

PK#	Ret Time	Name	Amount	Amount%	Area	Area%	Type	Width	Height	Height%
1	1.571		0.0000	0.000	11367.2	0.056	BB	0.241	785.87	0.077
2	2.086	HELIUM	84258.4700	100.000	462261.8	2.284	BV	0.063	123240.60	12.139
3	2.492		0.0000	0.000	19767070.0	97.660	VB	0.370	891257.90	87.784

Total Area = 20240690.0, Total Amount = 84258.47, Total Height = 1015284.0, Sample Units = ppm(v)

AD57818 11/17/15
mgp1758
11/18/15

VSTD5%



Sample Name: **VSTD5%**
Acquired from FIXED GASES--TCD via port 1 on 11/17/15 11:22:19am by 1304
RT-Msieve 5A

Data File: **C:\CPWIN\DATA1\2015DATA\15321\15321.09R**
Date Stamp: 11/17/15 11:22:22am
Sequence File: 15320.SEQ #9
Method File: C:\CPWIN\DATA1\FGHE.MET
Version 47. Date Stamp: 11/17/15 12:05:20pm
Calibration File: C:\CPWIN\DATA1\HE15321.CAL
Version 1. Date Stamp: 11/17/15 12:04:54pm

Run Time = 4.0 min Sample Rate = 1.0 per sec.
Amount Inj. = 1.000 Dilution Factor = 1.000
Sample Weight = 1.000 Int Std Amount = 1.000

Starting Peak Width = 0.05 min. Peak Threshold = 5 Area Reject = 0

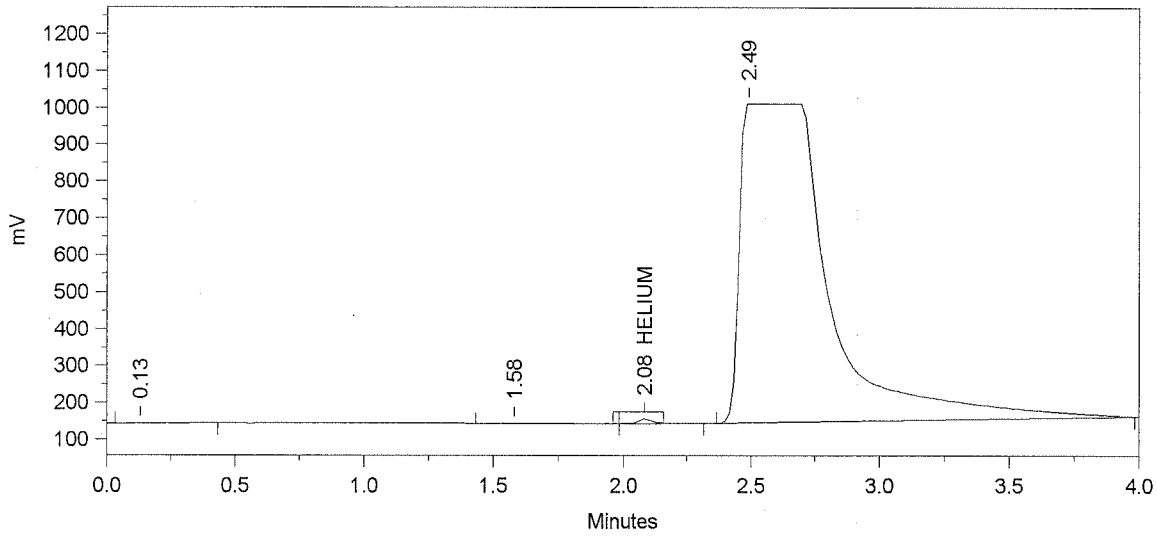
PK#	Ret Time	Name	Amount	Amount%	Area	Area%	Type	Width	Height	Height%
1	0.115		0.0000	0.000	4143.6	0.028	BB	0.180	384.72	0.041
2	1.569		0.0000	0.000	5998.3	0.040	BB	0.185	541.48	0.057
3	2.066	HELIUM	46052.7500	100.000	252656.2	1.692	BV	0.067	62492.53	6.613
4	2.525		0.0000	0.000	14672560.0	98.240	VB	0.277	881532.30	93.289

Total Area = 14935360.0, Total Amount = 46052.75, Total Height = 944951.0, Sample Units = ppm(v)

AD57018 11/17/15

mgp1758
11/18/15

VSTD1%



Sample Name: **VSTD1%**
Acquired from FIXED GASES--TCD via port 1 on 11/17/15 11:49:44am by 1304
RT-Msieve 5A

Data File: **C:\CPWIN\DATA1\2015DATA\15321\15321.10R**
Date Stamp: 11/17/15 11:49:46am
Sequence File: 15320.SEQ #10
Method File: C:\CPWIN\DATA1\FGHE.MET
Version 47. Date Stamp: 11/17/15 12:05:20pm
Calibration File: C:\CPWIN\DATA1\HE15321.CAL
Version 1. Date Stamp: 11/17/15 12:04:54pm

Run Time = 4.0 min Sample Rate = 1.0 per sec.
Amount Inj. = 1.000 Dilution Factor = 1.000
Sample Weight = 1.000 Int Std Amount = 1.000

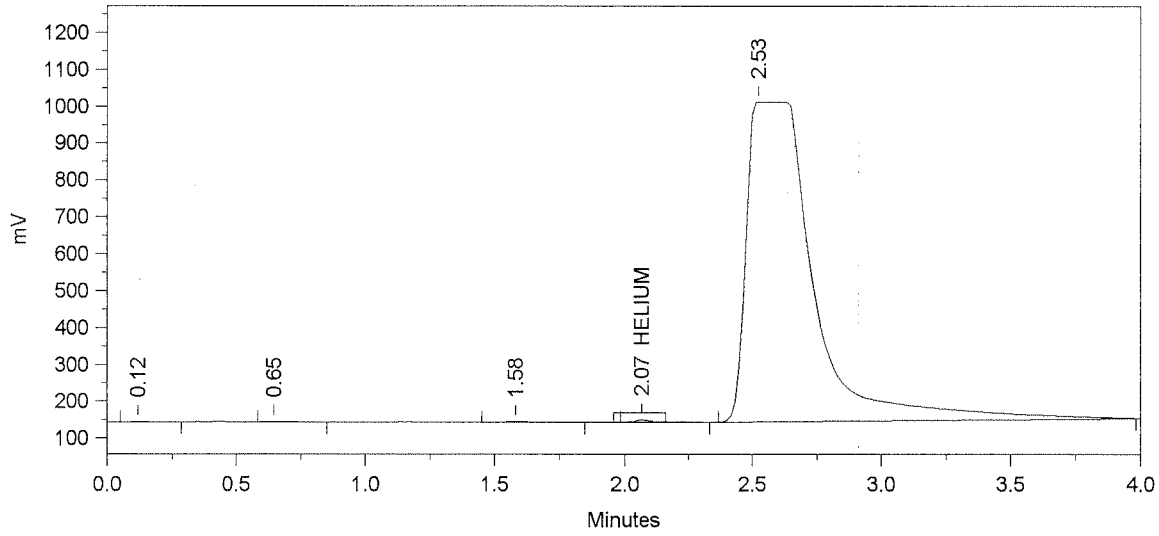
Starting Peak Width = 0.05 min. Peak Threshold = 5 Area Reject = 0

PK#	Ret Time	Name	Amount	Amount%	Area	Area%	Type	Width	Height	Height%
1	0.132		0.0000	0.000	2460.0	0.012	BB	0.161	254.04	0.029
2	1.582		0.0000	0.000	12044.9	0.058	BB	0.237	846.37	0.095
3	2.085	HELIUM	8375.9960	100.000	45952.7	0.221	BB	0.060	12662.26	1.423
4	2.492		0.0000	0.000	20686260.0	99.709	BB	0.394	876143.50	98.453

Total Area = 20746710.0, Total Amount = 8375.996, Total Height = 889906.2, Sample Units = ppm(v)

AD57518 11/17/15
mgp1758
11/18/15

VSTD0.5%



Sample Name: **VSTD0.5%**
Acquired from FIXED GASES--TCD via port 1 on 11/17/15 11:58:18am by 1304
RT-Msieve 5A

Data File: **C:\CPWIN\DATA1\2015DATA\15321\15321.11R**
Date Stamp: 11/17/15 11:58:20am
Sequence File: 15320.SEQ #11
Method File: C:\CPWIN\DATA1\FGHE.MET
Version 47. Date Stamp: 11/17/15 12:05:20pm
Calibration File: C:\CPWIN\DATA1\HE15321.CAL
Version 1. Date Stamp: 11/17/15 12:04:54pm

Run Time = 4.0 min Sample Rate = 1.0 per sec.
Amount Inj. = 1.000 Dilution Factor = 1.000
Sample Weight = 1.000 Int Std Amount = 1.000

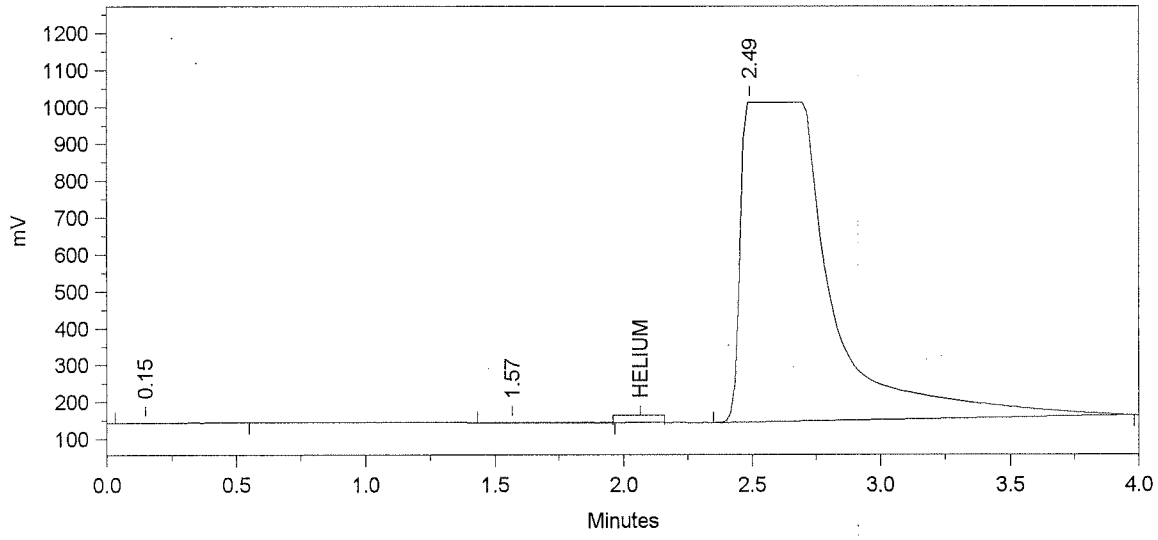
Starting Peak Width = 0.05 min. Peak Threshold = 5 Area Reject = 0

PK#	Ret Time	Name	Amount	Amount%	Area	Area%	Type	Width	Height	Height%
1	0.117		0.0000	0.000	2048.2	0.013	BB	0.085	401.29	0.046
2	0.646		0.0000	0.000	2612.2	0.017	BB	0.100	435.53	0.050
3	1.581		0.0000	0.000	5772.7	0.037	BB	0.184	524.20	0.060
4	2.065	HELIUM	4873.8590	100.000	26739.1	0.171	BB	0.069	6437.71	0.733
5	2.525		0.0000	0.000	15563370.0	99.762	BB	0.298	870975.80	99.113

Total Area = 15600540.0, Total Amount = 4873.859, Total Height = 878774.6, Sample Units = ppm(v)

ADS-7818 11/17/15
mpl758
11/18/15

VBLK321



Sample Name: **VBLK321**
Acquired from FIXED GASES--TCD via port 1 on 11/17/15 12:20:57pm by 1304
RT-Msieve 5A

Data File: **C:\CPWIN\DATA1\2006DATA\SEP06\06262\15321.12R**
Date Stamp: 11/17/15 12:21:00pm
Sequence File: 15320.SEQ #12
Method File: C:\CPWIN\DATA1\FGHE.MET
Version 47. Date Stamp: 11/17/15 12:05:20pm
Calibration File: C:\CPWIN\DATA1\HE15321.CAL
Version 1. Date Stamp: 11/17/15 12:04:54pm

Run Time = 4.0 min Sample Rate = 1.0 per sec.
Amount Inj. = 1.000 Dilution Factor = 1.000
Sample Weight = 1.000 Int Std Amount = 1.000

Starting Peak Width = 0.05 min. Peak Threshold = 5 Area Reject = 0

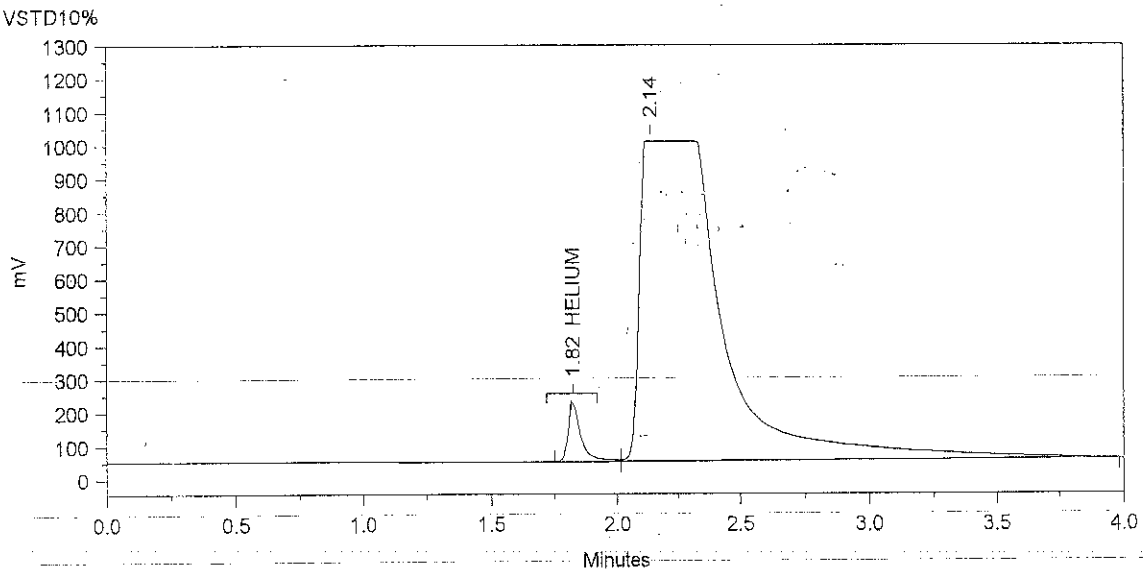
PK#	Ret Time	Name	Amount	Amount%	Area	Area%	Type	Width	Height	Height%
1	0.148		0.0000	0.000	2719.3	0.013	BB	0.195	232.11	0.026
2	1.566		0.0000	0.000	12352.7	0.059	BB	0.243	846.75	0.096
3	2.492		0.0000	0.000	20753840.0	99.927	BB	0.394	878867.90	99.877

Total Area = 20768920.0, Total Amount = 0.0, Total Height = 879946.8, Sample Units = ppm(v)

N.D.

AD57818 11/17/15

mqp1758
11/19/15



Sample Name: **VSTD10%**
Acquired from FIXED GASES--TCD via port 1 on 9/11/18 01:40:32pm by 1304
RT-Msieve 5A

Data File: **C:\CPWIN\DATA1\2018DATA\18254\18254.01R**
Date Stamp: 9/11/18 01:40:32pm
Sequence File: 18254.SEQ #1
Method File: C:\CPWIN\DATA1\FGHE.MET
Version 50. Date Stamp: 4/18/18 02:43:30pm
Calibration File: C:\CPWIN\DATA1\HE18108.CAL
Version 1. Date Stamp: 4/18/18 02:43:14pm

Run Time = 4.0 min Sample Rate = 1.0 per sec.
Amount Inj. = 1.000 Dilution Factor = 1.000
Sample Weight = 1.000 Int Std Amount = 1.000

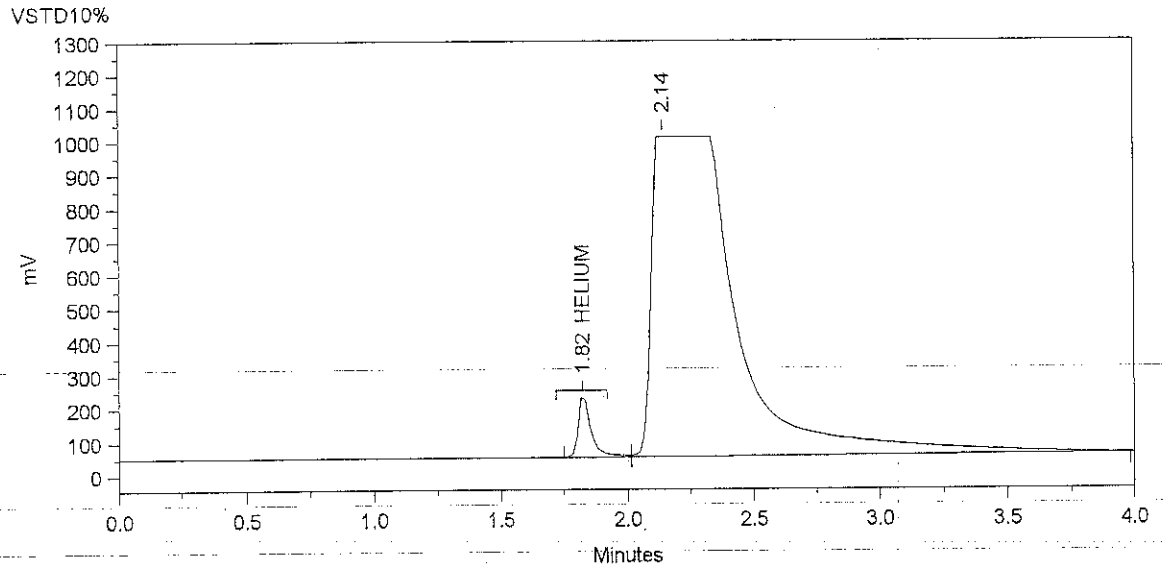
Starting Peak Width = 0.05 min. Peak Threshold = 5 Area Reject = 0

PK#	Ret Time	Name	Amount	Amount%	Area	Area%	Type	Width	Height	Height%
1	1.822	HELIUM	116329.6000	100.000	638211.6	2.800	BV	0.056	190935.10	16.605
2	2.142		0.0000	0.000	22153750.0	97.200	VB	0.385	958929.60	83.395

Total Area = 22791960.0, Total Amount = 116329.6, Total Height = 1149865.0, Sample Units = ppm(v)

16.3900

9/20/18



Sample Name: **VSTD10%**
Acquired from FIXED GASES--TCD via port 1 on 9/11/18 03:58:19pm by 1304
RT-Msieve 5A

Data File: **C:\CPWIN\DATA1\2018DATA\18254\18254.11R**
Date Stamp: 9/11/18 03:58:18pm
Sequence File: 18254.SEQ #11
Method File: C:\CPWIN\DATA1\FGHE.MET
Version 50. Date Stamp: 4/18/18 02:43:30pm
Calibration File: C:\CPWIN\DATA1\HE18108.CAL
Version 1. Date Stamp: 4/18/18 02:43:14pm

Run Time = 4.0 min Sample Rate = 1.0 per sec.
Amount Inj. = 1.000 Dilution Factor = 1.000
Sample Weight = 1.000 Int Std Amount = 1.000

Starting Peak Width = 0.05 min. Peak Threshold = 5 Area Reject = 0

PK#	Ret Time	Name	Amount	Amount%	Area	Area%	Type	Width	Height	Height%
1	1.824	HELIUM	118574.5000	100.000	650527.6	2.826	BV	0.057	190814.50	16.596
2	2.142		0.0000	0.000	22370590.0	97.174	VB	0.389	958944.40	83.404

Total Area = 23021120.0, Total Amount = 118574.5, Total Height = 1149759.0, Sample Units = ppm(v)

18.67% D

9/20/18

Lancaster Laboratories
Volatiles in Air
Runlog for Hewlett Packard GC/FID/PID System A58309

Data Directory Path is - C:\CP\DATA1

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
	18260.0000.d	VSTD010	09/17/2018	09:28		
	18260B.0000.d	VSTD010	09/17/2018	09:28		
	18260.0001.d	VSTD010	09/17/2018	10:06		
	18260B.0001.d	VSTD010	09/17/2018	10:06		
	18260.0002.d	VSTD010	09/17/2018	10:38		
	18260B.0002.d	VSTD010	09/17/2018	10:38		
	18260.0003.d	VSTD010	09/17/2018	11:12		
	18260B.0003.d	VSTD010	09/17/2018	11:12		
	18260.0004.d	VSTD010	09/17/2018	11:41		
	18260B.0004.d	VSTD010	09/17/2018	11:41		
	18260.0006.d	VSTD005	09/17/2018	12:10		
	18260B.0006.d	VSTD005	09/17/2018	12:10		
	18260.0007.d	VSTD001	09/17/2018	12:42		
	18260B.0007.d	VSTD001	09/17/2018	12:42		
	18260.0008.d	VSTD025	09/17/2018	13:12		
	18260B.0008.d	VSTD025	09/17/2018	13:12		
	18260.0009.d	VSTD100	09/17/2018	13:43		
	18260B.0009.d	VSTD100	09/17/2018	13:43		
	18260.0010.d	VSTD500	09/17/2018	14:17		
	18260B.0010.d	VSTD500	09/17/2018	14:17		
	18260.0011.d	VSTD010	09/17/2018	14:47		
	18260B.0011.d	VSTD010	09/17/2018	14:47		
	18260.0012.d	VBLK260	09/17/2018	15:26	M1826030AA	
	18260B.0012.d	VBLK260	09/17/2018	15:26	M1826030AA	
	18260.0013.d	LCS260	09/17/2018	16:04	M1826030AA	
	18260B.0013.d	LCS260	09/17/2018	16:04	M1826030AA	
	18260.0014.d	LCSD260	09/17/2018	16:37	M1826030AA	
	18260B.0014.d	LCSD260	09/17/2018	16:37	M1826030AA	
	18260.0015.d	9770891	09/17/2018	17:17	M1826030AA	
	18260B.0015.d	9770891	09/17/2018	17:17	M1826030AA	
	18260.0016.d	9770892	09/17/2018	17:46	M1826030AA	
	18260B.0016.d	9770892	09/17/2018	17:46	M1826030AA	
	18260.0017.d	9770893	09/17/2018	18:15	M1826030AA	
	18260B.0017.d	9770893	09/17/2018	18:15	M1826030AA	
	18260.0018.d	9777751	09/17/2018	18:43	M1826030AA	
	18260B.0018.d	9777751	09/17/2018	18:43	M1826030AA	
	18260.0019.d	9777752	09/17/2018	19:12	M1826030AA	
	18260B.0019.d	9777752	09/17/2018	19:12	M1826030AA	
	18260.0020.d	9777753	09/17/2018	19:42	M1826030AA	
	18260B.0020.d	9777753	09/17/2018	19:42	M1826030AA	
	18260.0021.d	9783074	09/17/2018	20:10	M1826030AA	
	18260B.0021.d	9783074	09/17/2018	20:10	M1826030AA	
	18260.0022.d	9783075	09/17/2018	20:39	M1826030AA	
	18260B.0022.d	9783075	09/17/2018	20:39	M1826030AA	
	18260.0023.d	9784854	09/17/2018	21:08	M1826030AA	
	18260B.0023.d	8784854	09/17/2018	21:08	M1826030AA	
	18260.0024.d	9784855	09/17/2018	21:36	M1826030AA	
	18260B.0024.d	8784855	09/17/2018	21:36	M1826030AA	
	18260.0025.d	9784856	09/17/2018	22:05	M1826030AA	
	18260B.0025.d	8784856	09/17/2018	22:05	M1826030AA	
	18260.0026.d	9784857	09/17/2018	22:34	M1826030AA	
	18260B.0026.d	8784857	09/17/2018	22:34	M1826030AA	
	18260.0027.d	9784858	09/17/2018	23:03	M1826030AA	
	18260B.0027.d	8784858	09/17/2018	23:03	M1826030AA	
	18260.0028.d	9784859	09/17/2018	23:31	M1826030AA	
	18260B.0028.d	8784859	09/17/2018	23:31	M1826030AA	
	18260.0029.d	9784860	09/18/2018	00:00	M1826030AA	
	18260B.0029.d	8784860	09/18/2018	00:00	M1826030AA	
	18260.0030.d	9784861	09/18/2018	00:29	M1826030AA	
	18260B.0030.d	8784861	09/18/2018	00:29	M1826030AA	
	18260.0031.d	9785623	09/18/2018	00:57	M1826030AA	
	18260B.0031.d	7895623	09/18/2018	00:57	M1826030AA	
	18260.0032.d	9785624	09/18/2018	01:26	M1826030AA	
	18260B.0032.d	7895624	09/18/2018	01:26	M1826030AA	
	18260.0034.d	CBLK	09/18/2018	08:11	M1826030AA	
	18260B.0034.d	CBLK	09/18/2018	08:11	M1826030AA	
	18260.0035.d	CBLK	09/18/2018	08:39	M1826030AA	
	18260B.0035.d	CBLK	09/18/2018	08:39	M1826030AA	
	18260.0036.d	CBLK	09/18/2018	09:08	M1826030AA	
	18260B.0036.d	CBLK	09/18/2018	09:08	M1826030AA	
	18260.0037.d	CBLK	09/18/2018	09:36	M1826030AA	
	18260B.0037.d	CBLK	09/18/2018	09:36	M1826030AA	
	18260.0038.d	CBLK	09/18/2018	10:05	M1826030AA	
	18260B.0038.d	CBLK	09/18/2018	10:05	M1826030AA	

Lancaster Laboratories
Volatiles in Air
Runlog for Hewlett Packard GC/FID/PID System A58309

Data Directory Path is - C:\CP\DATA1

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
	18261.0000.d	VSTD010	09/18/2018	10:39		
	18261B.0000.d	VSTD010	09/18/2018	10:39		
	18261.0001.d	VBLK261	09/18/2018	11:13	M1826130AA	
	18261B.0001.d	VBLK261	09/18/2018	11:13	M1826130AA	
	18261.0002.d	LCS261	09/18/2018	11:51	M1826130AA	
	18261B.0002.d	LCS261	09/18/2018	11:51	M1826130AA	
	18261.0003.d	LCSD261	09/18/2018	12:21	M1826130AA	
	18261B.0003.d	LCSD261	09/18/2018	12:21	M1826130AA	
	18261.0004.d	9785624	09/18/2018	13:19	M1826130AA	
	18261B.0004.d	9785624	09/18/2018	13:19	M1826130AA	
	18261.0005.d	9785625	09/18/2018	13:47	M1826130AA	
	18261B.0005.d	9785625	09/18/2018	13:47	M1826130AA	
	18261.0006.d	9791119	09/18/2018	14:16	M1826130AA	
	18261B.0006.d	9791119	09/18/2018	14:16	M1826130AA	
	18261.0007.d	9791120	09/18/2018	14:45	M1826130AA	
	18261B.0007.d	9791120	09/18/2018	14:45	M1826130AA	
	18261.0008.d	9791192	09/18/2018	15:13	M1826130AA	
	18261B.0008.d	9791192	09/18/2018	15:13	M1826130AA	
	18261.0009.d	9791193	09/18/2018	15:42	M1826130AA	
	18261B.0009.d	9791193	09/18/2018	15:42	M1826130AA	
	18261.0010.d	9796405	09/18/2018	16:11	M1826130AA	
	18261B.0010.d	9796405	09/18/2018	16:11	M1826130AA	
	18261.0011.d	9796406	09/18/2018	16:39	M1826130AA	
	18261B.0011.d	9796406	09/18/2018	16:39	M1826130AA	
	18261.0012.d	9797313	09/18/2018	17:08	M1826130AA	
	18261B.0012.d	9797313	09/18/2018	17:08	M1826130AA	
	18261.0013.d	9797314	09/18/2018	17:37	M1826130AA	
	18261B.0013.d	9797314	09/18/2018	17:37	M1826130AA	
	18261.0014.d	9798731	09/18/2018	18:17	M1826130AA	
	18261B.0014.d	9798731	09/18/2018	18:17	M1826130AA	
	18261.0015.d	9798732	09/18/2018	18:46	M1826130AA	
	18261B.0015.d	9798732	09/18/2018	18:46	M1826130AA	
	18261.0016.d	9798733	09/18/2018	19:15	M1826130AA	
	18261B.0016.d	9798733	09/18/2018	19:15	M1826130AA	
	18261.0017.d	9798734	09/18/2018	19:43	M1826130AA	
	18261B.0017.d	9798734	09/18/2018	19:43	M1826130AA	
	18261.0018.d	9798735	09/18/2018	20:12	M1826130AA	
	18261B.0018.d	9798735	09/18/2018	20:12	M1826130AA	
	18261.0019.d	9765349	09/18/2018	20:41	M1826130AA	
	18261B.0019.d	9765349	09/18/2018	20:41	M1826130AA	
	18261.0020.d	9765350	09/18/2018	21:09	M1826130AA	
	18261B.0020.d	9765350	09/18/2018	21:09	M1826130AA	
	18261.0021.d	9765351	09/18/2018	21:38	M1826130AA	
	18261B.0021.d	9765351	09/18/2018	21:38	M1826130AA	
	18261.0022.d	9765352	09/18/2018	22:07	M1826130AA	
	18261B.0022.d	9765352	09/18/2018	22:07	M1826130AA	
	18261.0023.d	9765353	09/18/2018	22:35	M1826130AA	
	18261B.0023.d	9765353	09/18/2018	22:35	M1826130AA	
	18261.0024.d	cblk	09/19/2018	10:18	M1826130AA	
	18261B.0024.d	cblk	09/19/2018	10:18	M1826130AA	
	18261.0025.d	cblk	09/19/2018	10:46	M1826130AA	
	18261B.0025.d	cblk	09/19/2018	10:46	M1826130AA	
	18261.0026.d	cblk	09/19/2018	11:15	M1826130AA	
	18261B.0026.d	cblk	09/19/2018	11:15	M1826130AA	
	18261.0027.d	cblk	09/19/2018	11:44	M1826130AA	
	18261B.0027.d	cblk	09/19/2018	11:44	M1826130AA	
	18261.0028.d	cblk	09/19/2018	12:12	M1826130AA	
	18261B.0028.d	cblk	09/19/2018	12:12	M1826130AA	
	18261.0029.d	cblk	09/20/2018	08:37	M1826130AA	
	18261B.0029.d	cblk	09/20/2018	08:37	M1826130AA	
	18261.0030.d	cblk	09/20/2018	09:06	M1826130AA	
	18261B.0030.d	cblk	09/20/2018	09:06	M1826130AA	
	18261.0031.d	cblk	09/20/2018	09:34	M1826130AA	
	18261B.0031.d	cblk	09/20/2018	09:34	M1826130AA	
	18261.0032.d	cblk	09/20/2018	10:03	M1826130AA	
	18261B.0032.d	cblk	09/20/2018	10:03	M1826130AA	
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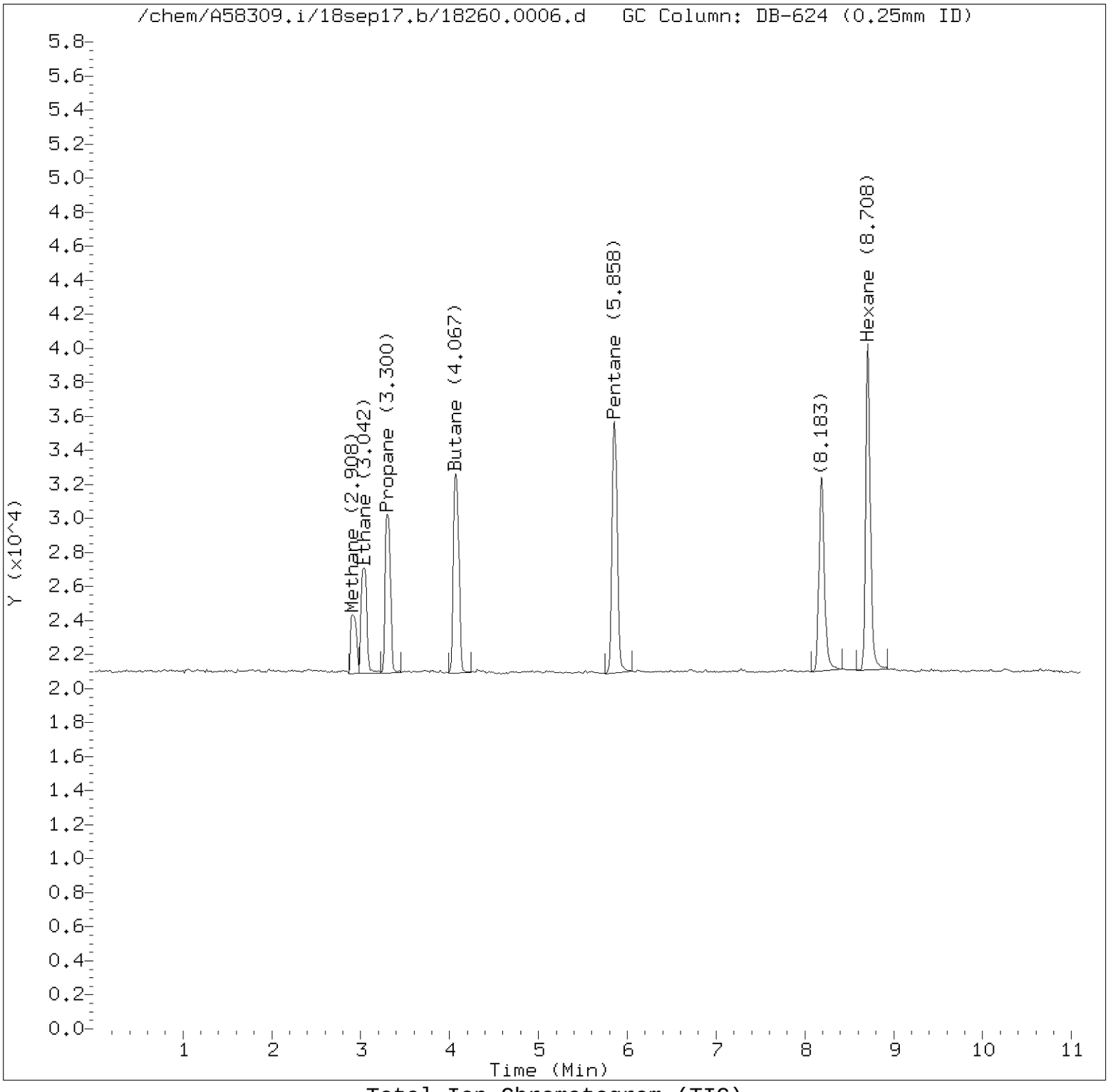


Total Ion Chromatogram (TIC)

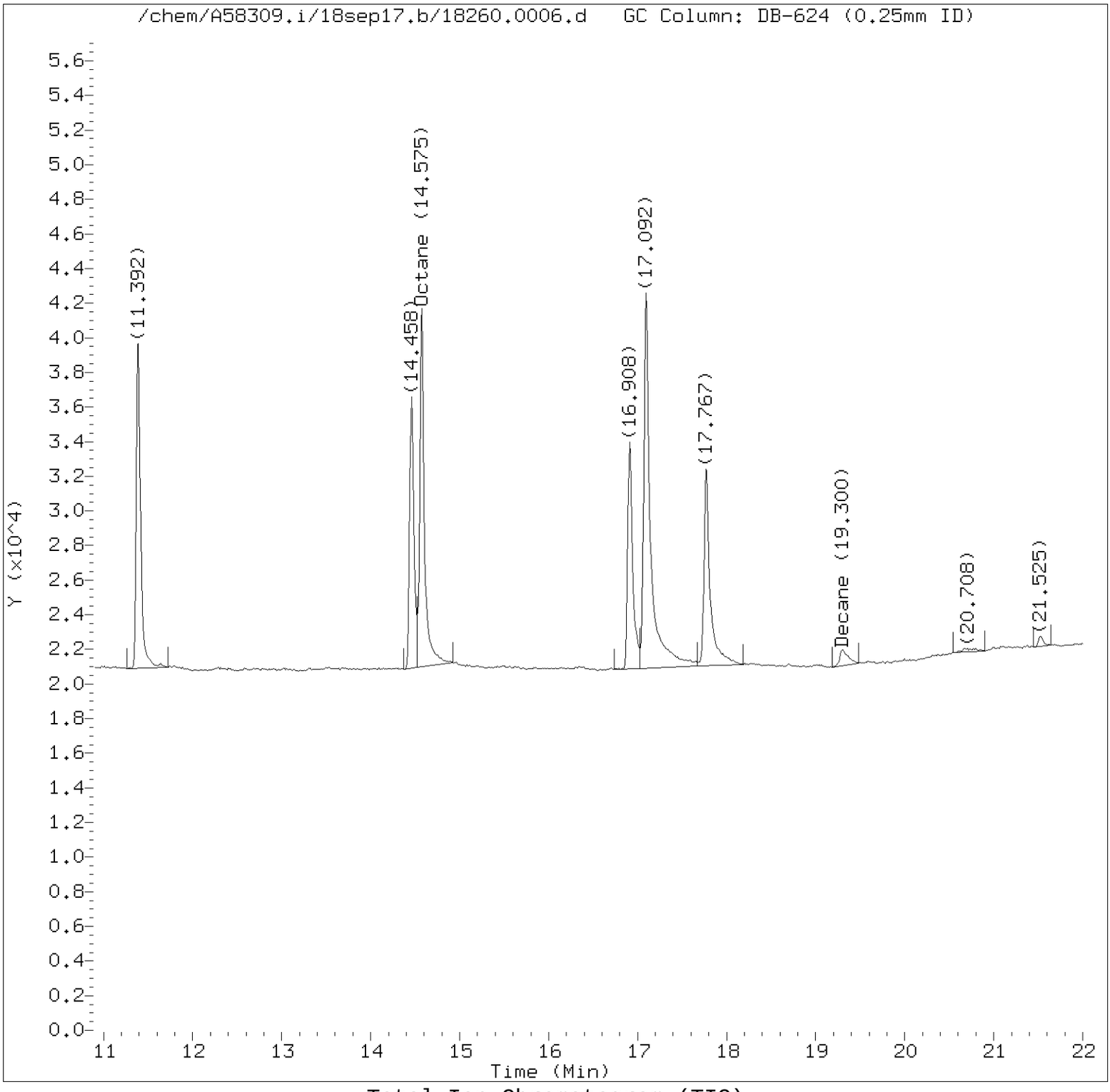
Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0006.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:10 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:45
Date, time and analyst ID of latest file update: 17-Sep-2018 15:45 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0006.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:10 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:45
Date, time and analyst ID of latest file update: 17-Sep-2018 15:45 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0006.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:10 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:45
Date, time and analyst ID of latest file update: 17-Sep-2018 15:45 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) Methane	2.908(±0.03)	2.908	15837	5.025
2) Ethane	3.042(±0.03)	3.042	28228	4.594
3) Propane	3.300(±0.03)	3.300	40479	4.651
4) Butane	4.067(±0.03)	4.067	52473	4.629
5) Pentane	5.858(±0.03)	5.858	62441	4.552
7) Hexane	8.708(±0.03)	8.708	70948	4.630
10) Octane	14.567(±0.03)	14.575	79197	4.707
15) Decane	19.283(±0.03)	19.300	6173	0.520

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

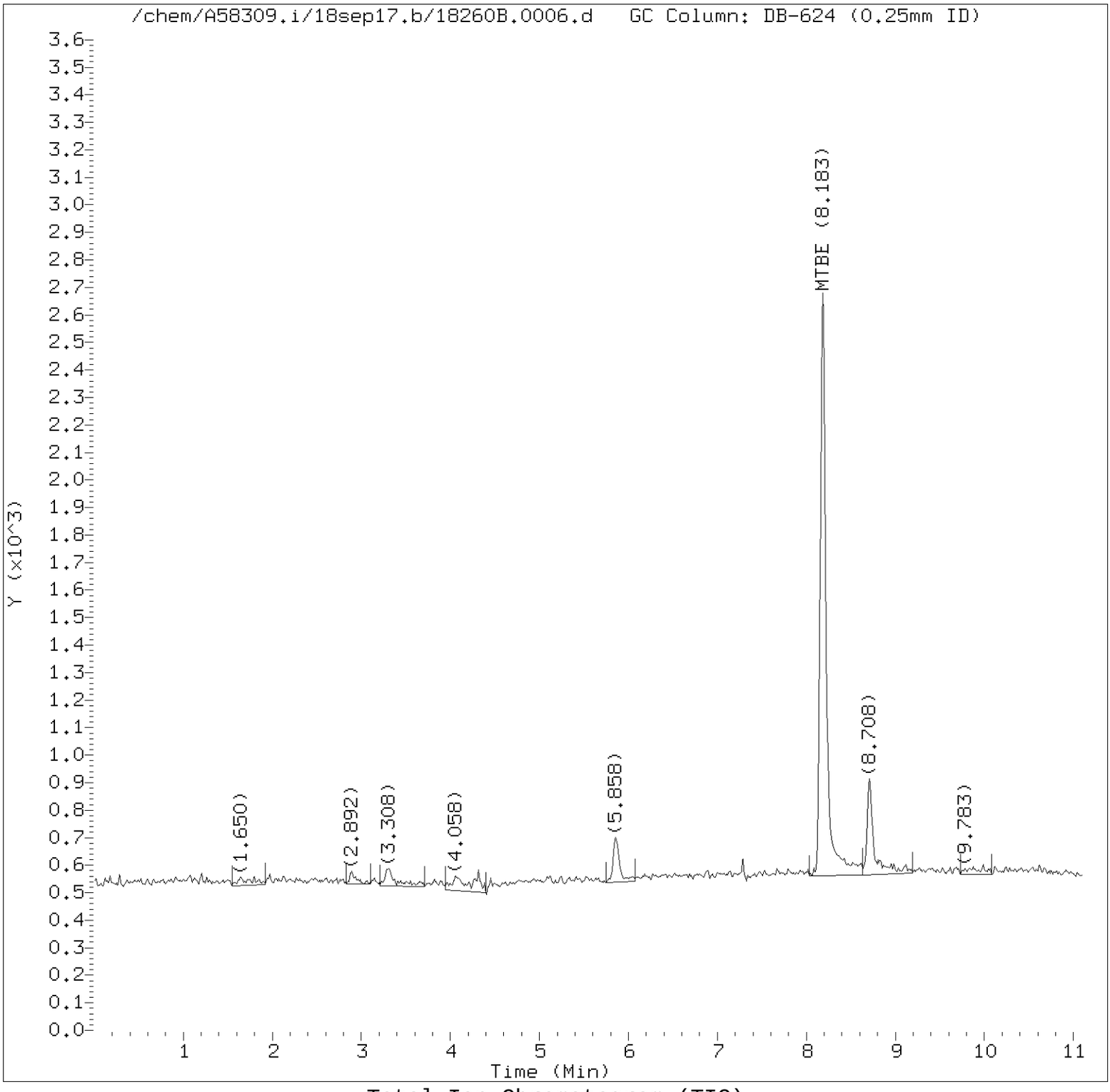
Data File: /chem/A58309.i/18sep17.b/18260.0006.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:10 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:45
Date, time and analyst ID of latest file update: 17-Sep-2018 15:45 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

RT	Area	Peak Label(s) and Range	Compound #s
2.908	15837	Methane	
3.042	28229	Ethane	
3.300	40480	Propane	
4.067	52473	Butane	
5.858	62442	Pentane	
8.183	50191		
8.708	70949	Hexane	
11.392	65826		
14.458	53071		
14.575	79198	Octane	
16.908	51618		
17.092	119113		
17.767	56977		
19.300	6173	Decane	
20.708	2197		
21.525	2228		

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

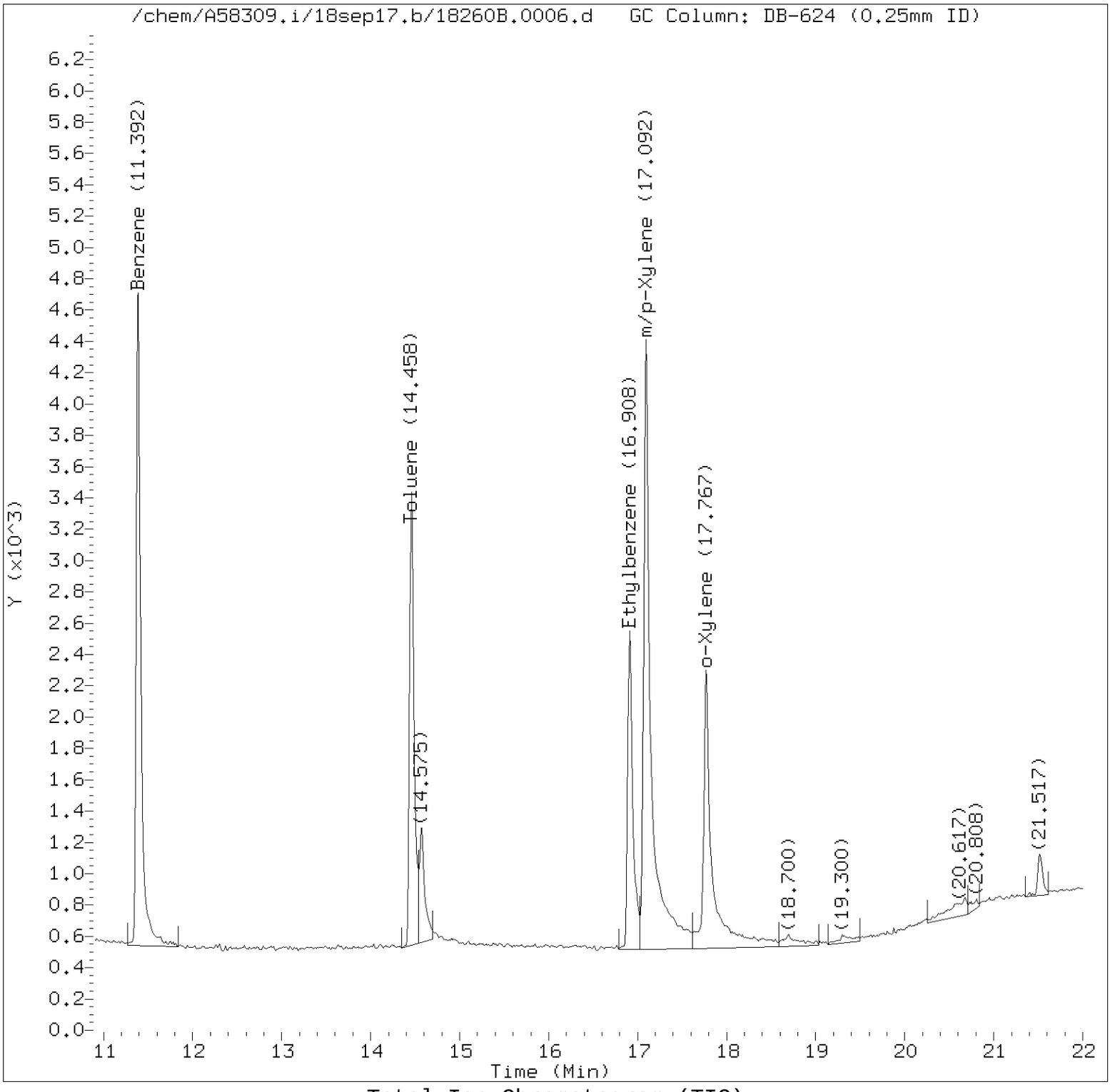
Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260B.0006.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:10 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260B.0006.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:10 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260B.0006.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:10 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

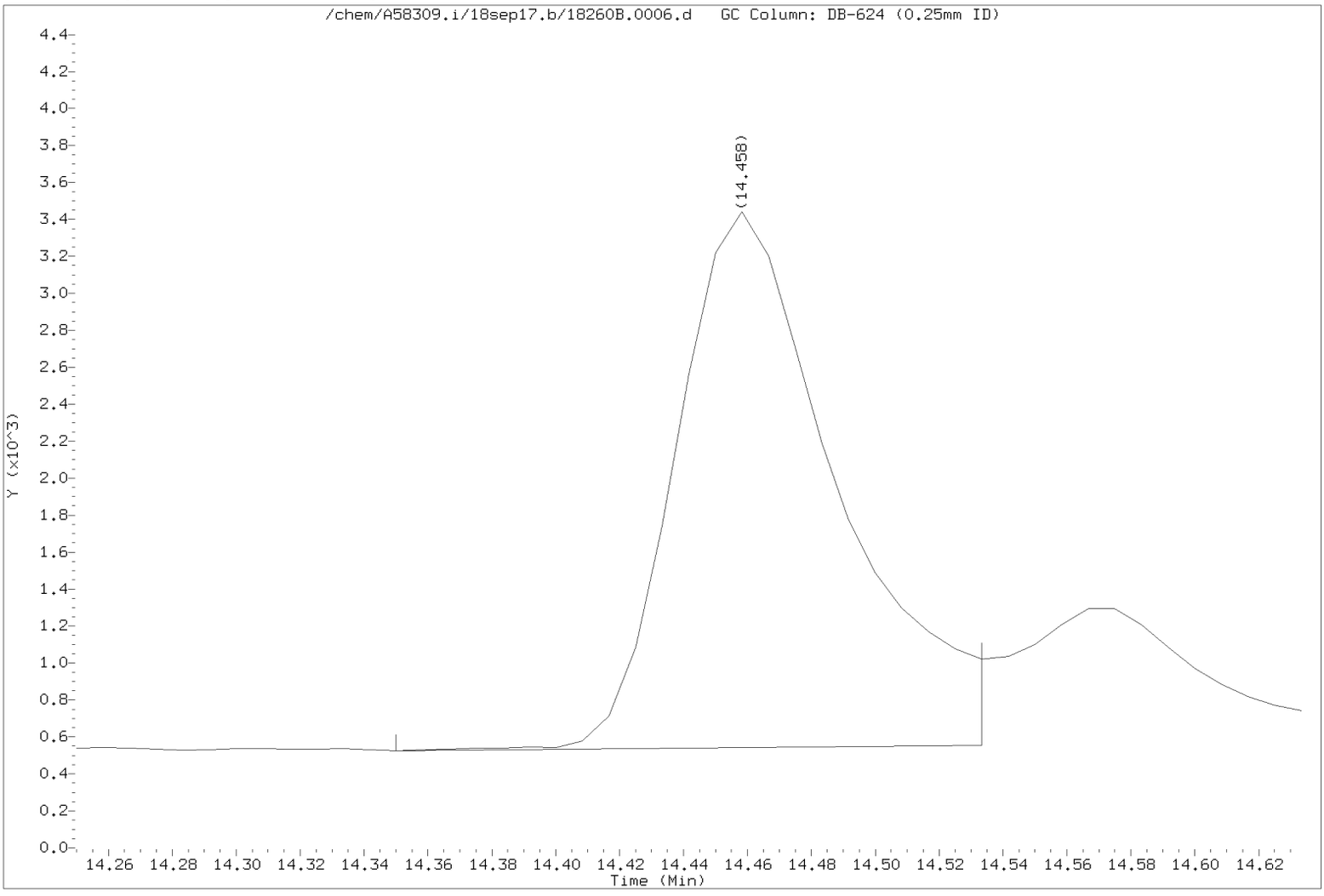
Sample Name: VSTD005 Lab Sample ID: VSTD005

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) MTBE	8.183(±0.03)	8.183	10432	4.894
2) Benzene	11.383(±0.06)	11.392	15673	4.680
3) Toluene	14.450(±0.03)	14.458	10301M	4.484
4) Ethylbenzene	16.908(±0.04)	16.908	8304	4.624
5) m/p-Xylene	17.092(±0.04)	17.092	23224	9.426
6) o-Xylene	17.767(±0.04)	17.767	12231	5.148
7) Xylene (total)			35455	14.574

M = Compound was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep17.b/18260B.0006.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:10 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compound Number : 3
Compound Name : Toluene
Retention Time (minutes): 14.458
Area (flag) : 10301M
Concentration (ppm(v)) : 4.4840
Integration start time : 14.350 Integration stop time: 14.533
Y at integration start : 526 Y at integration end: 554

Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 10/08/2018 at 10:17.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep17.b/18260B.0006.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:10 Analyst ID:

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: all
Calibration date and time: 17-SEP-2018 12:57
Date, time and analyst ID of latest file update: 17-Sep-2018 12:57 jbs01304

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compound Number : 3
Compound Name : Toluene
Retention Time (minutes): 14.458
Area : 13524
Concentration (ppm(v)) : 1.2357
Integration start time : 14.350 Integration stop time: 14.700
Y at integration start : 526 Y at integration end: 580

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: LEO2018

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260B.0006.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:10 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

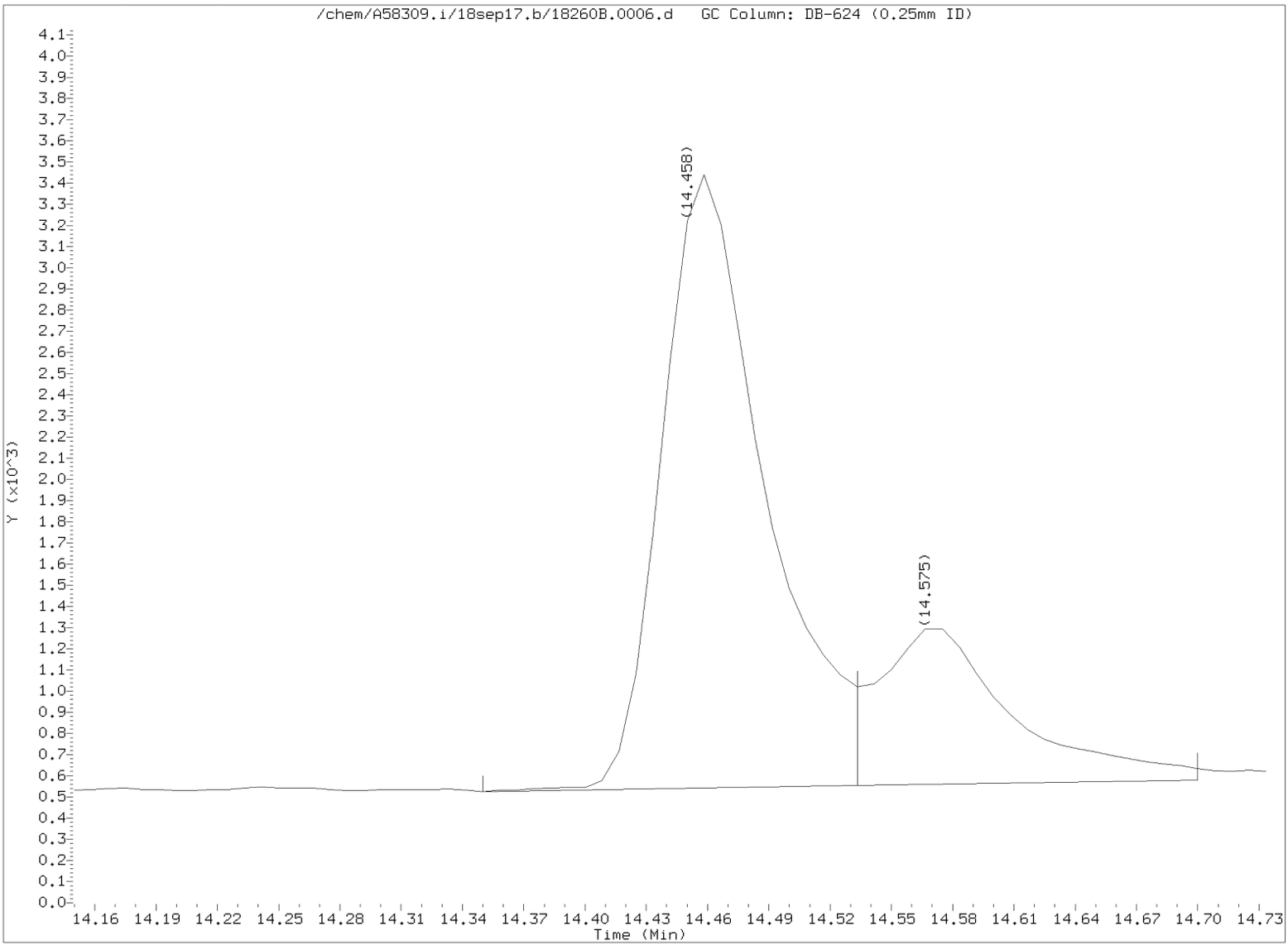
Sample Name: VSTD005 Lab Sample ID: VSTD005

RT	Area	Peak Label(s) and Range	Compound #s
1.650	344		
2.892	256		
3.308	613		
4.058	873		
5.858	839		
8.183	10432	MTBE	
8.708	2013		
9.783	354		
11.392	15674	Benzene	
14.458	10301M	Toluene	
14.575	3473M		
16.908	8305	Ethylbenzene	
17.092	23225	m/p-Xylene	
17.767	12232	o-Xylene	
18.050	35455		
18.700	879		
19.300	552		
20.617	1492		
20.808	388		
21.517	1079		

M = Peak was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep17.b/18260B.0006.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:10 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

Retention Time (minutes): 14.458
Area (flag) : 10301M
Integration start time : 14.350 Integration stop time: 14.533
Y at integration start : 526 Y at integration end: 554

Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 10/08/2018 at 10:17.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep17.b/18260B.0006.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:10 Analyst ID:

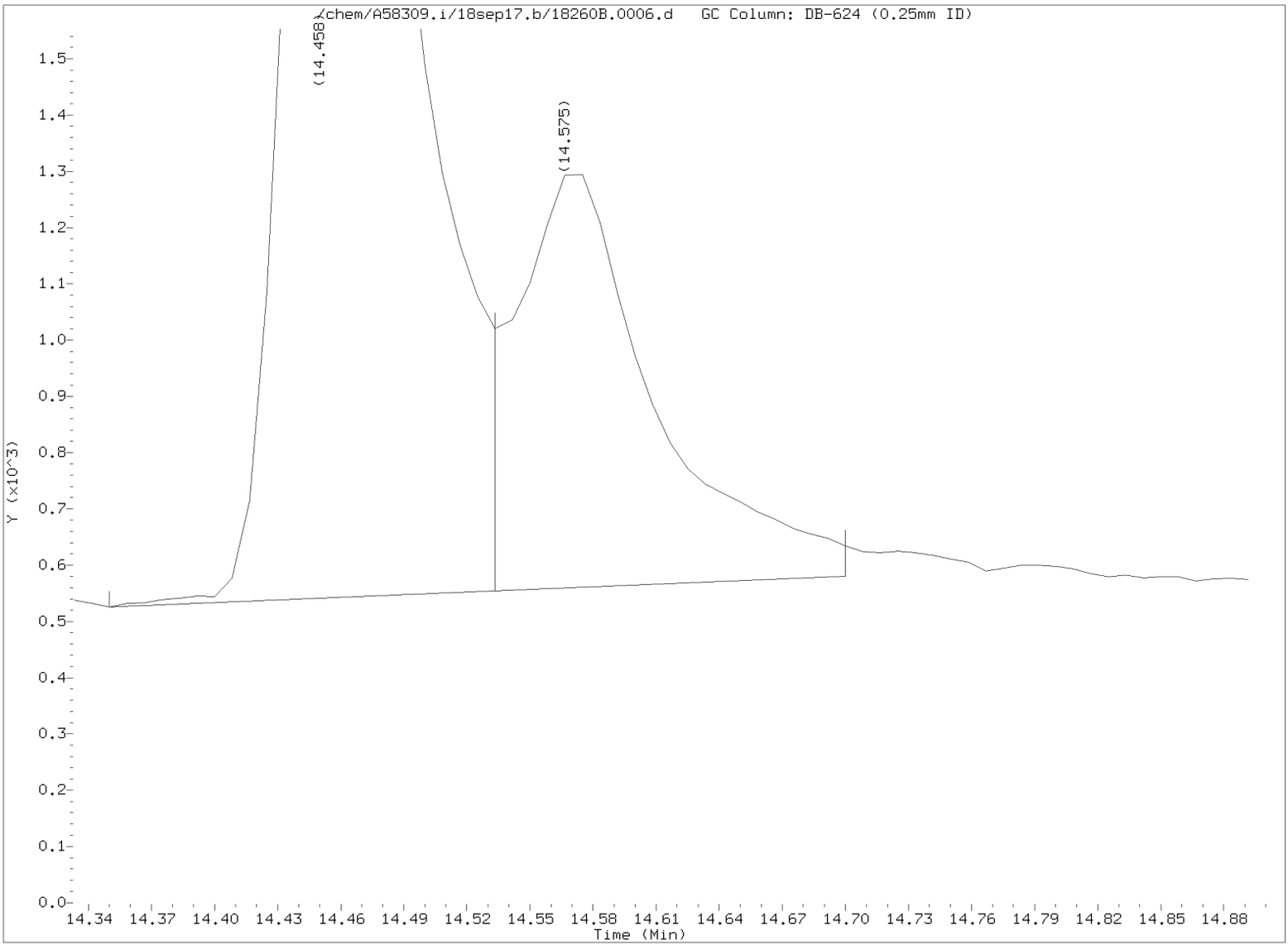
Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: all
Calibration date and time: 17-SEP-2018 12:57
Date, time and analyst ID of latest file update: 17-Sep-2018 12:57 jbs01304

Sample Name: VSTD005 Lab Sample ID: VSTD005

No signal was originally integrated at 14.458 minutes.

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: LEO2018

Manually Integrated Signal



Data File: /chem/A58309.i/18sep17.b/18260B.0006.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:10 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

Retention Time (minutes): 14.575
Area (flag) : 3473M
Integration start time : 14.533 Integration stop time: 14.700
Y at integration start : 554 Y at integration end: 580

Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 10/08/2018 at 10:17.
PARALLAX ID: jbs01304

Original Integration of Signal

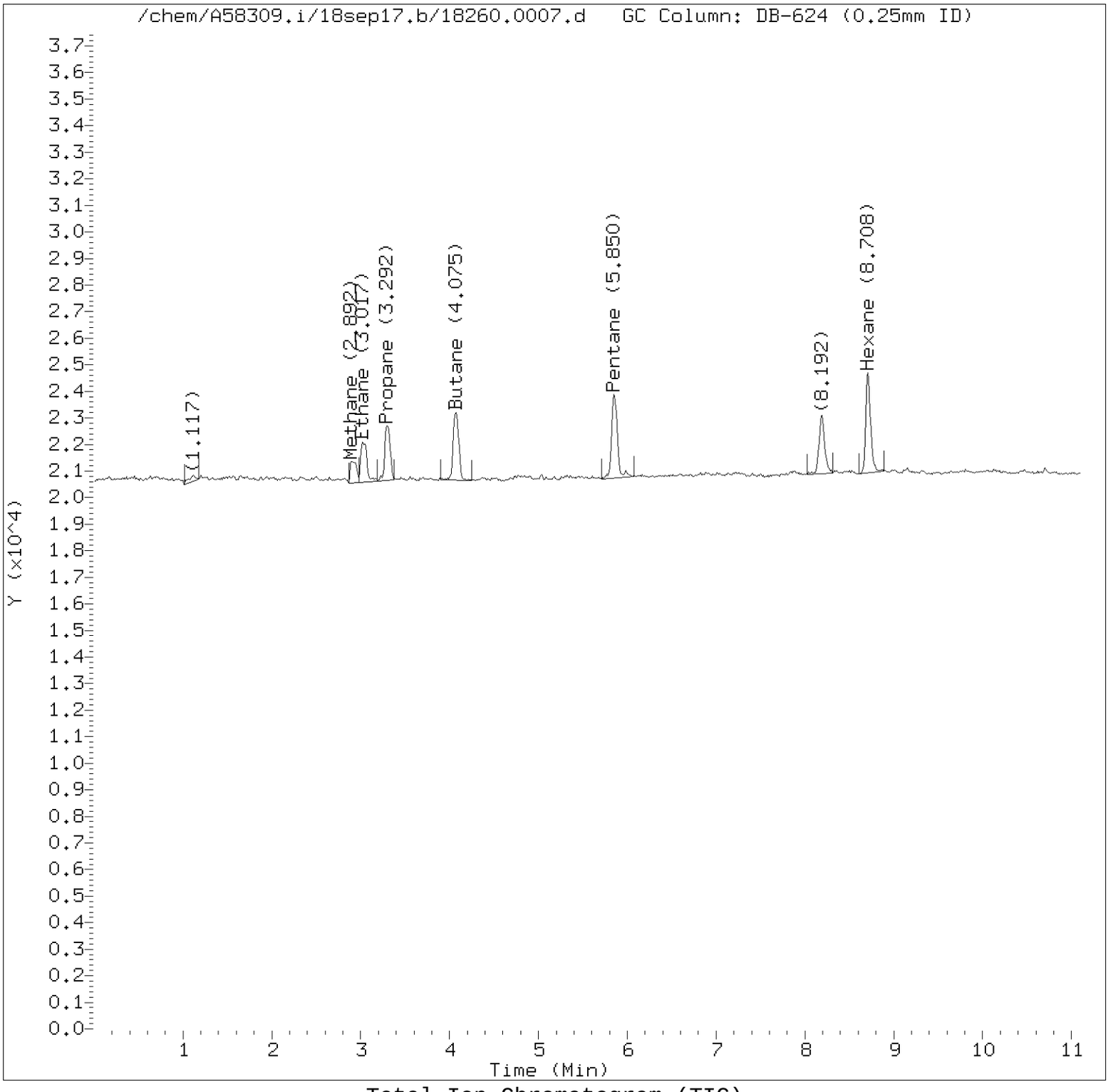
Data File: /chem/A58309.i/18sep17.b/18260B.0006.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:10 Analyst ID:

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: all
Calibration date and time: 17-SEP-2018 12:57
Date, time and analyst ID of latest file update: 17-Sep-2018 12:57 jbs01304

Sample Name: VSTD005 Lab Sample ID: VSTD005

No signal was originally integrated at 14.575 minutes.

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: LEO2018



Total Ion Chromatogram (TIC)

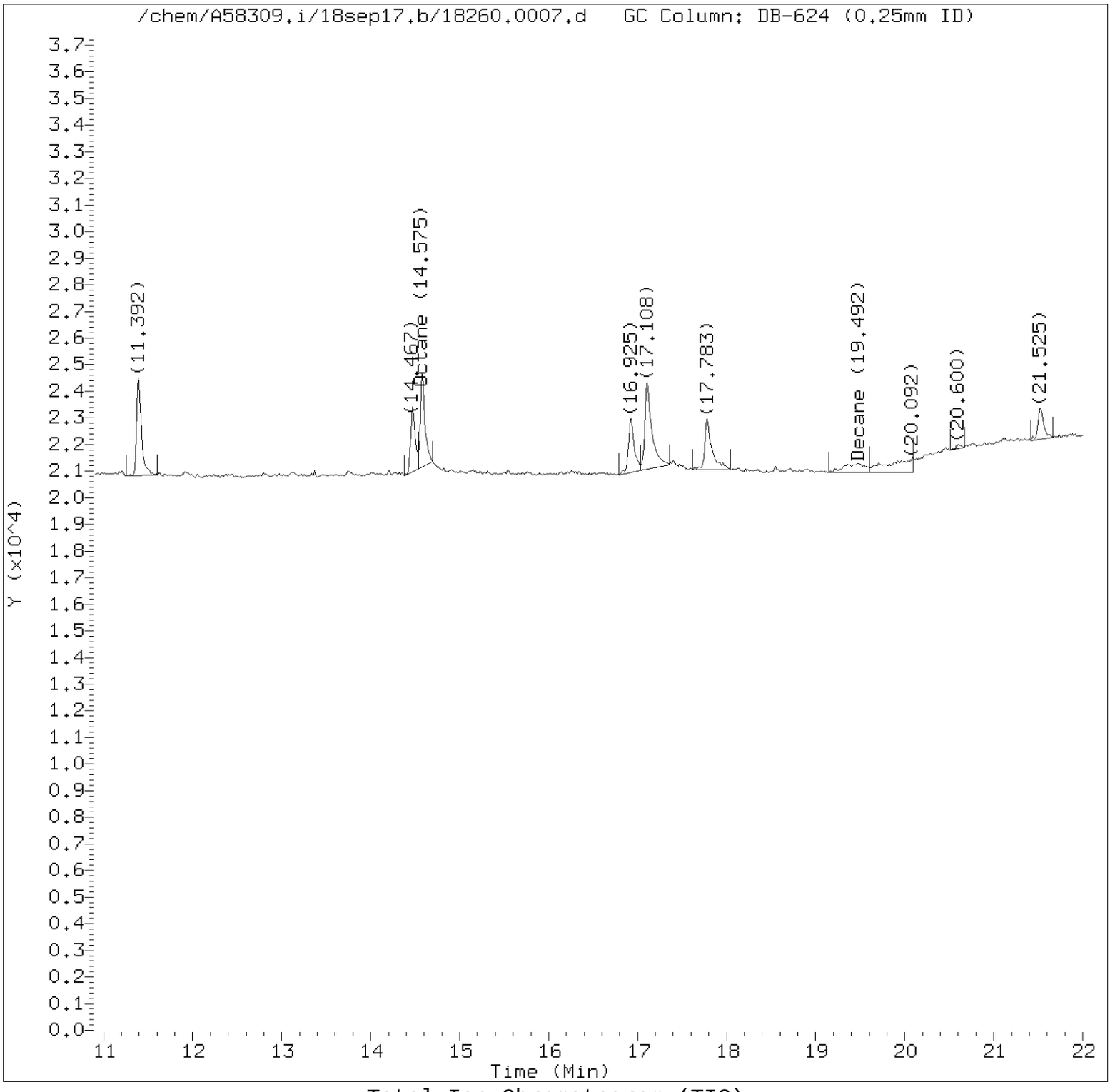
Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0007.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:42 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:45
Date, time and analyst ID of latest file update: 17-Sep-2018 15:45 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0007.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:42 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:45
Date, time and analyst ID of latest file update: 17-Sep-2018 15:45 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0007.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:42 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:45
Date, time and analyst ID of latest file update: 17-Sep-2018 15:45 ads07818

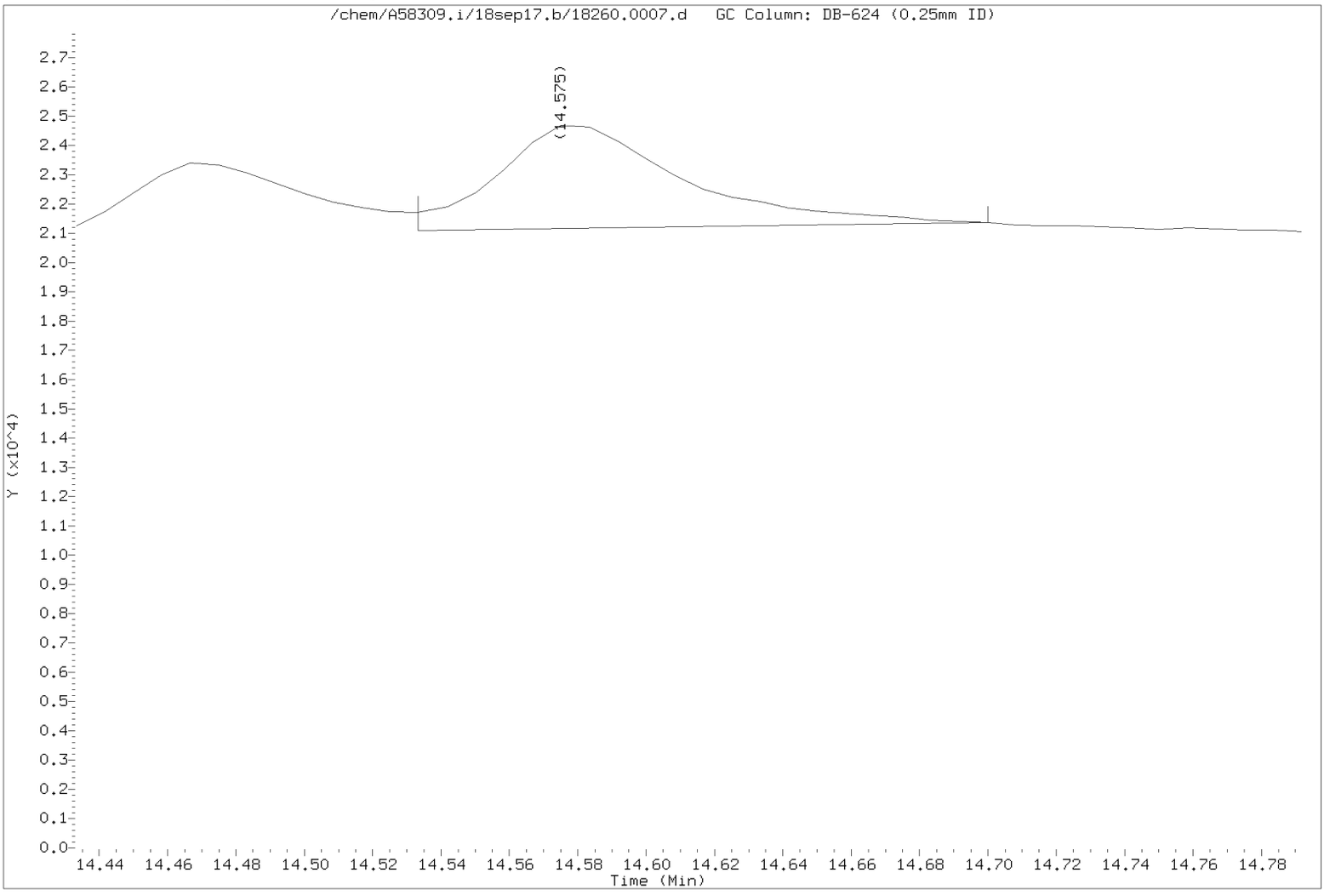
Sample Name: VSTD001 Lab Sample ID: VSTD001

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) Methane	2.908(±0.03)	2.892	4068	1.291
2) Ethane	3.042(±0.03)	3.017	7326	1.192
3) Propane	3.300(±0.03)	3.292	9178	1.055
4) Butane	4.067(±0.03)	4.075	11750	1.037
5) Pentane	5.858(±0.03)	5.850	14822	1.081
7) Hexane	8.708(±0.03)	8.708	14605	0.953
10) Octane	14.567(±0.03)	14.575	13465M	0.800
15) Decane	19.283(±0.03)	#19.492#	5578M	0.470

M = Compound was manually integrated.
# = Compound retention time outside defined window.

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep17.b/18260.0007.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:42 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:45
Date, time and analyst ID of latest file update: 17-Sep-2018 15:45 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 10
Compound Name : Octane
Retention Time (minutes): 14.575
Area (flag) : 13465M
Concentration (ppm(v)) : 0.8003
Integration start time : 14.533 Integration stop time: 14.700
Y at integration start : 21088 Y at integration end: 21371

Reason for manual integration: missed peak

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 10/08/2018 at 10:17.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep17.b/18260.0007.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:42 Analyst ID:

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 13:10
Date, time and analyst ID of latest file update: 17-Sep-2018 13:10 Unknown

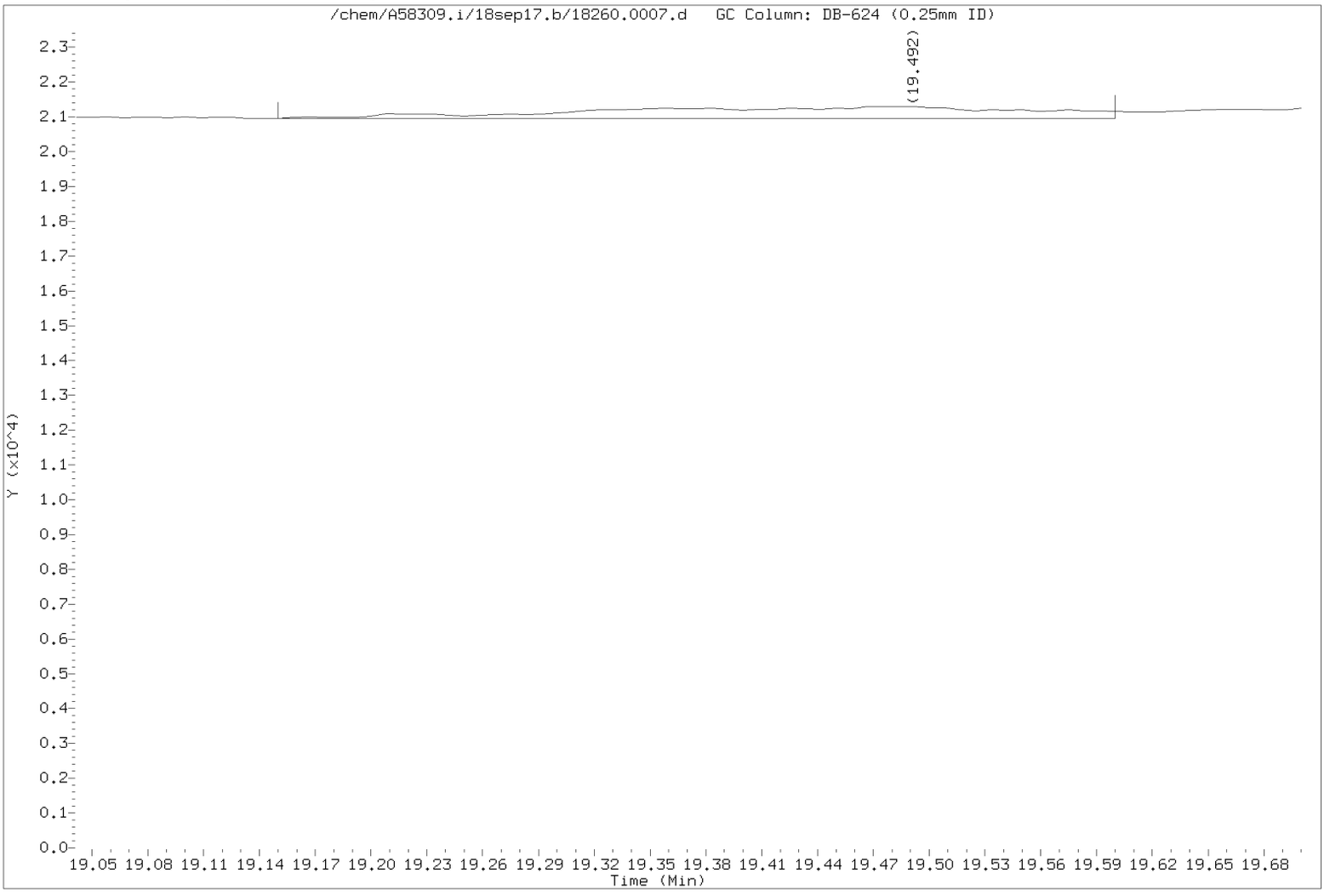
Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 10
Compound Name : Octane
Expected RT (minutes) : 14.567
Quant Ion : 100.00

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:47.

Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep17.b/18260.0007.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:42 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:45
Date, time and analyst ID of latest file update: 17-Sep-2018 15:45 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 15
Compound Name : Decane
Retention Time (minutes): 19.492
Area (flag) : 5578M
Concentration (ppm(v)) : 0.4700
Integration start time : 19.150 Integration stop time: 19.600
Y at integration start : 20955 Y at integration end: 20955

Reason for manual integration: missed peak

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 10/08/2018 at 10:17.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep17.b/18260.0007.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:42 Analyst ID:

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 13:10
Date, time and analyst ID of latest file update: 17-Sep-2018 13:10 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 15
Compound Name : Decane
Expected RT (minutes) : 19.283
Quant Ion : 100.00

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:47.

Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0007.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:42 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:45
Date, time and analyst ID of latest file update: 17-Sep-2018 15:45 ads07818

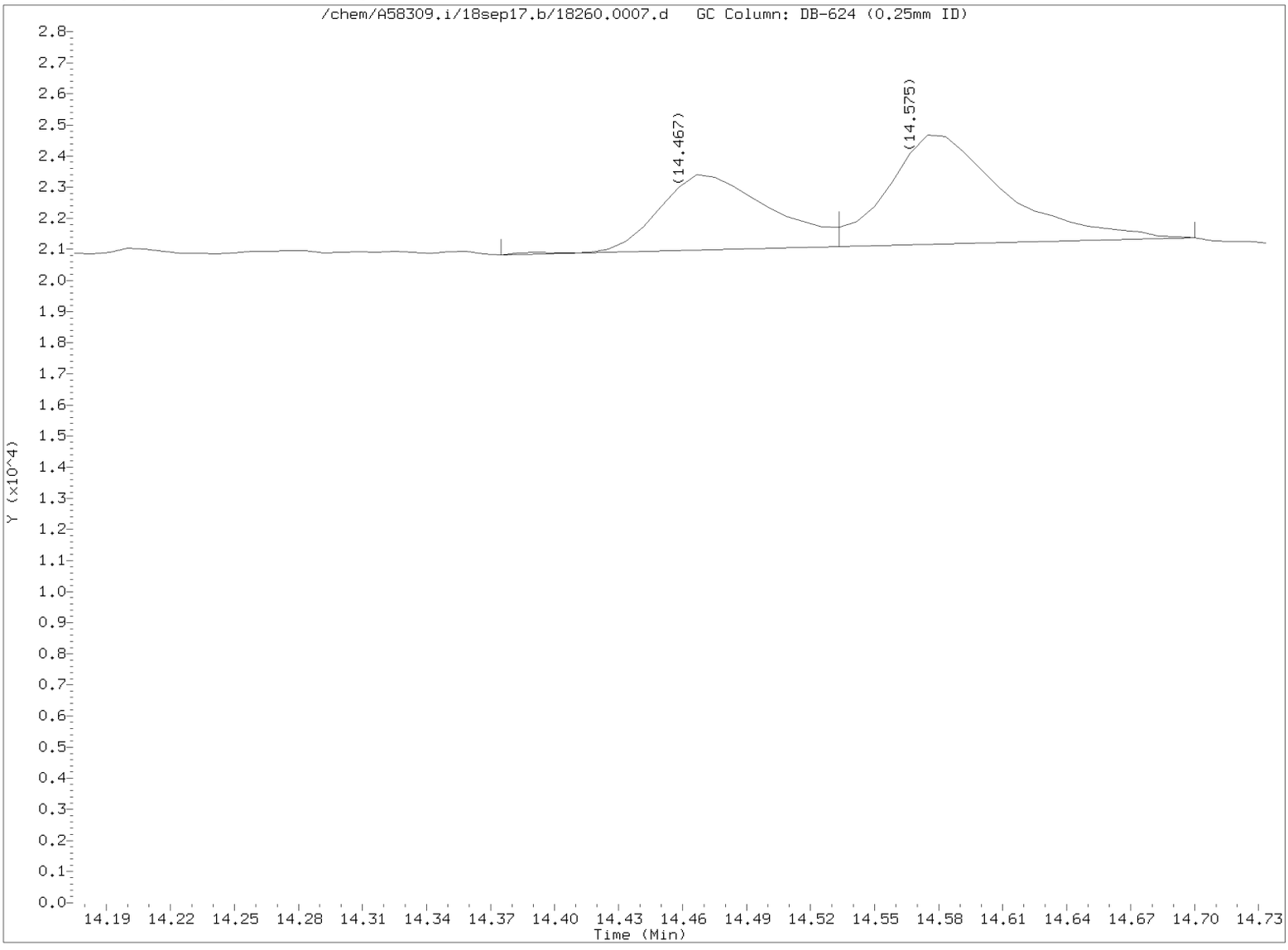
Sample Name: VSTD001 Lab Sample ID: VSTD001

RT	Area	Peak Label(s) and Range	Compound #s
1.117	1102		
2.892	4068	Methane	
3.017	7326	Ethane	
3.292	9179	Propane	
4.075	11750	Butane	
5.850	14823	Pentane	
8.192	10164		
8.708	14605	Hexane	
11.392	13916		
14.467	8902M		
14.575	13465M	Octane	
16.925	9396		
17.108	18501		
17.783	11253		
19.492	5578M	Decane	
20.092	10216M		
20.600	605		
21.525	5328		

M = Peak was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep17.b/18260.0007.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:42 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:45
Date, time and analyst ID of latest file update: 17-Sep-2018 15:45 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Retention Time (minutes): 14.467
Area (flag) : 8902M
Integration start time : 14.375 Integration stop time: 14.533
Y at integration start : 20828 Y at integration end: 21088

Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 10/08/2018 at 10:17.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep17.b/18260.0007.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:42 Analyst ID:

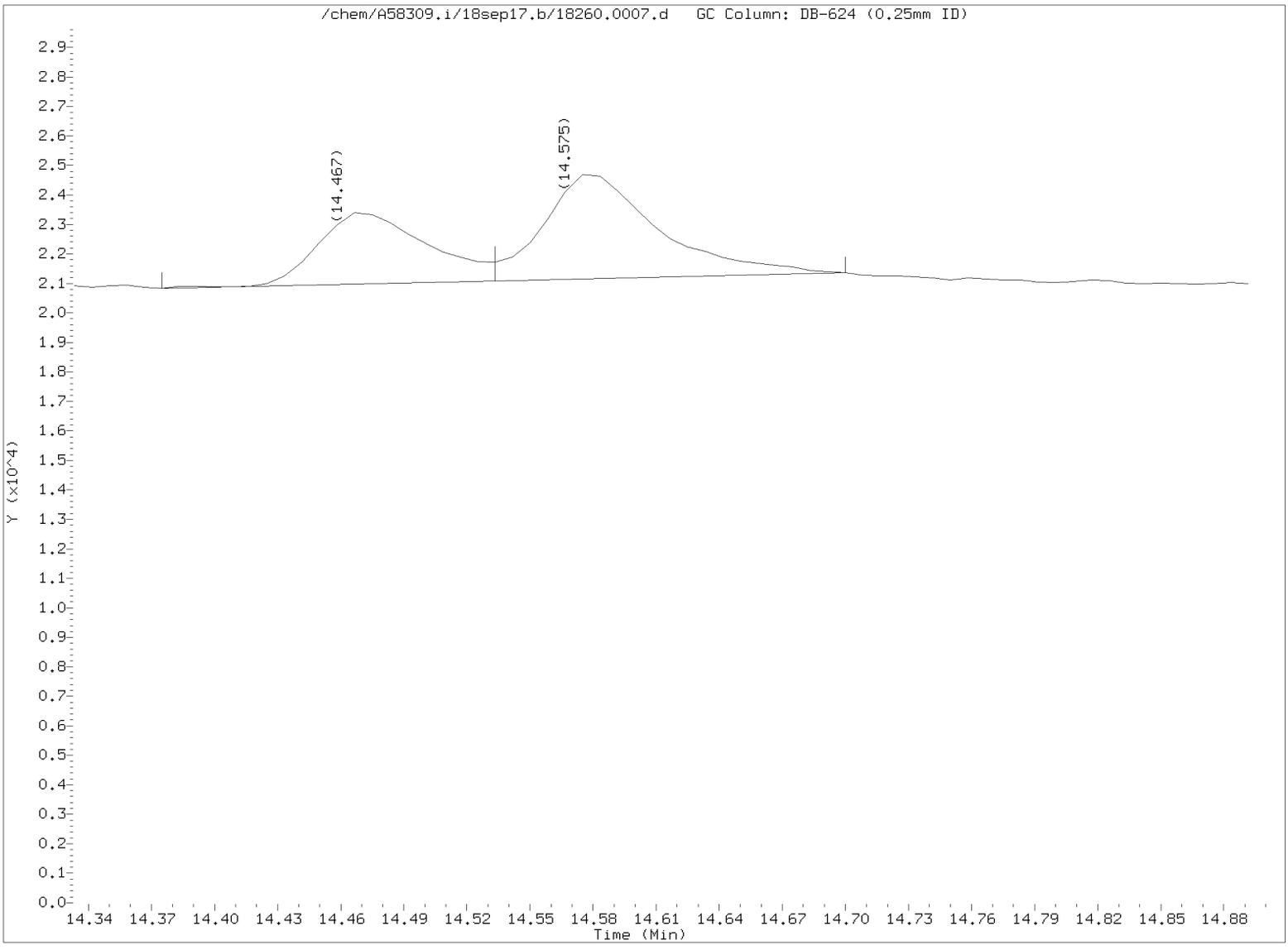
Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 13:10
Date, time and analyst ID of latest file update: 17-Sep-2018 13:10 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

No signal was originally integrated at 14.467 minutes.

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ADS20180

Manually Integrated Signal



Data File: /chem/A58309.i/18sep17.b/18260.0007.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:42 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:45
Date, time and analyst ID of latest file update: 17-Sep-2018 15:45 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Retention Time (minutes): 14.575
Area (flag) : 13465M
Integration start time : 14.533 Integration stop time: 14.700
Y at integration start : 21088 Y at integration end: 21371

Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 10/08/2018 at 10:17.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep17.b/18260.0007.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:42 Analyst ID:

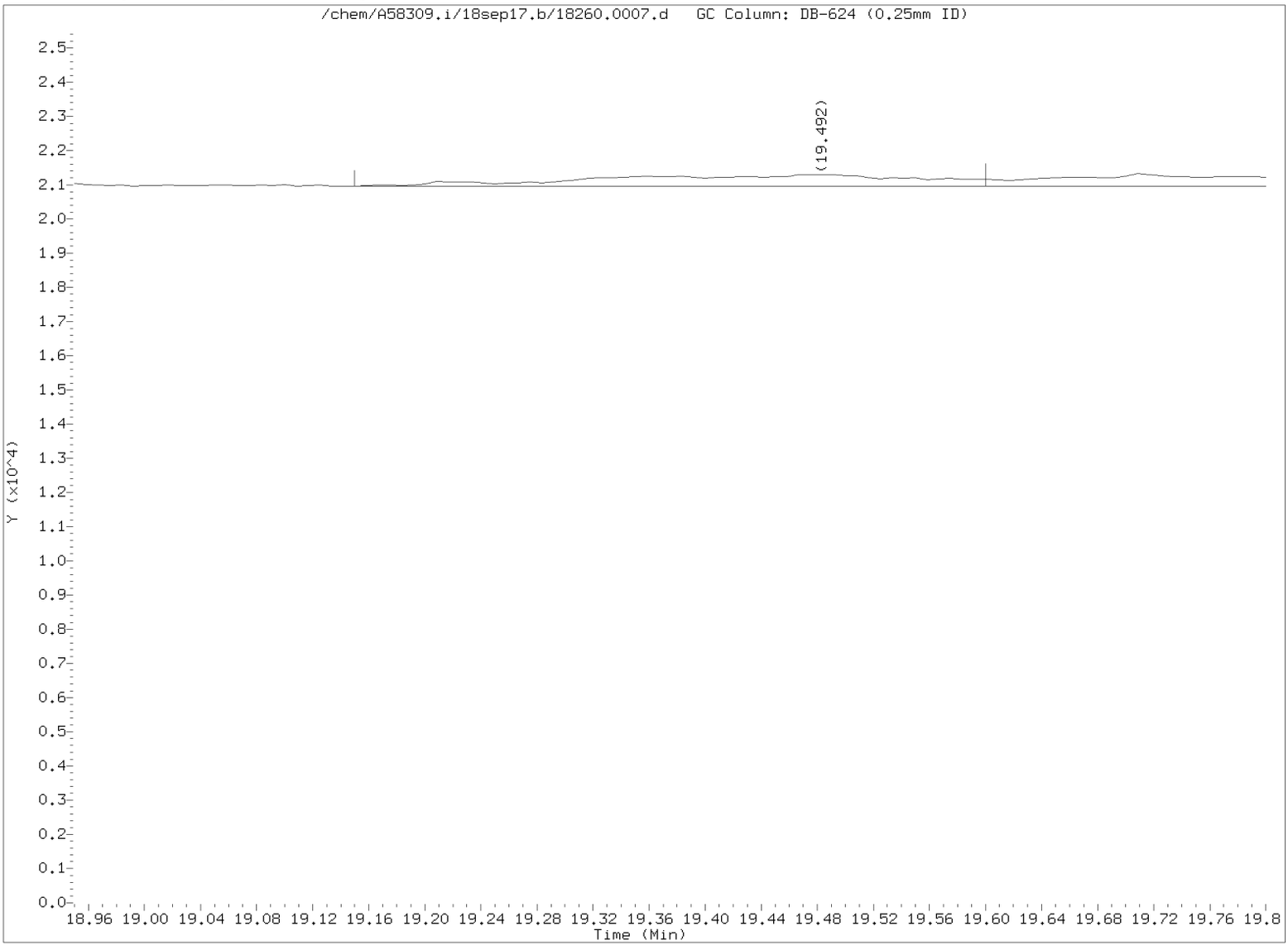
Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 13:10
Date, time and analyst ID of latest file update: 17-Sep-2018 13:10 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

No signal was originally integrated at 14.575 minutes.

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ADS0718

Manually Integrated Signal



Data File: /chem/A58309.i/18sep17.b/18260.0007.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:42 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:45
Date, time and analyst ID of latest file update: 17-Sep-2018 15:45 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Retention Time (minutes): 19.492
Area (flag) : 5578M
Integration start time : 19.150 Integration stop time: 19.600
Y at integration start : 20955 Y at integration end: 20955

Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 10/08/2018 at 10:17.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep17.b/18260.0007.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:42 Analyst ID:

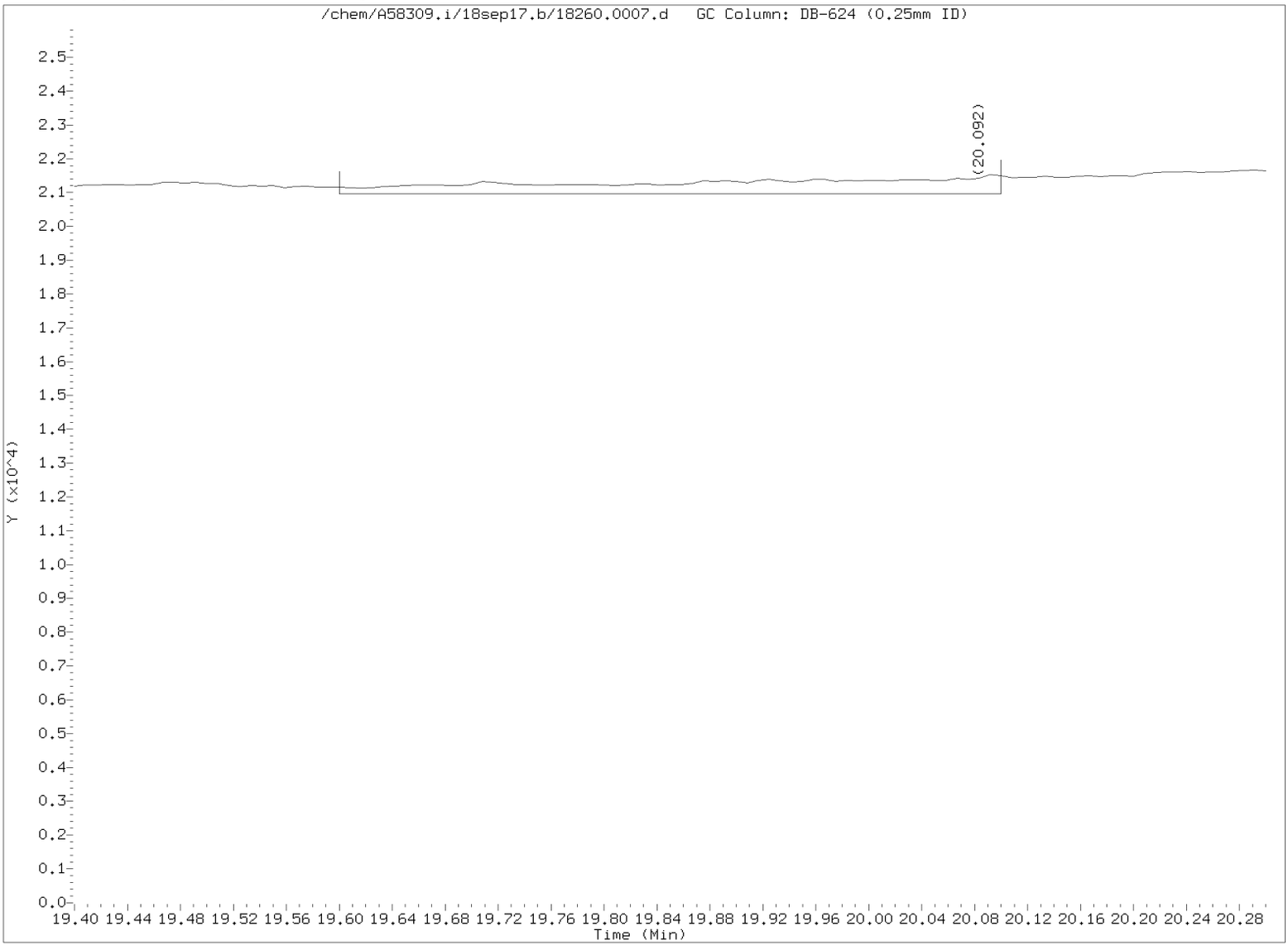
Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 13:10
Date, time and analyst ID of latest file update: 17-Sep-2018 13:10 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

No signal was originally integrated at 19.492 minutes.

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ASECHRIS

Manually Integrated Signal



Data File: /chem/A58309.i/18sep17.b/18260.0007.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:42 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:45
Date, time and analyst ID of latest file update: 17-Sep-2018 15:45 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Retention Time (minutes): 20.092
Area (flag) : 10216M
Integration start time : 19.600 Integration stop time: 20.100
Y at integration start : 20955 Y at integration end: 20955

Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 10/08/2018 at 10:17.
PARALLAX ID: jbs01304

Original Integration of Signal

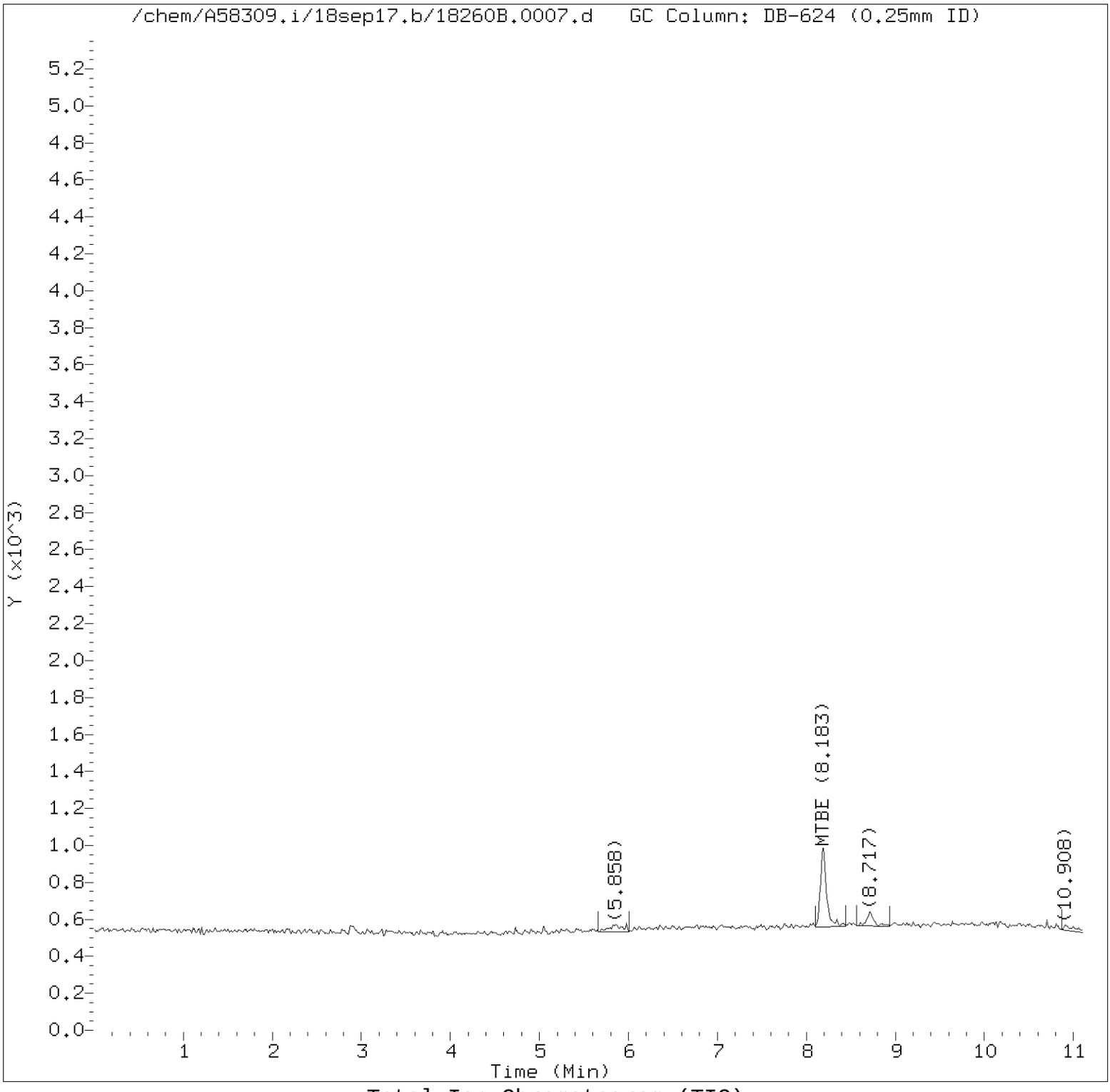
Data File: /chem/A58309.i/18sep17.b/18260.0007.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:42 Analyst ID:

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 13:10
Date, time and analyst ID of latest file update: 17-Sep-2018 13:10 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

No signal was originally integrated at 20.092 minutes.

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ASECHRIS



Total Ion Chromatogram (TIC)

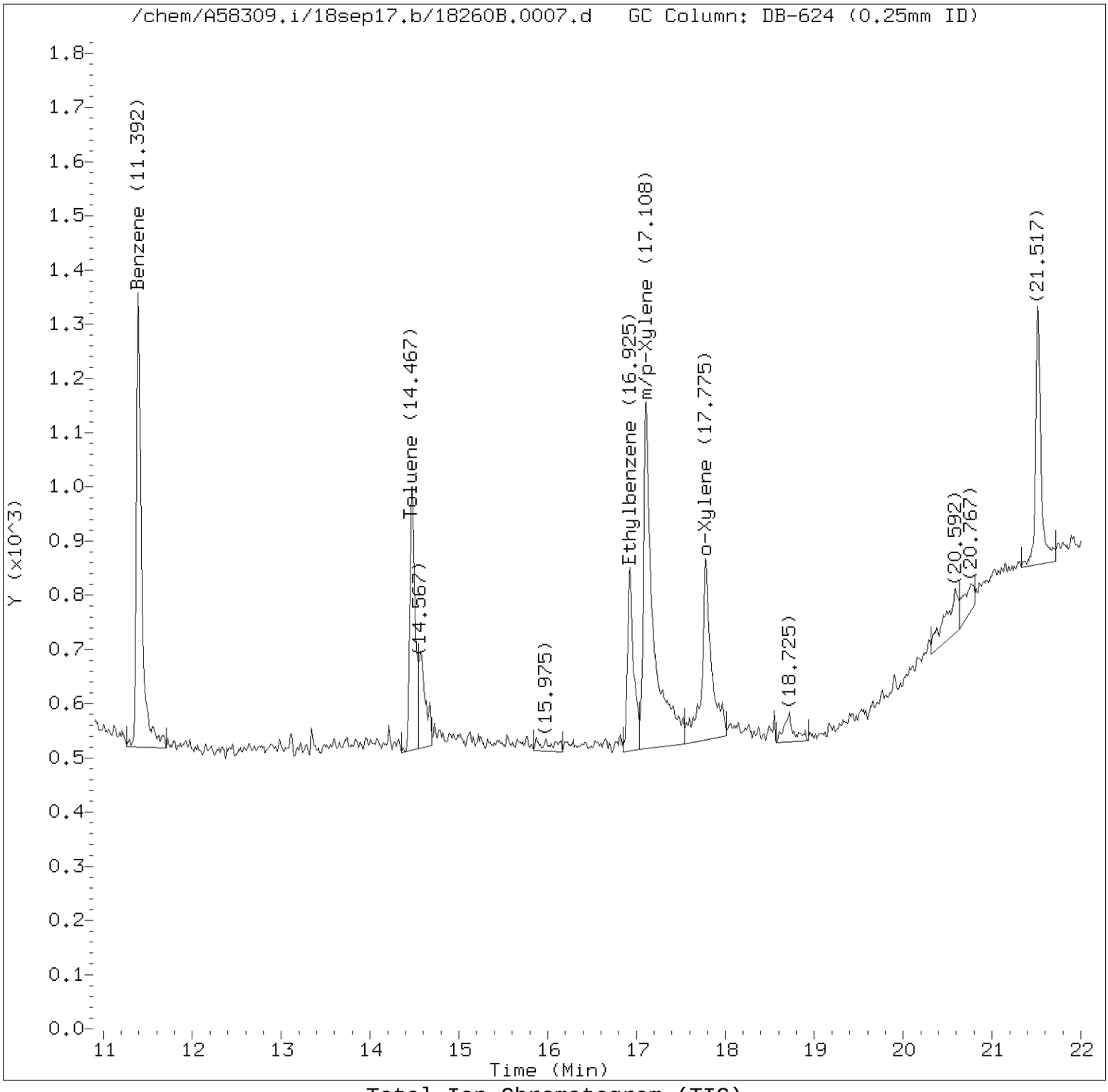
Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260B.0007.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:42 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:48.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260B.0007.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:42 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:48.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260B.0007.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:42 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

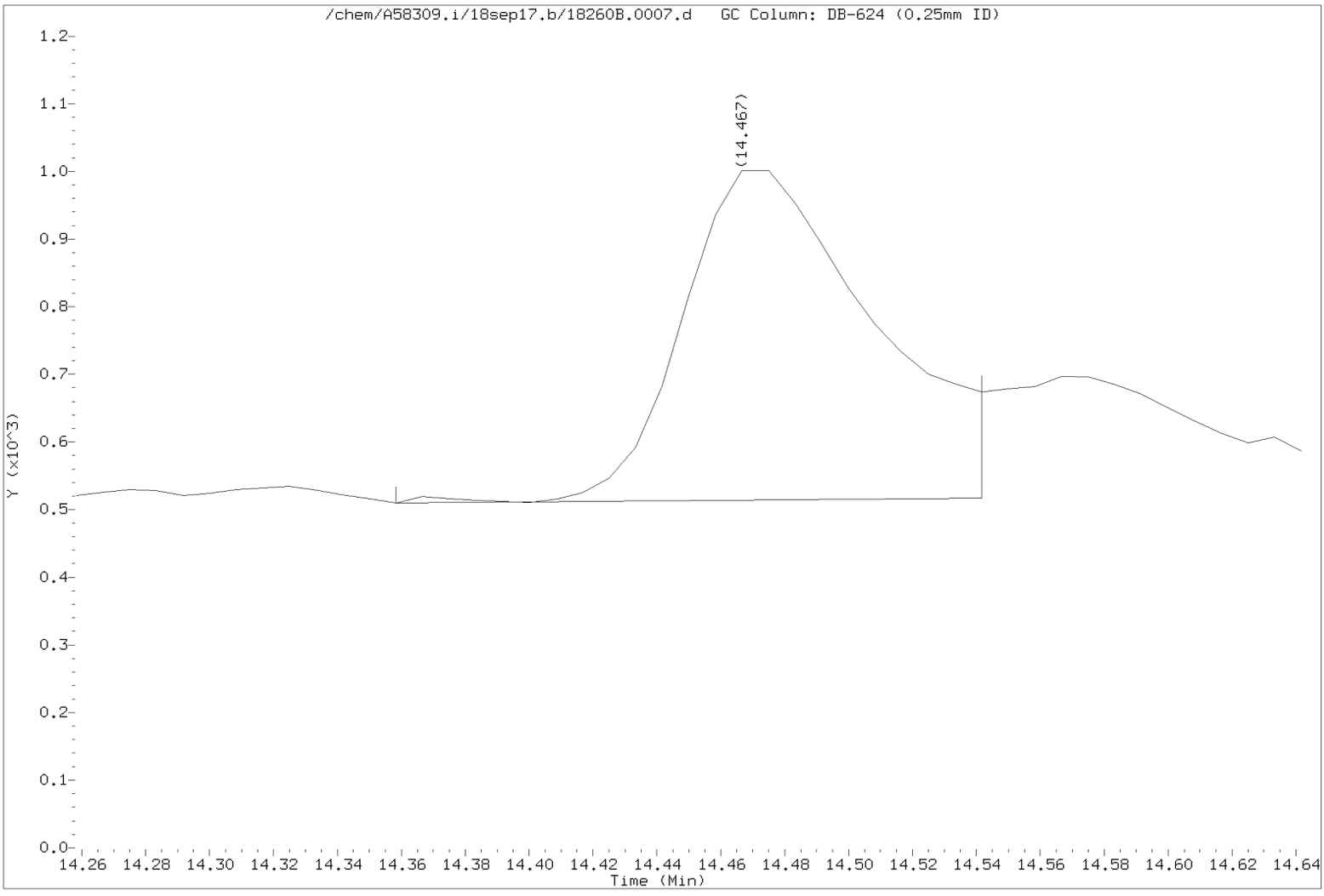
Sample Name: VSTD001 Lab Sample ID: VSTD001

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) MTBE	8.183(±0.03)	8.183	2125	0.997
2) Benzene	11.383(±0.06)	11.392	3475	1.038
3) Toluene	14.450(±0.03)	14.467	2062M	0.898
4) Ethylbenzene	16.908(±0.04)	16.925	1617	0.900
5) m/p-Xylene	17.092(±0.04)	17.108	5045	2.048
6) o-Xylene	17.767(±0.04)	17.775	2638	1.110
7) Xylene (total)			7683	3.158

M = Compound was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:48.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep17.b/18260B.0007.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:42 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 3
Compound Name : Toluene
Retention Time (minutes): 14.467
Area (flag) : 2062M
Concentration (ppm(v)) : 0.8976
Integration start time : 14.358 Integration stop time: 14.542
Y at integration start : 510 Y at integration end: 517

Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:48.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 10/08/2018 at 10:17.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep17.b/18260B.0007.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:42 Analyst ID:

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: all
Calibration date and time: 17-SEP-2018 13:10
Date, time and analyst ID of latest file update: 17-Sep-2018 13:10 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 3
Compound Name : Toluene
Retention Time (minutes): 14.475
Area : 3030
Concentration (ppm(v)) : 1.1205
Integration start time : 14.358 Integration stop time: 14.700
Y at integration start : 510 Y at integration end: 523

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:48.
Target 3.5 esignature user ID: 502781

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260B.0007.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:42 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

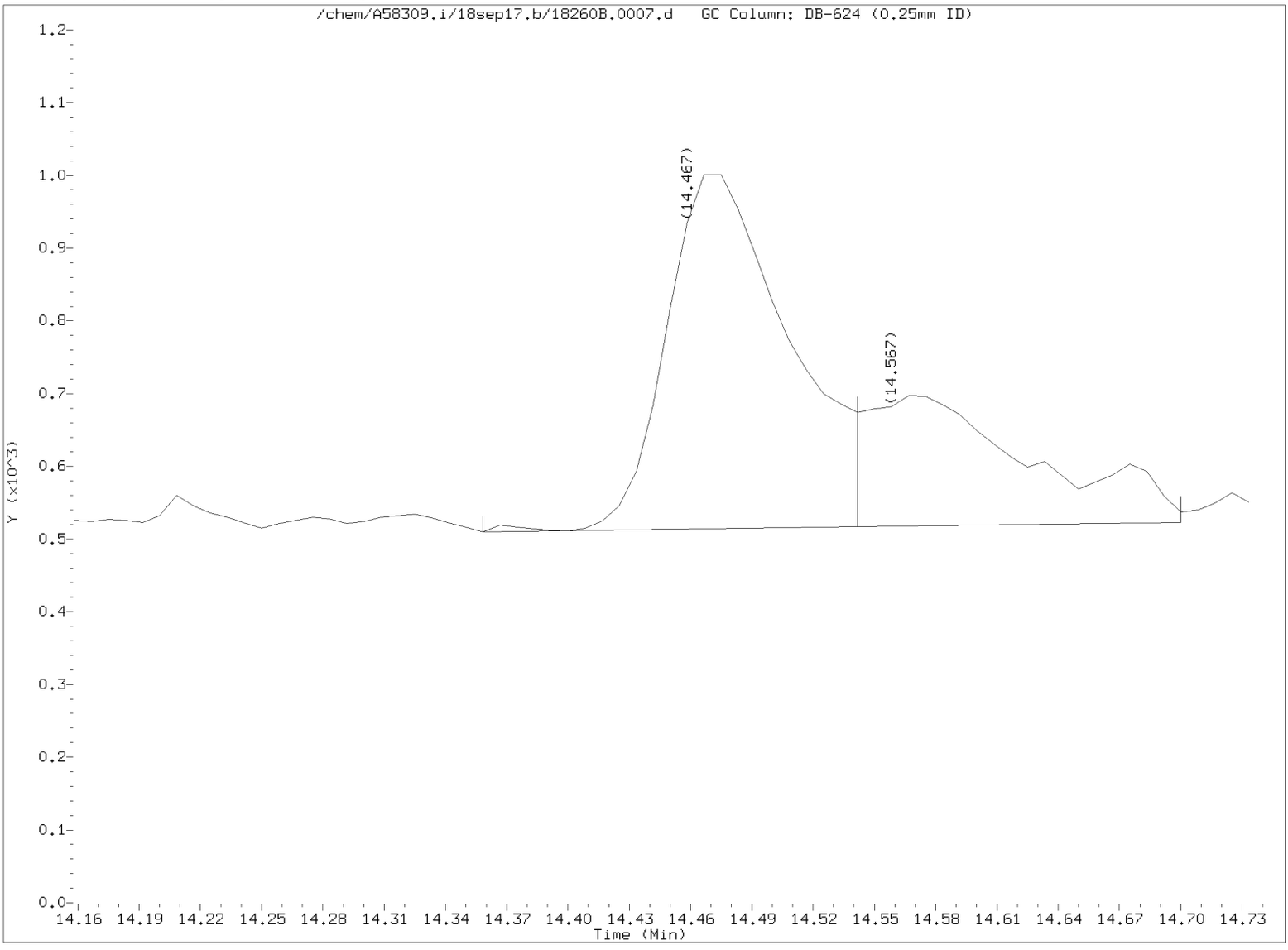
Sample Name: VSTD001 Lab Sample ID: VSTD001

RT	Area	Peak Label(s) and Range	Compound #s
5.858	412		
8.183	2126	MTBE	
8.717	462		
10.908	416		
11.392	3475	Benzene	
14.467	2062M	Toluene	
14.567	1050M		
15.975	254		
16.925	1618	Ethylbenzene	
17.108	5046	m/p-Xylene	
17.775	2638	o-Xylene	
18.050	7683		
18.725	423		
20.592	871		
20.767	479		
21.517	2021		

M = Peak was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:48.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep17.b/18260B.0007.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:42 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Retention Time (minutes): 14.467
Area (flag) : 2062M
Integration start time : 14.358 Integration stop time: 14.542
Y at integration start : 510 Y at integration end: 517

Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:48.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 10/08/2018 at 10:17.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep17.b/18260B.0007.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:42 Analyst ID:

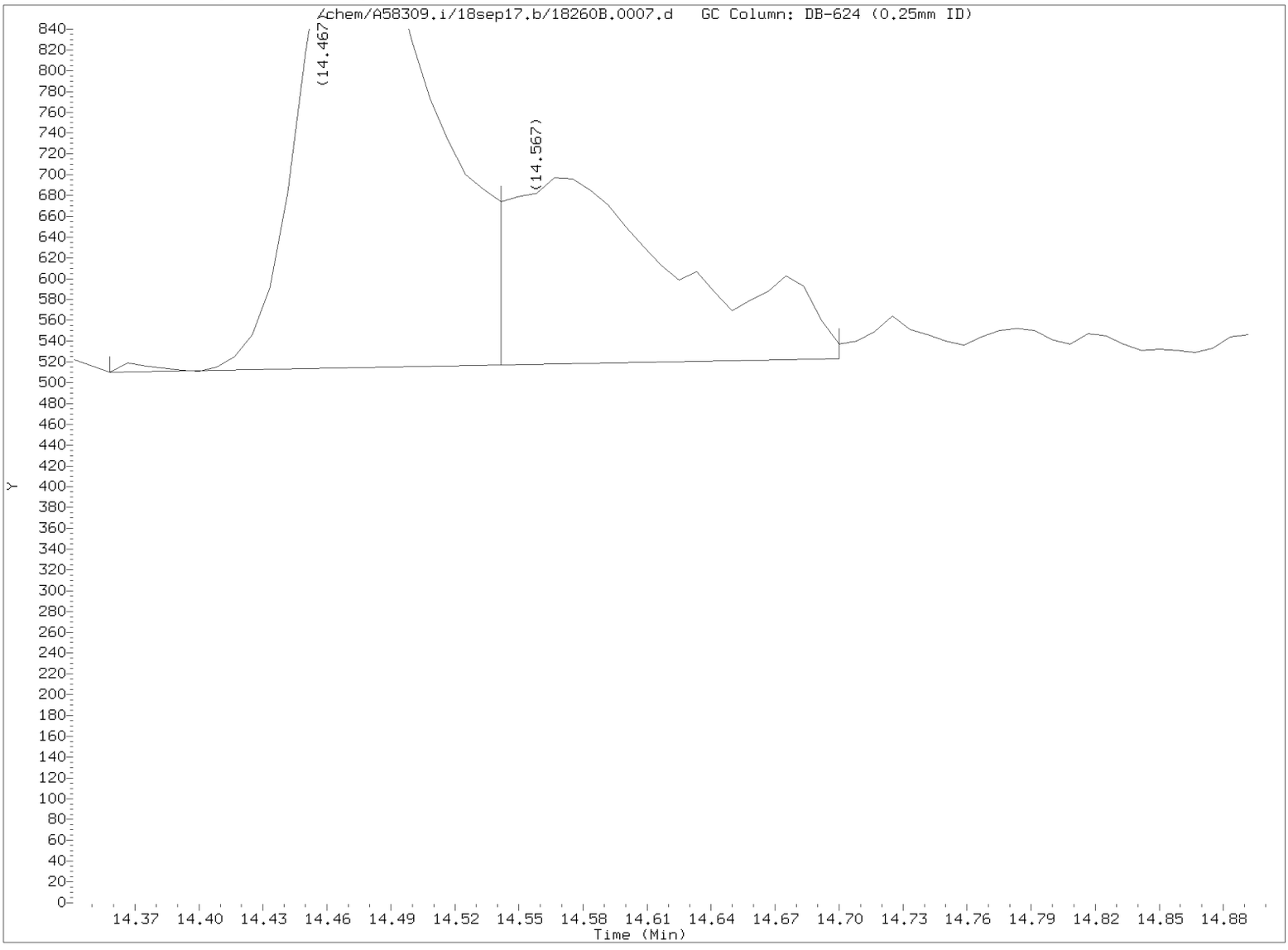
Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: all
Calibration date and time: 17-SEP-2018 13:10
Date, time and analyst ID of latest file update: 17-Sep-2018 13:10 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

No signal was originally integrated at 14.467 minutes.

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:48.
Target 3.5 esignature user ID: ASECHRIST

Manually Integrated Signal



Data File: /chem/A58309.i/18sep17.b/18260B.0007.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:42 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Retention Time (minutes): 14.567
Area (flag) : 1050M
Integration start time : 14.542 Integration stop time: 14.700
Y at integration start : 517 Y at integration end: 523

Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:48.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 10/08/2018 at 10:17.
PARALLAX ID: jbs01304

Original Integration of Signal

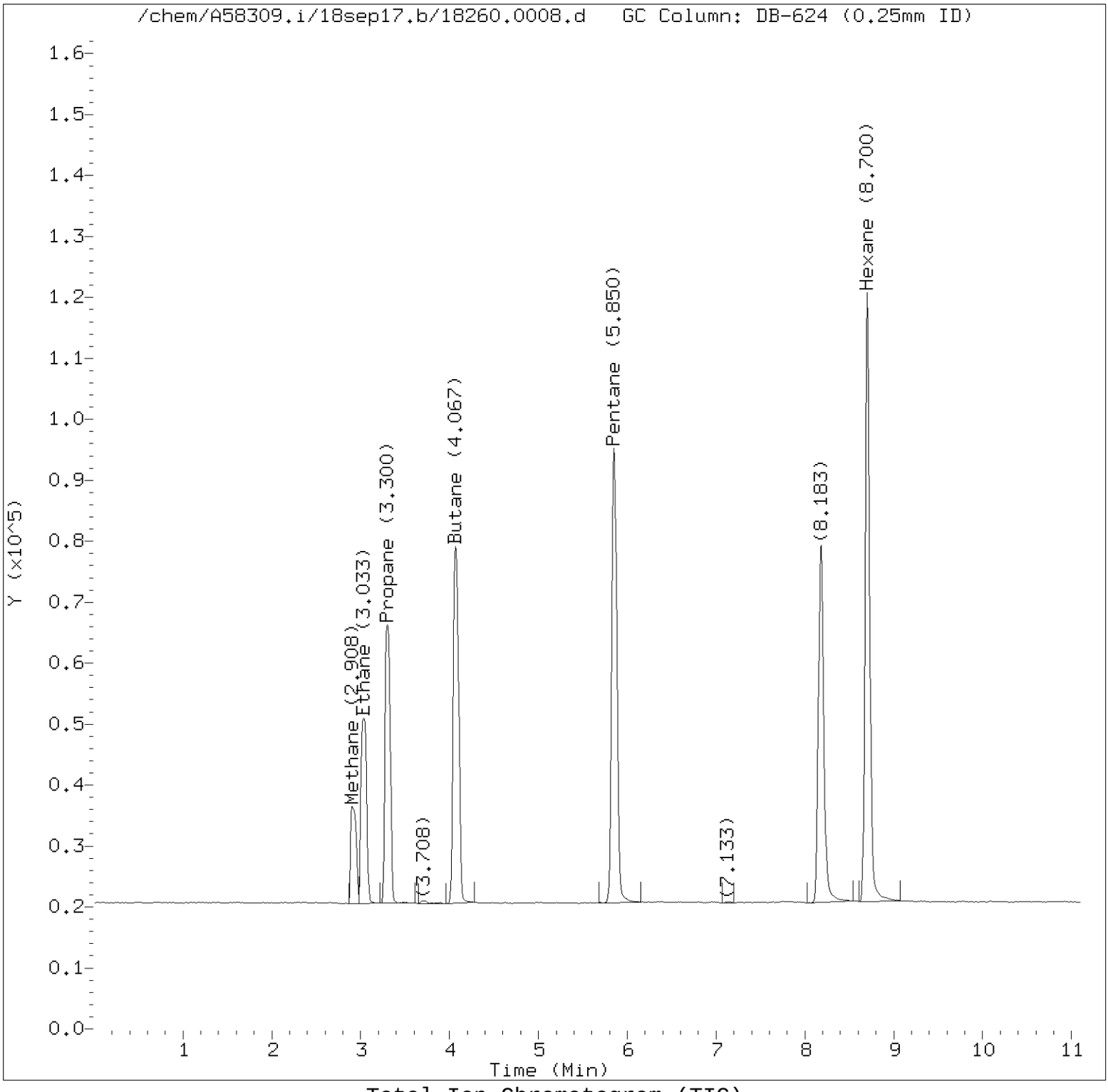
Data File: /chem/A58309.i/18sep17.b/18260B.0007.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 12:42 Analyst ID:

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: all
Calibration date and time: 17-SEP-2018 13:10
Date, time and analyst ID of latest file update: 17-Sep-2018 13:10 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

No signal was originally integrated at 14.567 minutes.

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:48.
Target 3.5 esignature user ID: ASECHRIST



Total Ion Chromatogram (TIC)

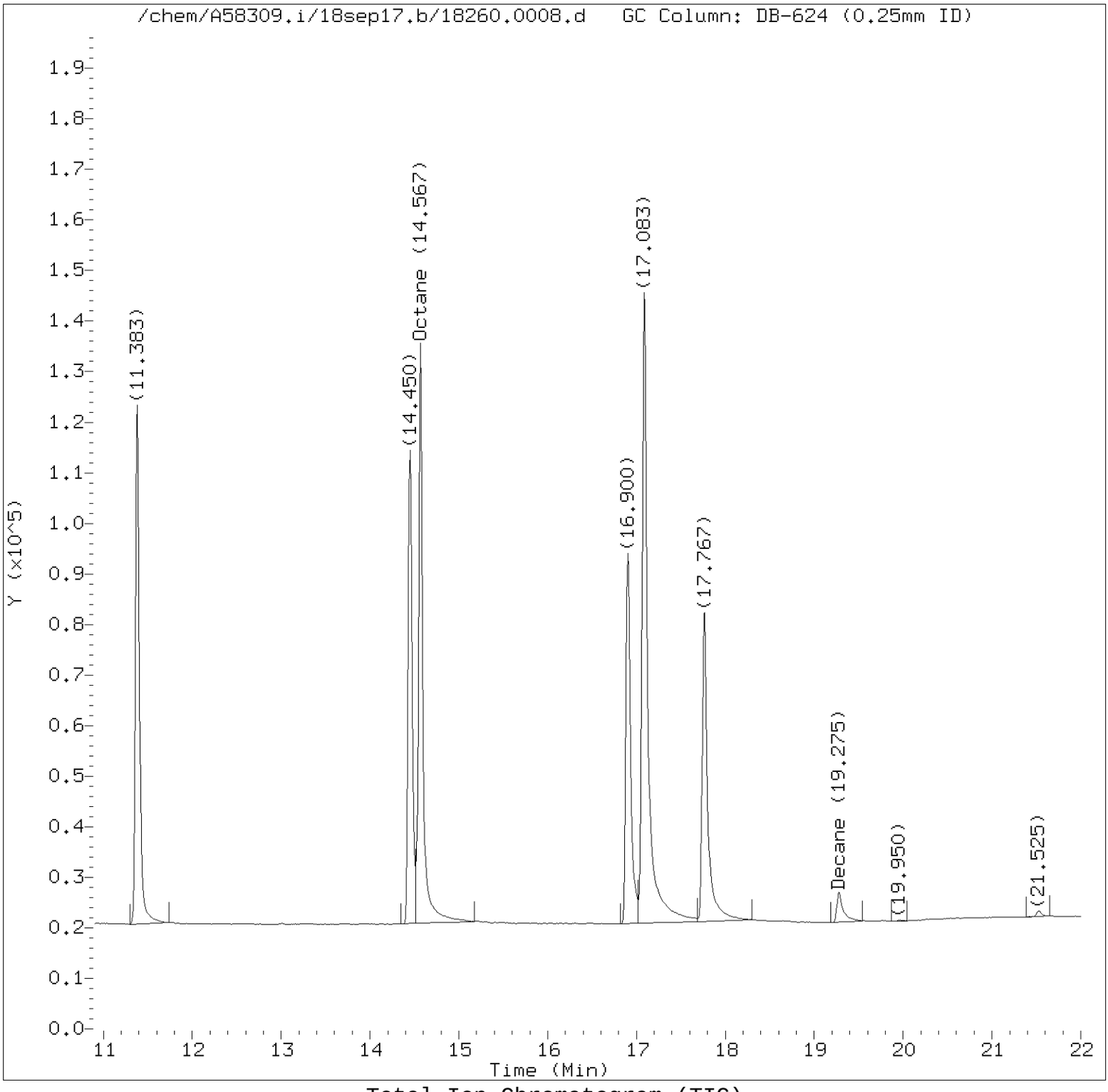
Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0008.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 13:12 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0008.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 13:12 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0008.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 13:12 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) Methane	2.908(±0.03)	2.908	70137	22.253
2) Ethane	3.042(±0.03)	3.033	133624	21.746
3) Propane	3.300(±0.03)	3.300	196394	22.565
4) Butane	4.067(±0.03)	4.067	259692	22.910
5) Pentane	5.858(±0.03)	5.850	311681	22.722
7) Hexane	8.708(±0.03)	8.700	360184	23.505
10) Octane	14.567(±0.03)	14.567	410050	24.371
15) Decane	19.283(±0.03)	19.275	30519	2.572

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

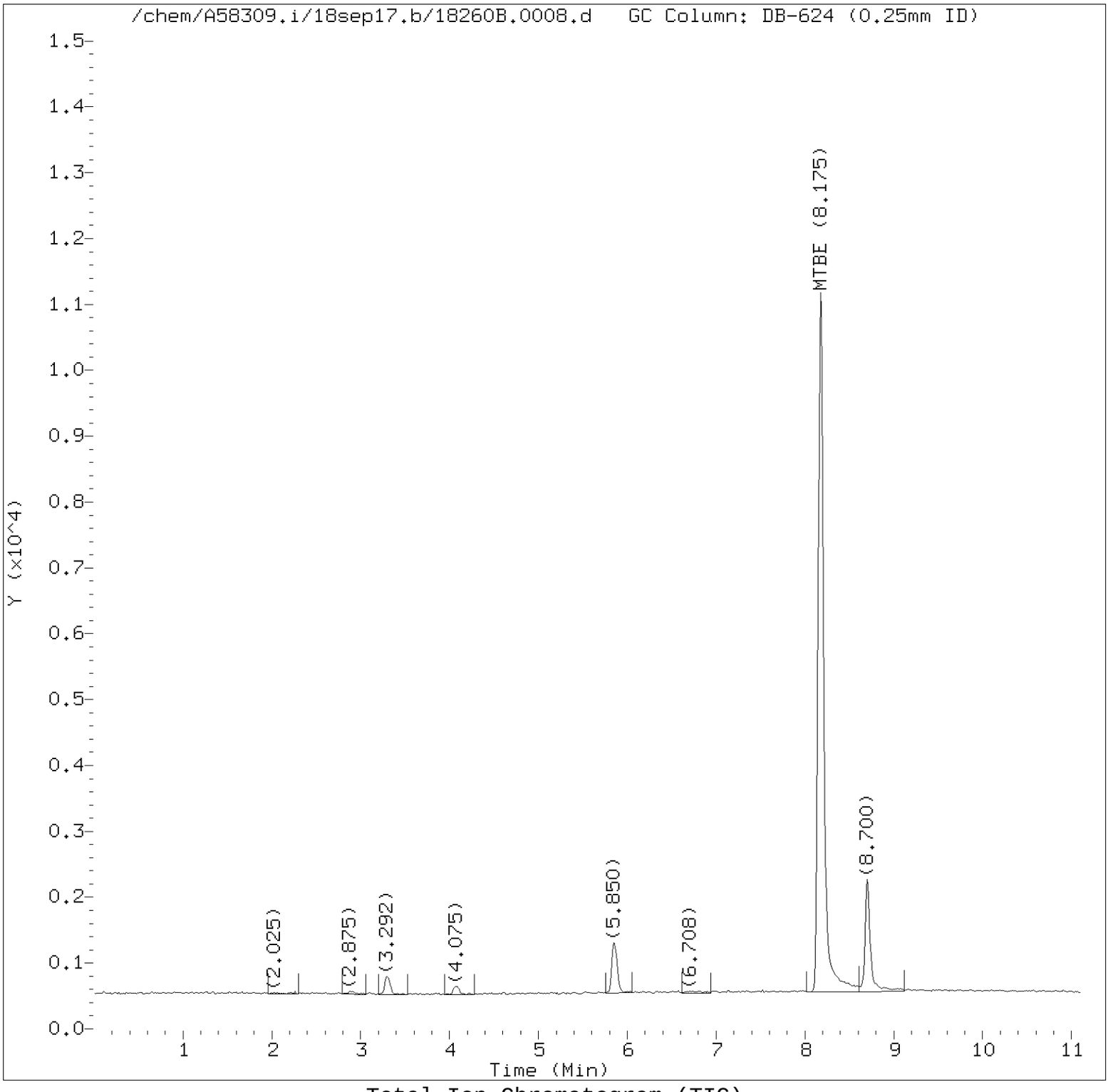
Data File: /chem/A58309.i/18sep17.b/18260.0008.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 13:12 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

RT	Area	Peak Label(s) and Range Compound #s
2.908	70137	Methane
3.033	133625	Ethane
3.300	196395	Propane
3.708	2837	
4.067	259693	Butane
5.850	311681	Pentane
7.133	782	
8.183	255377	
8.700	360184	Hexane
11.383	337612	
14.450	292332	
14.567	410050	Octane
16.900	270382	
17.083	583388	
17.767	272361	
19.275	30520	Decane
19.950	842	
21.525	4178	

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

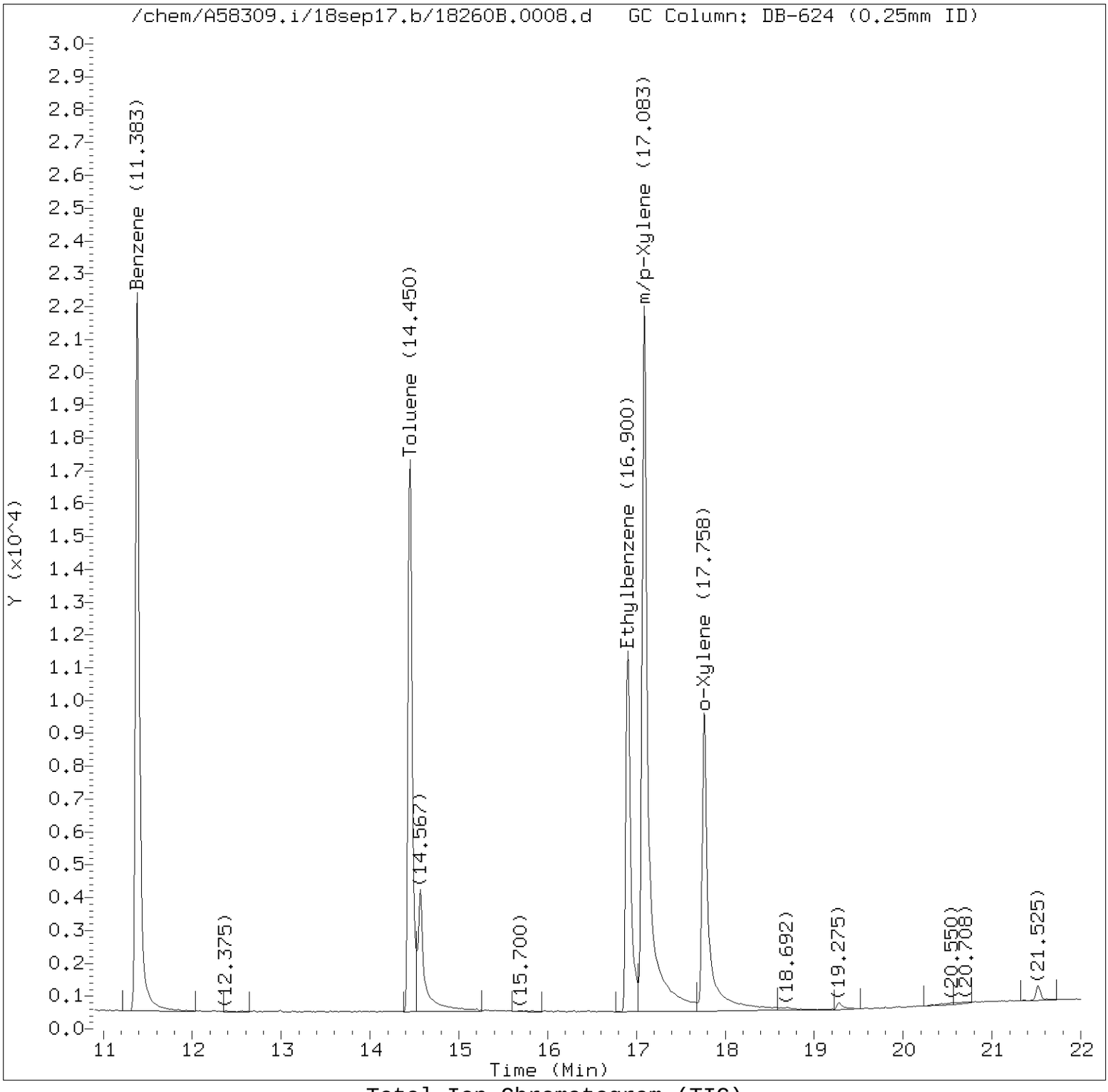
Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260B.0008.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 13:12 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:48.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260B.0008.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 13:12 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:48.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260B.0008.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 13:12 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) MTBE	8.183(±0.03)	8.175	48905	22.942
2) Benzene	11.383(±0.06)	11.383	76659	22.893
3) Toluene	14.450(±0.03)	14.450	54850	23.876
4) Ethylbenzene	16.908(±0.04)	16.900	41645	23.191
5) m/p-Xylene	17.092(±0.04)	17.083	108752	44.139
6) o-Xylene	17.767(±0.04)	17.758	48509	20.419
7) Xylene (total)			157261	64.558

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:48.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

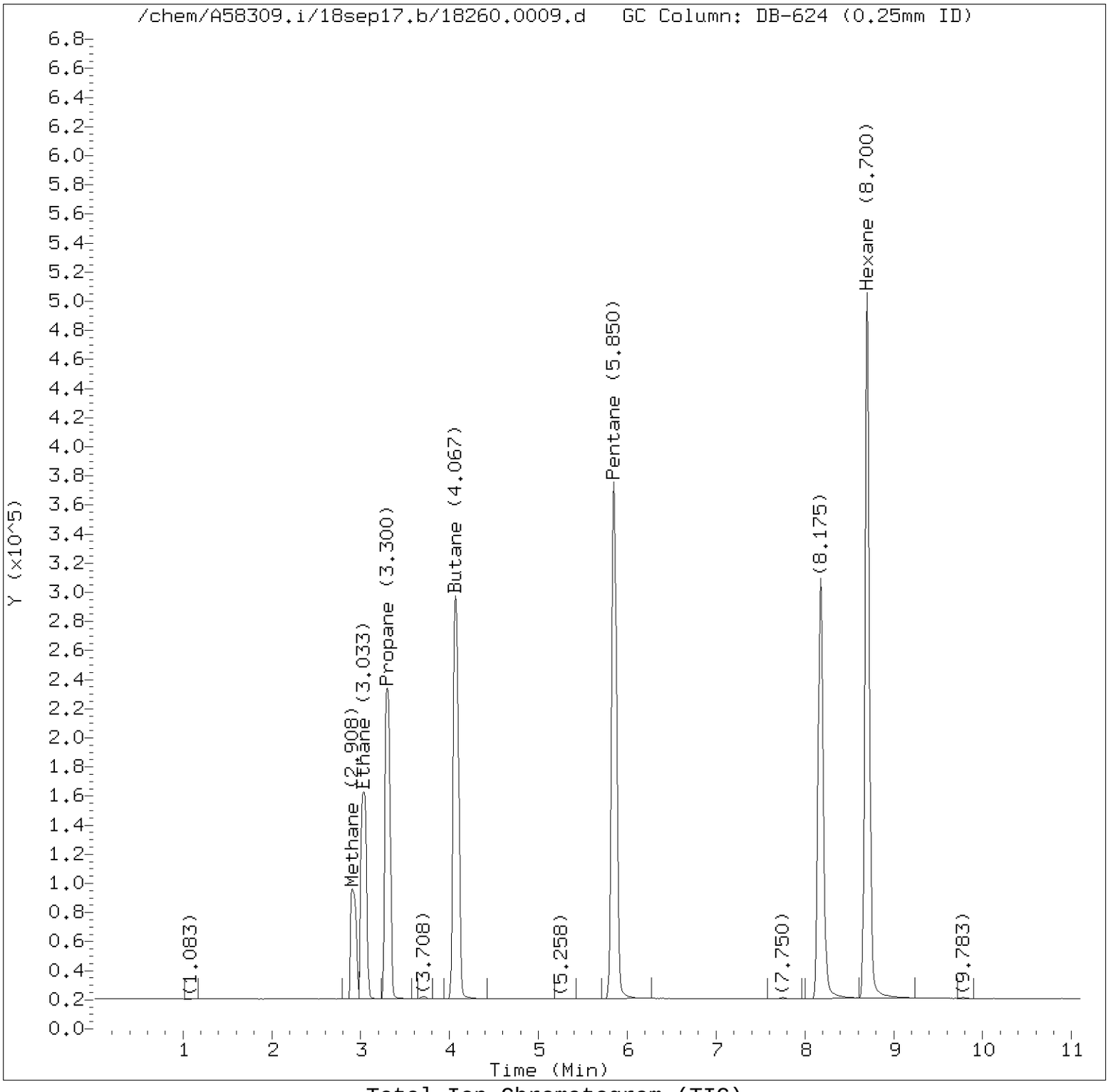
Data File: /chem/A58309.i/18sep17.b/18260B.0008.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 13:12 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

RT	Area	Peak Label(s) and Range	Compound #s
2.025	277		
2.875	318		
3.292	1316		
4.075	776		
5.850	3367		
6.708	331		
8.175	48905	MTBE	
8.700	7655		
11.383	76660	Benzene	
12.375	278		
14.450	54850	Toluene	
14.567	20271		
15.700	323		
16.900	41646	Ethylbenzene	
17.083	108752	m/p-Xylene	
17.758	48510	o-Xylene	
18.050	157261		
18.692	1355		
19.275	1203		
20.550	598		
20.708	528		
21.525	1922		

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:48.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

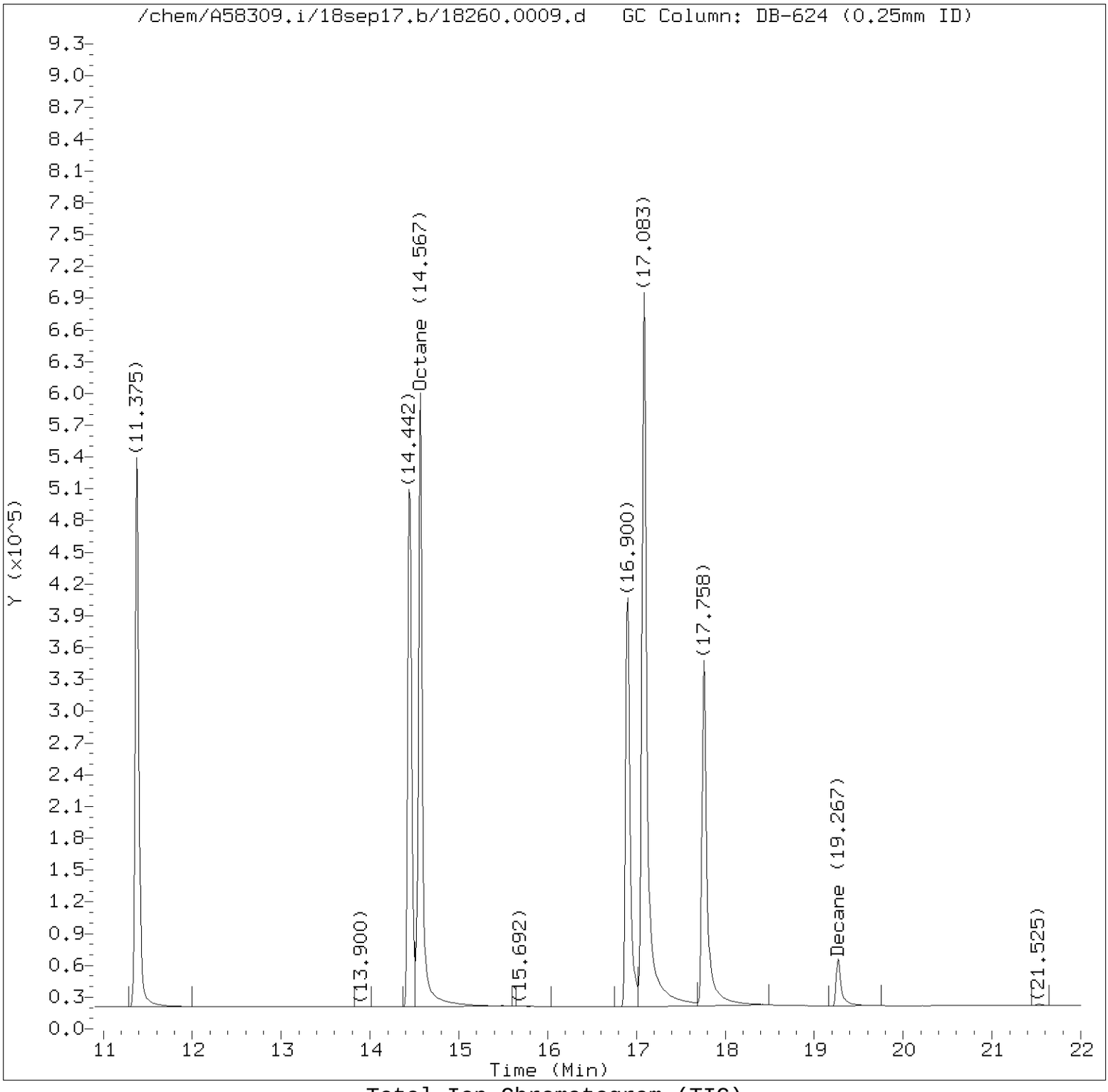
Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0009.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 13:43 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD100 Lab Sample ID: VSTD100

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0009.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 13:43 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD100 Lab Sample ID: VSTD100

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0009.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 13:43 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD100 Lab Sample ID: VSTD100

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) Methane	2.908(±0.03)	2.908	331275	105.107
2) Ethane	3.042(±0.03)	3.033	625319	101.763
3) Propane	3.300(±0.03)	3.300	920060	105.714
4) Butane	4.067(±0.03)	4.067	1225587	108.121
5) Pentane	5.858(±0.03)	5.850	1470844	107.227
7) Hexane	8.708(±0.03)	8.700	1711110	111.666
10) Octane	14.567(±0.03)	14.567	1996932	118.686
15) Decane	19.283(±0.03)	19.267	189126	15.937

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0009.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 13:43 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD100 Lab Sample ID: VSTD100

RT	Area	Peak Label(s) and Range	Compound #s
1.083	966		
2.908	331275	Methane	
3.033	625320	Ethane	
3.300	920060	Propane	
3.708	6958		
4.067	1225588	Butane	
5.258	1839		
5.850	1470844	Pentane	
7.750	5412		
8.175	1214607		
8.700	1711111	Hexane	
9.783	3038		
11.375	1637081		
13.900	2180		
14.442	1460960		
14.567	1996932	Octane	
15.692	2898		
16.900	1345532		
17.083	2840989		
17.758	1354745		
19.267	189127	Decane	
21.525	4779		

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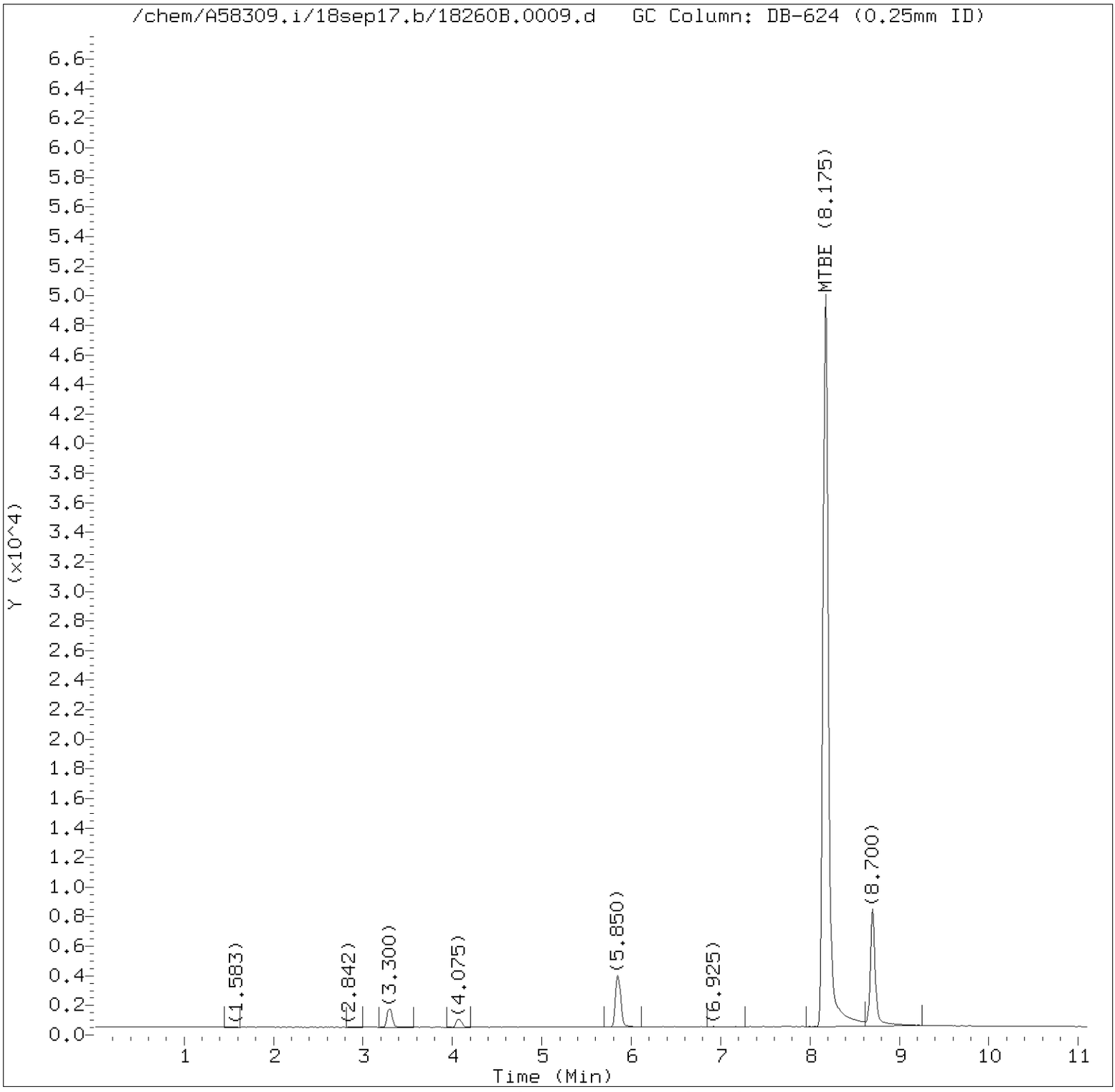
on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

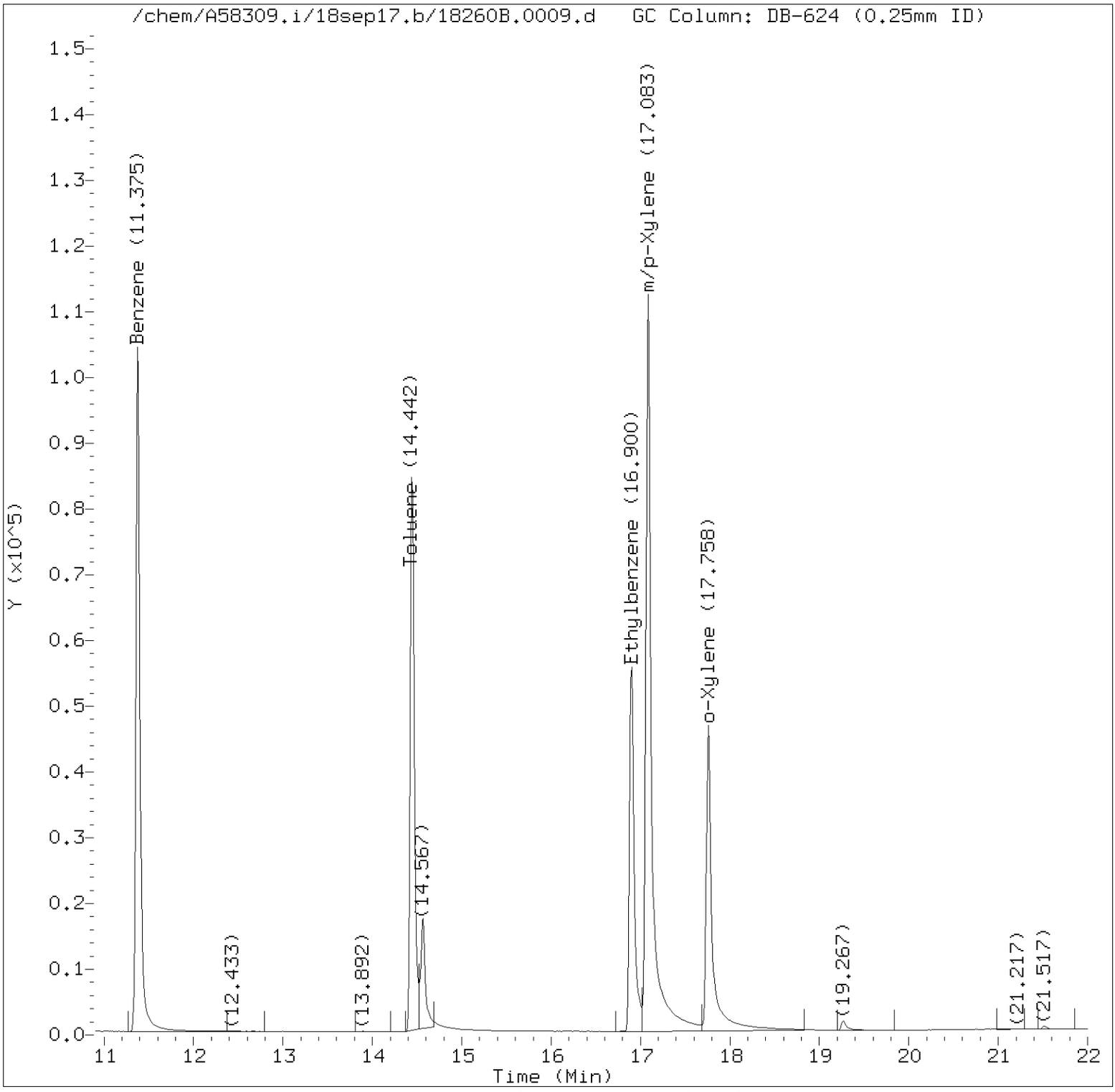
Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260B.0009.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 13:43 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD100 Lab Sample ID: VSTD100

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:48.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260B.0009.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 13:43 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD100 Lab Sample ID: VSTD100

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:48.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260B.0009.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 13:43 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

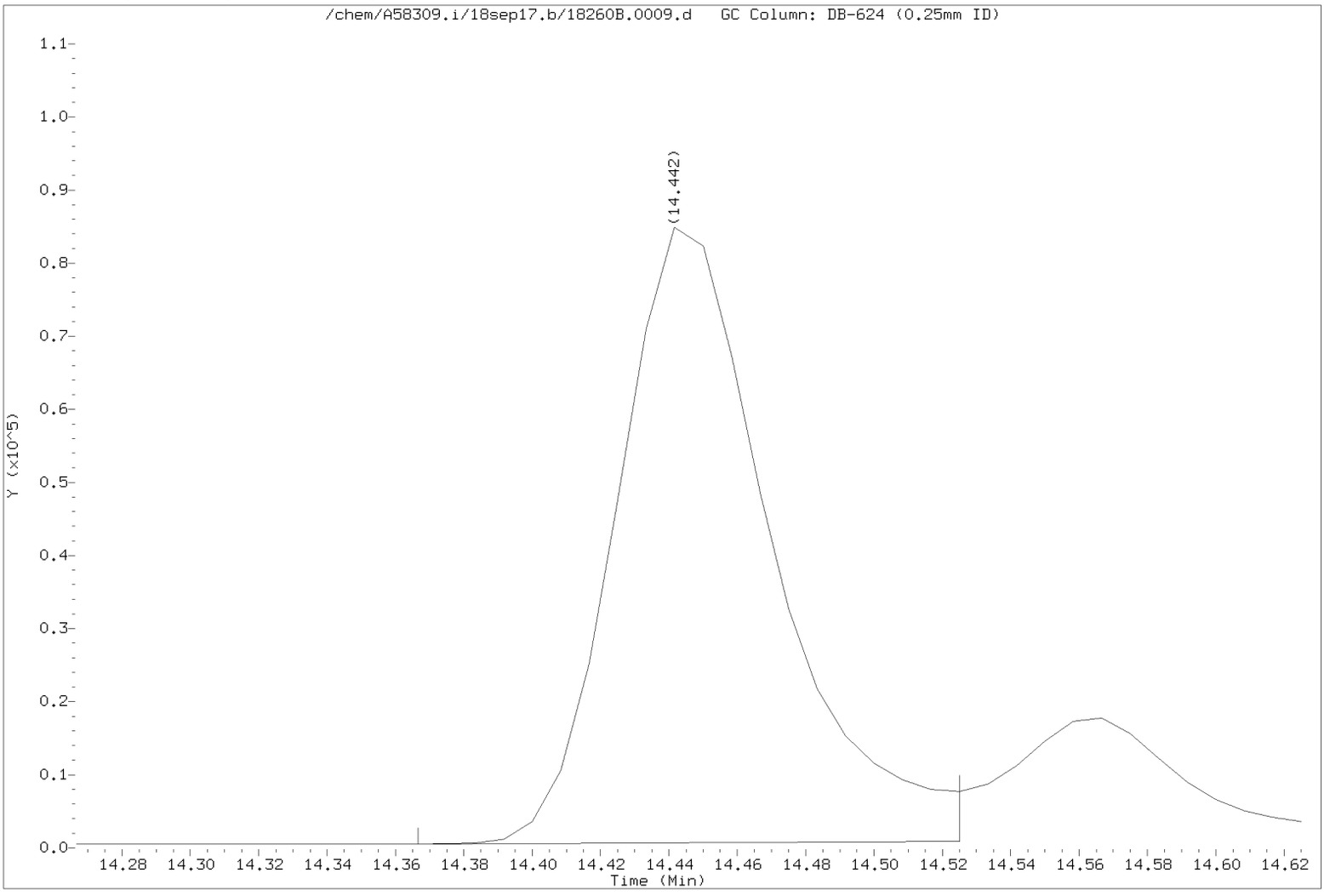
Sample Name: VSTD100 Lab Sample ID: VSTD100

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) MTBE	8.183(±0.03)	8.175	223578	104.886
2) Benzene	11.383(±0.06)	11.375	352259	105.196
3) Toluene	14.450(±0.03)	14.442	267929M	116.630
4) Ethylbenzene	16.908(±0.04)	16.900	201269	112.081
5) m/p-Xylene	17.092(±0.04)	17.083	514981	209.012
6) o-Xylene	17.767(±0.04)	17.758	223558	94.104
7) Xylene (total)			738539	303.116

M = Compound was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:48.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep17.b/18260B.0009.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 13:43 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD100 Lab Sample ID: VSTD100

Compound Number : 3
Compound Name : Toluene
Retention Time (minutes): 14.442
Area (flag) : 267929M
Concentration (ppm(v)) : 116.6299
Integration start time : 14.367 Integration stop time: 14.525
Y at integration start : 538 Y at integration end: 894

Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:48.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 10/08/2018 at 10:17.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep17.b/18260B.0009.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 13:43 Analyst ID:

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: all
Calibration date and time: 17-SEP-2018 14:11
Date, time and analyst ID of latest file update: 17-Sep-2018 14:11 Unknown

Sample Name: VSTD100 Lab Sample ID: VSTD100

Compound Number : 3
Compound Name : Toluene
Retention Time (minutes): 14.442
Area : 329850
Concentration (ppm(v)) : 121.2177
Integration start time : 14.367 Integration stop time: 14.692
Y at integration start : 538 Y at integration end: 1271

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:48.
Target 3.5 esignature user ID: 502781

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260B.0009.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 13:43 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

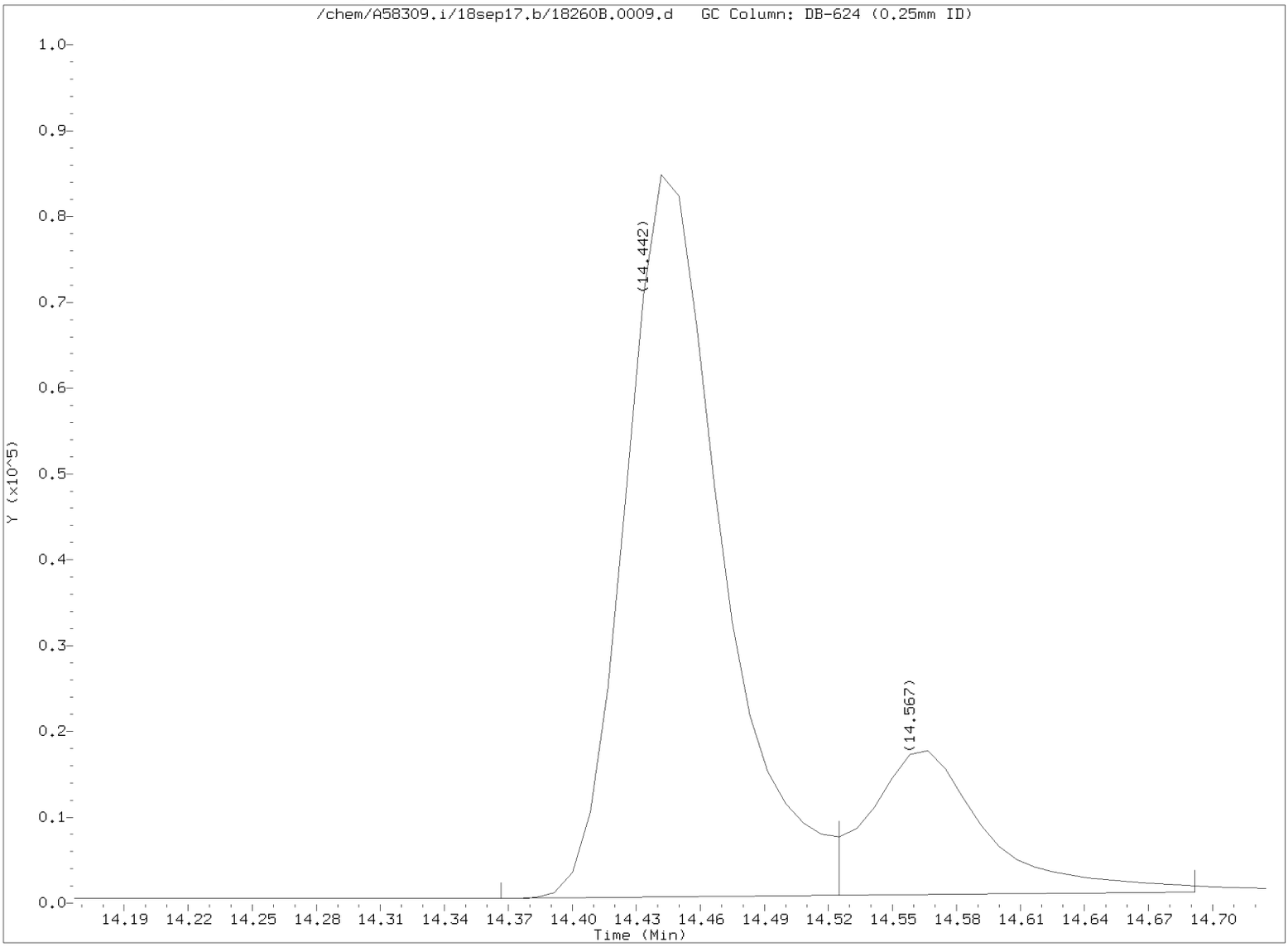
Sample Name: VSTD100 Lab Sample ID: VSTD100

RT	Area	Peak Label(s) and Range	Compound #s
1.583	265		
2.842	255		
3.300	5644		
4.075	2622		
5.850	15206		
6.925	372		
8.175	223578	MTBE	
8.700	33586		
11.375	352259	Benzene	
12.433	430		
13.892	298		
14.442	267929M	Toluene	
14.567	65521M		
16.900	201270	Ethylbenzene	
17.083	514982	m/p-Xylene	
17.758	223558	o-Xylene	
18.050	738539		
19.267	6710		
21.217	351		
21.517	1811		

M = Peak was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:48.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep17.b/18260B.0009.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 13:43 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD100 Lab Sample ID: VSTD100

Retention Time (minutes): 14.442
Area (flag) : 267929M
Integration start time : 14.367 Integration stop time: 14.525
Y at integration start : 538 Y at integration end: 894

Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:48.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 10/08/2018 at 10:17.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep17.b/18260B.0009.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 13:43 Analyst ID:

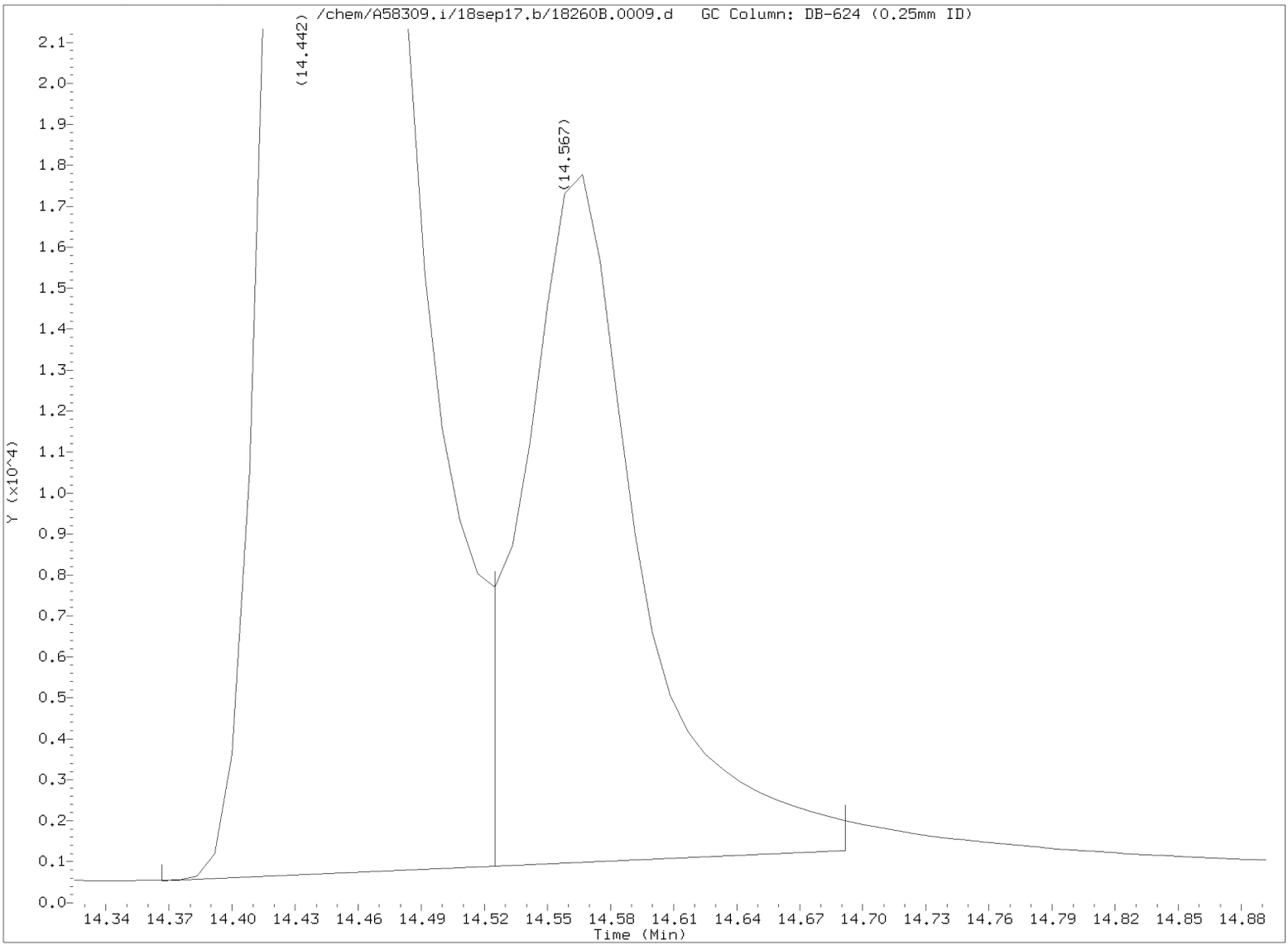
Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: all
Calibration date and time: 17-SEP-2018 14:11
Date, time and analyst ID of latest file update: 17-Sep-2018 14:11 Unknown

Sample Name: VSTD100 Lab Sample ID: VSTD100

No signal was originally integrated at 14.442 minutes.

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:48.
Target 3.5 esignature user ID: ASECHRIS

Manually Integrated Signal



Data File: /chem/A58309.i/18sep17.b/18260B.0009.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 13:43 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD100 Lab Sample ID: VSTD100

Retention Time (minutes): 14.567
Area (flag) : 65521M
Integration start time : 14.525 Integration stop time: 14.692
Y at integration start : 894 Y at integration end: 1271

Reason for manual integration: Signal not integrated by automation

Analyst responsible for change: Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:48.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 10/08/2018 at 10:17.
PARALLAX ID: jbs01304

Original Integration of Signal

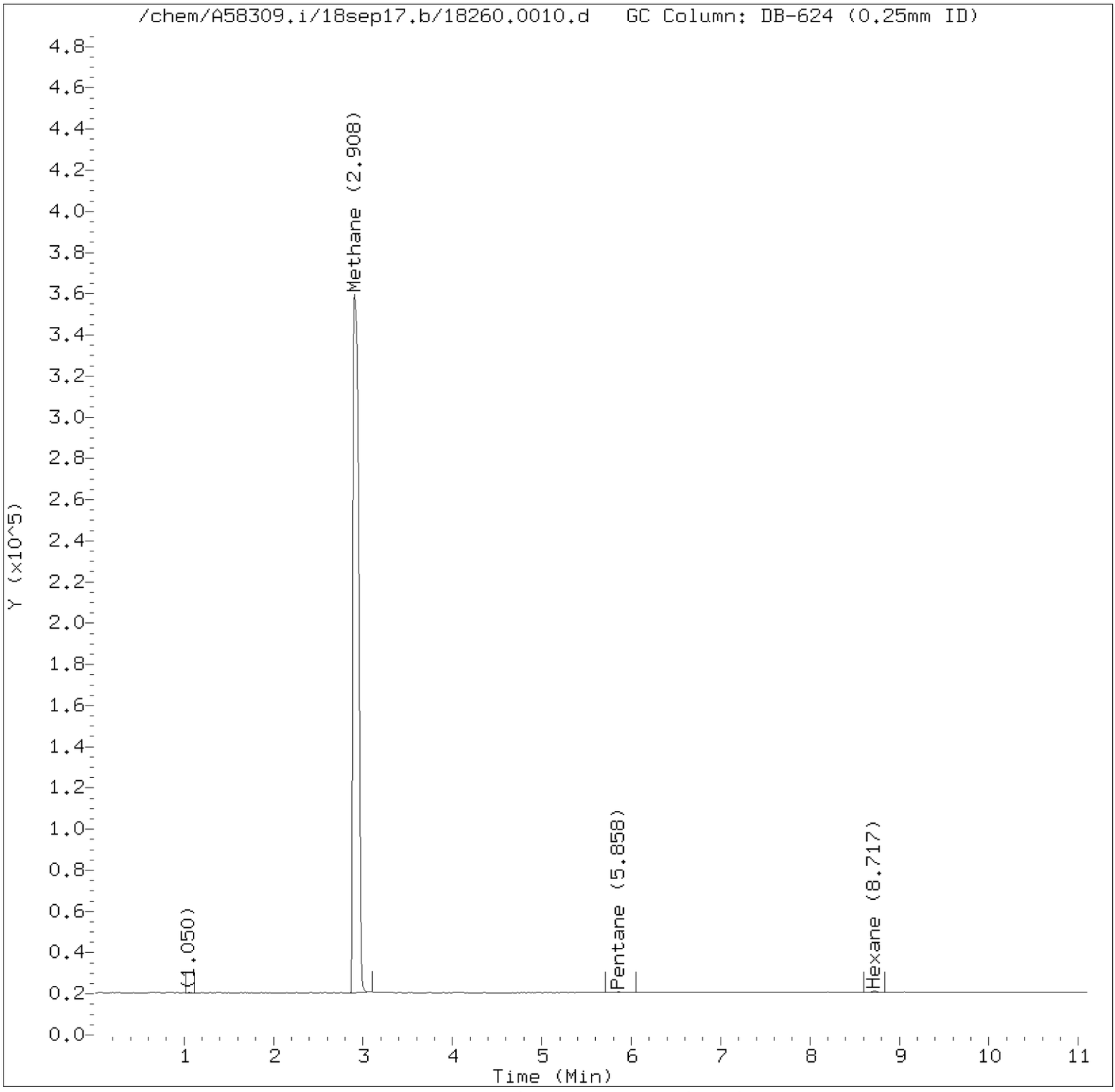
Data File: /chem/A58309.i/18sep17.b/18260B.0009.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 13:43 Analyst ID:

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: all
Calibration date and time: 17-SEP-2018 14:11
Date, time and analyst ID of latest file update: 17-Sep-2018 14:11 Unknown

Sample Name: VSTD100 Lab Sample ID: VSTD100

No signal was originally integrated at 14.567 minutes.

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:48.
Target 3.5 esignature user ID: ASECHRIST



Total Ion Chromatogram (TIC)

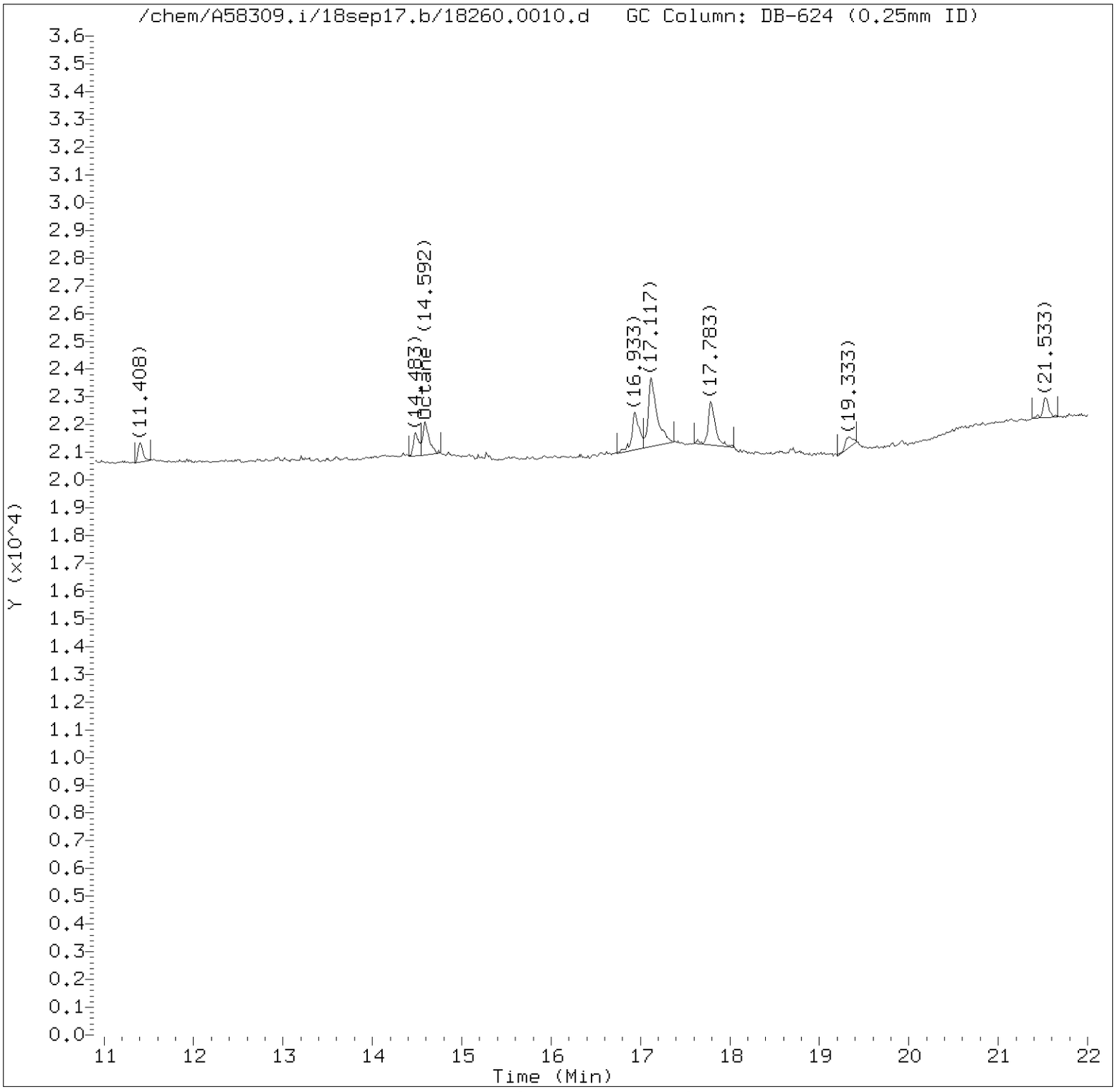
Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0010.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 14:17 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICALmethaneonly
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD500 Lab Sample ID: VSTD500

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0010.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 14:17 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICALmethaneonly
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD500 Lab Sample ID: VSTD500

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0010.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 14:17 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICALmethaneonly
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD500 Lab Sample ID: VSTD500

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) Methane	2.908(±0.03)	2.908	1511303	479.507

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

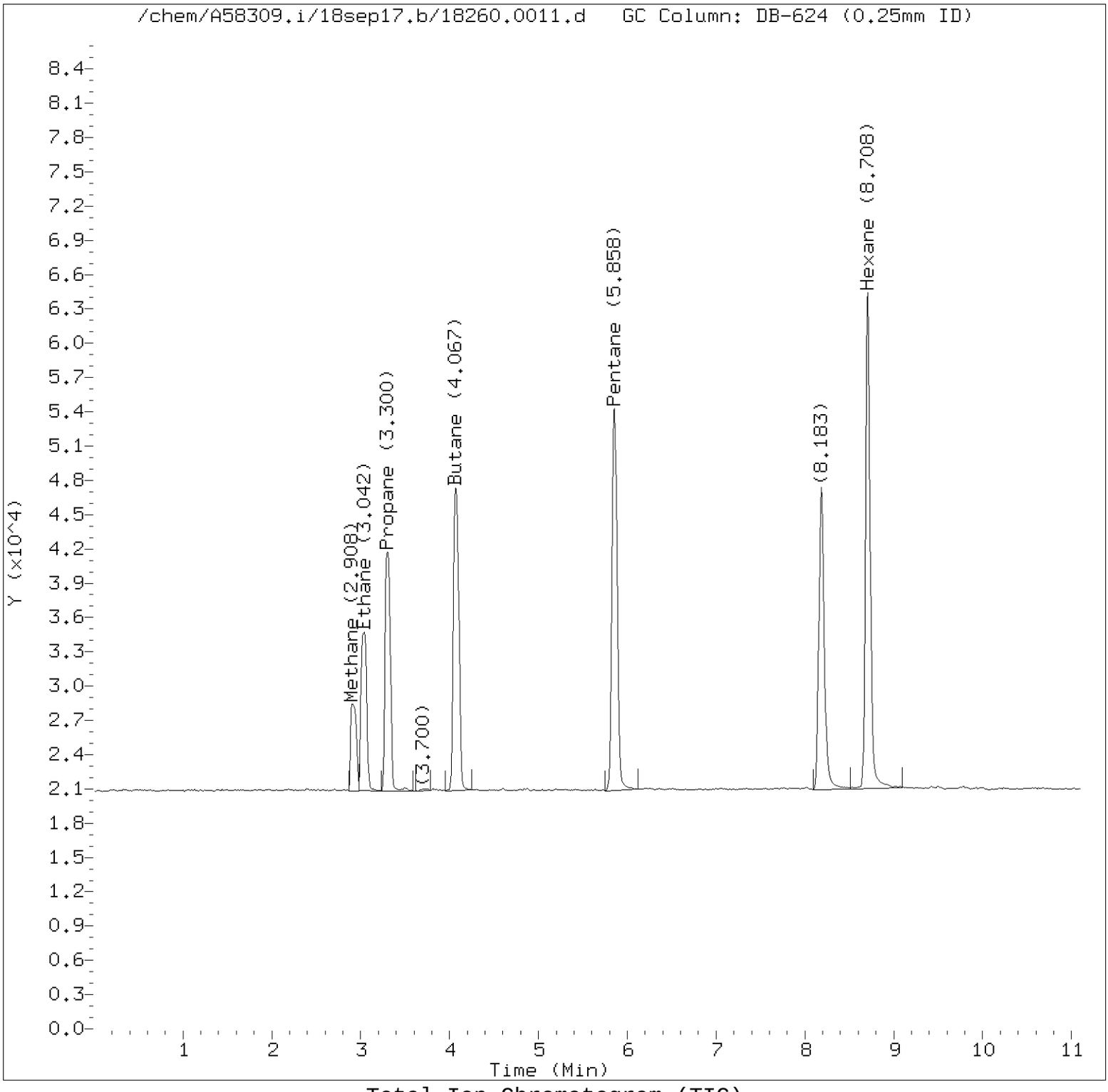
Data File: /chem/A58309.i/18sep17.b/18260.0010.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 14:17 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICALmethaneonly
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD500 Lab Sample ID: VSTD500

RT	Area	Peak Label(s) and Range	Compound #s
1.050	500		
2.908	1511304	Methane	
5.858	1942	Pentane	
8.717	2645	Hexane	
11.408	2488		
14.483	3524		
14.592	6116	Octane	
16.933	8101		
17.117	17564		
17.783	9365		
19.333	2209		
21.533	3334		

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

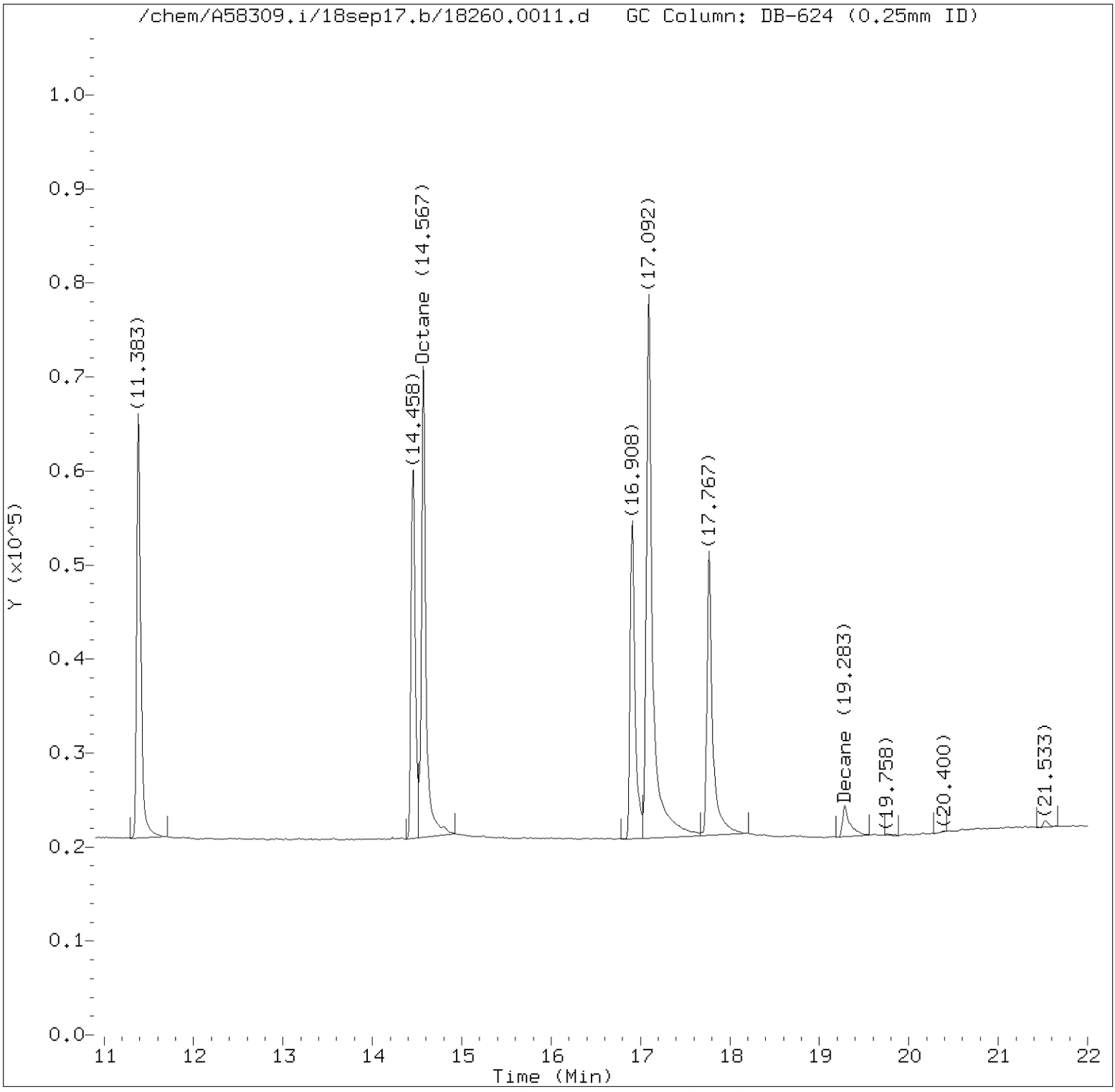
Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0011.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 14:47 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0011.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 14:47 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0011.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 14:47 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

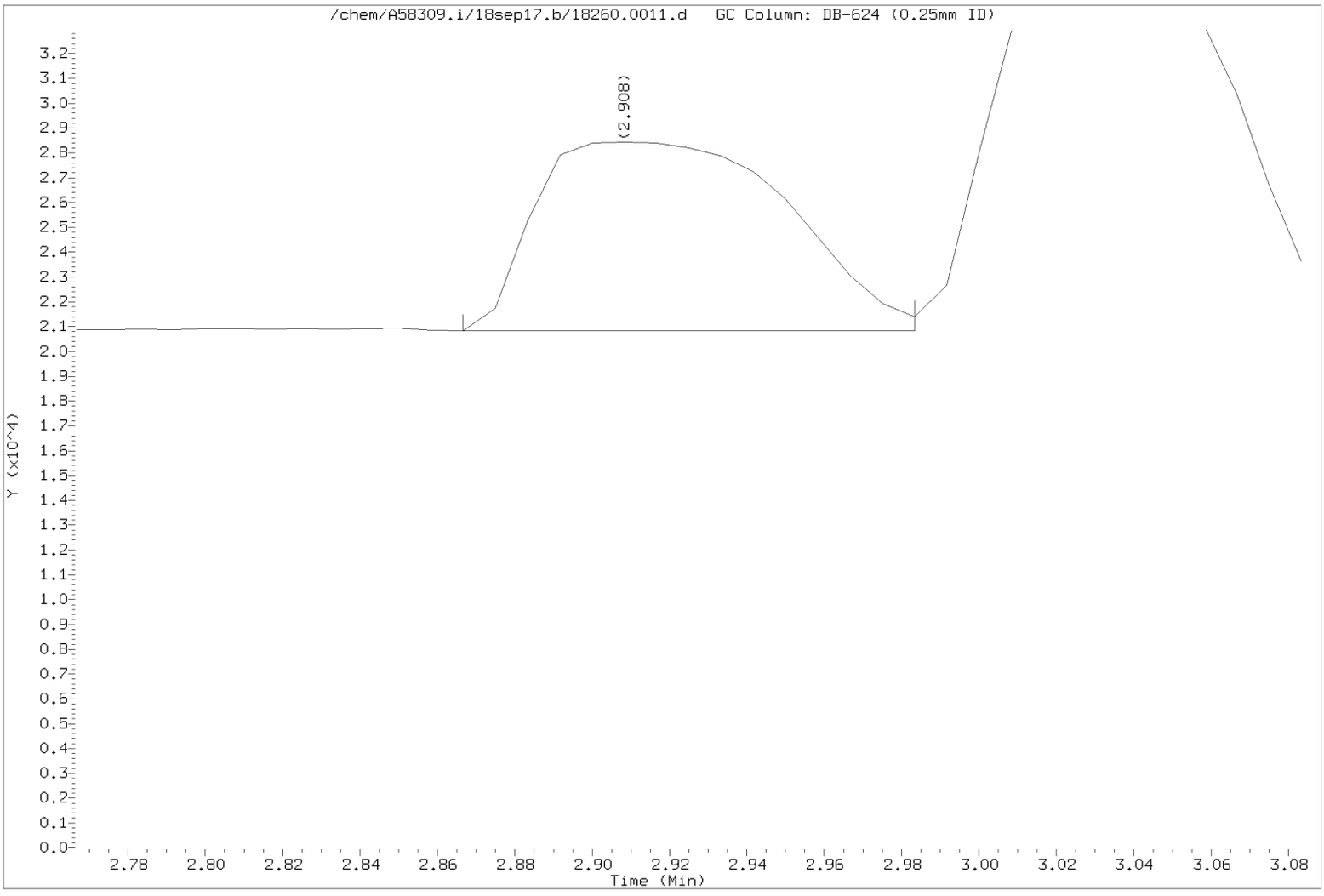
Sample Name: VSTD010 Lab Sample ID: VSTD010

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) Methane	2.908(±0.03)	2.908	34507M	10.948
2) Ethane	3.042(±0.03)	3.042	61546	10.016
3) Propane	3.300(±0.03)	3.300	91865	10.555
4) Butane	4.067(±0.03)	4.067	117883	10.400
5) Pentane	5.858(±0.03)	5.858	140996	10.279
7) Hexane	8.708(±0.03)	8.708	163045	10.640
10) Octane	14.567(±0.03)	14.567	184513	10.966
15) Decane	19.283(±0.03)	19.283	19425	1.637

M = Compound was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep17.b/18260.0011.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 14:47 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 1
Compound Name : Methane
Retention Time (minutes): 2.908
Area (flag) : 34507M
Concentration (ppm(v)) : 10.9484
Integration start time : 2.867 Integration stop time: 2.983
Y at integration start : 20831 Y at integration end: 20831

Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 10/08/2018 at 10:17.
PARALLAX ID: jbs01304

Original Integration of Signal

Data File: /chem/A58309.i/18sep17.b/18260.0011.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 14:47 Analyst ID:

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:15
Date, time and analyst ID of latest file update: 17-Sep-2018 15:15 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 1
Compound Name : Methane
Retention Time (minutes): 2.908
Area : 11995
Concentration (ppm(v)) : 3.8163
Integration start time : 2.775 Integration stop time: 2.908
Y at integration start : 20872 Y at integration end: 20857

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ADS0718

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0011.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 14:47 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

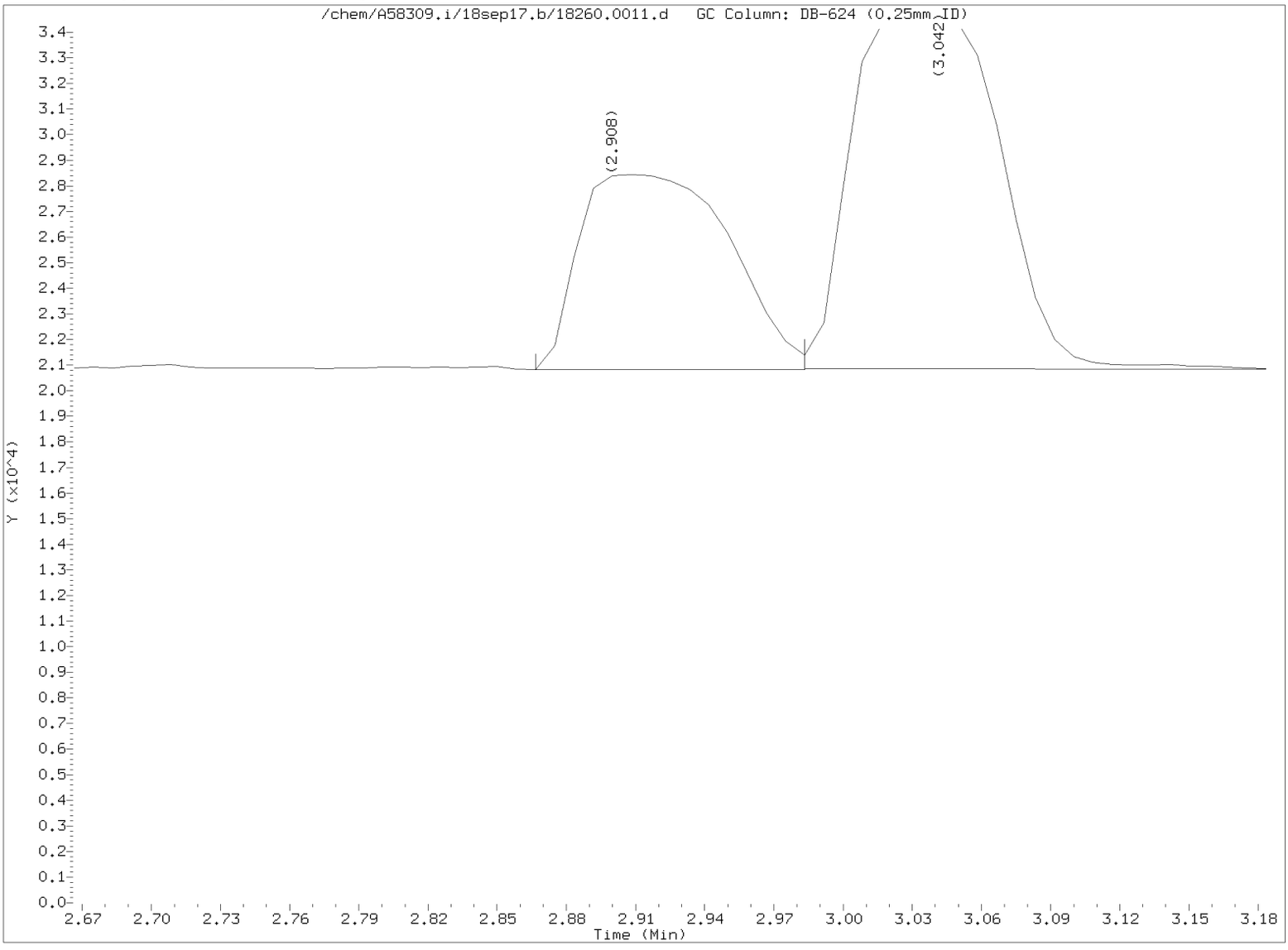
Sample Name: VSTD010 Lab Sample ID: VSTD010

RT	Area	Peak Label(s) and Range	Compound #s
2.908	34507M	Methane	
3.042	61546	Ethane	
3.300	91866	Propane	
3.700	1006		
4.067	117884	Butane	
5.858	140996	Pentane	
8.183	116479		
8.708	163045	Hexane	
11.383	150112		
14.458	127080		
14.567	184514	Octane	
16.908	129166		
17.092	287015		
17.767	135476		
19.283	19425	Decane	
19.758	896		
20.400	526		
21.533	2866		

M = Peak was manually integrated.

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818

Manually Integrated Signal



Data File: /chem/A58309.i/18sep17.b/18260.0011.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 14:47 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Retention Time (minutes): 2.908
Area (flag) : 34507M
Integration start time : 2.867 Integration stop time: 2.983
Y at integration start : 20831 Y at integration end: 20831

Reason for manual integration: improper integration

Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 10/08/2018 at 10:17.
PARALLAX ID: jbs01304

Original Integration of Signal

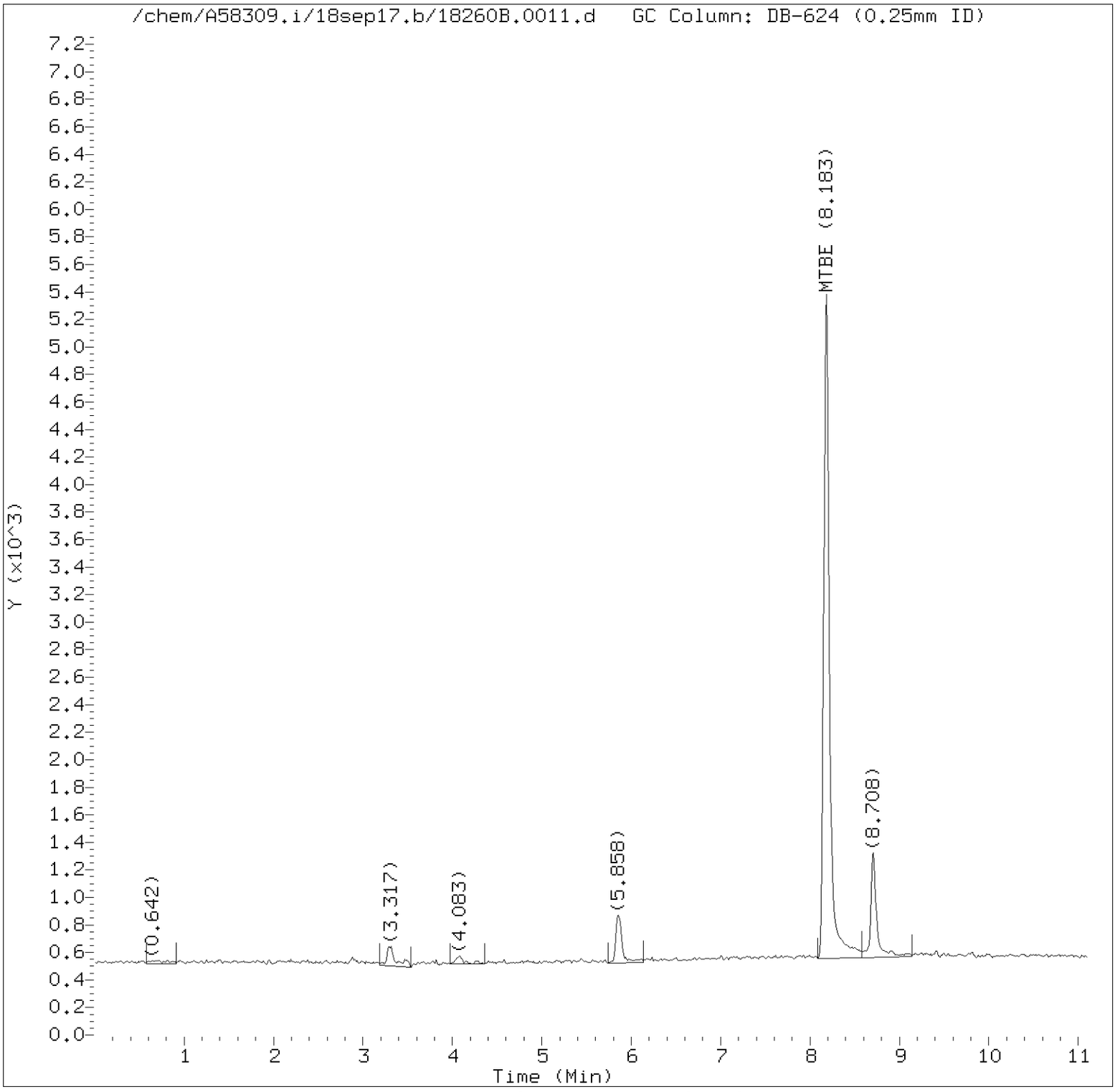
Data File: /chem/A58309.i/18sep17.b/18260.0011.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 14:47 Analyst ID:

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 17-SEP-2018 15:15
Date, time and analyst ID of latest file update: 17-Sep-2018 15:15 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

No signal was originally integrated at 2.908 minutes.

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 15:47.
Target 3.5 esignature user ID: ASECHRIST



Total Ion Chromatogram (TIC)

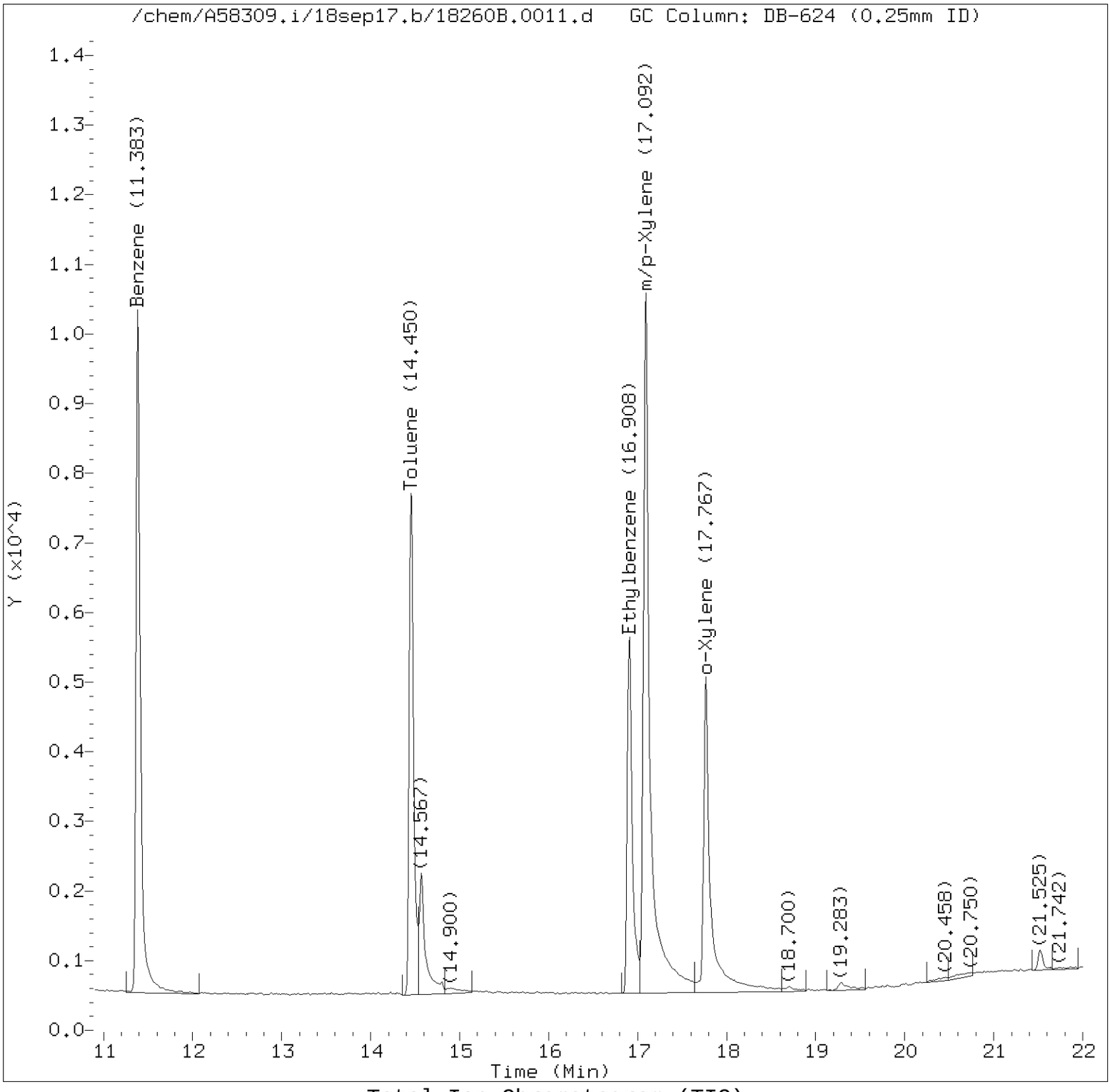
Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260B.0011.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 14:47 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:48.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260B.0011.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 14:47 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 15:48.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260B.0011.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 14:47 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) MTBE	8.183(±0.03)	8.183	22548	10.578
2) Benzene	11.383(±0.06)	11.383	35444	10.585
3) Toluene	14.450(±0.03)	14.450	24908	10.842
4) Ethylbenzene	16.908(±0.04)	16.908	20224	11.262
5) m/p-Xylene	17.092(±0.04)	17.092	54491	22.116
6) o-Xylene	17.767(±0.04)	17.767	26181	11.021
7) Xylene (total)			80672	33.137

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on 09/17/2018 at 15:48.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260B.0011.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 14:47 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: 07090
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 15:46 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

RT	Area	Peak Label(s) and Range	Compound #s
0.642	305		
3.317	1066		
4.083	440		
5.858	1778		
8.183	22548	MTBE	
8.708	3696		
11.383	35445	Benzene	
14.450	24909	Toluene	
14.567	9045		
14.900	836		
16.908	20224	Ethylbenzene	
17.092	54492	m/p-Xylene	
17.767	26182	o-Xylene	
18.050	80672		
18.700	636		
19.283	1024		
20.458	480		
20.750	815		
21.525	1163		
21.742	388		

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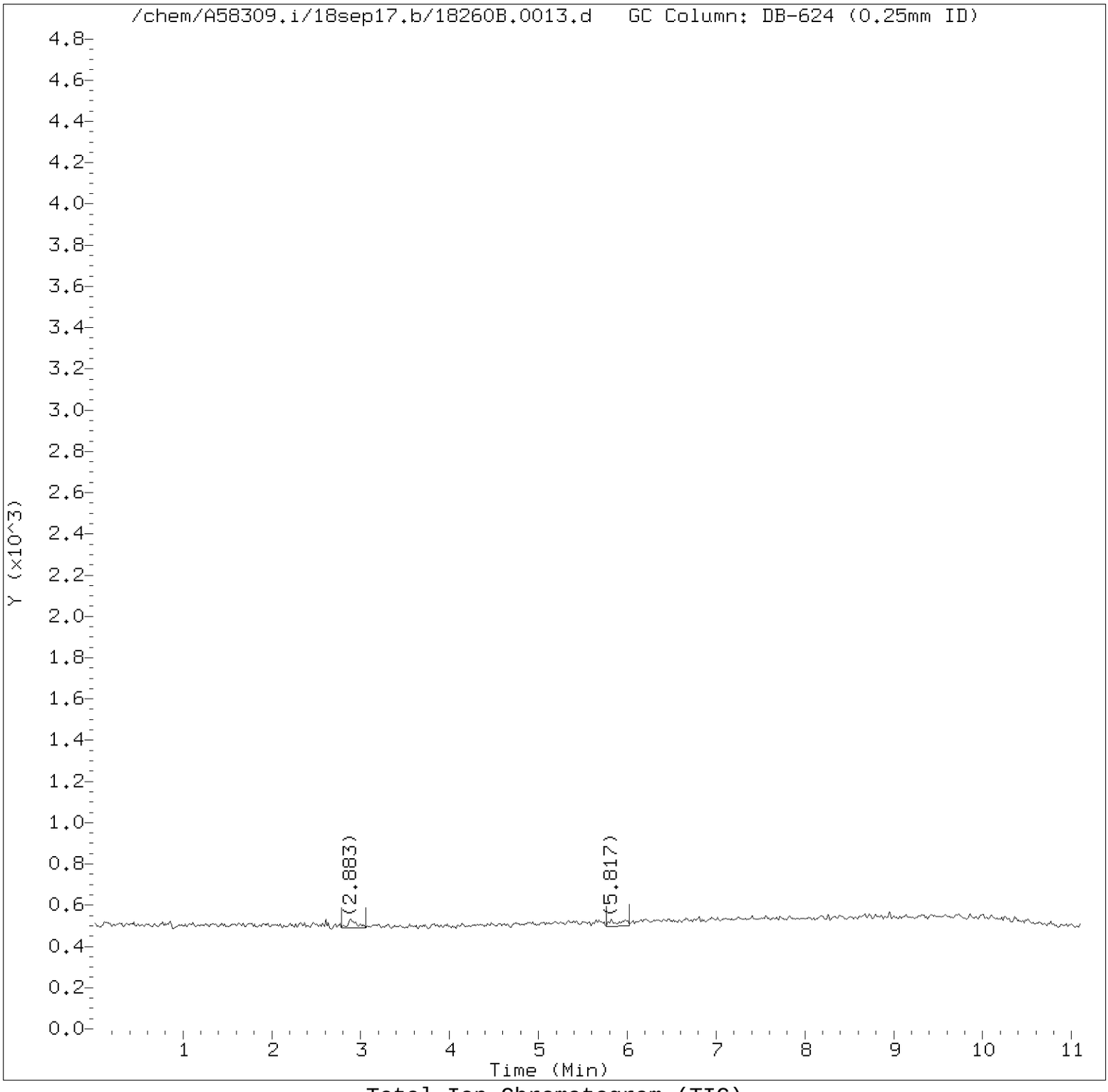
on 09/17/2018 at 15:48.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

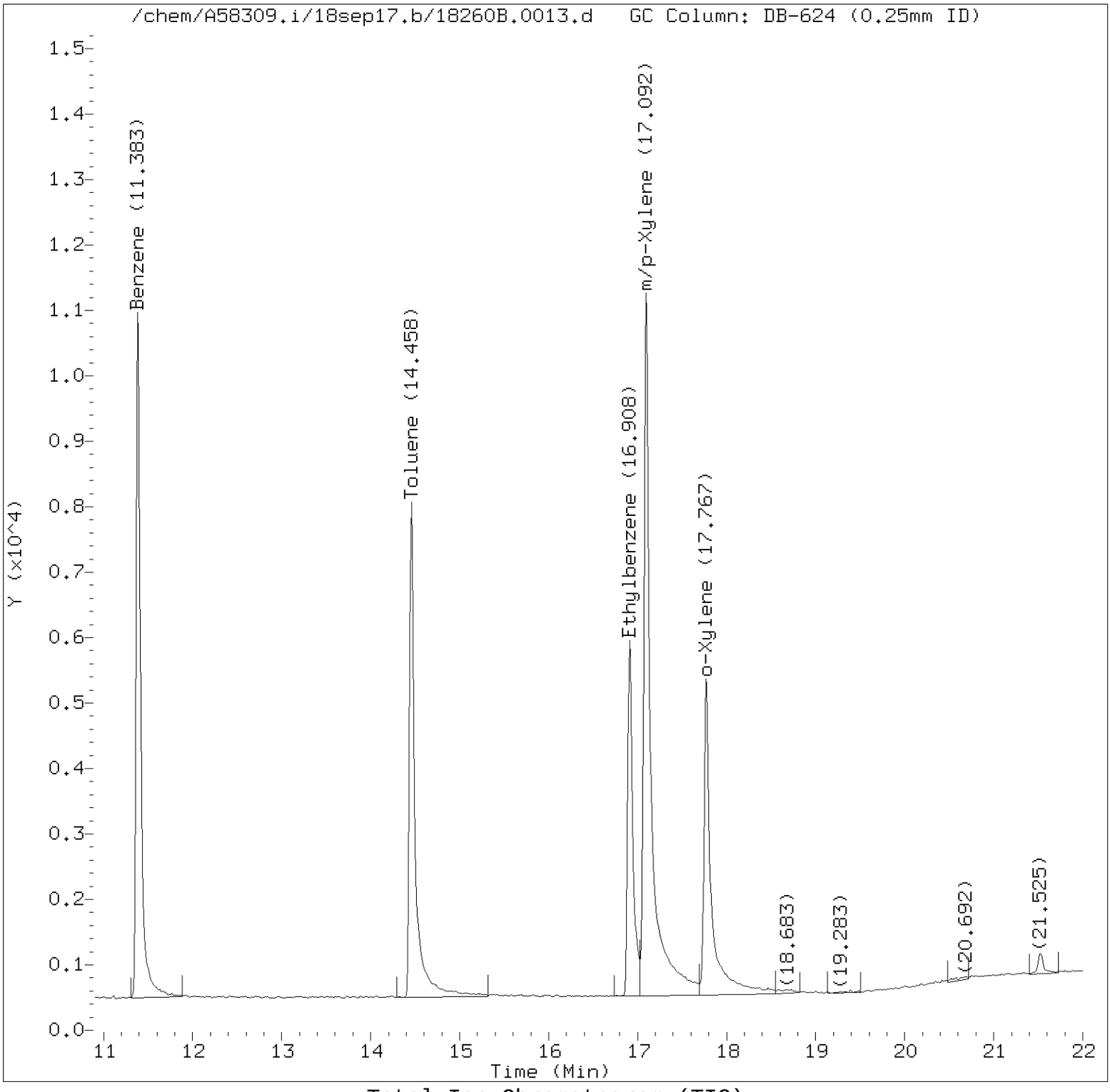
Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260B.0013.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 16:04 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: BTEX
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 16:37 ads07818

Sample Name: LCS260 Lab Sample ID: LCS260

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 16:38.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260B.0013.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 16:04 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: BTEX
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 16:37 ads07818

Sample Name: LCS260 Lab Sample ID: LCS260

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 16:38.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260B.0013.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 16:04 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: BTEX
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 16:37 ads07818

Sample Name: LCS260 Lab Sample ID: LCS260

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
2) Benzene	11.383(±0.06)	11.383	38740	11.569
3) Toluene	14.450(±0.03)	14.458	33966	14.785
4) Ethylbenzene	16.908(±0.04)	16.908	22035	12.271
5) m/p-Xylene	17.092(±0.04)	17.092	61835	25.097
6) o-Xylene	17.767(±0.04)	17.767	28577	12.029
7) Xylene (total)			90412	37.126

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 16:38.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260B.0013.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 16:04 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: BTEX
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 16:37 ads07818

Sample Name: LCS260 Lab Sample ID: LCS260

RT	Area	Peak Label(s) and Range	Compound #s
2.883	273		
5.817	295		
11.383	38741	Benzene	
14.458	33966	Toluene	
16.908	22036	Ethylbenzene	
17.092	61836	m/p-Xylene	
17.767	28577	o-Xylene	
18.050	90412		
18.683	645		
19.283	326		
20.692	481		
21.525	1493		

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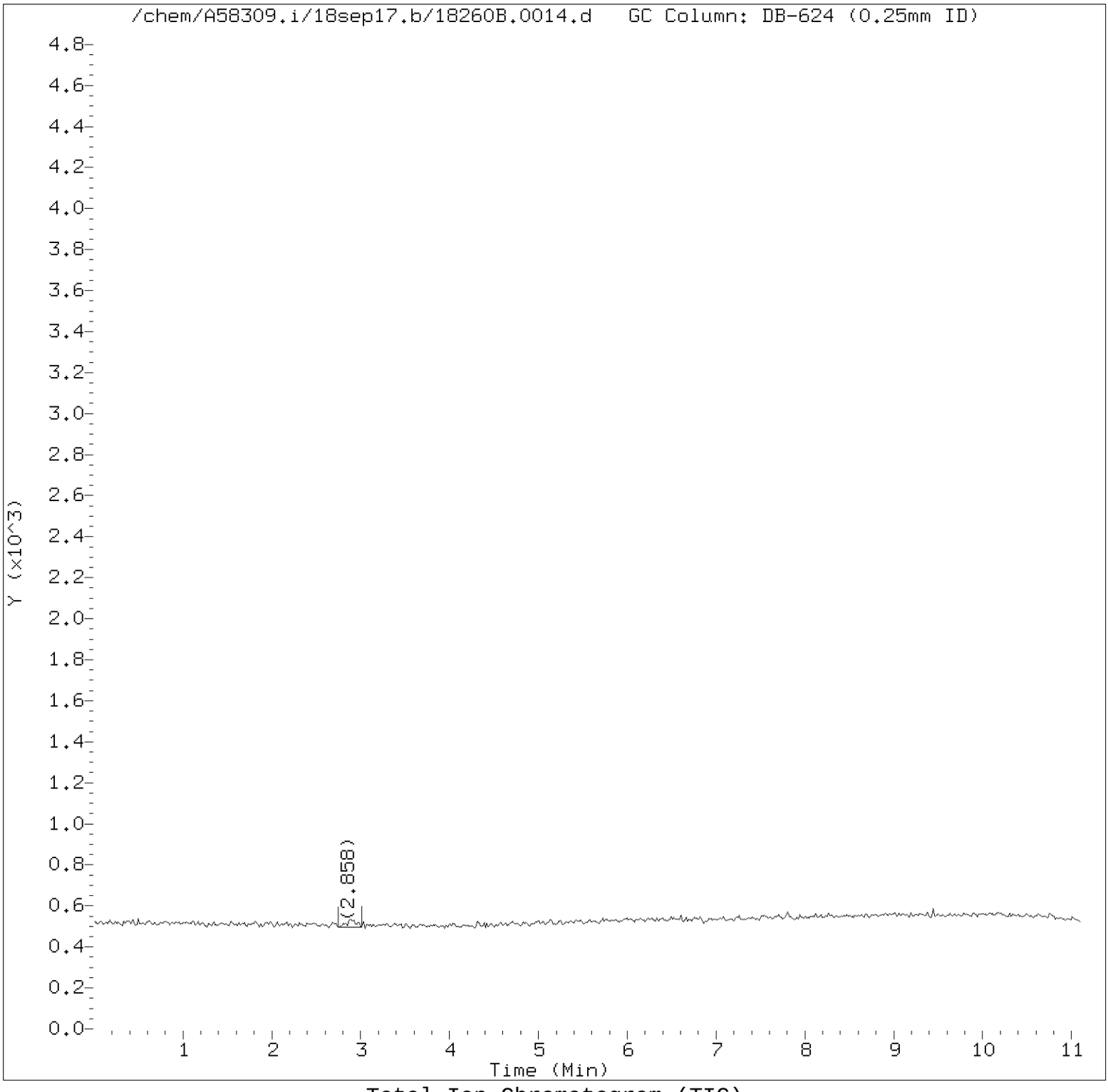
on 09/17/2018 at 16:38.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

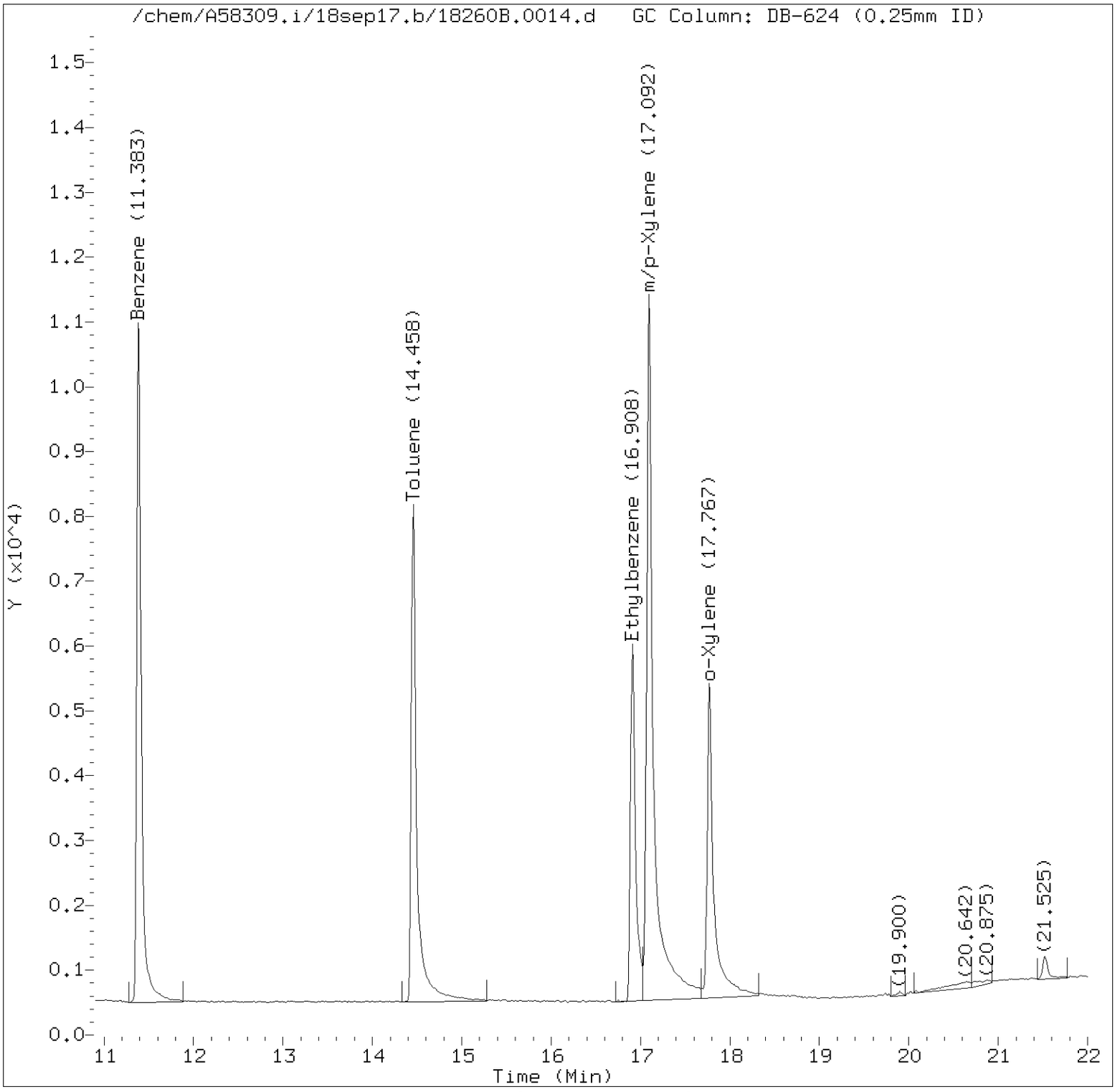
Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260B.0014.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 16:37 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: BTEX
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 17:08 ads07818

Sample Name: LCSD260 Lab Sample ID: LCSD260

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 17:08.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260B.0014.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 16:37 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: BTEX
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 17:08 ads07818

Sample Name: LCSD260 Lab Sample ID: LCSD260

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 17:08.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260B.0014.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 16:37 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: BTEX
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 17:08 ads07818

Sample Name: LCSD260 Lab Sample ID: LCSD260

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
2) Benzene	11.383(±0.06)	11.383	38923	11.624
3) Toluene	14.450(±0.03)	14.458	33690	14.665
4) Ethylbenzene	16.908(±0.04)	16.908	21974	12.237
5) m/p-Xylene	17.092(±0.04)	17.092	60381	24.506
6) o-Xylene	17.767(±0.04)	17.767	25669	10.805
7) Xylene (total)			86050	35.312

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 17:08.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260B.0014.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 16:37 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_pid.m Sublist used: BTEX
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 17:08 ads07818

Sample Name: LCSD260 Lab Sample ID: LCSD260

RT	Area	Peak Label(s) and Range	Compound #s
2.858	279		
11.383	38924	Benzene	
14.458	33690	Toluene	
16.908	21974	Ethylbenzene	
17.092	60382	m/p-Xylene	
17.767	25670	o-Xylene	
18.050	86050		
19.900	276		
20.642	2081		
20.875	860		
21.525	1566		

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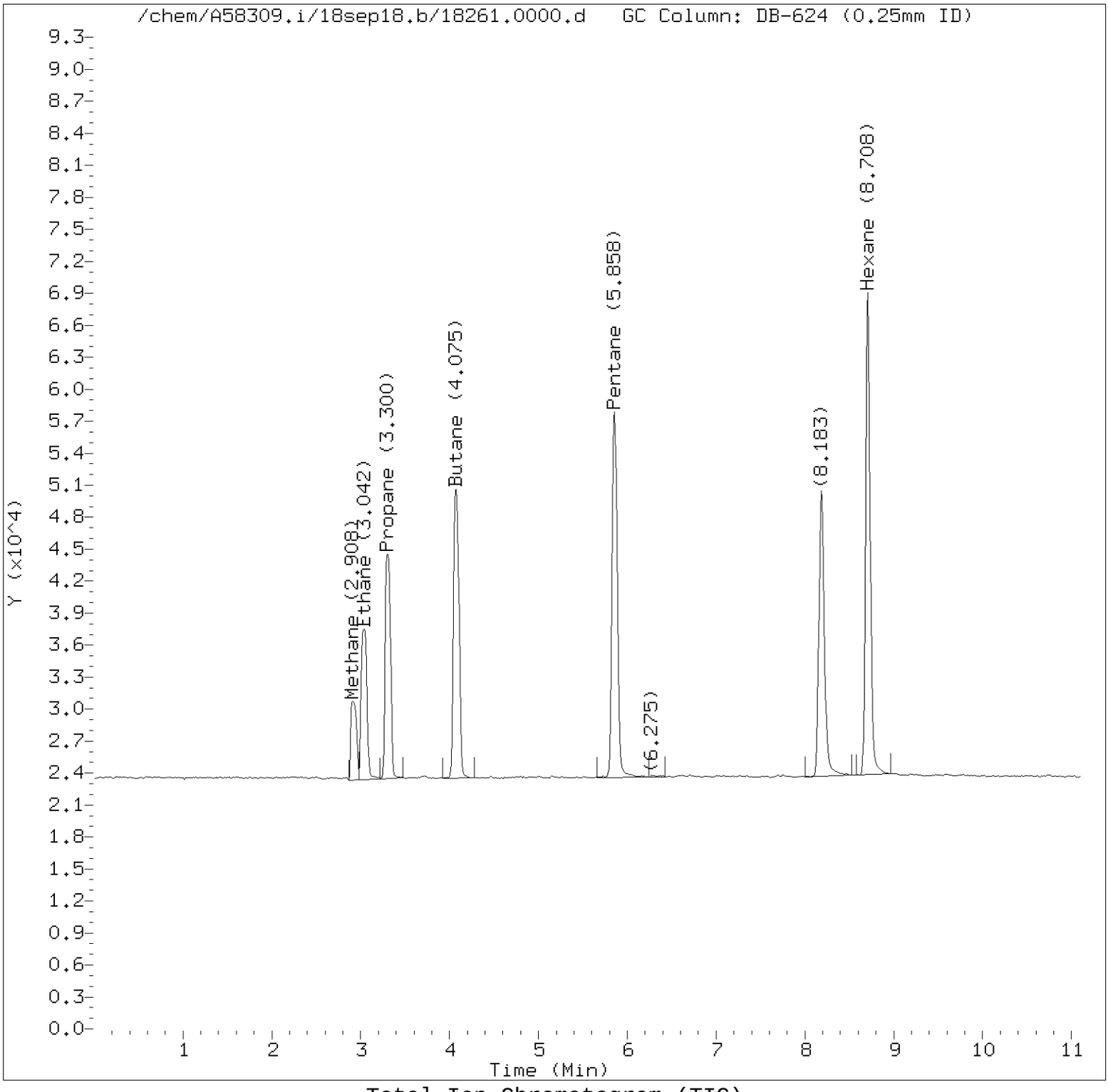
on 09/17/2018 at 17:08.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

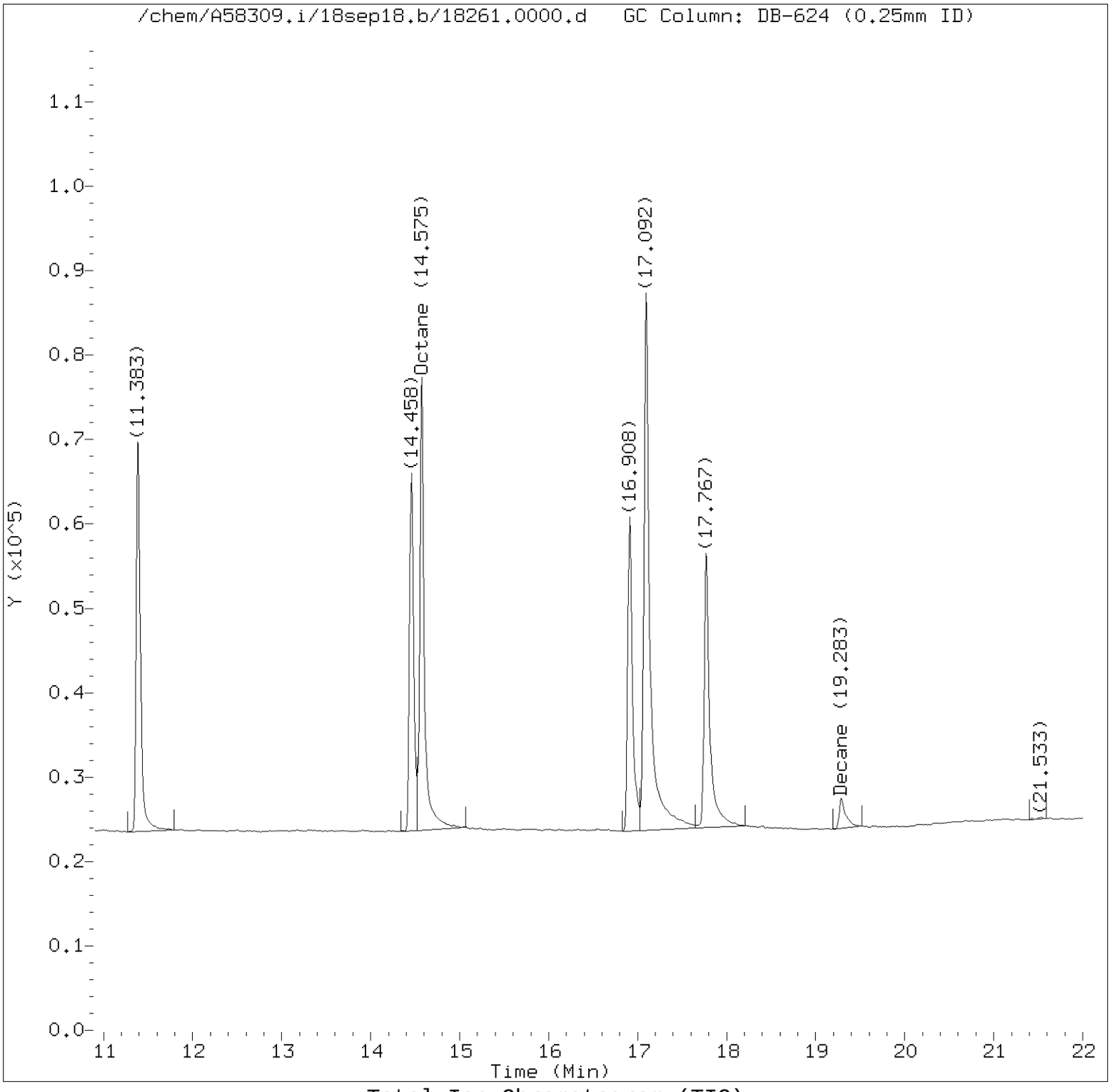
Target Revision 3.5

Data File: /chem/A58309.i/18sep18.b/18261.0000.d Instrument ID: A58309.i
Injection date and time: 18-SEP-2018 10:39 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep18.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 18-SEP-2018 12:56
Date, time and analyst ID of latest file update: 18-Sep-2018 12:56 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Alexander D. Sechrist
on 09/18/2018 at 12:57.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep18.b/18261.0000.d Instrument ID: A58309.i
Injection date and time: 18-SEP-2018 10:39 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep18.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 18-SEP-2018 12:56
Date, time and analyst ID of latest file update: 18-Sep-2018 12:56 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Alexander D. Sechrist
on 09/18/2018 at 12:57.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep18.b/18261.0000.d Instrument ID: A58309.i
Injection date and time: 18-SEP-2018 10:39 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep18.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 18-SEP-2018 12:56
Date, time and analyst ID of latest file update: 18-Sep-2018 12:56 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) Methane	2.908(±0.03)	2.908	33332	10.576
2) Ethane	3.042(±0.03)	3.042	64431	10.485
3) Propane	3.300(±0.03)	3.300	92008	10.572
4) Butane	4.075(±0.03)	4.075	120870	10.663
5) Pentane	5.858(±0.03)	5.858	146533	10.683
7) Hexane	8.708(±0.03)	8.708	164346	10.725
10) Octane	14.575(±0.03)	14.575	200907	11.941
15) Decane	19.283(±0.03)	19.283	18499	1.559

Digitally signed by Alexander D. Sechrist
on 09/18/2018 at 12:57.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

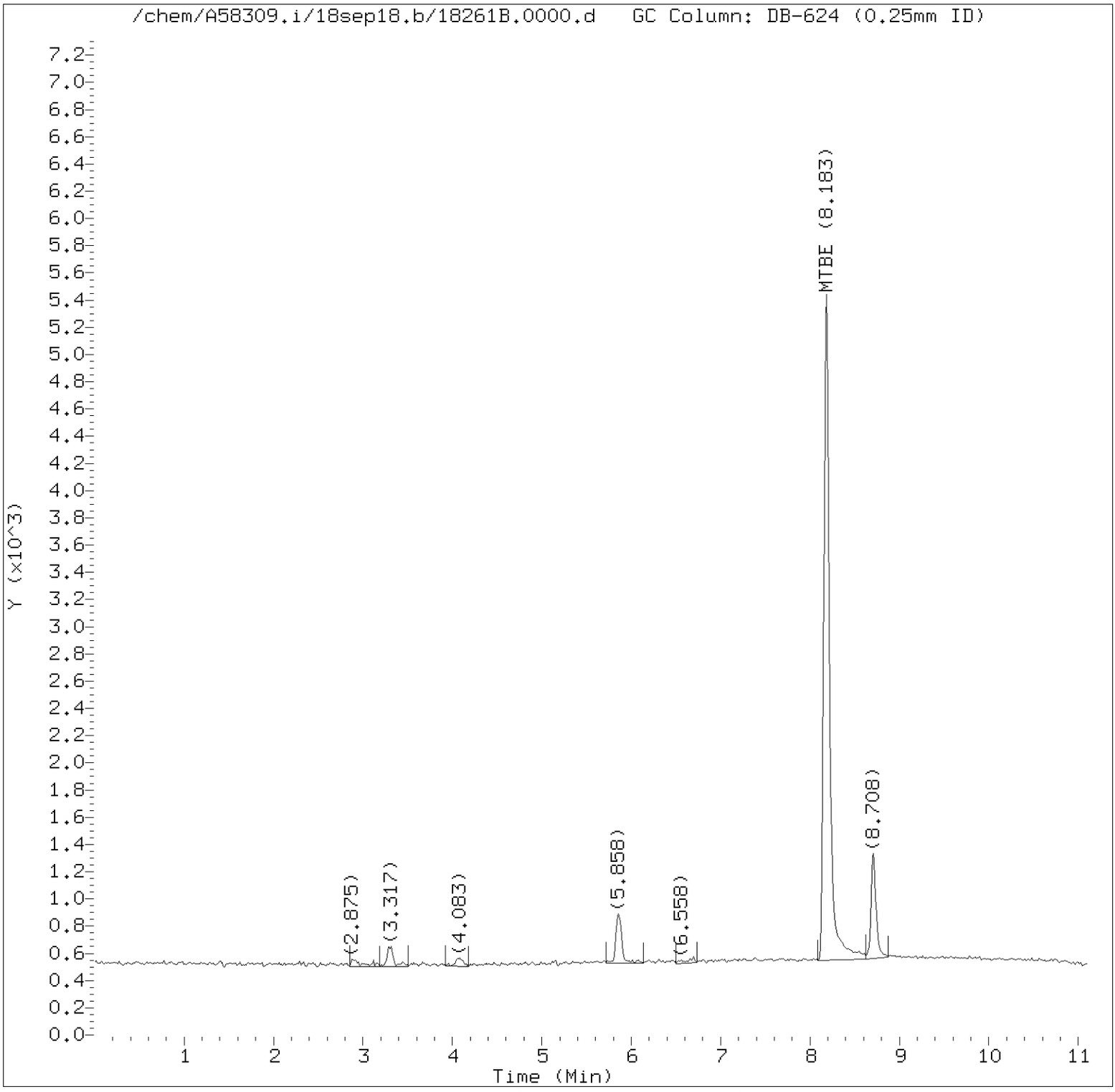
Data File: /chem/A58309.i/18sep18.b/18261.0000.d Instrument ID: A58309.i
Injection date and time: 18-SEP-2018 10:39 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep18.b/gc_fid.m Sublist used: ICAL
Calibration date and time: 18-SEP-2018 12:56
Date, time and analyst ID of latest file update: 18-Sep-2018 12:56 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

RT	Area	Peak Label(s) and Range	Compound #s
2.908	33332	Methane	
3.042	64432	Ethane	
3.300	92009	Propane	
4.075	120870	Butane	
5.858	146534	Pentane	
6.275	1212		
8.183	118993		
8.708	164346	Hexane	
11.383	159751		
14.458	138590		
14.575	200908	Octane	
16.908	140113		
17.092	313279		
17.767	147445		
19.283	18499	Decane	
21.533	1151		

Digitally signed by Alexander D. Sechrist
on 09/18/2018 at 12:57.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

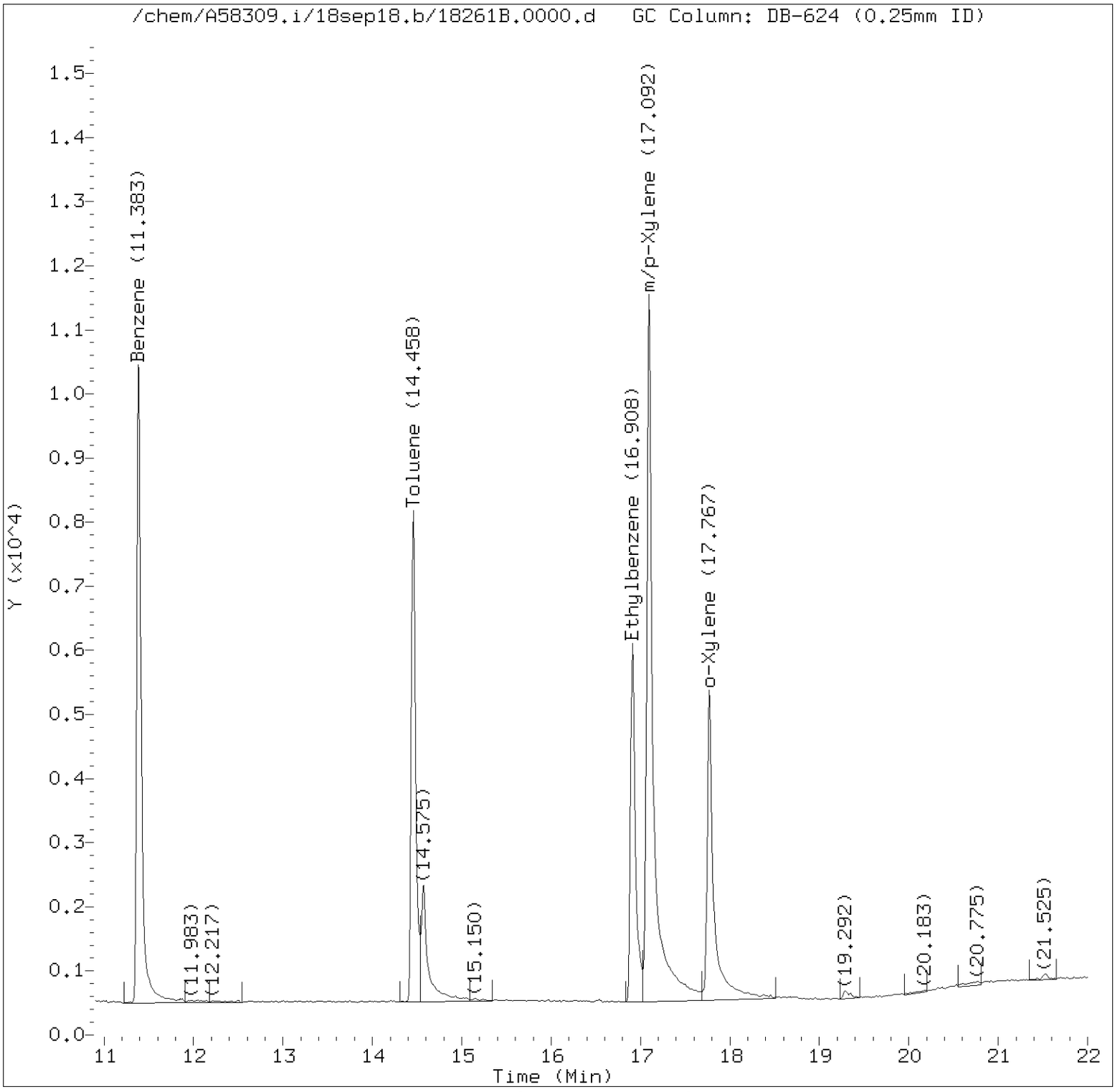
Target Revision 3.5

Data File: /chem/A58309.i/18sep18.b/18261B.0000.d Instrument ID: A58309.i
Injection date and time: 18-SEP-2018 10:39 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep18.b/gc_pid.m Sublist used: 07090
Calibration date and time: 18-SEP-2018 12:56
Date, time and analyst ID of latest file update: 18-Sep-2018 12:56 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Alexander D. Sechrist
on 09/18/2018 at 12:57.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep18.b/18261B.0000.d Instrument ID: A58309.i
Injection date and time: 18-SEP-2018 10:39 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep18.b/gc_pid.m Sublist used: 07090
Calibration date and time: 18-SEP-2018 12:56
Date, time and analyst ID of latest file update: 18-Sep-2018 12:56 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Alexander D. Sechrist
on 09/18/2018 at 12:57.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep18.b/18261B.0000.d Instrument ID: A58309.i
Injection date and time: 18-SEP-2018 10:39 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep18.b/gc_pid.m Sublist used: 07090
Calibration date and time: 18-SEP-2018 12:56
Date, time and analyst ID of latest file update: 18-Sep-2018 12:56 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))
1) MTBE	8.183(±0.03)	8.183	22921	10.753
2) Benzene	11.383(±0.06)	11.383	36718	10.965
3) Toluene	14.458(±0.03)	14.458	26181	11.397
4) Ethylbenzene	16.908(±0.04)	16.908	21638	12.050
5) m/p-Xylene	17.092(±0.04)	17.092	58606	23.786
6) o-Xylene	17.767(±0.04)	17.767	25918	10.910
7) Xylene (total)			84524	34.696

Digitally signed by Alexander D. Sechrist
on 09/18/2018 at 12:57.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep18.b/18261B.0000.d Instrument ID: A58309.i
Injection date and time: 18-SEP-2018 10:39 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep18.b/gc_pid.m Sublist used: 07090
Calibration date and time: 18-SEP-2018 12:56
Date, time and analyst ID of latest file update: 18-Sep-2018 12:56 ads07818

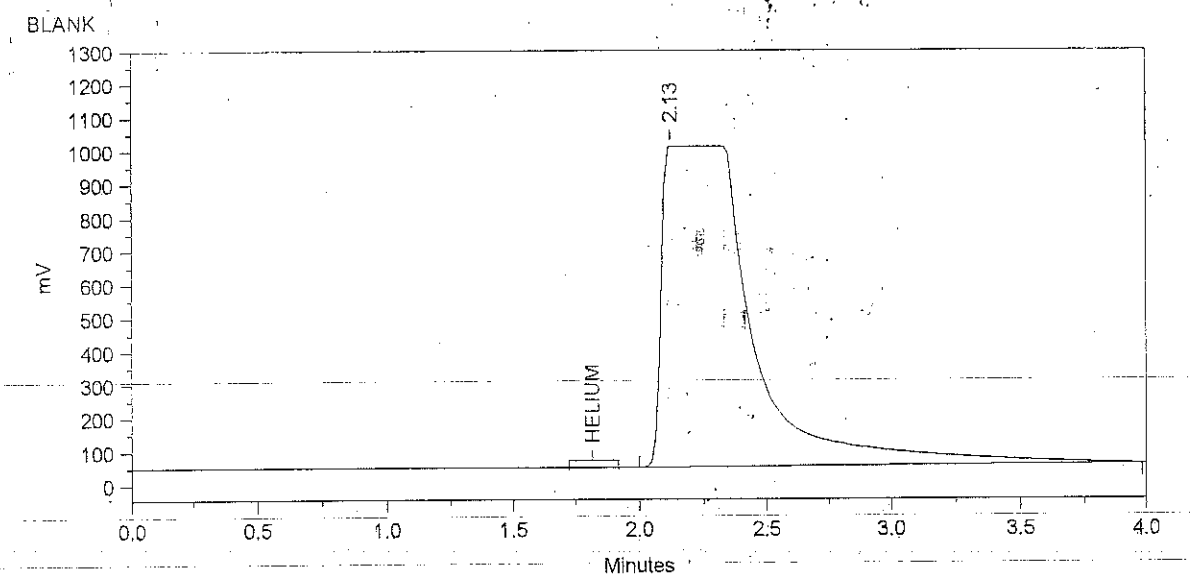
Sample Name: VSTD010 Lab Sample ID: VSTD010

RT	Area	Peak Label(s) and Range	Compound #s
2.875	467		
3.317	841		
4.083	392		
5.858	1761		
6.558	274		
8.183	22921	MTBE	
8.708	3121		
11.383	36718	Benzene	
11.983	435		
12.217	415		
14.458	26182	Toluene	
14.575	10514		
15.150	335		
16.908	21638	Ethylbenzene	
17.092	58607	m/p-Xylene	
17.767	25918	o-Xylene	
18.050	84524		
19.292	715		
20.183	258		
20.775	582		
21.525	505		

Digitally signed by Alexander D. Sechrist
on 09/18/2018 at 12:57.
Target 3.5 esignature user ID: ads07818

Raw QC Data

Volatile Organics in Air by GC



Sample Name: **BLANK**
Acquired from FIXED GASES--TCD via port 1 on 9/11/18 01:50:46pm by 1304
RT-Msieve 5A

Data File: C:\CPWIN\DATA1\2018DATA\18254\18254.02R
Date Stamp: 9/11/18 01:50:46pm
Sequence File: 18254.SEQ #2
Method File: C:\CPWIN\DATA1\FGHE.MET
Version 50. Date Stamp: 4/18/18 02:43:30pm
Calibration File: C:\CPWIN\DATA1\HE18108.CAL
Version 1. Date Stamp: 4/18/18 02:43:14pm

Run Time = 4.0 min Sample Rate = 1.0 per sec.
Amount Inj. = 1.000 Dilution Factor = 1.000
Sample Weight = 1.000 Int Std Amount = 1.000

Starting Peak Width = 0.05 min. Peak Threshold = 5 Area Reject = 0

PK#	Ret Time	Name	Amount	Amount%	Area	Area%	Type	Width	Height	Height%
1	2.125		0.0000	0.000	23487220.0	100.000	BB	0.402	974511.40	100.000

Total Area = 23487220.0, Total Amount = 0.0, Total Height = 974511.4, Sample Units = ppm(v)

ND

9/20/18

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

VBLK260

FID Data file: /chem/A58309.i/18sep17.b/18260.0012.d Injection date and time: **17-SEP-2018 15:26**
FID Data file Sample Info. Line: VBLK260 Instrument ID: **A58309.i** Batch: **M1826030AA**
Date, time and analyst ID of latest FID file update: 17-Sep-2018 16:01 ads07818

FID Blank Data file reference: **/chem/A58309.i/18sep17.b/18260.0012.d**

FID Method used: /chem/A58309.i/18sep17.b/gc_fid.m FID Sublist used: **blank**
FID Calibration date and time (Last Method Edit): 17-SEP-2018 15:46
FID Mid Level Daily Calibration Standard Reference: **/chem/A58309.i/18sep17.b/18260.0011.d**

PID Data file: /chem/A58309.i/18sep17.b/18260B.0012.d Injection date and time: **17-SEP-2018 15:26**
PID Data file Sample Info. Line: VBLK260 Instrument ID: **A58309.i** Batch: **M1826030AA**
Date, time and analyst ID of latest PID file update: 17-Sep-2018 16:01 ads07818

PID Blank Data file reference: **/chem/A58309.i/18sep17.b/18260B.0012.d**

PID Method used: /chem/A58309.i/18sep17.b/gc_pid.m PID Sublist used: **07090**
PID Calibration date and time (Last Method Edit): 17-SEP-2018 15:46
PID Mid Level Daily Calibration Standard Reference: **/chem/A58309.i/18sep17.b/18260B.0011.d**

Sampling Media: Tedlar Bag Bottle code: N/A Matrix: AIR On-Column Amount units: ppm(v) In Sample Concentration units: ppm(v)

Sample Concentration Formula: On-Column Amount * DF * IVn/IVa Dilution Factor (DF): 1
Nominal Injection Volume (IVn): 100 cc Actual injection Volume (IVa): 100 cc

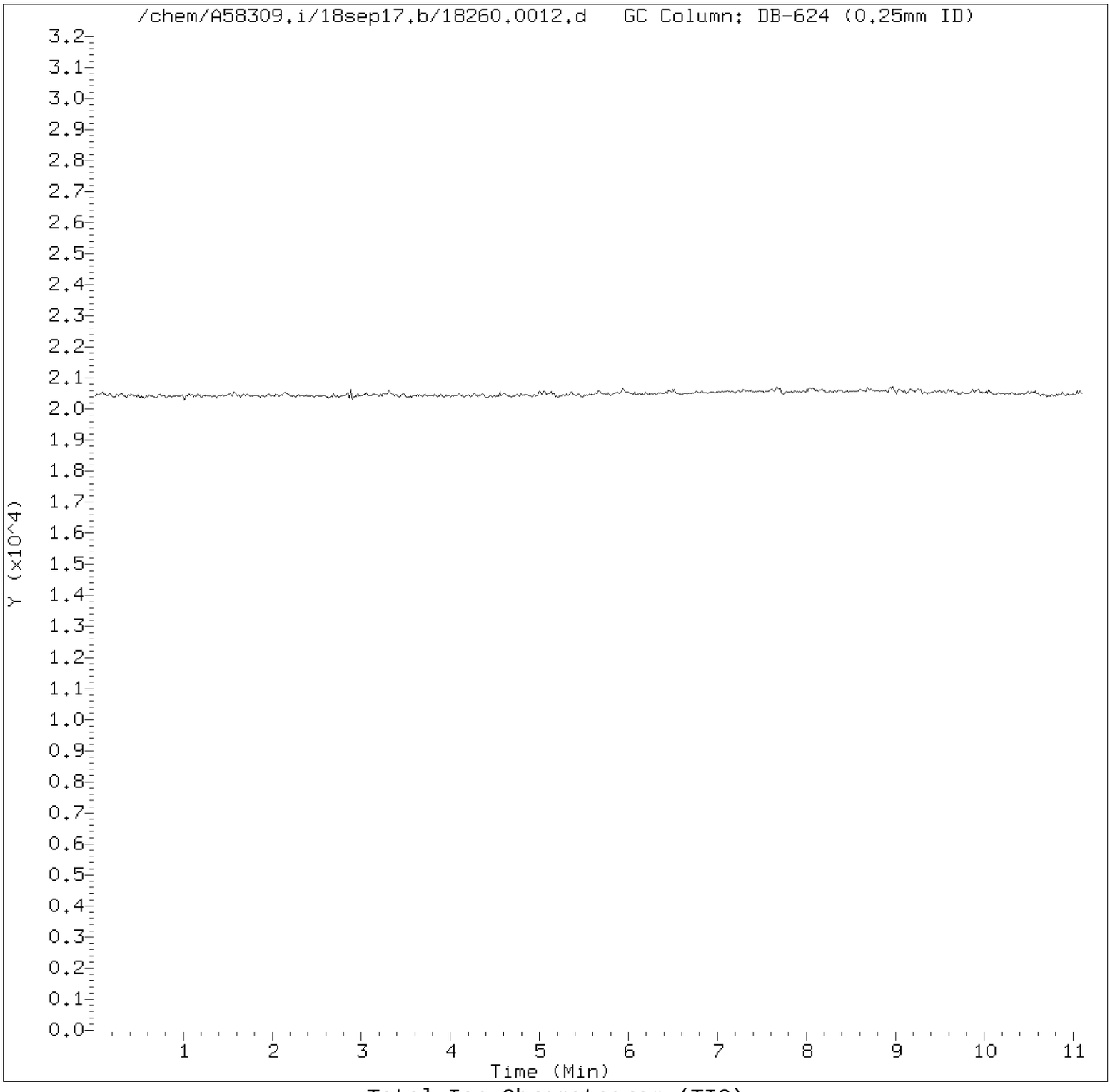
Analysis Comments:

Single Component, Summary, and Range Target Compounds	Expected RT(±window)	RT Low Limit	RT	RT High Limit	Area	On-Column Concentration (ppm(v))	In Sample Concentration (ppm(v))	Blank Conc.	Qual.	Reporting Limit (on-column)	LOQ
1) Methane	2.908(±0.03)	2.878	N.D.	2.938		Not Detected				2	5
2) Ethane	3.042(±0.03)	3.012	N.D.	3.072		Not Detected				0.5	0.5
3) Propane	3.300(±0.03)	3.270	N.D.	3.330		Not Detected				0.2	1
4) Butane	4.067(±0.03)	4.037	N.D.	4.097		Not Detected				0.3	1
5) Pentane	5.858(±0.03)	5.828	N.D.	5.888		Not Detected				0.3	1
7) Hexane	8.708(±0.03)	8.678	N.D.	8.738		Not Detected				0.2	1
16) C2-C10 Hydrocarbons as methane	3.012			19.313		Not Detected				5	10
17) C2-C10 Hydrocarbons as propane	3.012			19.313		Not Detected				5	10
18) C2-C10 Hydrocarbons as hexane	3.012			19.313		Not Detected				5	10
19) C2-C4 Hydrocarbons as methane	3.012			4.097		Not Detected				5	10
20) C2-C4 Hydrocarbons as propane	3.012			4.097		Not Detected				5	10
21) C2-C4 Hydrocarbons as hexane	3.012			4.097		Not Detected				5	10
22) C1-C10 Hydrocarbons as methane	2.878			19.313		Not Detected				5	10
23) C1-C10 Hydrocarbons as propane	2.878			19.313		Not Detected				5	10
24) C1-C10 Hydrocarbons as hexane	2.878			19.313		Not Detected				5	10
25) C1-C4 Hydrocarbons as methane	2.878			4.097		Not Detected				5	10
26) C1-C4 Hydrocarbons as propane	2.878			4.097		Not Detected				5	10
27) C1-C4 Hydrocarbons as hexane	2.878			4.097		Not Detected				5	10
28) >C4-C10 Hydrocarbons methane	4.097			19.313		Not Detected				5	10
29) >C4-C10 Hydrocarbons propane	4.097			19.313		Not Detected				5	10
30) >C4-C10 Hydrocarbons hexane	4.097			19.313		Not Detected				5	10
1) MTBE	8.183(±0.03)	8.153	N.D.	8.213		Not Detected				0.5	1
2) Benzene	11.383(±0.06)	11.323	N.D.	11.443		Not Detected				0.5	1
3) Toluene	14.450(±0.03)	14.420	N.D.	14.480		Not Detected				0.8	1
4) Ethylbenzene	16.908(±0.04)	16.868	N.D.	16.948		Not Detected				0.4	1
5) m/p-Xylene	17.092(±0.04)	17.052	N.D.	17.132		Not Detected				0.7	2
6) o-Xylene	17.767(±0.04)	17.727	N.D.	17.807		Not Detected				0.7	2
7) Xylene (total)						Not Detected				0.7	2

Total number of FID targets = 21 Total number of PID targets = 7

Digitally signed by Alexander D. Sechrist on 09/17/2018 at 16:01. Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/18/2018 at 14:23. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

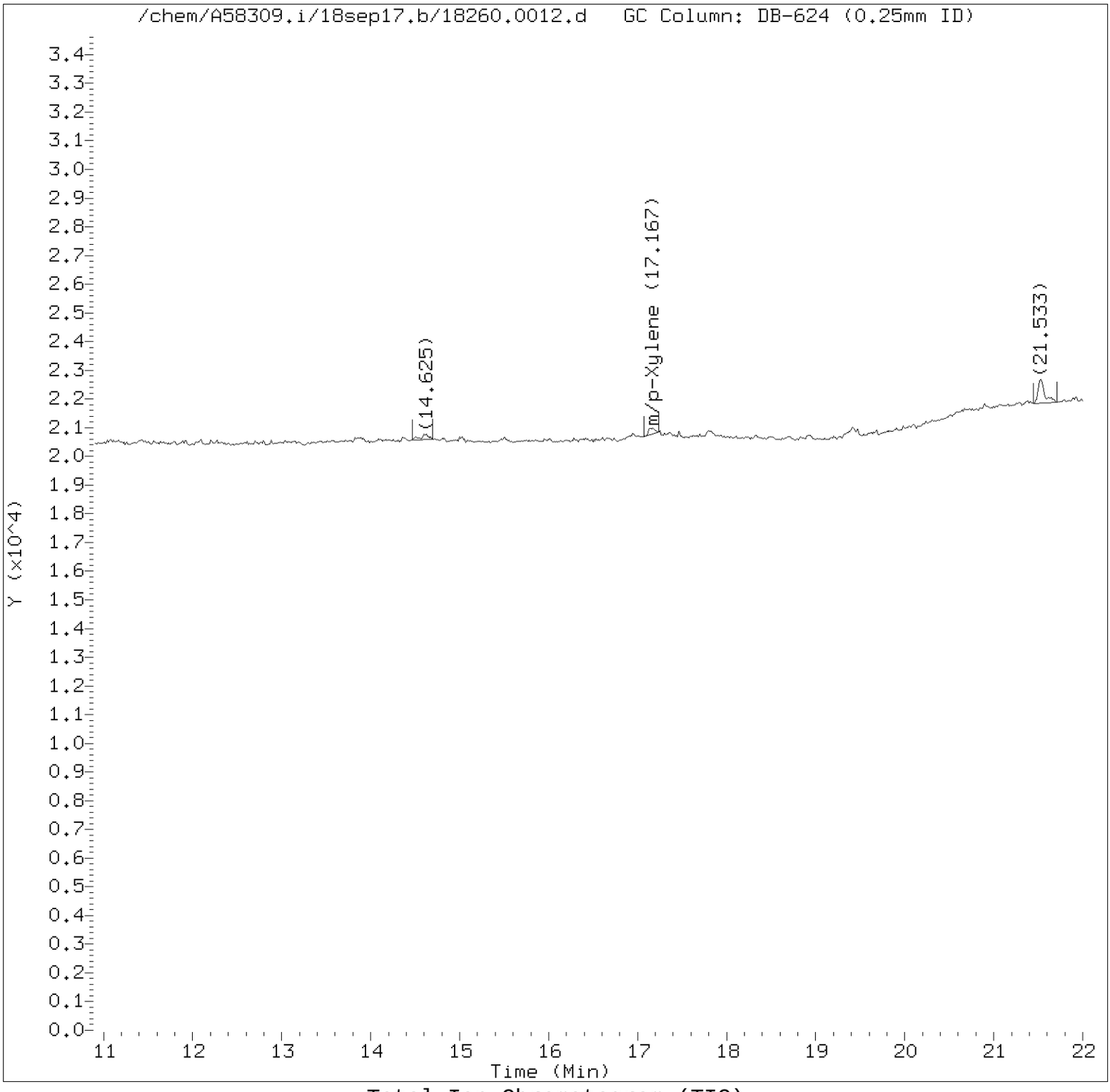
Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0012.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 15:26 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: blank
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 16:01 ads07818

Sample Name: VBLK260 Lab Sample ID: VBLK260

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 16:01.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0012.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 15:26 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: blank
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 16:01 ads07818

Sample Name: VBLK260 Lab Sample ID: VBLK260

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 16:01.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0012.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 15:26 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: blank
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 16:01 ads07818

Sample Name: VBLK260 Lab Sample ID: VBLK260

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))

No integrated signals resulted in on-column concentrations above the reporting limit.

Range Target Compounds	Range Start RT	Range End RT	Area	On-Column Concentration (ppm(v))

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 16:01.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep17.b/18260.0012.d Instrument ID: A58309.i
Injection date and time: 17-SEP-2018 15:26 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep17.b/gc_fid.m Sublist used: blank
Calibration date and time: 17-SEP-2018 15:46
Date, time and analyst ID of latest file update: 17-Sep-2018 16:01 ads07818

Sample Name: VBLK260 Lab Sample ID: VBLK260

RT	Area	Peak Label(s) and Range	Compound #s
14.625	1221	16 17 18 22 23 24 28 29 30	
17.167	1041	m/p-Xylene 16 17 18 22 23 24 28 29 30	
18.050	1041		
21.533	4302		

Digitally signed by Alexander D. Sechrist
on 09/17/2018 at 16:01.
Target 3.5 esignature user ID: ads07818

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

VBLK261

FID Data file: /chem/A58309.i/18sep18.b/18261.0001.d Injection date and time: **18-SEP-2018 11:13**
FID Data file Sample Info. Line: VBLK261 Instrument ID: **A58309.i** Batch: **M1826130AA**
Date, time and analyst ID of latest FID file update: 18-Sep-2018 12:56 ads07818

FID Blank Data file reference: **/chem/A58309.i/18sep18.b/18261.0001.d**

FID Method used: /chem/A58309.i/18sep18.b/gc_fid.m FID Sublist used: **blank**
FID Calibration date and time (Last Method Edit): 18-SEP-2018 12:56
FID Mid Level Daily Calibration Standard Reference: **/chem/A58309.i/18sep18.b/18261.0000.d**

PID Data file: /chem/A58309.i/18sep18.b/18261B.0001.d Injection date and time: **18-SEP-2018 11:13**
PID Data file Sample Info. Line: VBLK261 Instrument ID: **A58309.i** Batch: **M1826130AA**
Date, time and analyst ID of latest PID file update: 18-Sep-2018 12:57 ads07818

PID Blank Data file reference: **/chem/A58309.i/18sep18.b/18261B.0001.d**

PID Method used: /chem/A58309.i/18sep18.b/gc_pid.m PID Sublist used: **07090**
PID Calibration date and time (Last Method Edit): 18-SEP-2018 12:56
PID Mid Level Daily Calibration Standard Reference: **/chem/A58309.i/18sep18.b/18261B.0000.d**

Sampling Media: Tedlar Bag Bottle code: N/A Matrix: AIR On-Column Amount units: ppm(v) In Sample Concentration units: ppm(v)

Sample Concentration Formula: On-Column Amount * DF * IVn/IVa Dilution Factor (DF): 1
Nominal Injection Volume (IVn): 100 cc Actual injection Volume (IVa): 100 cc

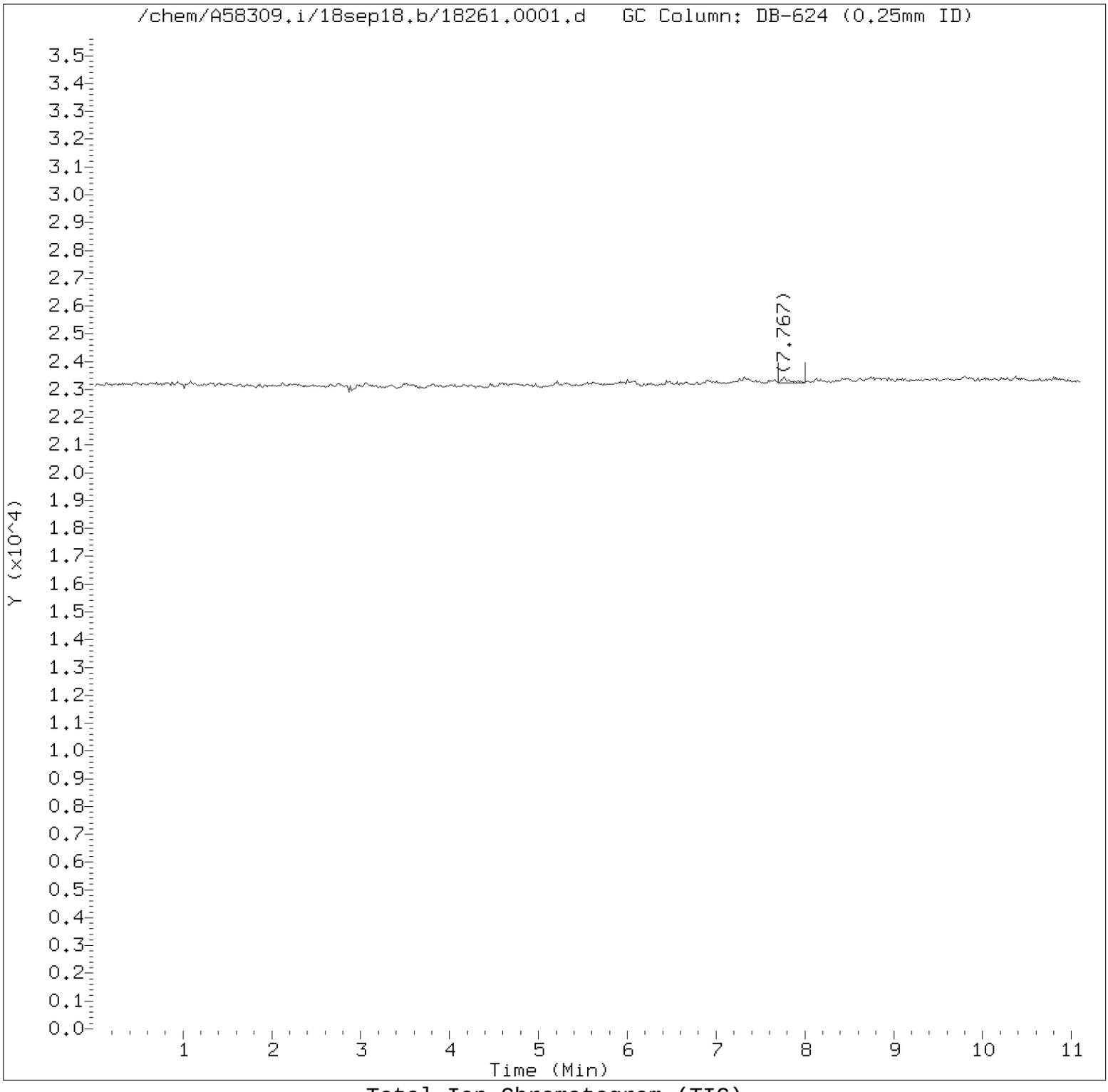
Analysis Comments:

Single Component, Summary, and Range Target Compounds	Expected RT(±window)	RT Low Limit	RT	RT High Limit	Area	On-Column Concentration (ppm(v))	In Sample Concentration (ppm(v))	Blank Conc.	Qual.	Reporting Limit (on-column)	LOQ
1) Methane	2.908(±0.03)	2.878	N.D.	2.938		Not Detected				2	5
2) Ethane	3.042(±0.03)	3.012	N.D.	3.072		Not Detected				0.5	0.5
3) Propane	3.300(±0.03)	3.270	N.D.	3.330		Not Detected				0.2	1
4) Butane	4.075(±0.03)	4.045	N.D.	4.105		Not Detected				0.3	1
5) Pentane	5.858(±0.03)	5.828	N.D.	5.888		Not Detected				0.3	1
7) Hexane	8.708(±0.03)	8.678	N.D.	8.738		Not Detected				0.2	1
16) C2-C10 Hydrocarbons as methane	3.012			19.313		Not Detected				5	10
17) C2-C10 Hydrocarbons as propane	3.012			19.313		Not Detected				5	10
18) C2-C10 Hydrocarbons as hexane	3.012			19.313		Not Detected				5	10
19) C2-C4 Hydrocarbons as methane	3.012			4.105		Not Detected				5	10
20) C2-C4 Hydrocarbons as propane	3.012			4.105		Not Detected				5	10
21) C2-C4 Hydrocarbons as hexane	3.012			4.105		Not Detected				5	10
22) C1-C10 Hydrocarbons as methane	2.878			19.313		Not Detected				5	10
23) C1-C10 Hydrocarbons as propane	2.878			19.313		Not Detected				5	10
24) C1-C10 Hydrocarbons as hexane	2.878			19.313		Not Detected				5	10
25) C1-C4 Hydrocarbons as methane	2.878			4.105		Not Detected				5	10
26) C1-C4 Hydrocarbons as propane	2.878			4.105		Not Detected				5	10
27) C1-C4 Hydrocarbons as hexane	2.878			4.105		Not Detected				5	10
28) >C4-C10 Hydrocarbons methane	4.105			19.313		Not Detected				5	10
29) >C4-C10 Hydrocarbons propane	4.105			19.313		Not Detected				5	10
30) >C4-C10 Hydrocarbons hexane	4.105			19.313		Not Detected				5	10
1) MTBE	8.183(±0.03)	8.153	N.D.	8.213		Not Detected				0.5	1
2) Benzene	11.383(±0.06)	11.323	N.D.	11.443		Not Detected				0.5	1
3) Toluene	14.458(±0.03)	14.428	N.D.	14.488		Not Detected				0.8	1
4) Ethylbenzene	16.908(±0.04)	16.868	N.D.	16.948		Not Detected				0.4	1
5) m/p-Xylene	17.092(±0.04)	17.052	N.D.	17.132		Not Detected				0.7	2
6) o-Xylene	17.767(±0.04)	17.727	N.D.	17.807		Not Detected				0.7	2
7) Xylene (total)						Not Detected				0.7	2

Total number of FID targets = 21 Total number of PID targets = 7

Digitally signed by Alexander D. Sechrist on 09/18/2018 at 12:57. Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 10/08/2018 at 10:31. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

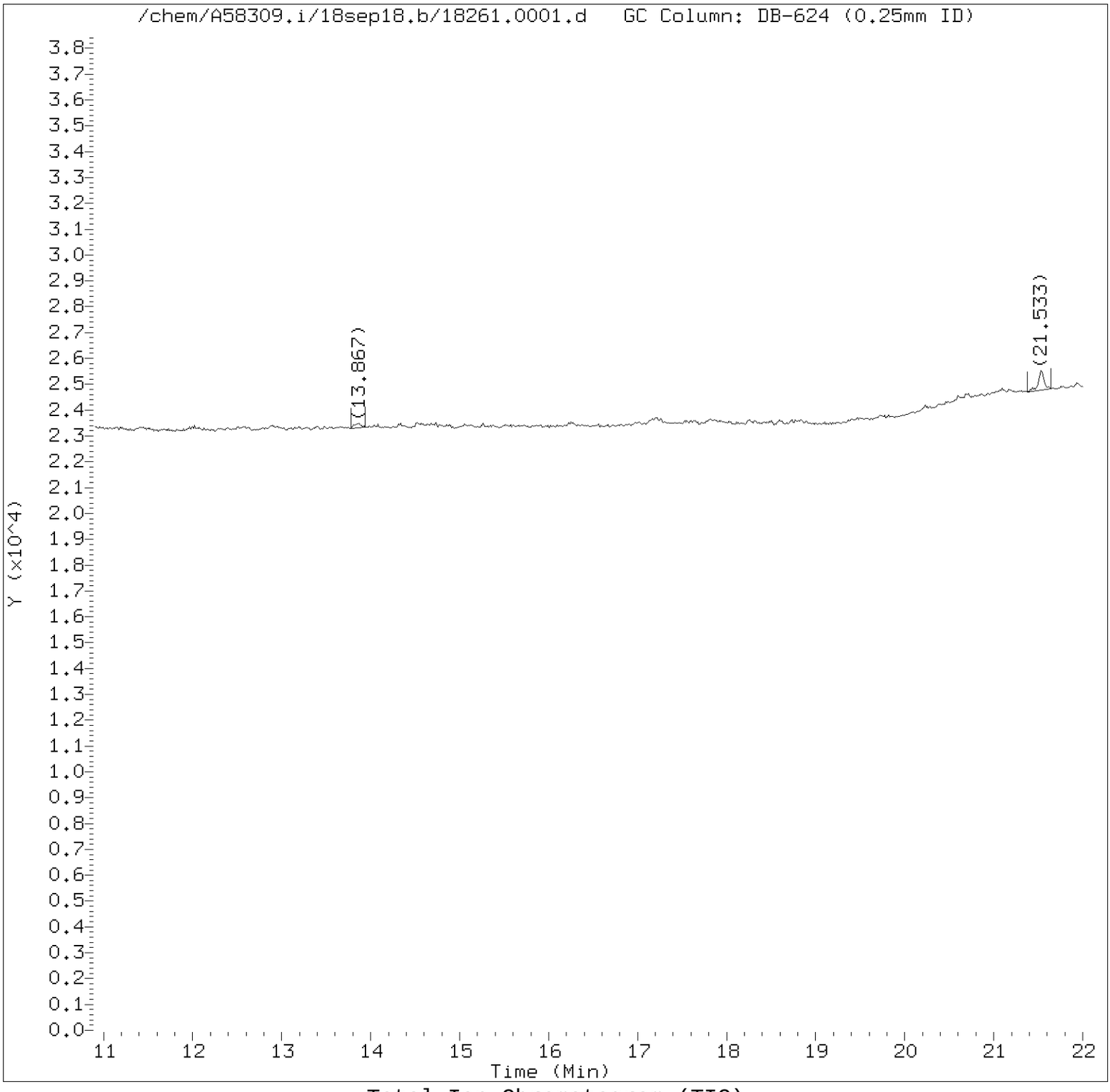
Target Revision 3.5

Data File: /chem/A58309.i/18sep18.b/18261.0001.d Instrument ID: A58309.i
Injection date and time: 18-SEP-2018 11:13 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep18.b/gc_fid.m Sublist used: blank
Calibration date and time: 18-SEP-2018 12:56
Date, time and analyst ID of latest file update: 18-Sep-2018 12:56 ads07818

Sample Name: VBLK261 Lab Sample ID: VBLK261

Digitally signed by Alexander D. Sechrist
on 09/18/2018 at 12:57.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/A58309.i/18sep18.b/18261.0001.d Instrument ID: A58309.i
Injection date and time: 18-SEP-2018 11:13 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep18.b/gc_fid.m Sublist used: blank
Calibration date and time: 18-SEP-2018 12:56
Date, time and analyst ID of latest file update: 18-Sep-2018 12:56 ads07818

Sample Name: VBLK261 Lab Sample ID: VBLK261

Digitally signed by Alexander D. Sechrist
on 09/18/2018 at 12:57.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep18.b/18261.0001.d Instrument ID: A58309.i
Injection date and time: 18-SEP-2018 11:13 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep18.b/gc_fid.m Sublist used: blank
Calibration date and time: 18-SEP-2018 12:56
Date, time and analyst ID of latest file update: 18-Sep-2018 12:56 ads07818

Sample Name: VBLK261 Lab Sample ID: VBLK261

Single Component and Summary Compounds	Expected RT(±window)	RT	Area	On-Column Concentration (ppm(v))

No integrated signals resulted in on-column concentrations above the reporting limit.

Range Target Compounds	Range Start RT	Range End RT	Area	On-Column Concentration (ppm(v))

Digitally signed by Alexander D. Sechrist
on 09/18/2018 at 12:57.
Target 3.5 esignature user ID: ads07818

Tabular Peak Report

Target Revision 3.5

Data File: /chem/A58309.i/18sep18.b/18261.0001.d Instrument ID: A58309.i
Injection date and time: 18-SEP-2018 11:13 Analyst ID: ADS07818

Method used: /chem/A58309.i/18sep18.b/gc_fid.m Sublist used: blank
Calibration date and time: 18-SEP-2018 12:56
Date, time and analyst ID of latest file update: 18-Sep-2018 12:56 ads07818

Sample Name: VBLK261 Lab Sample ID: VBLK261

RT	Area	Peak Label(s) and Range	Compound #s
7.767	1253	16 17 18 22 23 24 28 29 30	
13.867	939	16 17 18 22 23 24 28 29 30	
21.533	3327		

Digitally signed by Alexander D. Sechrist
on 09/18/2018 at 12:57.
Target 3.5 esignature user ID: ads07818

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: Sunoco c/o Enviro. Assessment
SDG: GLE02

Volatiles in Air

Fraction: Volatile Organics in Air by GC/MS

Sample #	Client ID	DF	Comments
9785623	GCBC_SS	40	
9785624	GCBC_IA	1	
9785625	GCBC_OA	1	

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:

All QC is within specifications.

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

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	

1. Relative Response Factor (RRF)

$$RRF = \frac{AX}{Ais} \quad \frac{Cis}{Cx}$$

Where:

Ax = Area of the characteristic ion for the compound to be measured
Ais = Area of the characteristic ion for the specific internal standard to be measured
Cis = Concentration of the internal standard
Cx = Concentration of the compound to be measured

2. % Relative Standard Deviation (%RSD)

$$\%RSD = \frac{standard\ deviation}{Mean} \times 100$$

3. % Difference

$$\%D = \frac{RRFc - RRFi}{RRFi} \times 100$$

Where:

RRFc = Relative response factor from the continuing calibration standard
RRFi = Mean relative response factor from the initial calibration

4. Concentration

$$X_a = \frac{(A_x)(I_s)(Df)}{(A_{is})(RRF)}$$

Where:

X_a = target compound concentration, ppb(v)

A_x = Area of the quantitation ion for the target compound to be measured

A_{is} = Area of quantitation ion for the specific internal standard

I_s = Concentration of internal standard, ppb(v)

RRF = Average relative response factor from initial or continuing calibration

Df = Dilution factor

5. % Recovery

$$\%Rec = \frac{SSR - SR}{SA} \times 100$$

Where:

SSR = Spiked sample result
SR = Sample result
SA = Spike added

QC Summary

Volatile Organics in Air by GC/MS

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Quality Control Reference List
Volatiles in Air

CLIENT: Sunoco c/o Enviro. Assessment
SDG: GLE02

Fraction: Volatile Organics in Air by GC/MS

Analysis	Batch Number	Sample Number	Analysis Date
TO-15 Standard List	E1824930AA	VBLKE02B	09/06/2018 13:23
		LCSE02Q	09/06/2018 13:58
		LCSDE02Y	09/06/2018 14:23
		9785623	09/06/2018 18:03
		9785623	09/06/2018 18:38
		9785624	09/06/2018 17:14
		9785625	09/06/2018 17:41

Fraction: Volatile Organics in Air by GC/MS

E1824930AA / VBLKE02B Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Dichlorodifluoromethane	09/06/18	N.D.	ug/m3	0.64	4.9
Chlorodifluoromethane	09/06/18	N.D.	ug/m3	0.53	3.5
Chloromethane	09/06/18	N.D.	ug/m3	0.50	2.1
Freon 114	09/06/18	N.D.	ug/m3	0.84	7.0
Vinyl Chloride	09/06/18	N.D.	ug/m3	0.31	2.6
1,3-Butadiene	09/06/18	N.D.	ug/m3	0.38	2.2
Bromomethane	09/06/18	N.D.	ug/m3	0.70	3.9
Chloroethane	09/06/18	N.D.	ug/m3	0.50	2.6
Dichlorofluoromethane	09/06/18	N.D.	ug/m3	0.46	4.2
Trichlorofluoromethane	09/06/18	N.D.	ug/m3	0.84	5.6
Pentane	09/06/18	N.D.	ug/m3	0.38	3.0
1,1-Dichloroethene	09/06/18	N.D.	ug/m3	0.56	4.0
Freon 113	09/06/18	N.D.	ug/m3	0.84	7.7
Acetone	09/06/18	N.D.	ug/m3	1.3	12
Carbon Disulfide	09/06/18	N.D.	ug/m3	0.40	3.1
3-Chloropropene	09/06/18	N.D.	ug/m3	0.47	3.1
Methylene Chloride	09/06/18	N.D.	ug/m3	0.87	6.9
trans-1,2-Dichloroethene	09/06/18	N.D.	ug/m3	0.34	4.0
Methyl t-Butyl Ether	09/06/18	N.D.	ug/m3	0.54	3.6
Hexane	09/06/18	N.D.	ug/m3	0.46	3.5
1,1-Dichloroethane	09/06/18	N.D.	ug/m3	0.36	4.0
cis-1,2-Dichloroethene	09/06/18	N.D.	ug/m3	0.48	4.0
2-Butanone	09/06/18	N.D.	ug/m3	0.62	2.9
Chloroform	09/06/18	N.D.	ug/m3	0.45	4.9
1,1,1-Trichloroethane	09/06/18	N.D.	ug/m3	0.65	5.5
Carbon Tetrachloride	09/06/18	N.D.	ug/m3	0.88	6.3
1,2-Dichloroethane	09/06/18	N.D.	ug/m3	0.32	4.0
Benzene	09/06/18	N.D.	ug/m3	0.35	3.2
Isooctane	09/06/18	N.D.	ug/m3	0.61	4.7
Heptane	09/06/18	N.D.	ug/m3	0.94	4.1
Trichloroethene	09/06/18	N.D.	ug/m3	0.97	5.4
1,2-Dichloropropane	09/06/18	N.D.	ug/m3	0.60	4.6
Dibromomethane	09/06/18	N.D.	ug/m3	1.0	7.1
Bromodichloromethane	09/06/18	N.D.	ug/m3	0.80	6.7
cis-1,3-Dichloropropene	09/06/18	N.D.	ug/m3	0.45	4.5
4-Methyl-2-pentanone	09/06/18	N.D.	ug/m3	0.61	4.1
Toluene	09/06/18	N.D.	ug/m3	0.45	3.8
Octane	09/06/18	N.D.	ug/m3	1.9	9.3
trans-1,3-Dichloropropene	09/06/18	N.D.	ug/m3	0.54	4.5
1,1,2-Trichloroethane	09/06/18	N.D.	ug/m3	0.65	5.5
Tetrachloroethene	09/06/18	N.D.	ug/m3	1.7	14
2-Hexanone	09/06/18	N.D.	ug/m3	0.74	4.1
Dibromochloromethane	09/06/18	N.D.	ug/m3	1.1	8.5
1,2-Dibromoethane	09/06/18	N.D.	ug/m3	1.0	7.7
Chlorobenzene	09/06/18	N.D.	ug/m3	0.60	4.6

Fraction: Volatile Organics in Air by GC/MS

E1824930AA / VBLKE02B Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
1,1,1,2-Tetrachloroethane	09/06/18	N.D.	ug/m3	1.0	6.9
Ethylbenzene	09/06/18	N.D.	ug/m3	0.83	4.3
m/p-Xylene	09/06/18	N.D.	ug/m3	1.1	8.7
o-Xylene	09/06/18	N.D.	ug/m3	0.83	4.3
Styrene	09/06/18	N.D.	ug/m3	0.85	4.3
Bromoform	09/06/18	N.D.	ug/m3	1.8	10
Cumene	09/06/18	N.D.	ug/m3	1.2	4.9
1,1,2,2-Tetrachloroethane	09/06/18	N.D.	ug/m3	1.0	6.9
1,2,3-Trichloropropane	09/06/18	N.D.	ug/m3	0.84	6.0
Bromobenzene	09/06/18	N.D.	ug/m3	0.64	6.4
4-Ethyltoluene	09/06/18	N.D.	ug/m3	0.88	4.9
1,3,5-Trimethylbenzene	09/06/18	N.D.	ug/m3	1.6	9.8
1,2,4-Trimethylbenzene	09/06/18	N.D.	ug/m3	1.4	9.8
1,3-Dichlorobenzene	09/06/18	N.D.	ug/m3	1.1	6.0
1,4-Dichlorobenzene	09/06/18	N.D.	ug/m3	1.0	6.0
1,2-Dichlorobenzene	09/06/18	N.D.	ug/m3	1.2	6.0
Hexachloroethane	09/06/18	N.D.	ug/m3	2.6	19

Quality Control Summary
Laboratory Control Standard (LCS)
Laboratory Control Standard Duplicate(LCSD)

SDG: GLE02
Matrix: AIR

Volatiles in Air

Fraction: Volatile Organics in Air by GC/MS

LCS: LCSE02Q LCSD: LCSDE02Y	Batch: **E1824930AA** (Sample number(s): 9785623-9785625)							
Analyte	**Spike Added ug/m3**	**LCS Conc ug/m3**	**LCSD Conc ug/m3**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Dichlorodifluoromethane	49.45	54.89	55.13	111	111	74-133	0	25
Chlorodifluoromethane	35.37	41.87	41.94	118	119	70-138	0	25
Chloromethane	20.65	19.41	18.93	94	92	65-140	2	25
Freon 114	69.91	76.56	77.08	110	110	66-126	1	25
Vinyl Chloride	25.56	27.73	27.86	108	109	75-130	0	25
1,3-Butadiene	22.12	21.71	22.45	98	101	72-122	3	25
Bromomethane	38.83	44.32	44.52	114	115	71-133	0	25
Chloroethane	26.38	28.66	28.82	109	109	76-129	1	25
Dichlorofluoromethane	42.09	47.29	48.19	112	114	75-137	2	25
Trichlorofluoromethane	56.18	59.56	61.44	106	109	73-132	3	25
Pentane	29.51	27.69	28.58	94	97	69-125	3	25
1,1-Dichloroethene	39.65	41.33	42.72	104	108	70-129	3	25
Freon 113	76.64	77.67	79.25	101	103	66-119	2	25
Acetone	23.76	24.94	25.26	105	106	71-136	1	25
Carbon Disulfide	31.14	31.76	32.92	102	106	72-128	4	25
3-Chloropropene	31.3	35.74	36.75	114	117	67-141	3	25
Methylene Chloride	34.74	39.67	40.52	114	117	69-128	2	25
trans-1,2-Dichloroethene	39.65	41.63	42.2	105	106	77-128	1	25
Methyl t-Butyl Ether	36.05	33.82	35.07	94	97	71-119	4	25
Hexane	35.25	32.43	33.95	92	96	70-118	5	25
1,1-Dichloroethane	40.47	41.48	42.31	102	105	74-129	2	25
cis-1,2-Dichloroethene	39.65	39.56	40.72	100	103	76-126	3	25
2-Butanone	29.49	27.38	29.09	93	99	75-126	6	25
Chloroform	48.83	49.51	51.13	101	105	75-127	3	25
1,1,1-Trichloroethane	54.56	53.36	55.28	98	101	74-122	4	25
Carbon Tetrachloride	62.91	58.26	60.47	93	96	72-127	4	25
1,2-Dichloroethane	40.47	44.48	45.14	110	112	72-138	1	25
Benzene	31.95	31.94	32.62	100	102	76-123	2	25
Isooctane	46.72	47.85	47.94	102	103	74-127	0	25
Heptane	40.98	39.4	39.49	96	96	74-122	0	25
Trichloroethene	53.74	54.68	55.62	102	103	76-118	2	25
1,2-Dichloropropane	46.21	48.18	48.75	104	105	75-127	1	25
Dibromomethane	71.1	73.86	73.53	104	103	76-124	0	25
Bromodichloromethane	67.01	68.72	68.91	103	103	75-134	0	25
cis-1,3-Dichloropropene	45.39	42.36	43.13	93	95	51-120	2	25
4-Methyl-2-pentanone	40.96	40.35	40.71	98	99	68-133	1	25
Toluene	37.68	37.5	38.17	100	101	78-119	2	25
Octane	46.72	44.51	44.96	95	96	73-122	1	25
trans-1,3-Dichloropropene	45.39	43.17	43.9	95	97	72-119	2	25
1,1,2-Trichloroethane	54.56	56.27	58.97	103	108	76-127	5	25
Tetrachloroethene	67.82	70.73	71.48	104	105	68-123	1	25
2-Hexanone	40.96	41.38	41.66	101	102	63-144	1	25

Volatiles in Air

Fraction: Volatile Organics in Air by GC/MS

LCS: LCSE02Q LCSD: LCSDE02Y **Analyte**	Batch: **E1824930AA** (Sample number(s): 9785623-9785625)							
	Spike Added ug/m3	**LCS Conc ug/m3**	**LCSD Conc ug/m3**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Dibromochloromethane	85.19	82.06	85.57	96	100	74-131	4	25
1,2-Dibromoethane	76.83	77.75	80.27	101	104	73-121	3	25
Chlorobenzene	46.04	46.3	46.74	101	102	76-117	1	25
1,1,1,2-Tetrachloroethane	68.65	66.76	67.73	97	99	73-124	1	25
Ethylbenzene	43.42	42.93	42.97	99	99	77-117	0	25
m/p-Xylene	43.42	42.23	42.9	97	99	78-119	2	25
o-Xylene	43.42	42.59	43.6	98	100	78-121	2	25
Styrene	42.6	41.48	42.7	97	100	76-127	3	25
Bromoform	103.37	90.7	93.02	88	90	69-128	3	25
Cumene	49.16	48.68	48.98	99	100	80-133	1	25
1,1,2,2-Tetrachloroethane	68.65	69.3	70.78	101	103	72-133	2	25
1,2,3-Trichloropropane	60.3	62.34	63.15	103	105	71-127	1	25
Bromobenzene	64.22	61.71	64.93	96	101	74-118	5	25
4-Ethyltoluene	49.16	48.82	49.89	99	101	73-130	2	25
1,3,5-Trimethylbenzene	49.16	47.74	49.17	97	100	72-130	3	25
1,2,4-Trimethylbenzene	49.16	48.03	49.46	98	101	70-138	3	25
1,3-Dichlorobenzene	60.12	59.13	61.95	98	103	75-129	5	25
1,4-Dichlorobenzene	60.12	57.86	58.73	96	98	74-123	2	25
1,2-Dichlorobenzene	60.12	57.03	59.53	95	99	71-126	4	25
Hexachloroethane	96.83	67.73	69.54	70	72	59-135	3	25

Fraction: Volatile Organics in Air by GC/MS

05298: TO-15 Standard List Analyte Name	Default MDL	Default LOQ	Units
Dichlorodifluoromethane	0.64	4.9	ug/m3
Chlorodifluoromethane	0.53	3.5	ug/m3
Freon 114	0.84	7.0	ug/m3
Chloromethane	0.50	2.1	ug/m3
Vinyl Chloride	0.31	2.6	ug/m3
1,3-Butadiene	0.38	2.2	ug/m3
Bromomethane	0.70	3.9	ug/m3
Chloroethane	0.50	2.6	ug/m3
Dichlorofluoromethane	0.46	4.2	ug/m3
Trichlorofluoromethane	0.84	5.6	ug/m3
Pentane	0.38	3.0	ug/m3
1,1-Dichloroethene	0.56	4.0	ug/m3
Freon 113	0.84	7.7	ug/m3
Acetone	1.3	12	ug/m3
Carbon Disulfide	0.40	3.1	ug/m3
3-Chloropropene	0.47	3.1	ug/m3
Methylene Chloride	0.87	6.9	ug/m3
trans-1,2-Dichloroethene	0.34	4.0	ug/m3
Methyl t-Butyl Ether	0.54	3.6	ug/m3
Hexane	0.46	3.5	ug/m3
1,1-Dichloroethane	0.36	4.0	ug/m3
cis-1,2-Dichloroethene	0.48	4.0	ug/m3
2-Butanone	0.62	2.9	ug/m3
Chloroform	0.45	4.9	ug/m3
1,1,1-Trichloroethane	0.65	5.5	ug/m3
Carbon Tetrachloride	0.88	6.3	ug/m3
1,2-Dichloroethane	0.32	4.0	ug/m3
Benzene	0.35	3.2	ug/m3
Isooctane	0.61	4.7	ug/m3
Heptane	0.94	4.1	ug/m3
Trichloroethene	0.97	5.4	ug/m3
1,2-Dichloropropane	0.60	4.6	ug/m3
Dibromomethane	1.0	7.1	ug/m3
Bromodichloromethane	0.80	6.7	ug/m3
cis-1,3-Dichloropropene	0.45	4.5	ug/m3
4-Methyl-2-pentanone	0.61	4.1	ug/m3
Toluene	0.45	3.8	ug/m3
Octane	1.9	9.3	ug/m3
trans-1,3-Dichloropropene	0.54	4.5	ug/m3
1,1,2-Trichloroethane	0.65	5.5	ug/m3
Tetrachloroethene	1.7	14	ug/m3
2-Hexanone	0.74	4.1	ug/m3
Dibromochloromethane	1.1	8.5	ug/m3
1,2-Dibromoethane	1.0	7.7	ug/m3
Chlorobenzene	0.60	4.6	ug/m3
1,1,1,2-Tetrachloroethane	1.0	6.9	ug/m3
Ethylbenzene	0.83	4.3	ug/m3

Fraction: Volatile Organics in Air by GC/MS

05298: TO-15 Standard List Analyte Name	Default MDL	Default LOQ	Units
m/p-Xylene	1.1	8.7	ug/m3
o-Xylene	0.83	4.3	ug/m3
Styrene	0.85	4.3	ug/m3
Bromoform	1.8	10	ug/m3
Cumene	1.2	4.9	ug/m3
1,1,2,2-Tetrachloroethane	1.0	6.9	ug/m3
1,2,3-Trichloropropane	0.84	6.0	ug/m3
Bromobenzene	0.64	6.4	ug/m3
4-Ethyltoluene	0.88	4.9	ug/m3
1,3,5-Trimethylbenzene	1.6	9.8	ug/m3
1,2,4-Trimethylbenzene	1.4	9.8	ug/m3
1,3-Dichlorobenzene	1.1	6.0	ug/m3
1,4-Dichlorobenzene	1.0	6.0	ug/m3
1,2-Dichlorobenzene	1.2	6.0	ug/m3
Hexachloroethane	2.6	19	ug/m3

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

SDG No.:

Lab File ID: ei00020.d

BFB Injection Date: 09/05/2018

Instrument ID: 22820

BFB Injection Time: 10:14

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0% - 40.0% of mass 95	16.57
75	30.0% - 66.0% of mass 95	51.24
95	Base peak, 100% relative abundance	100.00
96	5.0% - 9.0% of mass 95	6.76
173	< 2.0% of mass 174	0.00 (0.00)
174	> 50.0% of mass 95	84.00
175	4.0% - 9.0% of mass 174	6.28 (7.48)
176	93.0% - 101.0% of mass 174	81.52 (97.05)
177	5.0% - 9.0% of mass 176	5.45 (6.69)

THIS CHECK APPLIES TO THE FOLLOWING:

LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD010	ei00021.d	09/05/2018	11:20
VSTD005	ei00022.d	09/05/2018	11:44
VSTD002	ei00023.d	09/05/2018	12:08
VSTD001	ei00024.d	09/05/2018	12:31
VSTD025	ei00026.d	09/05/2018	13:18
VSTD070	ei00027.d	09/05/2018	13:43
VBLKE01	ei00029.d	09/05/2018	14:30
LCSE01	ei00030.d	09/05/2018	15:09
LCSDE01	ei00031.d	09/05/2018	15:34
mdlv0.5	ei00032.d	09/05/2018	15:58
mdlv0.2	ei00033.d	09/05/2018	16:22
9779677	ei00039.d	09/05/2018	19:12
9781667	ei00040.d	09/05/2018	19:39
9781668	ei00041.d	09/05/2018	20:05
9781669	ei00042.d	09/05/2018	20:32
9781670	ei00043.d	09/05/2018	20:58
9781738	ei00044.d	09/05/2018	21:25
9781740	ei00046.d	09/05/2018	22:18
9781741	ei00047.d	09/05/2018	22:44
9783135	ei00048.d	09/05/2018	23:07
9783136	ei00049.d	09/05/2018	23:34
9783137	ei00051.d	09/06/2018	00:23
9781612	ei00053.d	09/06/2018	01:09
9781613	ei00054.d	09/06/2018	01:33
9781739	ei00055.d	09/06/2018	08:54

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

SDG No.:

Lab File ID: ei00060.d

BFB Injection Date: 09/06/2018

Instrument ID: 22820

BFB Injection Time: 12:08

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0% - 40.0% of mass 95	16.69
75	30.0% - 66.0% of mass 95	51.75
95	Base peak, 100% relative abundance	100.00
96	5.0% - 9.0% of mass 95	6.53
173	< 2.0% of mass 174	0.15 (0.18)
174	> 50.0% of mass 95	79.59
175	4.0% - 9.0% of mass 174	5.80 (7.29)
176	93.0% - 101.0% of mass 174	76.28 (95.85)
177	5.0% - 9.0% of mass 176	4.92 (6.44)

THIS CHECK APPLIES TO THE FOLLOWING:

LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD010	ei00061.d	09/06/2018	12:45
VBLKE02	ei00062.d	09/06/2018	13:23
LCSE02	ei00063.d	09/06/2018	13:58
LCSDE02	ei00064.d	09/06/2018	14:23
9783148	ei00065.d	09/06/2018	15:11
9783149	ei00066.d	09/06/2018	15:36
9783150	ei00067.d	09/06/2018	15:58
9783151	ei00068.d	09/06/2018	16:23
9783148DL	ei00069.d	09/06/2018	16:47
9785624	ei00070.d	09/06/2018	17:14
9785625	ei00071.d	09/06/2018	17:41
9785623	ei00072.d	09/06/2018	18:03
9785623	ei00073.d	09/06/2018	18:38
9784858	ei00074.d	09/06/2018	19:03
9784858DL	ei00075.d	09/06/2018	19:26
9784859	ei00076.d	09/06/2018	19:51
9784860	ei00078.d	09/06/2018	20:38
9784861	ei00080.d	09/06/2018	21:25
cc875	ei00083.d	09/07/2018	08:44

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	1.00	2.00	5.00	10.00	25.00	70.0
Dichlorodifluoromethane	75-71-8	1.00	2.00	5.00	10.00	25.00	
Chlorodifluoromethane	75-45-6	1.00	2.00	5.00	10.00	25.00	
Freon 114	76-14-2	1.00	2.00	5.00	10.00	25.00	
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	1.00	2.00	5.00	10.00	25.00	
Bromomethane	74-83-9	1.00	2.00	5.00	10.00	25.00	
Chloroethane	75-00-3	1.00	2.00	5.00	10.00	25.00	
Bromoethene	593-60-2	1.00	2.00	5.00	10.00	25.00	
Dichlorofluoromethane	75-43-4	1.00	2.00	5.00	10.00	25.00	
Trichlorofluoromethane	75-69-4	1.00	2.00	5.00	10.00	25.00	
Pentane	109-66-0	1.00	2.00	5.00	10.00	25.00	70.0
Ethanol	9003-99-0	1.00	2.00	5.00	10.00	25.00	
Acrolein	107-02-8	1.00	2.00	5.00	10.00	25.00	
1,1-Dichloroethene	75-35-4	1.00	2.00	5.00	10.00	25.00	70.0
Freon 113	76-13-1	1.00	2.00	5.00	10.00	25.00	
Acetone	67-64-1	1.00	2.00	5.00	10.00	25.00	70.0
Methyl Iodide	74-88-4	1.00	2.00	5.00	10.00	25.00	
Carbon Disulfide	75-15-0	1.00	2.00	5.00	10.00	25.00	
Acetonitrile	75-05-8	1.00	2.00	5.00	10.00	25.00	
3-Chloropropene	107-05-1	1.00	2.00	5.00	10.00	25.00	
Methylene Chloride	75-09-2	1.00	2.00	5.00	10.00	25.00	70.0
tert-Butyl Alcohol	75-65-0	1.12	2.24	5.60	11.20	28.00	78.4
Acrylonitrile	107-13-1	1.00	2.00	5.00	10.00	25.00	
trans-1,2-Dichloroethene	156-60-5	1.00	2.00	5.00	10.00	25.00	70.0
Methyl t-Butyl Ether	1634-04-4	1.00	2.00	5.00	10.00	25.00	
Hexane	110-54-3	1.00	2.00	5.00	10.00	25.00	70.0
1,1-Dichloroethane	75-34-3	1.00	2.00	5.00	10.00	25.00	70.0
Vinyl Acetate	108-05-4	1.00	2.00	5.00	10.00	25.00	
Di-Isopropyl Ether	108-20-3	1.00	2.00	5.00	10.00	25.00	
Ethyl Tert-Butyl Ether	637-92-3	1.00	2.00	5.00	10.00	25.00	
cis-1,2-Dichloroethene	156-59-2	1.00	2.00	5.00	10.00	25.00	70.0
2-Butanone	78-93-3	1.00	2.00	5.00	10.00	25.00	70.0
Ethyl Acetate	141-78-6	1.00	2.00	5.00	10.00	25.00	
Methyl Acrylate	96-33-3	1.00	2.00	5.00	10.00	25.00	
Tetrahydrofuran	77392-70-2	1.00	2.00	5.00	10.00	25.00	
Chloroform	67-66-3	1.00	2.00	5.00	10.00	25.00	
1,1,1-Trichloroethane	71-55-6	1.00	2.00	5.00	10.00	25.00	70.0
Cyclohexane	68411-77-8	1.00	2.00	5.00	10.00	25.00	
Carbon Tetrachloride	56-23-5	1.00	2.00	5.00	10.00	25.00	70.0
1,4-Difluorobenzene	540-36-3	10.00	10.00	10.00	10.00	10.00	10.00
1,2-Dichloroethane	107-06-2	1.00	2.00	5.00	10.00	25.00	70.0
Benzene	71-43-2	1.00	2.00	5.00	10.00	25.00	70.0
Isooctane	540-84-1	1.00	2.00	5.00	10.00	25.00	70.0
Tert Amyl Methyl Ether	64257-84-7	1.00	2.00	5.00	10.00	25.00	
Heptane	142-82-5	1.00	2.00	5.00	10.00	25.00	70.0

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

Trichloroethene	79-01-6	1.00	2.00	5.00	10.00	25.00	70.0
Ethyl Acrylate	140-88-5	1.00	2.00	5.00	10.00	25.00	
1,2-Dichloropropane	78-87-5	1.00	2.00	5.00	10.00	25.00	
Methyl Methacrylate	80-62-6	1.00	2.00	5.00	10.00	25.00	
Dibromomethane	74-95-3	1.00	2.00	5.00	10.00	25.00	
1,4-Dioxane	123-91-1	1.00	2.00	5.00	10.00	25.00	
Bromodichloromethane	75-27-4	1.00	2.00	5.00	10.00	25.00	
cis-1,3-Dichloropropene	10061-01-5	1.00	2.00	5.00	10.00	25.00	
4-Methyl-2-Pentanone	108-10-1	1.00	2.00	5.00	10.00	25.00	
Chlorobenzene d5	3114-55-4	10.00	10.00	10.00	10.00	10.00	10.00
Toluene	108-88-3	1.00	2.00	5.00	10.00	25.00	70.0
Octane	111-65-9	1.00	2.00	5.00	10.00	25.00	
trans-1,3-Dichloropropene	10061-02-6	1.00	2.00	5.00	10.00	25.00	
Ethyl Methacrylate	97-63-2	1.00	2.00	5.00	10.00	25.00	
1,1,2-Trichloroethane	79-00-5	1.00	2.00	5.00	10.00	25.00	70.0
Tetrachloroethene	127-18-4	1.00	2.00	5.00	10.00	25.00	70.0
2-Hexanone	591-78-6	1.00	2.00	5.00	10.00	25.00	
Dibromochloromethane	124-48-1	1.00	2.00	5.00	10.00	25.00	
1,2-Dibromoethane	106-93-4	1.00	2.00	5.00	10.00	25.00	
Chlorobenzene	108-90-7	1.00	2.00	5.00	10.00	25.00	
1,1,1,2-Tetrachloroethane	630-20-6	1.00	2.00	5.00	10.00	25.00	
Ethylbenzene	100-41-4	1.00	2.00	5.00	10.00	25.00	70.0
m/p-Xylene	1330-20-7	1.00	2.00	5.00	10.00	25.00	70.0
o-Xylene	95-47-6	1.00	2.00	5.00	10.00	25.00	70.0
Styrene	100-42-5	1.00	2.00	5.00	10.00	25.00	
Bromoform	75-25-2	1.00	2.00	5.00	10.00	25.00	
Cumene	98-82-8	1.00	2.00	5.00	10.00	25.00	
1,1,2,2-Tetrachloroethane	79-34-5	1.00	2.00	5.00	10.00	25.00	
1,2,3-Trichloropropane	96-18-4	1.00	2.00	5.00	10.00	25.00	
n-Propylbenzene	74296-31-4	1.00	2.00	5.00	10.00	25.00	
2-Chlorotoluene	95-49-8	1.00	2.00	5.00	10.00	25.00	
Bromobenzene	108-86-1	1.00	2.00	5.00	10.00	25.00	
4-Ethyltoluene	622-96-8	1.00	2.00	5.00	10.00	25.00	
1,3,5-Trimethylbenzene	108-67-8	1.00	2.00	5.00	10.00	25.00	
Alpha Methyl Styrene	611-15-1	1.00	2.00	5.00	10.00	25.00	
tert-Butylbenzene	98-06-6	1.00	2.00	5.00	10.00	25.00	
1,2,4-Trimethylbenzene	95-63-6	1.00	2.00	5.00	10.00	25.00	
sec-Butylbenzene	68411-44-9	1.00	2.00	5.00	10.00	25.00	
1,3-Dichlorobenzene	541-73-1	1.00	2.00	5.00	10.00	25.00	
1,4-Dichlorobenzene	106-46-7	1.00	2.00	5.00	10.00	25.00	
p-Isopropyltoluene	99-87-6	1.00	2.00	5.00	10.00	25.00	
Benzyl chloride	100-44-7	1.00	2.00	5.00	10.00	25.00	
1,2-Dichlorobenzene	95-50-1	1.00	2.00	5.00	10.00	25.00	
n-Butylbenzene	74296-32-5	1.00	2.00	5.00	10.00	25.00	
Hexachloroethane	67-72-1	1.00	2.00	5.00	10.00	25.00	
1,2-Dibromo-3-Chloropropane	96-12-8	1.00	2.00	5.00	10.00	25.00	
1,2,4-Trichlorobenzene	120-82-1	1.00	2.00	5.00	10.00	25.00	
Hexachlorobutadiene	87-68-3	1.00	2.00	5.00	10.00	25.00	
Naphthalene	91-20-3	1.00	2.00	5.00	10.00	25.00	

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FORM 06
VOLATILE ORGANICS IN AIR
INITIAL CALIBRATION DATA

SDG No.:

Instrument ID: 22820 Calibration Start Date: 09/05/2018 Calibration End Date: 09/05/2018

Calibration Start Time: 11:20 Calibration End Time: 13:43

LAB FILE IDs:
RRF 1 = ei00024.d RRF 2 = ei00023.d RRF 5 = ei00022.d RRF 10 = ei00021.d RRF 25 = ei00026.d
RRF 70 = ei00027.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
Propene	0.470	0.415	0.434	0.440	0.463	0.444	0.444	4	AVG
Dichlorodifluoromethane	1.796	1.652	1.693	1.738	1.861	1.780	1.753	4	AVG
Chlorodifluoromethane	0.903	0.849	0.828	0.860	0.939	0.879	0.876	5	AVG
Freon 114	1.912	1.654	1.671	1.762	1.871	1.752	1.770	6	AVG
Chloromethane	0.427	0.375	0.322	0.308	0.342	0.310	0.347	13	AVG
Vinyl Chloride	0.648	0.586	0.601	0.627	0.677	0.637	0.629	5	AVG
1,3-Butadiene	0.535	0.444	0.451	0.475	0.496	0.477	0.480	7	AVG
Bromomethane	0.576	0.526	0.561	0.631	0.639	0.631	0.594	8	AVG
Chloroethane	0.390	0.330	0.346	0.345	0.371	0.351	0.355	6	AVG
Bromoethene	0.663	0.569	0.610	0.632	0.676	0.634	0.631	6	AVG
Dichlorofluoromethane	1.541	1.285	1.425	1.433	1.530	1.414	1.438	6	AVG
Trichlorofluoromethane	2.093	1.757	1.785	1.810	1.934	1.807	1.864	7	AVG
Pentane	1.236	1.034	0.976	1.016	1.067	0.980	1.051	9	AVG
Ethanol	0.276	0.270	0.235	0.240	0.247	0.229	0.250	8	AVG
Acrolein	0.300	0.216	0.239	0.241	0.269	0.251	0.253	11	AVG
1,1-Dichloroethene	1.167	0.943	1.032	1.056	1.118	1.032	1.058	7	AVG
Freon 113	1.217	0.968	0.929	0.927	0.996	0.905	0.990	12	AVG
Acetone	1.053	0.856	0.860	0.872	0.907	0.840	0.898	9	AVG
Methyl Iodide	1.861	1.656	1.685	1.563	1.844	1.515	1.687	8	AVG
Carbon Disulfide	1.968	1.704	1.828	1.905	2.008	1.848	1.877	6	AVG
Isopropanol	1.298	1.021	1.036	1.073	1.095	1.015	1.090	10	AVG
Acetonitrile	0.451	0.472	0.399	0.384	0.351	0.312	0.395	15	AVG
3-Chloropropene	0.358	0.275	0.296	0.301	0.307	0.286	0.304	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.

FORM 06
VOLATILE ORGANICS IN AIR
INITIAL CALIBRATION DATA

SDG No.:

Instrument ID: 22820 Calibration Start Date: 09/05/2018 Calibration End Date: 09/05/2018

Calibration Start Time: 11:20 Calibration End Time: 13:43

LAB FILE IDs:
RRF 1 = ei00024.d RRF 2 = ei00023.d RRF 5 = ei00022.d RRF 10 = ei00021.d RRF 25 = ei00026.d
RRF 70 = ei00027.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
Methylene Chloride	0.650	0.498	0.561	0.554	0.597	0.547	0.568	9	AVG
tert-Butyl Alcohol	1.799	1.535	1.498	1.498	1.526	1.399	1.542	9	AVG
Acrylonitrile	0.609	0.507	0.511	0.511	0.547	0.504	0.531	8	AVG
trans-1,2-Dichloroethene	0.963	0.856	0.940	0.958	0.995	0.910	0.937	5	AVG
Methyl t-Butyl Ether	2.351	2.095	2.054	2.054	2.183	1.955	2.115	6	AVG
Hexane	1.269	1.016	0.997	0.997	1.064	0.977	1.053	10	AVG
1,1-Dichloroethane	1.404	1.209	1.194	1.215	1.272	1.188	1.247	7	AVG
Vinyl Acetate	0.239	0.200	0.186	0.190	0.201	0.185	0.200	10	AVG
Di-Isopropyl Ether	2.270	1.982	2.026	1.992	2.126	1.917	2.052	6	AVG
Ethyl Tert-Butyl Ether	2.321	1.998	1.994	2.031	2.152	1.978	2.079	6	AVG
cis-1,2-Dichloroethene	1.014	0.824	0.909	0.904	0.975	0.896	0.920	7	AVG
2-Butanone	0.475	0.395	0.387	0.379	0.401	0.360	0.400	10	AVG
Ethyl Acetate	0.236	0.194	0.205	0.192	0.199	0.184	0.202	9	AVG
Methyl Acrylate	1.393	1.126	1.154	1.131	1.209	1.090	1.184	9	AVG
Tetrahydrofuran	0.919	0.715	0.720	0.691	0.730	0.665	0.740	12	AVG
Chloroform	1.810	1.532	1.512	1.537	1.624	1.470	1.581	8	AVG
1,1,1-Trichloroethane	1.879	1.605	1.574	1.573	1.681	1.516	1.638	8	AVG
Cyclohexane	1.292	1.046	1.031	1.040	1.108	0.988	1.084	10	AVG
Carbon Tetrachloride	1.862	1.528	1.536	1.527	1.664	1.497	1.602	9	AVG
Benzene	0.737	0.590	0.580	0.583	0.628	0.557	0.613	11	AVG
1,2-Dichloroethane	0.293	0.251	0.258	0.252	0.269	0.240	0.260	7	AVG
Isooctane	0.915	0.800	0.830	0.824	0.883	0.787	0.840	6	AVG
Tert-Amyl Methyl Ether	0.618	0.552	0.525	0.526	0.561	0.500	0.547	7	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.

SDG No.:

Instrument ID: 22820 Calibration Start Date: 09/05/2018 Calibration End Date: 09/05/2018

Calibration Start Time: 11:20 Calibration End Time: 13:43

LAB FILE IDs:
RRF 1 = ei00024.d RRF 2 = ei00023.d RRF 5 = ei00022.d RRF 10 = ei00021.d RRF 25 = ei00026.d
RRF 70 = ei00027.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
Heptane	0.390	0.305	0.300	0.285	0.309	0.268	0.310	14	AVG
Trichloroethene	0.307	0.266	0.246	0.242	0.265	0.235	0.260	10	AVG
Ethyl Acrylate	0.504	0.434	0.404	0.406	0.434	0.383	0.428	10	AVG
1,2-Dichloropropane	0.254	0.216	0.194	0.199	0.218	0.191	0.212	11	AVG
Dibromomethane	0.303	0.243	0.252	0.253	0.268	0.238	0.260	9	AVG
1,4-Dioxane	0.180	0.154	0.148	0.146	0.153	0.133	0.152	10	AVG
Methyl Methacrylate	0.261	0.241	0.225	0.222	0.235	0.207	0.232	8	AVG
Bromodichloromethane	0.499	0.447	0.431	0.432	0.454	0.405	0.445	7	AVG
cis-1,3-Dichloropropene	0.452	0.389	0.371	0.370	0.392	0.352	0.388	9	AVG
4-Methyl-2-Pentanone	0.510	0.437	0.428	0.408	0.423	0.376	0.430	10	AVG
Toluene	0.888	0.770	0.748	0.718	0.757	0.666	0.758	10	AVG
Octane	0.555	0.447	0.418	0.384	0.407	0.358	0.428	16	AVG
trans-1,3-Dichloropropene	0.386	0.342	0.334	0.340	0.348	0.317	0.345	7	AVG
Ethyl Methacrylate	0.477	0.411	0.411	0.392	0.409	0.363	0.411	9	AVG
1,1,2-Trichloroethane	0.319	0.279	0.271	0.252	0.259	0.229	0.268	11	AVG
Tetrachloroethene	0.487	0.394	0.415	0.403	0.415	0.358	0.412	10	AVG
2-Hexanone	0.531	0.420	0.405	0.397	0.424	0.371	0.425	13	AVG
Dibromochloromethane	0.396	0.351	0.348	0.340	0.348	0.315	0.350	8	AVG
1,2-Dibromoethane	0.494	0.404	0.408	0.399	0.410	0.361	0.413	11	AVG
Chlorobenzene	0.721	0.596	0.585	0.572	0.594	0.528	0.599	11	AVG
1,1,1,2-Tetrachloroethane	0.355	0.315	0.313	0.301	0.310	0.276	0.312	8	AVG
Ethylbenzene	1.268	1.062	1.023	0.987	1.003	0.855	1.033	13	AVG
m/p-Xylene	0.986	0.829	0.802	0.779	0.796	0.694	0.814	12	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: 22820 Calibration Start Date: 09/05/2018 Calibration End Date: 09/05/2018

Calibration Start Time: 11:20 Calibration End Time: 13:43

LAB FILE IDs:
RRF 1 = ei00024.d RRF 2 = ei00023.d RRF 5 = ei00022.d RRF 10 = ei00021.d RRF 25 = ei00026.d
RRF 70 = ei00027.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
o-Xylene	0.967	0.842	0.805	0.768	0.792	0.685	0.810	12	AVG
Styrene	0.758	0.630	0.617	0.587	0.612	0.524	0.621	12	AVG
Bromoform	0.569	0.474	0.497	0.475	0.494	0.444	0.492	9	AVG
Cumene	1.308	1.147	1.121	1.038	1.080	0.924	1.103	12	AVG
Bromobenzene	0.460	0.378	0.371	0.352	0.373	0.323	0.376	12	AVG
1,1,2,2-Tetrachloroethane	0.722	0.573	0.575	0.554	0.567	0.500	0.582	13	AVG
1,2,3-Trichloropropane	0.220	0.185	0.178	0.170	0.173	0.150	0.179	13	AVG
n-Propylbenzene	0.363	0.306	0.302	0.279	0.296	0.255	0.300	12	AVG
2-Chlorotoluene	0.317	0.273	0.260	0.246	0.254	****	0.270	10	AVG
4-Ethyltoluene	1.343	1.115	1.112	1.029	1.076	0.877	1.092	14	AVG
1,3,5-Trimethylbenzene	1.150	0.978	0.944	0.850	0.890	0.755	0.928	14	AVG
Alpha Methyl Styrene	0.517	0.453	0.439	0.424	0.449	****	0.456	8	AVG
tert-Butylbenzene	1.077	0.919	0.858	0.748	0.794	****	0.879	15	AVG
1,2,4-Trimethylbenzene	1.135	0.965	0.909	0.830	0.885	0.740	0.911	15	AVG
sec-Butylbenzene	1.592	1.374	1.303	1.178	1.252	****	1.340	12	AVG
1,3-Dichlorobenzene	0.728	0.618	0.597	0.565	0.598	0.500	0.601	12	AVG
1,4-Dichlorobenzene	0.759	0.627	0.623	0.583	0.616	0.528	0.623	12	AVG
p-Isopropyltoluene	1.362	1.147	1.066	0.985	1.052	****	1.123	13	AVG
Benzyl Chloride	0.938	0.783	0.783	0.772	0.830	****	0.821	8	AVG
1,2-Dichlorobenzene	0.685	0.596	0.555	0.527	0.568	0.487	0.570	12	AVG
n-Butylbenzene	1.230	1.028	1.008	0.930	1.042	****	1.048	11	AVG
Hexachloroethane	0.351	0.304	0.287	0.273	0.312	****	0.305	10	AVG
1,2-Dibromo-3-chloropropane	0.343	0.304	0.300	0.284	0.320	0.289	0.307	7	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.

SDG No.:

Instrument ID: 22820 Calibration Start Date: 09/05/2018 Calibration End Date: 09/05/2018

Calibration Start Time: 11:20 Calibration End Time: 13:43

LAB FILE IDs:
RRF 1 = ei00024.d RRF 2 = ei00023.d RRF 5 = ei00022.d RRF 10 = ei00021.d RRF 25 = ei00026.d
RRF 70 = ei00027.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
1,2,4-Trichlorobenzene	0.493	0.434	0.418	0.385	0.482	0.441	0.442	9	AVG
Hexachlorobutadiene	0.472	0.396	0.395	0.352	0.440	****	0.411	11	AVG
Naphthalene	1.038	0.884	0.868	0.802	0.977	****	0.914	10	AVG

Average % RSD: 10

* 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.

Internal Standard
Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP22820.i/18sep05.b/ei00021.d VSTD010
/chem/HP22820.i/18sep05.b/ei00022.d VSTD005
/chem/HP22820.i/18sep05.b/ei00023.d VSTD002
/chem/HP22820.i/18sep05.b/ei00024.d VSTD001
/chem/HP22820.i/18sep05.b/ei00026.d VSTD025
/chem/HP22820.i/18sep05.b/ei00027.d VSTD070

Area Summary

	File ID:								
Internal Standard Name	ei00021.d	ei00022.d	ei00023.d	ei00024.d	ei00026.d	ei00027.d	Avg. Area	%RSD	In Spec
Bromochloromethane	329569	325670	319260	319127	294634	303420	315280	4	Yes
1,4-Difluorobenzene	1258872	1251598	1230754	1250892	1116407	1164457	1212163	5	Yes
Chlorobenzene-d5	1224597	1198179	1228566	1221815	1100048	1130285	1183915	5	Yes

%RSD of internal standard area is flagged out of spec if greater than 30.

RT Summary

	File ID:						
Internal Standard Name	ei00021.d	ei00022.d	ei00023.d	ei00024.d	ei00026.d	ei00027.d	Avg. RT
Bromochloromethane	5.467	5.474	5.467	5.467	5.467	5.474	5.470
1,4-Difluorobenzene	6.291	6.298	6.291	6.291	6.291	6.291	6.292
Chlorobenzene-d5	8.497	8.497	8.490	8.490	8.490	8.497	8.494

Comments:_____

_____

Report generated on 09/05/2018 at 14:06

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 LCS File ID: ei00030.d LCSD File ID: ei00031.d

Batch: E1824830AA LCS Injected: 09/05/2018 LCSD Injected: 09/05/2018

Method: EPA TO-15 LCS Client ID: LCSE01 LCSD Client ID: LCSDE01

Dilution Factor: 1

COMPOUND	SPIKE LEVEL	LCS CONC. (ppb(v))	LCSD CONC. (ppb(v))	LCS %REC	LCSD %REC	RANGE	%RPD	RPD MAX	IN SPEC
Dichlorodifluoromethane	10.00	10.97	10.60	110	106	74-133	3	25	YES
Chlorodifluoromethane	10.00	11.72	10.94	117	109	70-138	7	25	YES
Freon 114	10.00	11.12	10.63	111	106	66-126	4	25	YES
Chloromethane	10.00	9.94	9.45	99	94	65-140	5	25	YES
Vinyl Chloride	10.00	11.14	10.73	111	107	75-130	4	25	YES
1,3-Butadiene	10.00	10.57	10.15	106	102	72-122	4	25	YES
Bromomethane	10.00	11.19	10.87	112	109	71-133	3	25	YES
Chloroethane	10.00	10.86	10.37	109	104	76-129	5	25	YES
Dichlorofluoromethane	10.00	11.30	10.98	113	110	75-137	3	25	YES
Trichlorofluoromethane	10.00	10.66	10.29	107	103	73-132	4	25	YES
Pentane	10.00	10.02	9.63	100	96	69-125	4	25	YES
1,1-Dichloroethene	10.00	10.89	10.63	109	106	70-129	2	25	YES
Freon 113	10.00	10.34	10.06	103	101	66-119	3	25	YES
Acetone	10.00	10.44	10.31	104	103	71-136	1	25	YES
Carbon Disulfide	10.00	10.67	10.28	107	103	72-128	4	25	YES
3-Chloropropene	10.00	12.41	11.85	124	119	67-141	5	25	YES
Methylene Chloride	10.00	12.04	11.54	120	115	69-128	4	25	YES
trans-1,2-Dichloroethene	10.00	10.67	10.60	107	106	77-128	1	25	YES
Methyl t-Butyl Ether	10.00	10.40	10.17	104	102	71-119	2	25	YES
Hexane	10.00	10.17	9.88	102	99	70-118	3	25	YES
1,1-Dichloroethane	10.00	10.58	10.10	106	101	74-129	5	25	YES
cis-1,2-Dichloroethene	10.00	10.74	10.34	107	103	76-126	4	25	YES
2-Butanone	10.00	10.35	10.16	104	102	75-126	2	25	YES
Chloroform	10.00	10.40	10.16	104	102	75-127	2	25	YES
1,1,1-Trichloroethane	10.00	10.51	10.24	105	102	74-122	3	25	YES
Carbon Tetrachloride	10.00	10.43	10.04	104	100	72-127	4	25	YES
1,2-Dichloroethane	10.00	10.34	10.03	103	100	72-138	3	25	YES
Benzene	10.00	9.97	9.96	100	100	76-123	0	25	YES
Isooctane	10.00	10.32	10.34	103	103	74-127	0	25	YES
Heptane	10.00	9.71	9.84	97	98	74-122	1	25	YES
Trichloroethene	10.00	10.36	10.04	104	100	76-118	3	25	YES
1,2-Dichloropropane	10.00	9.95	10.02	100	100	75-127	1	25	YES
Dibromomethane	10.00	10.29	10.30	103	103	76-124	0	25	YES
Bromodichloromethane	10.00	9.90	10.01	99	100	75-134	1	25	YES
cis-1,3-Dichloropropene	10.00	9.89	9.82	99	98	51-120	1	25	YES
4-Methyl-2-Pentanone	10.00	9.83	9.77	98	98	79-131	1	25	YES

COMMENTS:
Applies to Sample(s): 9779677, 9781667-9781670

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 LCS File ID: ei00030.d LCSD File ID: ei00031.d

Batch: E1824830AA LCS Injected: 09/05/2018 LCSD Injected: 09/05/2018

Method: EPA TO-15 LCS Client ID: LCSE01 LCSD Client ID: LCSDE01

Dilution Factor: 1

COMPOUND	SPIKE LEVEL	LCS CONC. (ppb(v))	LCSD CONC. (ppb(v))	LCS %REC	LCSD %REC	RANGE	%RPD	RPD MAX	IN SPEC
Toluene	10.00	10.18	9.95	102	100	78-119	2	25	YES
Octane	10.00	9.67	9.60	97	96	73-122	1	25	YES
trans-1,3-Dichloropropene	10.00	10.26	9.82	103	98	76-131	4	25	YES
1,1,2-Trichloroethane	10.00	10.00	10.07	100	101	76-127	1	25	YES
Tetrachloroethene	10.00	10.59	10.47	106	105	68-123	1	25	YES
2-Hexanone	10.00	10.15	9.85	102	98	74-134	3	25	YES
Dibromochloromethane	10.00	10.14	10.02	101	100	74-131	1	25	YES
1,2-Dibromoethane	10.00	10.26	10.07	103	101	73-121	2	25	YES
Chlorobenzene	10.00	10.18	10.08	102	101	76-117	1	25	YES
1,1,1,2-Tetrachloroethane	10.00	10.30	10.21	103	102	73-137	1	25	YES
Ethylbenzene	10.00	10.04	9.90	100	99	77-117	1	25	YES
m/p-Xylene	10.00	10.20	10.01	102	100	78-119	2	25	YES
o-Xylene	10.00	10.20	10.06	102	101	78-121	1	25	YES
Styrene	10.00	10.35	10.10	103	101	77-143	2	25	YES
Bromoform	10.00	9.89	9.80	99	98	58-144	1	25	YES
Cumene	10.00	10.38	10.32	104	103	80-133	1	25	YES
1,1,2,2-Tetrachloroethane	10.00	9.94	9.89	99	99	72-133	1	25	YES
1,2,3-Trichloropropane	10.00	10.21	9.81	102	98	71-127	4	25	YES
Bromobenzene	10.00	9.87	10.00	99	100	74-118	1	25	YES
4-Ethyltoluene	10.00	10.09	10.20	101	102	73-130	1	25	YES
1,3,5-Trimethylbenzene	10.00	10.03	9.96	100	100	72-130	1	25	YES
1,2,4-Trimethylbenzene	10.00	10.06	10.09	101	101	70-138	0	25	YES
1,3-Dichlorobenzene	10.00	9.87	9.98	99	100	75-129	1	25	YES
1,4-Dichlorobenzene	10.00	9.87	9.80	99	98	74-123	1	25	YES
1,2-Dichlorobenzene	10.00	9.62	9.68	96	97	71-126	1	25	YES
Hexachloroethane	10.00	9.27	9.27	93	93	59-135	0	25	YES
Propene	10.00	10.48	10.17	105	102	78-126	3	25	YES
Bromoethene	10.00	11.21	10.64	112	106	77-123	5	25	YES
Ethanol	10.00	10.54	10.48	105	105	56-149	1	25	YES
Acrolein	10.00	11.39	10.88	114	109	54-132	5	25	YES
Methyl Iodide	10.00	10.80	10.37	108	104	72-127	4	25	YES
Isopropanol	10.00	10.66	10.20	107	102	69-160	4	25	YES
Acetonitrile	10.00	10.81	9.93	108	99	56-136	8	25	YES
tert-Butyl Alcohol	10.00	10.99	10.66	110	107	71-154	3	25	YES
Acrylonitrile	10.00	10.60	10.38	106	104	68-135	2	25	YES
Vinyl Acetate	10.00	11.40	10.97	114	110	75-161	4	25	YES

COMMENTS:
Applies to Sample(s): 9779677, 9781667-9781670

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 LCS File ID: ei00030.d LCSD File ID: ei00031.d

Batch: E1824830AA LCS Injected: 09/05/2018 LCSD Injected: 09/05/2018

Method: EPA TO-15 LCS Client ID: LCSE01 LCSD Client ID: LCSDE01

Dilution Factor: 1

COMPOUND	SPIKE LEVEL	LCS CONC. (ppb(v))	LCSD CONC. (ppb(v))	LCS %REC	LCSD %REC	RANGE	%RPD	RPD MAX	IN SPEC
Di-Isopropyl Ether	10.00	10.75	10.27	107	103	71-122	5	25	YES
Ethyl Tert-Butyl Ether	10.00	10.33	9.96	103	100	68-121	4	25	YES
Ethyl Acetate	10.00	9.76	10.00	98	100	73-124	2	25	YES
Methyl Acrylate	10.00	10.40	10.12	104	101	75-125	3	25	YES
Tetrahydrofuran	10.00	10.18	9.90	102	99	67-127	3	25	YES
Cyclohexane	10.00	10.55	10.26	106	103	70-118	3	25	YES
Tert-Amyl Methyl Ether	10.00	9.81	9.81	98	98	78-124	0	25	YES
Ethyl Acrylate	10.00	10.02	9.74	100	97	71-126	3	25	YES
1,4-Dioxane	10.00	10.30	10.09	103	101	76-124	2	25	YES
Methyl Methacrylate	10.00	9.93	9.73	99	97	73-117	2	25	YES
Ethyl Methacrylate	10.00	10.29	9.92	103	99	69-137	4	25	YES
Xylene (total)	20.00	20.40	20.06	102	100	79-120	2	25	YES
n-Propylbenzene	10.00	10.21	9.98	102	100	73-120	2	25	YES
2-Chlorotoluene	10.00	9.92	9.82	99	98	74-123	1	25	YES
Alpha Methyl Styrene	10.00	9.89	9.83	99	98	71-138	1	25	YES
tert-Butylbenzene	10.00	9.34	9.54	93	95	78-138	2	25	YES
sec-Butylbenzene	10.00	9.63	9.78	96	98	79-139	2	25	YES
p-Isopropyltoluene	10.00	9.53	9.72	95	97	75-145	2	25	YES
Benzyl Chloride	10.00	9.60	9.31	96	93	49-163	3	25	YES
n-Butylbenzene	10.00	9.77	9.77	98	98	72-143	0	25	YES
1,2-Dibromo-3-chloropropane	10.00	9.23	9.31	92	93	52-156	1	25	YES
1,2,4-Trichlorobenzene	10.00	8.98	9.51	90	95	45-156	6	25	YES
Hexachlorobutadiene	10.00	9.23	9.60	92	96	49-154	4	25	YES
Naphthalene	10.00	9.03	9.34	90	93	39-152	3	25	YES

COMMENTS:
Applies to Sample(s): 9779677, 9781667-9781670

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: ei00061.d

Calibration Date: 09/06/2018

Instrument ID: 22820

Calibration Time: 12:45

Init. Calib. Date(s): 09/05/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
Propene	0.444	0.520	11.704	10	17
Dichlorodifluoromethane	1.753	2.144	12.229	10	22
Chlorodifluoromethane	0.876	1.060	12.094	10	21
Freon 114	1.770	2.140	12.087	10	21
Chloromethane	0.347	0.345	9.943	10	-1
Vinyl Chloride	0.629	0.740	11.755	10	18
1,3-Butadiene	0.480	0.528	10.996	10	10
Bromomethane	0.594	0.743	12.505	10	25
Chloroethane	0.355	0.414	11.638	10	16
Bromoethene	0.631	0.684	10.844	10	8
Dichlorofluoromethane	1.438	1.734	12.057	10	21
Trichlorofluoromethane	1.864	2.170	11.641	10	16
Pentane	1.051	1.132	10.764	10	8
Ethanol	0.250	0.241	9.646	10	-4
Acrolein	0.253	0.282	11.145	10	11
1,1-Dichloroethene	1.058	1.207	11.409	10	14
Freon 113	0.990	1.106	11.172	10	12
Acetone	0.898	1.031	11.485	10	15
Methyl Iodide	1.687	1.713	10.155	10	2
Carbon Disulfide	1.877	2.247	11.972	10	20
Isopropanol	1.090	1.107	10.160	10	2
Acetonitrile	0.395	0.408	10.339	10	3
3-Chloropropene	0.304	0.318	11.623	11.1	5
Methylene Chloride	0.568	0.654	12.791	11.1	15
tert-Butyl Alcohol	1.542	1.374	9.887	11.1	-11
Acrylonitrile	0.531	0.580	10.918	10	9
trans-1,2-Dichloroethene	0.937	1.092	11.658	10	17
Methyl t-Butyl Ether	2.115	2.184	10.324	10	3
Hexane	1.053	1.079	10.244	10	2
1,1-Dichloroethane	1.247	1.405	11.269	10	13
Vinyl Acetate	0.200	0.180	10.073	11.2	-10
Di-Isopropyl Ether	2.052	2.227	10.853	10	9
Ethyl Tert-Butyl Ether	2.079	2.065	9.931	10	-1
cis-1,2-Dichloroethene	0.920	1.042	11.322	10	13
2-Butanone	0.400	0.409	10.240	10	2
Ethyl Acetate	0.202	0.201	9.954	10	0
Methyl Acrylate	1.184	1.194	10.085	10	1
Tetrahydrofuran	0.740	0.782	10.563	10	6
Chloroform	1.581	1.818	11.501	10	15

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: ei00061.d

Calibration Date: 09/06/2018

Instrument ID: 22820

Calibration Time: 12:45

Init. Calib. Date(s): 09/05/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
1,1,1-Trichloroethane	1.638	1.777	10.851	10	9
Cyclohexane	1.084	1.122	10.348	10	3
Carbon Tetrachloride	1.602	1.619	10.103	10	1
Benzene	0.613	0.672	10.971	10	10
1,2-Dichloroethane	0.260	0.316	12.142	10	21
Isooctane	0.840	0.935	11.136	10	11
Tert-Amyl Methyl Ether	0.547	0.574	10.497	10	5
Heptane	0.310	0.315	10.166	10	2
Trichloroethene	0.260	0.288	11.074	10	11
Ethyl Acrylate	0.428	0.423	9.905	10	-1
1,2-Dichloropropane	0.212	0.238	11.248	10	12
Dibromomethane	0.260	0.291	11.216	10	12
1,4-Dioxane	0.152	0.166	10.878	10	9
Methyl Methacrylate	0.232	0.232	10.015	10	0
Bromodichloromethane	0.445	0.502	11.288	10	13
cis-1,3-Dichloropropene	0.388	0.404	10.422	10	4
4-Methyl-2-Pentanone	0.430	0.452	10.509	10	5
Toluene	0.758	0.813	10.732	10	7
Octane	0.428	0.438	10.232	10	2
trans-1,3-Dichloropropene	0.345	0.355	10.297	10	3
Ethyl Methacrylate	0.411	0.395	9.605	10	-4
1,1,2-Trichloroethane	0.268	0.295	11.010	10	10
Tetrachloroethene	0.412	0.458	11.099	10	11
2-Hexanone	0.425	0.440	10.364	10	4
Dibromochloromethane	0.350	0.369	10.563	10	6
1,2-Dibromoethane	0.413	0.455	11.030	10	10
Chlorobenzene	0.599	0.656	10.943	10	9
1,1,1,2-Tetrachloroethane	0.312	0.328	10.512	10	5
Ethylbenzene	1.033	1.064	10.304	10	3
m/p-Xylene	0.814	0.831	10.209	10	2
o-Xylene	0.810	0.836	10.320	10	3
Styrene	0.621	0.638	10.270	10	3
Bromoform	0.492	0.464	9.433	10	-6
Cumene	1.103	1.124	10.194	10	2
Bromobenzene	0.376	0.393	10.446	10	4
1,1,2,2-Tetrachloroethane	0.582	0.640	11.006	10	10
1,2,3-Trichloropropane	0.179	0.197	10.968	10	10
n-Propylbenzene	0.300	0.303	10.084	10	1
2-Chlorotoluene	0.270	0.275	10.171	10	2

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: ei00061.d

Calibration Date: 09/06/2018

Instrument ID: 22820

Calibration Time: 12:45

Init. Calib. Date(s): 09/05/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
4-Ethyltoluene	1.092	1.116	10.219	10	2
1,3,5-Trimethylbenzene	0.928	0.939	10.125	10	1
Alpha Methyl Styrene	0.456	0.447	9.793	10	-2
tert-Butylbenzene	0.879	0.809	9.201	10	-8
1,2,4-Trimethylbenzene	0.911	0.921	10.117	10	1
sec-Butylbenzene	1.340	1.273	9.505	10	-5
1,3-Dichlorobenzene	0.601	0.649	10.807	10	8
1,4-Dichlorobenzene	0.623	0.655	10.523	10	5
p-Isopropyltoluene	1.123	1.078	9.605	10	-4
Benzyl Chloride	0.821	0.673	8.196	10	-18
1,2-Dichlorobenzene	0.570	0.597	10.473	10	5
n-Butylbenzene	1.048	1.022	9.751	10	-2
Hexachloroethane	0.305	0.229	7.501	10	-25
1,2-Dibromo-3-chloropropane	0.307	0.294	9.588	10	-4
1,2,4-Trichlorobenzene	0.442	0.410	9.278	10	-7
Hexachlorobutadiene	0.411	0.390	9.490	10	-5
Naphthalene	0.914	0.808	8.846	10	-12

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

Continuing Calibration
Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP22820.i/18sep05.b/ei00021.d
/chem/HP22820.i/18sep05.b/ei00022.d
/chem/HP22820.i/18sep05.b/ei00023.d
/chem/HP22820.i/18sep05.b/ei00024.d
/chem/HP22820.i/18sep05.b/ei00026.d
/chem/HP22820.i/18sep05.b/ei00027.d

** ICAL Area and RT are the average from the above standards.

Current Continuing Calibration Standard:

/chem/HP22820.i/18sep06.b/ei00061.d

Area Summary

File ID:

Internal Standard Name	ei00061.d	ICAL Area	Low Limit	High Limit	In Spec
Bromochloromethane	263195	315280	189168	441392	Yes
1,4-Difluorobenzene	972599	1212163	727298	1697028	Yes
Chlorobenzene-d5	950709	1183915	710349	1657481	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

RT Summary

File ID:

Internal Standard Name	ei00061.d	ICAL RT	In Spec
Bromochloromethane	5.467	5.470	Yes
1,4-Difluorobenzene	6.291	6.292	Yes
Chlorobenzene-d5	8.497	8.494	Yes

A "No" indicates the retention time is greater than 30 seconds from the RT of the referenced ICAL average.

Comments:_____

_____

Page 1 of 1

Report generated on 09/06/2018 at 13:07

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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: 09/06/2018

Lab File ID: ei00061.d Analyzed Time: 12:45

Instrument ID: 22820

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	R.T.	Area	R.T.	Area	R.T.
24 HOUR STANDARD	263195	5.47	972599	6.29	950709	8.50
UPPER LIMIT	368473	5.80	1361639	6.62	1330993	8.83
LOWER LIMIT	157917	5.14	583559	5.96	570425	8.17
LAB SAMPLE ID						
VBLKE02	282991	5.47	1054020	6.29	1031464	8.50
LCSE02	286760	5.47	1045187	6.29	1006800	8.50
LCSDE02	272106	5.47	1016194	6.29	973204	8.49
9783148	256168	5.47	998556	6.30	999121	8.50
9783149	276686	5.47	1009936	6.29	996066	8.50
9783150	250401	5.47	920065	6.29	934298	8.49
9783151	262230	5.47	943937	6.29	946978	8.50
9783148DL	282577	5.47	1013774	6.29	1019661	8.49
9785624	275943	5.47	1032213	6.30	1029933	8.50
9785625	274282	5.47	1040247	6.29	1013553	8.50
9785623	252438	5.47	938473	6.29	974383	8.50
9785623	228339	5.47	833573	6.29	849019	8.50
9784858	214592	5.47	872330	6.29	895528	8.50
9784858DL	257191	5.47	969961	6.29	1004677	8.49
9784859	240115	5.47	915284	6.29	934914	8.50
9784860	253388	5.47	951230	6.29	946865	8.49
9784861	238564	5.47	899949	6.29	906652	8.50
cc875	281009	5.47	998133	6.29	994071	8.50

* = 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 09
VOLATILE ORGANICS IN AIR
DUPLICATE SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 Method: EPA TO-15

Batch: E1824930A

BKG Lab Sample ID(s): 9785623 BKG Injected: 09/06/2018

DUP Lab Sample ID(s): 9785623 DUP Injected: 09/06/2018

BKG File ID(s): ei00072.d

DUP File ID(s): ei00073.d

Concentration Units: ppb(v) Limt: MDL

COMPOUND	BKG CONC.	Q	DUP CONC.	Q	RPD	RPD MAX	IN SPEC
Dichlorodifluoromethane	48		58		19	25	YES
Chlorodifluoromethane	6.0	U	6.0	U		25	YES
Freon 114	4.8	U	4.8	U		25	YES
Chloromethane	9.6	U	9.6	U		25	YES
Vinyl Chloride	4.8	U	4.8	U		25	YES
1,3-Butadiene	6.8	U	6.8	U		25	YES
Bromomethane	7.2	U	7.2	U		25	YES
Chloroethane	7.6	U	7.6	U		25	YES
Dichlorofluoromethane	4.4	U	4.4	U		25	YES
Trichlorofluoromethane	6.0	U	6.0	U		25	YES
Pentane	5.2	U	5.2	U		25	YES
1,1-Dichloroethene	5.6	U	5.6	U		25	YES
Freon 113	1800		2000		11	25	YES
Acetone	39	J	38	J	3	25	YES
Carbon Disulfide	5.2	U	5.2	U		25	YES
3-Chloropropene	6.0	U	6.0	U		25	YES
Methylene Chloride	10	U	10	U		25	YES
trans-1,2-Dichloroethene	3.4	U	3.4	U		25	YES
Methyl t-Butyl Ether	6.0	U	6.0	U		25	YES
Hexane	5.2	U	5.2	U		25	YES
1,1-Dichloroethane	8.9	J	7.9	J	12	25	YES
cis-1,2-Dichloroethene	4.8	U	4.8	U		25	YES
2-Butanone	8.4	U	8.4	U		25	YES
Chloroform	3.7	U	3.7	U		25	YES
1,1,1-Trichloroethane	7.2	J	7.0	J	3	25	YES
Carbon Tetrachloride	5.6	U	5.6	U		25	YES
Benzene	42		48		13	25	YES

COMMENTS:

_____

_____

Abbreviations:
BKG = Background sample
DUP = Duplicate sample
D = Analysis of diluted sample.
U = The compound is less than the limit being reported
J = The result is between the MDL and LOQ

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FORM 09
VOLATILE ORGANICS IN AIR
DUPLICATE SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 Method: EPA TO-15

Batch: E1824930A

BKG Lab Sample ID(s): 9785623 BKG Injected: 09/06/2018

DUP Lab Sample ID(s): 9785623 DUP Injected: 09/06/2018

BKG File ID(s): ei00072.d

DUP File ID(s): ei00073.d

Concentration Units: ppb(v) Limt: MDL

COMPOUND	BKG CONC.	Q	DUP CONC.	Q	RPD	RPD MAX	IN SPEC
1,2-Dichloroethane	3.2	U	3.2	U		25	YES
Isooctane	5.2	U	5.2	U		25	YES
Heptane	9.2	U	9.2	U		25	YES
Trichloroethene	60		63		5	25	YES
1,2-Dichloropropane	5.2	U	5.2	U		25	YES
Dibromomethane	5.6	U	5.6	U		25	YES
Bromodichloromethane	4.8	U	4.8	U		25	YES
cis-1,3-Dichloropropene	4.0	U	4.0	U		25	YES
4-Methyl-2-Pentanone	7.8	J	7.4	J	5	25	YES
Toluene	22	J	27	J	20	25	YES
Octane	16	U	16	U		25	YES
trans-1,3-Dichloropropene	4.8	U	4.8	U		25	YES
1,1,2-Trichloroethane	4.8	U	4.8	U		25	YES
Tetrachloroethene	210		230		9	25	YES
2-Hexanone	7.2	U	7.2	U		25	YES
Dibromochloromethane	5.2	U	5.2	U		25	YES
1,2-Dibromoethane	5.2	U	5.2	U		25	YES
Chlorobenzene	5.2	U	5.2	U		25	YES
1,1,1,2-Tetrachloroethane	6.0	U	6.0	U		25	YES
Ethylbenzene	7.6	U	7.6	U		25	YES
m/p-Xylene	210		240		13	25	YES
o-Xylene	7.6	U	7.6	U		25	YES
Styrene	8.0	U	8.0	U		25	YES
Bromoform	6.8	U	6.8	U		25	YES
Cumene	9.6	U	9.6	U		25	YES
Bromobenzene	4.0	U	4.0	U		25	YES
1,1,2,2-Tetrachloroethane	6.0	U	6.0	U		25	YES

COMMENTS:

_____

_____

Abbreviations:
BKG = Background sample
DUP = Duplicate sample
D = Analysis of diluted sample.
U = The compound is less than the limit being reported
J = The result is between the MDL and LOQ

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FORM 09
VOLATILE ORGANICS IN AIR
DUPLICATE SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 Method: EPA TO-15

Batch: E1824930A

BKG Lab Sample ID(s): 9785623 BKG Injected: 09/06/2018

DUP Lab Sample ID(s): 9785623 DUP Injected: 09/06/2018

BKG File ID(s): ei00072.d

DUP File ID(s): ei00073.d

Concentration Units: ppb(v) Limt: MDL

COMPOUND	BKG CONC.	Q	DUP CONC.	Q	RPD	RPD MAX	IN SPEC
1,2,3-Trichloropropane	5.6	U	5.6	U		25	YES
4-Ethyltoluene	7.2	U	7.2	U		25	YES
1,3,5-Trimethylbenzene	13	U	13	U		25	YES
1,2,4-Trimethylbenzene	11	U	11	U		25	YES
1,3-Dichlorobenzene	7.6	U	7.6	U		25	YES
1,4-Dichlorobenzene	6.8	U	6.8	U		25	YES
1,2-Dichlorobenzene	8.0	U	8.0	U		25	YES
Hexachloroethane	11	U	11	U		25	YES

COMMENTS:

Abbreviations:
BKG = Background sample
DUP = Duplicate sample
D = Analysis of diluted sample.
U = The compound is less than the limit being reported
J = The result is between the MDL and LOQ

Sample Data

Volatile Organics in Air by GC/MS

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE02

Sample Media:	CANISTER	Lab Sample ID:	9785623
Canister ID:	1263	Lab File ID:	ei00072.d
Pressure Received:	13.3 psia	Date Collected:	08/30/2018
Final Pressure:	26.6 psia	Date Received:	09/05/2018
Nominal Volume:	200 cc	Analyzed Date:	09/06/2018
Injection Volume:	10 cc	Analyzed Time:	18:03
Instrument ID:	22820	Dilution Factor:	40

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	240	
75-45-6	Chlorodifluoromethane	21	U
76-14-2	Freon 114	34	U
74-87-3	Chloromethane	20	U
75-01-4	Vinyl Chloride	12	U
106-99-0	1,3-Butadiene	15	U
74-83-9	Bromomethane	28	U
75-00-3	Chloroethane	20	U
75-43-4	Dichlorofluoromethane	19	U
75-69-4	Trichlorofluoromethane	34	U
109-66-0	Pentane	15	U
75-35-4	1,1-Dichloroethene	22	U
76-13-1	Freon 113	14000	
67-64-1	Acetone	93	J
75-15-0	Carbon Disulfide	16	U
107-05-1	3-Chloropropene	19	U
75-09-2	Methylene Chloride	35	U
156-60-5	trans-1,2-Dichloroethene	14	U
1634-04-4	Methyl t-Butyl Ether	22	U
110-54-3	Hexane	18	U
75-34-3	1,1-Dichloroethane	36	J
156-59-2	cis-1,2-Dichloroethene	19	U
78-93-3	2-Butanone	25	U
67-66-3	Chloroform	18	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE02

Sample Media:	CANISTER	Lab Sample ID:	9785623
Canister ID:	1263	Lab File ID:	ei00072.d
Pressure Received:	13.3 psia	Date Collected:	08/30/2018
Final Pressure:	26.6 psia	Date Received:	09/05/2018
Nominal Volume:	200 cc	Analyzed Date:	09/06/2018
Injection Volume:	10 cc	Analyzed Time:	18:03
Instrument ID:	22820	Dilution Factor:	40

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
71-55-6	1,1,1-Trichloroethane	39	J
56-23-5	Carbon Tetrachloride	35	U
71-43-2	Benzene	130	
107-06-2	1,2-Dichloroethane	13	U
540-84-1	Isooctane	24	U
142-82-5	Heptane	38	U
79-01-6	Trichloroethene	320	
78-87-5	1,2-Dichloropropane	24	U
74-95-3	Dibromomethane	40	U
75-27-4	Bromodichloromethane	32	U
10061-01-5	cis-1,3-Dichloropropene	18	U
108-10-1	4-Methyl-2-Pentanone	32	J
108-88-3	Toluene	84	J
111-65-9	Octane	75	U
10061-02-6	trans-1,3-Dichloropropene	22	U
79-00-5	1,1,2-Trichloroethane	26	U
127-18-4	Tetrachloroethene	1400	
591-78-6	2-Hexanone	29	U
124-48-1	Dibromochloromethane	44	U
106-93-4	1,2-Dibromoethane	40	U
108-90-7	Chlorobenzene	24	U
630-20-6	1,1,1,2-Tetrachloroethane	41	U
100-41-4	Ethylbenzene	33	U
179601-23-1	m/p-Xylene	930	

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE02

Sample Media:	CANISTER	Lab Sample ID:	9785623
Canister ID:	1263	Lab File ID:	ei00072.d
Pressure Received:	13.3 psia	Date Collected:	08/30/2018
Final Pressure:	26.6 psia	Date Received:	09/05/2018
Nominal Volume:	200 cc	Analyzed Date:	09/06/2018
Injection Volume:	10 cc	Analyzed Time:	18:03
Instrument ID:	22820	Dilution Factor:	40

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
95-47-6	o-Xylene	33	U
100-42-5	Styrene	34	U
75-25-2	Bromoform	70	U
98-82-8	Cumene	47	U
108-86-1	Bromobenzene	26	U
79-34-5	1,1,2,2-Tetrachloroethane	41	U
96-18-4	1,2,3-Trichloropropane	34	U
622-96-8	4-Ethyltoluene	35	U
108-67-8	1,3,5-Trimethylbenzene	63	U
95-63-6	1,2,4-Trimethylbenzene	55	U
541-73-1	1,3-Dichlorobenzene	46	U
106-46-7	1,4-Dichlorobenzene	41	U
95-50-1	1,2-Dichlorobenzene	48	U
67-72-1	Hexachloroethane	100	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Volatiles in Air 9785623

Data file: /chem/HP22820.i/18sep06.b/ei00072.d Injection date and time: **06-SEP-2018 18:03**
Data file Sample Info. Line: 9785623;10;E1824930AA;1263-;0;0;SAMPLE; Instrument ID: **HP22820.i** Batch: **E1824930AA**
Date, time and analyst ID of latest file update: 06-Sep-2018 19:11 jeb07445

Blank Data file reference: **/chem/HP22820.i/18sep06.b/ei00062.d**

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 06-SEP-2018 13:08
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18sep06.b/ei00061.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): 26.6 psia Canister Pressure before dilution (Ya): 13.3 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 10 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	5.467(0.000)	751	130	252438 (-4)	10.00		157917 - 368473
51) 1,4-Difluorobenzene	6.291(0.000)	866	114	938473 (-4)	10.00		583560 - 1361638
71) Chlorobenzene-d5	8.497(0.000)	1174	117	974383 (2)	10.00		570426 - 1330992

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)	1.606(0.007)	85	52736	1.192	47.66			0.13	1
3) Chlorodifluoromethane	(1)			Not Detected					0.15	1
4) Freon 114	(1)			Not Detected					0.12	1
5) Chloromethane	(1)			Not Detected					0.24	1
6) Vinyl Chloride	(1)			Not Detected					0.12	1
7) 1,3-Butadiene	(1)			Not Detected					0.17	1
8) Bromomethane	(1)			Not Detected					0.18	1
9) Chloroethane	(1)			Not Detected					0.19	1
11) Dichlorofluoromethane	(1)			Not Detected					0.11	1
12) Trichlorofluoromethane	(1)			Not Detected					0.15	1
13) Pentane	(1)			Not Detected					0.13	1
17) 1,1-Dichloroethene	(1)			Not Detected					0.14	1
18) Freon 113	(1)	3.447(0.000)	103	1136258	45.453	1818.13			0.11	1
19) Acetone	(1)	3.540(-0.001)	43	22137	0.977	39.06		J	0.53	5
21) Carbon Disulfide	(1)			Not Detected					0.13	1
24) 3-Chloropropene	(1)			Not Detected					0.15	1
25) Methylene Chloride	(1)			Not Detected					0.25	2
28) trans-1,2-Dichloroethene	(1)			Not Detected					0.086	1
29) Methyl t-Butyl Ether	(1)			Not Detected					0.15	1
30) Hexane	(1)			Not Detected					0.13	1
31) 1,1-Dichloroethane	(1)	4.715(0.001)	63	6996	0.222	8.89		J	0.089	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.12	1
37) 2-Butanone	(1)			Not Detected					0.21	1
42) Chloroform	(1)			Not Detected					0.092	1
43) 1,1,1-Trichloroethane	(1)	5.675(0.001)	97	7450	0.180	7.21		J	0.12	1
45) Carbon Tetrachloride	(1)			Not Detected					0.14	1
46) Benzene	(2)	5.983(0.001)	78	60223	1.048	41.91			0.11	1
47) 1,2-Dichloroethane	(2)			Not Detected					0.08	1
48) Isooctane	(2)			Not Detected					0.13	1
50) Heptane	(2)			Not Detected					0.23	1
52) Trichloroethene	(2)	6.491(0.000)	130	36435	1.491	59.63			0.18	1
54) 1,2-Dichloropropane	(2)			Not Detected					0.13	1
55) Dibromomethane	(2)			Not Detected					0.14	1
58) Bromodichloromethane	(2)			Not Detected					0.12	1
59) cis-1,3-Dichloropropene	(2)			Not Detected					0.1	1
60) 4-Methyl-2-Pentanone	(2)	7.336(-0.001)	43	7913	0.196	7.84		J	0.15	1
61) Toluene	(3)	7.465(0.000)	91	41166	0.557	22.30		J	0.12	1
62) Octane	(3)			Not Detected					0.4	2
63) trans-1,3-Dichloropropene	(3)			Not Detected					0.12	1
66) 1,1,2-Trichloroethane	(3)			Not Detected					0.12	1
67) Tetrachloroethene	(3)	7.866(0.000)	166	209068	5.205	208.19			0.25	2
68) 2-Hexanone	(3)			Not Detected					0.18	1
69) Dibromochloromethane	(3)			Not Detected					0.13	1

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Lancaster Laboratories, Inc.

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18sep06.b/ei00072.d Injection date and time: **06-SEP-2018 18:03**
Data file Sample Info. Line: 9785623;10;E1824930AA;1263-;0;0;SAMPLE; Instrument ID: **HP22820.i** Batch: **E1824930AA**
Date, time and analyst ID of latest file update: 06-Sep-2018 19:11 jeb07445

Blank Data file reference: **/chem/HP22820.i/18sep06.b/ei00062.d**

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 06-SEP-2018 13:08
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18sep06.b/ei00061.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): 26.6 psia Canister Pressure before dilution (Ya): 13.3 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 10 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					0.13	1
72) Chlorobenzene	(3)			Not Detected					0.13	1
73) 1,1,1,2-Tetrachloroethane	(3)			Not Detected					0.15	1
74) Ethylbenzene	(3)			Not Detected					0.19	1
75) m/p-Xylene	(3)	8.669(0.000)	91	424871	5.354	214.17			0.26	2
76) o-Xylene	(3)			Not Detected					0.19	1
78) Styrene	(3)			Not Detected					0.2	1
79) Bromoform	(3)			Not Detected					0.17	1
80) Cumene	(3)			Not Detected					0.24	1
81) Bromobenzene	(3)			Not Detected					0.1	1
82) 1,1,2,2-Tetrachloroethane	(3)			Not Detected					0.15	1
83) 1,2,3-Trichloropropane	(3)			Not Detected					0.14	1
86) 4-Ethyltoluene	(3)			Not Detected					0.18	1
87) 1,3,5-Trimethylbenzene	(3)			Not Detected					0.32	2
90) 1,2,4-Trimethylbenzene	(3)			Not Detected					0.28	2
92) 1,3-Dichlorobenzene	(3)			Not Detected					0.19	1
93) 1,4-Dichlorobenzene	(3)			Not Detected					0.17	1
96) 1,2-Dichlorobenzene	(3)			Not Detected					0.2	1
98) Hexachloroethane	(3)			Not Detected					0.27	2

Total number of targets = 62

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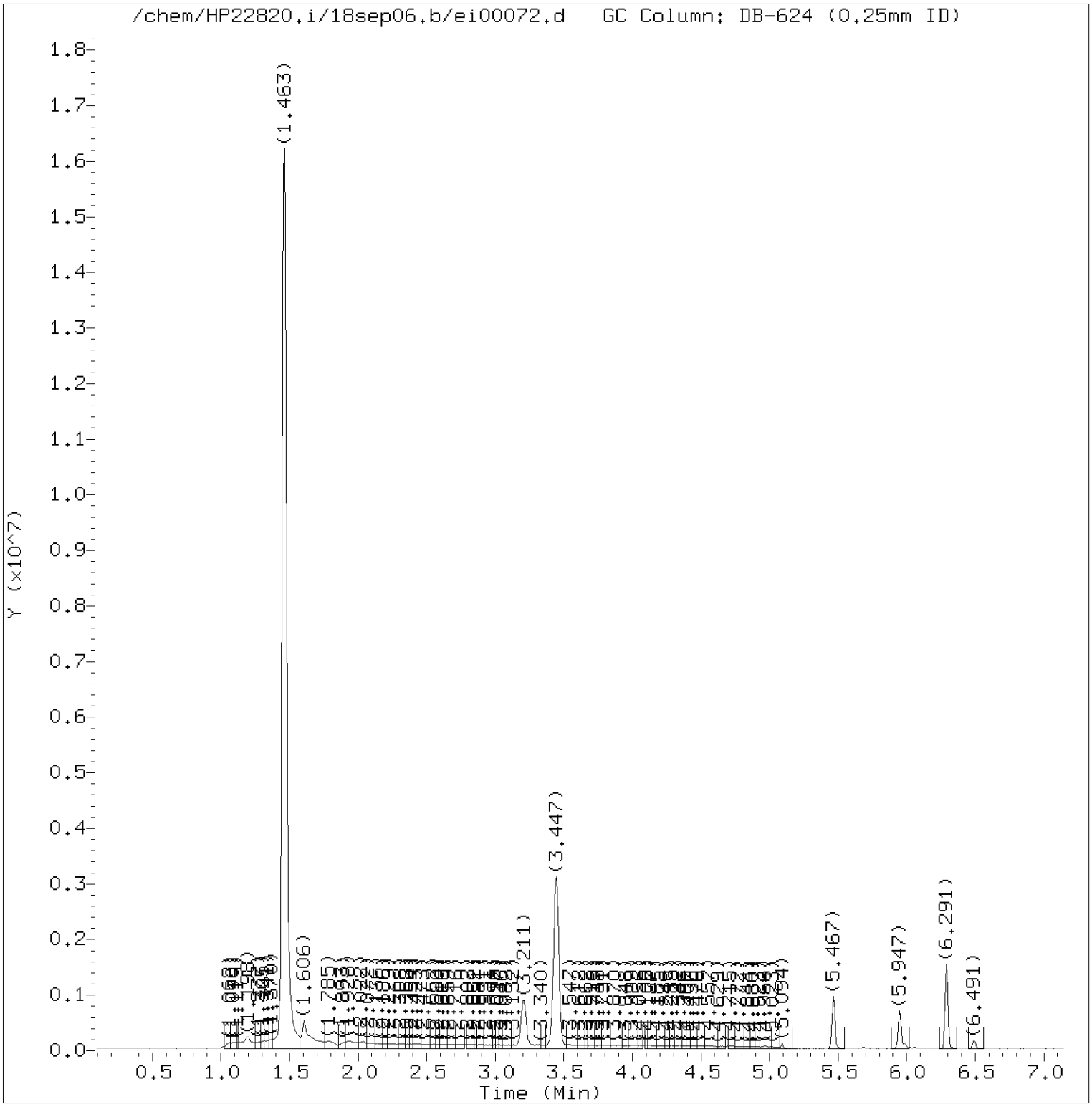
Secondary review performed and digitally signed by Jeffrey B. Smith on 09/07/2018 at 14:24. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

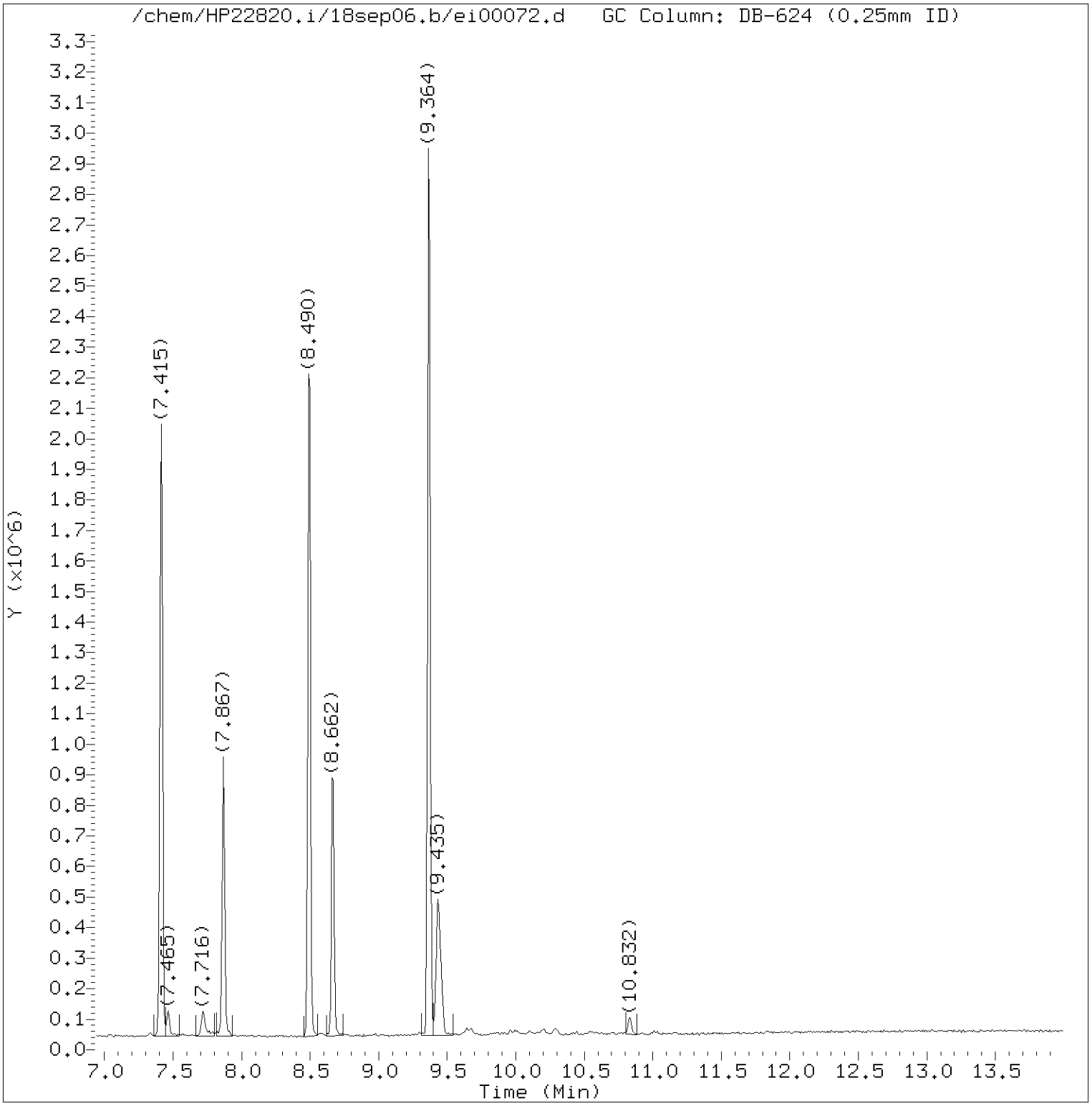
Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00072.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 18:03 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:11 jeb07445

Sample Name: 1263- Lab Sample ID: 9785623

Digitally signed by Jacob E. Bailey
on 09/06/2018 at 19:13.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00072.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 18:03 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:11 jeb07445

Sample Name: 1263- Lab Sample ID: 9785623

Digitally signed by Jacob E. Bailey
on 09/06/2018 at 19:13.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00072.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 18:03 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:11 jeb07445

Sample Name: 1263- Lab Sample ID: 9785623

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
2) Dichlorodifluoromethane	(1)	1.606	85	52736	1.192
18) Freon 113	(1)	3.447	103	1136258	45.453
19) Acetone	(1)	3.540	43	22137	0.977
31) 1,1-Dichloroethane	(1)	4.715	63	6996	0.222
40)*Bromochloromethane	(1)	5.467	130	252438	10.000
43) 1,1,1-Trichloroethane	(1)	5.675	97	7450	0.180
46) Benzene	(2)	5.983	78	60223	1.048
51)*1,4-Difluorobenzene	(2)	6.291	114	938473	10.000
52) Trichloroethene	(2)	6.491	130	36435	1.491
60) 4-Methyl-2-Pentanone	(2)	7.337	43	7913	0.196
61) Toluene	(3)	7.465	91	41166	0.557
67) Tetrachloroethene	(3)	7.867	166	209068	5.205
71)*Chlorobenzene-d5	(3)	8.497	117	974383	10.000
75) m/p-Xylene	(3)	8.669	91	424871	5.354

* = Compound is an internal standard.

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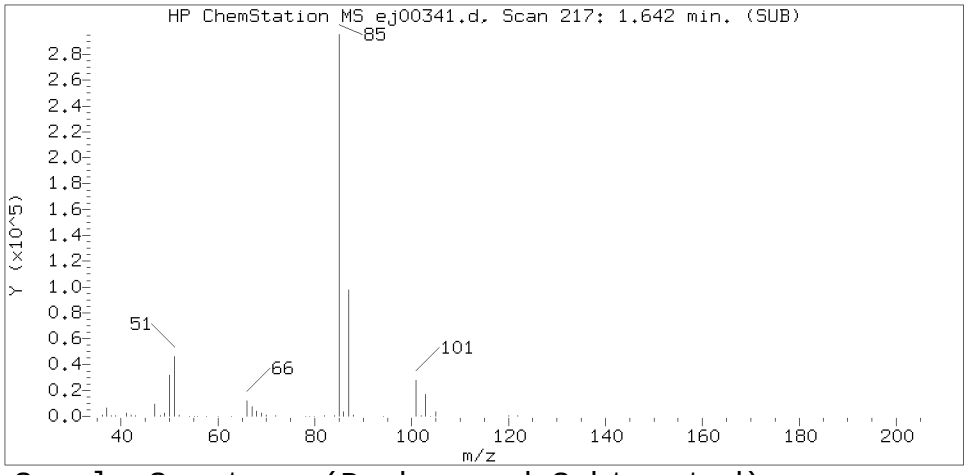
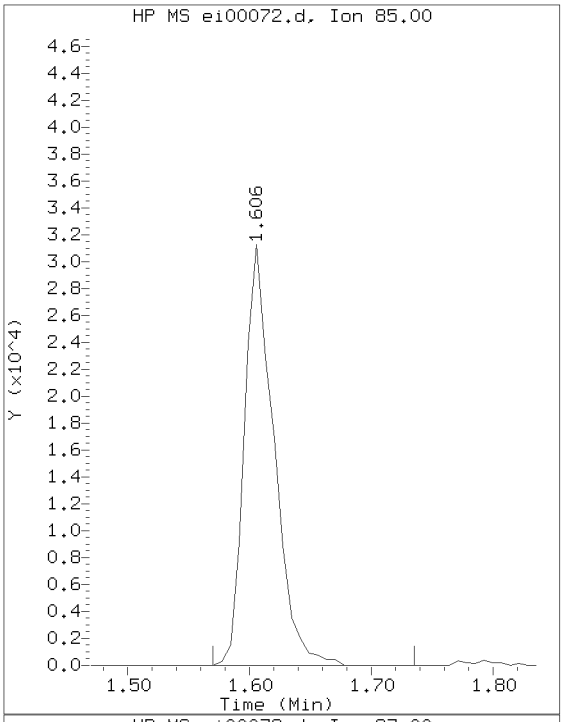
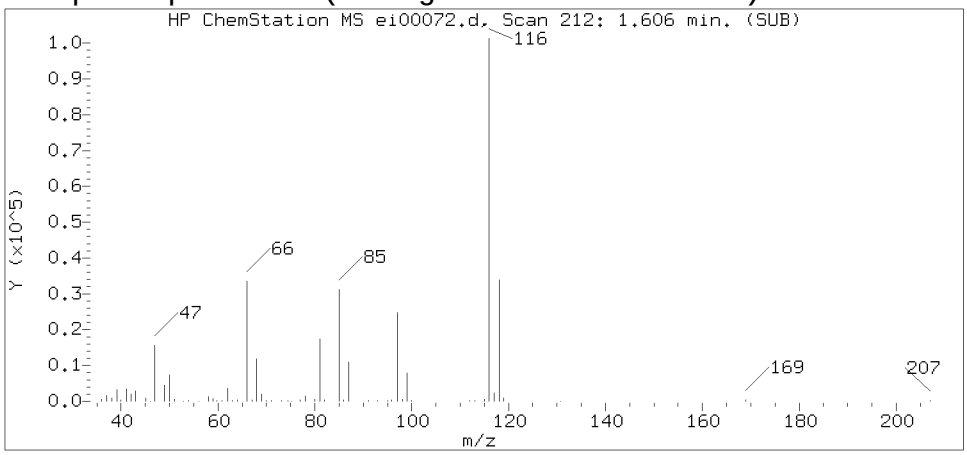
on 09/06/2018 at 19:13.
Target 3.5 esignature user ID: jeb07445

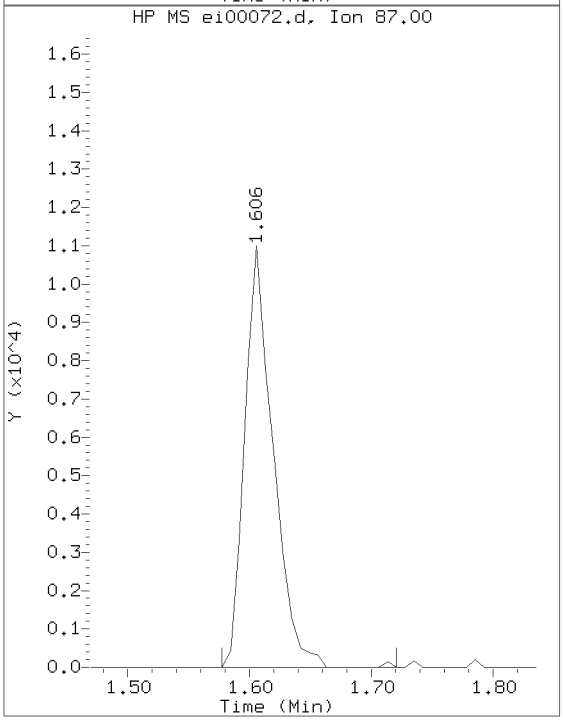
Reference Standard Spectrum for Dichlorodifluoromethane



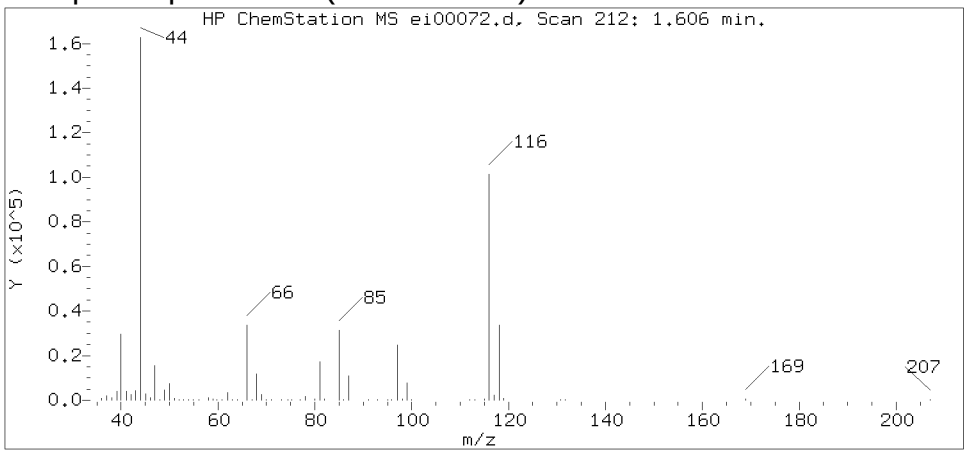


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP22820.i/18sep06.b/ei00072.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 18:03 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:11 jeb07445

Sample Name: 1263- Lab Sample ID: 9785623

Compound Number	: 2
Compound Name	: Dichlorodifluoromethane
Scan Number	: 212
Retention Time (minutes)	: 1.606
Relative Retention Time	: 0.00786
Quant Ion	: 85.00
Area (flag)	: 52736
Concentration (ppb(v))	: 1.1916

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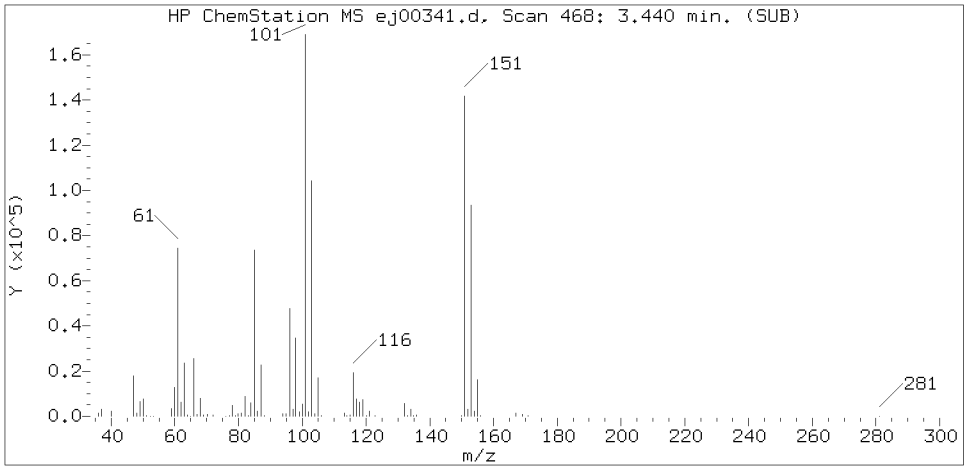
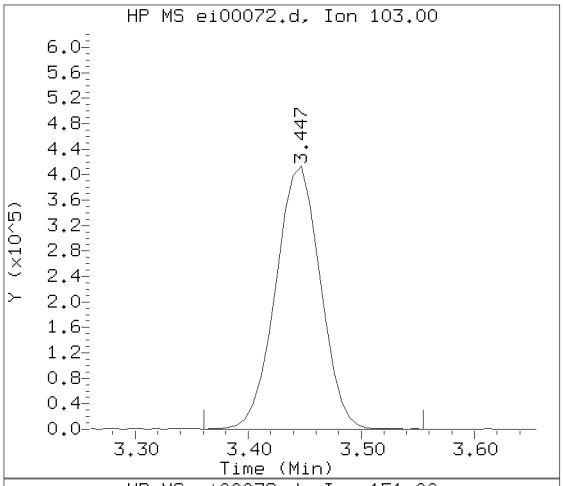
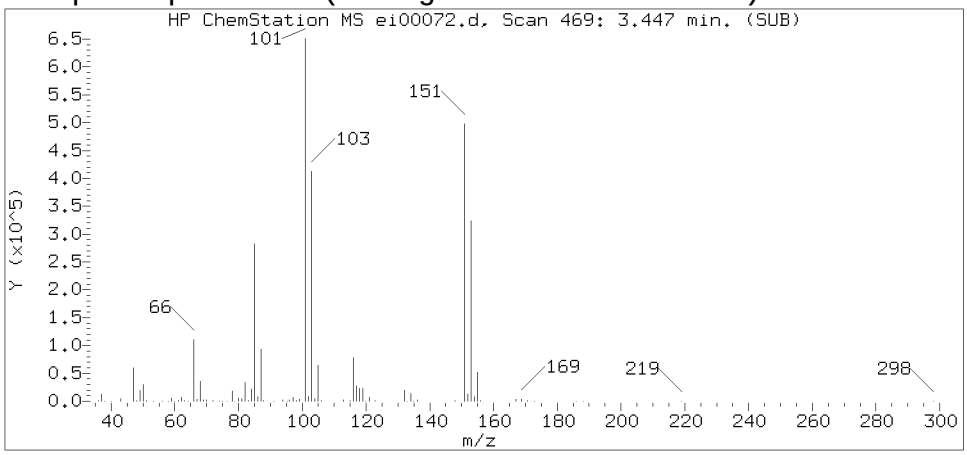
Target 3.5 esignature user ID: jeb07445

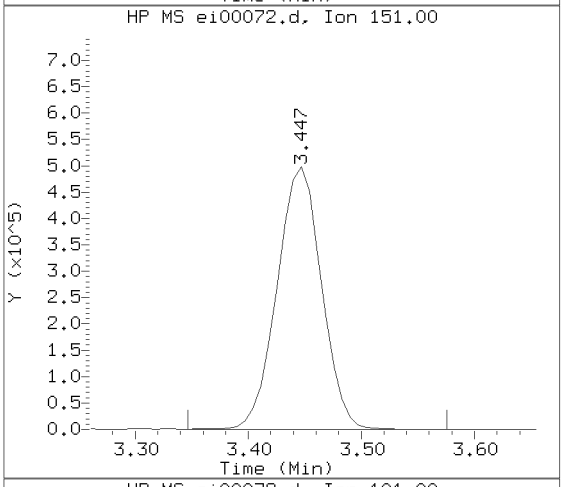
Reference Standard Spectrum for Freon 113



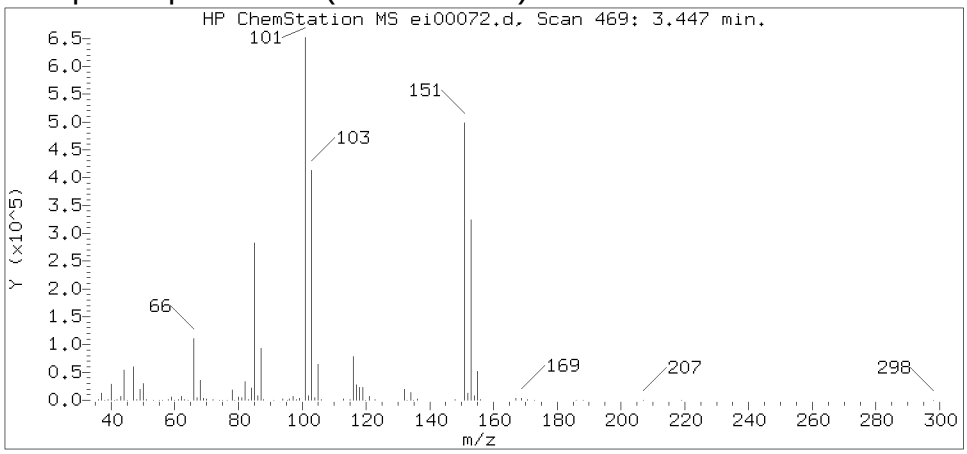


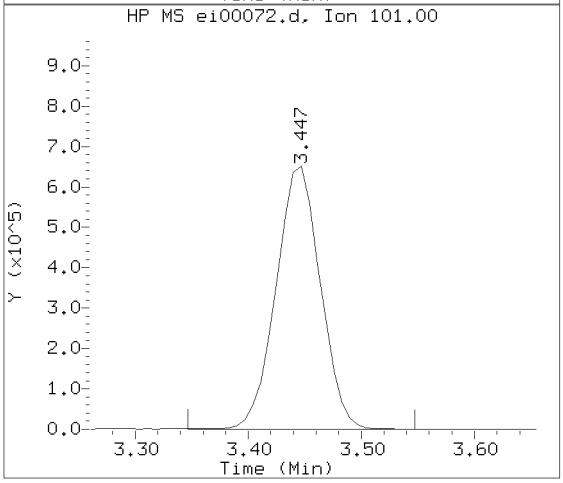
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP22820.i/18sep06.b/ei00072.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 18:03 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:11 jeb07445

Sample Name: 1263- Lab Sample ID: 9785623

Compound Number : 18
Compound Name : Freon 113
Scan Number : 469
Retention Time (minutes): 3.447
Relative Retention Time : 0.00000
Quant Ion : 103.00
Area (flag) : 1136258
Concentration (ppb(v)) : 45.4532

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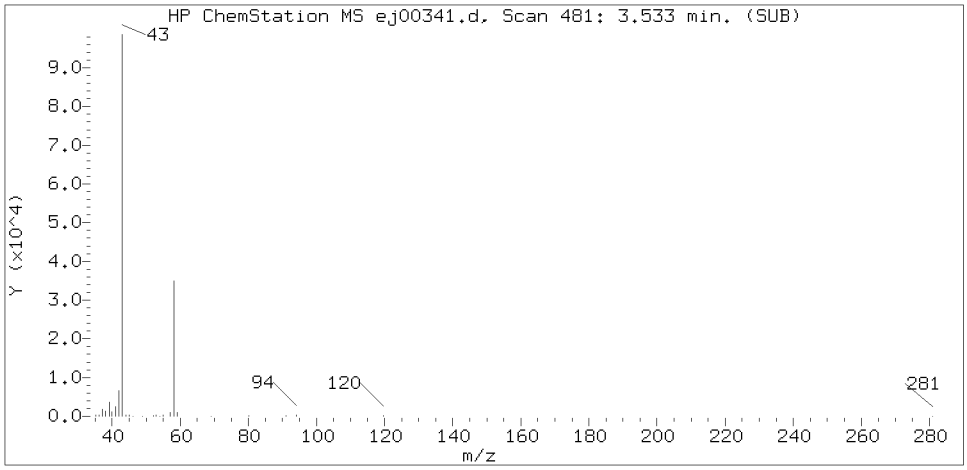
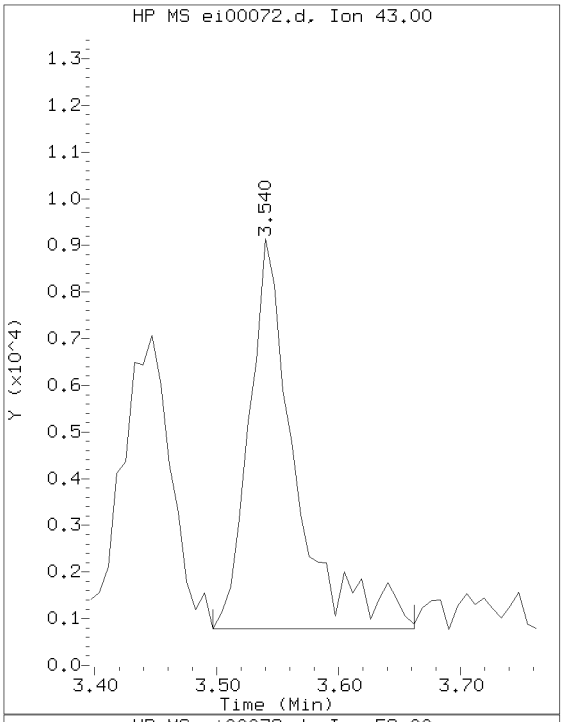
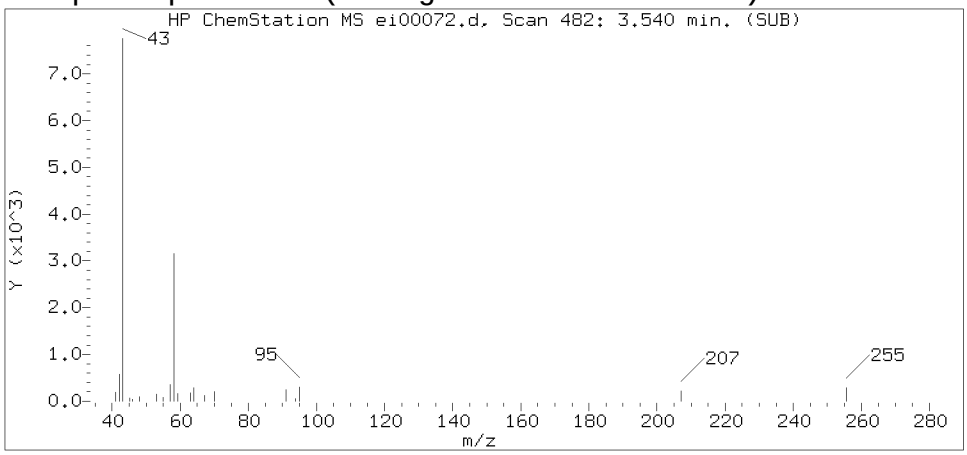
Target 3.5 esignature user ID: jeb07445

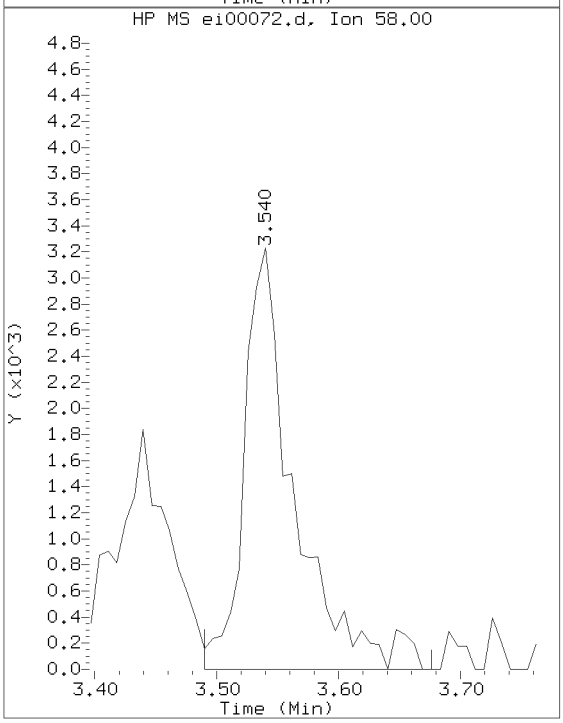
Reference Standard Spectrum for Acetone



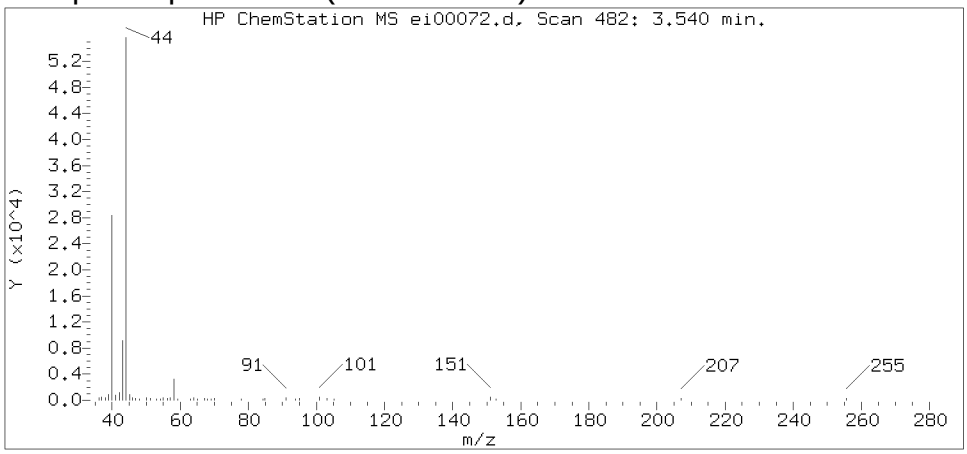


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP22820.i/18sep06.b/ei00072.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 18:03 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:11 jeb07445

Sample Name: 1263- Lab Sample ID: 9785623

Compound Number : 19
Compound Name : Acetone
Scan Number : 482
Retention Time (minutes): 3.540
Relative Retention Time :-0.00131
Quant Ion : 43.00
Area (flag) : 22137
Concentration (ppb(v)) : 0.9765

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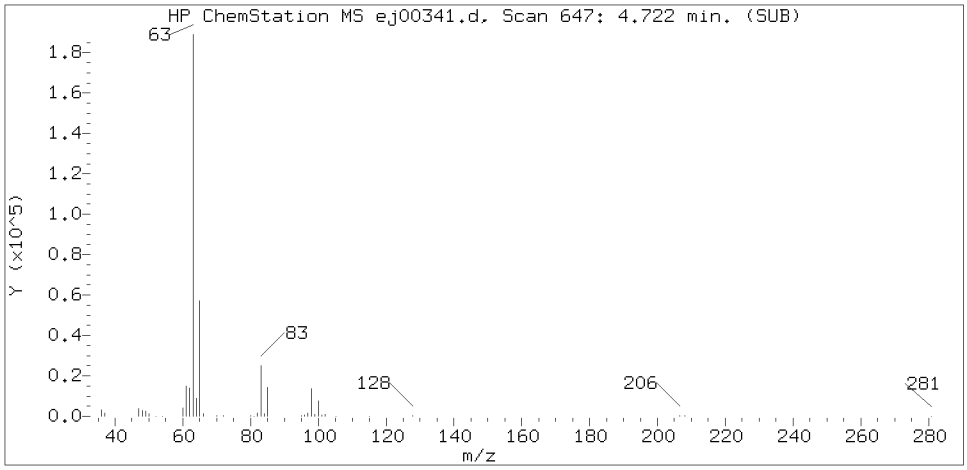
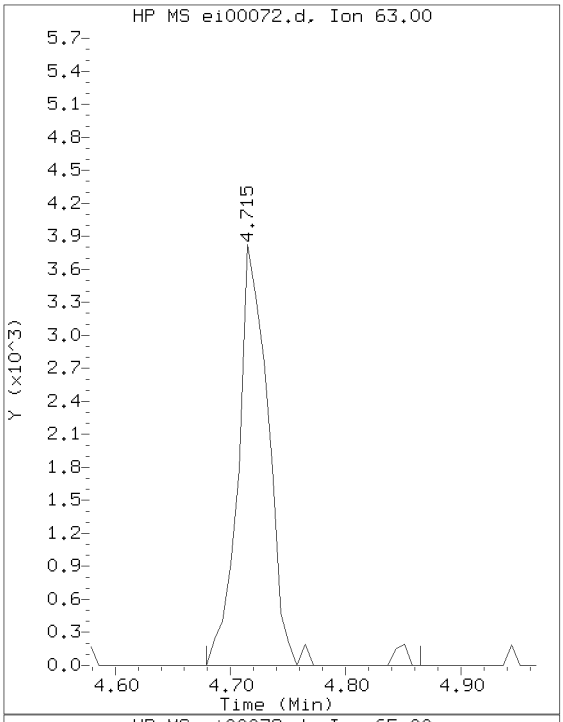
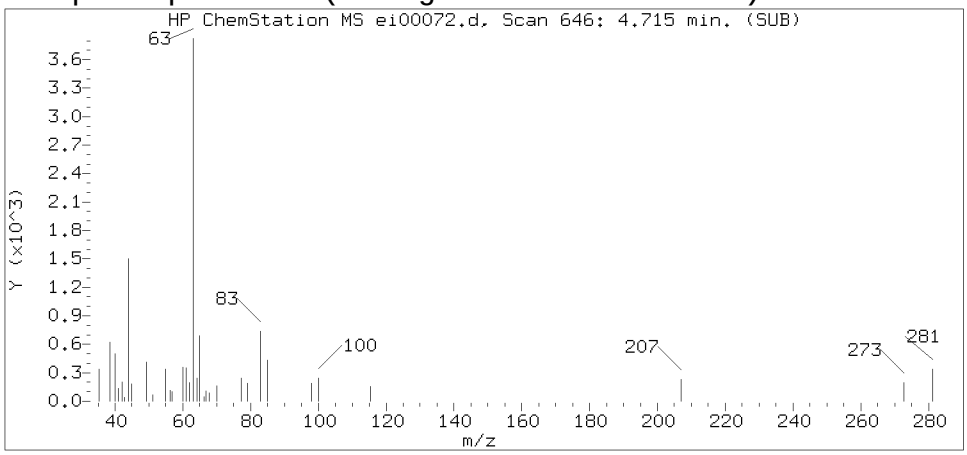
Target 3.5 esignature user ID: jeb07445

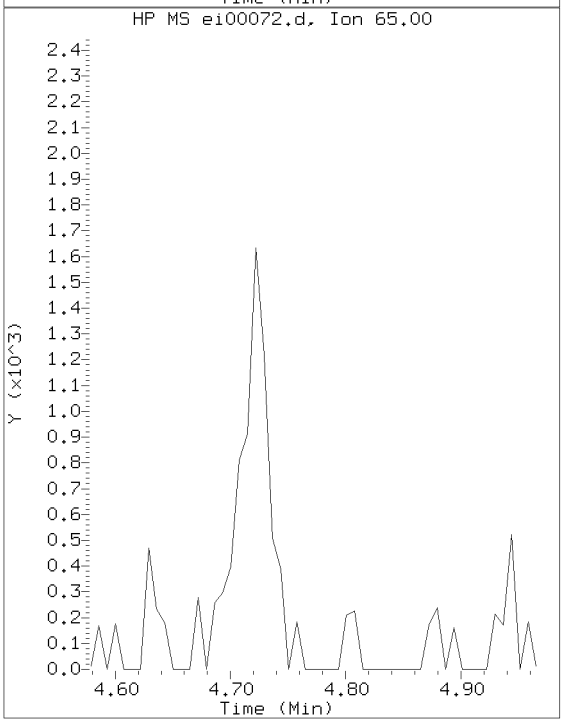
Reference Standard Spectrum for 1,1-Dichloroethane



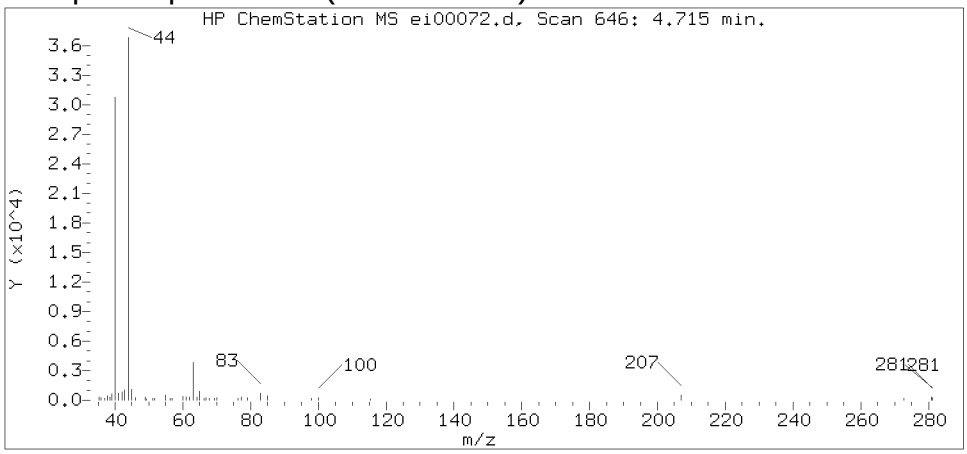


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP22820.i/18sep06.b/ei00072.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 18:03 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:11 jeb07445

Sample Name: 1263- Lab Sample ID: 9785623

Compound Number	: 31
Compound Name	: 1,1-Dichloroethane
Scan Number	: 646
Retention Time (minutes)	: 4.715
Relative Retention Time	: 0.00131
Quant Ion	: 63.00
Area (flag)	: 6996
Concentration (ppb(v))	: 0.2222

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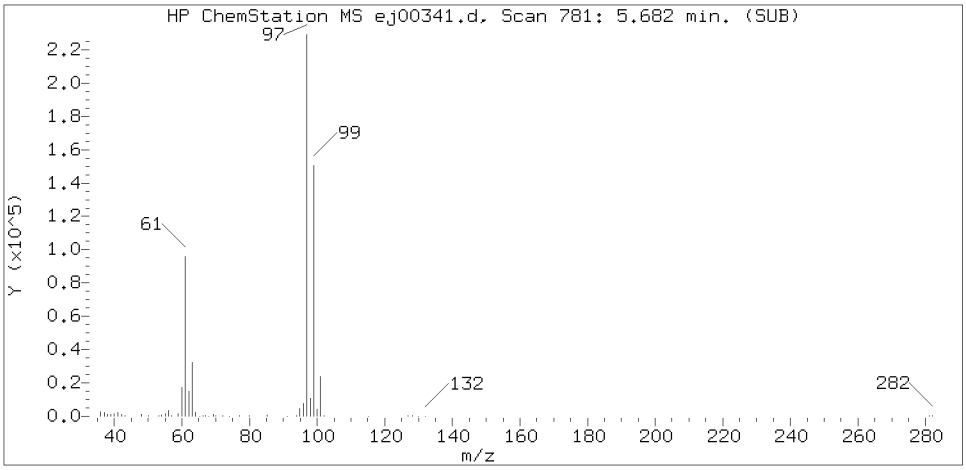
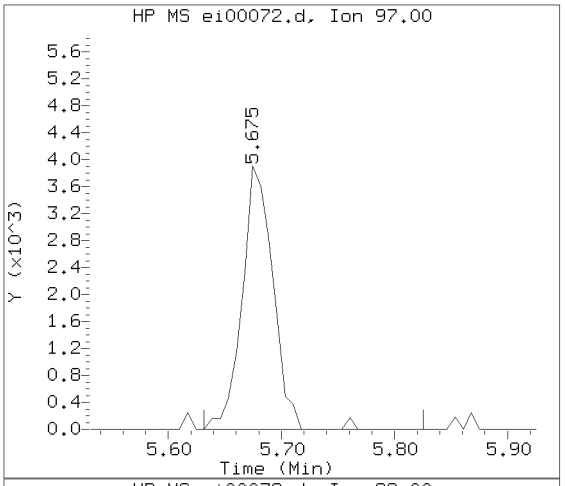
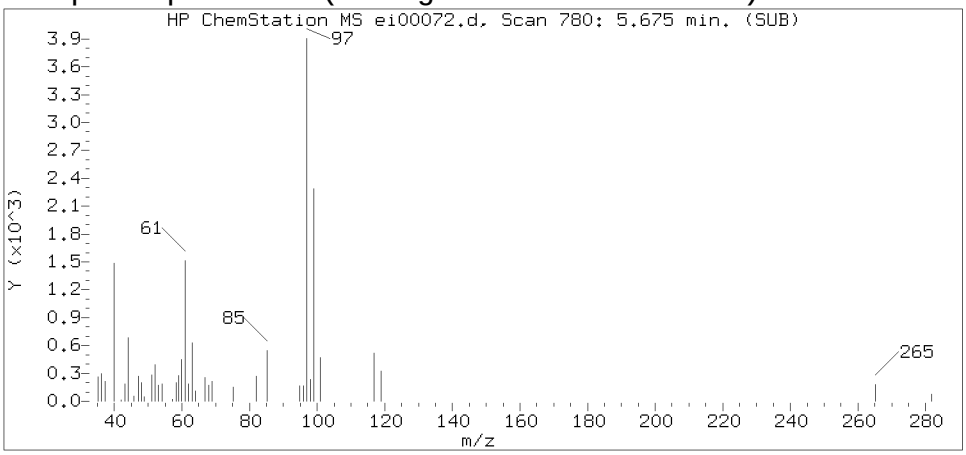
Target 3.5 esignature user ID: jeb07445

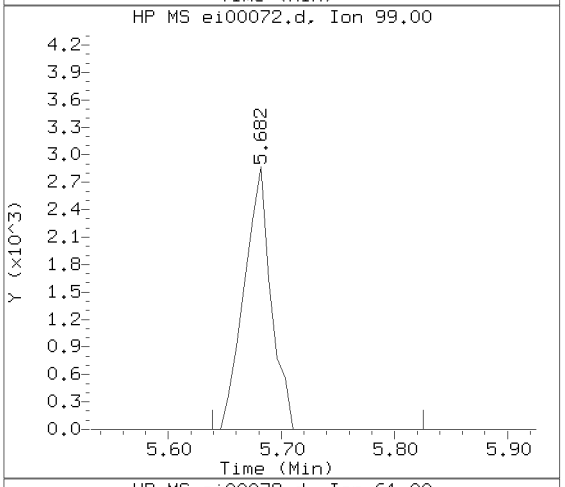
Reference Standard Spectrum for 1,1,1-Trichloroethane



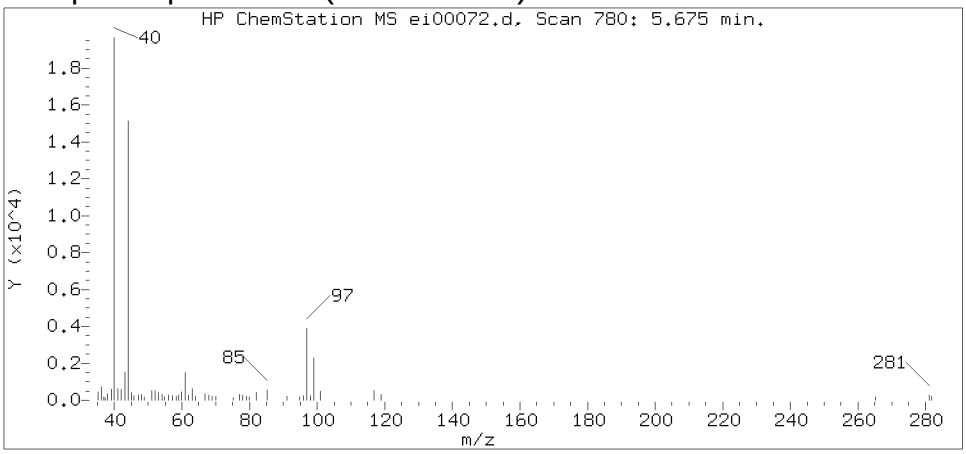


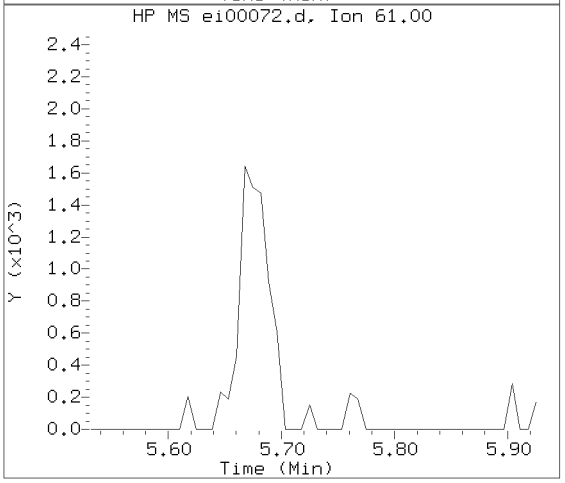
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP22820.i/18sep06.b/ei00072.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 18:03 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:11 jeb07445

Sample Name: 1263- Lab Sample ID: 9785623

Compound Number : 43
Compound Name : 1,1,1-Trichloroethane
Scan Number : 780
Retention Time (minutes): 5.675
Relative Retention Time : 0.00131
Quant Ion : 97.00
Area (flag) : 7450
Concentration (ppb(v)) : 0.1802

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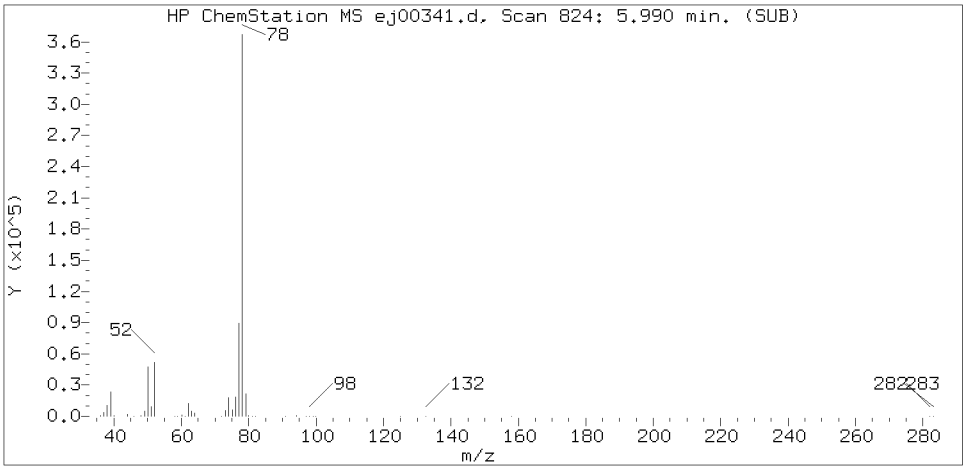
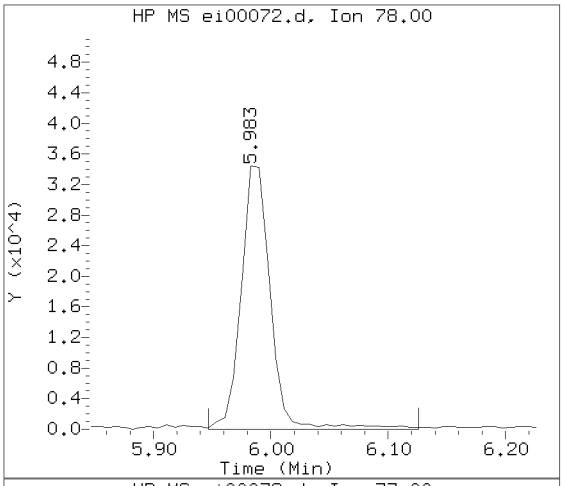
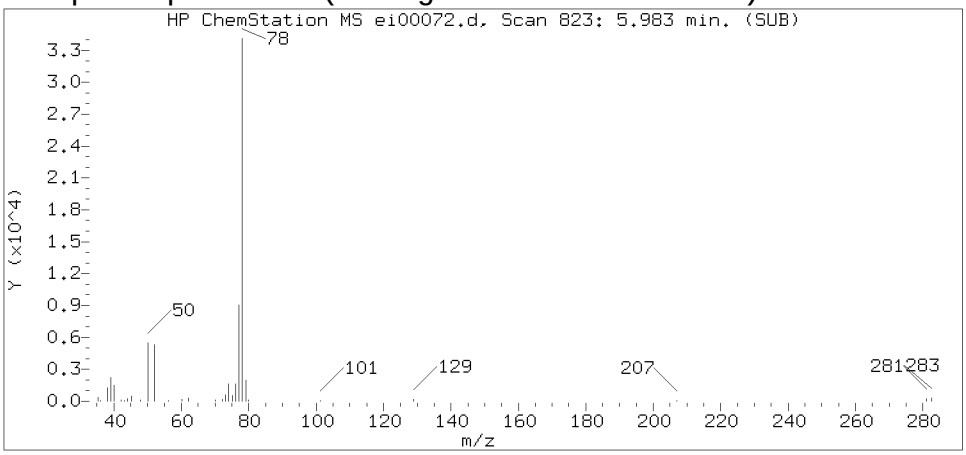
Target 3.5 esignature user ID: jeb07445

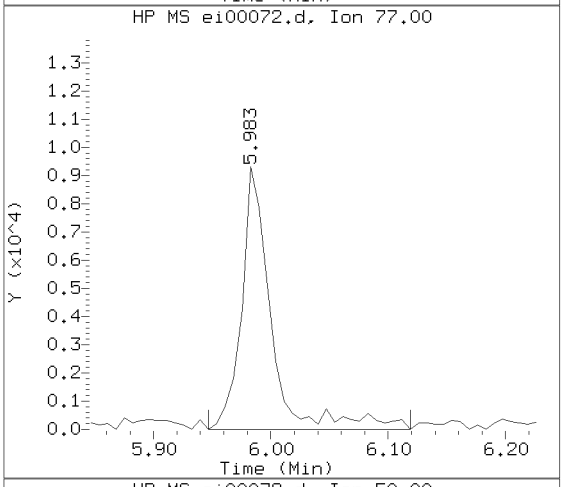
Reference Standard Spectrum for Benzene



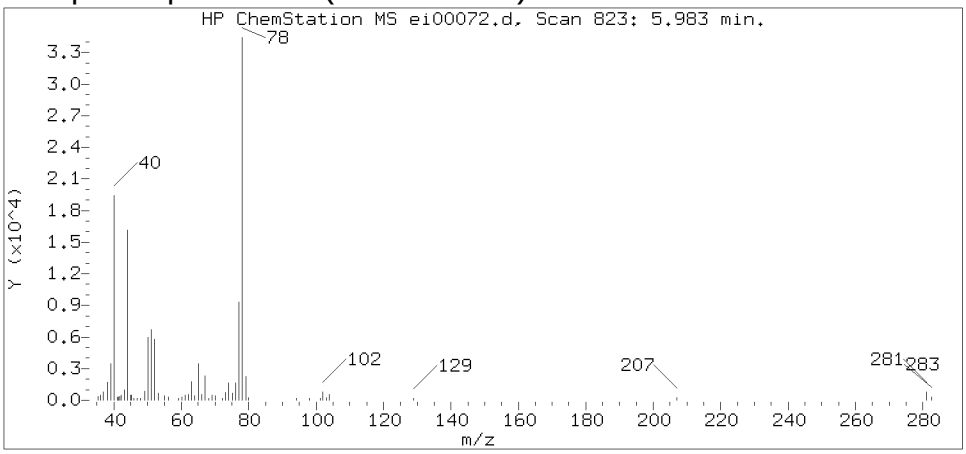


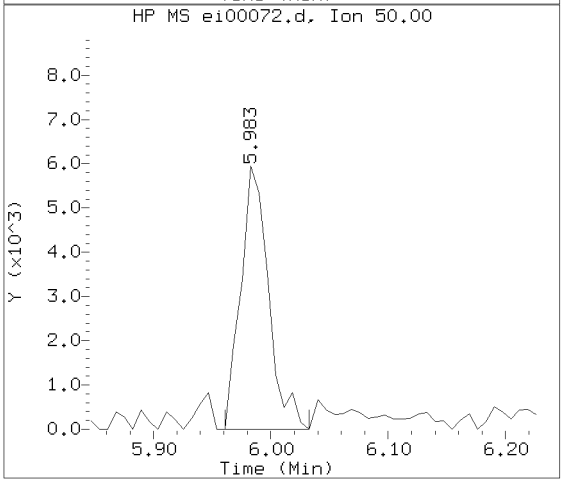
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP22820.i/18sep06.b/ei00072.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 18:03 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:11 jeb07445

Sample Name: 1263- Lab Sample ID: 9785623

Compound Number : 46
Compound Name : Benzene
Scan Number : 823
Retention Time (minutes): 5.983
Relative Retention Time : 0.00114
Quant Ion : 78.00
Area (flag) : 60223
Concentration (ppb(v)) : 1.0477

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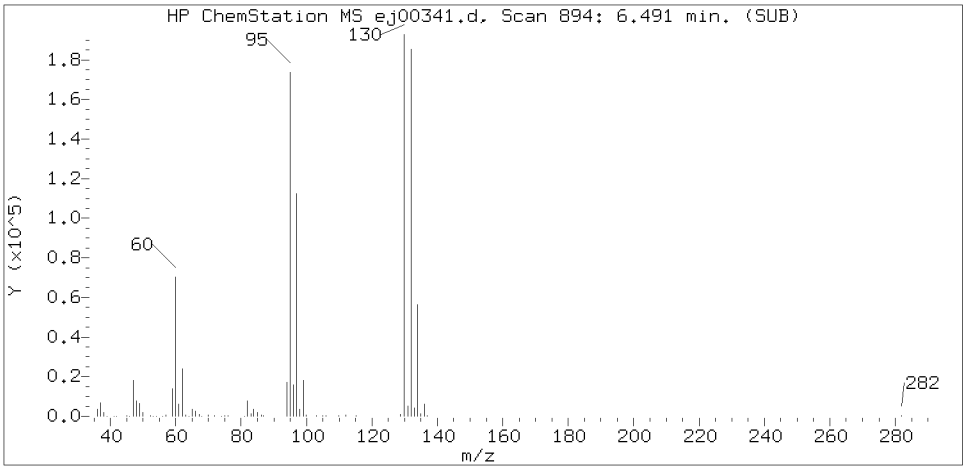
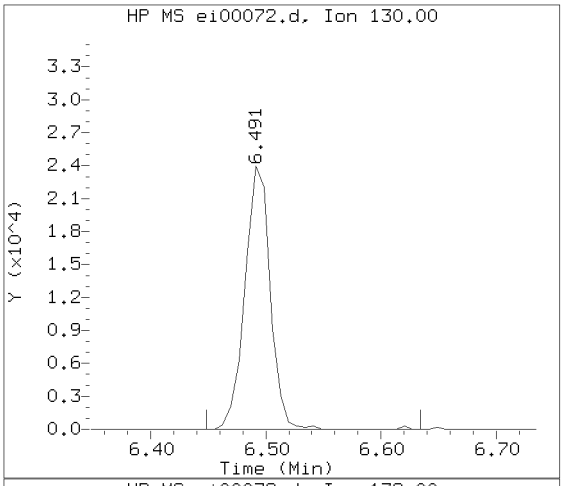
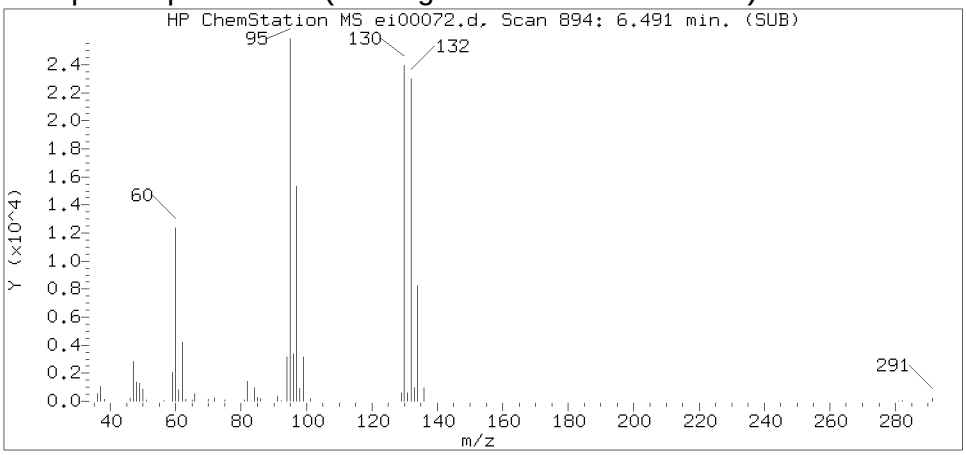
Target 3.5 esignature user ID: jeb07445

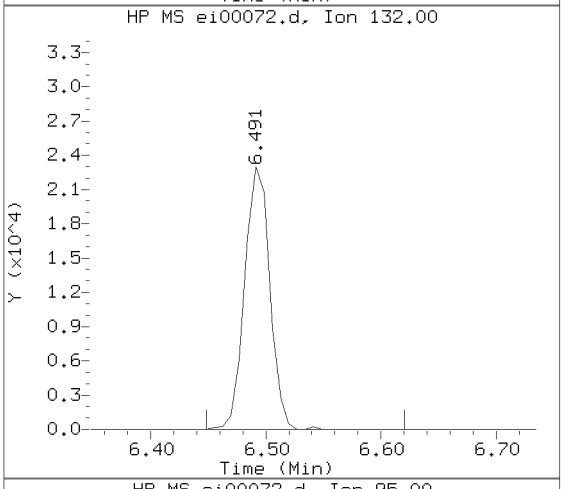
Reference Standard Spectrum for Trichloroethene



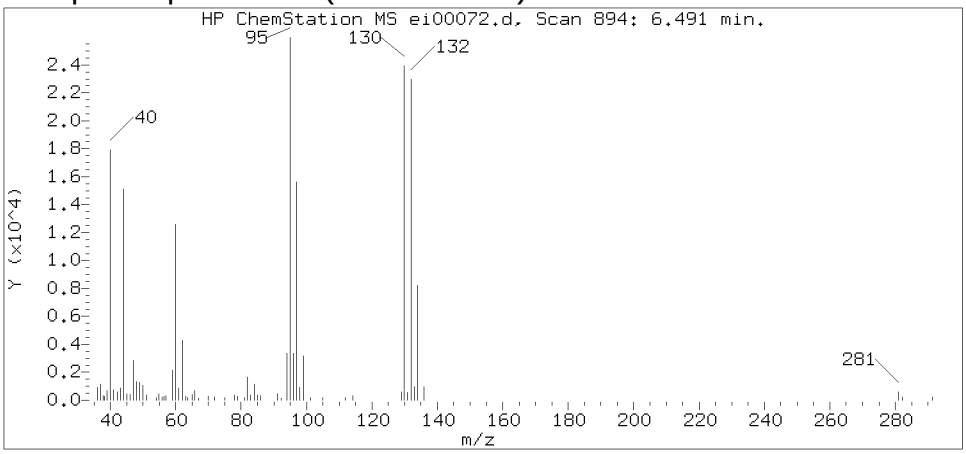


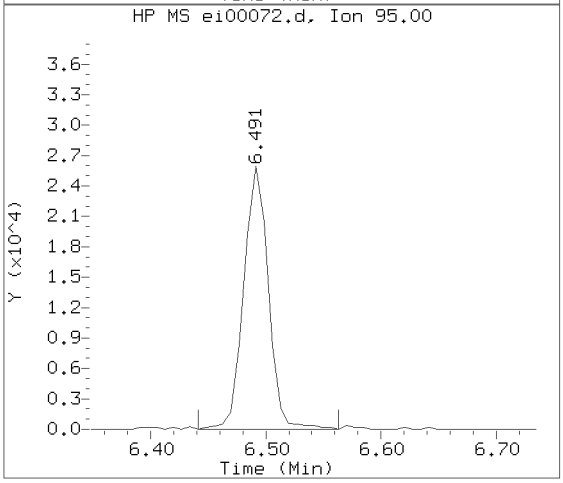
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP22820.i/18sep06.b/ei00072.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 18:03 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:11 jeb07445

Sample Name: 1263- Lab Sample ID: 9785623

Compound Number : 52
Compound Name : Trichloroethene
Scan Number : 894
Retention Time (minutes): 6.491
Relative Retention Time : 0.00000
Quant Ion : 130.00
Area (flag) : 36435
Concentration (ppb(v)) : 1.4907

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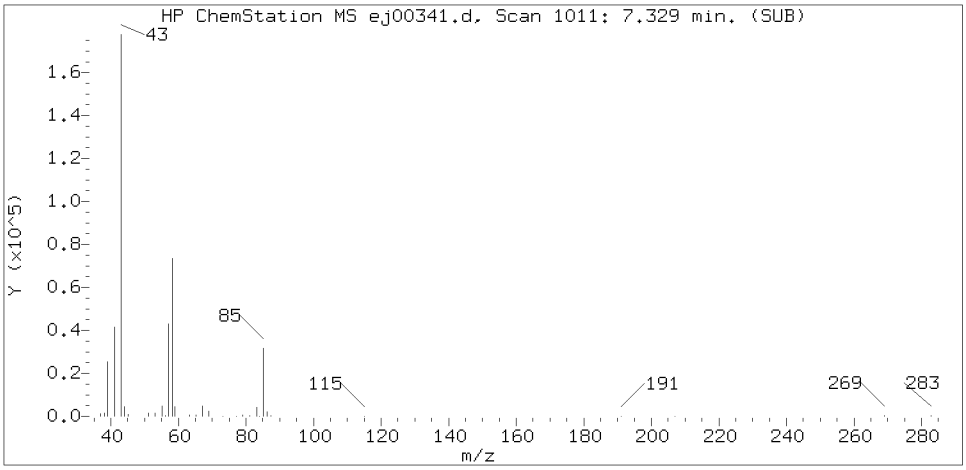
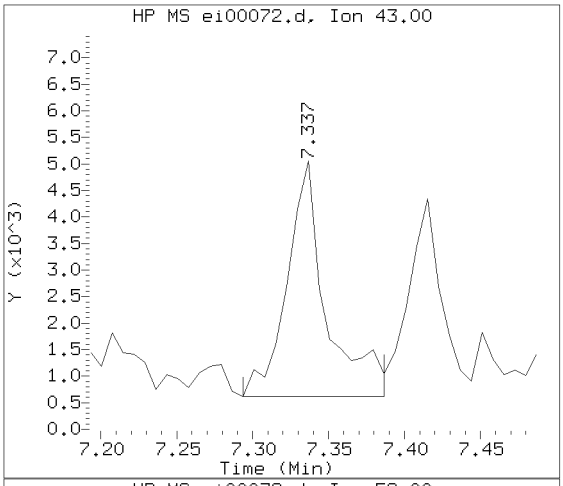
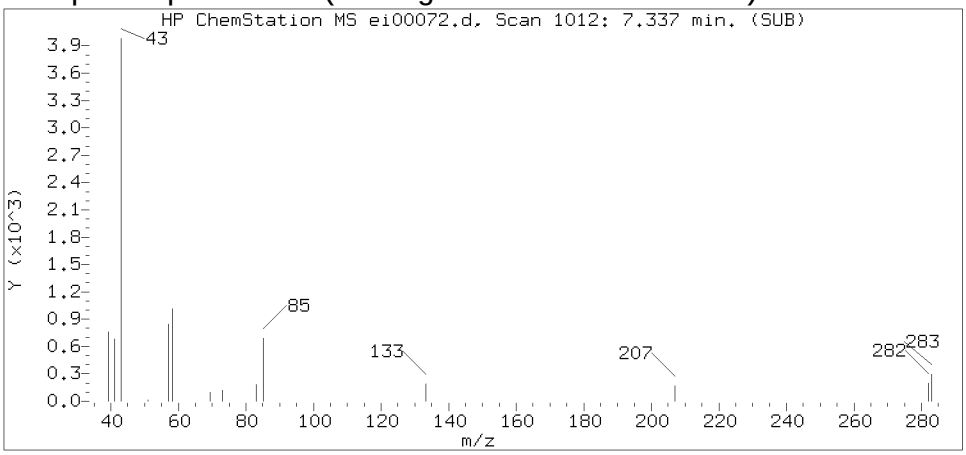
Target 3.5 esignature user ID: jeb07445

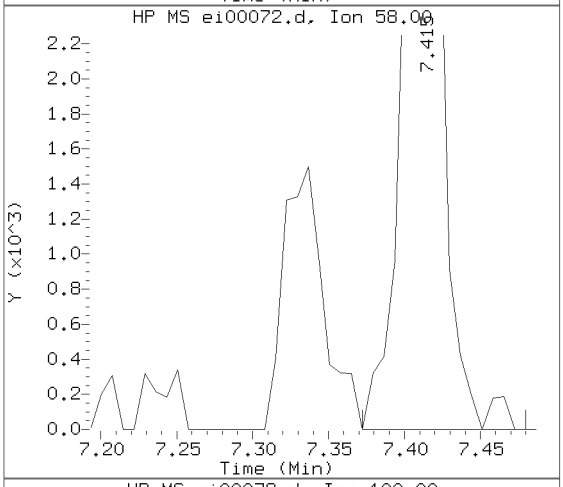
Reference Standard Spectrum for 4-Methyl-2-Pentanone



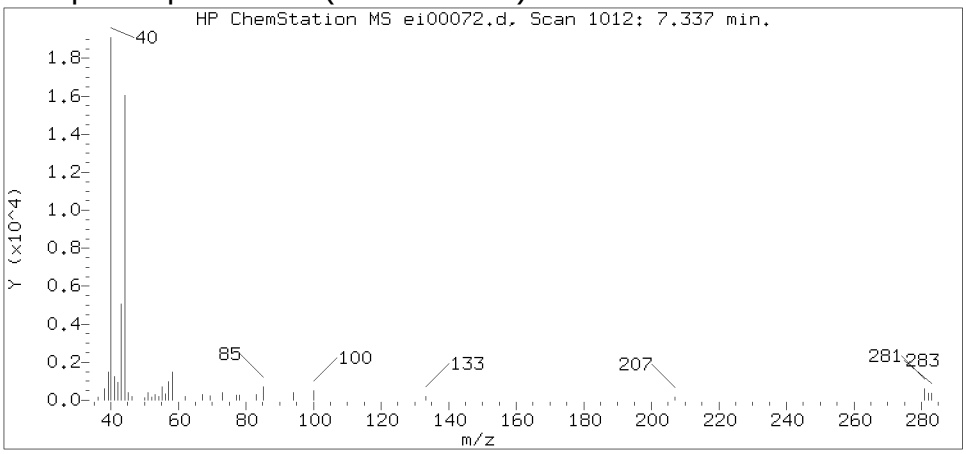


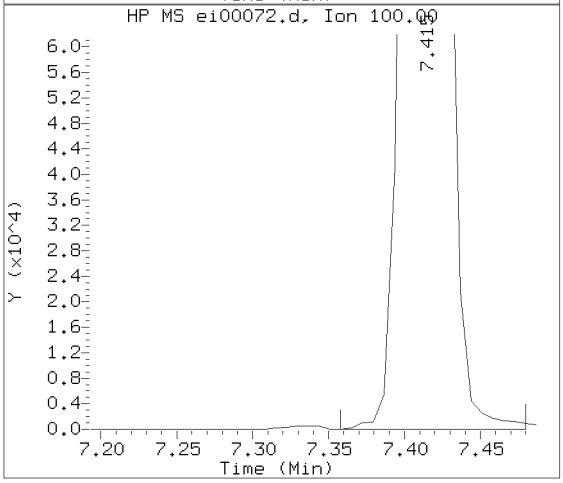
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP22820.i/18sep06.b/ei00072.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 18:03 Analyst ID: jeb07445

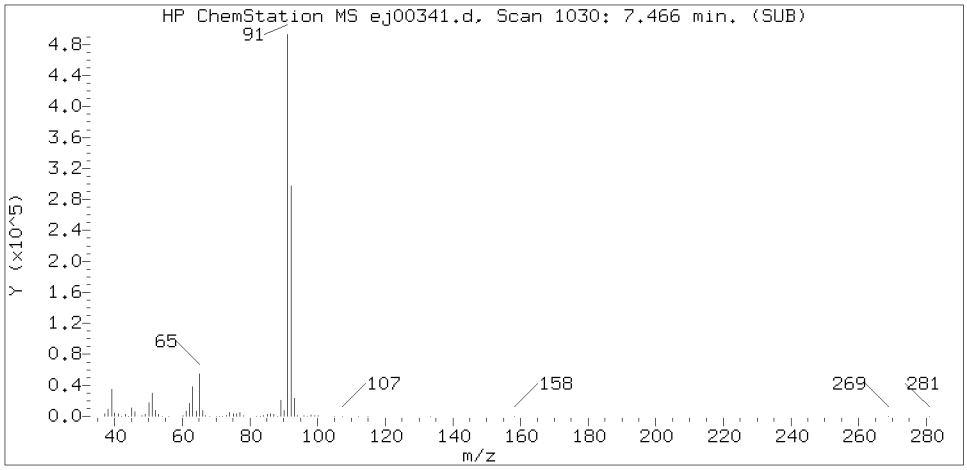
Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:11 jeb07445

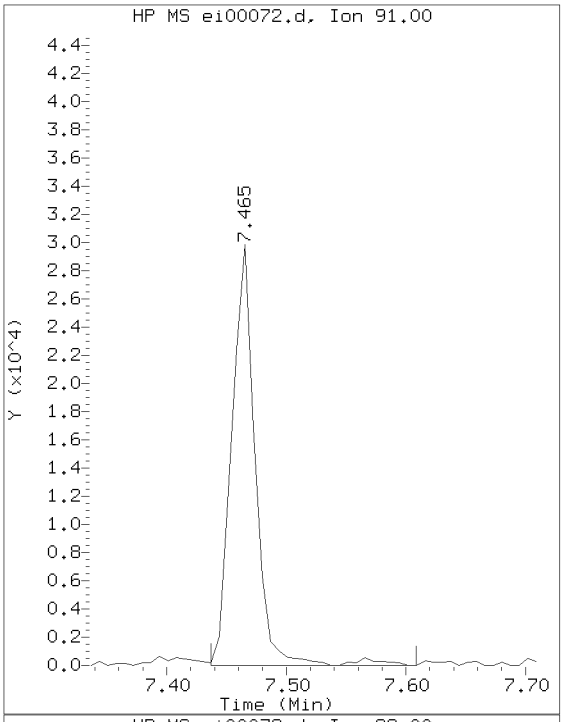
Sample Name: 1263- Lab Sample ID: 9785623

Compound Number : 60
Compound Name : 4-Methyl-2-Pentanone
Scan Number : 1012
Retention Time (minutes): 7.337
Relative Retention Time :-0.00114
Quant Ion : 43.00
Area (flag) : 7913
Concentration (ppb(v)) : 0.1959

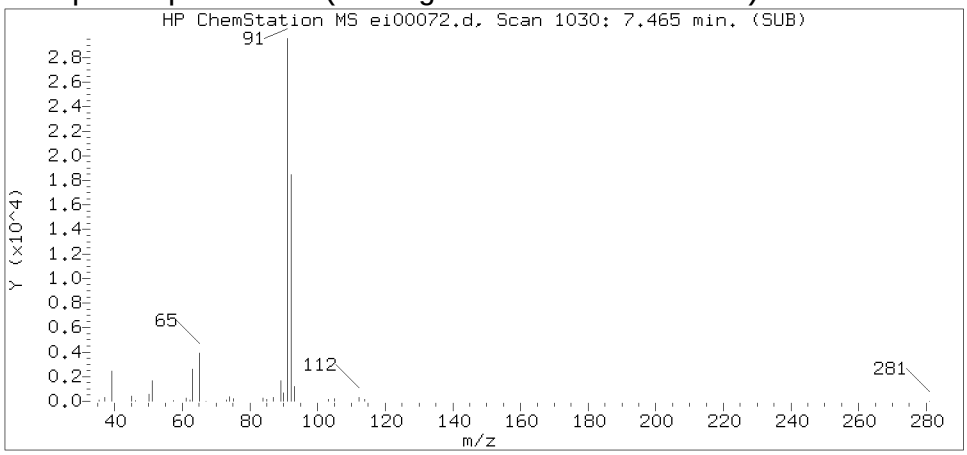
Digitally signed by Jacob E. Bailey on 09/06/2018 at 19:13.
Target 3.5 esignature user ID: jeb07445

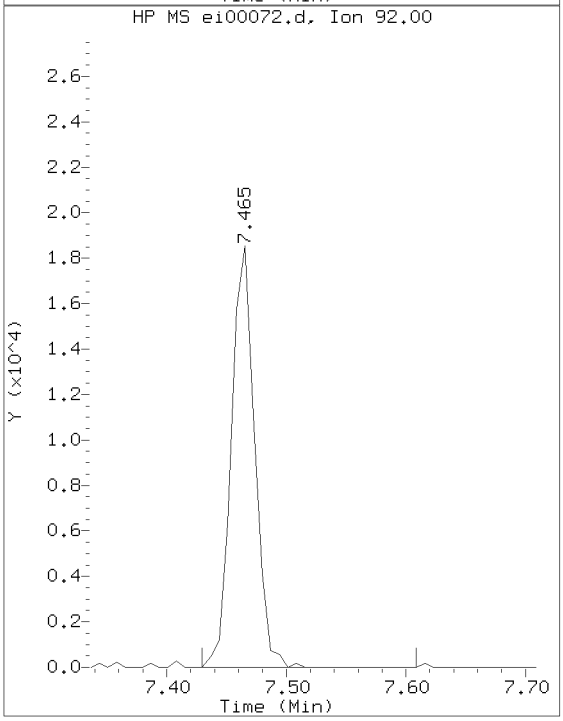
Reference Standard Spectrum for Toluene



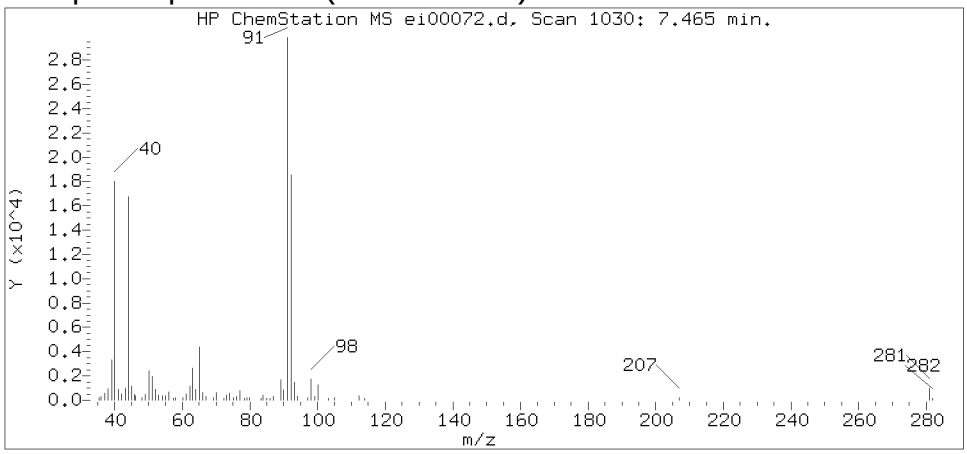


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP22820.i/18sep06.b/ei00072.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 18:03 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:11 jeb07445

Sample Name: 1263- Lab Sample ID: 9785623

Compound Number	: 61
Compound Name	: Toluene
Scan Number	: 1030
Retention Time (minutes)	: 7.465
Relative Retention Time	: 0.00000
Quant Ion	: 91.00
Area (flag)	: 41166
Concentration (ppb(v))	: 0.5574

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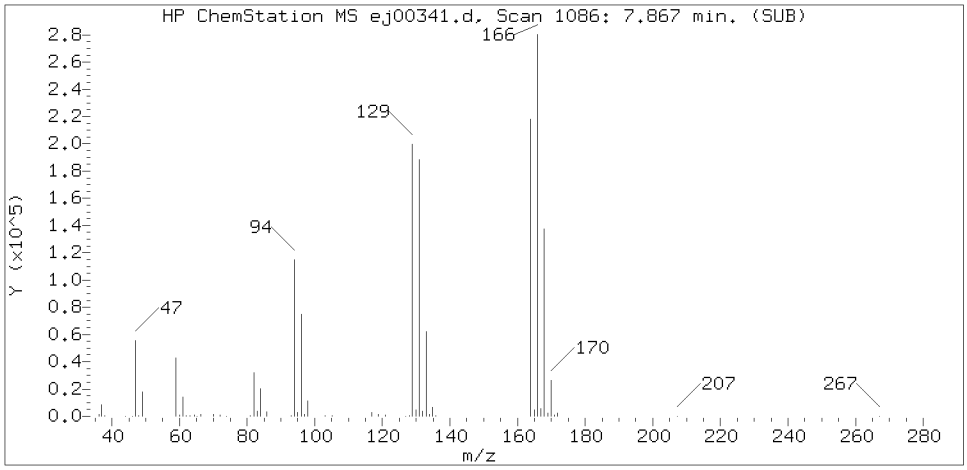
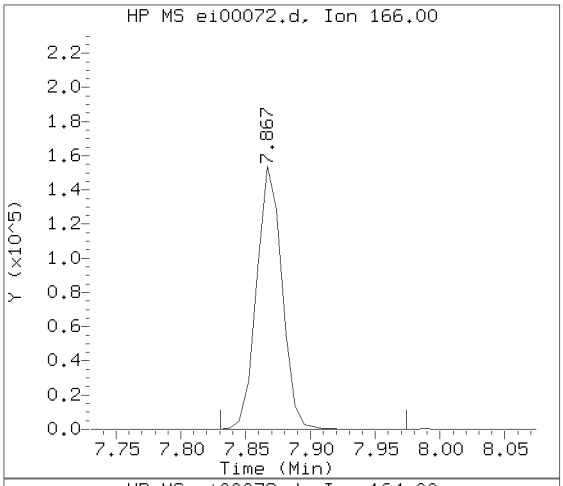
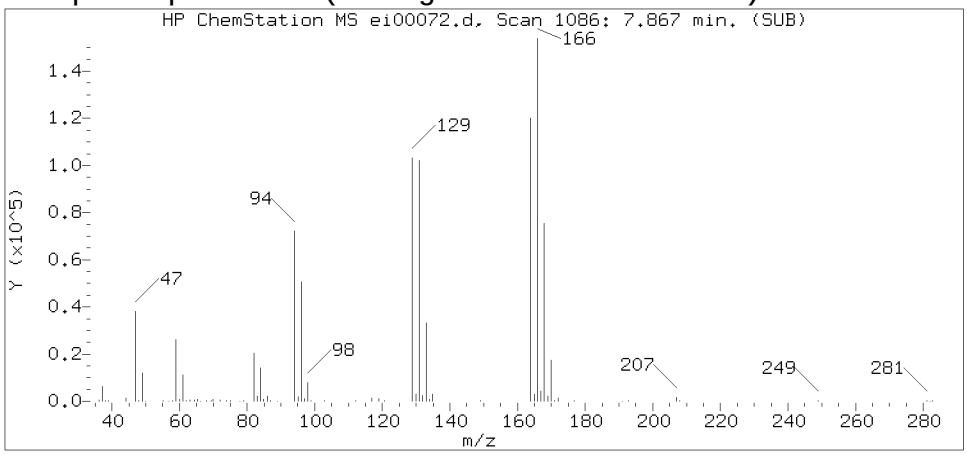
Target 3.5 esignature user ID: jeb07445

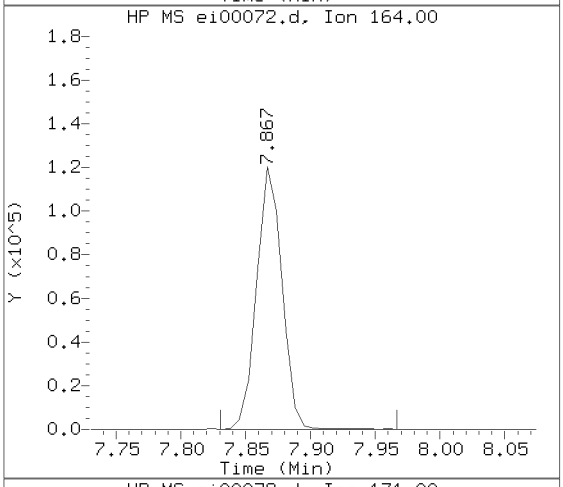
Reference Standard Spectrum for Tetrachloroethene



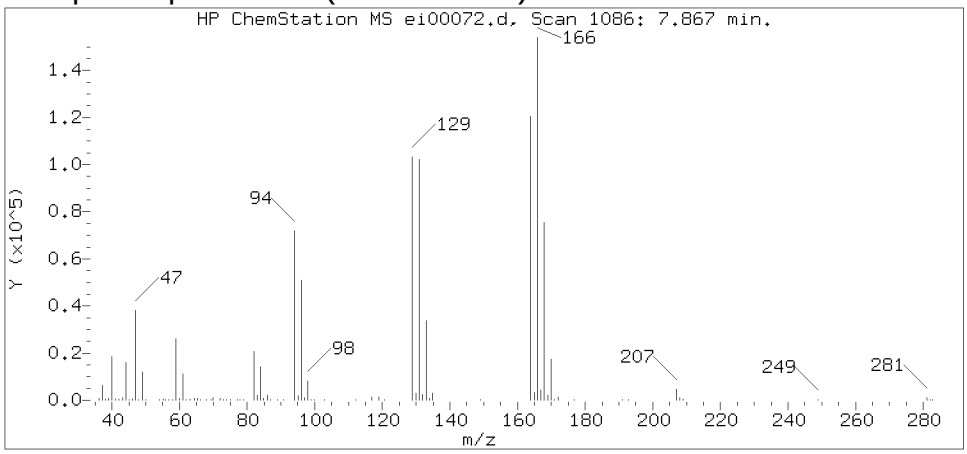


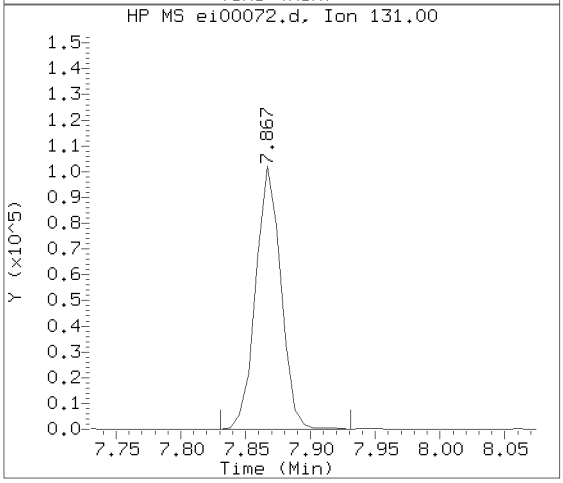
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP22820.i/18sep06.b/ei00072.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 18:03 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:11 jeb07445

Sample Name: 1263- Lab Sample ID: 9785623

Compound Number : 67
Compound Name : Tetrachloroethene
Scan Number : 1086
Retention Time (minutes): 7.867
Relative Retention Time : 0.00000
Quant Ion : 166.00
Area (flag) : 209068
Concentration (ppb(v)) : 5.2048

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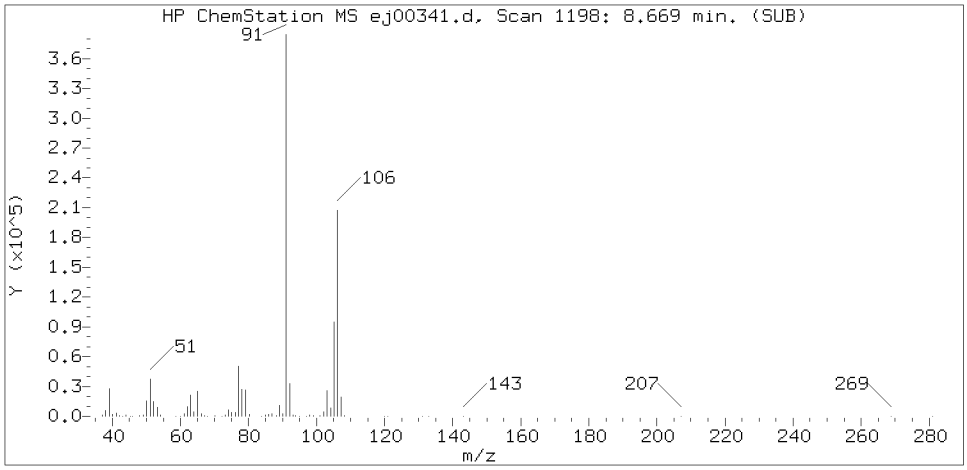
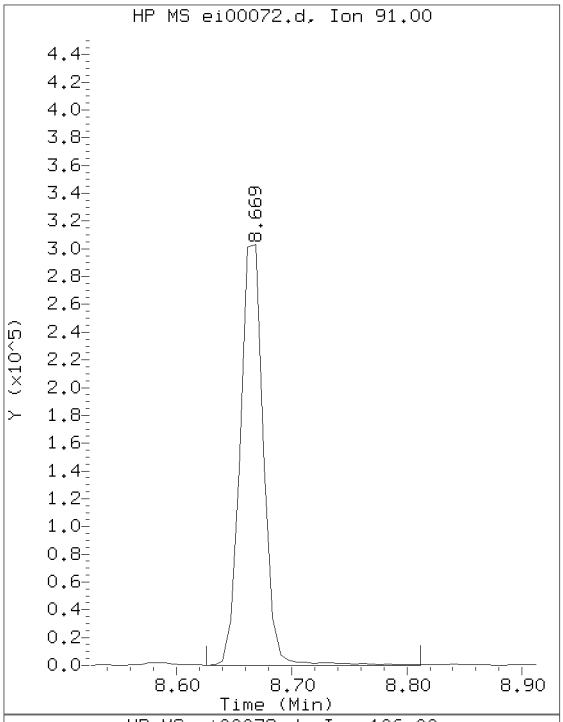
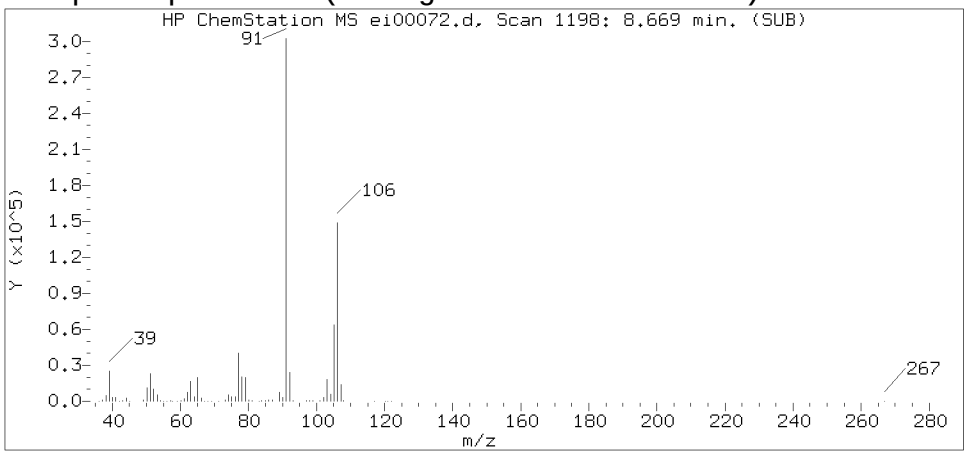
Target 3.5 esignature user ID: jeb07445

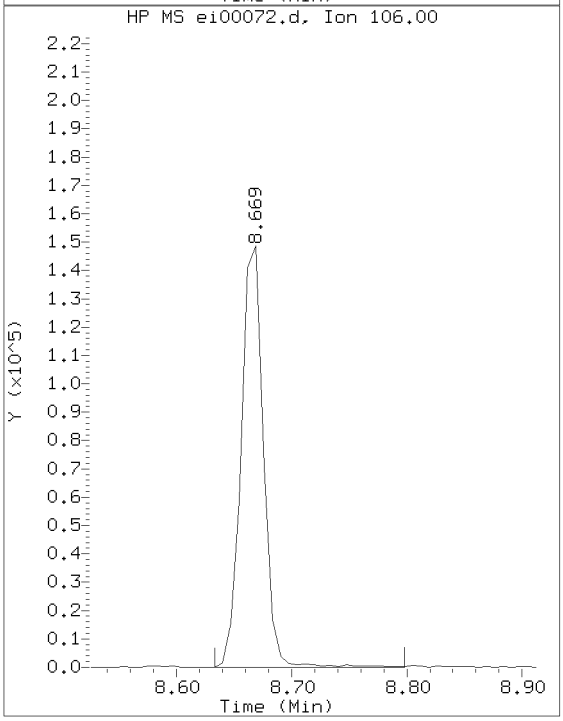
Reference Standard Spectrum for m/p-Xylene



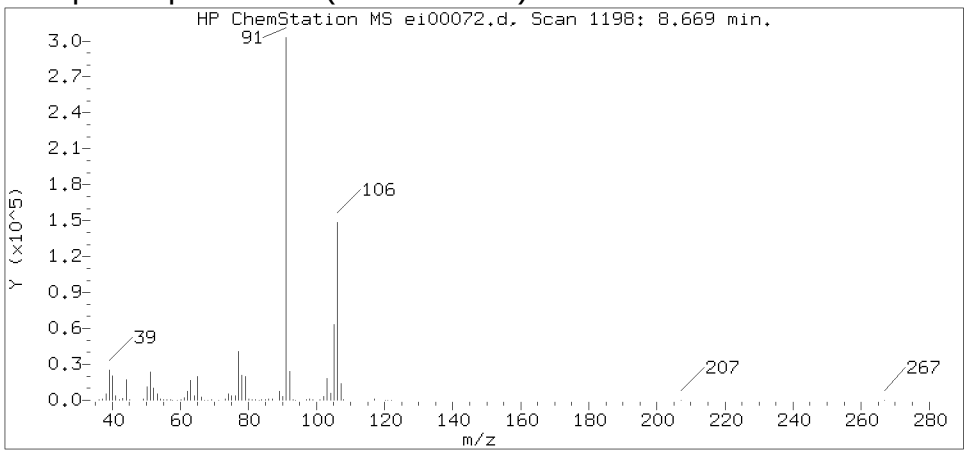


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP22820.i/18sep06.b/ei00072.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 18:03 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:11 jeb07445

Sample Name: 1263- Lab Sample ID: 9785623

Compound Number	: 75
Compound Name	: m/p-Xylene
Scan Number	: 1198
Retention Time (minutes)	: 8.669
Relative Retention Time	: 0.00000
Quant Ion	: 91.00
Area (flag)	: 424871
Concentration (ppb(v))	: 5.3543

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Target 3.5 esignature user ID: jeb07445

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE02

Sample Media:	CANISTER	Lab Sample ID:	9785624
Canister ID:	1176	Lab File ID:	ei00070.d
Pressure Received:	11.3 psia	Date Collected:	08/30/2018
Final Pressure:	22.5 psia	Date Received:	09/05/2018
Nominal Volume:	200 cc	Analyzed Date:	09/06/2018
Injection Volume:	400 cc	Analyzed Time:	17:14
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	2.4	J
75-45-6	Chlorodifluoromethane	0.53	U
76-14-2	Freon 114	0.84	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.31	U
106-99-0	1,3-Butadiene	0.38	U
74-83-9	Bromomethane	0.70	U
75-00-3	Chloroethane	0.50	U
75-43-4	Dichlorofluoromethane	0.46	U
75-69-4	Trichlorofluoromethane	1.5	J
109-66-0	Pentane	3.9	
75-35-4	1,1-Dichloroethene	0.56	U
76-13-1	Freon 113	0.84	U
67-64-1	Acetone	47	
75-15-0	Carbon Disulfide	5.4	
107-05-1	3-Chloropropene	0.47	U
75-09-2	Methylene Chloride	0.87	U
156-60-5	trans-1,2-Dichloroethene	0.34	U
1634-04-4	Methyl t-Butyl Ether	0.54	U
110-54-3	Hexane	1.7	J
75-34-3	1,1-Dichloroethane	0.52	J
156-59-2	cis-1,2-Dichloroethene	0.85	J
78-93-3	2-Butanone	5.7	
67-66-3	Chloroform	0.45	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE02

Sample Media:	CANISTER	Lab Sample ID:	9785624
Canister ID:	1176	Lab File ID:	ei00070.d
Pressure Received:	11.3 psia	Date Collected:	08/30/2018
Final Pressure:	22.5 psia	Date Received:	09/05/2018
Nominal Volume:	200 cc	Analyzed Date:	09/06/2018
Injection Volume:	400 cc	Analyzed Time:	17:14
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
71-55-6	1,1,1-Trichloroethane	0.65	U
56-23-5	Carbon Tetrachloride	0.88	U
71-43-2	Benzene	7.1	
107-06-2	1,2-Dichloroethane	0.32	U
540-84-1	Isooctane	1.1	J
142-82-5	Heptane	1.5	J
79-01-6	Trichloroethene	0.97	U
78-87-5	1,2-Dichloropropane	0.60	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	0.80	U
10061-01-5	cis-1,3-Dichloropropene	0.45	U
108-10-1	4-Methyl-2-Pentanone	57	
108-88-3	Toluene	9.7	
111-65-9	Octane	1.9	J
10061-02-6	trans-1,3-Dichloropropene	0.54	U
79-00-5	1,1,2-Trichloroethane	0.65	U
127-18-4	Tetrachloroethene	1.7	U
591-78-6	2-Hexanone	0.82	J
124-48-1	Dibromochloromethane	1.1	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	0.60	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.1	J
179601-23-1	m/p-Xylene	150	

Abbreviations:
U = The compound is less than the limit being reported.
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D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE02

Sample Media:	CANISTER	Lab Sample ID:	9785624
Canister ID:	1176	Lab File ID:	ei00070.d
Pressure Received:	11.3 psia	Date Collected:	08/30/2018
Final Pressure:	22.5 psia	Date Received:	09/05/2018
Nominal Volume:	200 cc	Analyzed Date:	09/06/2018
Injection Volume:	400 cc	Analyzed Time:	17:14
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
95-47-6	o-Xylene	8.5	
100-42-5	Styrene	0.86	J
75-25-2	Bromoform	1.8	U
98-82-8	Cumene	1.7	J
108-86-1	Bromobenzene	0.64	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	0.84	U
622-96-8	4-Ethyltoluene	11	
108-67-8	1,3,5-Trimethylbenzene	11	
95-63-6	1,2,4-Trimethylbenzene	42	
541-73-1	1,3-Dichlorobenzene	1.1	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.2	U
67-72-1	Hexachloroethane	2.6	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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

Data file: /chem/HP22820.i/18sep06.b/ei00070.d Injection date and time: **06-SEP-2018 17:14**
Data file Sample Info. Line: 9785624;400;E1824930AA;-1176;0;0;SAMPLE; Instrument ID: **HP22820.i** Batch: **E1824930AA**
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Blank Data file reference: **/chem/HP22820.i/18sep06.b/ei00062.d**

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 06-SEP-2018 13:08
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18sep06.b/ei00061.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): 22.5 psia Canister Pressure before dilution (Ya): 11.3 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 400 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	5.474(-0.007)	752	130	275943 (5)	10.00		157917 - 368473
51) 1,4-Difluorobenzene	6.298(-0.007)	867	114	1032213 (6)	10.00		583560 - 1361638
71) Chlorobenzene-d5	8.497(0.000)	1174	117	1029933 (8)	10.00		570426 - 1330992

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)	1.656(-0.000)	85	23190	0.479	0.48		J	0.13	1
3) Chlorodifluoromethane	(1)			Not Detected					0.15	1
4) Freon 114	(1)			Not Detected					0.12	1
5) Chloromethane	(1)			Not Detected					0.24	1
6) Vinyl Chloride	(1)			Not Detected					0.12	1
7) 1,3-Butadiene	(1)			Not Detected					0.17	1
8) Bromomethane	(1)			Not Detected					0.18	1
9) Chloroethane	(1)			Not Detected					0.19	1
11) Dichlorofluoromethane	(1)			Not Detected					0.11	1
12) Trichlorofluoromethane	(1)	2.781(-0.000)	101	13682	0.266	0.27		J	0.15	1
13) Pentane	(1)	2.881(0.000)	43	38223	1.317	1.32			0.13	1
17) 1,1-Dichloroethene	(1)			Not Detected					0.14	1
18) Freon 113	(1)			Not Detected					0.11	1
19) Acetone	(1)	3.540(-0.000)	43	486659	19.639	19.64			0.53	5
21) Carbon Disulfide	(1)	3.669(-0.000)	76	89896	1.736	1.74			0.13	1
24) 3-Chloropropene	(1)			Not Detected					0.15	1
25) Methylene Chloride	(1)			Not Detected					0.25	2
28) trans-1,2-Dichloroethene	(1)			Not Detected					0.086	1
29) Methyl t-Butyl Ether	(1)			Not Detected					0.15	1
30) Hexane	(1)	4.564(0.001)	57	14401	0.496	0.50		J	0.13	1
31) 1,1-Dichloroethane	(1)	4.715(0.002)	63	4410	0.128	0.13		J	0.089	1
35) cis-1,2-Dichloroethene	(1)	5.252(0.002)	61	5469	0.215	0.22		J	0.12	1
37) 2-Butanone	(1)	5.295(-0.001)	72	21243	1.927	1.93			0.21	1
42) Chloroform	(1)			Not Detected					0.092	1
43) 1,1,1-Trichloroethane	(1)			Not Detected					0.12	1
45) Carbon Tetrachloride	(1)			Not Detected					0.14	1
46) Benzene	(2)	5.990(0.001)	78	140811	2.227	2.23			0.11	1
47) 1,2-Dichloroethane	(2)			Not Detected					0.08	1
48) Isooctane	(2)	6.033(0.002)	57	19511	0.225	0.23		J	0.13	1
50) Heptane	(2)	6.183(-0.000)	43	11465	0.359	0.36		J	0.23	1
52) Trichloroethene	(2)			Not Detected					0.18	1
54) 1,2-Dichloropropane	(2)			Not Detected					0.13	1
55) Dibromomethane	(2)			Not Detected					0.14	1
58) Bromodichloromethane	(2)			Not Detected					0.12	1
59) cis-1,3-Dichloropropene	(2)			Not Detected					0.1	1
60) 4-Methyl-2-Pentanone	(2)	7.329(0.001)	43	614022	13.824	13.82			0.15	1
61) Toluene	(3)	7.465(0.000)	91	200444	2.568	2.57			0.12	1
62) Octane	(3)	7.516(0.000)	43	18218	0.413	0.41		J	0.4	2
63) trans-1,3-Dichloropropene	(3)			Not Detected					0.12	1
66) 1,1,2-Trichloroethane	(3)			Not Detected					0.12	1
67) Tetrachloroethene	(3)			Not Detected					0.25	2
68) 2-Hexanone	(3)	7.945(0.000)	43	8756	0.200	0.20		J	0.18	1
69) Dibromochloromethane	(3)			Not Detected					0.13	1

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

Data file: /chem/HP22820.i/18sep06.b/ei00070.d Injection date and time: **06-SEP-2018 17:14**
Data file Sample Info. Line: 9785624;400;E1824930AA;-1176;0;0;SAMPLE; Instrument ID: **HP22820.i** Batch: **E1824930AA**
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Blank Data file reference: **/chem/HP22820.i/18sep06.b/ei00062.d**

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 06-SEP-2018 13:08
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18sep06.b/ei00061.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): 22.5 psia Canister Pressure before dilution (Ya): 11.3 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 400 cc

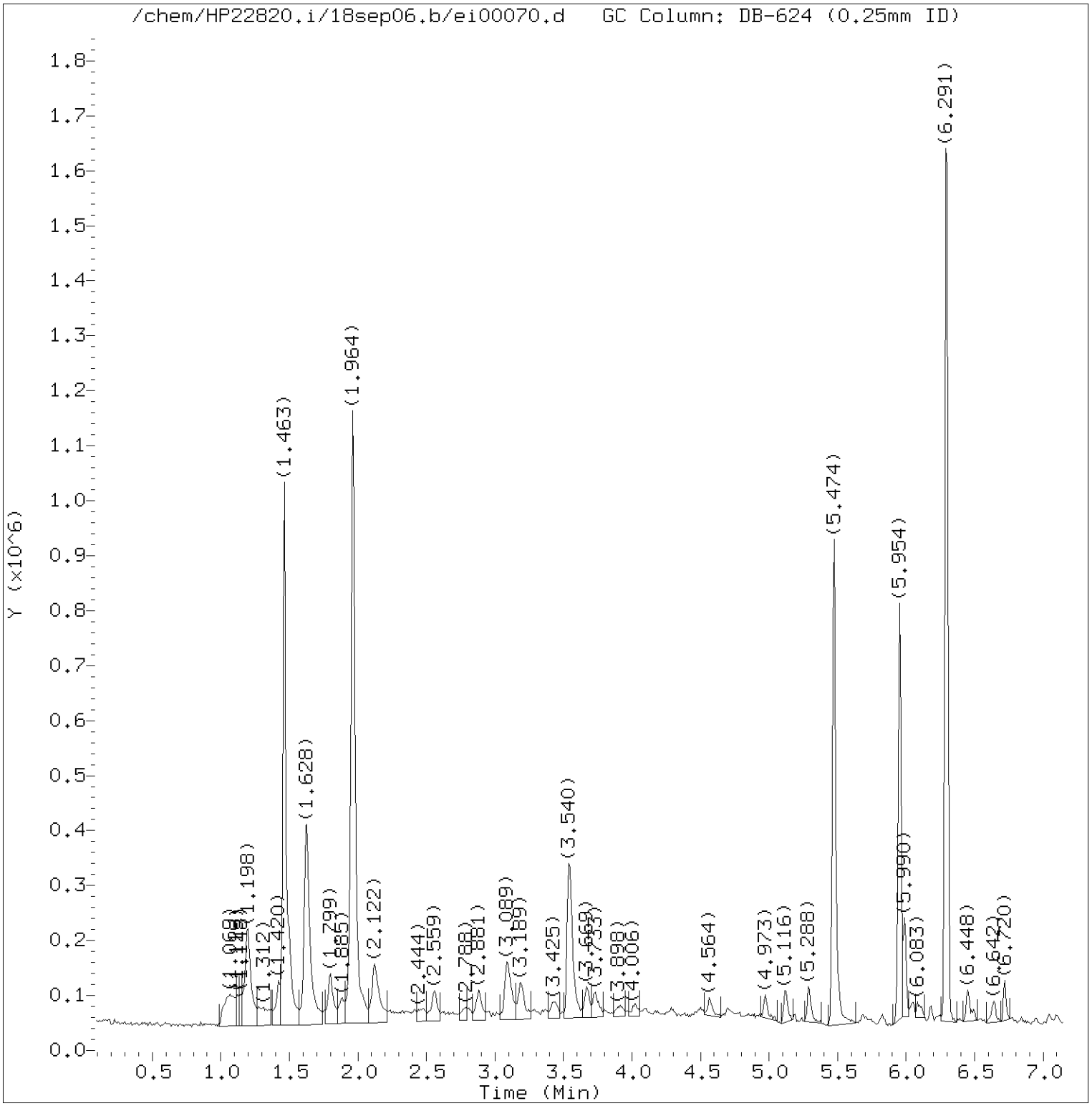
Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
70) 1,2-Dibromoethane	(3)			Not Detected					0.13	1
72) Chlorobenzene	(3)			Not Detected					0.13	1
73) 1,1,1,2-Tetrachloroethane	(3)			Not Detected					0.15	1
74) Ethylbenzene	(3)	8.583(-0.000)	91	27769	0.261	0.26		J	0.19	1
75) m/p-Xylene	(3)	8.669(0.000)	91	2901984	34.599	34.60			0.26	2
76) o-Xylene	(3)	8.970(-0.000)	91	163215	1.957	1.96			0.19	1
78) Styrene	(3)	8.977(-0.000)	104	12985	0.203	0.20		J	0.2	1
79) Bromoform	(3)			Not Detected					0.17	1
80) Cumene	(3)	9.235(-0.000)	105	38307	0.337	0.34		J	0.24	1
81) Bromobenzene	(3)			Not Detected					0.1	1
82) 1,1,2,2-Tetrachloroethane	(3)			Not Detected					0.15	1
83) 1,2,3-Trichloropropane	(3)			Not Detected					0.14	1
86) 4-Ethyltoluene	(3)	9.621(0.000)	105	242312M	2.155	2.15			0.18	1
87) 1,3,5-Trimethylbenzene	(3)	9.672(-0.000)	105	214752M	2.247	2.25			0.32	2
90) 1,2,4-Trimethylbenzene	(3)	9.958(-0.000)	105	800812M	8.537	8.54			0.28	2
92) 1,3-Dichlorobenzene	(3)			Not Detected					0.19	1
93) 1,4-Dichlorobenzene	(3)			Not Detected					0.17	1
96) 1,2-Dichlorobenzene	(3)			Not Detected					0.2	1
98) Hexachloroethane	(3)			Not Detected					0.27	2

M = Compound was manually integrated.

Total number of targets = 62

Digitally signed by Jacob E. Bailey on 09/06/2018 at 19:12. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/07/2018 at 14:24. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

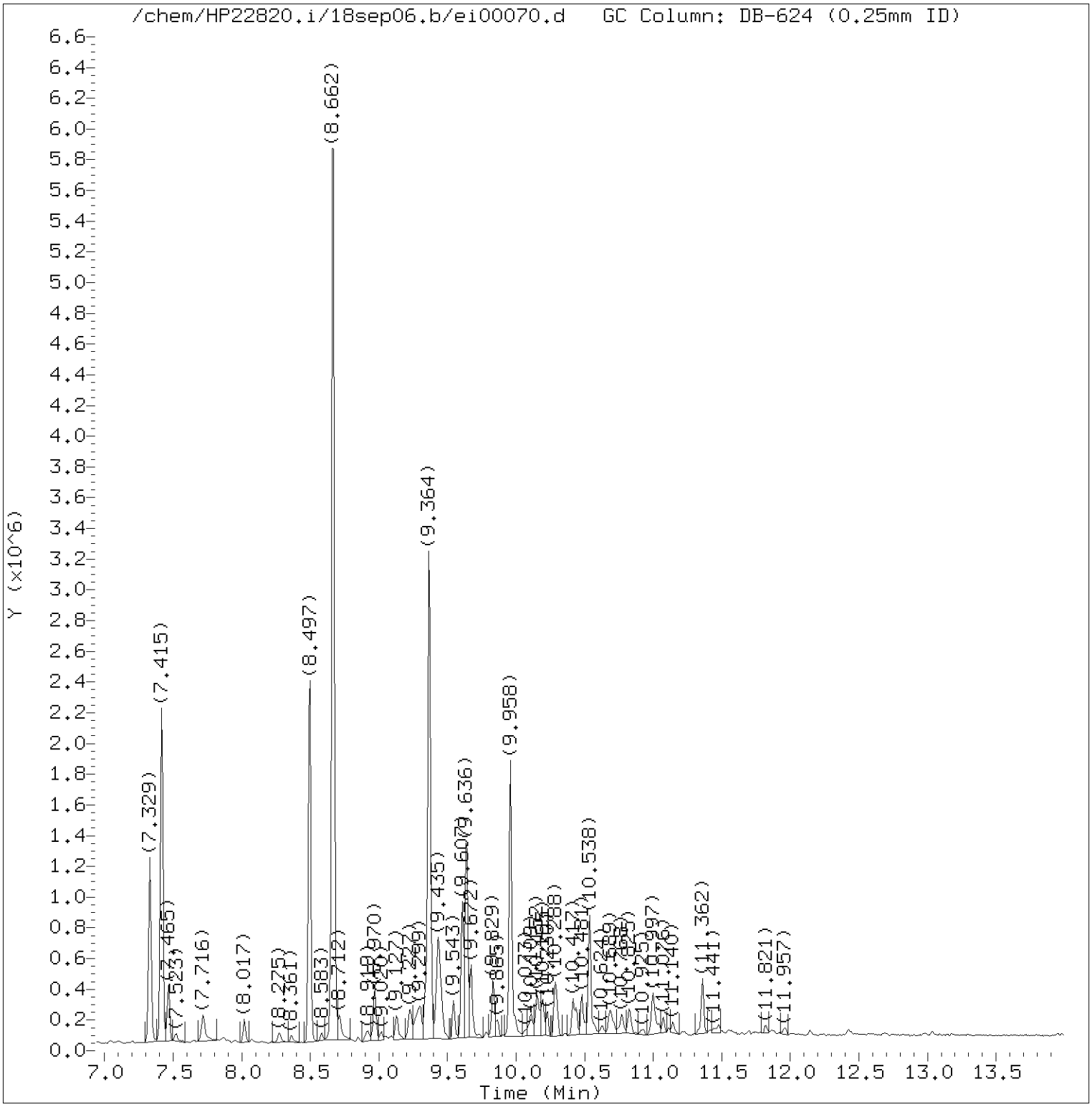
Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Sample Name: -1176 Lab Sample ID: 9785624

Digitally signed by Jacob E. Bailey
on 09/06/2018 at 19:12.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
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Sample Name: -1176 Lab Sample ID: 9785624

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on 09/06/2018 at 19:12.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Sample Name: -1176 Lab Sample ID: 9785624

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
2) Dichlorodifluoromethane	(1)	1.656	85	23190	0.479
12) Trichlorofluoromethane	(1)	2.781	101	13682	0.266
13) Pentane	(1)	2.881	43	38223	1.317
19) Acetone	(1)	3.540	43	486659	19.639
21) Carbon Disulfide	(1)	3.669	76	89896	1.736
30) Hexane	(1)	4.564	57	14401	0.496
31) 1,1-Dichloroethane	(1)	4.715	63	4410	0.128
35) cis-1,2-Dichloroethene	(1)	5.252	61	5469	0.215
37) 2-Butanone	(1)	5.295	72	21243	1.927
40)*Bromochloromethane	(1)	5.474	130	275943	10.000
46) Benzene	(2)	5.990	78	140811	2.227
48) Isooctane	(2)	6.033	57	19511	0.225
50) Heptane	(2)	6.183	43	11465	0.359
51)*1,4-Difluorobenzene	(2)	6.298	114	1032213	10.000
60) 4-Methyl-2-Pentanone	(2)	7.329	43	614022	13.824
61) Toluene	(3)	7.465	91	200444	2.568
62) Octane	(3)	7.516	43	18218	0.413
68) 2-Hexanone	(3)	7.945	43	8756	0.200
71)*Chlorobenzene-d5	(3)	8.497	117	1029933	10.000
74) Ethylbenzene	(3)	8.583	91	27769	0.261
75) m/p-Xylene	(3)	8.669	91	2901984	34.599
76) o-Xylene	(3)	8.970	91	163215	1.957
78) Styrene	(3)	8.977	104	12985	0.203
80) Cumene	(3)	9.235	105	38307	0.337
86) 4-Ethyltoluene	(3)	9.621	105	242312M	2.155
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	214752M	2.247
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	800812M	8.537

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

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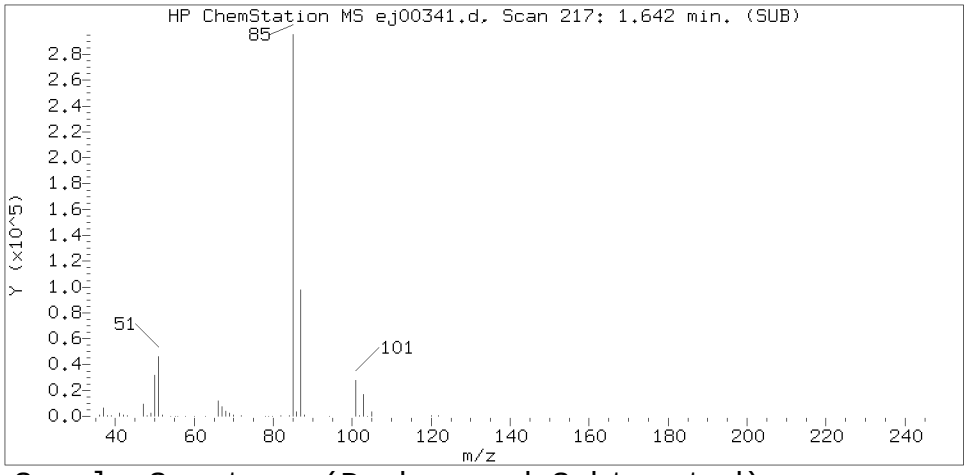
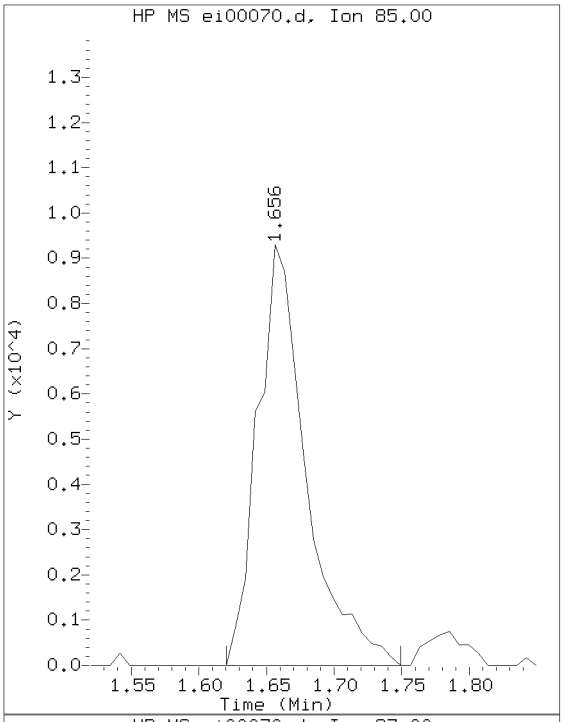
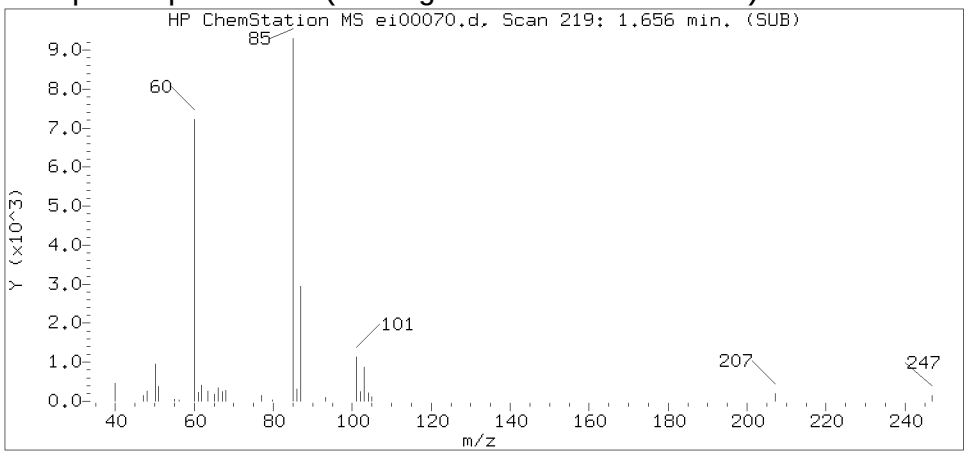
on 09/06/2018 at 19:12.
Target 3.5 esignature user ID: jeb07445

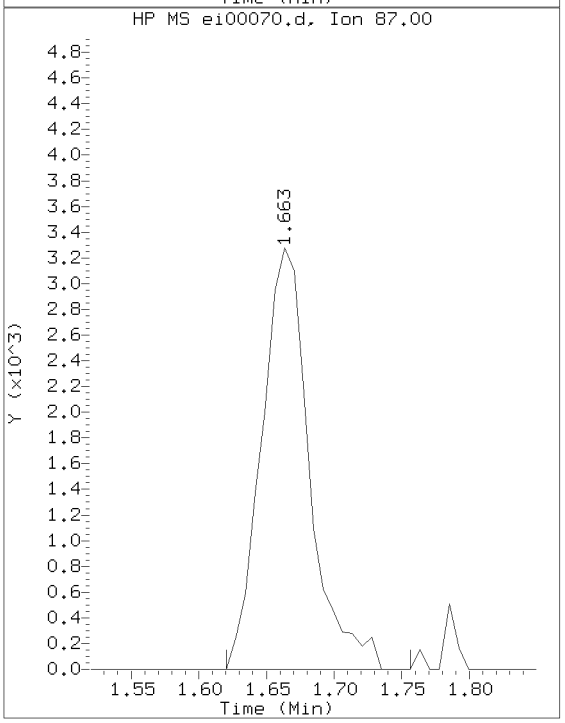
Reference Standard Spectrum for Dichlorodifluoromethane



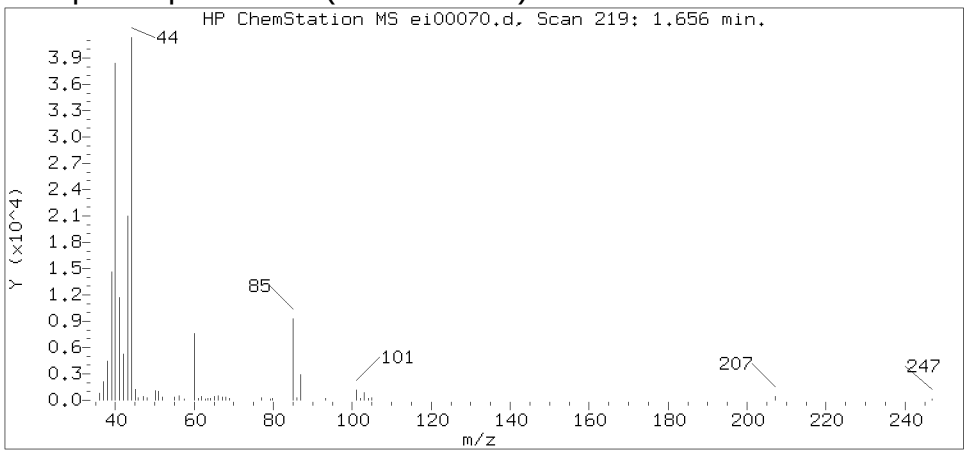


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Sample Name: -1176 Lab Sample ID: 9785624

Compound Number : 2
Compound Name : Dichlorodifluoromethane
Scan Number : 219
Retention Time (minutes): 1.656
Relative Retention Time :-0.00091
Quant Ion : 85.00
Area (flag) : 23190
Concentration (ppb(v)) : 0.4794

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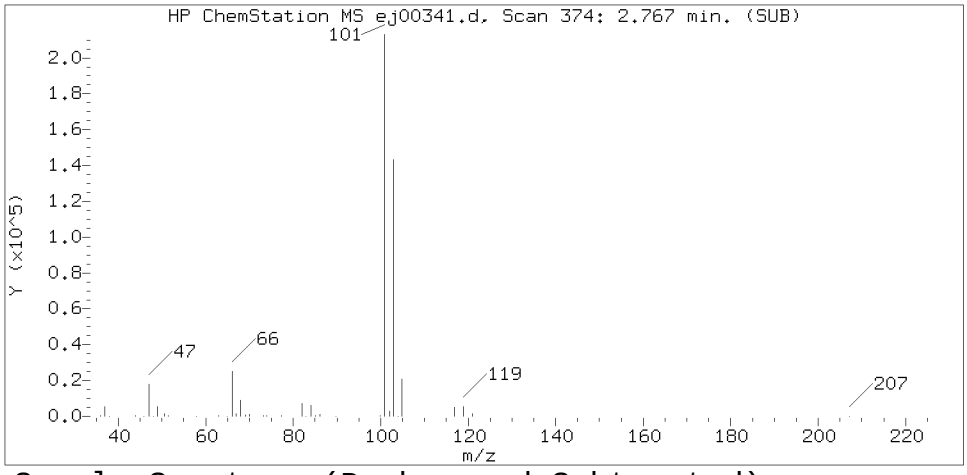
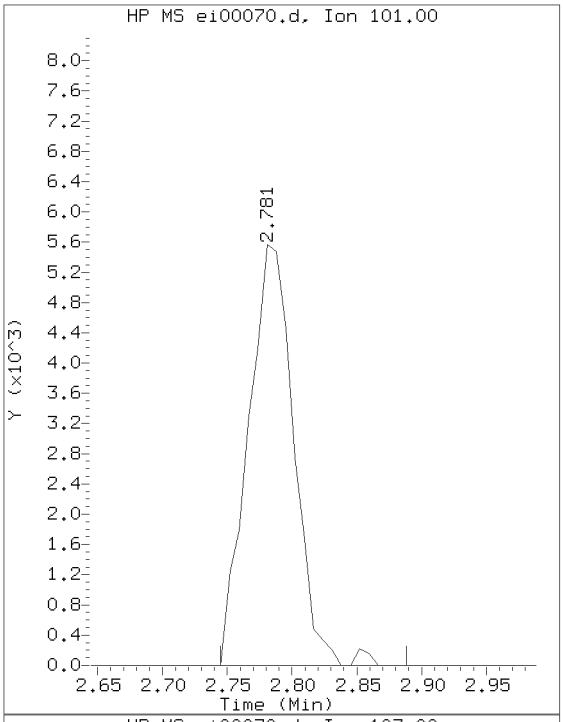
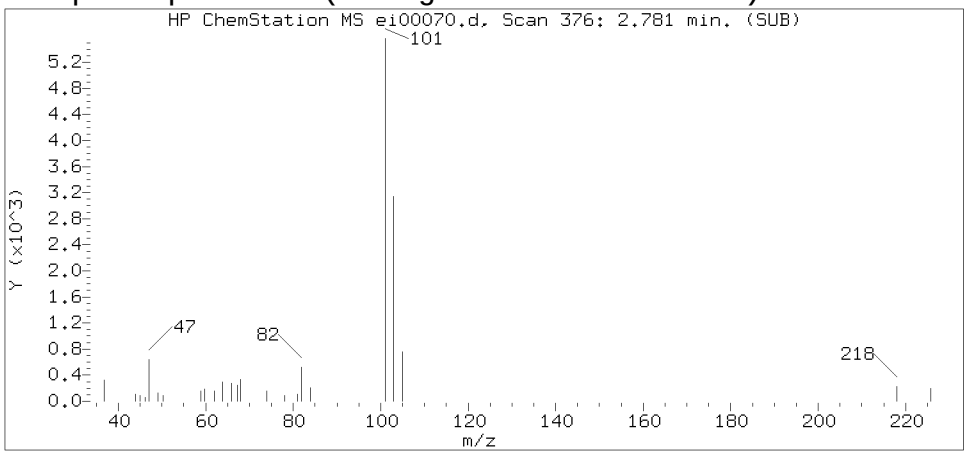
Target 3.5 esignature user ID: jeb07445

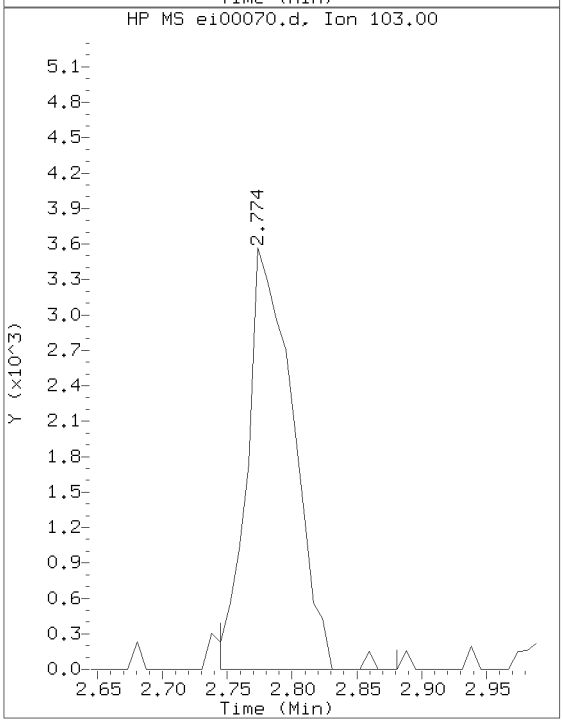
Reference Standard Spectrum for Trichlorofluoromethane



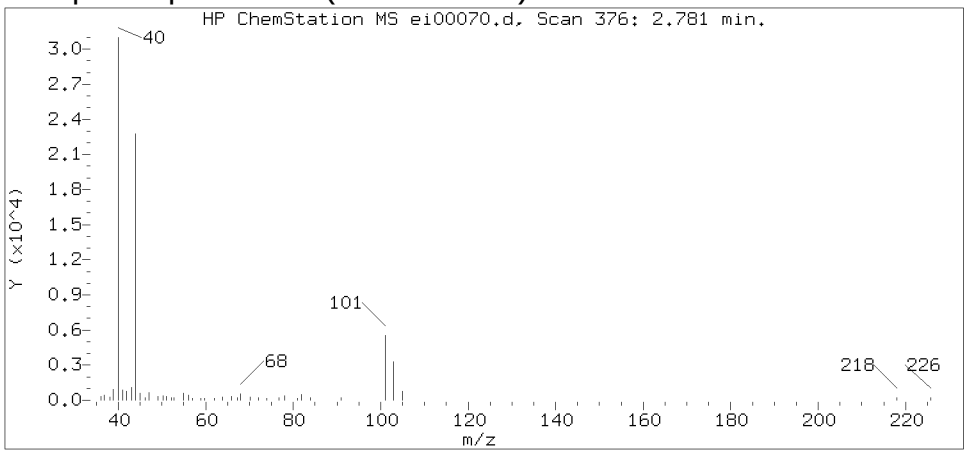


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Sample Name: -1176 Lab Sample ID: 9785624

Compound Number : 12
Compound Name : Trichlorofluoromethane
Scan Number : 376
Retention Time (minutes): 2.781
Relative Retention Time :-0.00064
Quant Ion : 101.00
Area (flag) : 13682
Concentration (ppb(v)) : 0.2660

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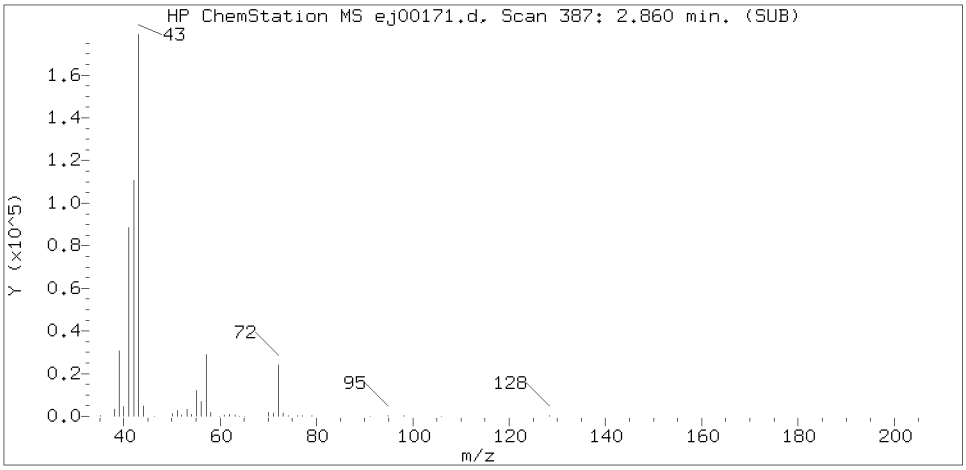
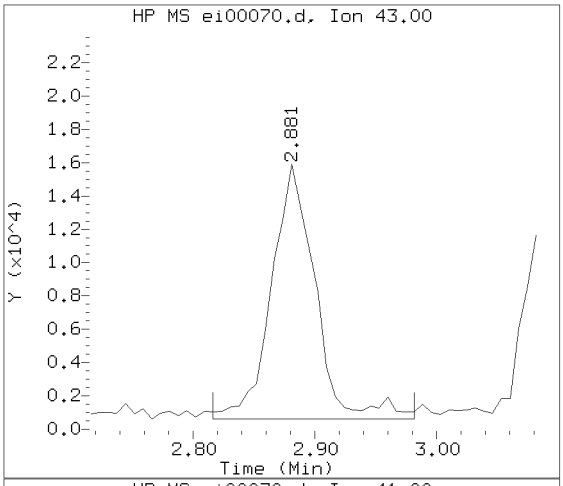
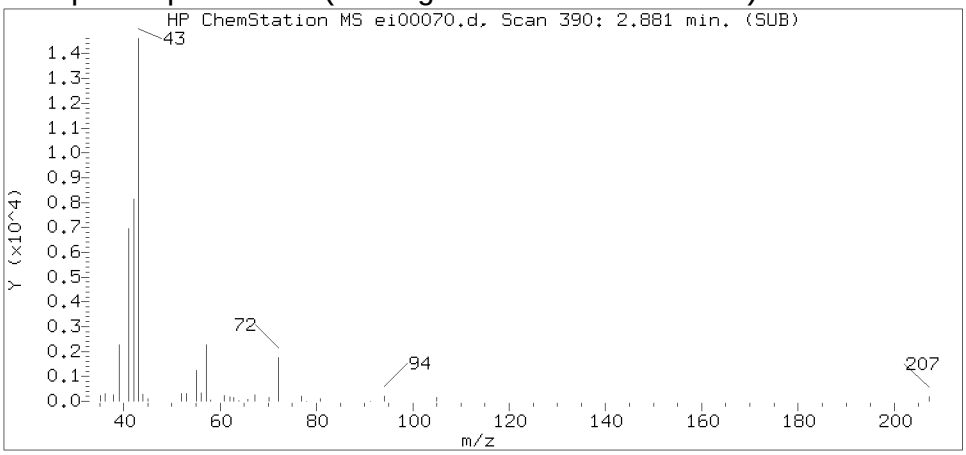
Target 3.5 esignature user ID: jeb07445

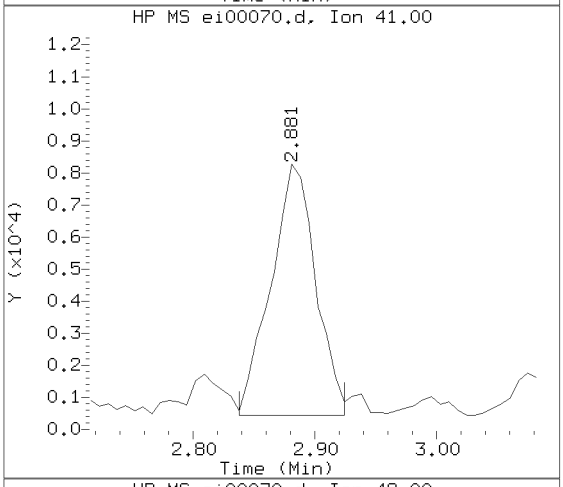
Reference Standard Spectrum for Pentane



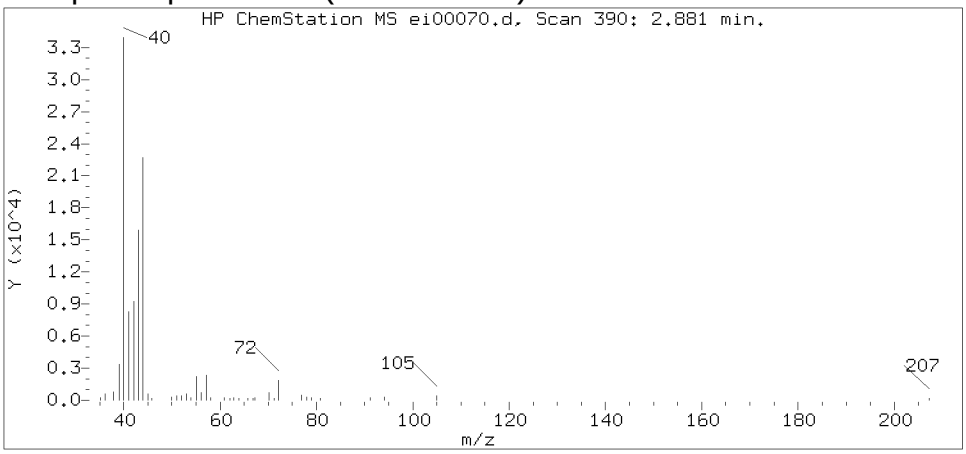


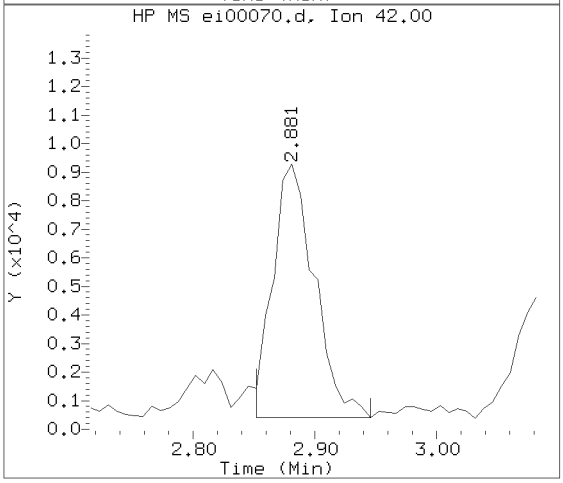
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Sample Name: -1176 Lab Sample ID: 9785624

Compound Number : 13
Compound Name : Pentane
Scan Number : 390
Retention Time (minutes): 2.881
Relative Retention Time : 0.00070
Quant Ion : 43.00
Area (flag) : 38223
Concentration (ppb(v)) : 1.3175

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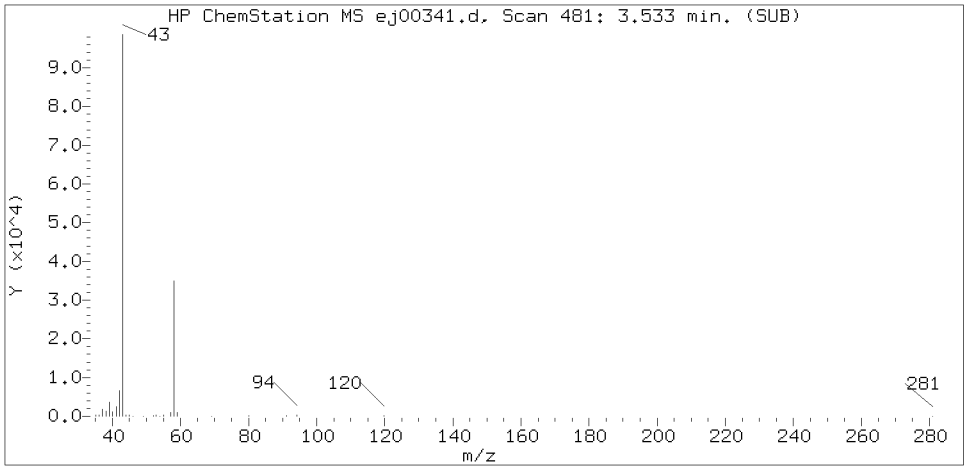
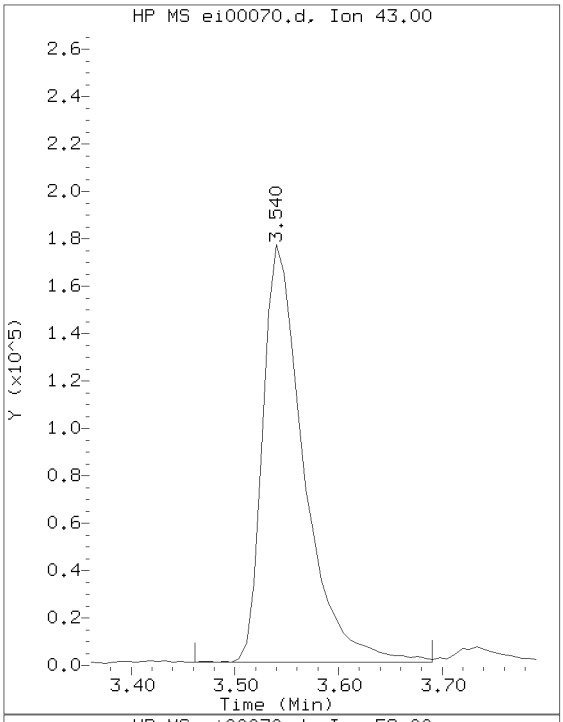
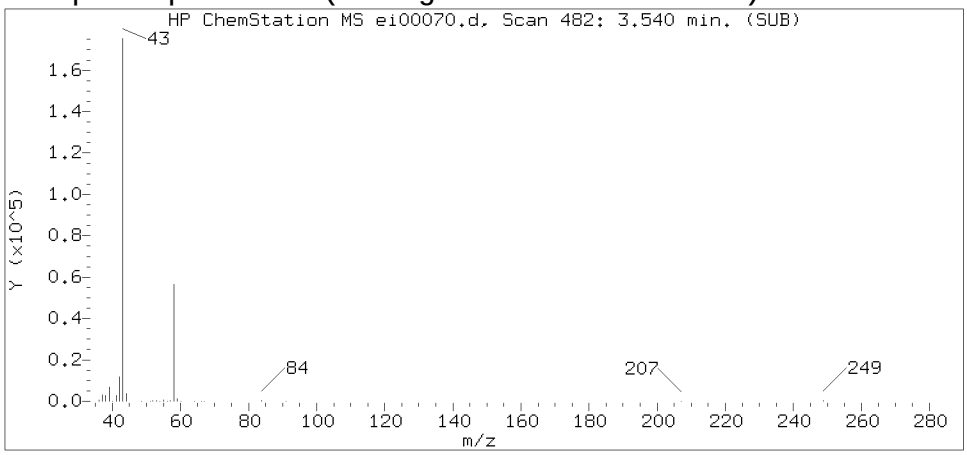
Target 3.5 esignature user ID: jeb07445

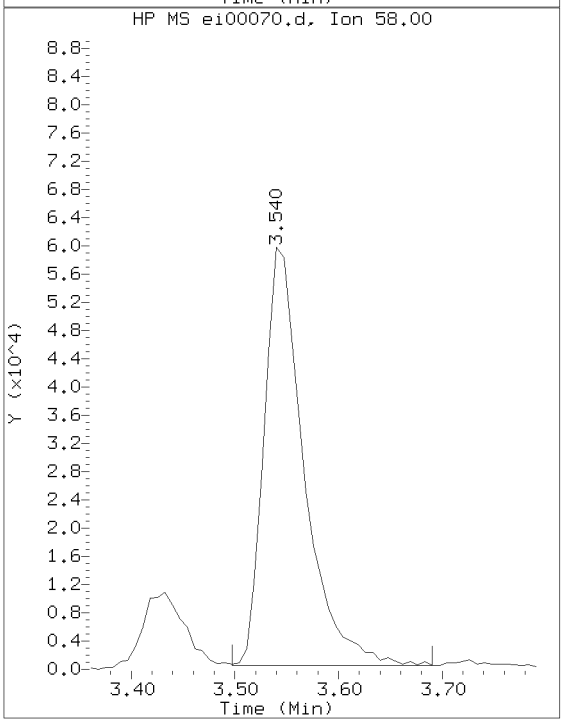
Reference Standard Spectrum for Acetone



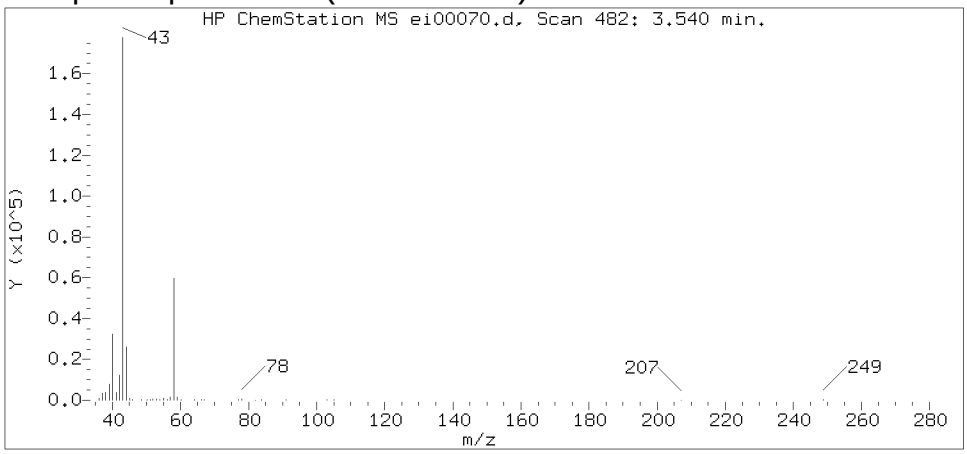


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Sample Name: -1176 Lab Sample ID: 9785624

Compound Number	: 19
Compound Name	: Acetone
Scan Number	: 482
Retention Time (minutes)	: 3.540
Relative Retention Time	:-0.00046
Quant Ion	: 43.00
Area (flag)	: 486659
Concentration (ppb(v))	: 19.6390

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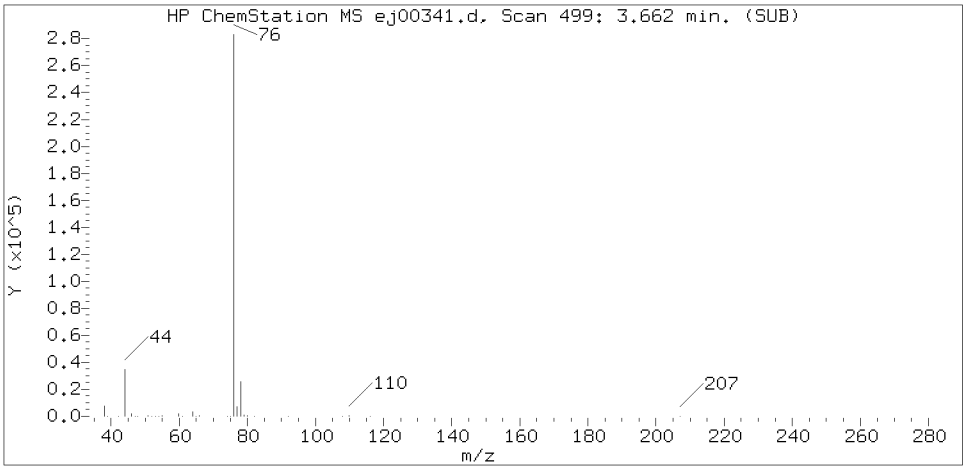
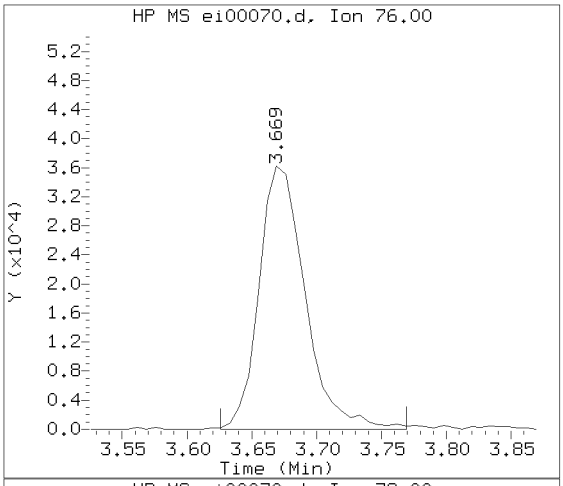
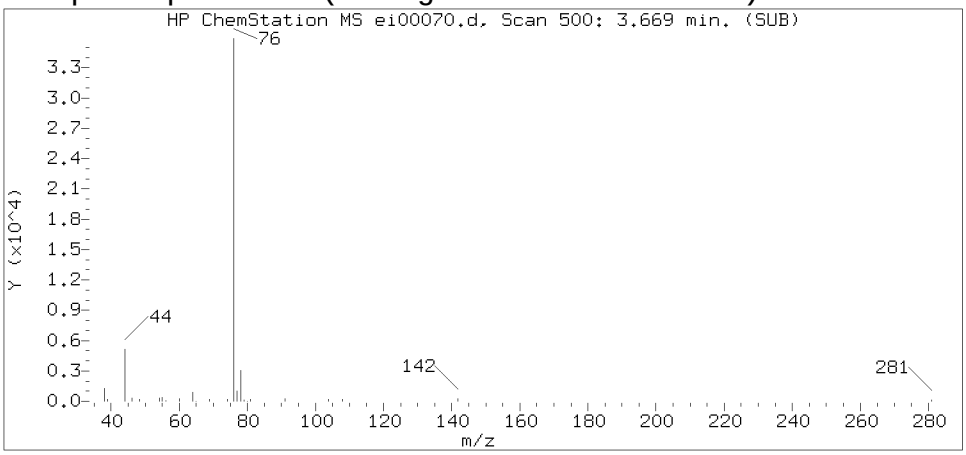
Target 3.5 esignature user ID: jeb07445

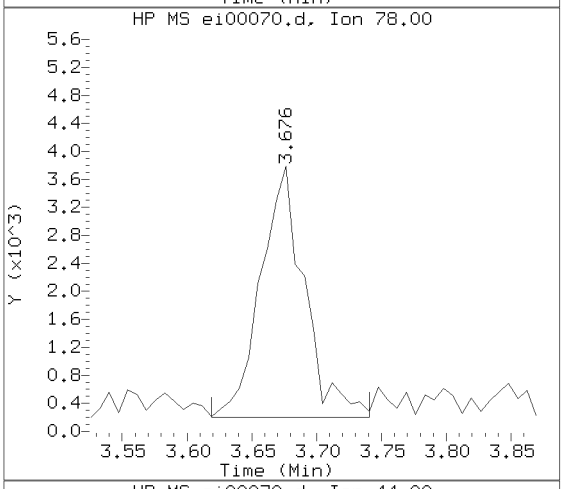
Reference Standard Spectrum for Carbon Disulfide



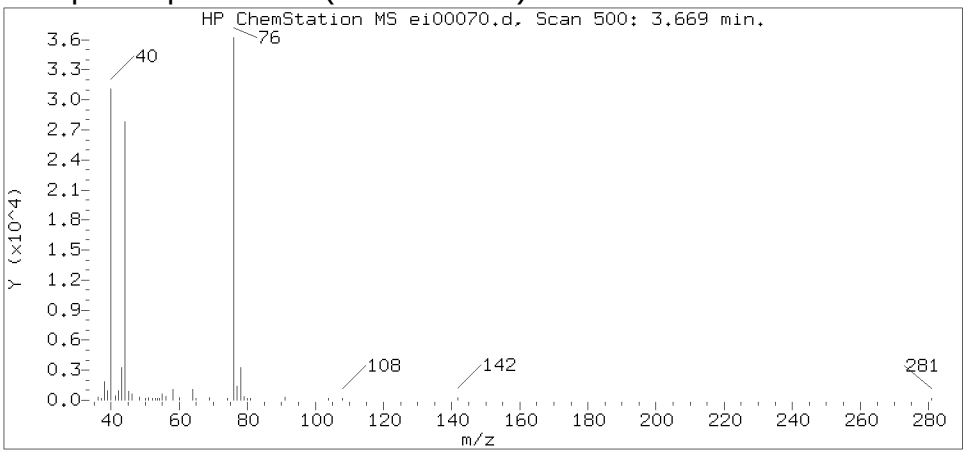


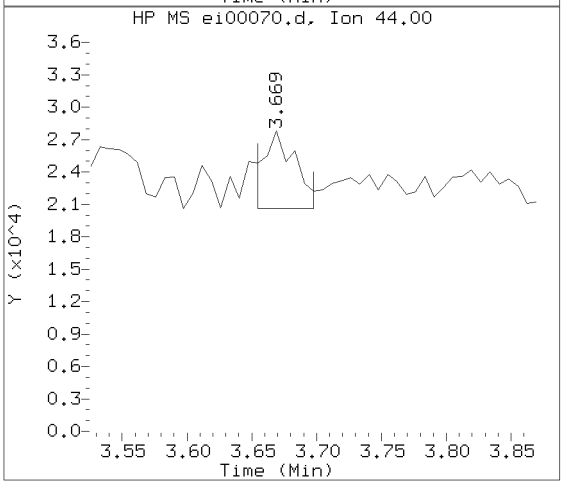
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Sample Name: -1176 Lab Sample ID: 9785624

Compound Number : 21
Compound Name : Carbon Disulfide
Scan Number : 500
Retention Time (minutes): 3.669
Relative Retention Time :-0.00043
Quant Ion : 76.00
Area (flag) : 89896
Concentration (ppb(v)) : 1.7359

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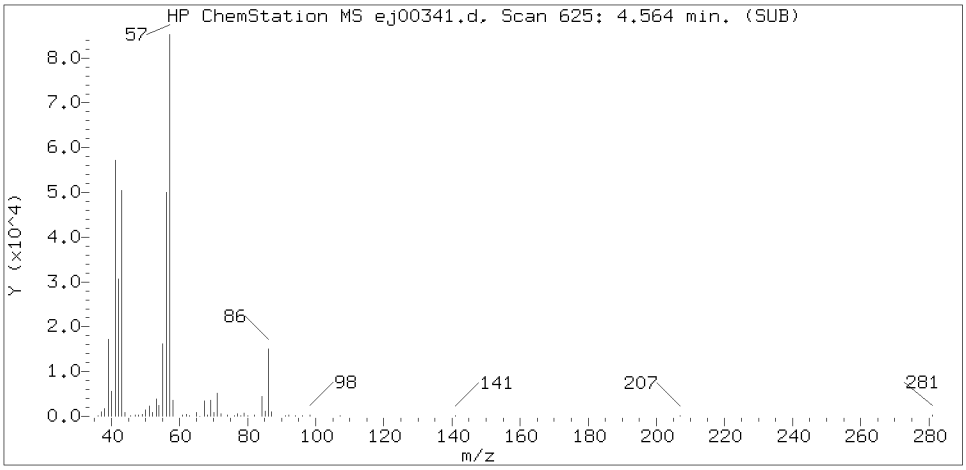
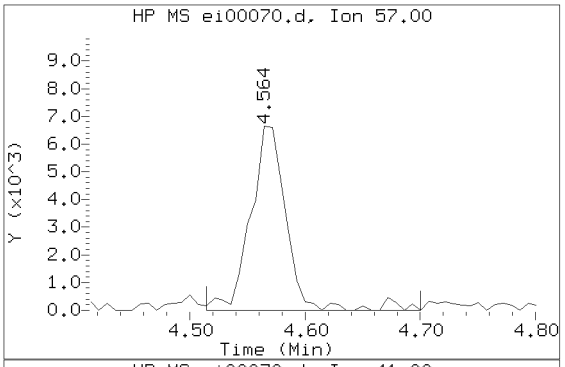
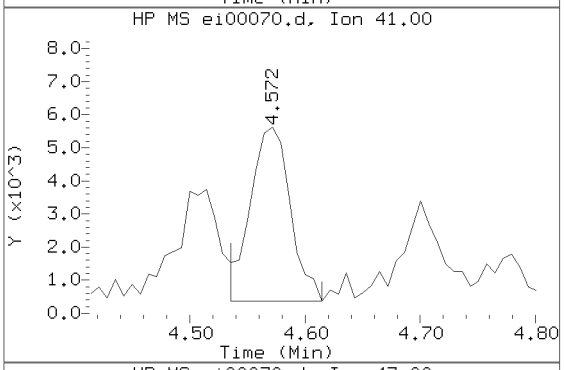
Target 3.5 esignature user ID: jeb07445

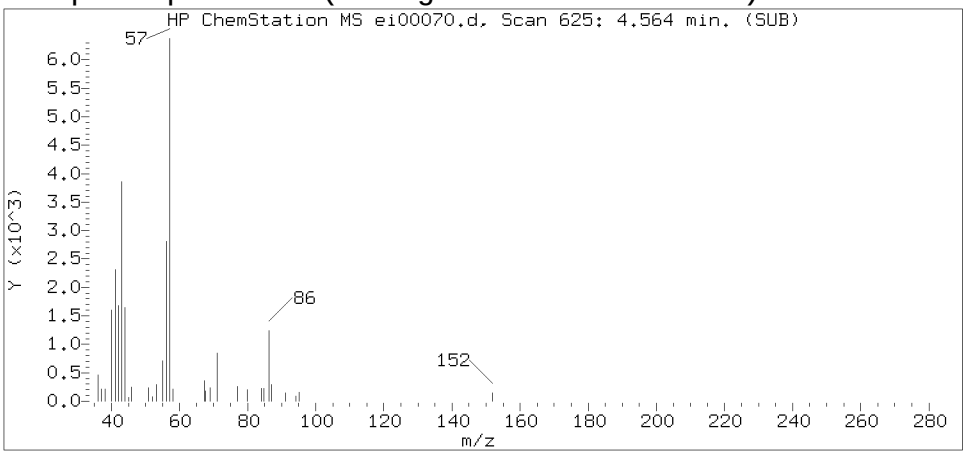
Reference Standard Spectrum for Hexane

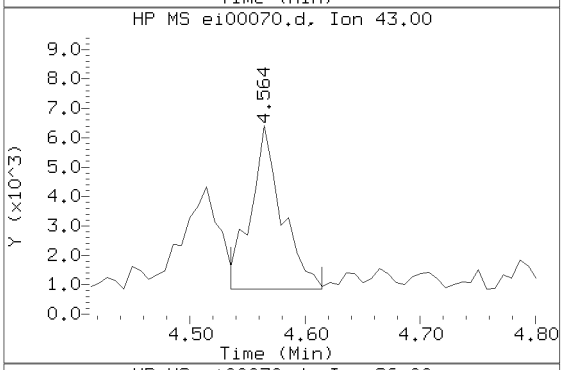




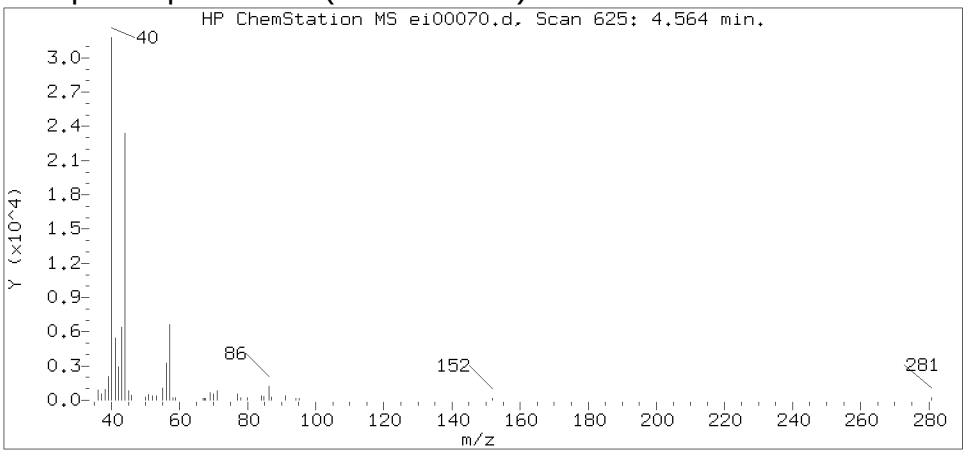


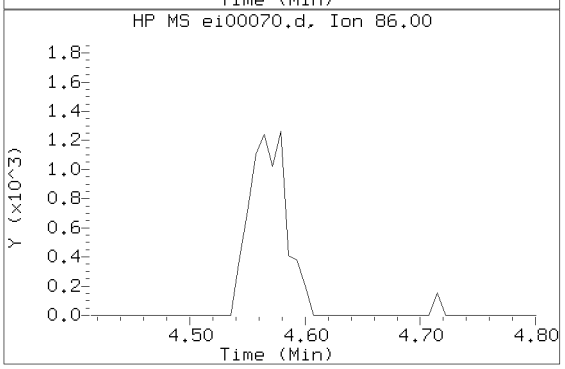
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Sample Name: -1176 Lab Sample ID: 9785624

Compound Number	: 30
Compound Name	: Hexane
Scan Number	: 625
Retention Time (minutes)	: 4.564
Relative Retention Time	: 0.00109
Quant Ion	: 57.00
Area (flag)	: 14401
Concentration (ppb(v))	: 0.4955

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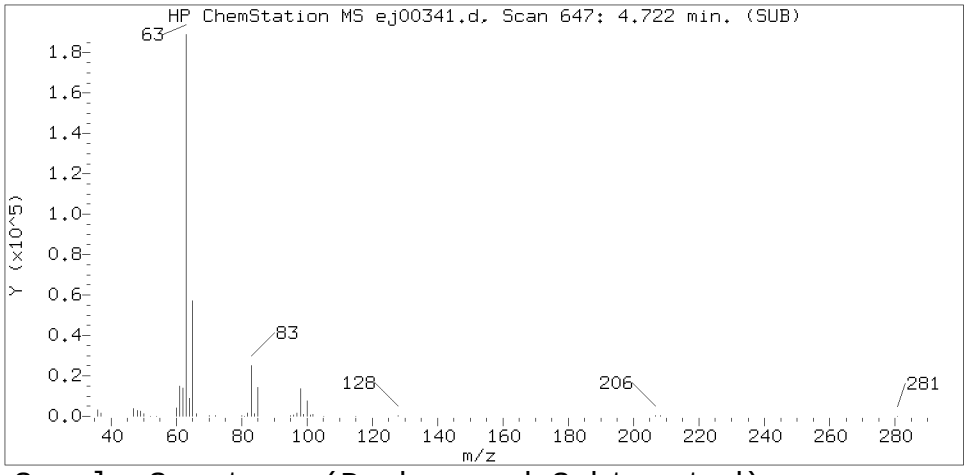
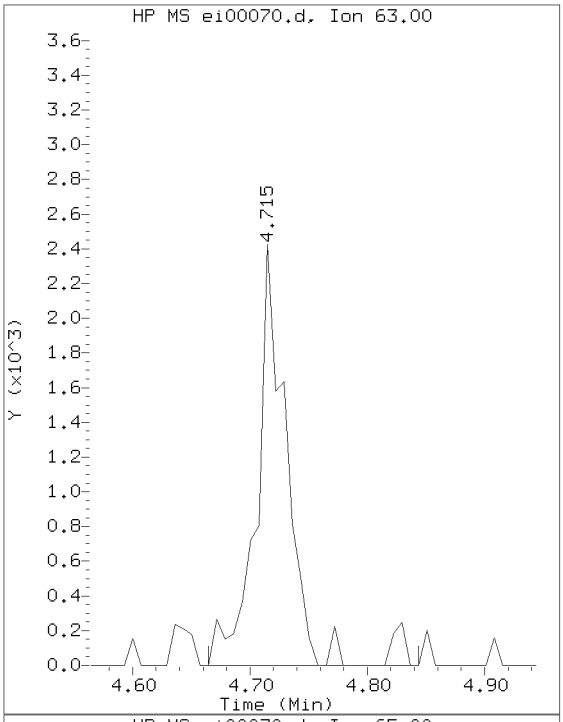
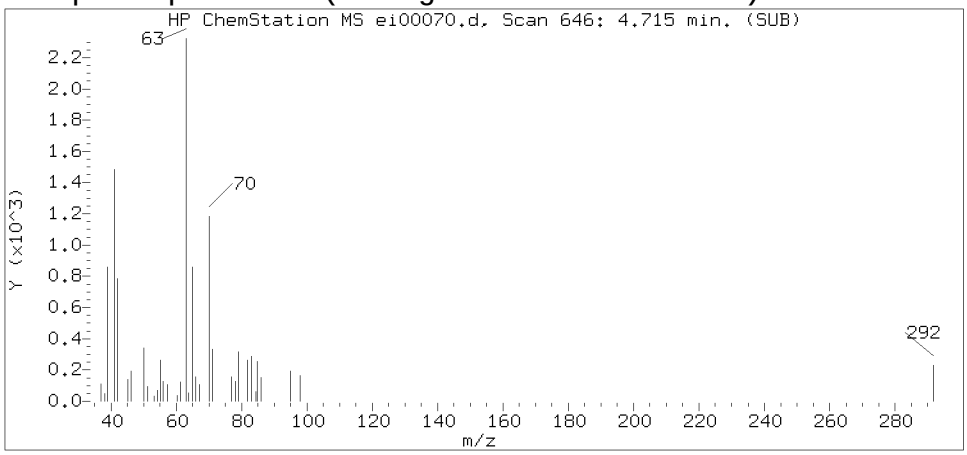
Target 3.5 esignature user ID: jeb07445

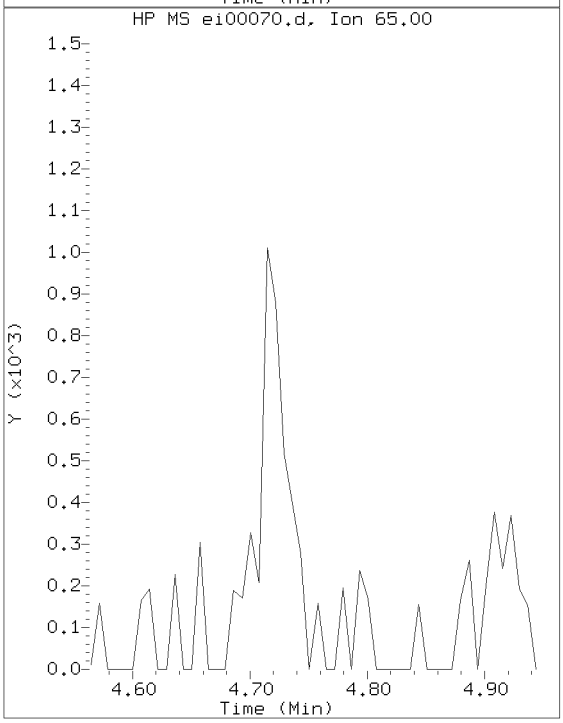
Reference Standard Spectrum for 1,1-Dichloroethane



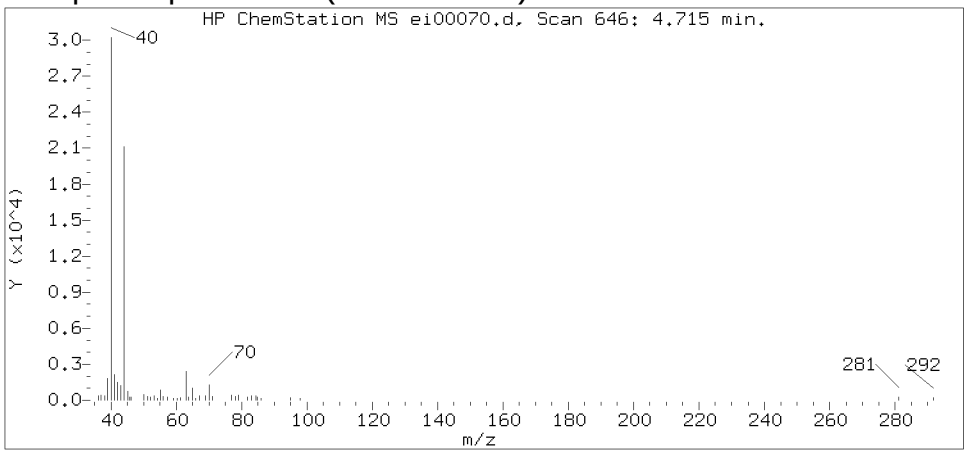


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Sample Name: -1176 Lab Sample ID: 9785624

Compound Number	: 31
Compound Name	: 1,1-Dichloroethane
Scan Number	: 646
Retention Time (minutes)	: 4.715
Relative Retention Time	: 0.00244
Quant Ion	: 63.00
Area (flag)	: 4410
Concentration (ppb(v))	: 0.1281

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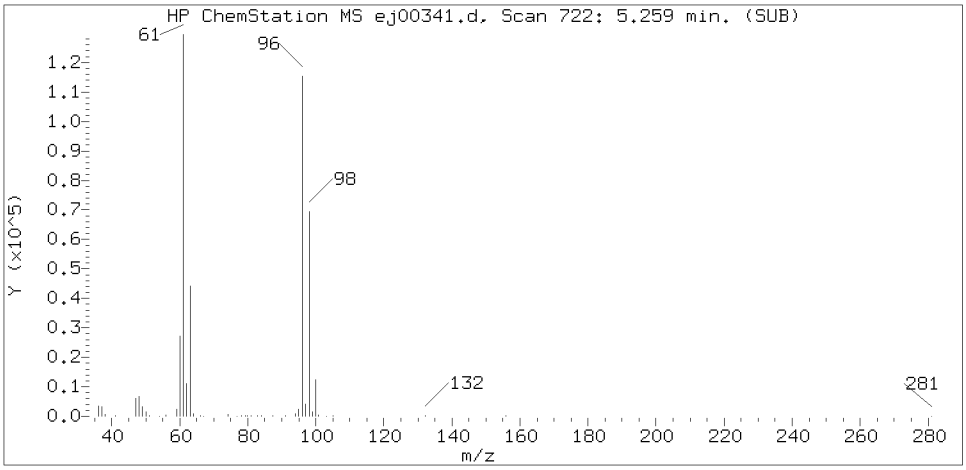
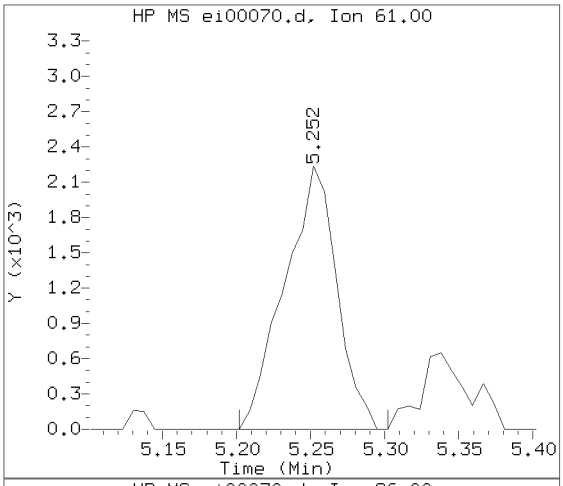
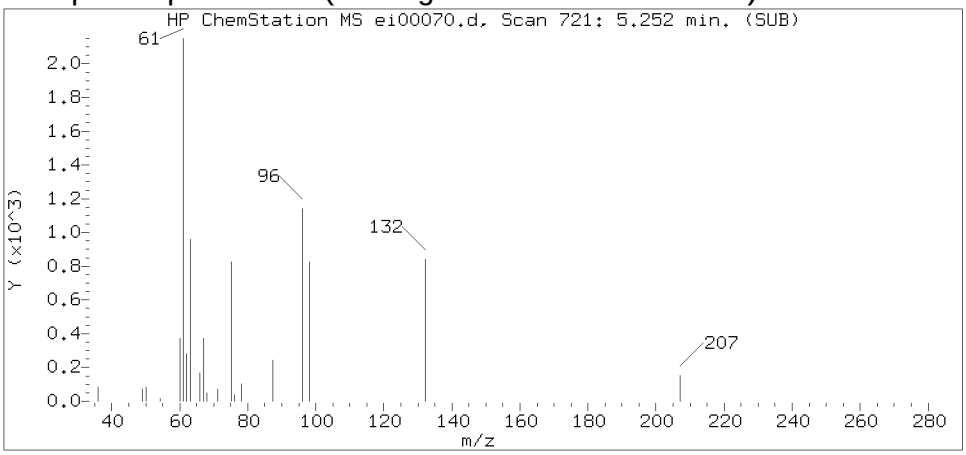
Target 3.5 esignature user ID: jeb07445

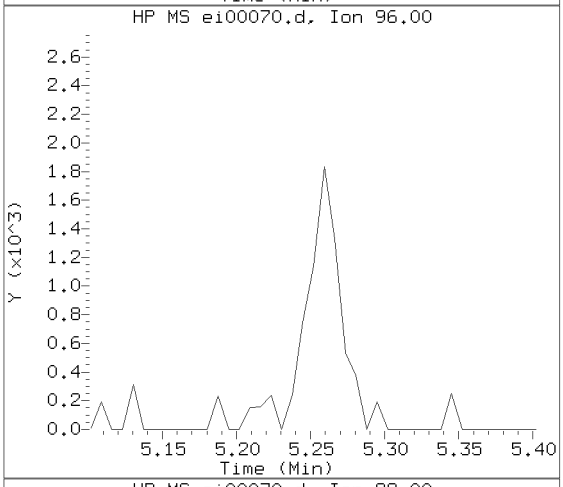
Reference Standard Spectrum for cis-1,2-Dichloroethene



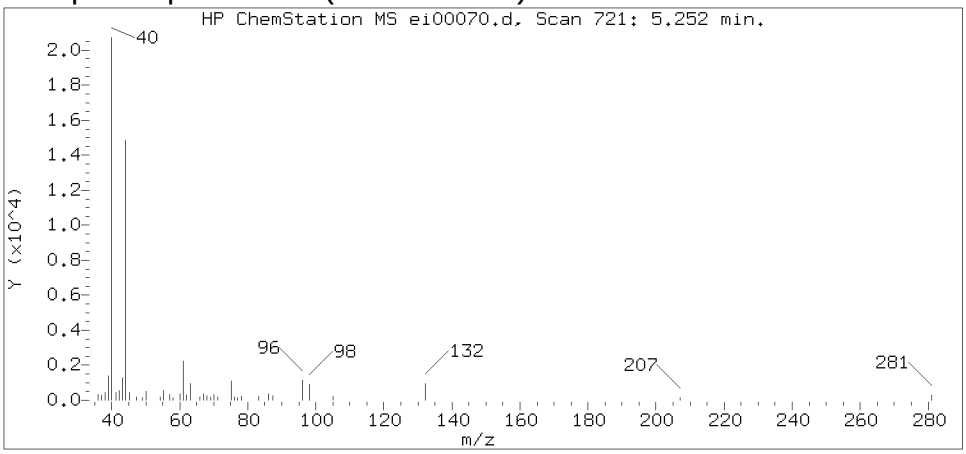


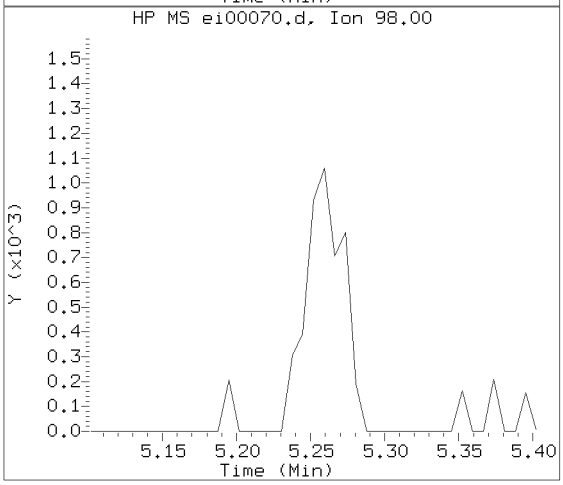
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Sample Name: -1176 Lab Sample ID: 9785624

Compound Number : 35
Compound Name : cis-1,2-Dichloroethene
Scan Number : 721
Retention Time (minutes): 5.252
Relative Retention Time : 0.00257
Quant Ion : 61.00
Area (flag) : 5469
Concentration (ppb(v)) : 0.2153

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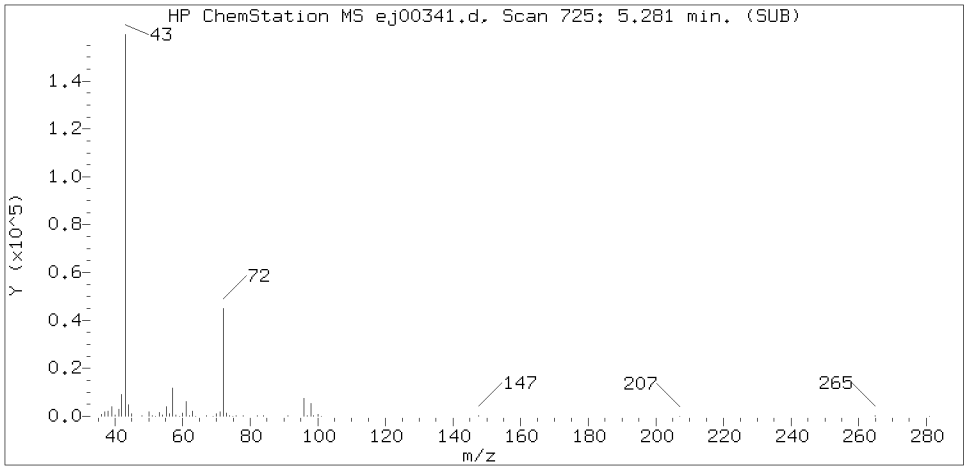
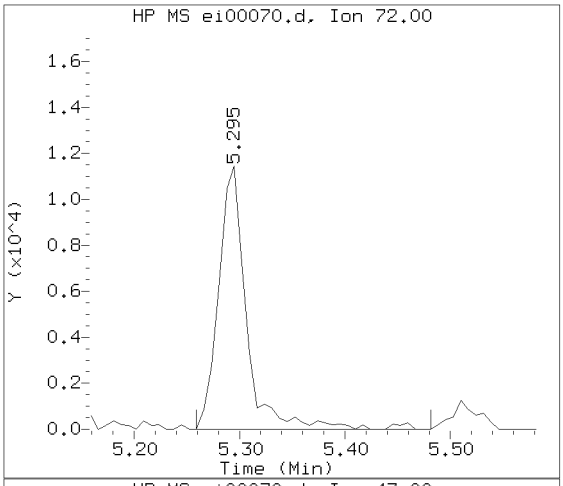
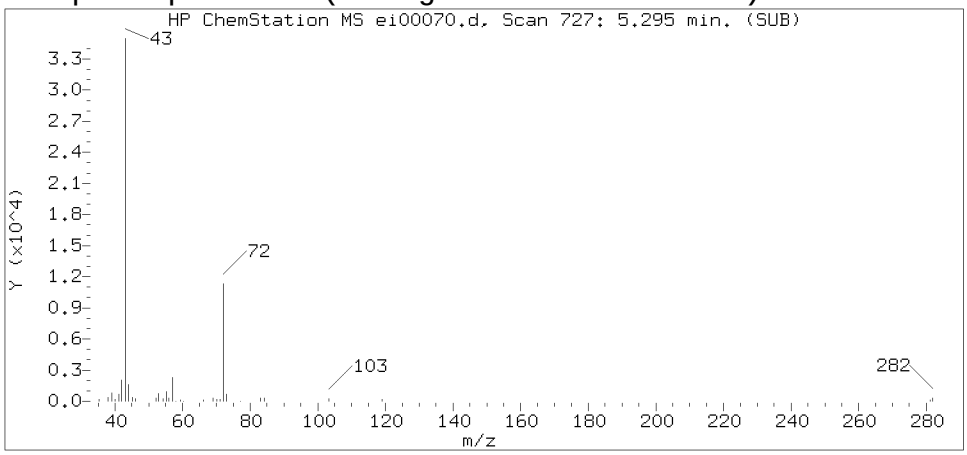
Target 3.5 esignature user ID: jeb07445

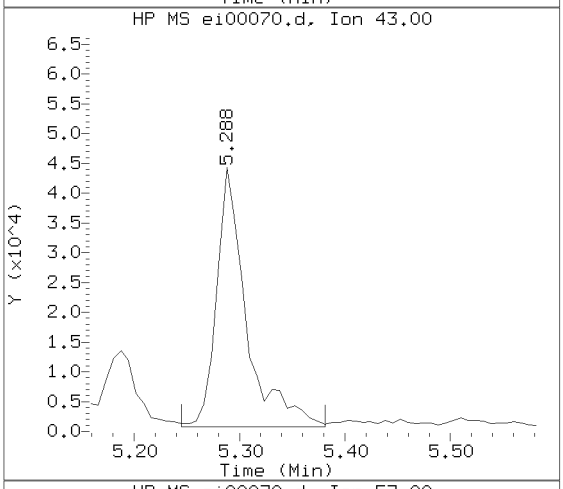
Reference Standard Spectrum for 2-Butanone



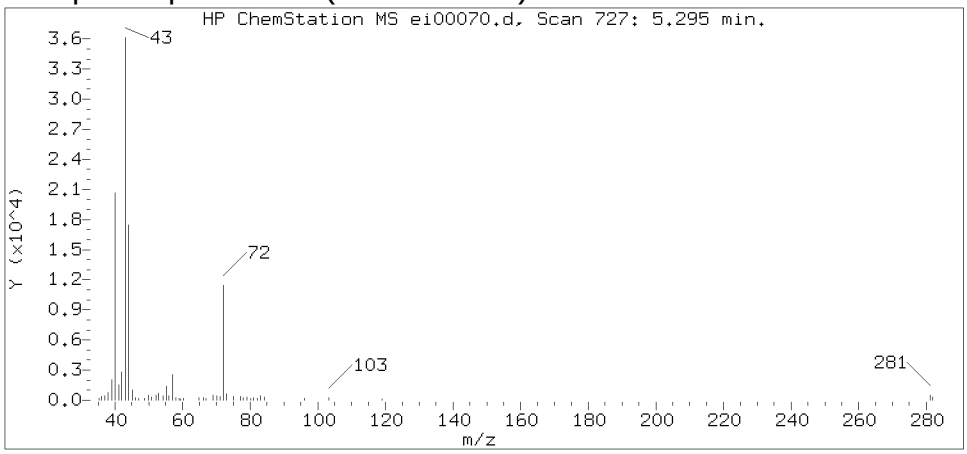


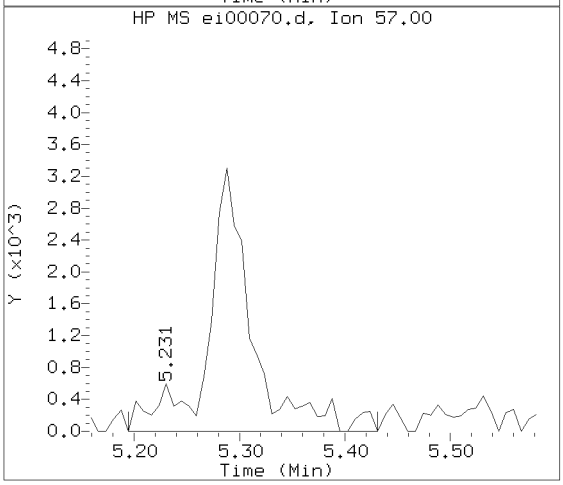
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Sample Name: -1176 Lab Sample ID: 9785624

Compound Number : 37
Compound Name : 2-Butanone
Scan Number : 727
Retention Time (minutes): 5.295
Relative Retention Time :-0.00135
Quant Ion : 72.00
Area (flag) : 21243
Concentration (ppb(v)) : 1.9267

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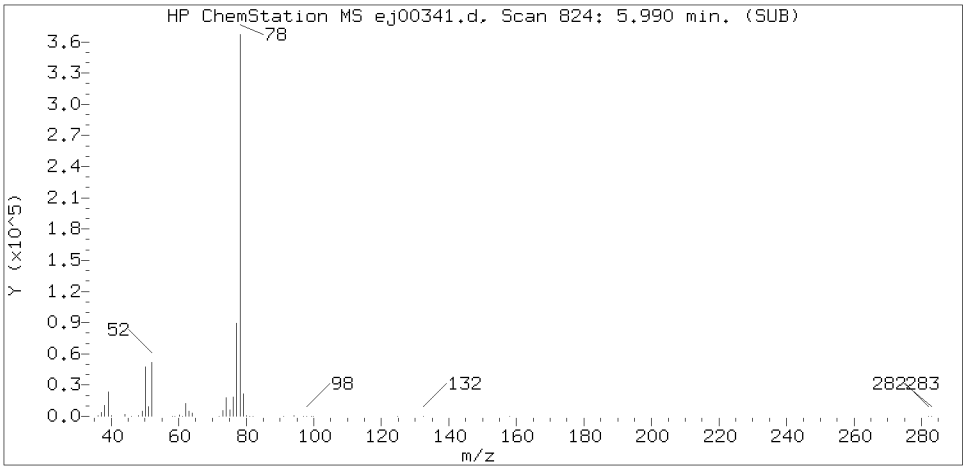
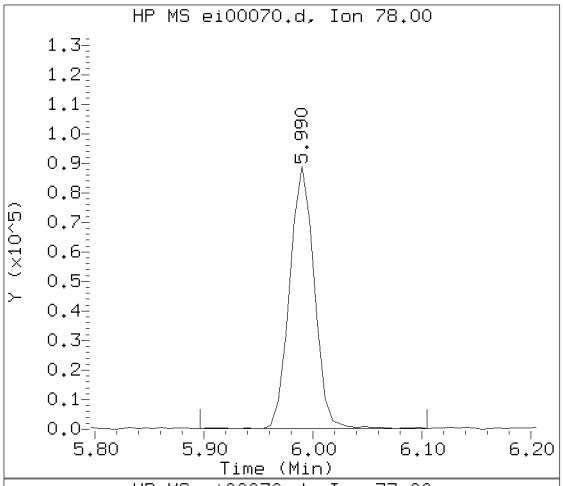
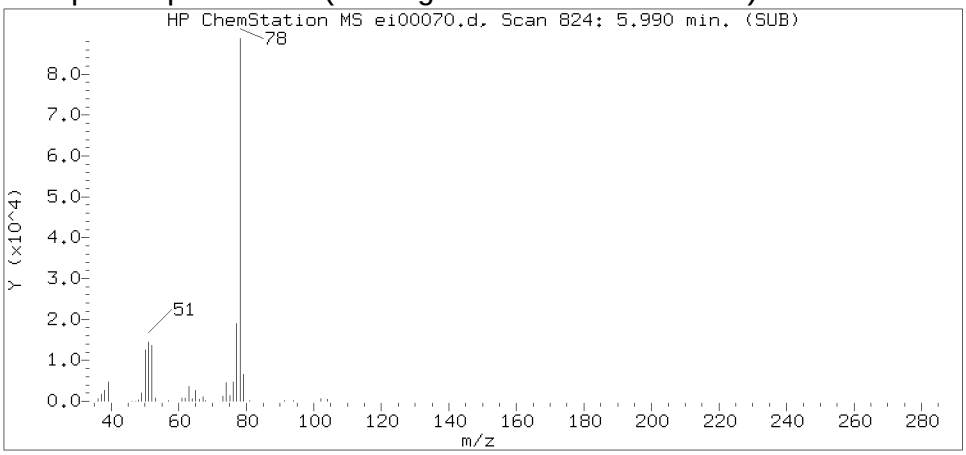
Target 3.5 esignature user ID: jeb07445

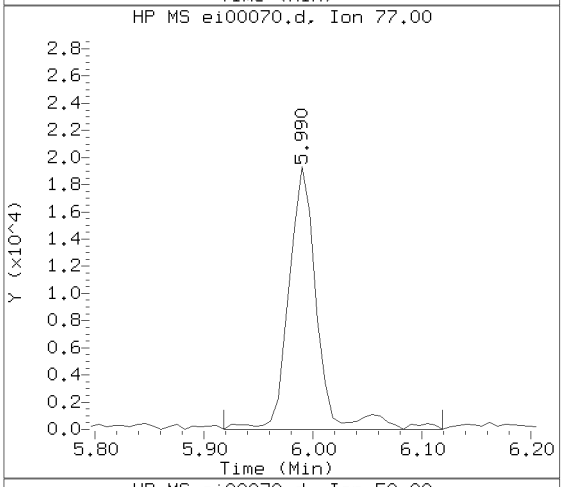
Reference Standard Spectrum for Benzene



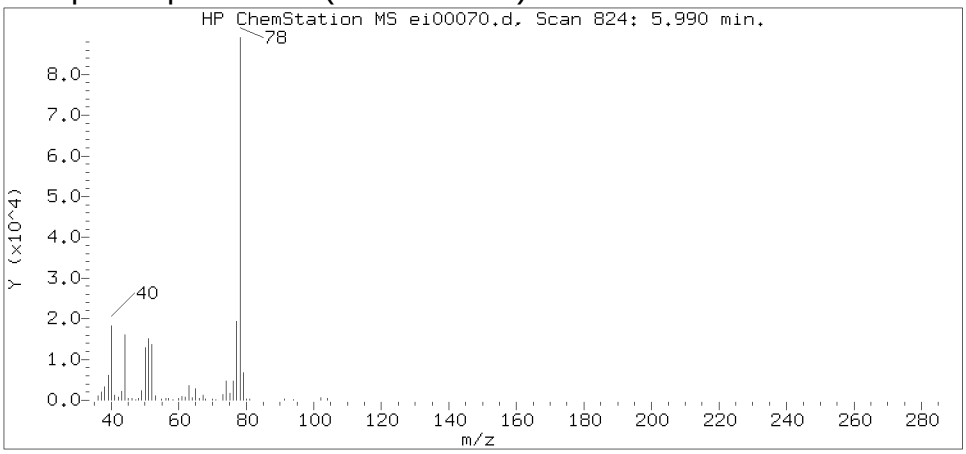


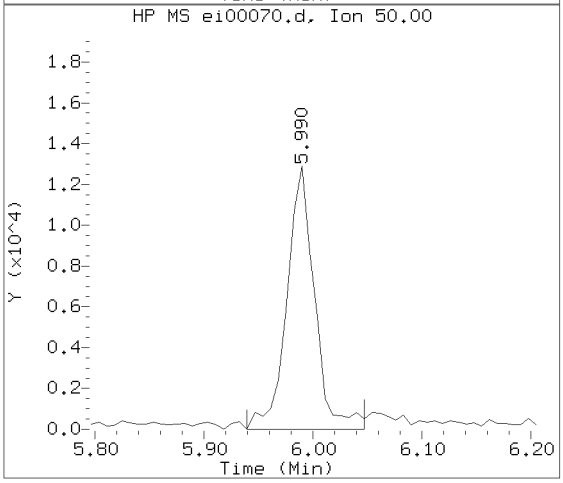
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Sample Name: -1176 Lab Sample ID: 9785624

Compound Number : 46
Compound Name : Benzene
Scan Number : 824
Retention Time (minutes): 5.990
Relative Retention Time : 0.00108
Quant Ion : 78.00
Area (flag) : 140811
Concentration (ppb(v)) : 2.2272

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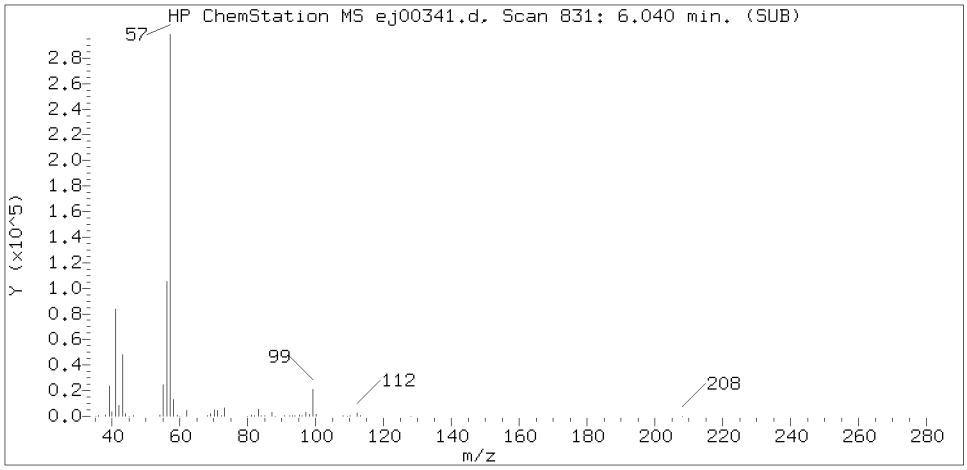
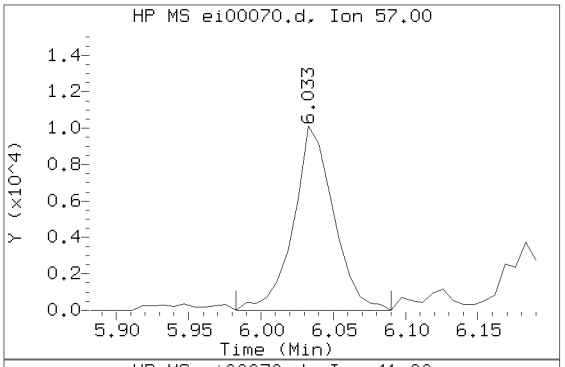
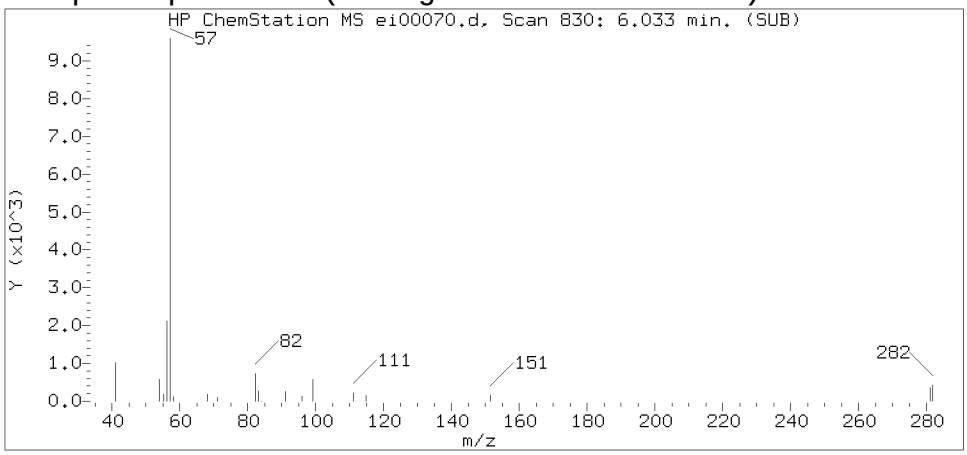
Target 3.5 esignature user ID: jeb07445

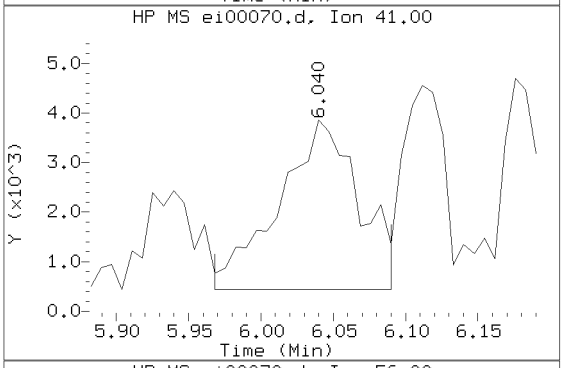
Reference Standard Spectrum for Isooctane

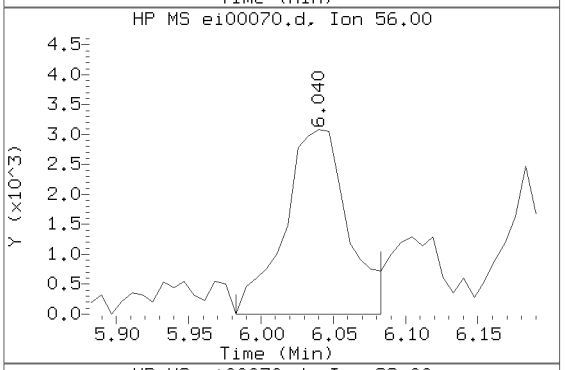




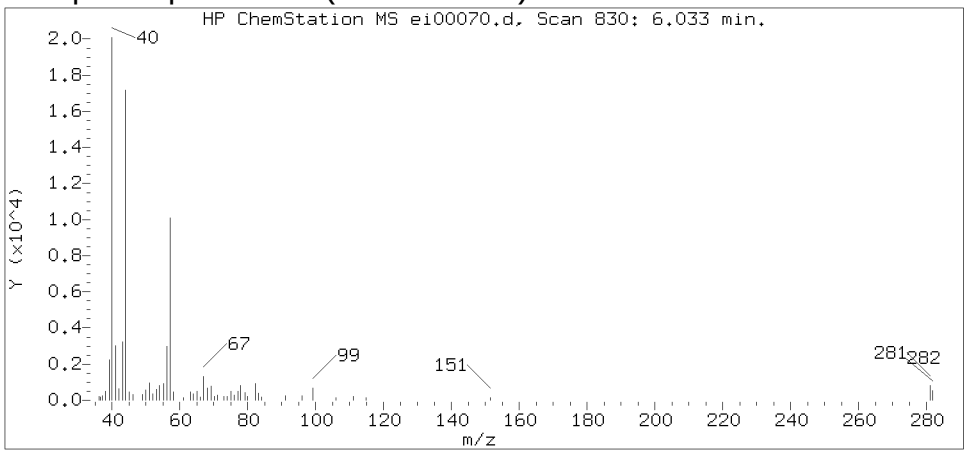
Sample Spectrum (Background Subtracted)

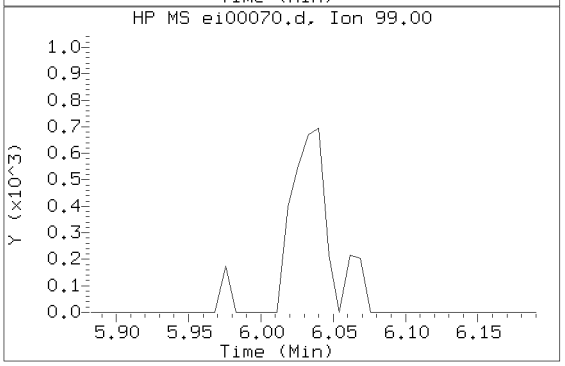






Sample Spectrum (Unaltered)





Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Sample Name: -1176 Lab Sample ID: 9785624

Compound Number : 48
Compound Name : Isooctane
Scan Number : 830
Retention Time (minutes): 6.033
Relative Retention Time : 0.00223
Quant Ion : 57.00
Area (flag) : 19511
Concentration (ppb(v)) : 0.2251

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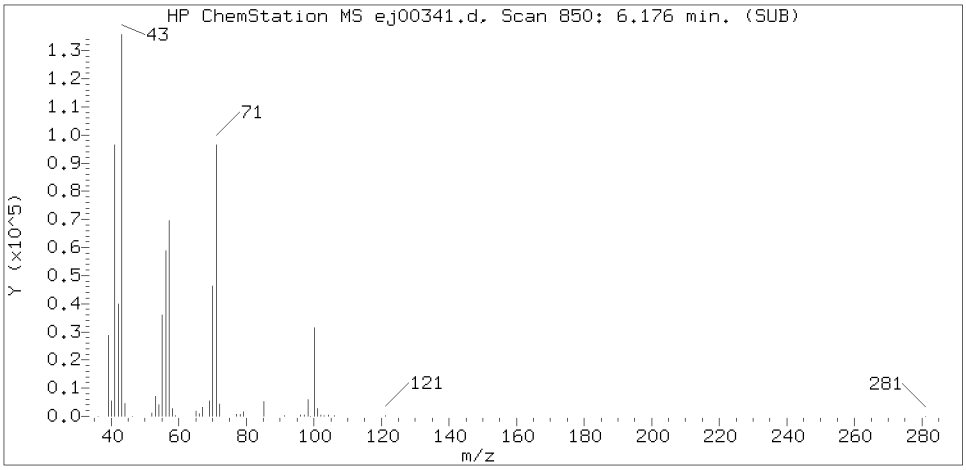
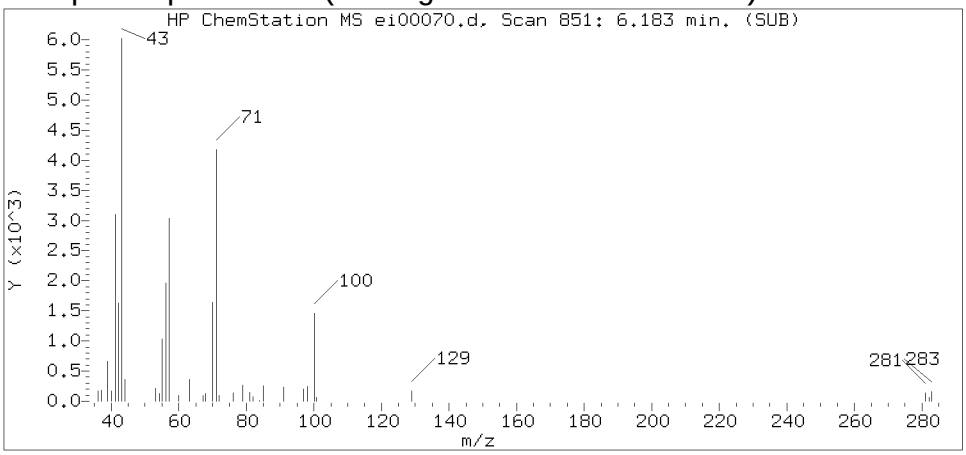
Target 3.5 esignature user ID: jeb07445

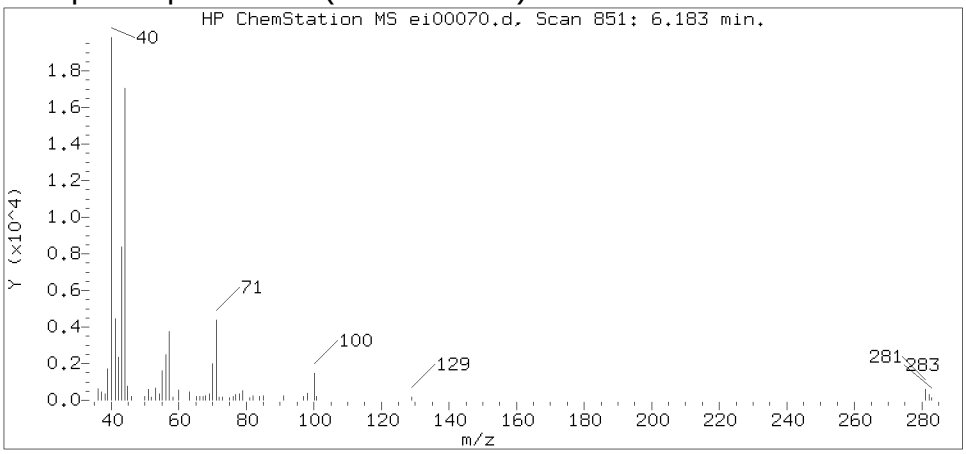
Reference Standard Spectrum for Heptane

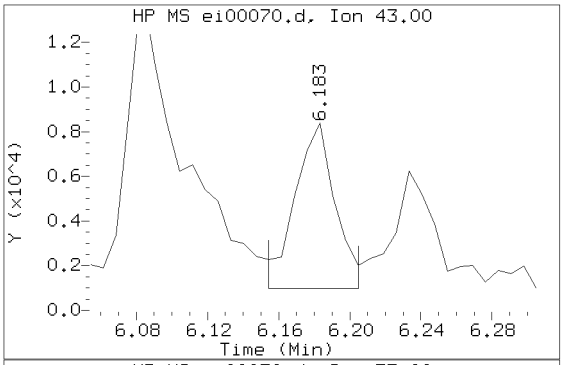


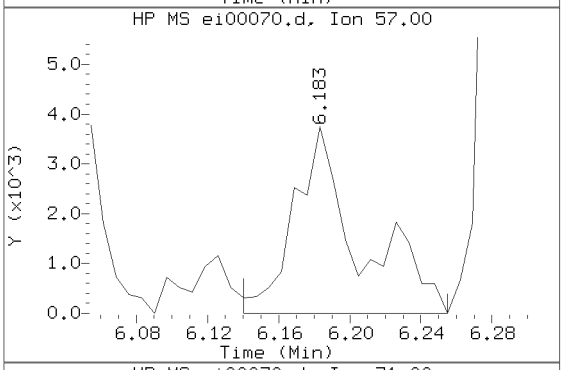
Sample Spectrum (Background Subtracted)

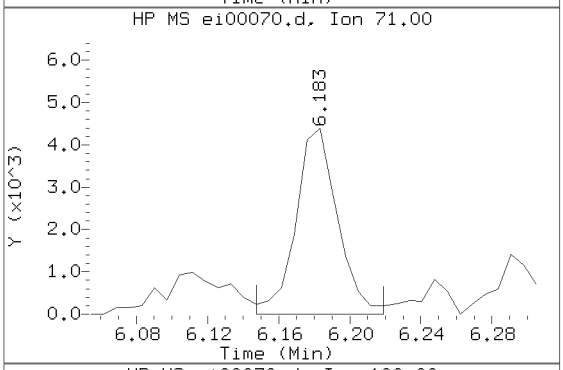


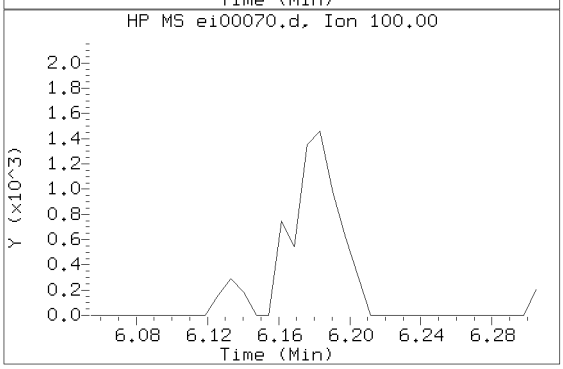
Sample Spectrum (Unaltered)











Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Sample Name: -1176 Lab Sample ID: 9785624

Compound Number : 50
Compound Name : Heptane
Scan Number : 851
Retention Time (minutes): 6.183
Relative Retention Time :-0.00002
Quant Ion : 43.00
Area (flag) : 11465
Concentration (ppb(v)) : 0.3587

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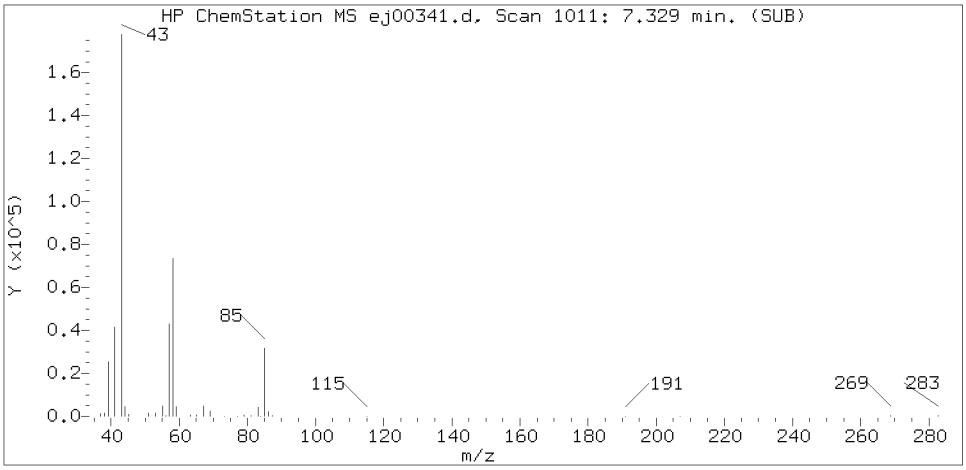
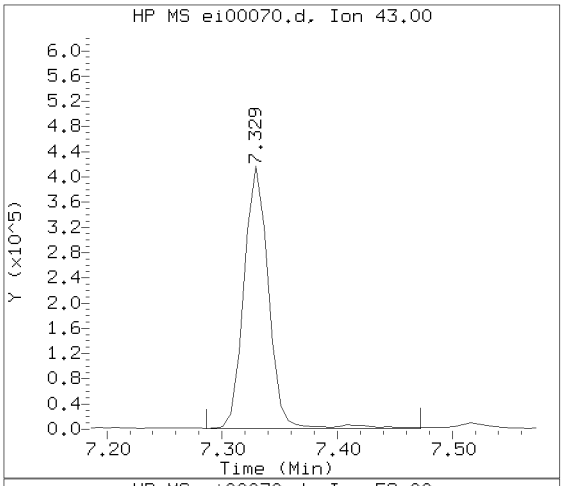
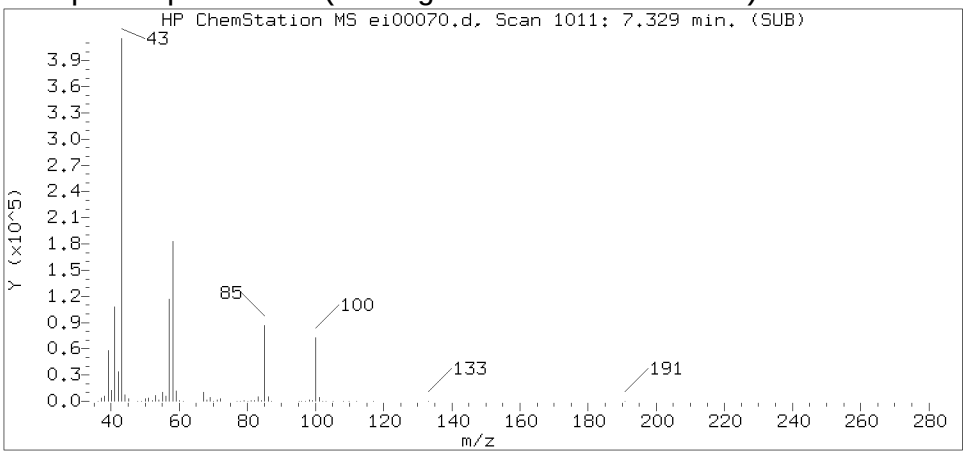
Target 3.5 esignature user ID: jeb07445

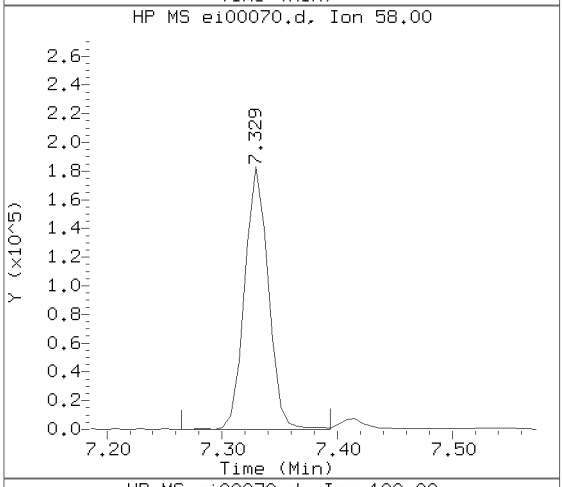
Reference Standard Spectrum for 4-Methyl-2-Pentanone



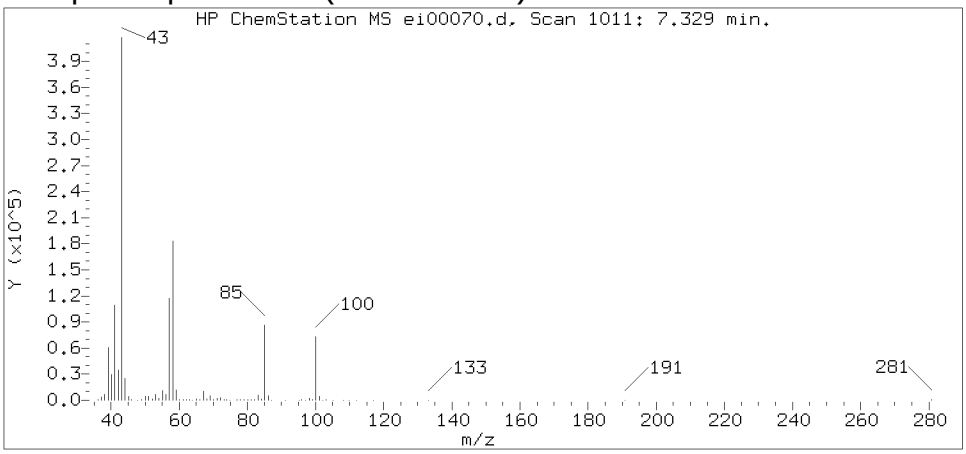


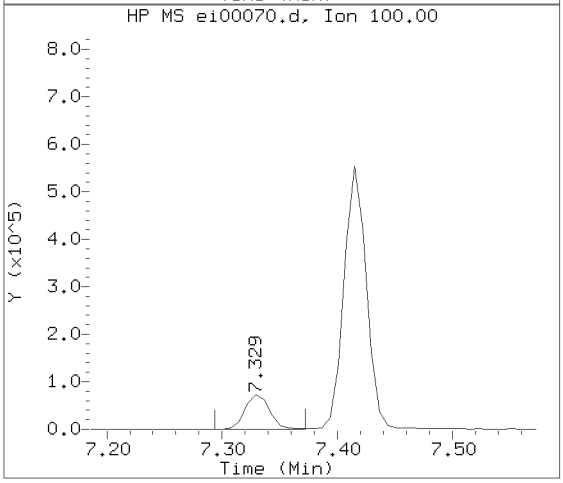
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Sample Name: -1176 Lab Sample ID: 9785624

Compound Number : 60
Compound Name : 4-Methyl-2-Pentanone
Scan Number : 1011
Retention Time (minutes): 7.329
Relative Retention Time : 0.00132
Quant Ion : 43.00
Area (flag) : 614022
Concentration (ppb(v)) : 13.8241

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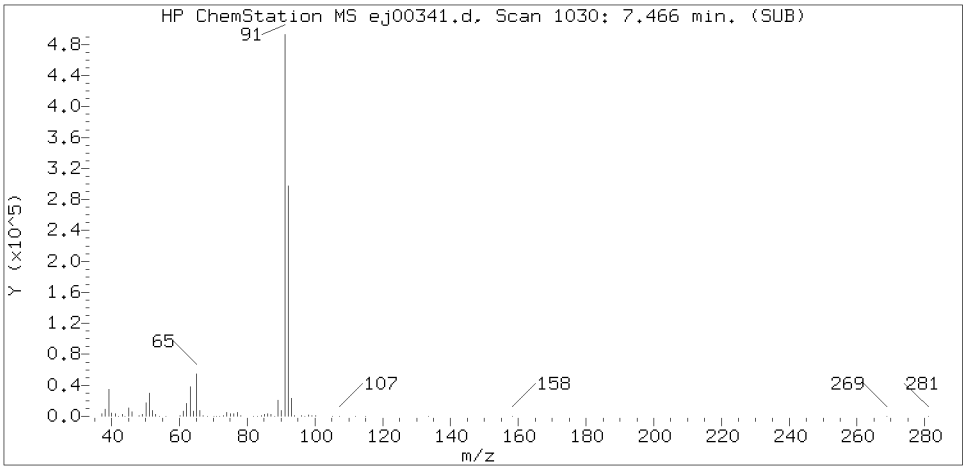
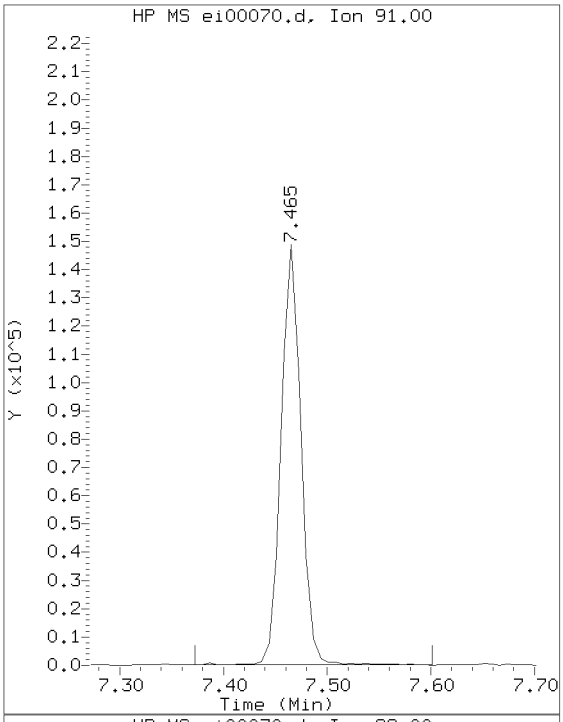
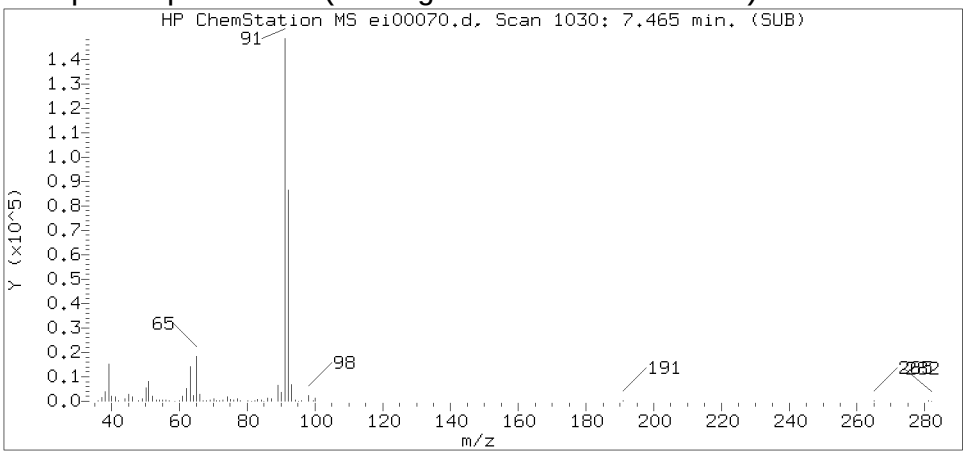
Target 3.5 esignature user ID: jeb07445

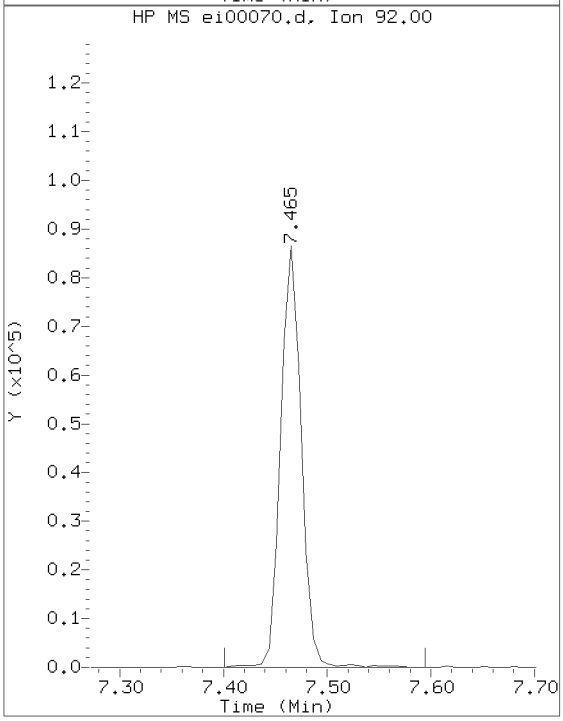
Reference Standard Spectrum for Toluene



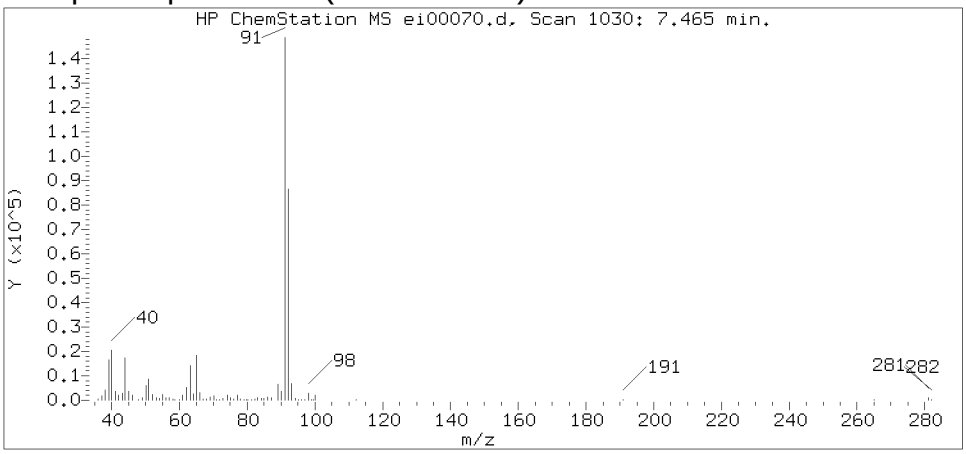


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Sample Name: -1176 Lab Sample ID: 9785624

Compound Number	: 61
Compound Name	: Toluene
Scan Number	: 1030
Retention Time (minutes)	: 7.465
Relative Retention Time	: 0.00000
Quant Ion	: 91.00
Area (flag)	: 200444
Concentration (ppb(v))	: 2.5679

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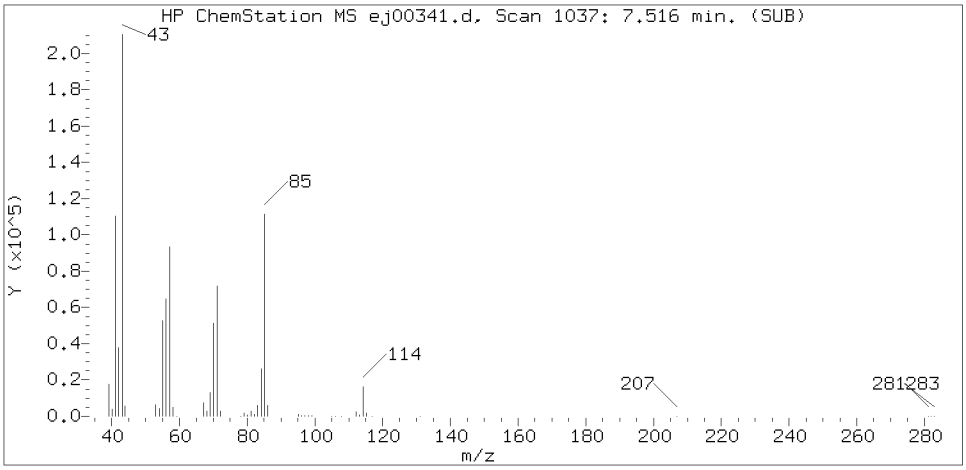
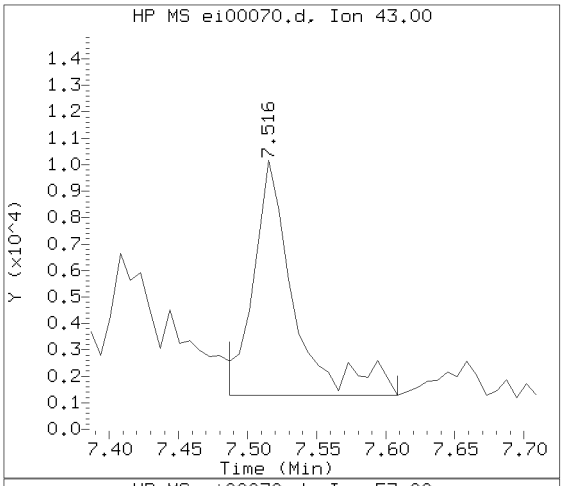
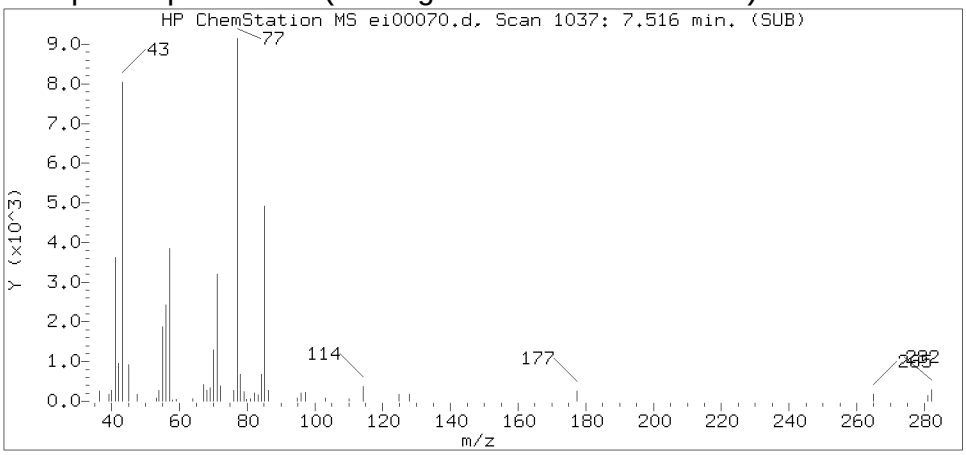
Target 3.5 esignature user ID: jeb07445

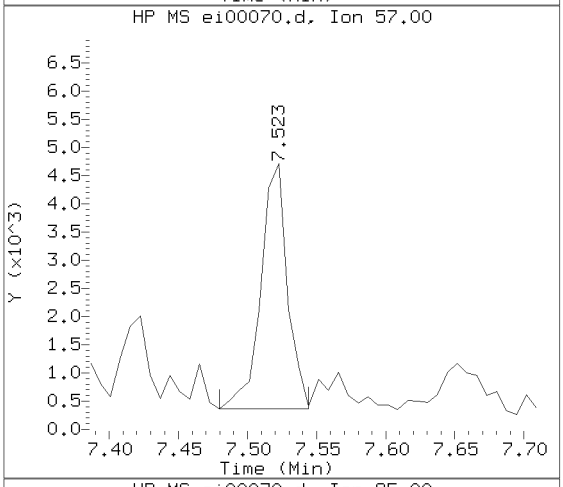
Reference Standard Spectrum for Octane



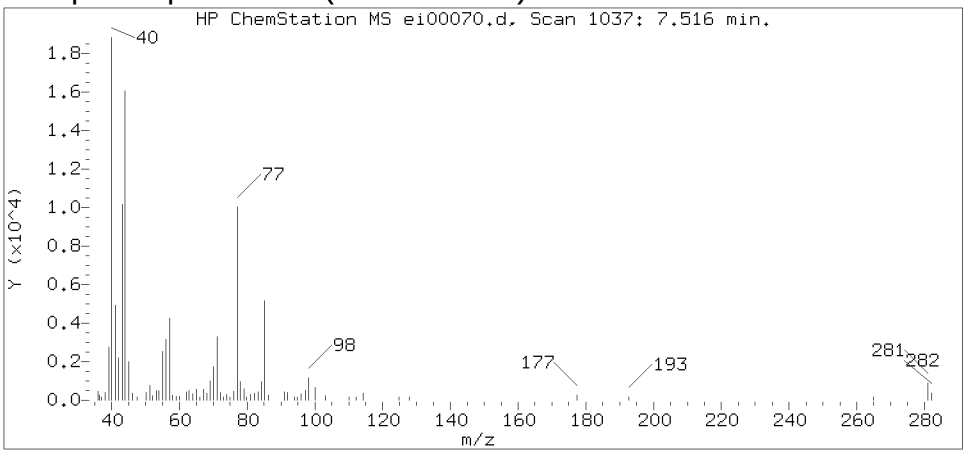


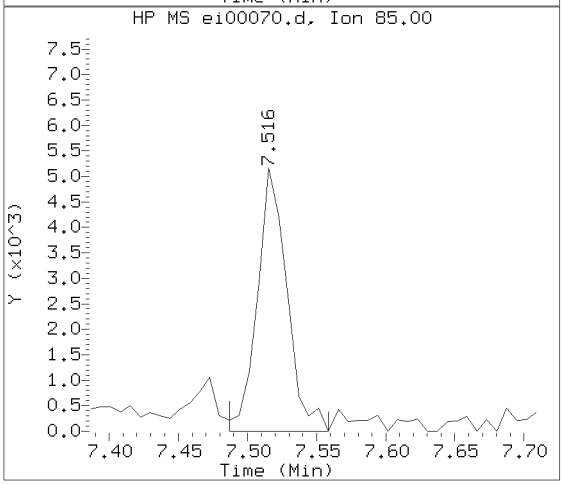
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Sample Name: -1176 Lab Sample ID: 9785624

Compound Number : 62
Compound Name : Octane
Scan Number : 1037
Retention Time (minutes): 7.516
Relative Retention Time : 0.00000
Quant Ion : 43.00
Area (flag) : 18218
Concentration (ppb(v)) : 0.4131

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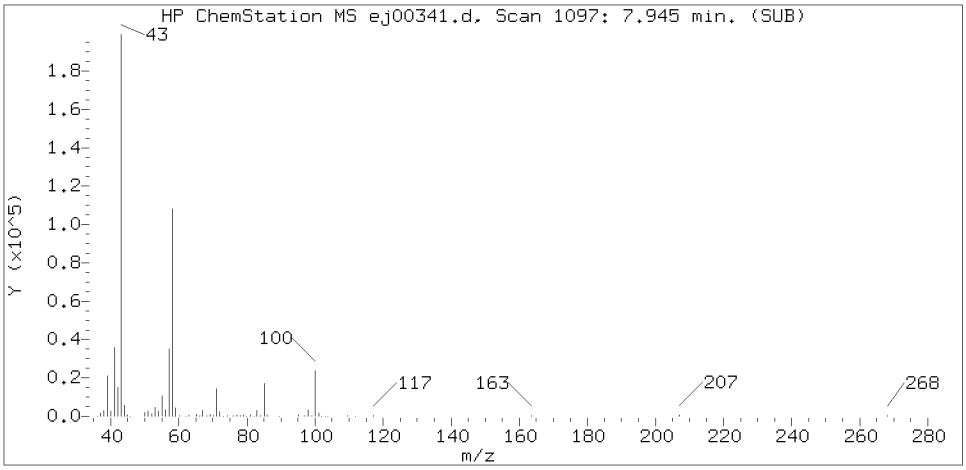
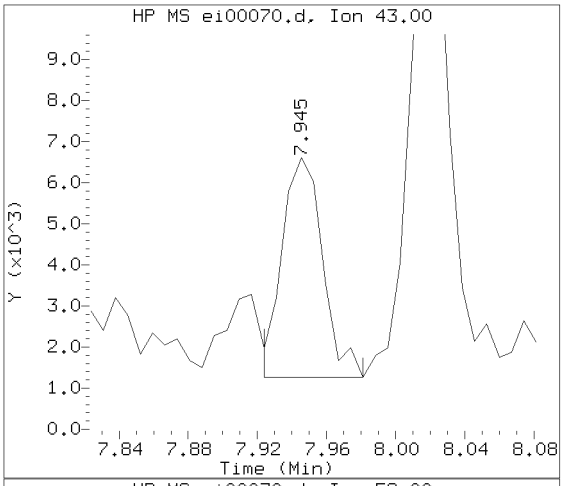
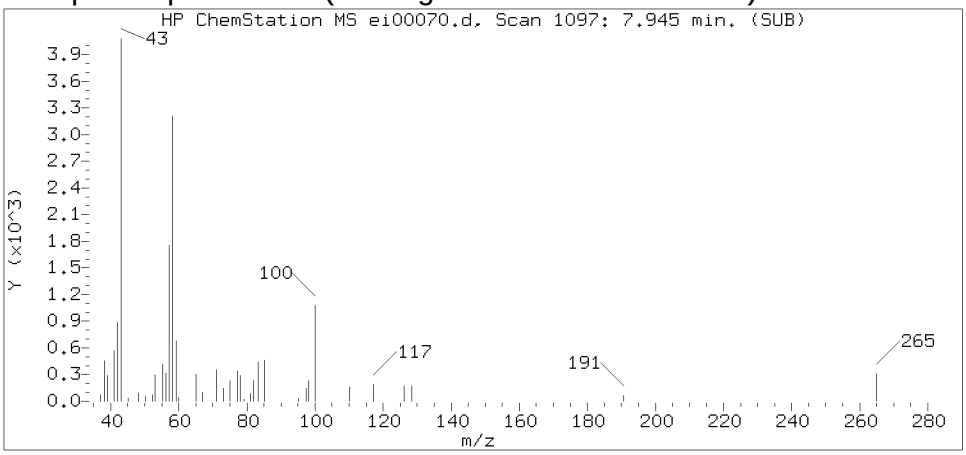
Target 3.5 esignature user ID: jeb07445

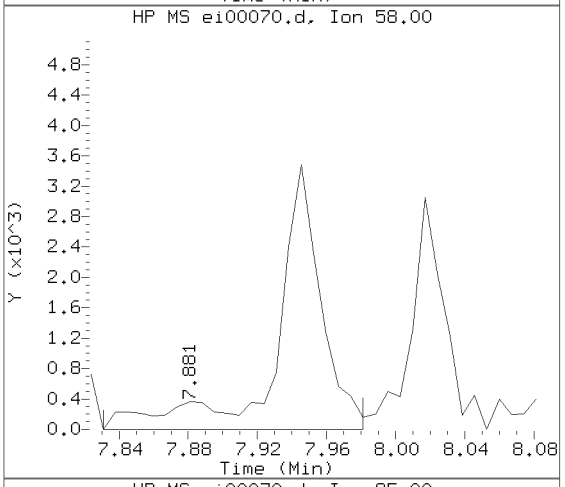
Reference Standard Spectrum for 2-Hexanone



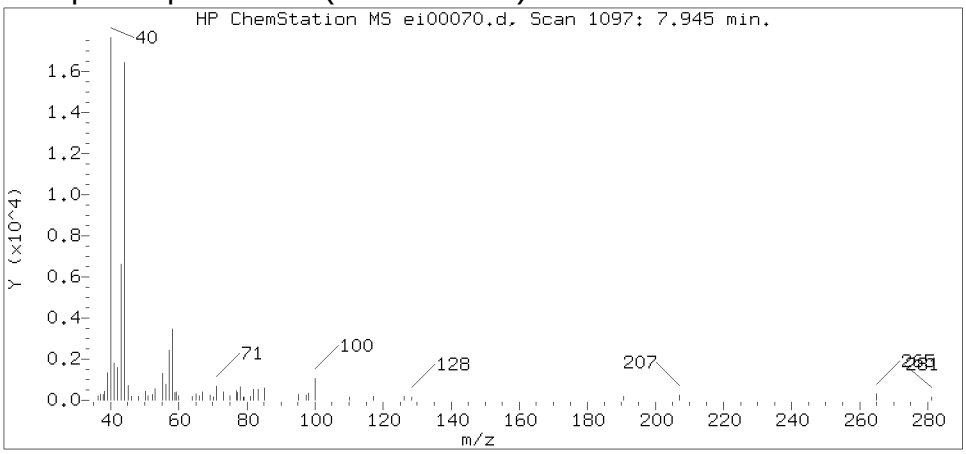


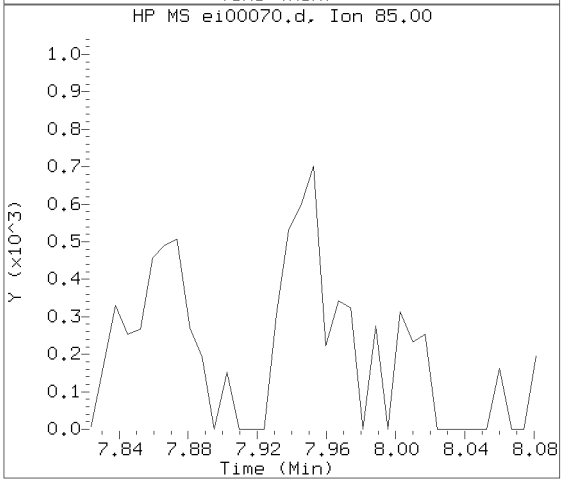
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Sample Name: -1176 Lab Sample ID: 9785624

Compound Number	: 68
Compound Name	: 2-Hexanone
Scan Number	: 1097
Retention Time (minutes)	: 7.945
Relative Retention Time	: 0.00000
Quant Ion	: 43.00
Area (flag)	: 8756
Concentration (ppb(v))	: 0.2001

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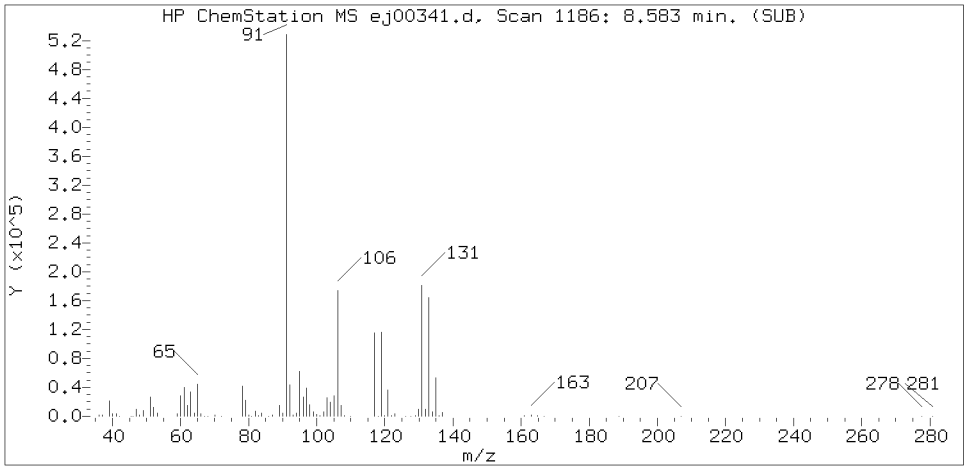
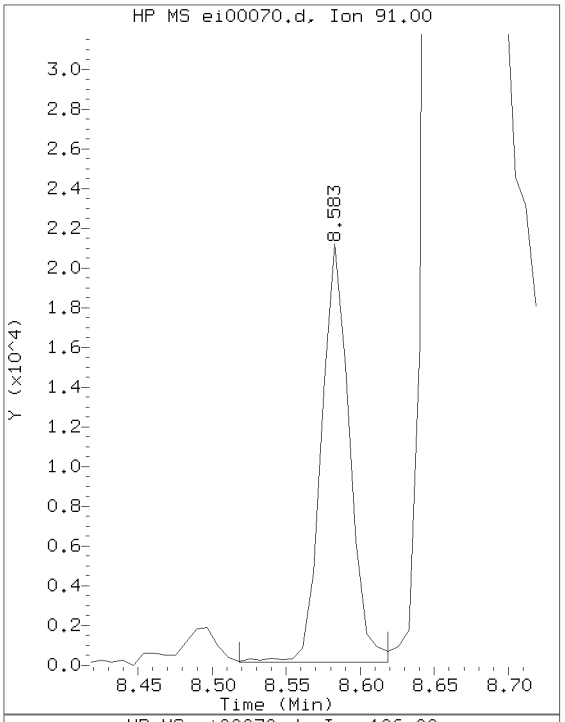
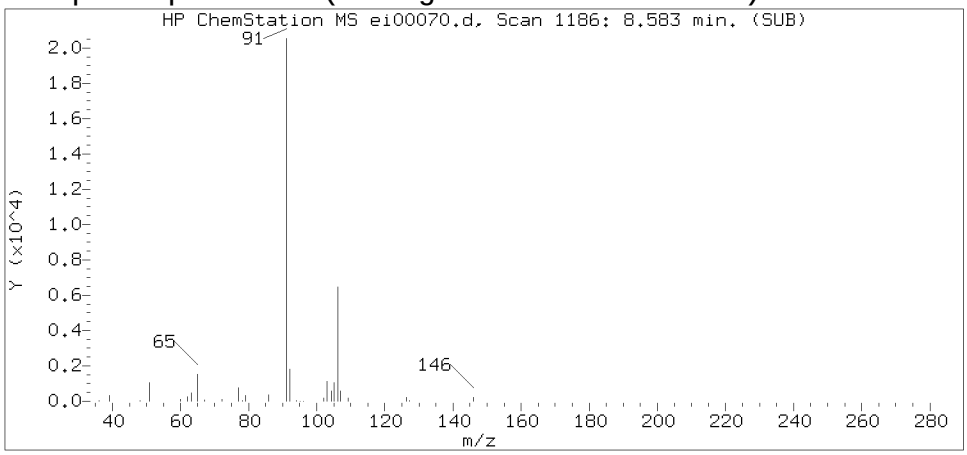
Target 3.5 esignature user ID: jeb07445

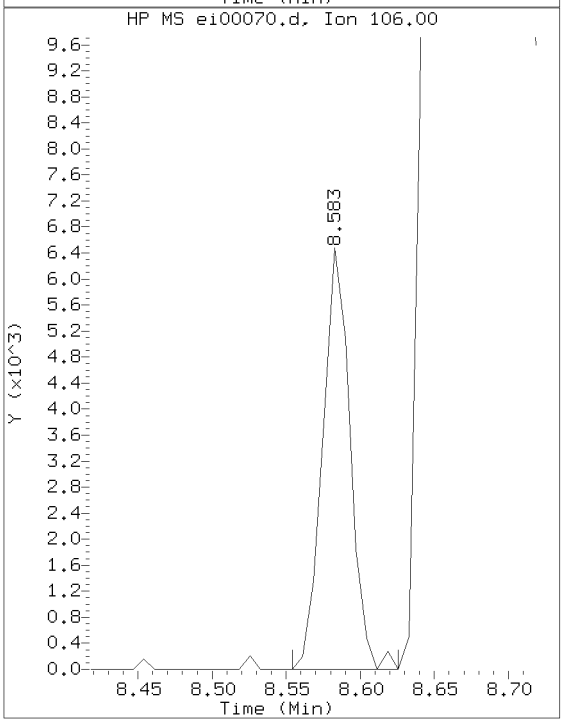
Reference Standard Spectrum for Ethylbenzene



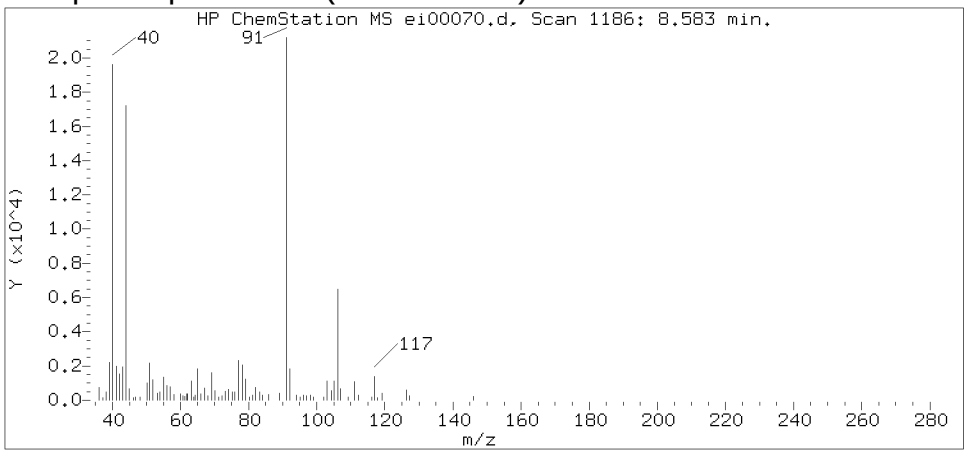


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Sample Name: -1176 Lab Sample ID: 9785624

Compound Number : 74
Compound Name : Ethylbenzene
Scan Number : 1186
Retention Time (minutes): 8.583
Relative Retention Time :-0.00000
Quant Ion : 91.00
Area (flag) : 27769
Concentration (ppb(v)) : 0.2610

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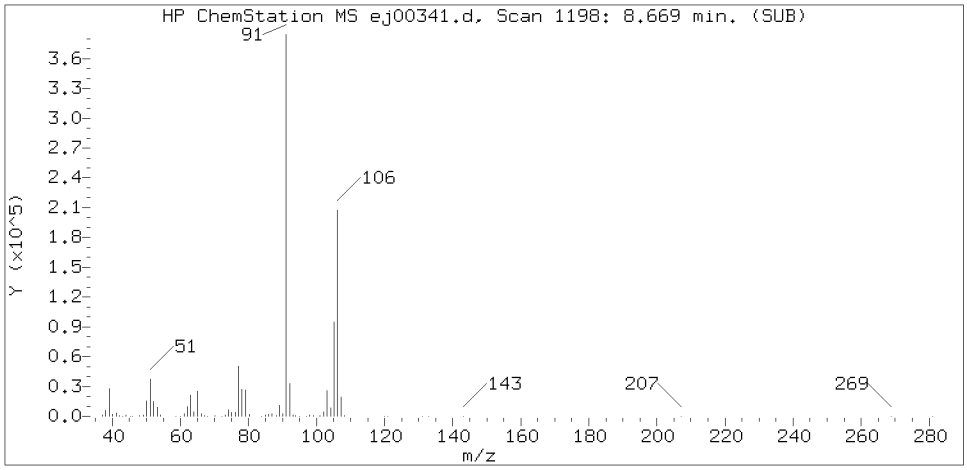
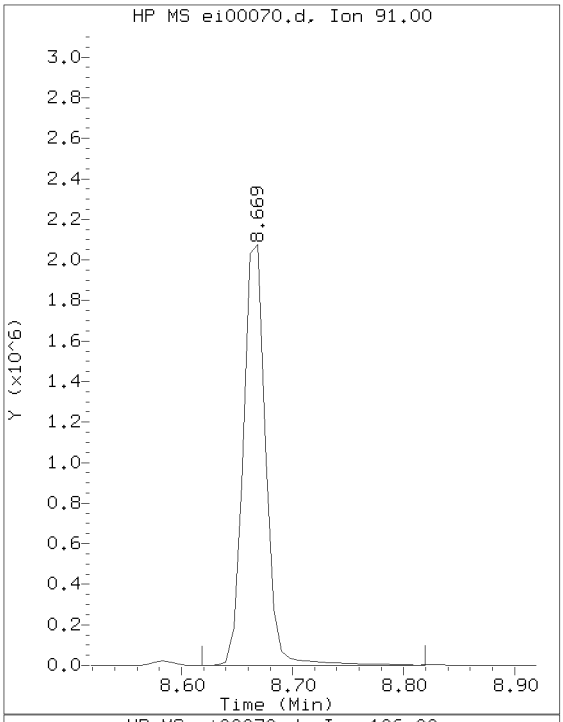
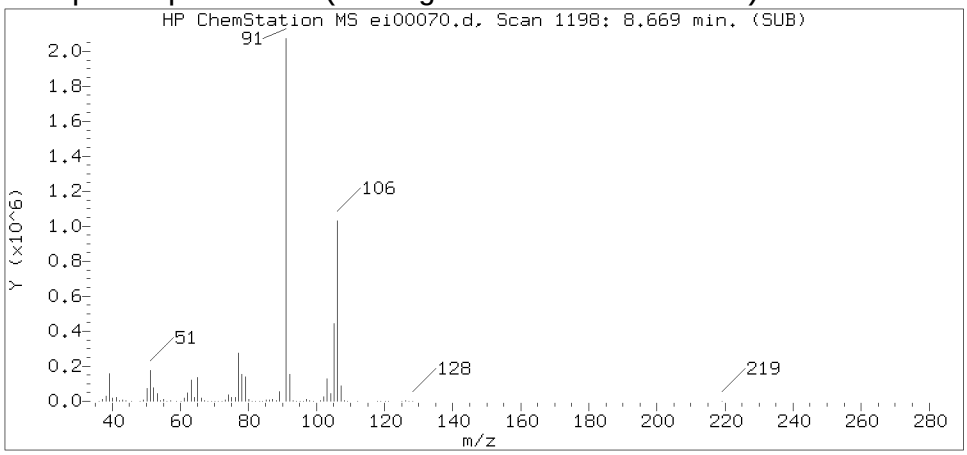
Target 3.5 esignature user ID: jeb07445

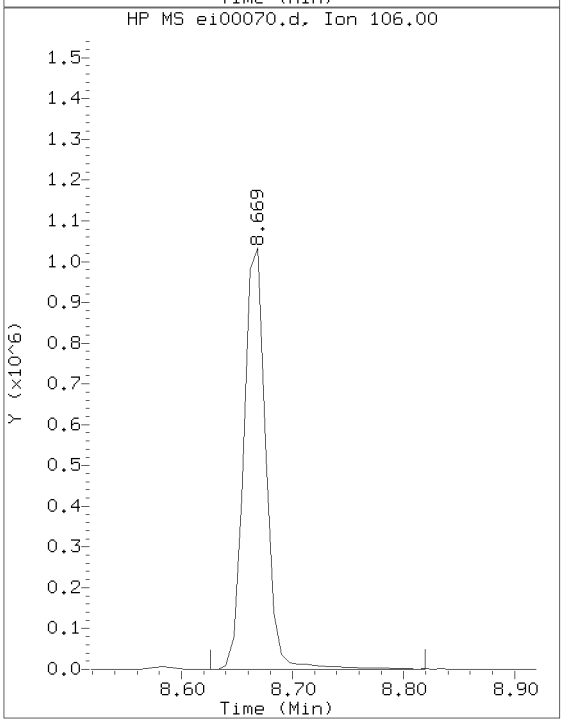
Reference Standard Spectrum for m/p-Xylene



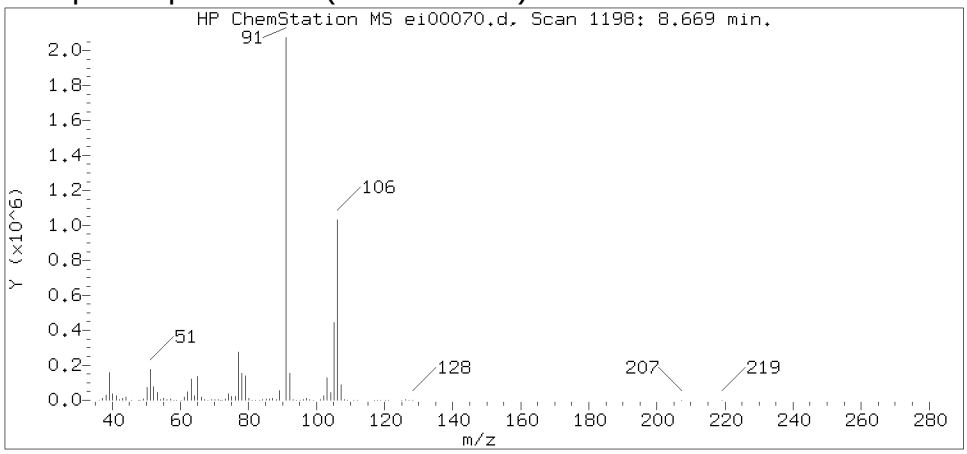


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Sample Name: -1176 Lab Sample ID: 9785624

Compound Number	: 75
Compound Name	: m/p-Xylene
Scan Number	: 1198
Retention Time (minutes)	: 8.669
Relative Retention Time	: 0.00000
Quant Ion	: 91.00
Area (flag)	: 2901984
Concentration (ppb(v))	: 34.5989

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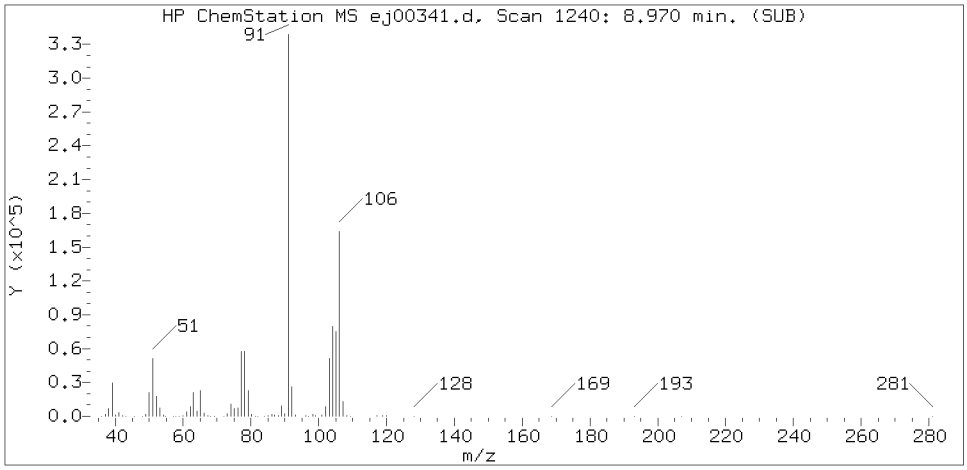
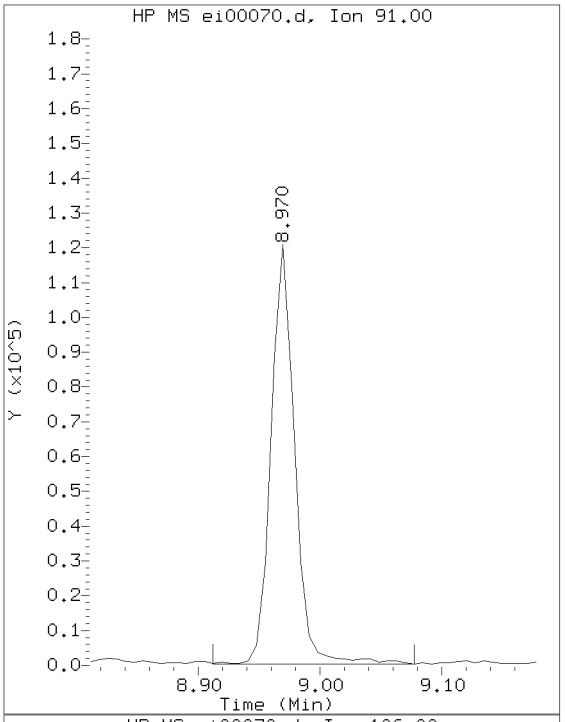
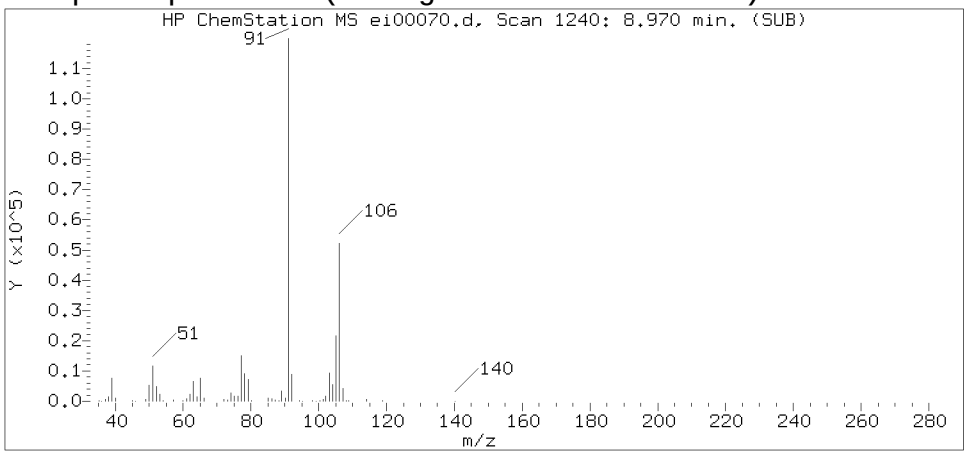
Target 3.5 esignature user ID: jeb07445

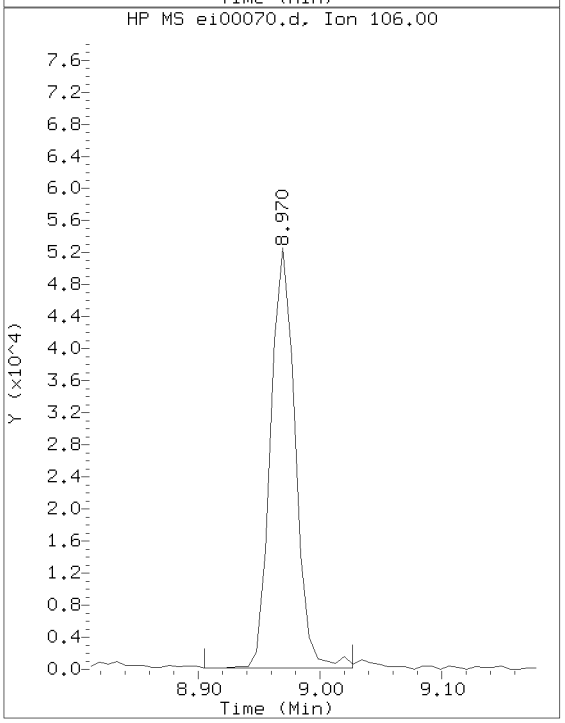
Reference Standard Spectrum for o-Xylene



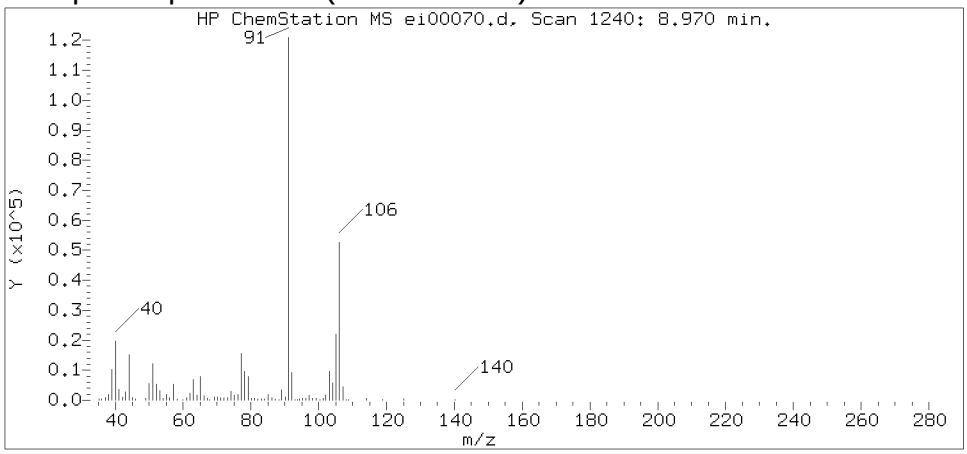


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Sample Name: -1176 Lab Sample ID: 9785624

Compound Number : 76
Compound Name : o-Xylene
Scan Number : 1240
Retention Time (minutes): 8.970
Relative Retention Time :-0.00000
Quant Ion : 91.00
Area (flag) : 163215
Concentration (ppb(v)) : 1.9568

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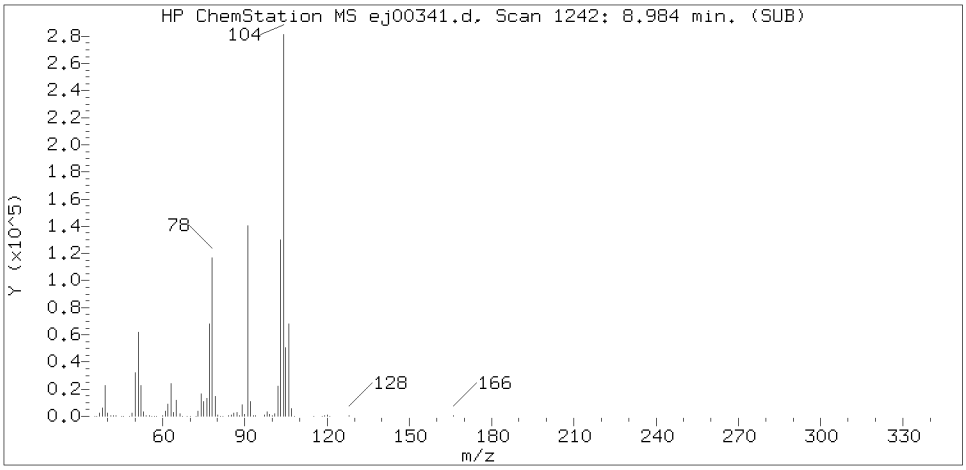
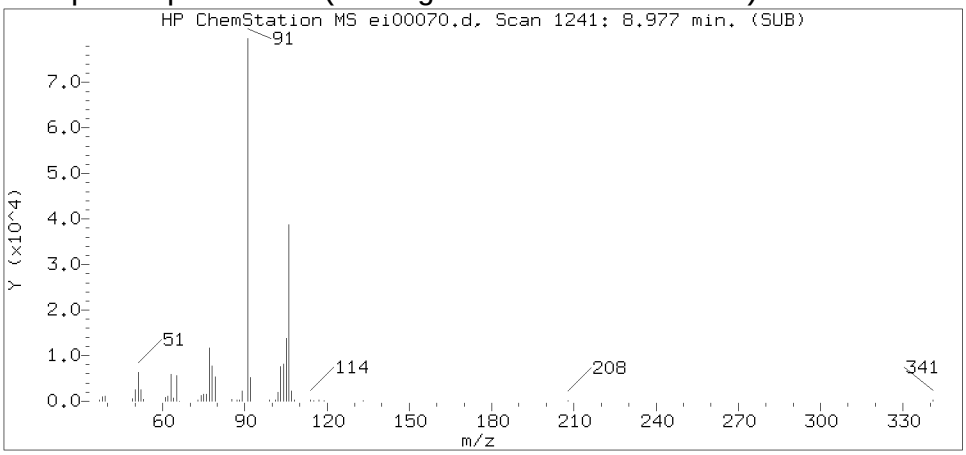
Target 3.5 esignature user ID: jeb07445

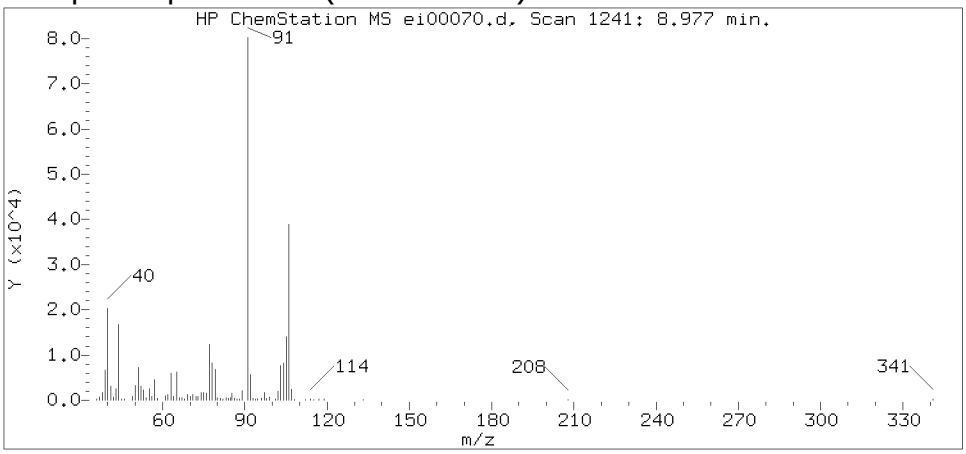
Reference Standard Spectrum for Styrene

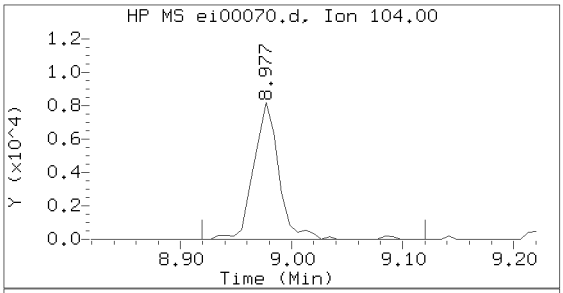


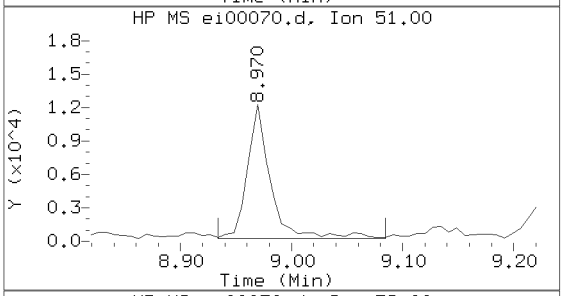
Sample Spectrum (Background Subtracted)

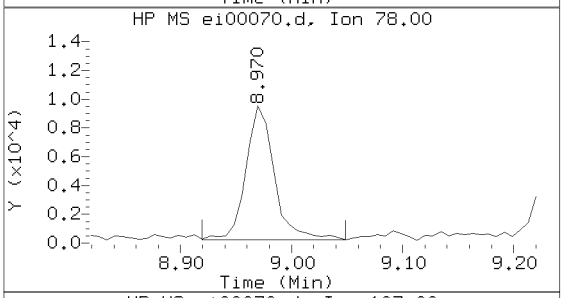


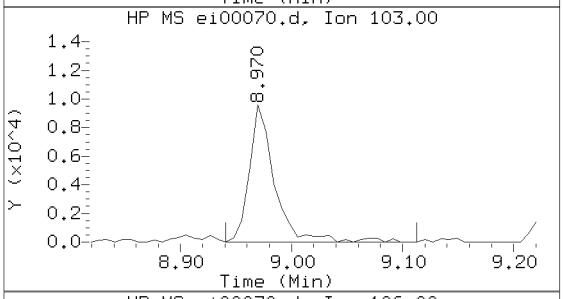
Sample Spectrum (Unaltered)

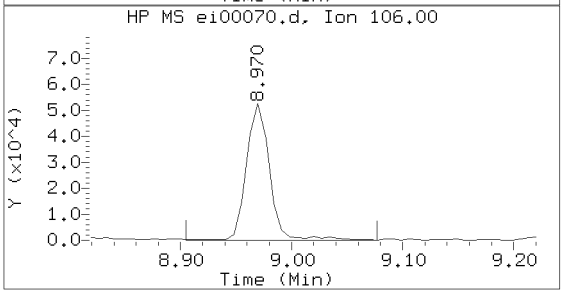












Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Sample Name: -1176 Lab Sample ID: 9785624

Compound Number	: 78
Compound Name	: Styrene
Scan Number	: 1241
Retention Time (minutes)	: 8.977
Relative Retention Time	:-0.00000
Quant Ion	: 104.00
Area (flag)	: 12985
Concentration (ppb(v))	: 0.2030

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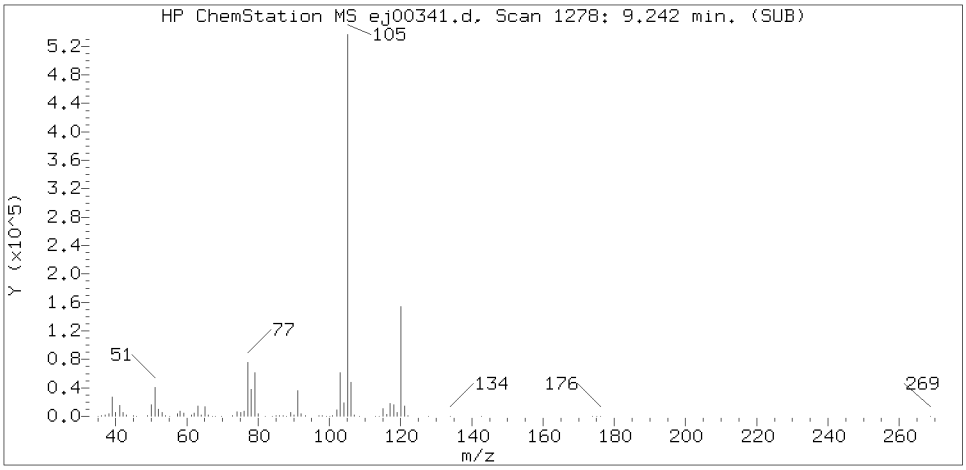
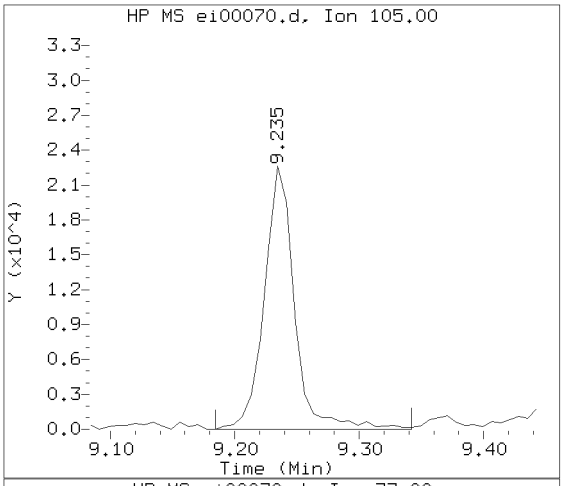
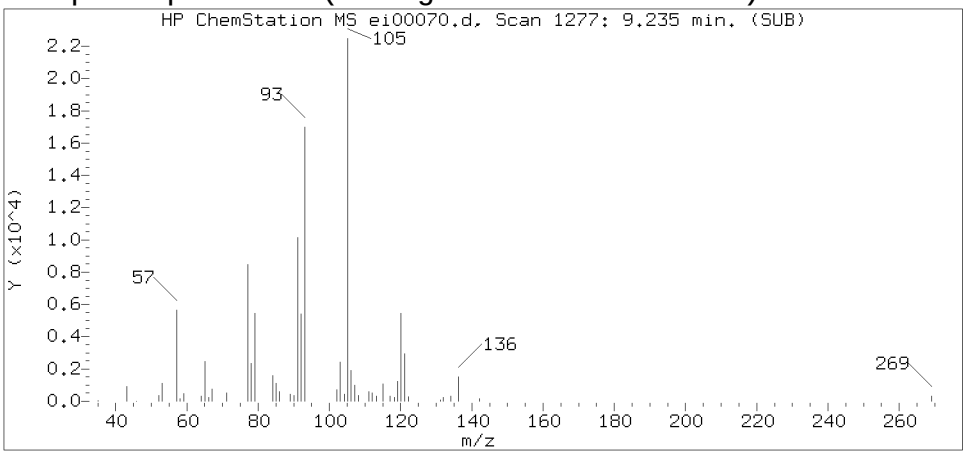
Target 3.5 esignature user ID: jeb07445

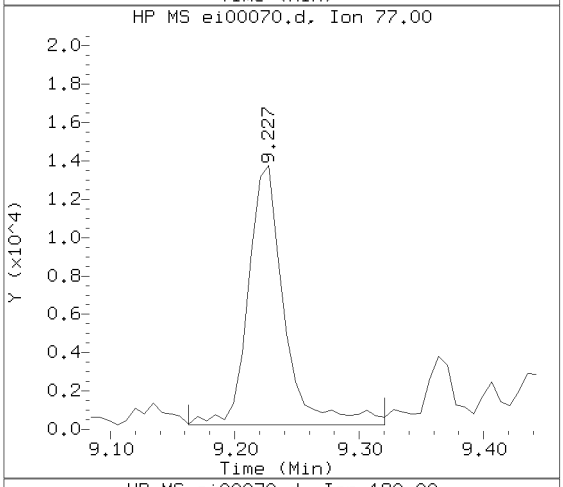
Reference Standard Spectrum for Cumene



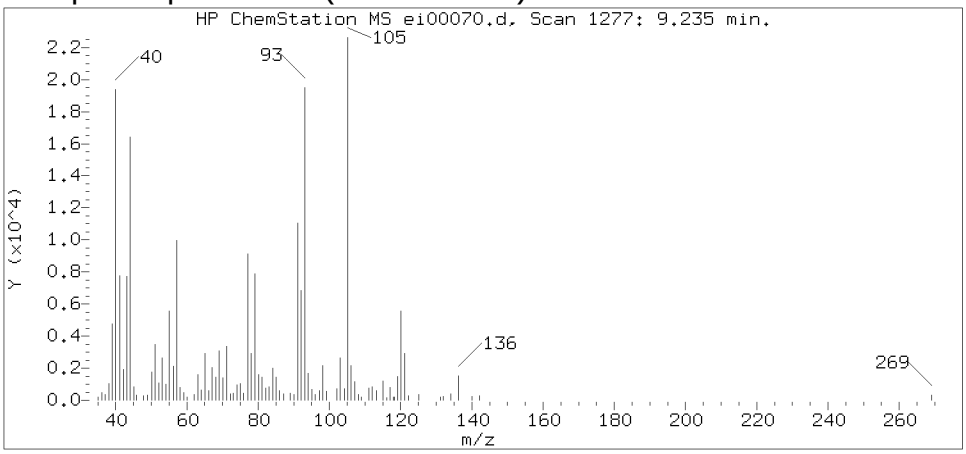


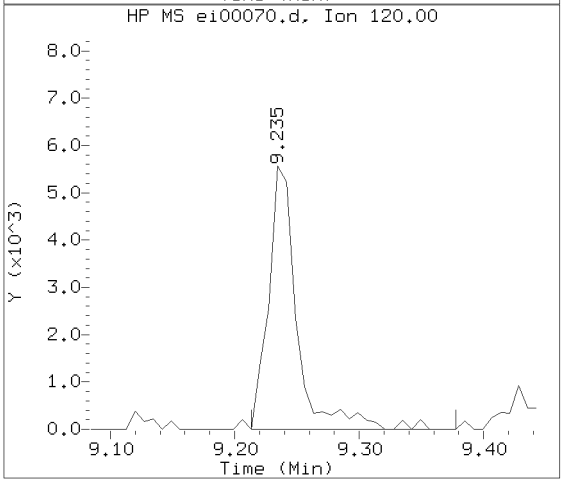
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

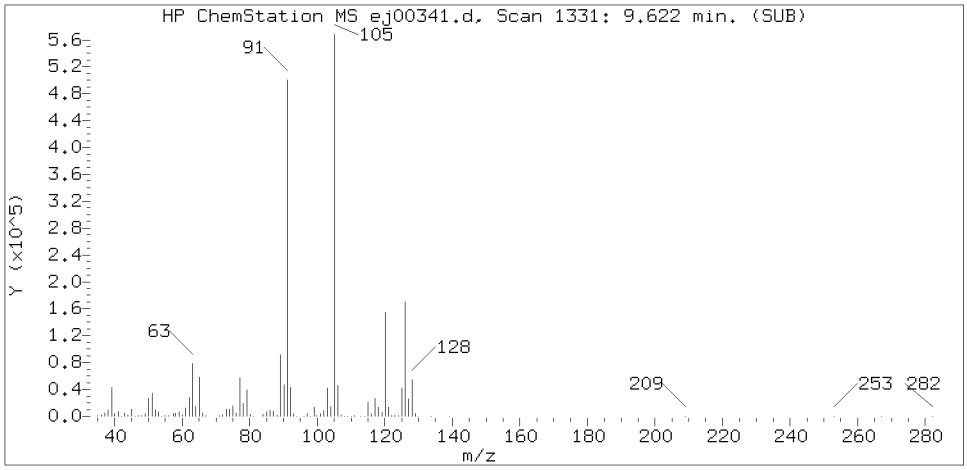
Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

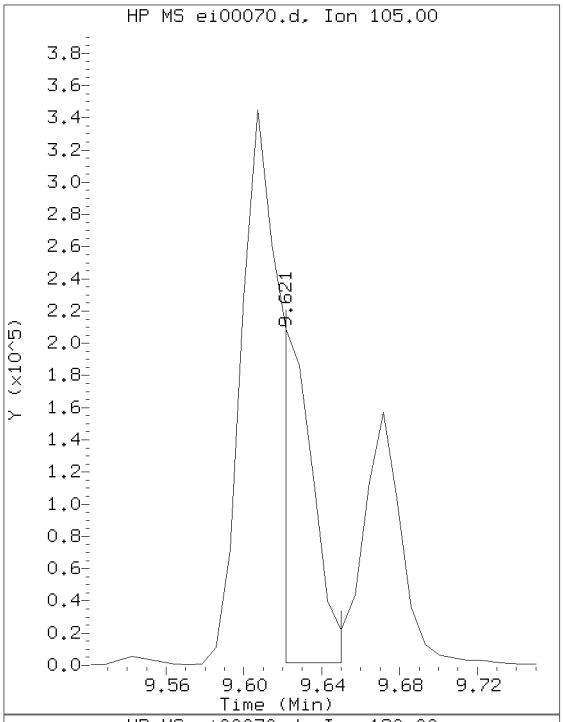
Sample Name: -1176 Lab Sample ID: 9785624

Compound Number : 80
Compound Name : Cumene
Scan Number : 1277
Retention Time (minutes): 9.235
Relative Retention Time :-0.00000
Quant Ion : 105.00
Area (flag) : 38307
Concentration (ppb(v)) : 0.3372

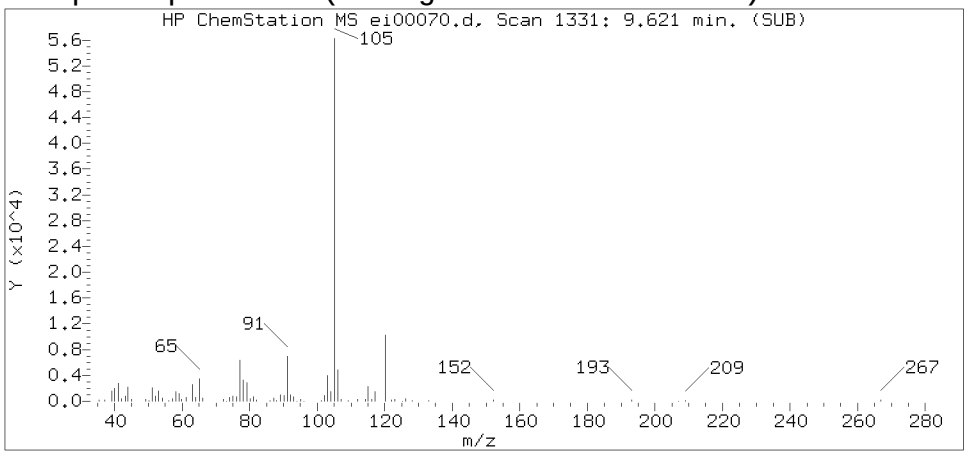
Digitally signed by Jacob E. Bailey on 09/06/2018 at 19:12.
Target 3.5 esignature user ID: jeb07445

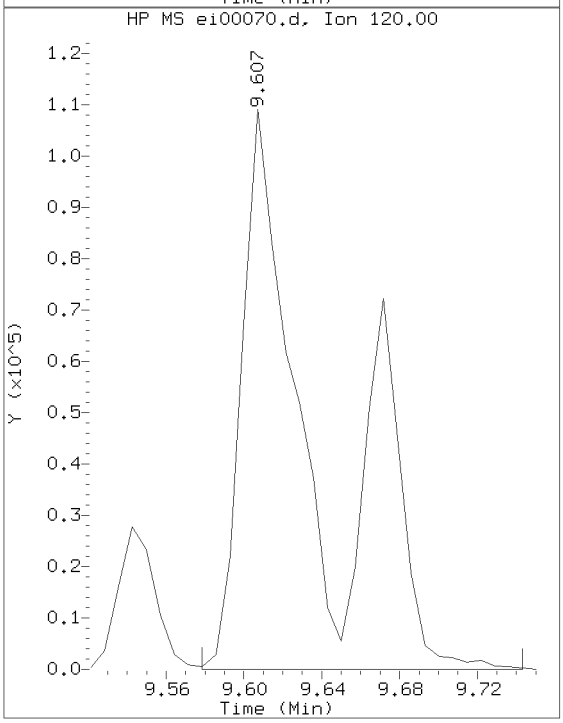
Reference Standard Spectrum for 4-Ethyltoluene



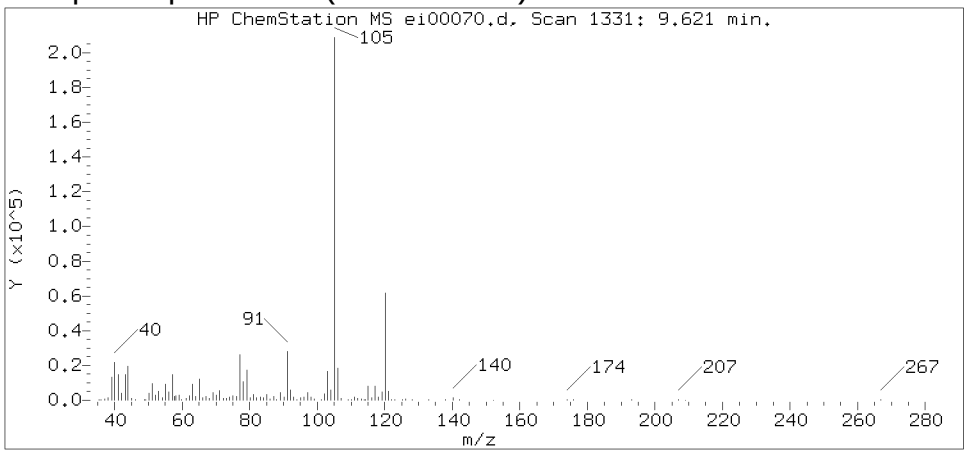


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

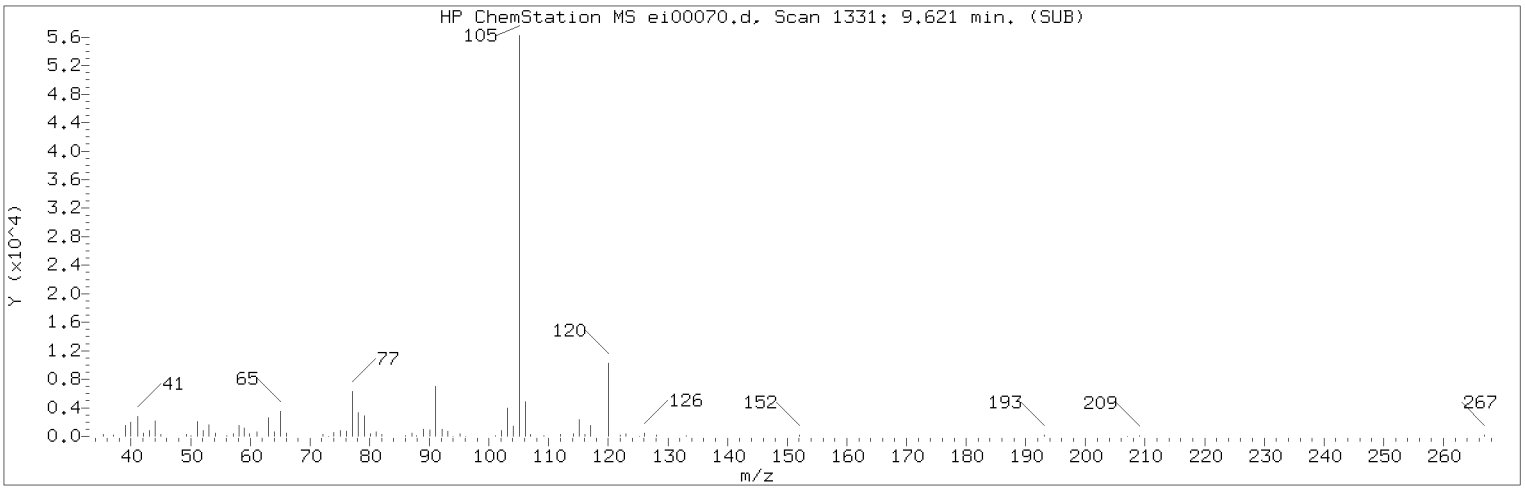
Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Sample Name: -1176 Lab Sample ID: 9785624

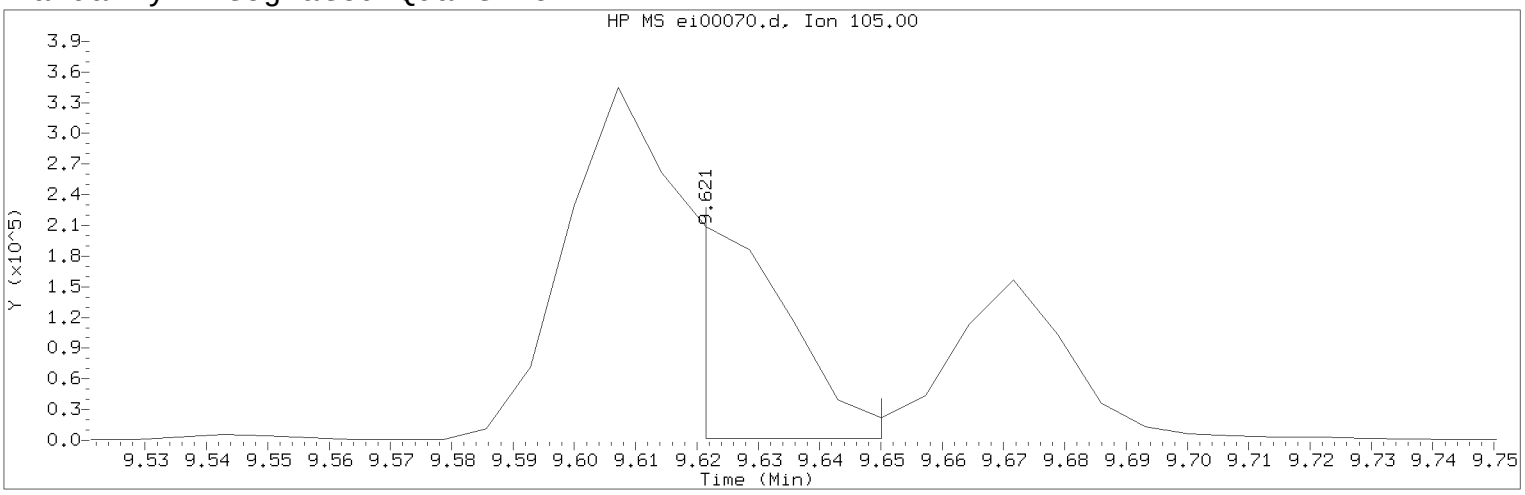
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1331
Retention Time (minutes): 9.621
Relative Retention Time : 0.00084
Quant Ion : 105.00
Area (flag) : 242312M
Concentration (ppb(v)) : 2.1549

Digitally signed by Jacob E. Bailey on 09/06/2018 at 19:12.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Sample Name: -1176 Lab Sample ID: 9785624

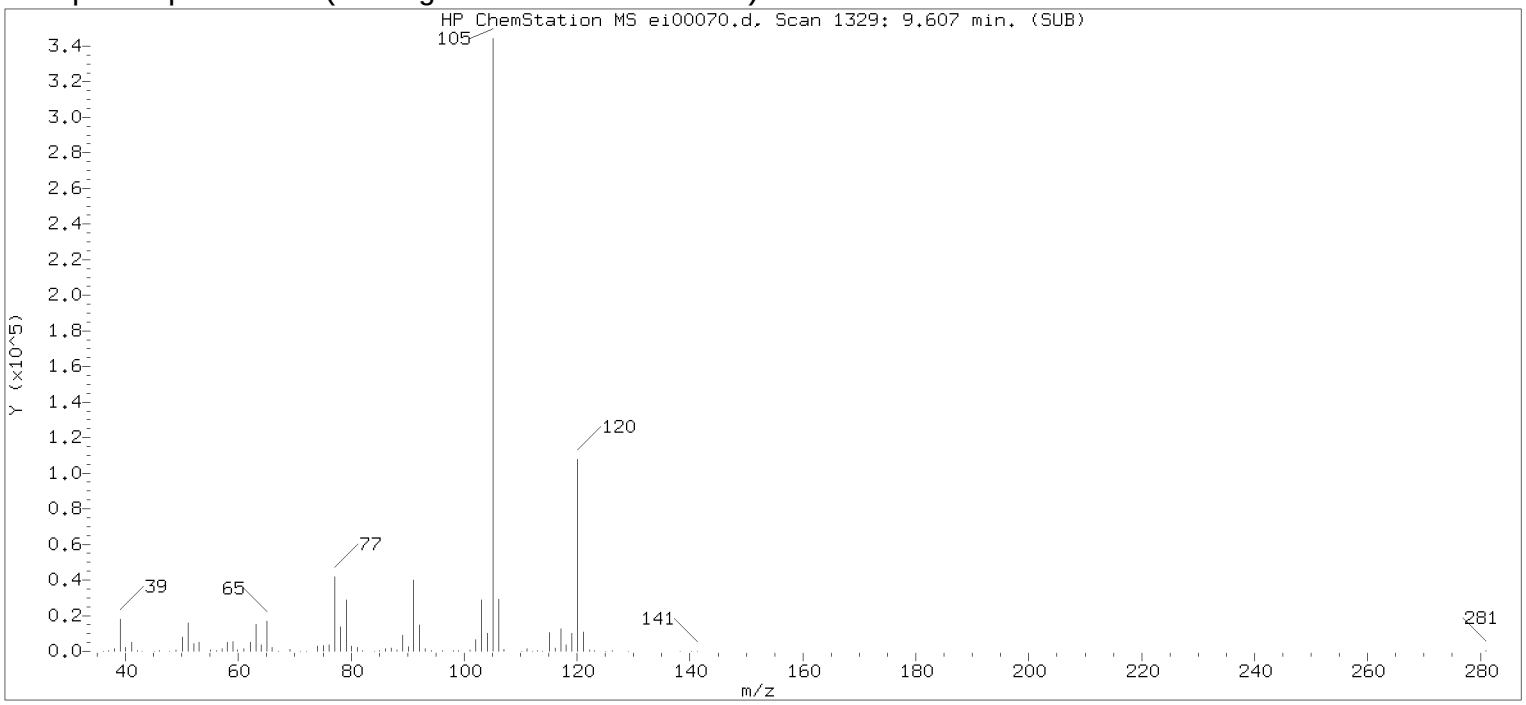
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1331
Retention Time (minutes): 9.621
Quant Ion : 105.00
Area (flag) : 242312M
Concentration (ppb(v)) : 2.1549
Integration start scan : 1330 Integration stop scan: 1334
Y at integration start : 1739 Y at integration end: 1739

Reason for manual integration: improper integration

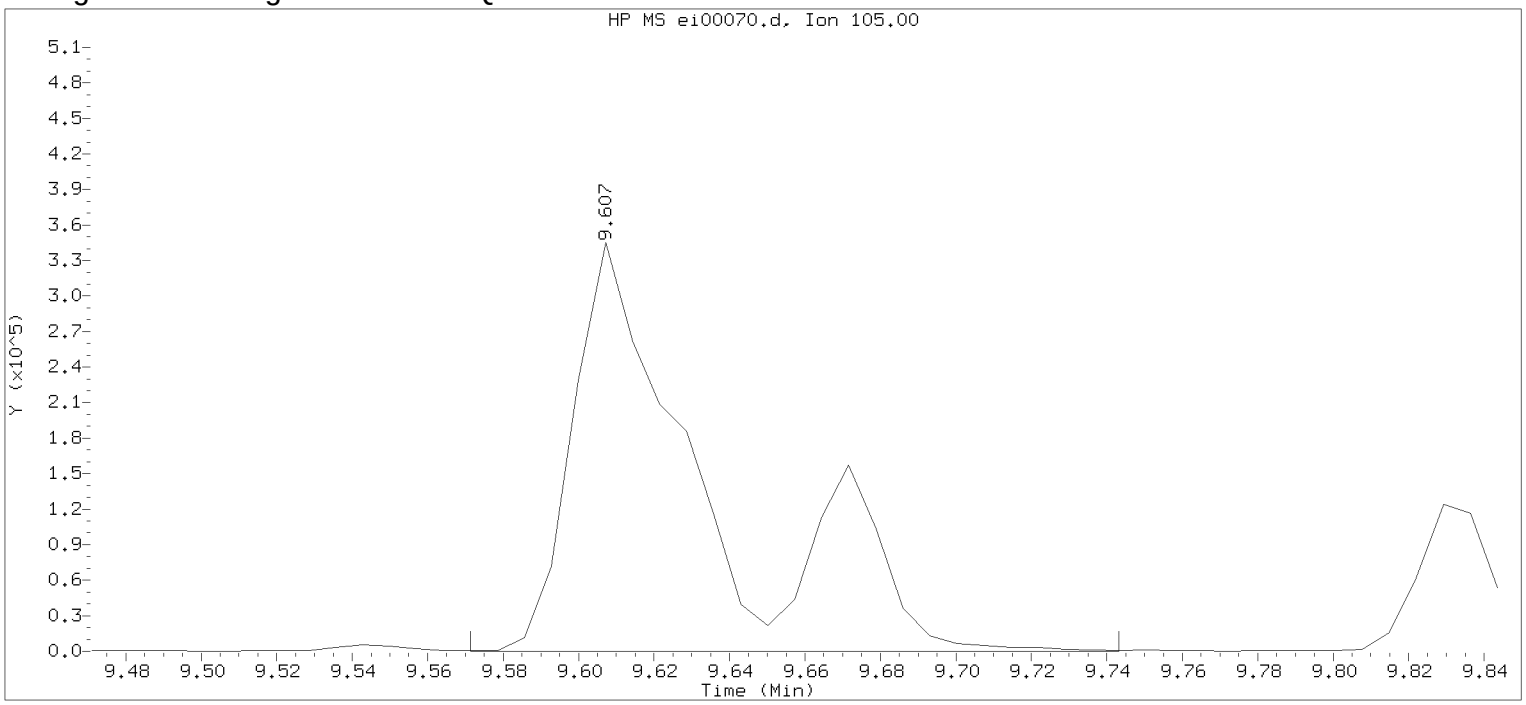
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/06/2018 at 19:12.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/07/2018 at 14:24.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

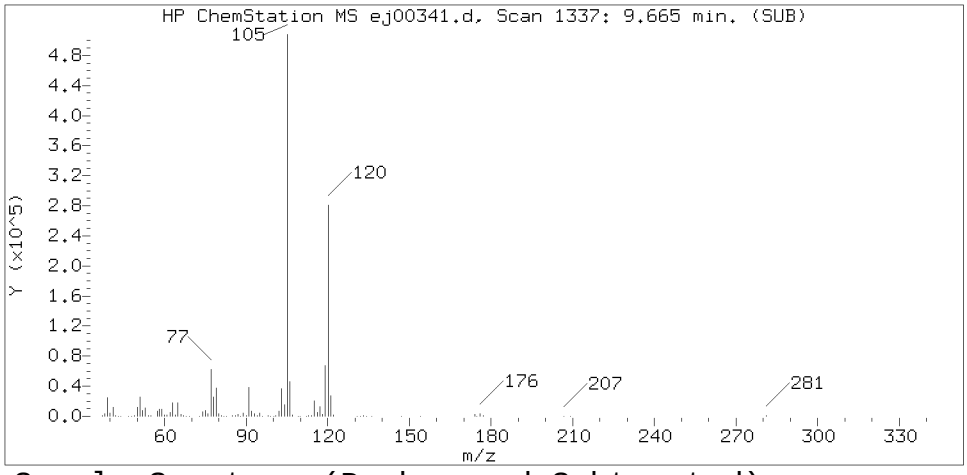
Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 17:36 Unknown

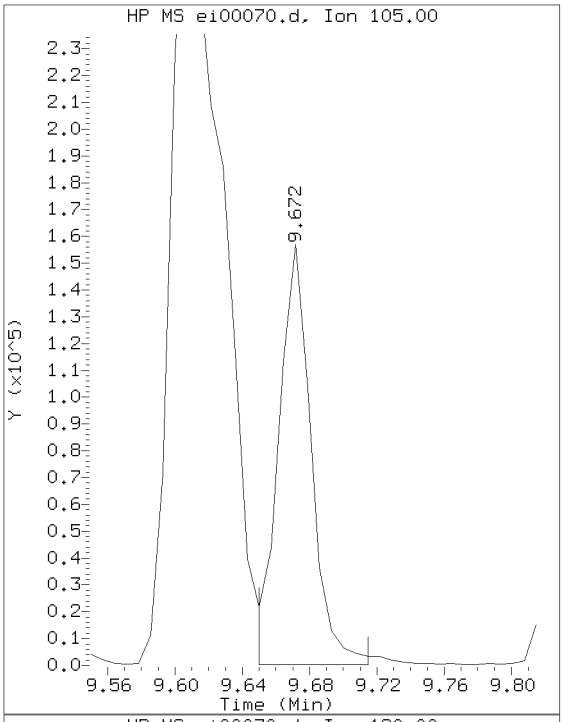
Sample Name: -1176 Lab Sample ID: 9785624

Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1329
Retention Time (minutes): 9.607
Quant Ion : 105.00
Area : 850837
Concentration (ppb(v)) : 7.5664
Integration start scan : 1323 Integration stop scan: 1347
Y at integration start : 0 Y at integration end: 0

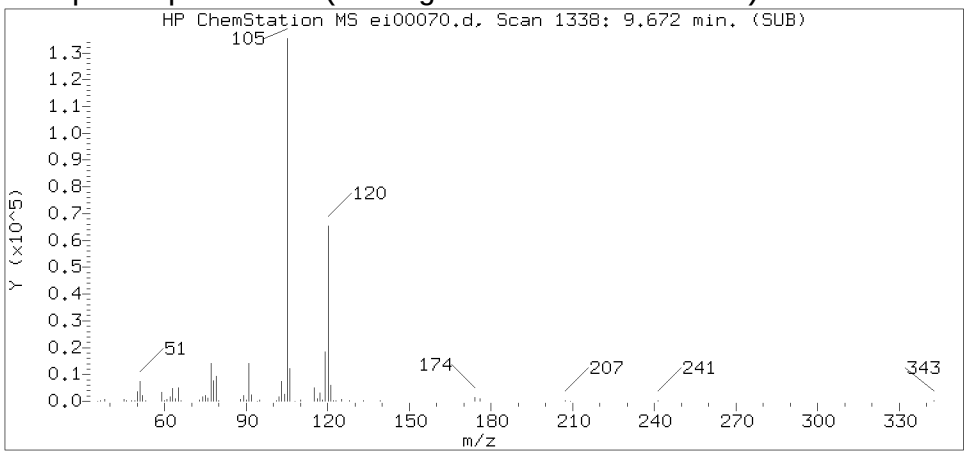
Digitally signed by Jacob E. Bailey on 09/06/2018 at 19:12.
Target 3.5 esignature user ID: jeb07445

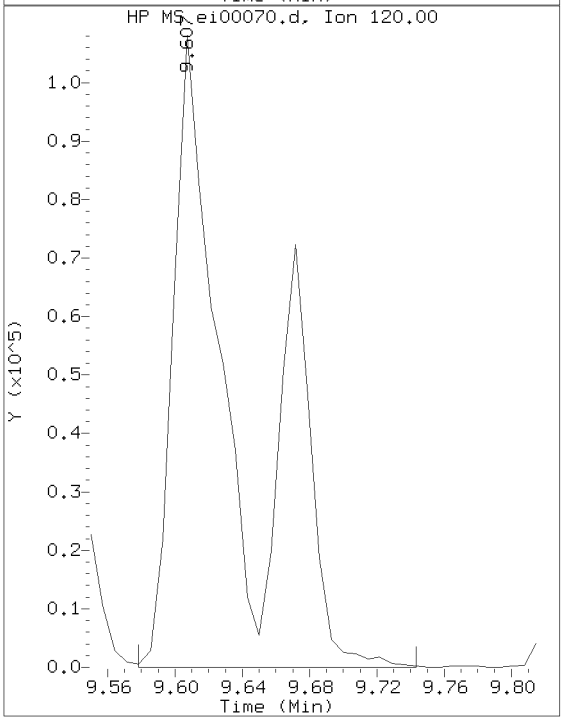
Reference Standard Spectrum for 1,3,5-Trimethylbenzene



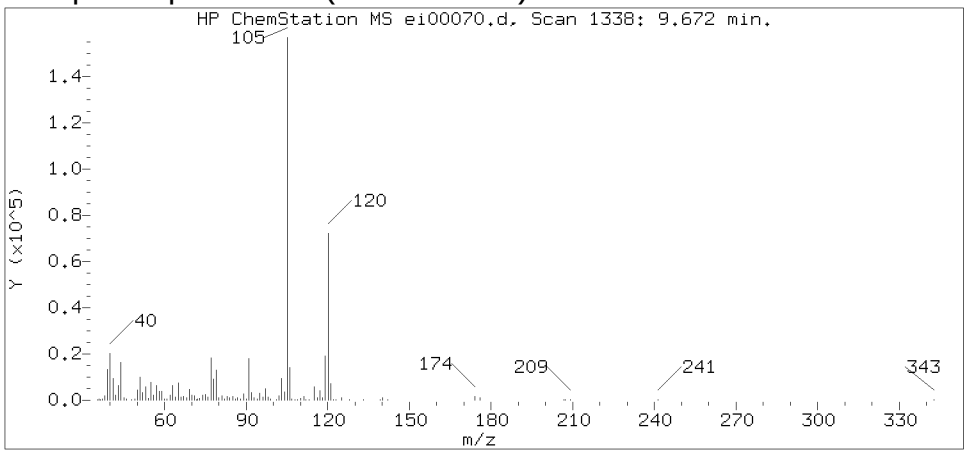


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

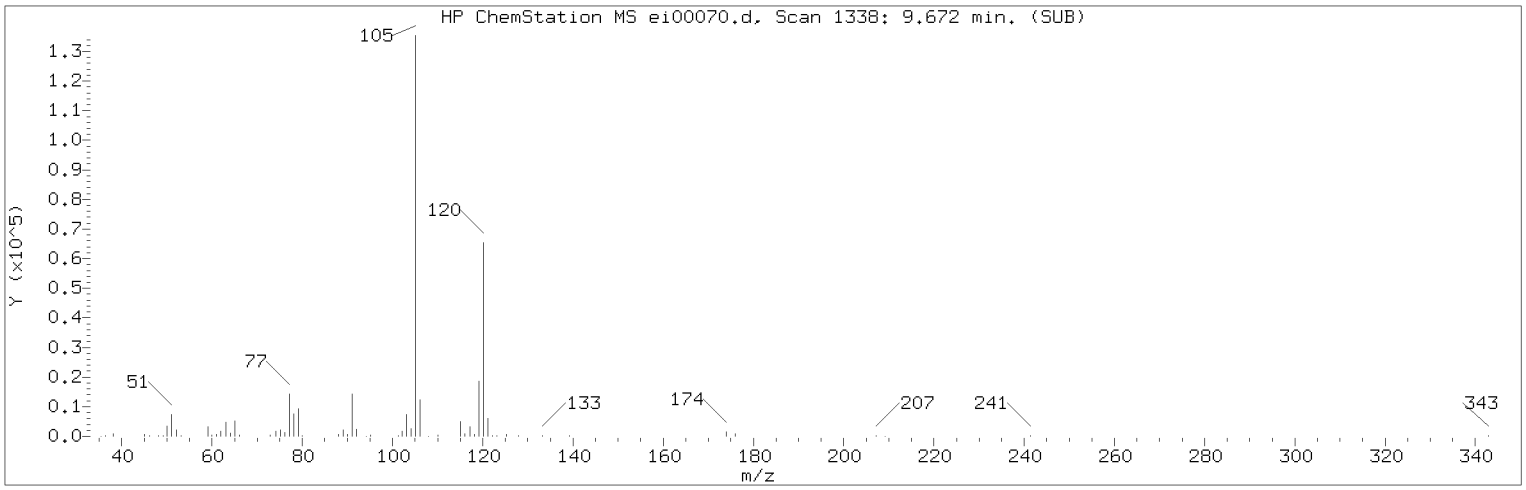
Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Sample Name: -1176 Lab Sample ID: 9785624

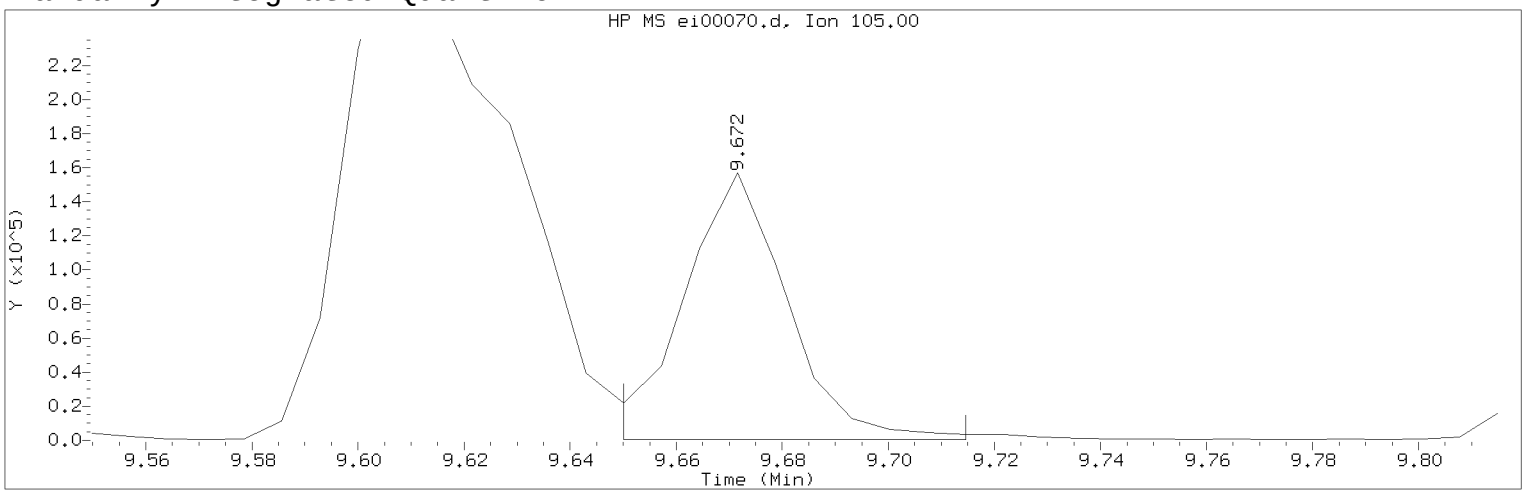
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Relative Retention Time :-0.00000
Quant Ion : 105.00
Area (flag) : 214752M
Concentration (ppb(v)) : 2.2473

Digitally signed by Jacob E. Bailey on 09/06/2018 at 19:12.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Sample Name: -1176 Lab Sample ID: 9785624

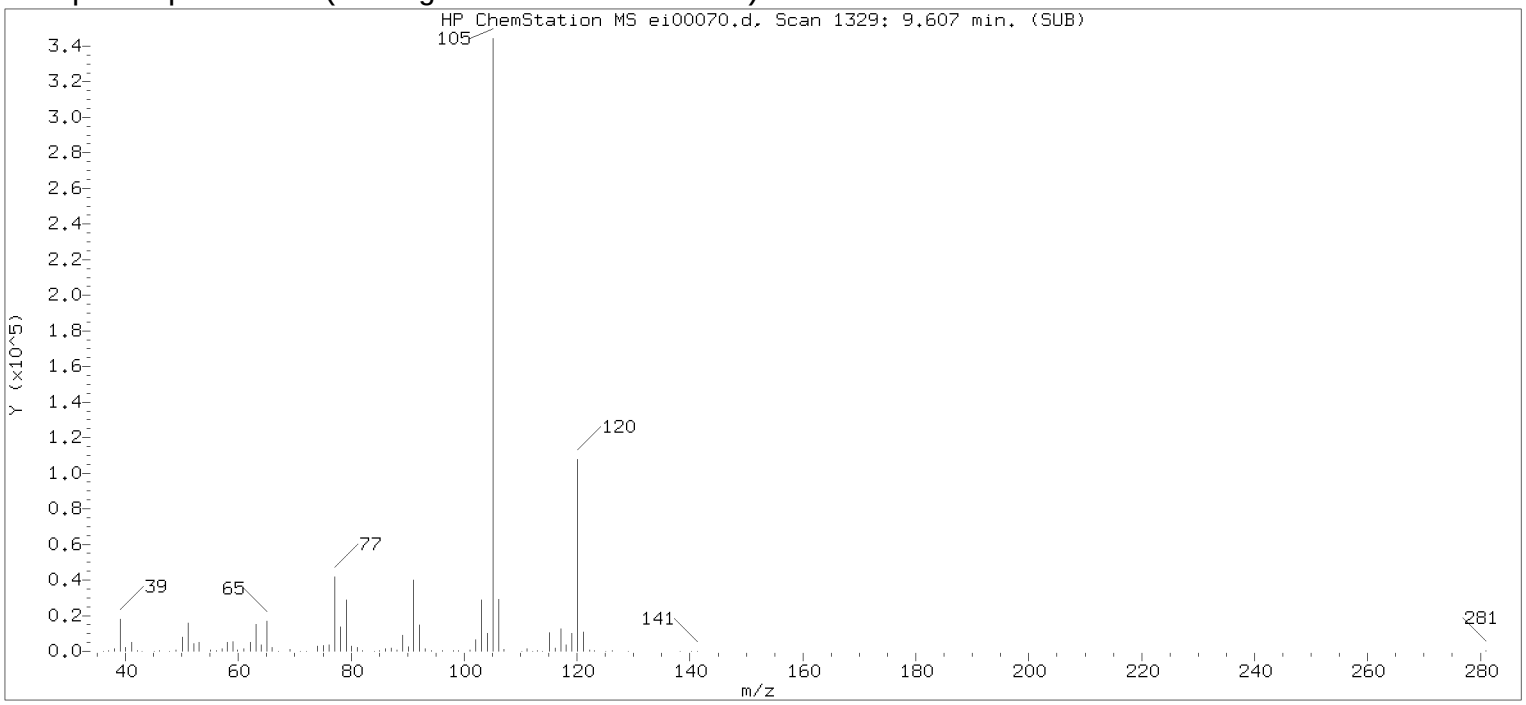
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 214752M
Concentration (ppb(v)) : 2.2473
Integration start scan : 1334 Integration stop scan: 1343
Y at integration start : 326 Y at integration end: 326

Reason for manual integration: improper integration

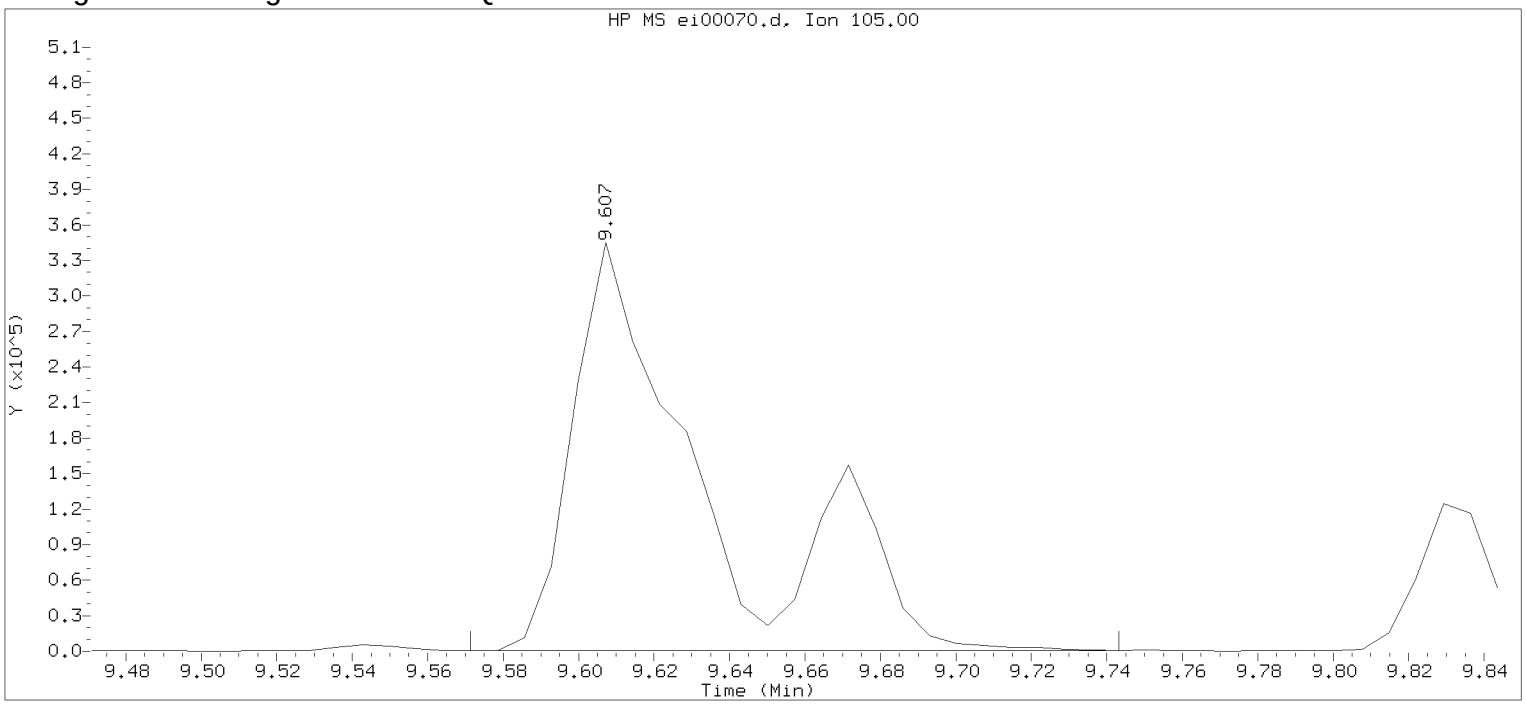
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/06/2018 at 19:12.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/07/2018 at 14:24.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

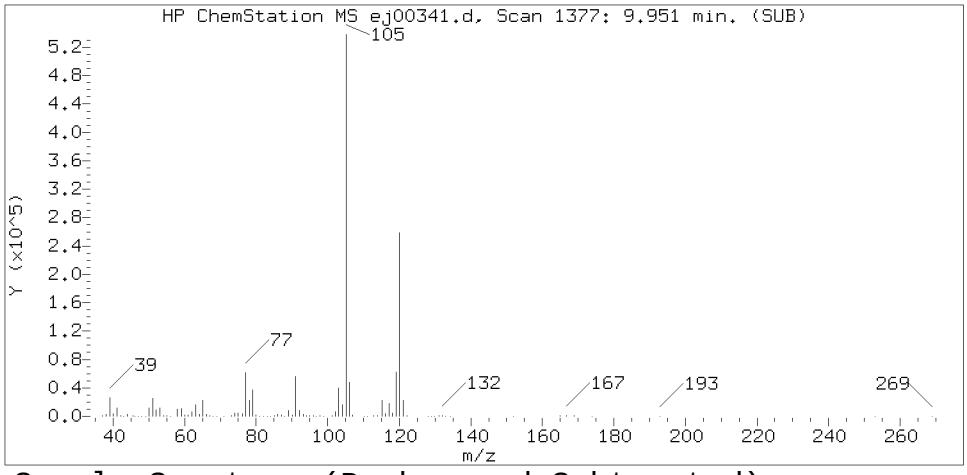
Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 17:36 Unknown

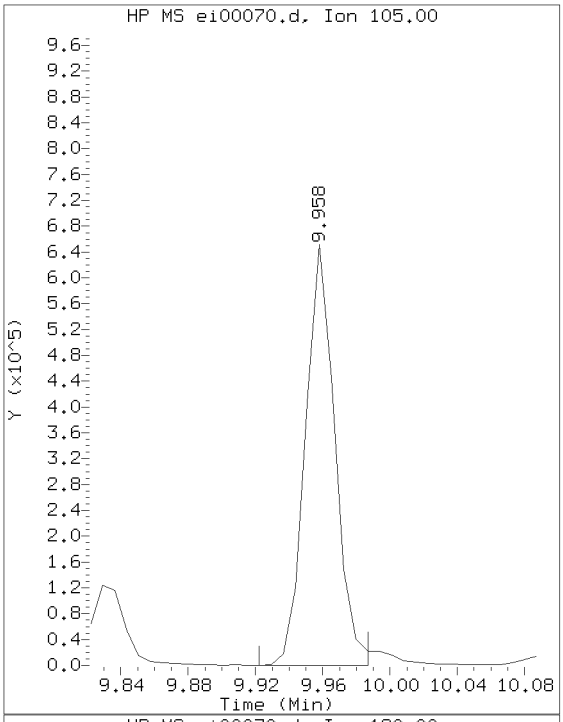
Sample Name: -1176 Lab Sample ID: 9785624

Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1329
Retention Time (minutes): 9.607
Quant Ion : 105.00
Area : 846289
Concentration (ppb(v)) : 8.8562
Integration start scan : 1323 Integration stop scan: 1347
Y at integration start : 441 Y at integration end: 441

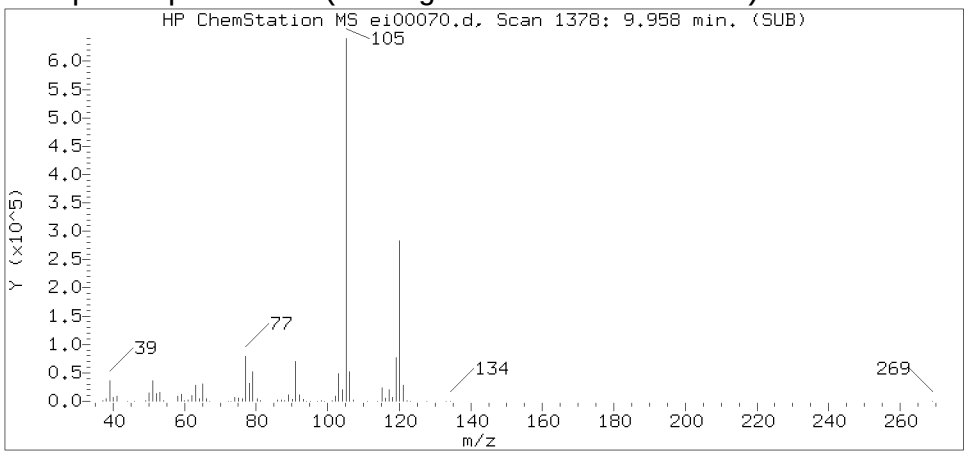
Digitally signed by Jacob E. Bailey on 09/06/2018 at 19:12.
Target 3.5 esignature userGLE02jeb07445

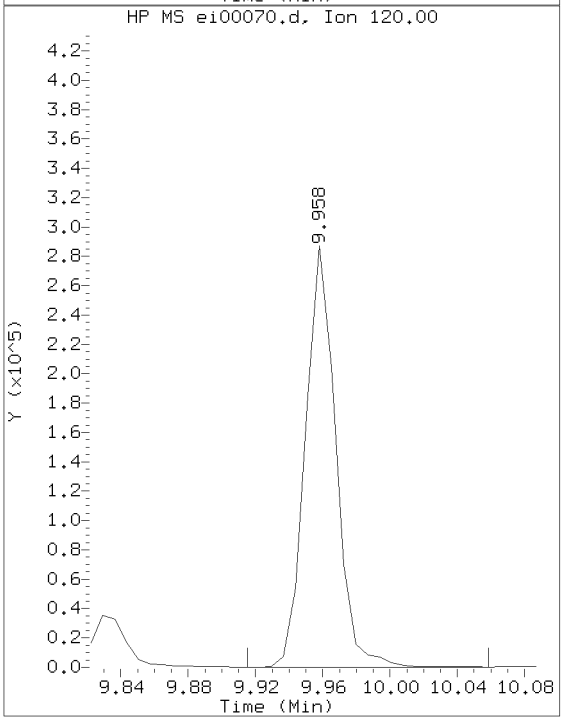
Reference Standard Spectrum for 1,2,4-Trimethylbenzene



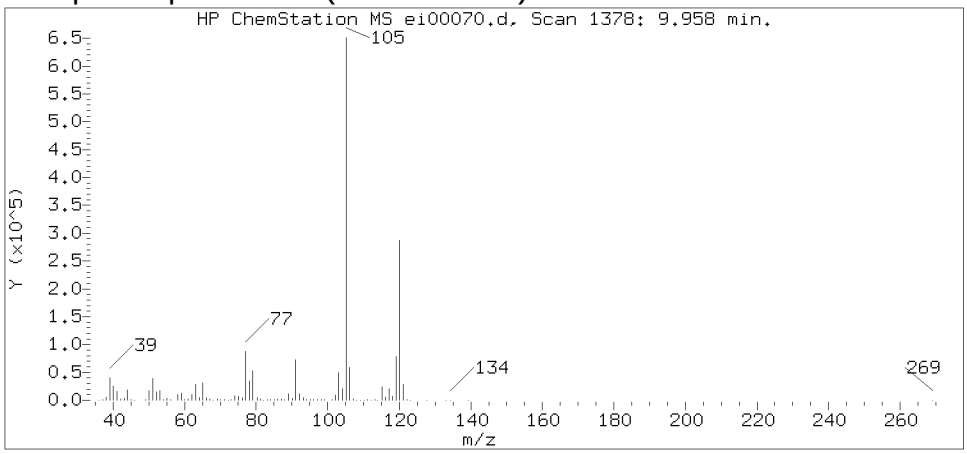


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

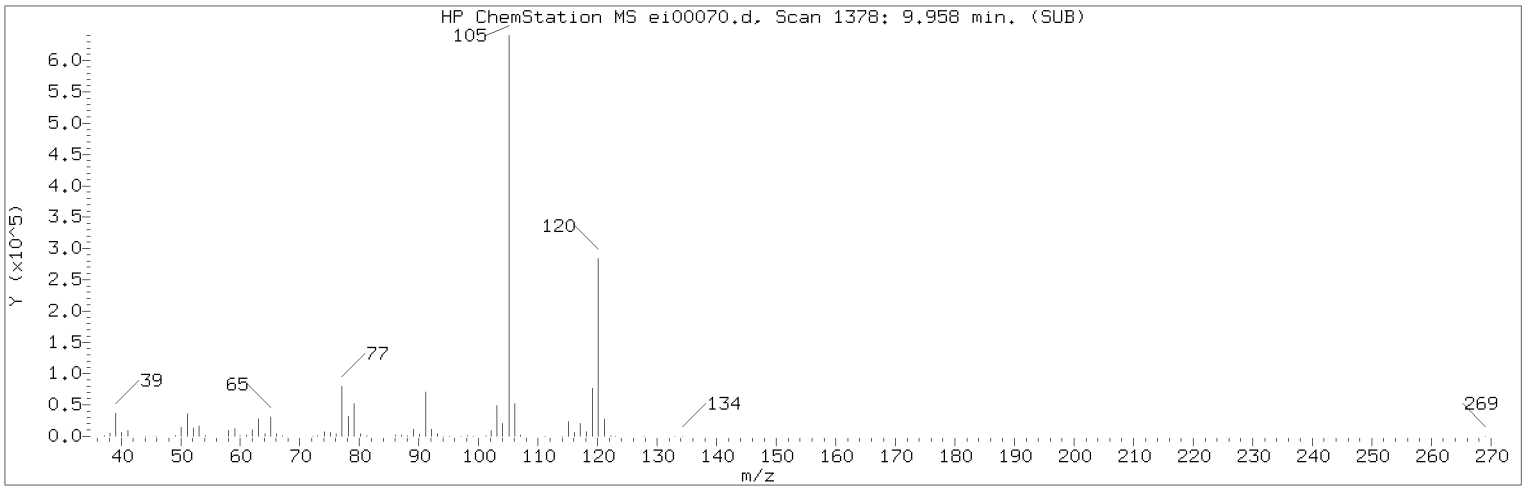
Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Sample Name: -1176 Lab Sample ID: 9785624

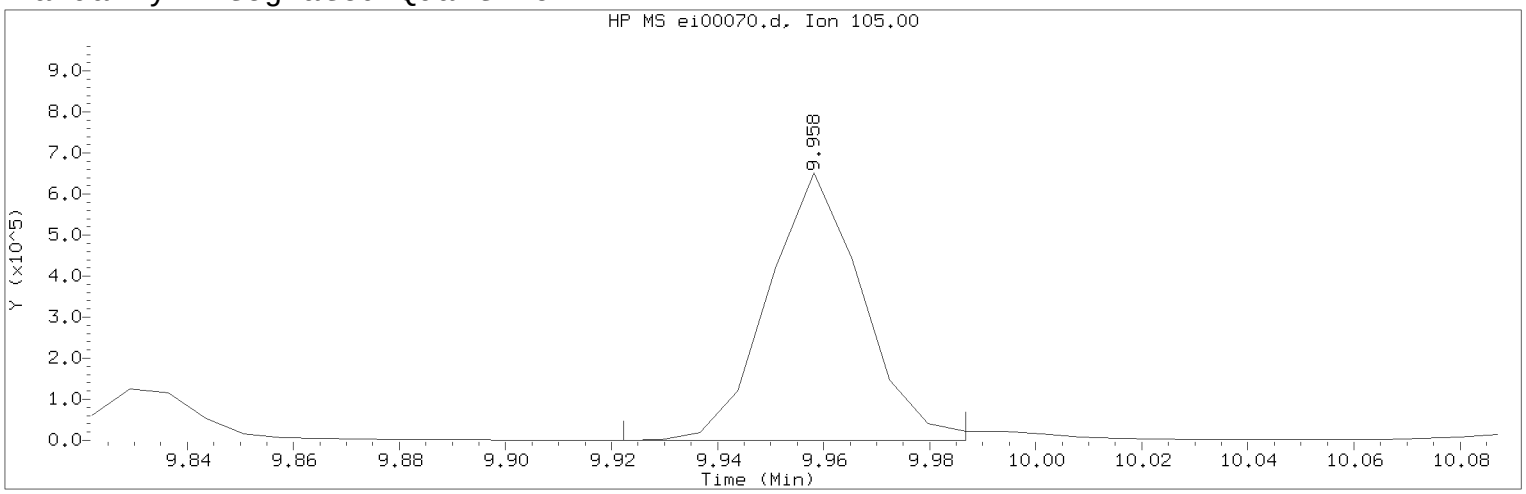
Compound Number : 90
Compound Name : 1,2,4-Trimethylbenzene
Scan Number : 1378
Retention Time (minutes): 9.958
Relative Retention Time :-0.00000
Quant Ion : 105.00
Area (flag) : 800812M
Concentration (ppb(v)) : 8.5373

Digitally signed by Jacob E. Bailey on 09/06/2018 at 19:12.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:08 jeb07445

Sample Name: -1176 Lab Sample ID: 9785624

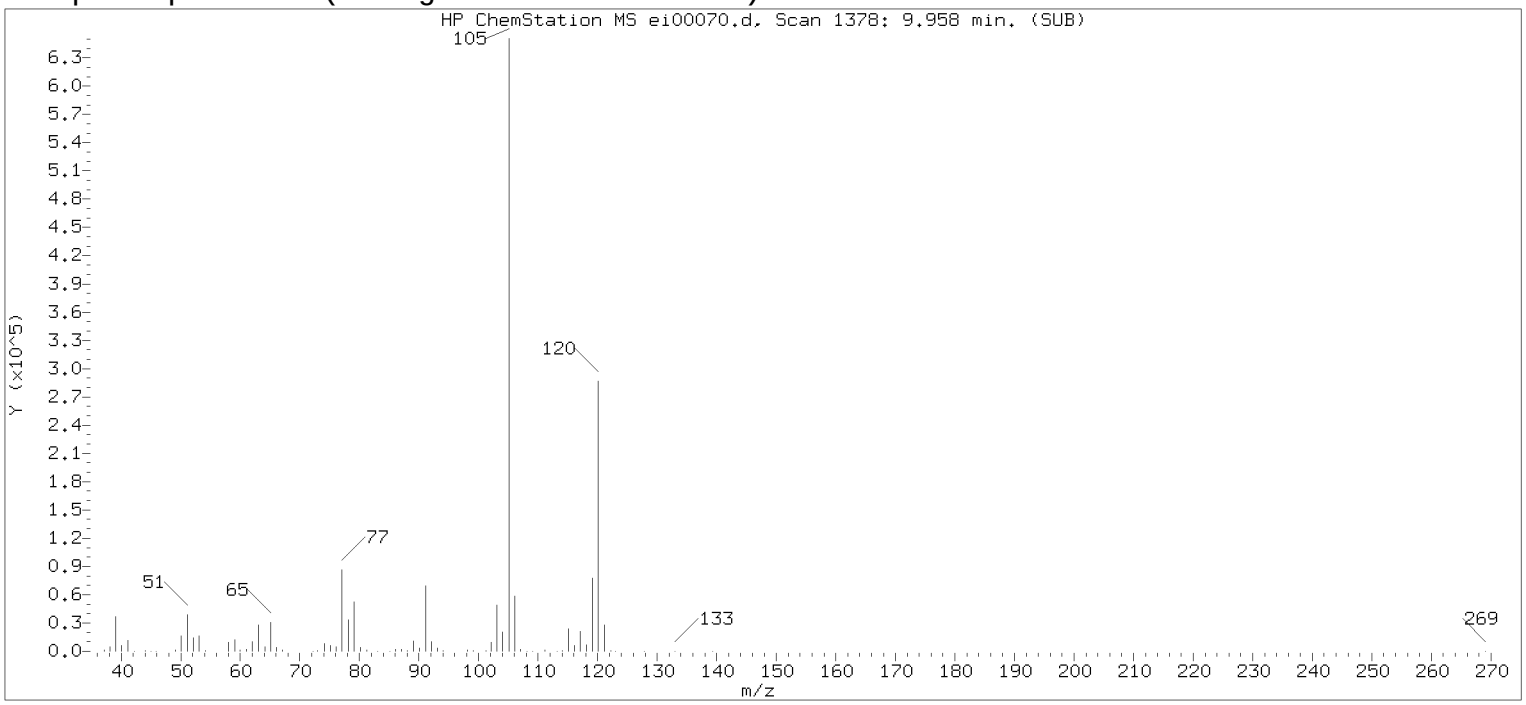
Compound Number : 90
Compound Name : 1,2,4-Trimethylbenzene
Scan Number : 1378
Retention Time (minutes): 9.958
Quant Ion : 105.00
Area (flag) : 800812M
Concentration (ppb(v)) : 8.5373
Integration start scan : 1372 Integration stop scan: 1381
Y at integration start : 327 Y at integration end: 327

Reason for manual integration: improper integration

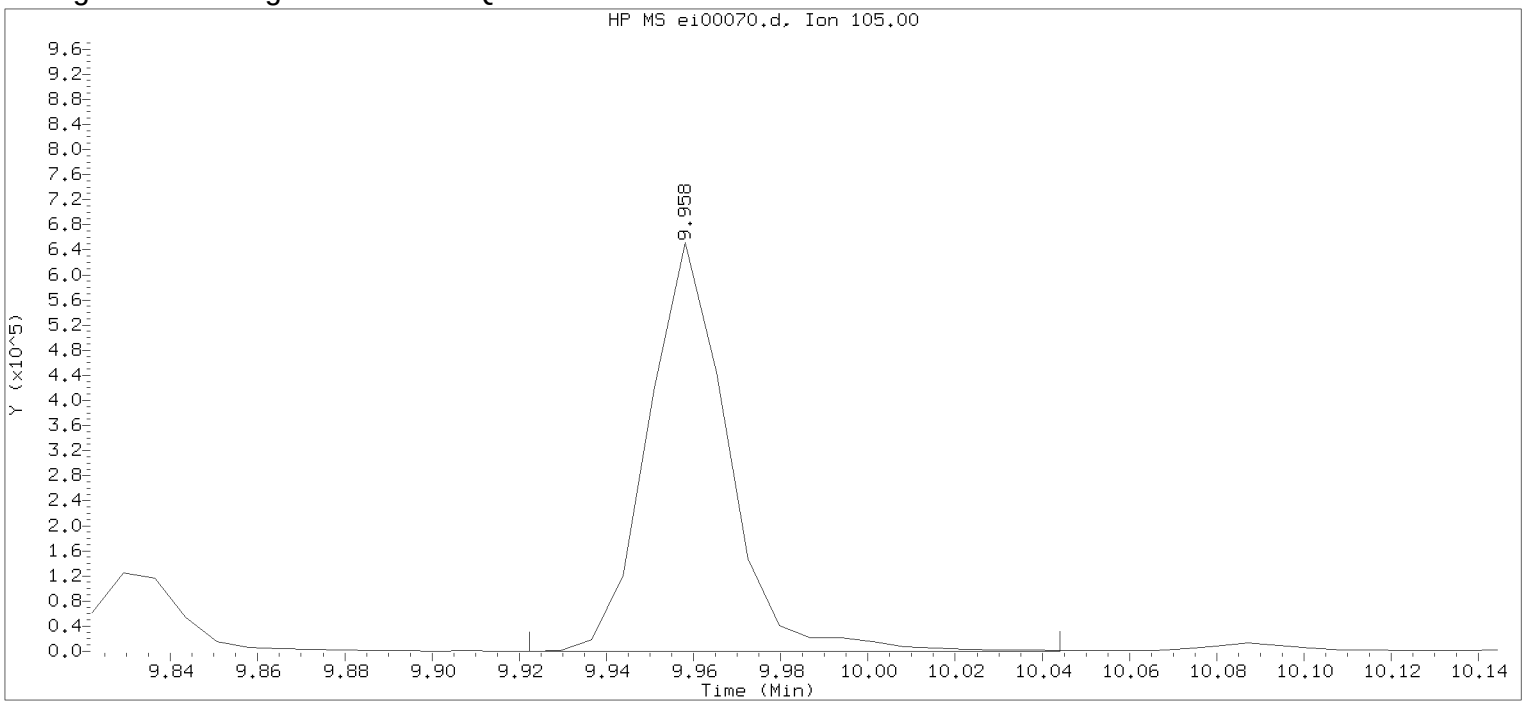
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/06/2018 at 19:12.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/07/2018 at 14:24.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep06.b/ei00070.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:14 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 17:36 Unknown

Sample Name: -1176 Lab Sample ID: 9785624

Compound Number : 90
Compound Name : 1,2,4-Trimethylbenzene
Scan Number : 1378
Retention Time (minutes): 9.958
Quant Ion : 105.00
Area : 824214
Concentration (ppb(v)) : 8.7868
Integration start scan : 1372 Integration stop scan: 1389
Y at integration start : 327 Y at integration end: 327

Digitally signed by Jacob E. Bailey on 09/06/2018 at 19:12.
Target 3.5 esignature userGLE02jeb07445

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE02

Sample Media:	CANISTER	Lab Sample ID:	9785625
Canister ID:	1374	Lab File ID:	ei00071.d
Pressure Received:	13.8 psia	Date Collected:	08/30/2018
Final Pressure:	27.6 psia	Date Received:	09/05/2018
Nominal Volume:	200 cc	Analyzed Date:	09/06/2018
Injection Volume:	400 cc	Analyzed Time:	17:41
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	2.6	J
75-45-6	Chlorodifluoromethane	0.53	U
76-14-2	Freon 114	0.84	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.31	U
106-99-0	1,3-Butadiene	0.38	U
74-83-9	Bromomethane	0.70	U
75-00-3	Chloroethane	0.50	U
75-43-4	Dichlorofluoromethane	0.46	U
75-69-4	Trichlorofluoromethane	1.5	J
109-66-0	Pentane	2.2	J
75-35-4	1,1-Dichloroethene	0.56	U
76-13-1	Freon 113	0.84	U
67-64-1	Acetone	20	
75-15-0	Carbon Disulfide	0.40	U
107-05-1	3-Chloropropene	0.47	U
75-09-2	Methylene Chloride	1.5	J
156-60-5	trans-1,2-Dichloroethene	0.34	U
1634-04-4	Methyl t-Butyl Ether	0.54	U
110-54-3	Hexane	0.84	J
75-34-3	1,1-Dichloroethane	0.36	U
156-59-2	cis-1,2-Dichloroethene	0.48	U
78-93-3	2-Butanone	2.8	J
67-66-3	Chloroform	0.45	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE02

Sample Media:	CANISTER	Lab Sample ID:	9785625
Canister ID:	1374	Lab File ID:	ei00071.d
Pressure Received:	13.8 psia	Date Collected:	08/30/2018
Final Pressure:	27.6 psia	Date Received:	09/05/2018
Nominal Volume:	200 cc	Analyzed Date:	09/06/2018
Injection Volume:	400 cc	Analyzed Time:	17:41
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
71-55-6	1,1,1-Trichloroethane	0.65	U
56-23-5	Carbon Tetrachloride	0.88	U
71-43-2	Benzene	0.43	J
107-06-2	1,2-Dichloroethane	0.32	U
540-84-1	Isooctane	0.73	J
142-82-5	Heptane	0.94	U
79-01-6	Trichloroethene	0.97	U
78-87-5	1,2-Dichloropropane	0.60	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	0.80	U
10061-01-5	cis-1,3-Dichloropropene	0.45	U
108-10-1	4-Methyl-2-Pentanone	0.61	U
108-88-3	Toluene	2.5	J
111-65-9	Octane	1.9	U
10061-02-6	trans-1,3-Dichloropropene	0.54	U
79-00-5	1,1,2-Trichloroethane	0.65	U
127-18-4	Tetrachloroethene	1.7	U
591-78-6	2-Hexanone	0.74	U
124-48-1	Dibromochloromethane	1.1	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	0.60	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	0.83	U
179601-23-1	m/p-Xylene	2.0	J

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE02

Sample Media:	CANISTER	Lab Sample ID:	9785625
Canister ID:	1374	Lab File ID:	ei00071.d
Pressure Received:	13.8 psia	Date Collected:	08/30/2018
Final Pressure:	27.6 psia	Date Received:	09/05/2018
Nominal Volume:	200 cc	Analyzed Date:	09/06/2018
Injection Volume:	400 cc	Analyzed Time:	17:41
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
95-47-6	o-Xylene	0.83	U
100-42-5	Styrene	0.85	U
75-25-2	Bromoform	1.8	U
98-82-8	Cumene	1.2	U
108-86-1	Bromobenzene	0.64	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
96-18-4	1,2,3-Trichloropropane	0.84	U
622-96-8	4-Ethyltoluene	0.88	U
108-67-8	1,3,5-Trimethylbenzene	1.6	U
95-63-6	1,2,4-Trimethylbenzene	2.1	J
541-73-1	1,3-Dichlorobenzene	1.1	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.2	U
67-72-1	Hexachloroethane	2.6	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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

Data file: /chem/HP22820.i/18sep06.b/ei00071.d Injection date and time: **06-SEP-2018 17:41**
Data file Sample Info. Line: 9785625;400;E1824930AA;1374-;0;0;SAMPLE; Instrument ID: **HP22820.i** Batch: **E1824930AA**
Date, time and analyst ID of latest file update: 06-Sep-2018 19:10 jeb07445

Blank Data file reference: **/chem/HP22820.i/18sep06.b/ei00062.d**

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 06-SEP-2018 13:08
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18sep06.b/ei00061.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): 27.6 psia Canister Pressure before dilution (Ya): 13.8 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 400 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	5.474(-0.007)	752	130	274282 (4)	10.00		157917 - 368473
51) 1,4-Difluorobenzene	6.291(0.000)	866	114	1040247 (7)	10.00		583560 - 1361638
71) Chlorobenzene-d5	8.497(0.000)	1174	117	1013553 (7)	10.00		570426 - 1330992

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)	1.656(-0.000)	85	25058	0.521	0.52		J	0.13	1
3) Chlorodifluoromethane	(1)			Not Detected					0.15	1
4) Freon 114	(1)			Not Detected					0.12	1
5) Chloromethane	(1)			Not Detected					0.24	1
6) Vinyl Chloride	(1)			Not Detected					0.12	1
7) 1,3-Butadiene	(1)			Not Detected					0.17	1
8) Bromomethane	(1)			Not Detected					0.18	1
9) Chloroethane	(1)			Not Detected					0.19	1
11) Dichlorofluoromethane	(1)			Not Detected					0.11	1
12) Trichlorofluoromethane	(1)	2.781(-0.000)	101	13756	0.269	0.27		J	0.15	1
13) Pentane	(1)	2.867(0.003)	43	21543	0.747	0.75		J	0.13	1
17) 1,1-Dichloroethene	(1)			Not Detected					0.14	1
18) Freon 113	(1)			Not Detected					0.11	1
19) Acetone	(1)	3.540(-0.000)	43	211987	8.606	8.61			0.53	5
21) Carbon Disulfide	(1)			Not Detected					0.13	1
24) 3-Chloropropene	(1)			Not Detected					0.15	1
25) Methylene Chloride	(1)	4.020(-0.000)	84	6718	0.431	0.43		J	0.25	2
28) trans-1,2-Dichloroethene	(1)			Not Detected					0.086	1
29) Methyl t-Butyl Ether	(1)			Not Detected					0.15	1
30) Hexane	(1)	4.564(0.001)	57	6895	0.239	0.24		J	0.13	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.089	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.12	1
37) 2-Butanone	(1)	5.295(-0.001)	72	10433	0.952	0.95		J	0.21	1
42) Chloroform	(1)			Not Detected					0.092	1
43) 1,1,1-Trichloroethane	(1)			Not Detected					0.12	1
45) Carbon Tetrachloride	(1)			Not Detected					0.14	1
46) Benzene	(2)	5.990(0.000)	78	8612	0.135	0.14		J	0.11	1
47) 1,2-Dichloroethane	(2)			Not Detected					0.08	1
48) Isooctane	(2)	6.033(0.001)	57	13673	0.157	0.16		J	0.13	1
50) Heptane	(2)			Not Detected					0.23	1
52) Trichloroethene	(2)			Not Detected					0.18	1
54) 1,2-Dichloropropane	(2)			Not Detected					0.13	1
55) Dibromomethane	(2)			Not Detected					0.14	1
58) Bromodichloromethane	(2)			Not Detected					0.12	1
59) cis-1,3-Dichloropropene	(2)			Not Detected					0.1	1
60) 4-Methyl-2-Pentanone	(2)			Not Detected					0.15	1
61) Toluene	(3)	7.465(0.000)	91	50134	0.653	0.65		J	0.12	1
62) Octane	(3)			Not Detected					0.4	2
63) trans-1,3-Dichloropropene	(3)			Not Detected					0.12	1
66) 1,1,2-Trichloroethane	(3)			Not Detected					0.12	1
67) Tetrachloroethene	(3)			Not Detected					0.25	2
68) 2-Hexanone	(3)			Not Detected					0.18	1
69) Dibromochloromethane	(3)			Not Detected					0.13	1

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

Data file: /chem/HP22820.i/18sep06.b/ei00071.d Injection date and time: **06-SEP-2018 17:41**
Data file Sample Info. Line: 9785625;400;E1824930AA;1374-;0;0;SAMPLE; Instrument ID: **HP22820.i** Batch: **E1824930AA**
Date, time and analyst ID of latest file update: 06-Sep-2018 19:10 jeb07445

Blank Data file reference: **/chem/HP22820.i/18sep06.b/ei00062.d**

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 06-SEP-2018 13:08
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18sep06.b/ei00061.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): 27.6 psia Canister Pressure before dilution (Ya): 13.8 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 400 cc

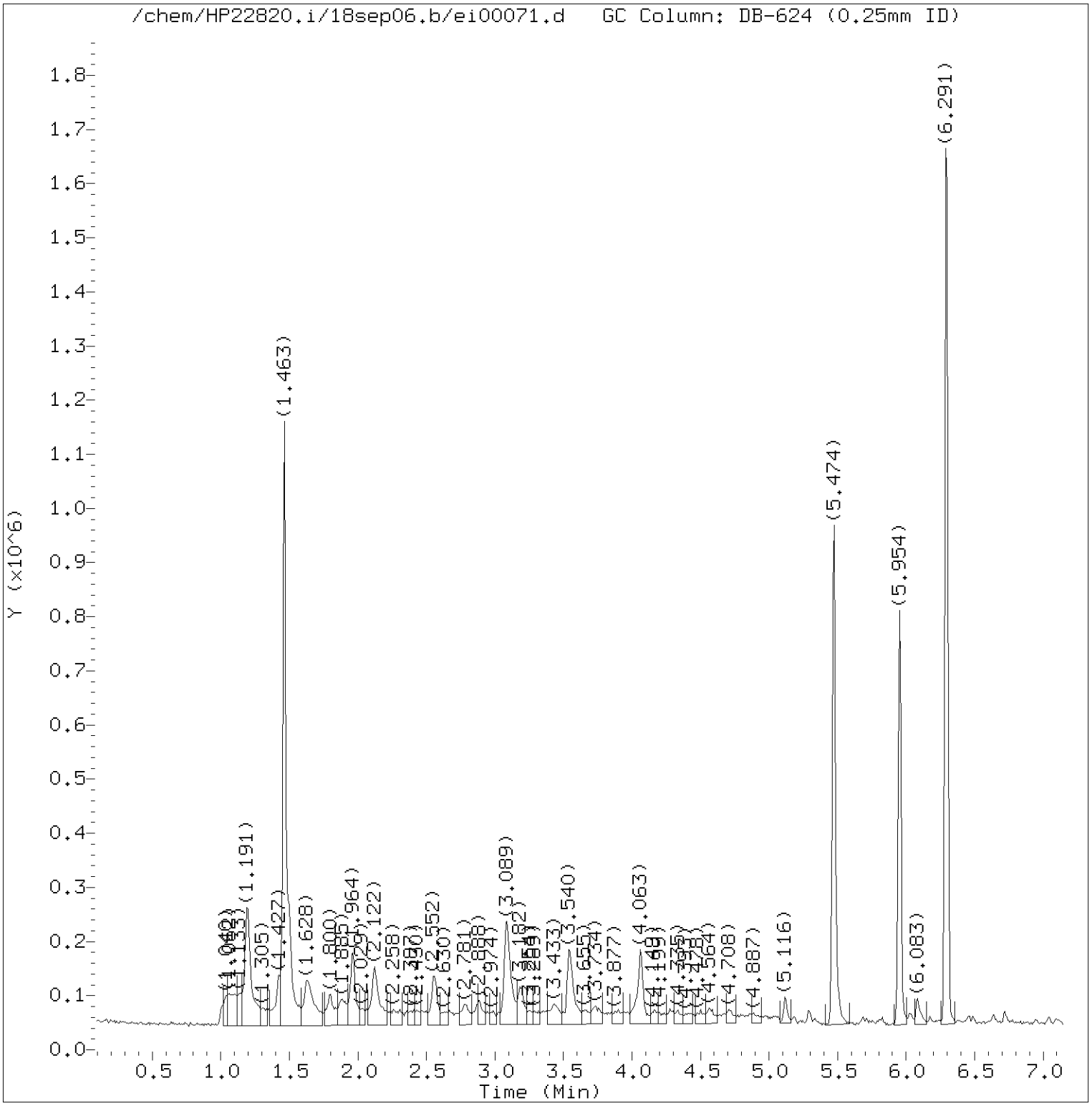
Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
70) 1,2-Dibromoethane	(3)			Not Detected					0.13	1
72) Chlorobenzene	(3)			Not Detected					0.13	1
73) 1,1,1,2-Tetrachloroethane	(3)			Not Detected					0.15	1
74) Ethylbenzene	(3)			Not Detected					0.19	1
75) m/p-Xylene	(3)	8.669(0.000)	91	38289	0.464	0.46		J	0.26	2
76) o-Xylene	(3)			Not Detected					0.19	1
78) Styrene	(3)			Not Detected					0.2	1
79) Bromoform	(3)			Not Detected					0.17	1
80) Cumene	(3)			Not Detected					0.24	1
81) Bromobenzene	(3)			Not Detected					0.1	1
82) 1,1,2,2-Tetrachloroethane	(3)			Not Detected					0.15	1
83) 1,2,3-Trichloropropane	(3)			Not Detected					0.14	1
86) 4-Ethyltoluene	(3)			Not Detected					0.18	1
87) 1,3,5-Trimethylbenzene	(3)			Not Detected					0.32	2
90) 1,2,4-Trimethylbenzene	(3)	9.958(-0.000)	105	39859M	0.432	0.43		J	0.28	2
92) 1,3-Dichlorobenzene	(3)			Not Detected					0.19	1
93) 1,4-Dichlorobenzene	(3)			Not Detected					0.17	1
96) 1,2-Dichlorobenzene	(3)			Not Detected					0.2	1
98) Hexachloroethane	(3)			Not Detected					0.27	2

M = Compound was manually integrated.

Total number of targets = 62

Digitally signed by Jacob E. Bailey on 09/06/2018 at 19:13. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/07/2018 at 14:24. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

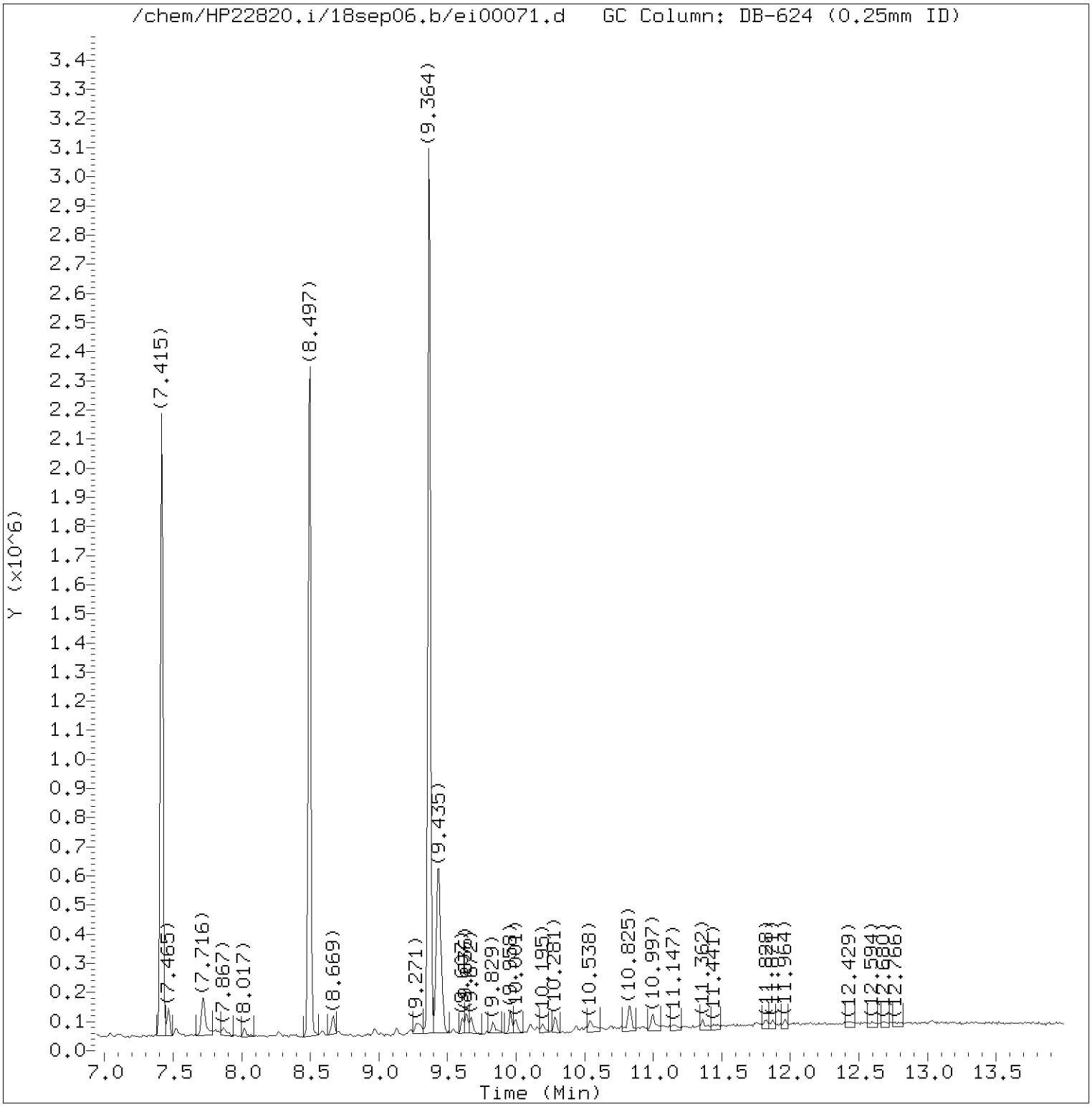
Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00071.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:41 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:10 jeb07445

Sample Name: 1374- Lab Sample ID: 9785625

Digitally signed by Jacob E. Bailey
on 09/06/2018 at 19:13.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00071.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:41 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:10 jeb07445

Sample Name: 1374- Lab Sample ID: 9785625

Digitally signed by Jacob E. Bailey
on 09/06/2018 at 19:13.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00071.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:41 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:10 jeb07445

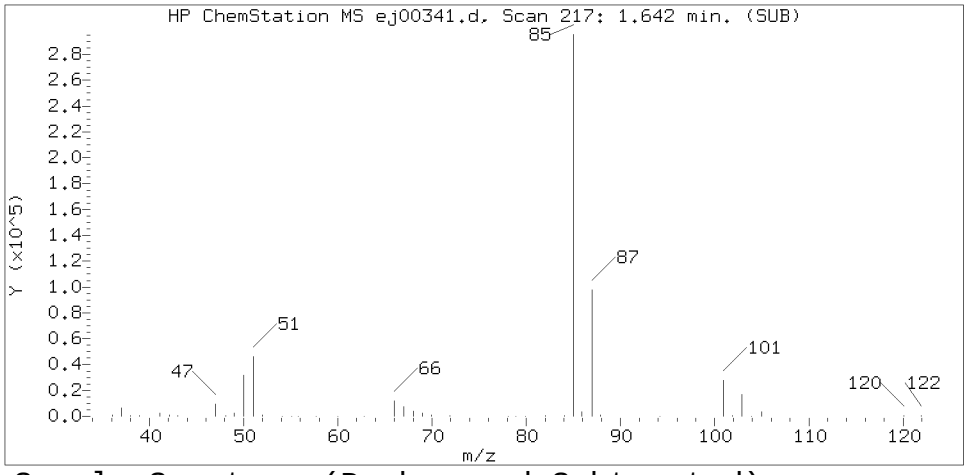
Sample Name: 1374- Lab Sample ID: 9785625

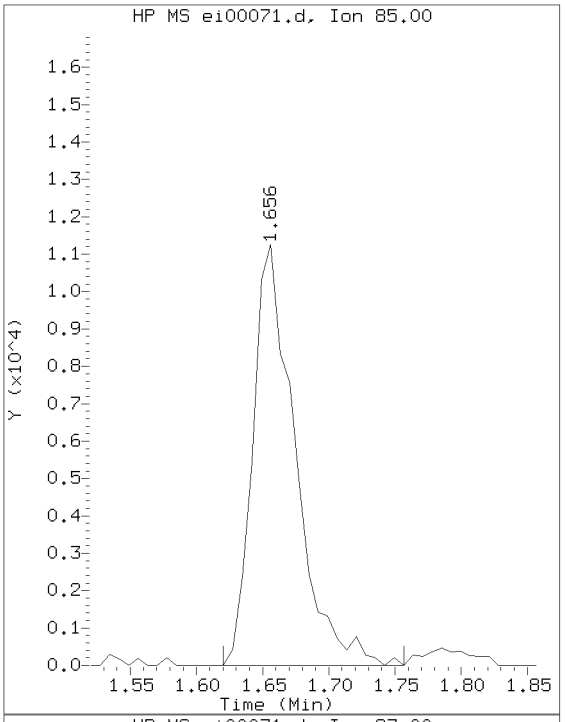
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
2) Dichlorodifluoromethane	(1)	1.656	85	25058	0.521
12) Trichlorofluoromethane	(1)	2.781	101	13756	0.269
13) Pentane	(1)	2.867	43	21543	0.747
19) Acetone	(1)	3.540	43	211987	8.606
25) Methylene Chloride	(1)	4.020	84	6718	0.431
30) Hexane	(1)	4.564	57	6895	0.239
37) 2-Butanone	(1)	5.295	72	10433	0.952
40)*Bromochloromethane	(1)	5.474	130	274282	10.000
46) Benzene	(2)	5.990	78	8612	0.135
48) Isooctane	(2)	6.033	57	13673	0.157
51)*1,4-Difluorobenzene	(2)	6.291	114	1040247	10.000
61) Toluene	(3)	7.465	91	50134	0.653
71)*Chlorobenzene-d5	(3)	8.497	117	1013553	10.000
75) m/p-Xylene	(3)	8.669	91	38289	0.464
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	39859M	0.432

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

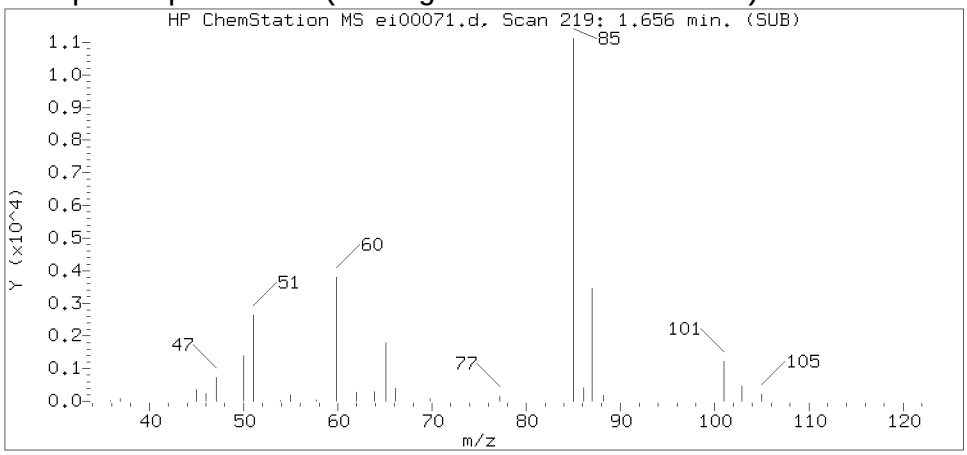
Digitally signed by Jacob E. Bailey
on 09/06/2018 at 19:13.
Target 3.5 esignature user ID: jeb07445

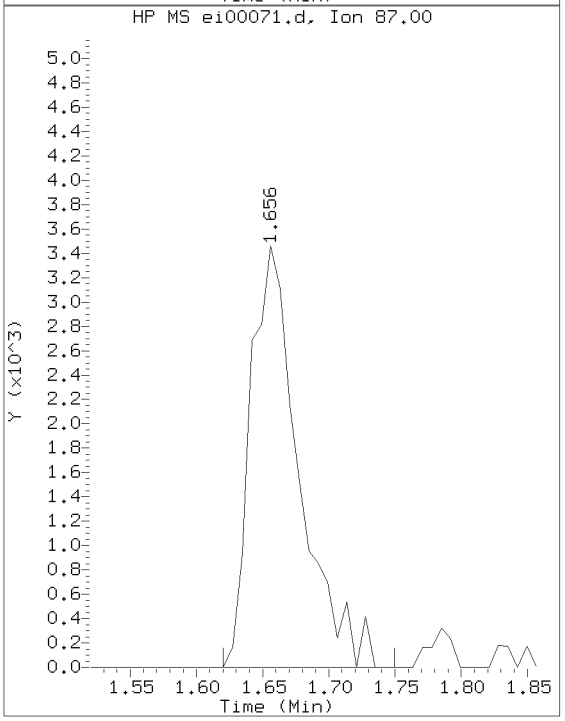
Reference Standard Spectrum for Dichlorodifluoromethane



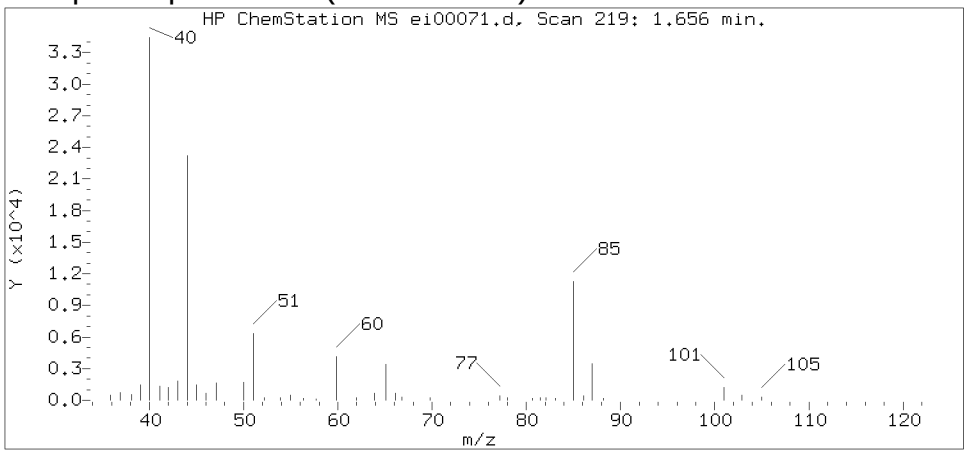


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP22820.i/18sep06.b/ei00071.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:41 Analyst ID: jeb07445

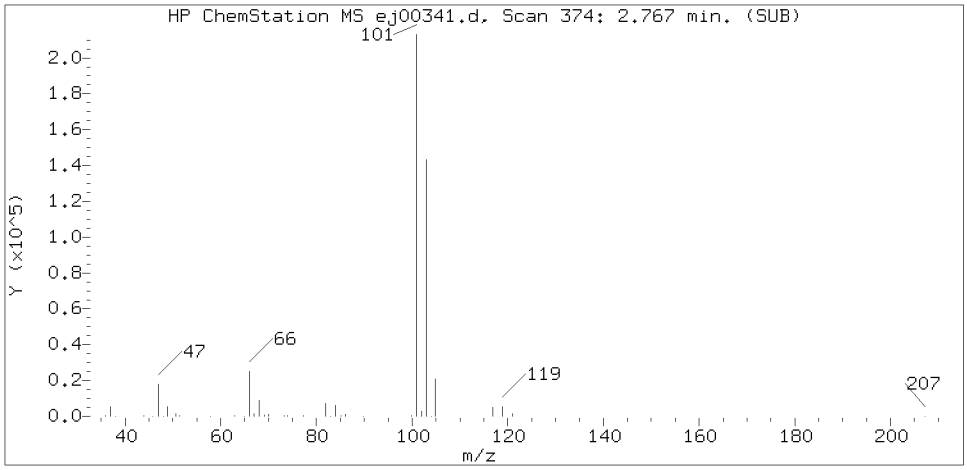
Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:10 jeb07445

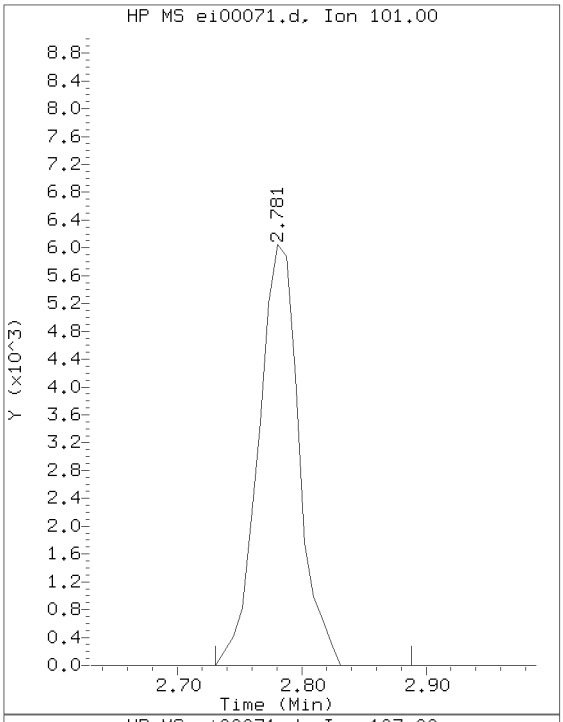
Sample Name: 1374- Lab Sample ID: 9785625

Compound Number : 2
Compound Name : Dichlorodifluoromethane
Scan Number : 219
Retention Time (minutes): 1.656
Relative Retention Time :-0.00091
Quant Ion : 85.00
Area (flag) : 25058
Concentration (ppb(v)) : 0.5211

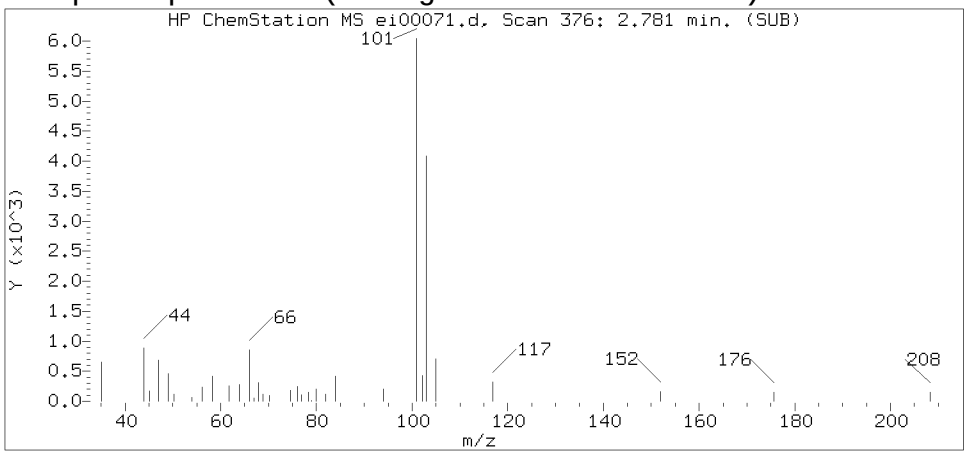
Digitally signed by Jacob E. Bailey on 09/06/2018 at 19:13.
Target 3.5 esignature user ID: jeb07445

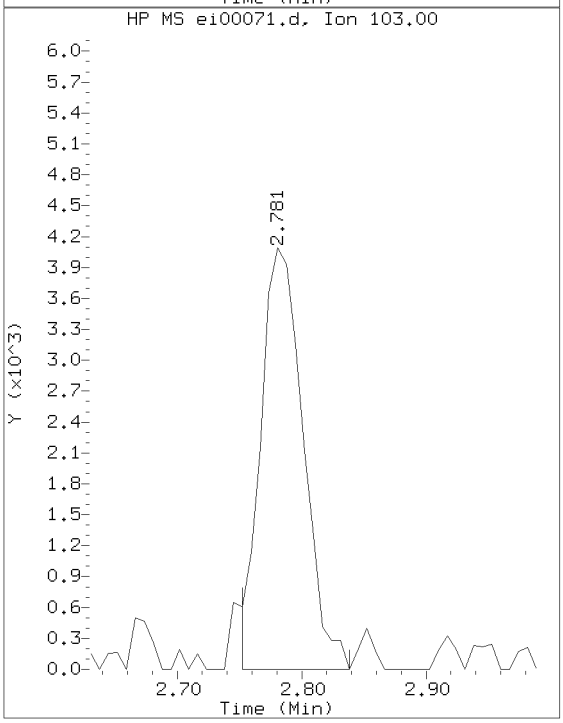
Reference Standard Spectrum for Trichlorofluoromethane



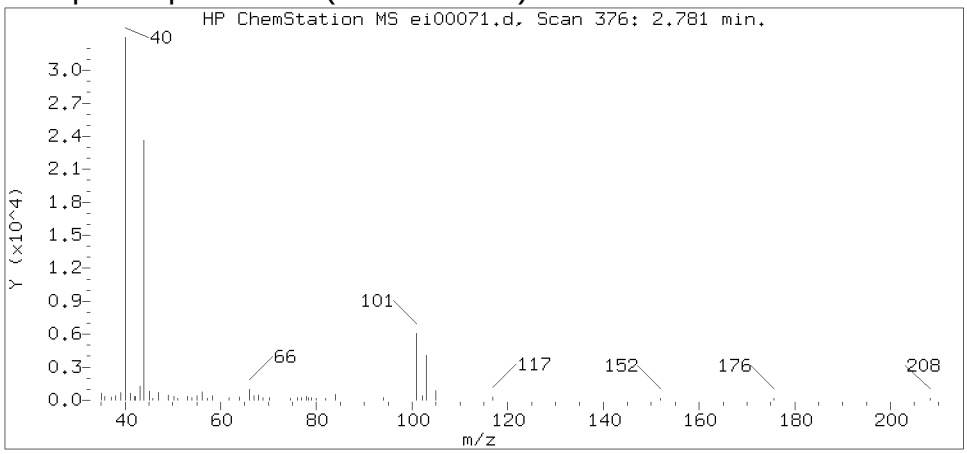


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP22820.i/18sep06.b/ei00071.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:41 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:10 jeb07445

Sample Name: 1374- Lab Sample ID: 9785625

Compound Number : 12
Compound Name : Trichlorofluoromethane
Scan Number : 376
Retention Time (minutes): 2.781
Relative Retention Time :-0.00064
Quant Ion : 101.00
Area (flag) : 13756
Concentration (ppb(v)) : 0.2690

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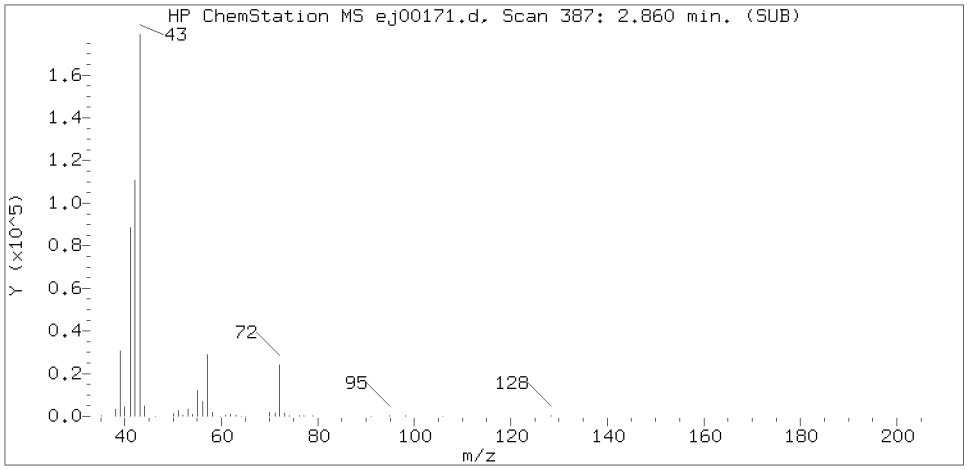
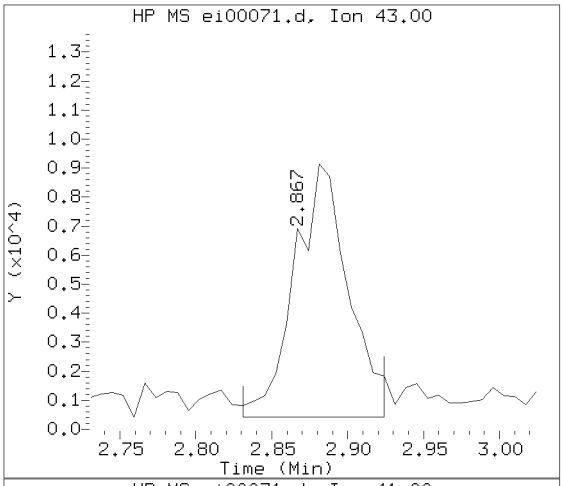
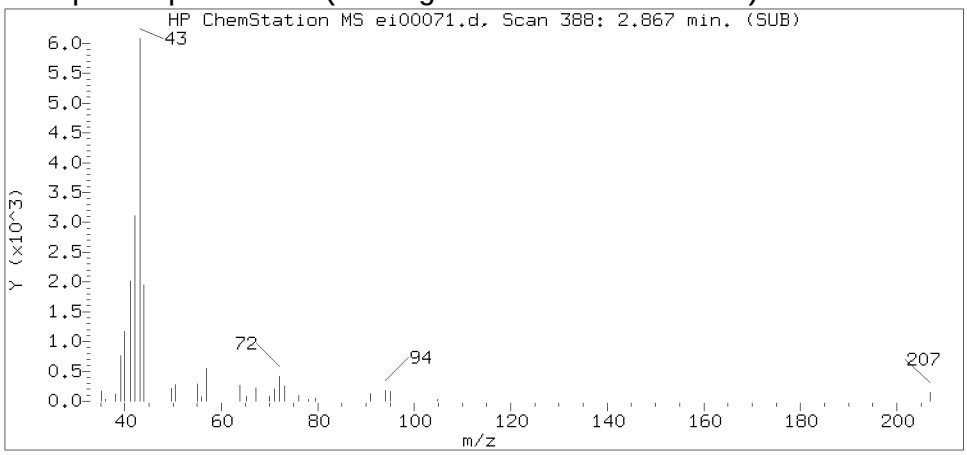
Target 3.5 esignature user ID: jeb07445

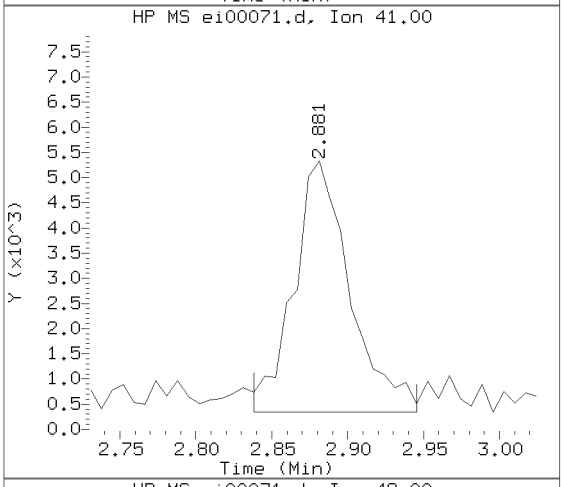
Reference Standard Spectrum for Pentane



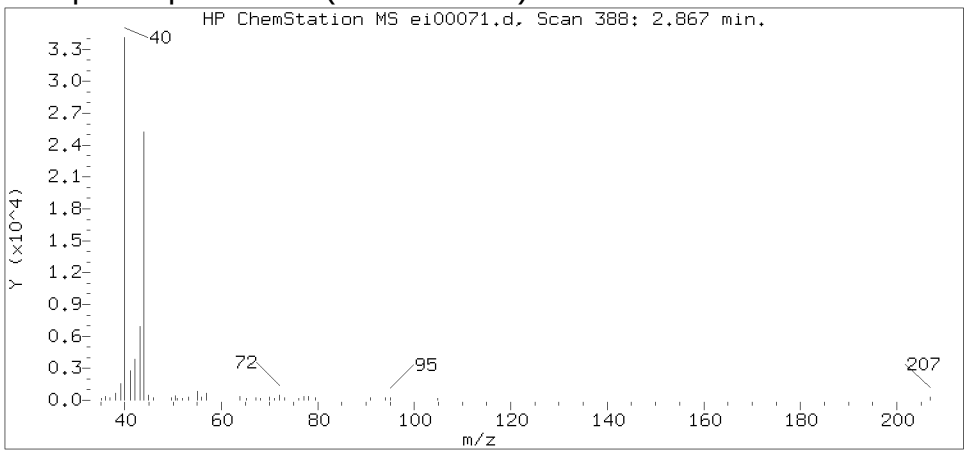


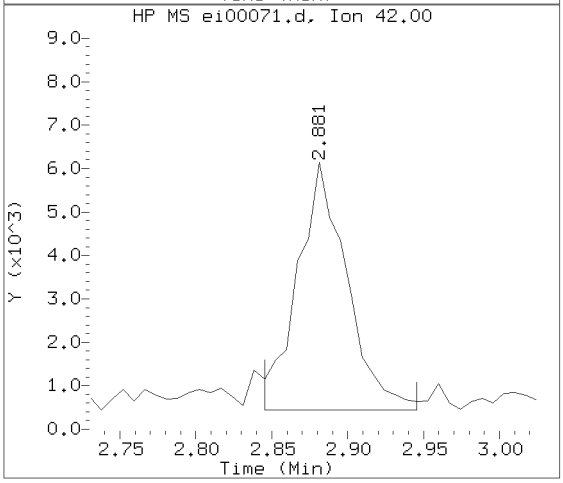
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP22820.i/18sep06.b/ei00071.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:41 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:10 jeb07445

Sample Name: 1374- Lab Sample ID: 9785625

Compound Number : 13
Compound Name : Pentane
Scan Number : 388
Retention Time (minutes): 2.867
Relative Retention Time : 0.00331
Quant Ion : 43.00
Area (flag) : 21543
Concentration (ppb(v)) : 0.7470

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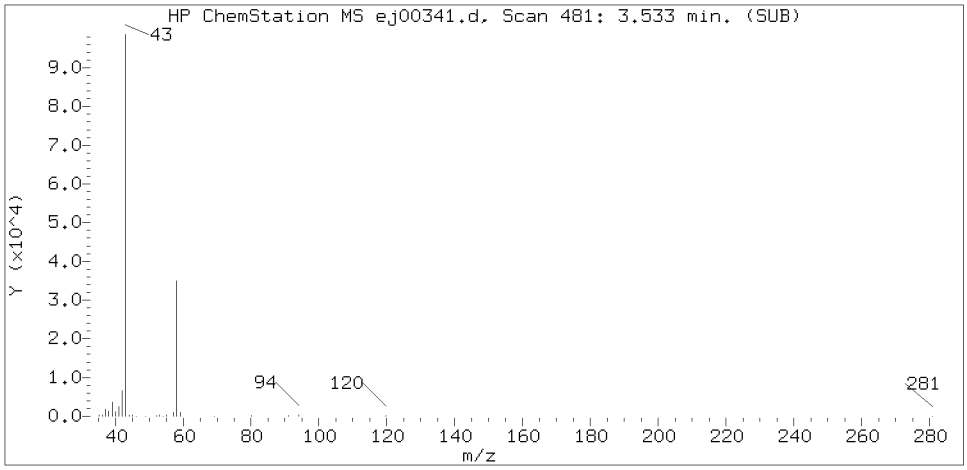
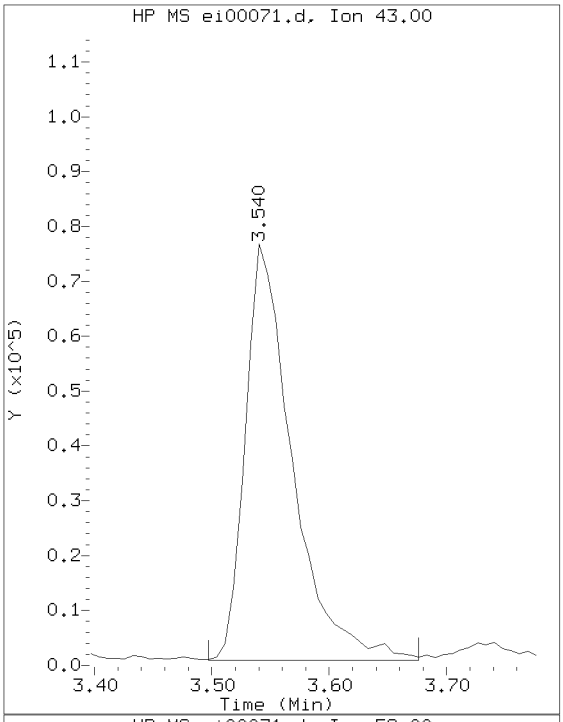
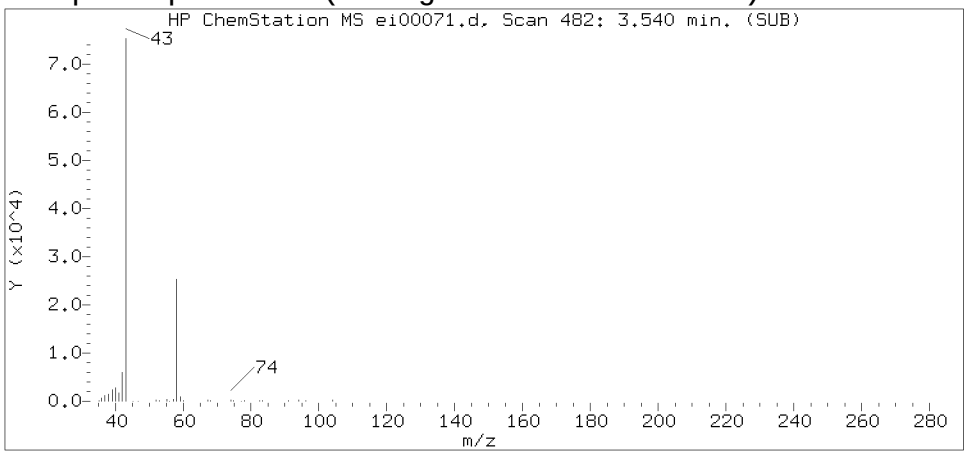
Target 3.5 esignature user ID: jeb07445

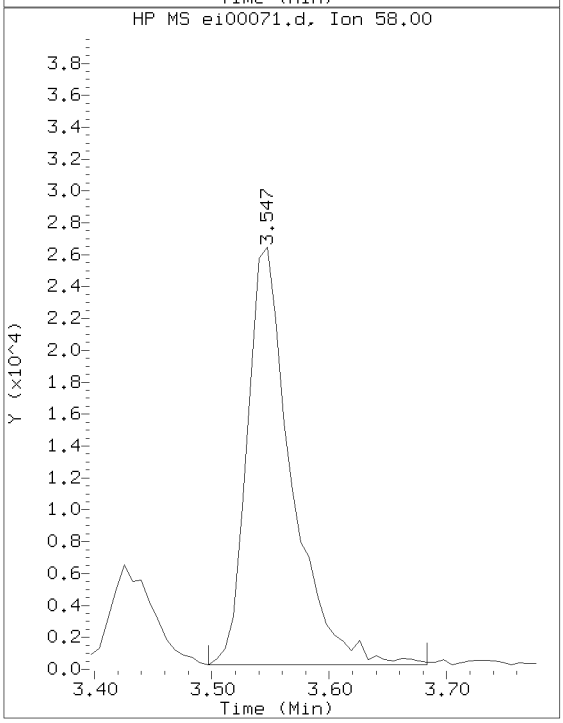
Reference Standard Spectrum for Acetone



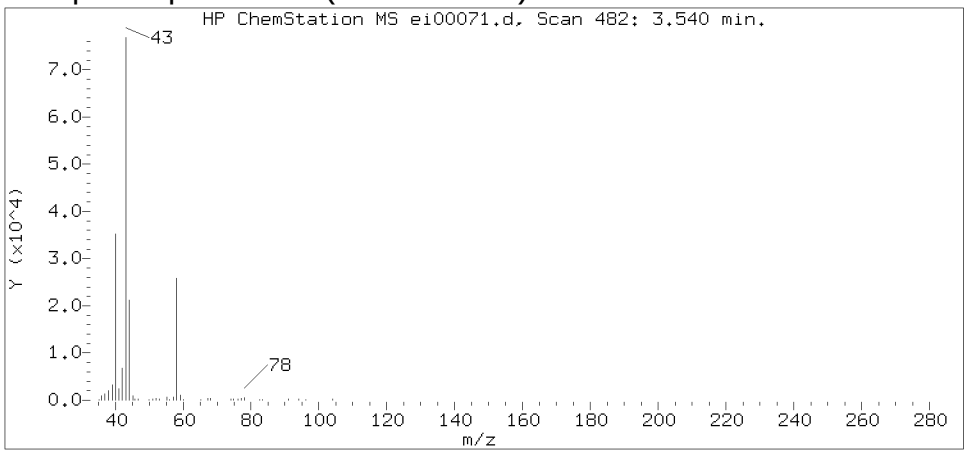


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP22820.i/18sep06.b/ei00071.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:41 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:10 jeb07445

Sample Name: 1374- Lab Sample ID: 9785625

Compound Number : 19
Compound Name : Acetone
Scan Number : 482
Retention Time (minutes): 3.540
Relative Retention Time :-0.00046
Quant Ion : 43.00
Area (flag) : 211987
Concentration (ppb(v)) : 8.6065

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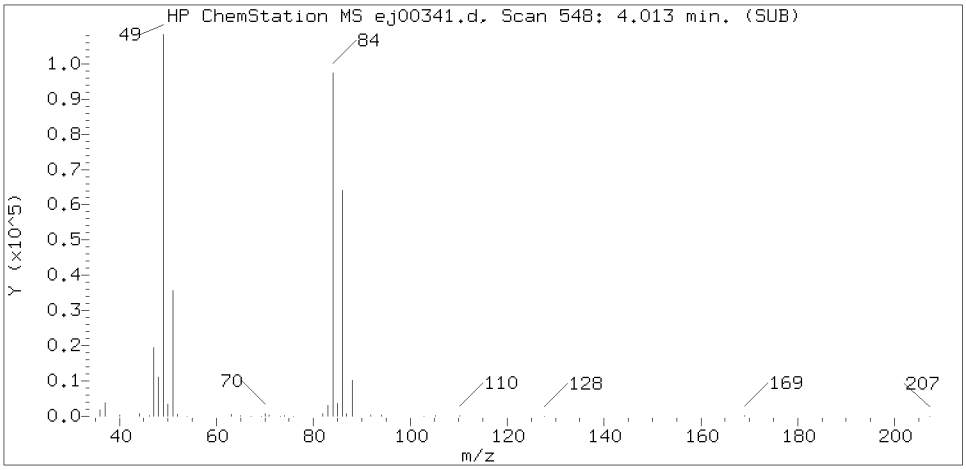
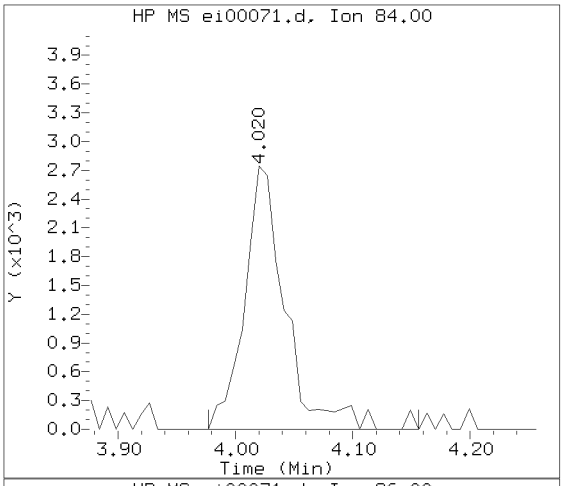
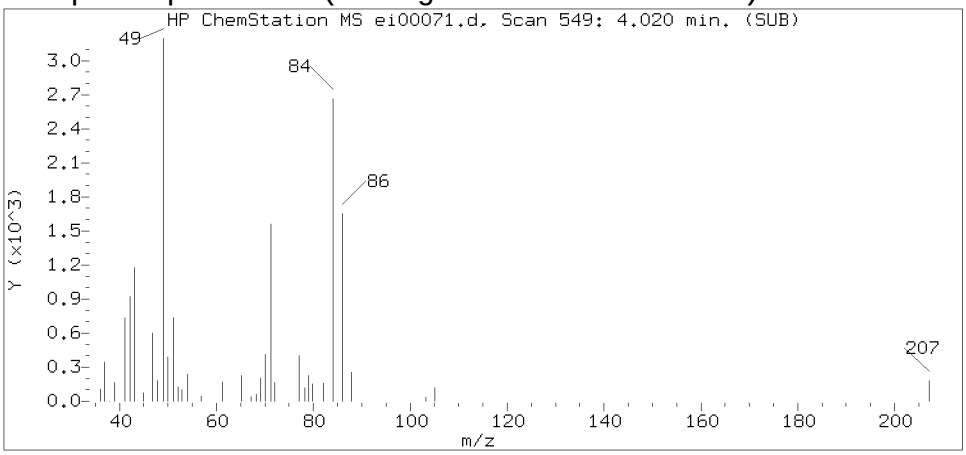
Target 3.5 esignature user ID: jeb07445

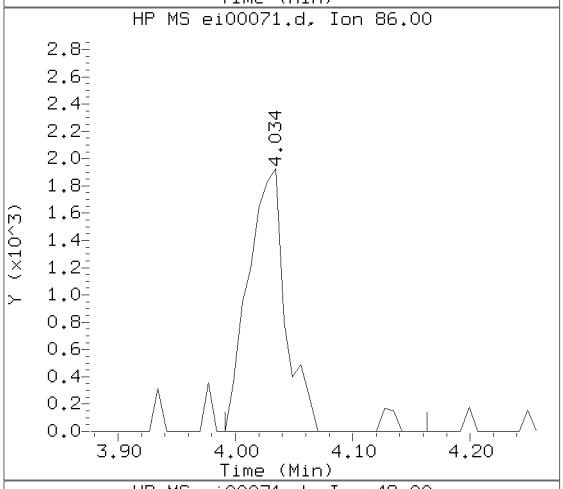
Reference Standard Spectrum for Methylene Chloride



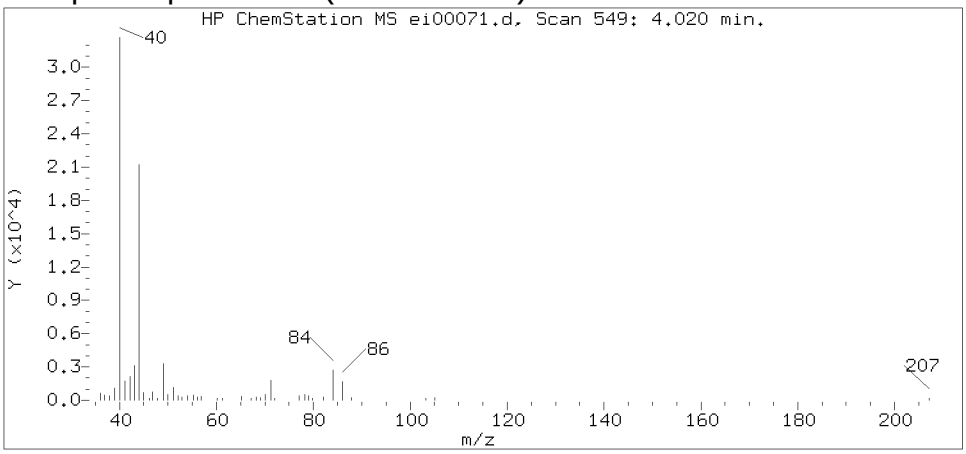


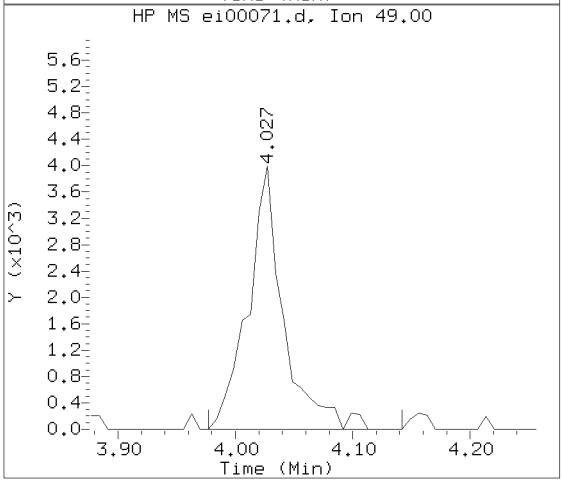
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP22820.i/18sep06.b/ei00071.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:41 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:10 jeb07445

Sample Name: 1374- Lab Sample ID: 9785625

Compound Number : 25
Compound Name : Methylene Chloride
Scan Number : 549
Retention Time (minutes): 4.020
Relative Retention Time :-0.00035
Quant Ion : 84.00
Area (flag) : 6718
Concentration (ppb(v)) : 0.4314

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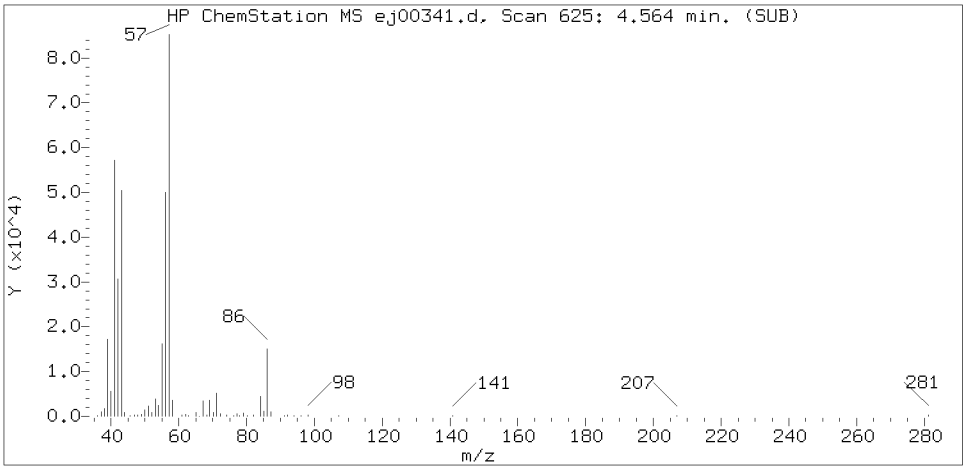
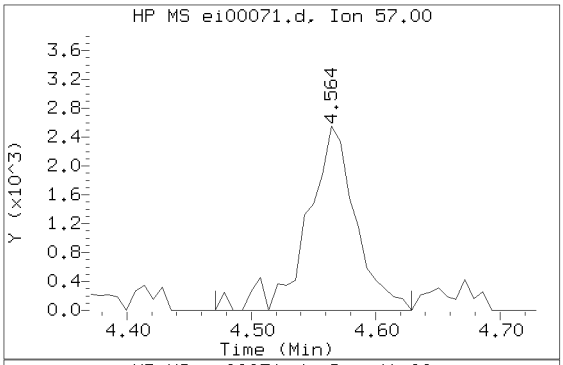
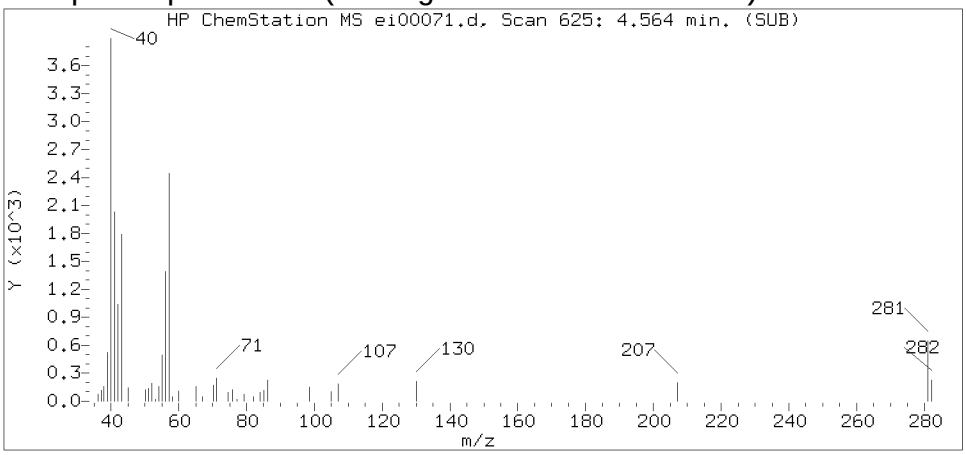
Target 3.5 esignature user ID: jeb07445

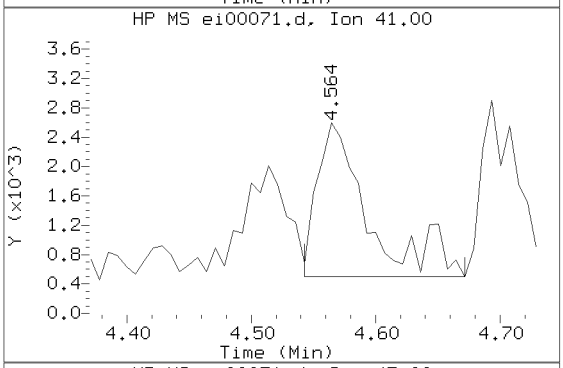
Reference Standard Spectrum for Hexane

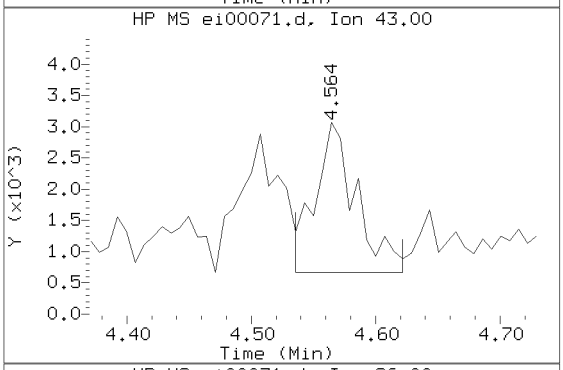




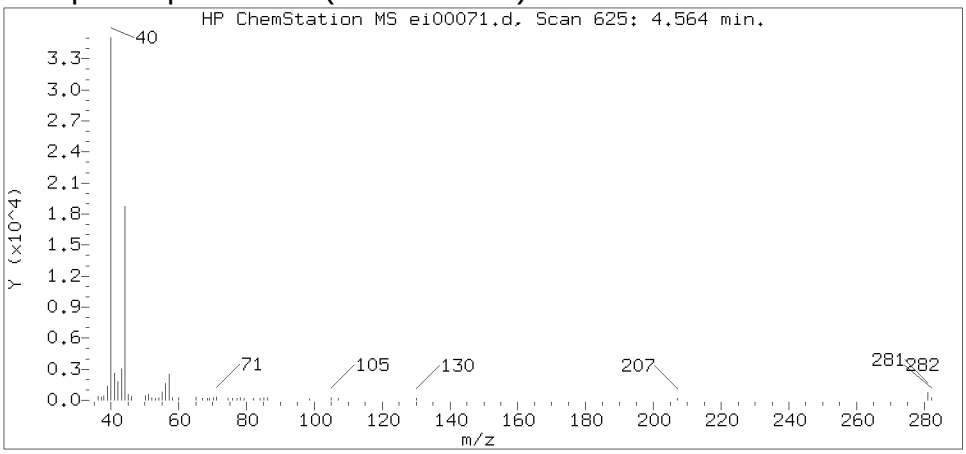
Sample Spectrum (Background Subtracted)

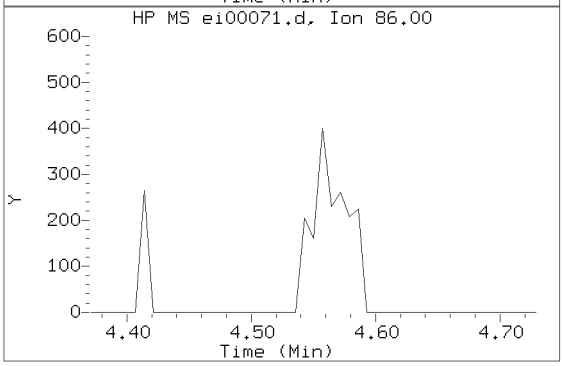






Sample Spectrum (Unaltered)





Data File: /chem/HP22820.i/18sep06.b/ei00071.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:41 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:10 jeb07445

Sample Name: 1374- Lab Sample ID: 9785625

Compound Number	: 30
Compound Name	: Hexane
Scan Number	: 625
Retention Time (minutes)	: 4.564
Relative Retention Time	: 0.00109
Quant Ion	: 57.00
Area (flag)	: 6895
Concentration (ppb(v))	: 0.2387

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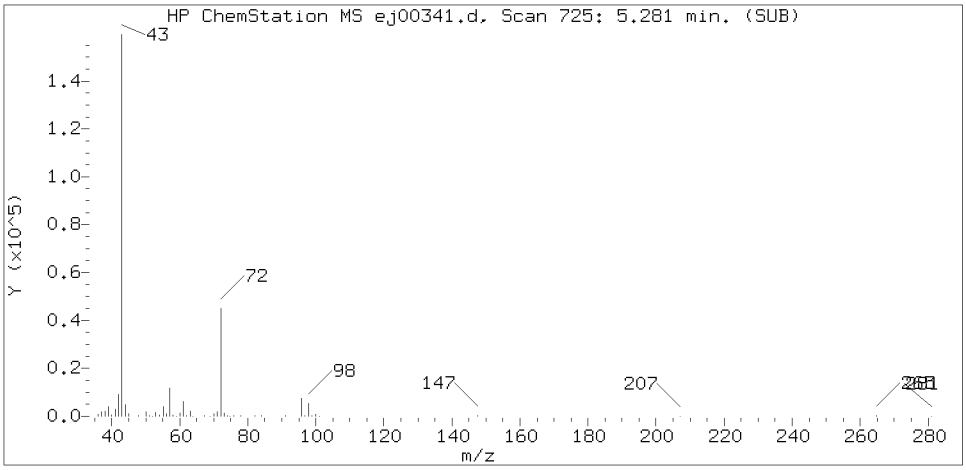
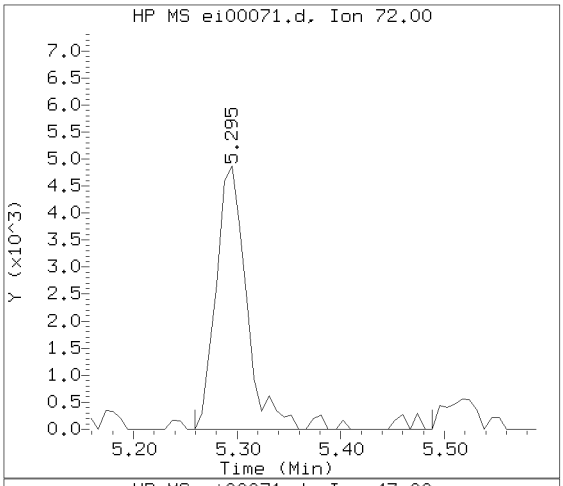
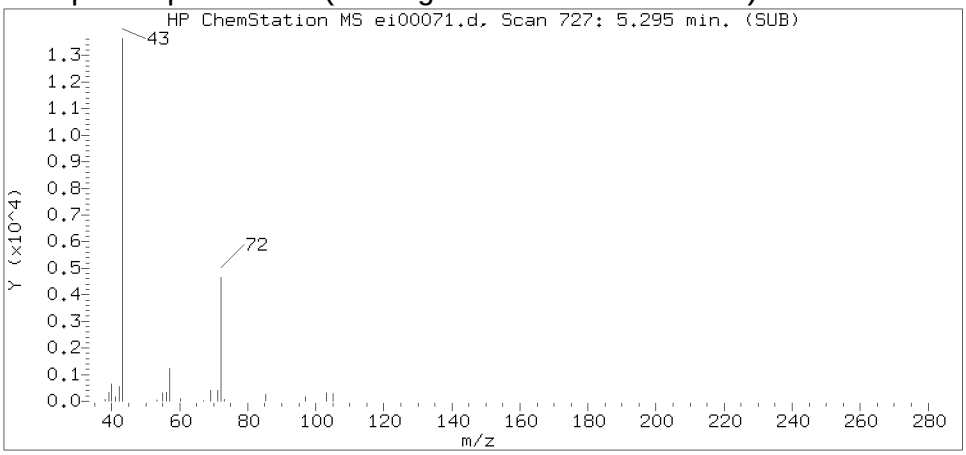
Target 3.5 esignature user ID: jeb07445

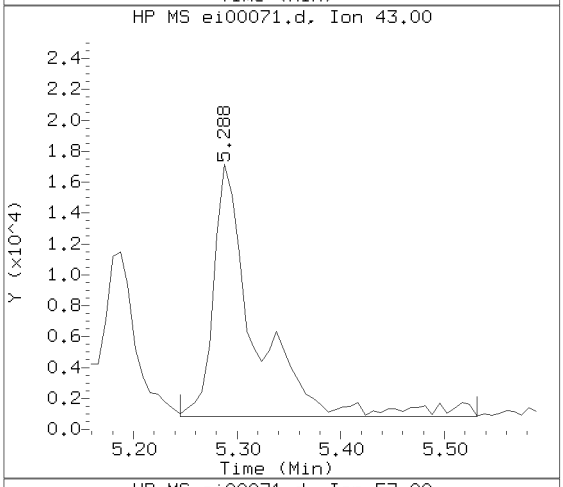
Reference Standard Spectrum for 2-Butanone



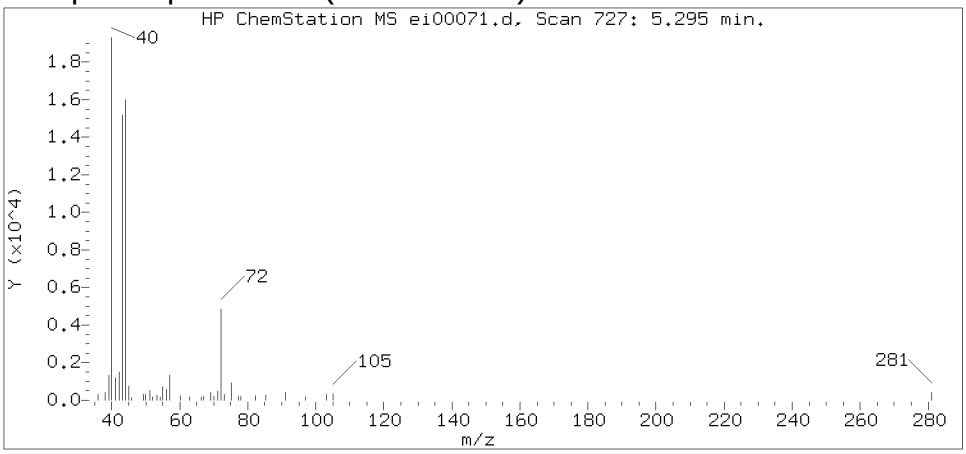


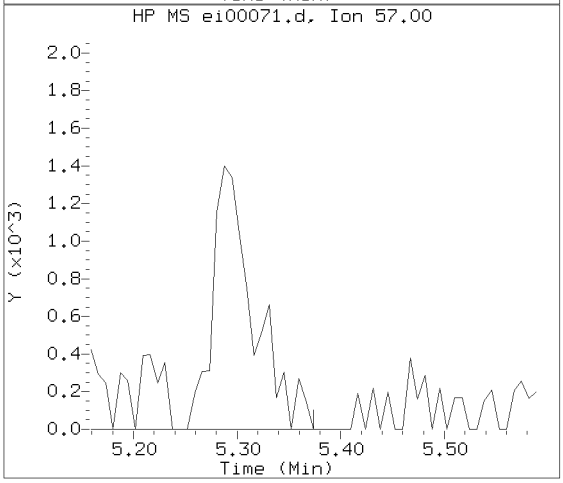
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP22820.i/18sep06.b/ei00071.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:41 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:10 jeb07445

Sample Name: 1374- Lab Sample ID: 9785625

Compound Number : 37
Compound Name : 2-Butanone
Scan Number : 727
Retention Time (minutes): 5.295
Relative Retention Time :-0.00135
Quant Ion : 72.00
Area (flag) : 10433
Concentration (ppb(v)) : 0.9520

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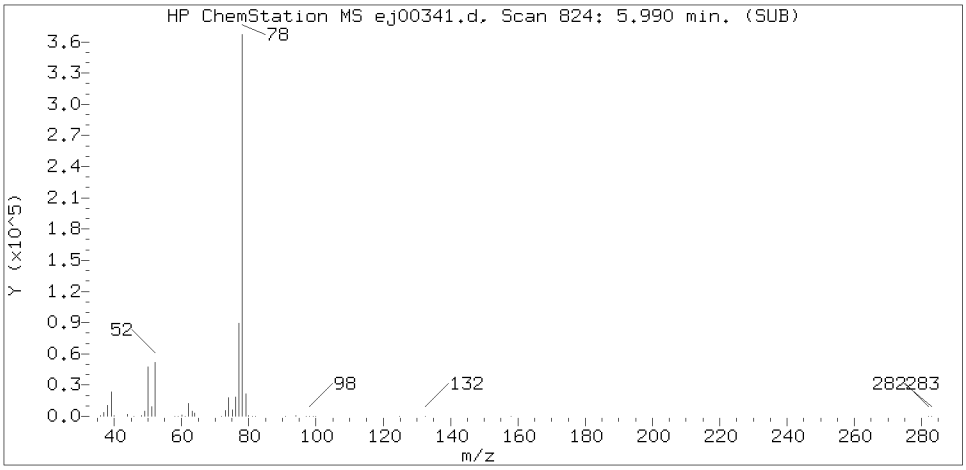
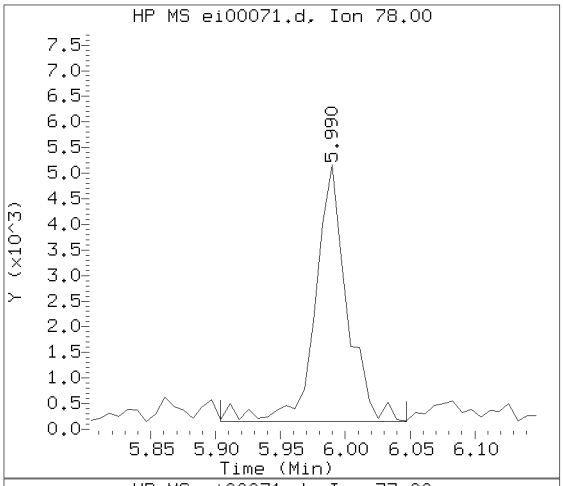
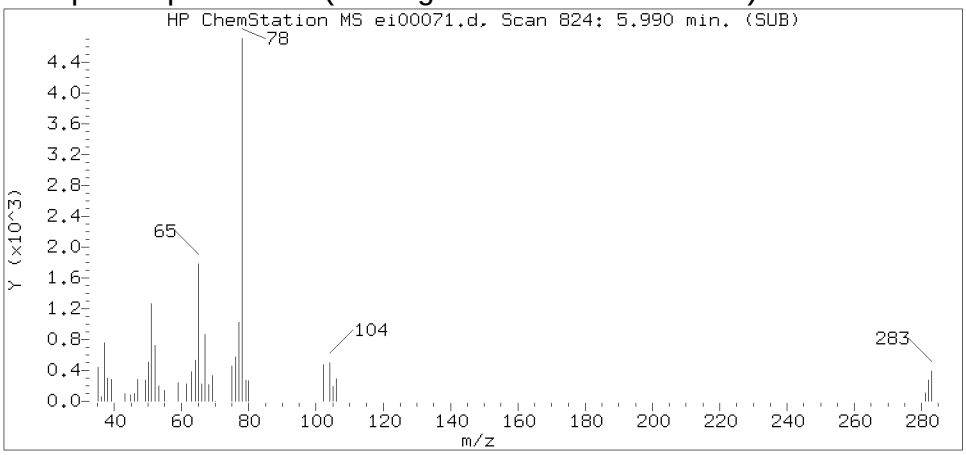
Target 3.5 esignature user ID: jeb07445

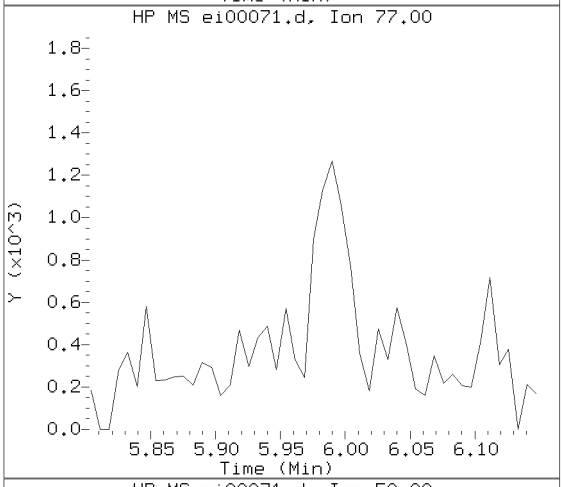
Reference Standard Spectrum for Benzene



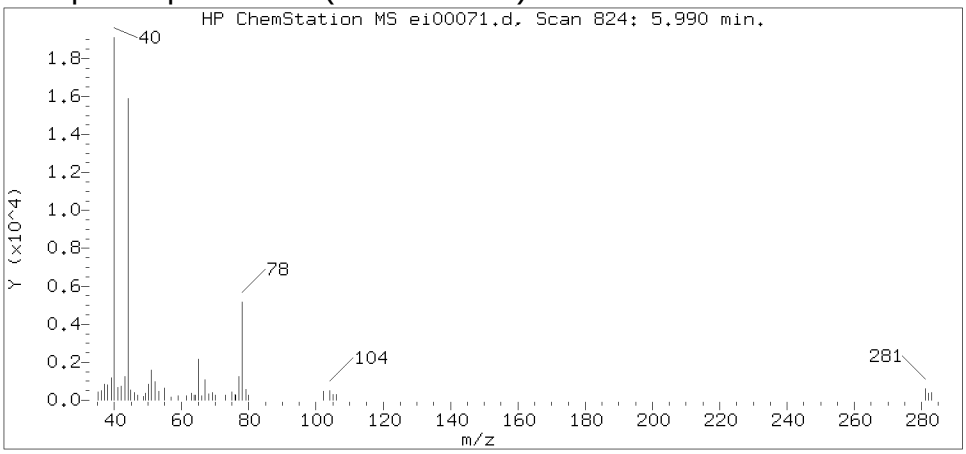


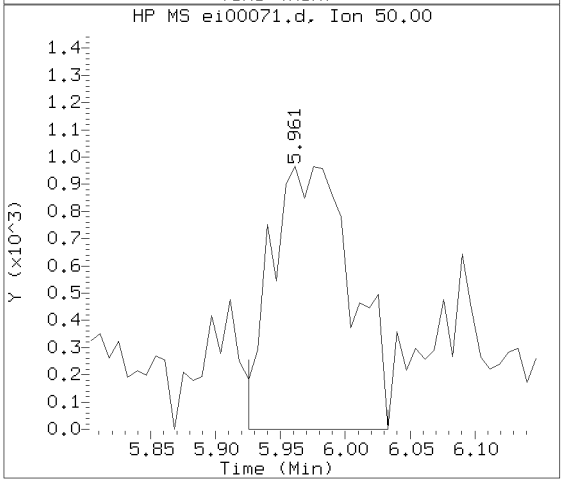
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP22820.i/18sep06.b/ei00071.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:41 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:10 jeb07445

Sample Name: 1374- Lab Sample ID: 9785625

Compound Number : 46
Compound Name : Benzene
Scan Number : 824
Retention Time (minutes): 5.990
Relative Retention Time : 0.00000
Quant Ion : 78.00
Area (flag) : 8612
Concentration (ppb(v)) : 0.1352

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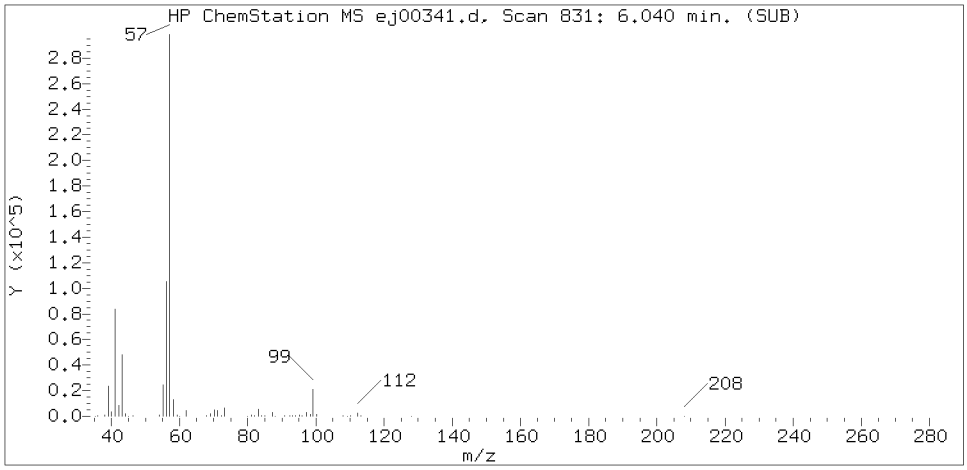
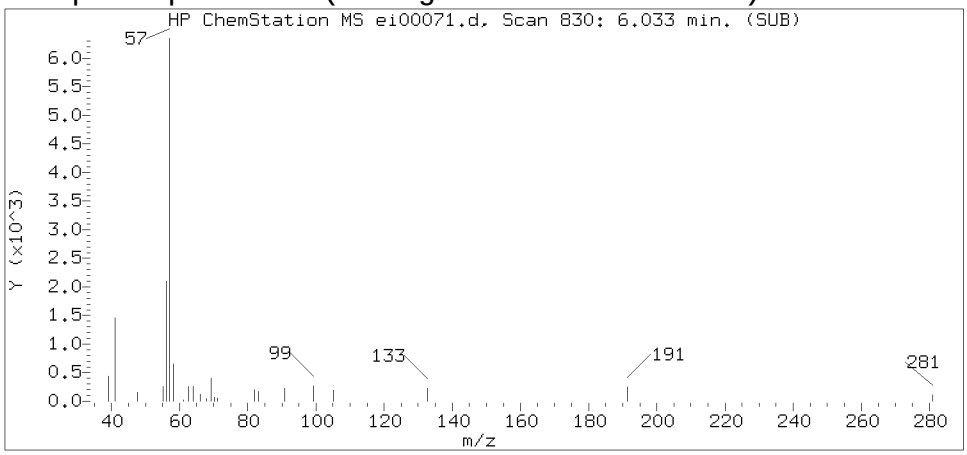
Target 3.5 esignature user ID: jeb07445

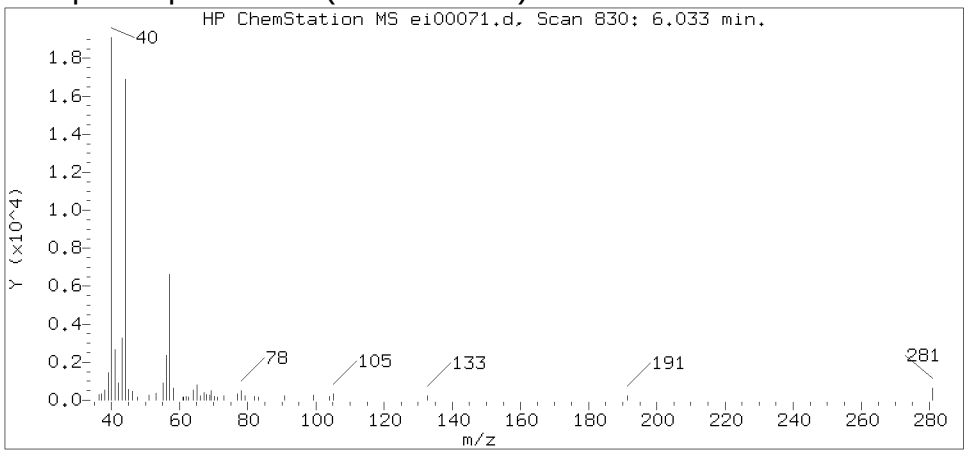
Reference Standard Spectrum for Isooctane

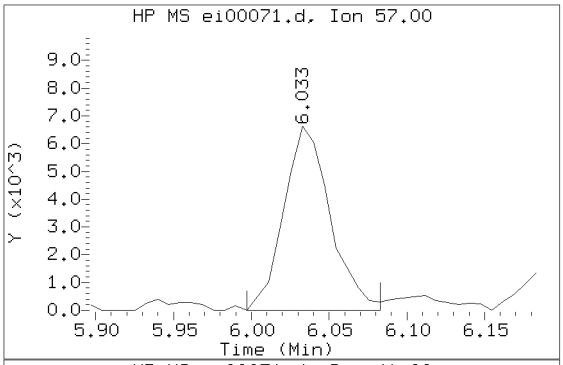


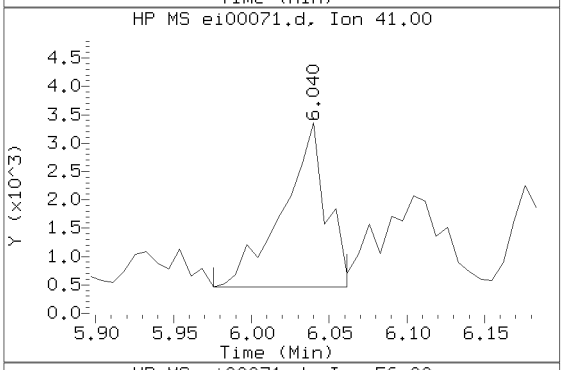
Sample Spectrum (Background Subtracted)

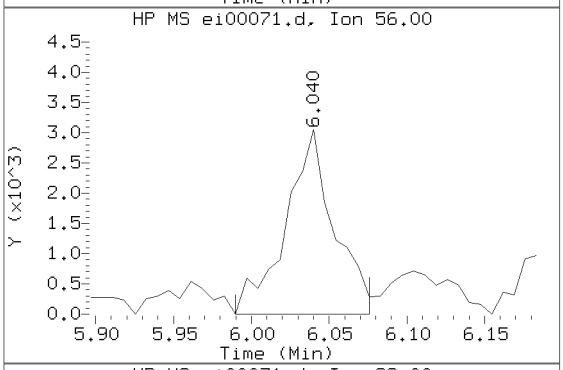


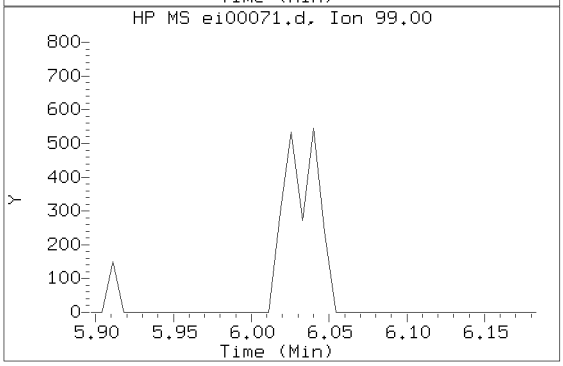
Sample Spectrum (Unaltered)











Data File: /chem/HP22820.i/18sep06.b/ei00071.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:41 Analyst ID: jeb07445

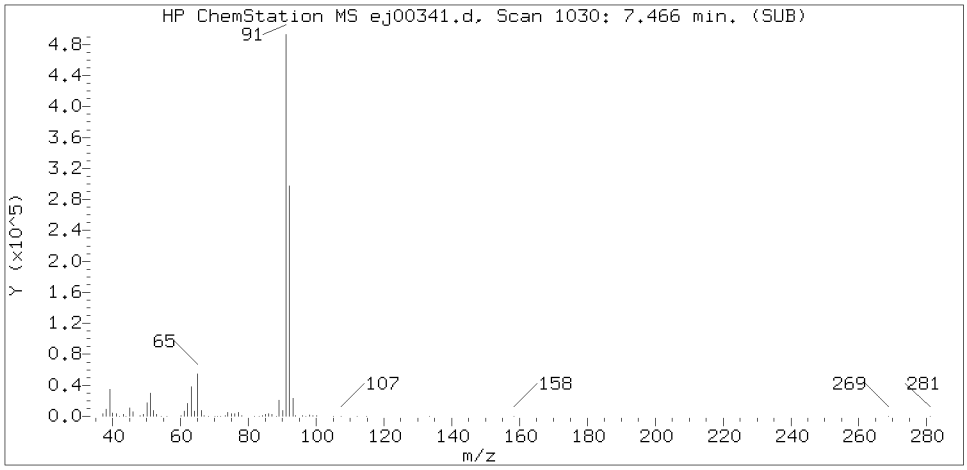
Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:10 jeb07445

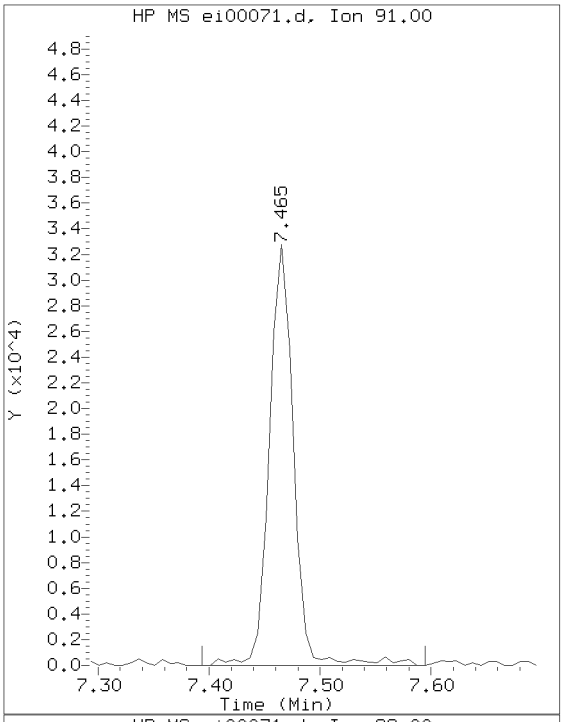
Sample Name: 1374- Lab Sample ID: 9785625

Compound Number	: 48
Compound Name	: Isooctane
Scan Number	: 830
Retention Time (minutes)	: 6.033
Relative Retention Time	: 0.00114
Quant Ion	: 57.00
Area (flag)	: 13673
Concentration (ppb(v))	: 0.1565

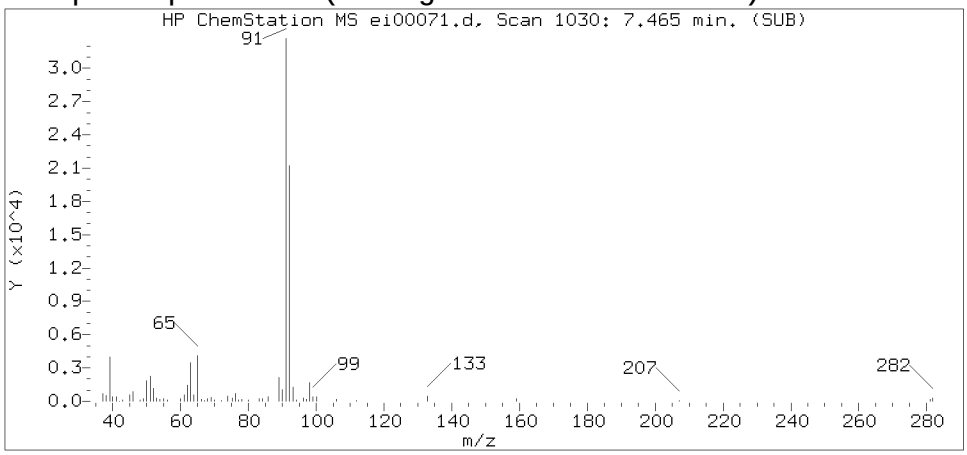
Digitally signed by Jacob E. Bailey on 09/06/2018 at 19:13.
Target 3.5 esignature user ID: jeb07445

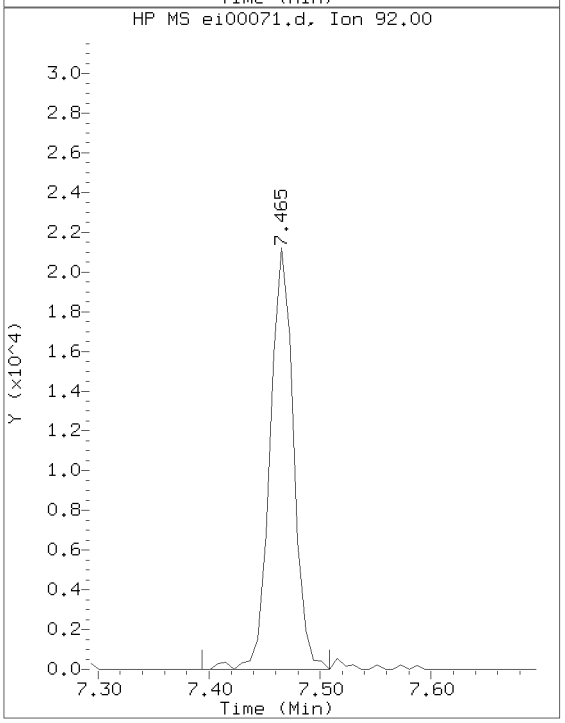
Reference Standard Spectrum for Toluene



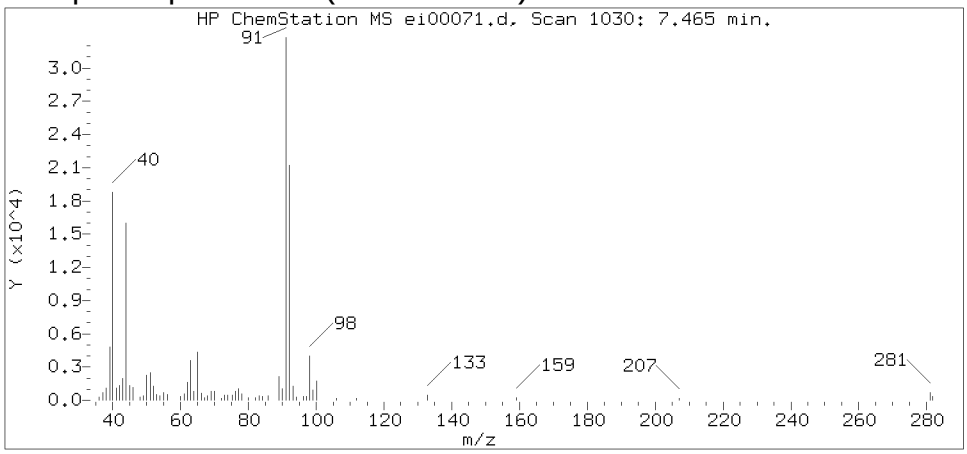


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP22820.i/18sep06.b/ei00071.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:41 Analyst ID: jeb07445

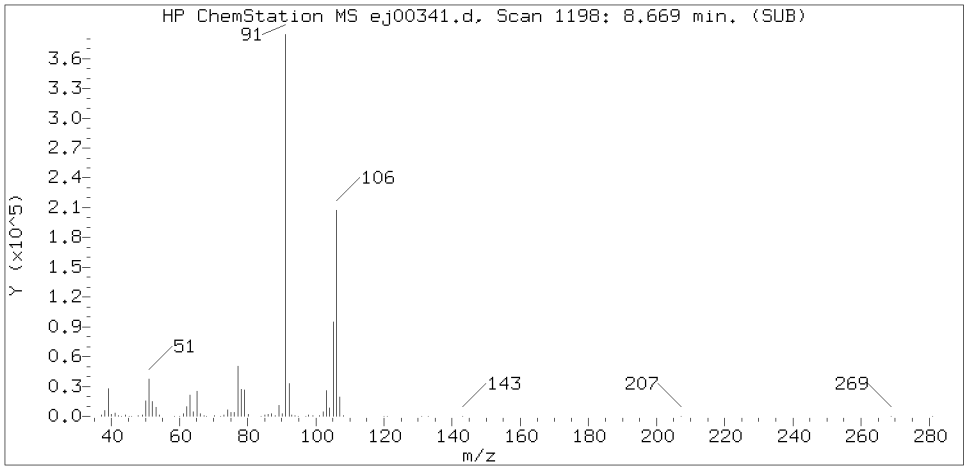
Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:10 jeb07445

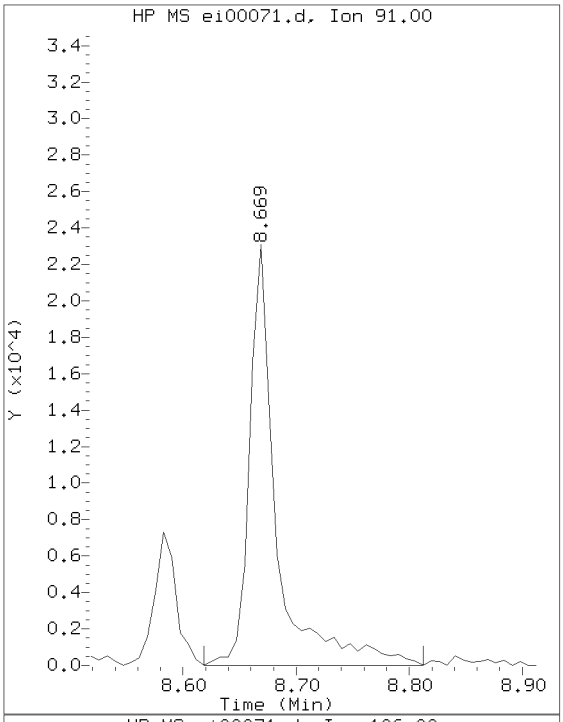
Sample Name: 1374- Lab Sample ID: 9785625

Compound Number	: 61
Compound Name	: Toluene
Scan Number	: 1030
Retention Time (minutes)	: 7.465
Relative Retention Time	: 0.00000
Quant Ion	: 91.00
Area (flag)	: 50134
Concentration (ppb(v))	: 0.6526

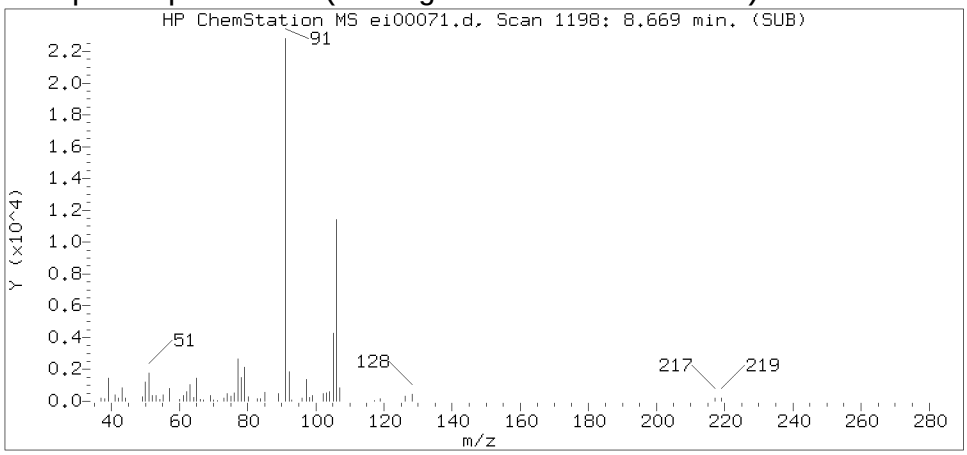
Digitally signed by Jacob E. Bailey on 09/06/2018 at 19:13.
Target 3.5 esignature user ID: jeb07445

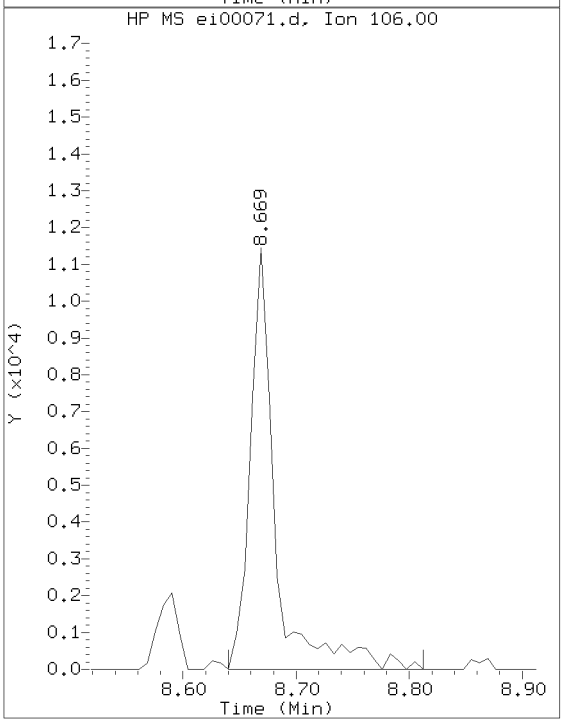
Reference Standard Spectrum for m/p-Xylene



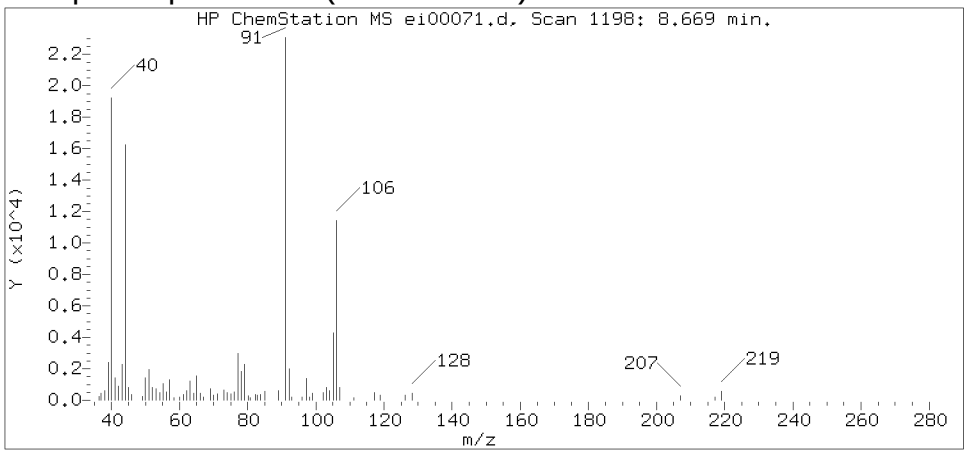


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP22820.i/18sep06.b/ei00071.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:41 Analyst ID: jeb07445

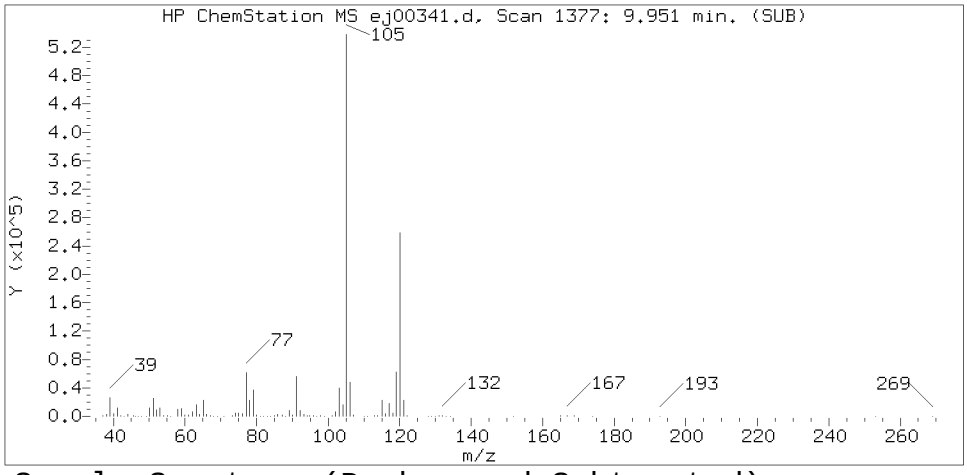
Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:10 jeb07445

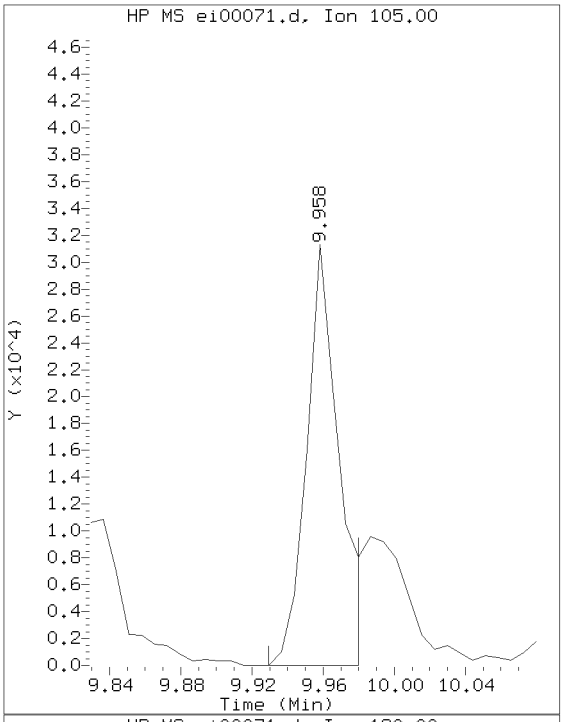
Sample Name: 1374- Lab Sample ID: 9785625

Compound Number : 75
Compound Name : m/p-Xylene
Scan Number : 1198
Retention Time (minutes): 8.669
Relative Retention Time : 0.00000
Quant Ion : 91.00
Area (flag) : 38289
Concentration (ppb(v)) : 0.4639

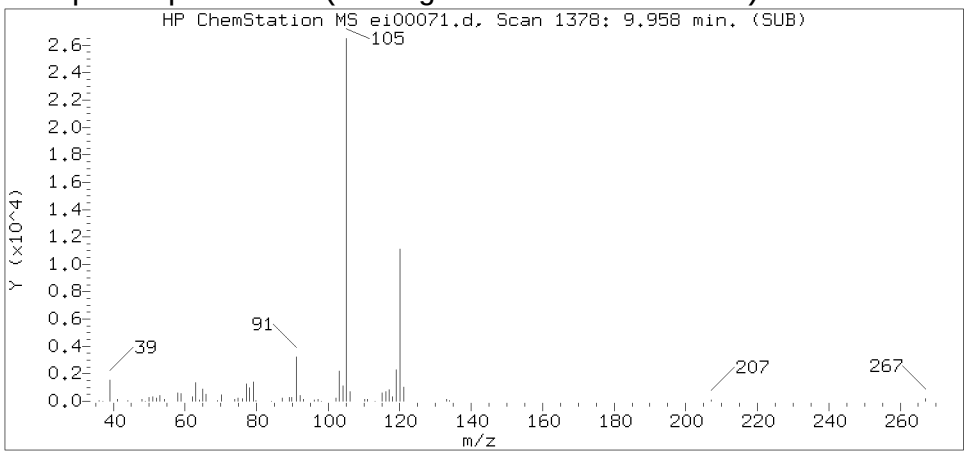
Digitally signed by Jacob E. Bailey on 09/06/2018 at 19:13.
Target 3.5 esignature user ID: jeb07445

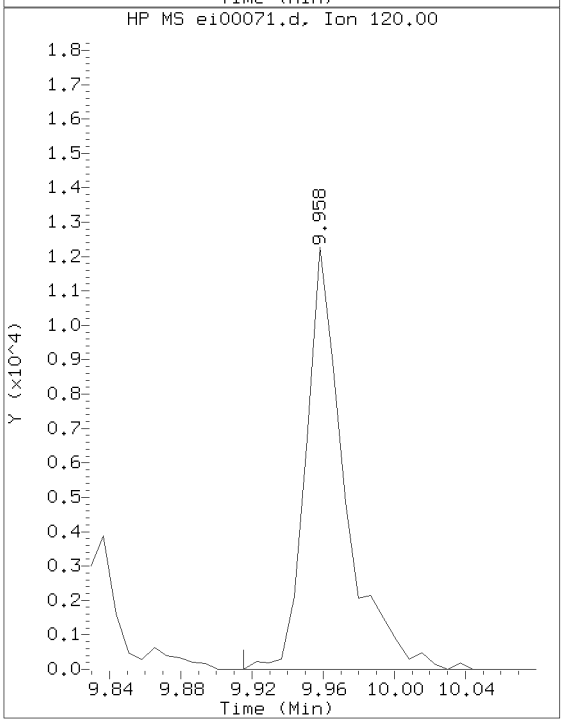
Reference Standard Spectrum for 1,2,4-Trimethylbenzene



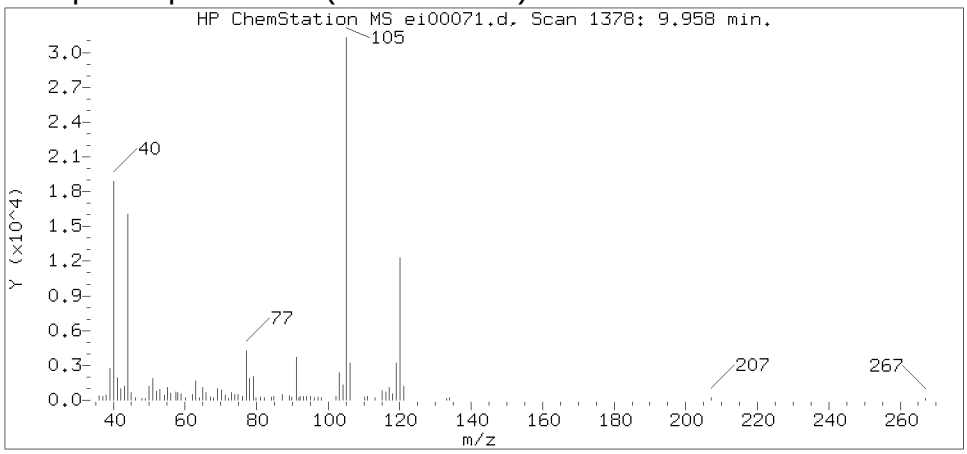


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP22820.i/18sep06.b/ei00071.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:41 Analyst ID: jeb07445

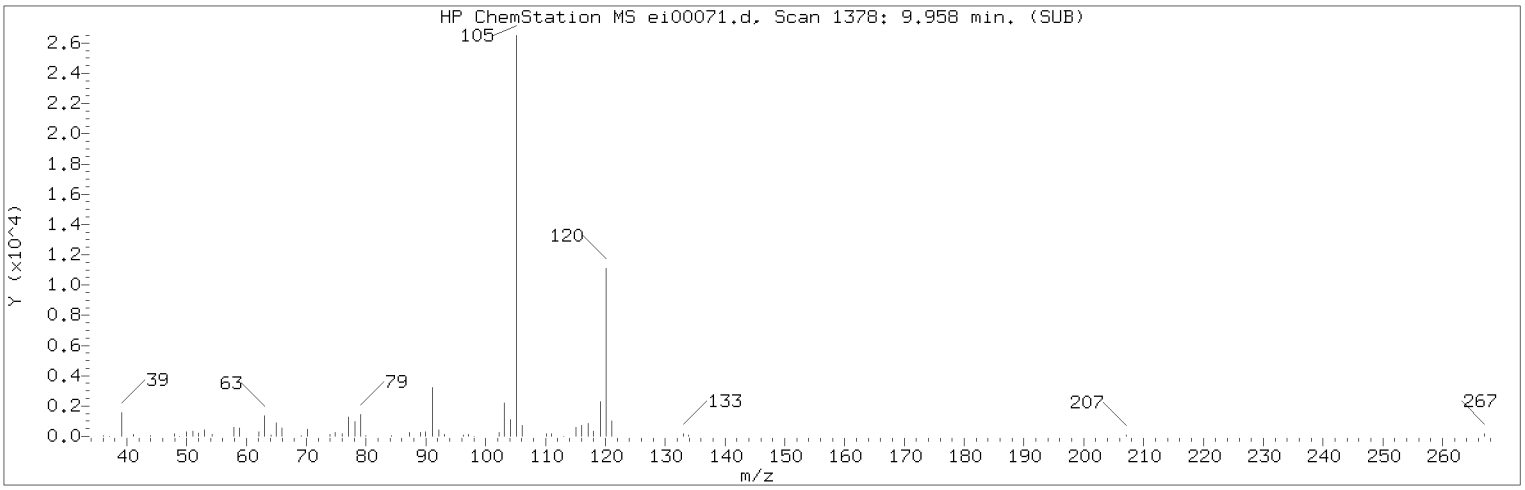
Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:10 jeb07445

Sample Name: 1374- Lab Sample ID: 9785625

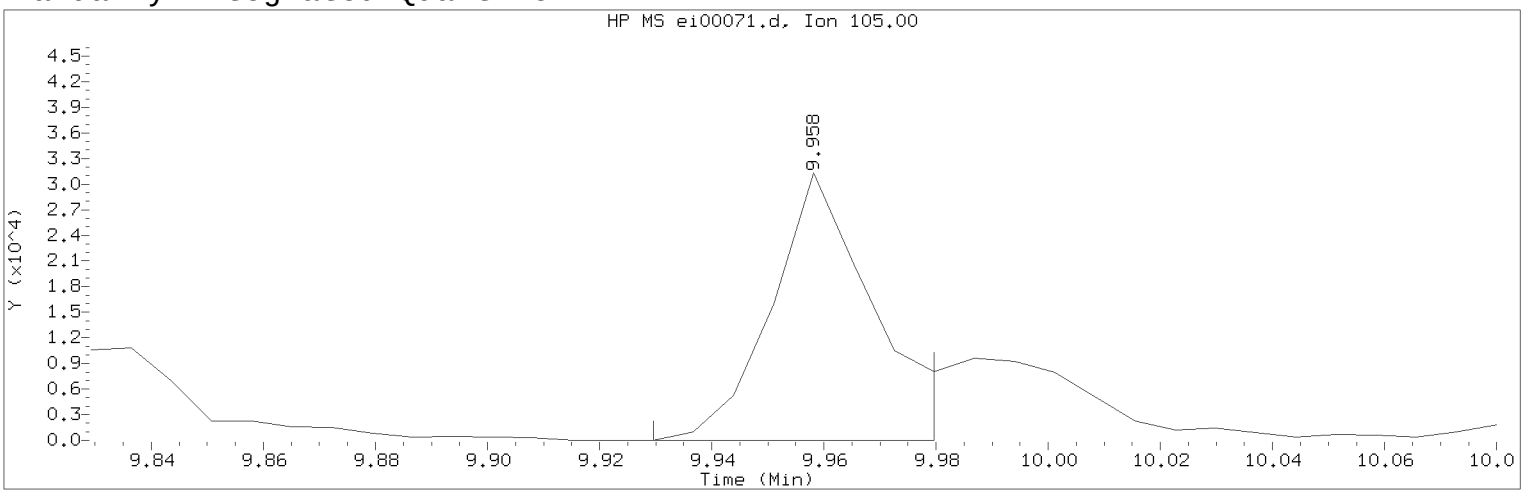
Compound Number : 90
Compound Name : 1,2,4-Trimethylbenzene
Scan Number : 1378
Retention Time (minutes): 9.958
Relative Retention Time :-0.00000
Quant Ion : 105.00
Area (flag) : 39859M
Concentration (ppb(v)) : 0.4318

Digitally signed by Jacob E. Bailey on 09/06/2018 at 19:13.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep06.b/ei00071.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:41 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:10 jeb07445

Sample Name: 1374- Lab Sample ID: 9785625

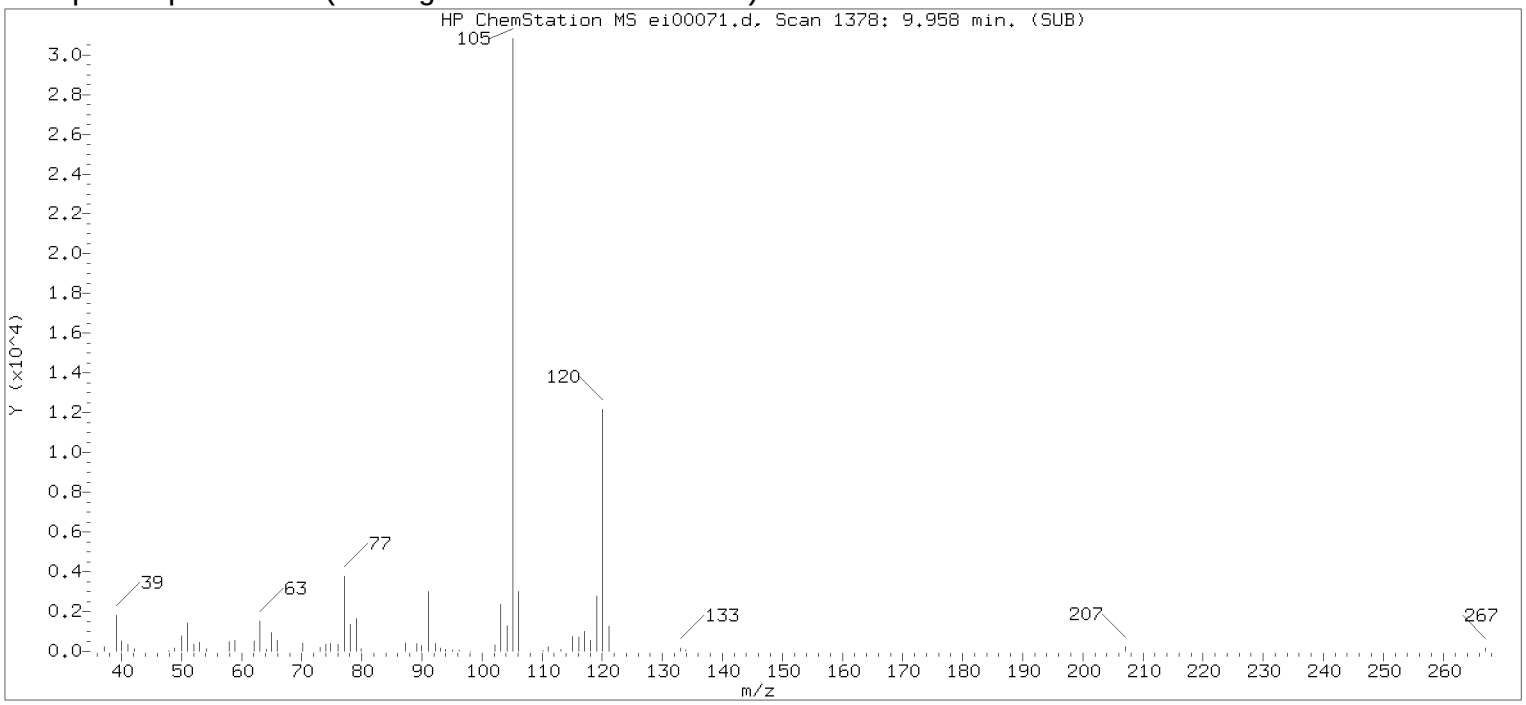
Compound Number : 90
Compound Name : 1,2,4-Trimethylbenzene
Scan Number : 1378
Retention Time (minutes): 9.958
Quant Ion : 105.00
Area (flag) : 39859M
Concentration (ppb(v)) : 0.4318
Integration start scan : 1373 Integration stop scan: 1380
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

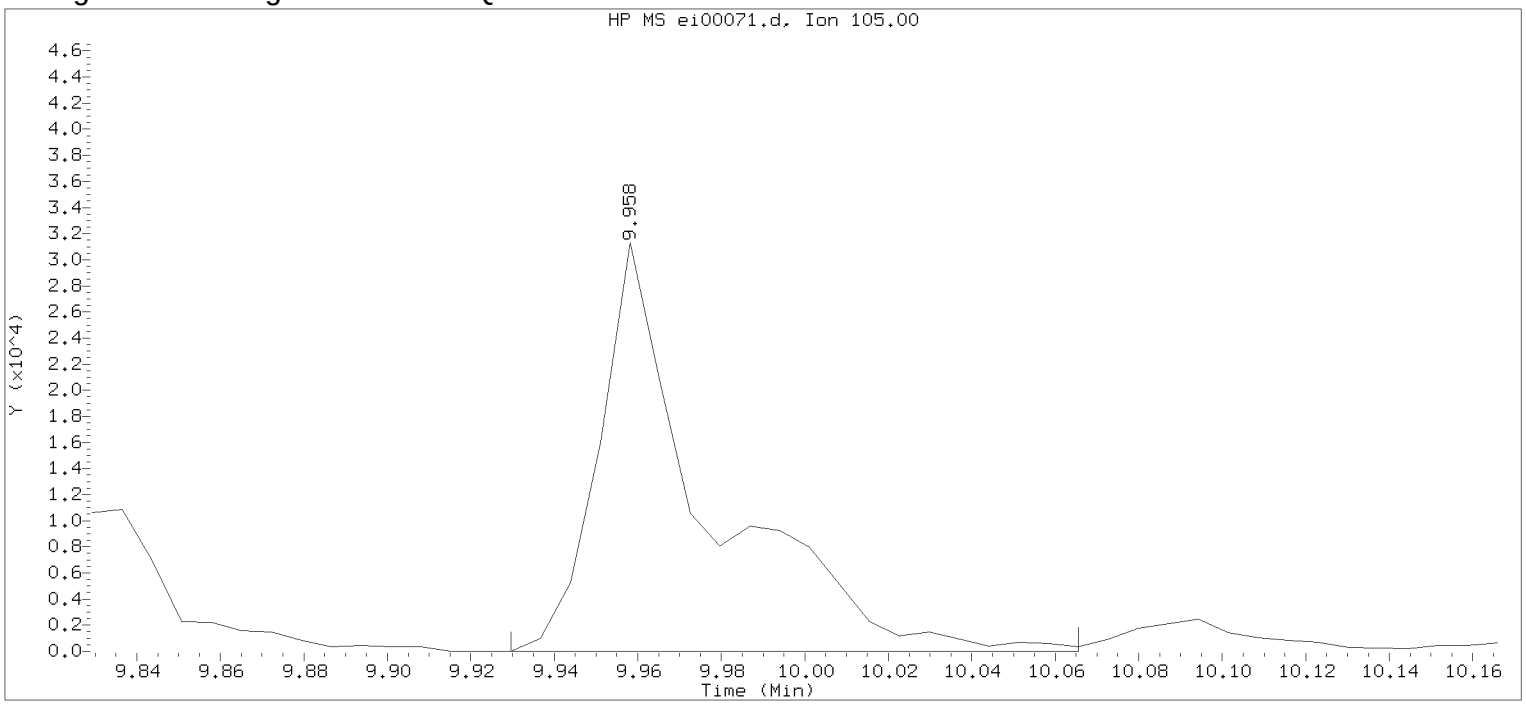
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/06/2018 at 19:13.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/07/2018 at 14:24.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep06.b/ei00071.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 17:41 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 18:02 Unknown

Sample Name: 1374- Lab Sample ID: 9785625

Compound Number : 90
Compound Name : 1,2,4-Trimethylbenzene
Scan Number : 1378
Retention Time (minutes): 9.958
Quant Ion : 105.00
Area : 56854
Concentration (ppb(v)) : 0.6159
Integration start scan : 1373 Integration stop scan: 1392
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 09/06/2018 at 19:13.
Target 3.5 esignature userGLE02jeb07445

Standards Data

Volatile Organics in Air by GC/MS

Lancaster Laboratories
Volatiles in Air
Runlog for Agilent GC/MS System HP22820 **HP #05**

Data Directory Path is - D:\data\18sep05\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
jeb07445	EI00020.D	50NGBFB	09/05/2018	10:14		
jeb07445	EI00021.D	VSTD010	09/05/2018	11:20		
jeb07445	EI00022.D	VSTD005	09/05/2018	11:44		
jeb07445	EI00023.D	VSTD002	09/05/2018	12:08		
jeb07445	EI00024.D	VSTD001	09/05/2018	12:31		
jeb07445	EI00025.D	VSTD0.50	09/05/2018	12:54		
jeb07445	EI00026.D	VSTD025	09/05/2018	13:18		
jeb07445	EI00027.D	VSTD070	09/05/2018	13:43		
jeb07445	EI00028.D	VBLKE01	09/05/2018	14:05	E1824830AA	
jeb07445	EI00029.D	VBLKE01	09/05/2018	14:30	E1824830AA	
jeb07445	EI00030.D	LCSE01	09/05/2018	15:09	E1824830AA	
jeb07445	EI00031.D	LCSDE01	09/05/2018	15:34	E1824830AA	
jeb07445	EI00032.D	mdlv0.5	09/05/2018	15:58	E1824830AA	
jeb07445	EI00033.D	mdlv0.2	09/05/2018	16:22	E1824830AA	
jeb07445	EI00034.D	9782590	09/05/2018	16:50	E1824830AA	
jeb07445	EI00035.D	9782589	09/05/2018	17:16	E1824830AA	
jeb07445	EI00036.D	9782588	09/05/2018	17:39	E1824830AA	
jeb07445	EI00037.D	9782588	09/05/2018	18:13	E1824830AA	
jeb07445	EI00038.D	9782588	09/05/2018	18:35	E1824830AA	
jeb07445	EI00039.D	9779677	09/05/2018	19:12	E1824830AA	
jeb07445	EI00040.D	9781667	09/05/2018	19:39	E1824830AA	
jeb07445	EI00041.D	9781668	09/05/2018	20:05	E1824830AA	
jeb07445	EI00042.D	9781669	09/05/2018	20:32	E1824830AA	
jeb07445	EI00043.D	9781670	09/05/2018	20:58	E1824830AA	
jeb07445	EI00044.D	9781738	09/05/2018	21:25	E1824830AA	
jeb07445	EI00045.D	9781739	09/05/2018	21:51	E1824830AA	
jeb07445	EI00046.D	9781740	09/05/2018	22:18	E1824830AA	
jeb07445	EI00047.D	9781741	09/05/2018	22:44	E1824830AA	
jeb07445	EI00048.D	9783135	09/05/2018	23:07	E1824830AA	
jeb07445	EI00049.D	9783136	09/05/2018	23:34	E1824830AA	
jeb07445	EI00050.D	9783136DL	09/05/2018	23:56	E1824830AA	
jeb07445	EI00051.D	9783137	09/06/2018	00:23	E1824830AA	
jeb07445	EI00052.D	9783137DL	09/06/2018	00:46	E1824830AA	
jeb07445	EI00053.D	9781612	09/06/2018	01:09	E1824830AA	100
jeb07445	EI00054.D	9781613	09/06/2018	01:33	E1824830AA	100
jeb07445	EI00055.D	9781739	09/06/2018	08:54	E1824830AA	

Lancaster Laboratories
Volatiles in Air
Runlog for Agilent GC/MS System HP22820 **HP #05**

Data Directory Path is - D:\data\18sep06\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
jeb07445	EI00060.D	50NGBFB	09/06/2018	12:08		
jeb07445	EI00061.D	VSTD010	09/06/2018	12:45		
jeb07445	EI00062.D	VBLKE02	09/06/2018	13:23	E1824930AA	
jeb07445	EI00063.D	LCSE02	09/06/2018	13:58	E1824930AA	
jeb07445	EI00064.D	LCSDE02	09/06/2018	14:23	E1824930AA	
jeb07445	EI00065.D	9783148	09/06/2018	15:11	E1824930AA	
jeb07445	EI00066.D	9783149	09/06/2018	15:36	E1824930AA	
jeb07445	EI00067.D	9783150	09/06/2018	15:58	E1824930AA	
jeb07445	EI00068.D	9783151	09/06/2018	16:23	E1824930AA	
jeb07445	EI00069.D	9783148DL	09/06/2018	16:47	E1824930AA	
jeb07445	EI00070.D	9785624	09/06/2018	17:14	E1824930AA	
jeb07445	EI00071.D	9785625	09/06/2018	17:41	E1824930AA	
jeb07445	EI00072.D	9785623	09/06/2018	18:03	E1824930AA	
jeb07445	EI00073.D	9785623	09/06/2018	18:38	E1824930AA	
jeb07445	EI00074.D	9784858	09/06/2018	19:03	E1824930AA	
jeb07445	EI00075.D	9784858DL	09/06/2018	19:26	E1824930AA	
jeb07445	EI00076.D	9784859	09/06/2018	19:51	E1824930AA	
jeb07445	EI00077.D	9784859DL	09/06/2018	20:14	E1824930AA	
jeb07445	EI00078.D	9784860	09/06/2018	20:38	E1824930AA	
jeb07445	EI00079.D	9784860DL	09/06/2018	21:01	E1824930AA	
jeb07445	EI00080.D	9784861	09/06/2018	21:25	E1824930AA	
jeb07445	EI00081.D	9784861DL	09/06/2018	21:48	E1824930AA	
jeb07445	EI00082.D	VBLKE02	09/06/2018	22:12	E1824930AA	
jeb07445	EI00083.D	cc875	09/07/2018	08:44	E1824930AA	
jeb07445	EI00084.D	fc1	09/07/2018	10:02	E1824930AA	

Data File: /chem/HP22820.i/18sep05.b/ei00020.d

Date : 05-SEP-2018 10:14

Client ID: 50NGBFB

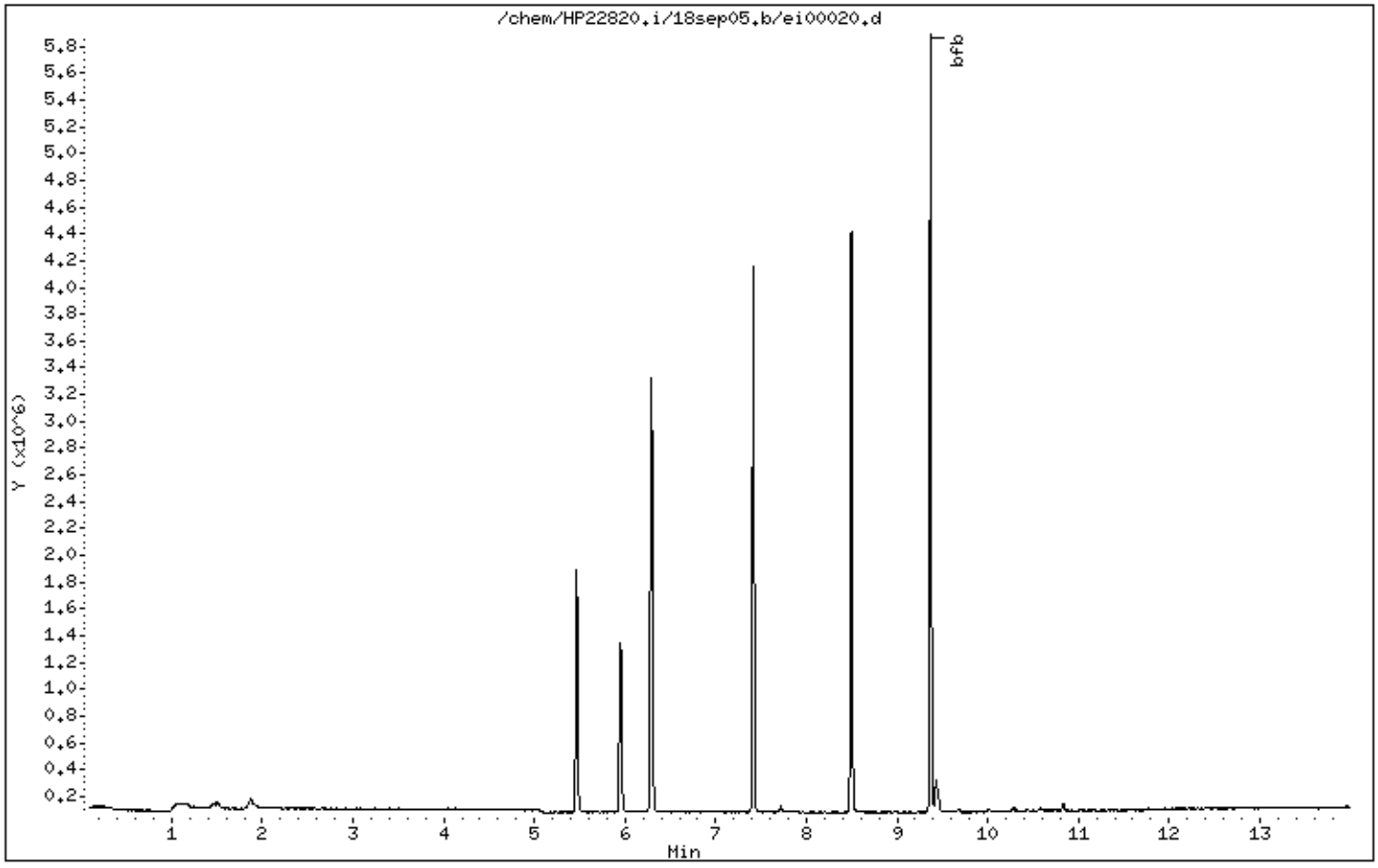
Instrument: HP22820.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25



Digitally signed by Jacob E. Bailey on 09/05/2018 at 15:40.
Target 3.5 esignature user ID: jeb07445

Data File: /chem/HP22820.i/18sep05.b/ei00020.d

Date : 05-SEP-2018 10:14

Client ID: 50NGBFB

Instrument: HP22820.i

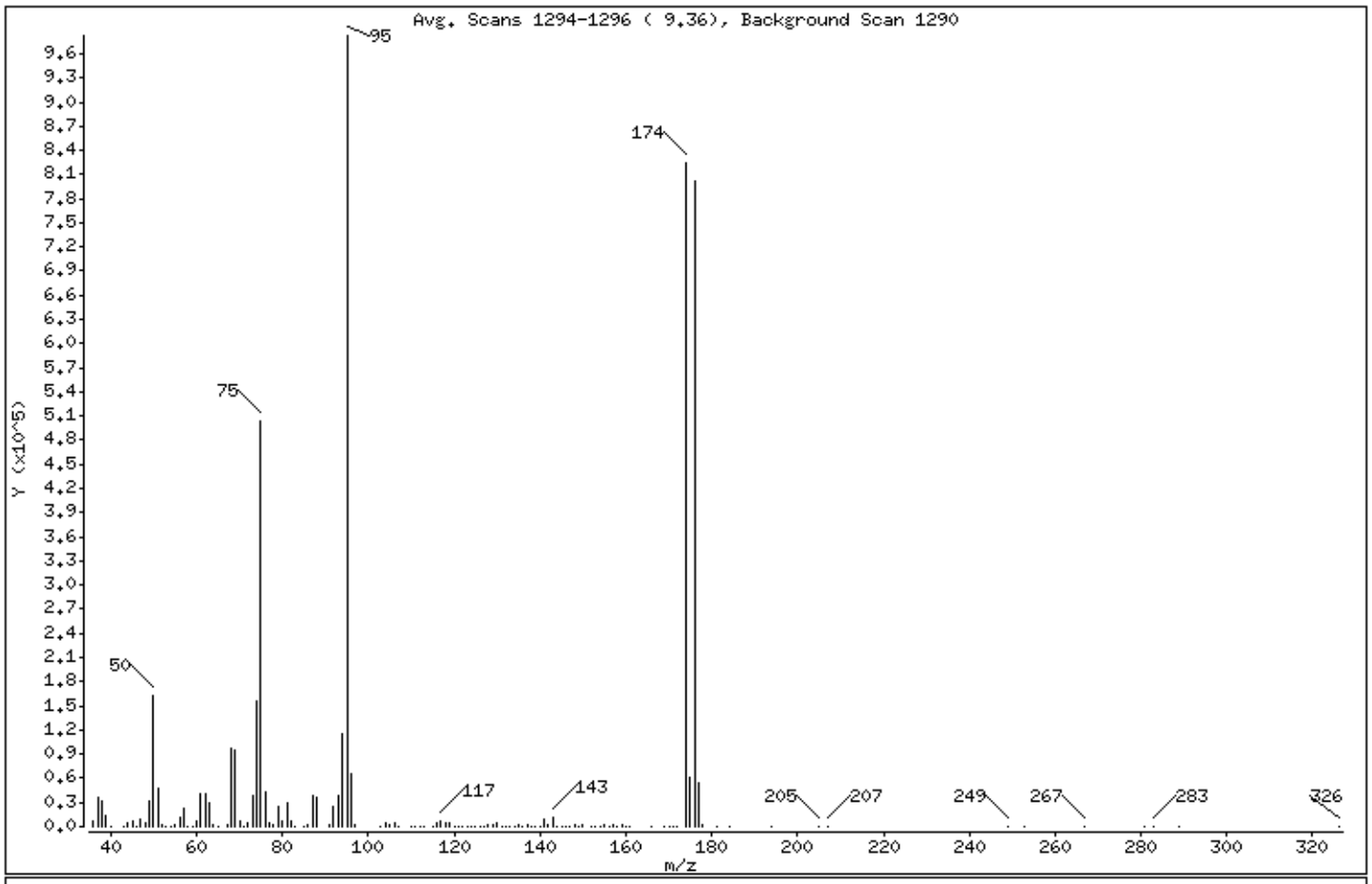
Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	16.57
75	30.00 - 66.00% of mass 95	51.24
96	5.00 - 9.00% of mass 95	6.76
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	84.00
175	4.00 - 9.00% of mass 174	6.28 (7.48)
176	93.00 - 101.00% of mass 174	81.52 (97.05)
177	5.00 - 9.00% of mass 176	5.45 (6.69)

Digitally signed by Jacob E. Bailey on 09/05/2018 at 15:40.
Target 3.5 esignature user ID: jeb07445

Date : 05-SEP-2018 10:14

Client ID: 50NGBFB Instrument: HP22820.i

Sample Info: 50NGBFB;;;BFB;0;;;

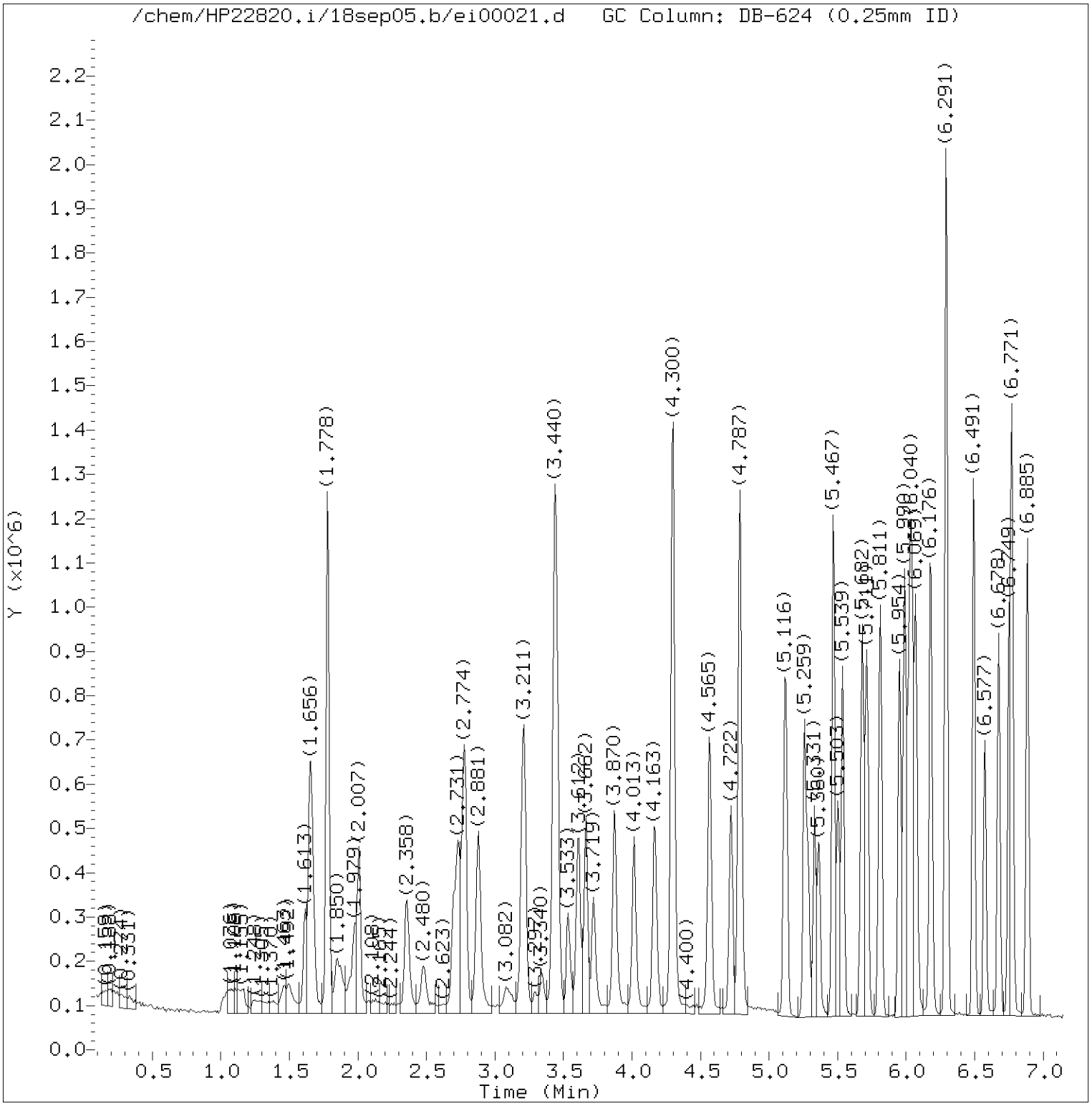
Operator: jeb07445

Column phase: DB-624 Column diameter: 0.25

Data File: ei00020.d
Spectrum: Avg. Scans 1294-1296 (9.36), Background Scan 1290
Location of Maximum: 95.00
Number of points: 133

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	6915	73.00	39368	118.00	3483	153.00	904
37.00	35952	74.00	155840	119.00	4771	154.00	694
38.00	32664	75.00	503424	120.00	420	155.00	2425
39.00	13284	76.00	42792	121.00	86	156.00	211
40.00	309	77.00	5443	122.00	487	157.00	1890
43.00	560	78.00	2948	123.00	420	158.00	363
44.00	4296	79.00	25728	124.00	558	159.00	1227
45.00	6081	80.00	7862	125.00	365	160.00	267
46.00	608	81.00	28968	126.00	429	161.00	946
47.00	9117	82.00	6057	127.00	385	166.00	146
48.00	4770	83.00	545	128.00	2668	169.00	55
49.00	31928	85.00	181	129.00	1674	170.00	161
50.00	162816	86.00	1288	130.00	3515	171.00	217
51.00	47680	87.00	37392	131.00	904	172.00	154
52.00	2060	88.00	36280	132.00	121	174.00	825280
53.00	193	91.00	3074	133.00	108	175.00	61728
54.00	149	92.00	25336	134.00	400	176.00	800896
55.00	1882	93.00	39000	135.00	1876	177.00	53552
56.00	12121	94.00	114632	136.00	360	178.00	1552
57.00	22608	95.00	982464	137.00	1811	181.00	60
58.00	1095	96.00	66440	138.00	101	184.00	62
59.00	130	97.00	2260	139.00	443	194.00	52
60.00	6964	103.00	528	140.00	895	205.00	66
61.00	40360	104.00	3525	141.00	9326	207.00	76
62.00	40808	105.00	1382	142.00	1318	249.00	102
63.00	29392	106.00	4056	143.00	10370	253.00	51
64.00	2869	107.00	786	144.00	432	267.00	98
65.00	194	110.00	381	145.00	780	281.00	42
67.00	1680	111.00	625	146.00	1037	283.00	89
68.00	97824	112.00	686	147.00	920	289.00	56
69.00	94216	113.00	477	148.00	2615	326.00	58
70.00	6214	115.00	782	149.00	469		
71.00	148	116.00	3606	150.00	1226		
72.00	4935	117.00	5829	152.00	527		

Digitally signed by Jacob E. Bailey on 09/05/2018 at 15:40.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

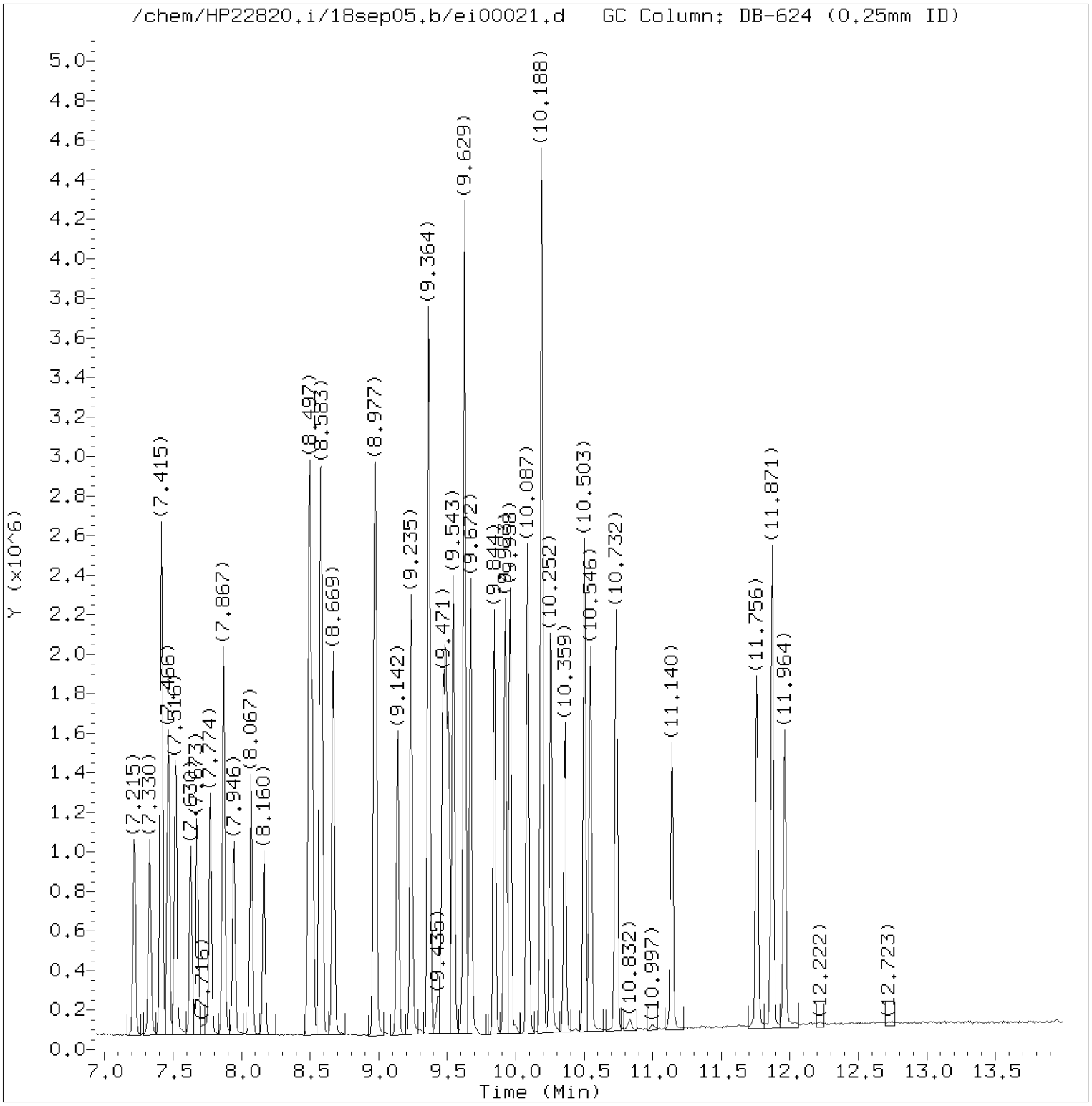
Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00021.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 11:20 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:15
Date, time and analyst ID of latest file update: 05-Sep-2018 13:15 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00021.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 11:20 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:15
Date, time and analyst ID of latest file update: 05-Sep-2018 13:15 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00021.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 11:20 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:15
Date, time and analyst ID of latest file update: 05-Sep-2018 13:15 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.613	41	144980	10.002
2) Dichlorodifluoromethane	(1)	1.649	85	572803	10.107
3) Chlorodifluoromethane	(1)	1.671	51	283481	10.001
4) Freon 114	(1)	1.778	85	580715	10.070
5) Chloromethane	(1)	1.843	50	101507	8.605
6) Vinyl Chloride	(1)	1.979	62	206576	10.186
7) 1,3-Butadiene	(1)	2.007	54	156663	9.974
8) Bromomethane	(1)	2.358	94	207905	11.000
9) Chloroethane	(1)	2.480	64	113652	9.780
10) Bromoethene	(1)	2.695	106	208131	10.210
11) Dichlorofluoromethane	(1)	2.731	67	472330	10.087
12) Trichlorofluoromethane	(1)	2.781	101	596602	9.726
13) Pentane	(1)	2.881	43	334893	9.537
14) Ethanol	(1)	3.082	45	79138	9.406
16) Acrolein	(1)	3.340	56	79552	9.696
17) 1,1-Dichloroethene	(1)	3.433	61	347860	10.060
18) Freon 113	(1)	3.447	103	305497	9.177
19) Acetone	(1)	3.533	43	287353	9.578
20) Methyl Iodide	(1)	3.612	142	515238	9.244
21) Carbon Disulfide	(1)	3.669	76	627747	10.289
22) Isopropanol	(1)	3.719	45	353699	9.693
24) 3-Chloropropene	(1)	3.870	76	109969	10.852
23) Acetonitrile	(1)	3.877	40	126607	7.246
25) Methylene Chloride	(1)	4.013	84	202561	10.863
26) tert-Butyl Alcohol	(1)	4.163	59	547868	10.505
28) trans-1,2-Dichloroethene	(1)	4.292	61	315845	10.313
27) Acrylonitrile	(1)	4.300	53	168513	9.569
29) Methyl t-Butyl Ether	(1)	4.300	73	676899	9.604
30) Hexane	(1)	4.565	57	328530	9.321
31) 1,1-Dichloroethane	(1)	4.722	63	400580	9.679
32) Vinyl Acetate	(1)	4.787	86	69998	10.443
33) Di-Isopropyl Ether	(1)	4.787	45	656443	9.634
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	669422	9.737
35) cis-1,2-Dichloroethene	(1)	5.259	61	297958	9.905
37) 2-Butanone	(1)	5.281	72	124789	9.255
38) Ethyl Acetate	(1)	5.331	70	63331	9.282
39) Methyl Acrylate	(1)	5.367	55	372612	9.416
40)*Bromochloromethane	(1)	5.467	130	329569	10.000

* = Compound is an internal standard.

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on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00021.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 11:20 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:15
Date, time and analyst ID of latest file update: 05-Sep-2018 13:15 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
41) Tetrahydrofuran	(1)	5.503	42	227779	9.078
42) Chloroform	(1)	5.539	83	506399	9.619
43) 1,1,1-Trichloroethane	(1)	5.682	97	518449	9.491
44) Cyclohexane	(1)	5.711	56	342809	9.437
45) Carbon Tetrachloride	(1)	5.811	117	503404	9.468
46) Benzene	(2)	5.990	78	734122	9.366
47) 1,2-Dichloroethane	(2)	6.011	62	316933	9.557
48) Isooctane	(2)	6.040	57	1037051	11.357
49) Tert-Amyl Methyl Ether	(2)	6.069	73	662310	9.476
50) Heptane	(2)	6.176	43	359205	8.911
51)*1,4-Difluorobenzene	(2)	6.291	114	1258872	10.000
52) Trichloroethene	(2)	6.491	130	305260	9.132
53) Ethyl Acrylate	(2)	6.577	55	511197	9.290
36) 1,2-Dichloroethene (total)	(1)		61	613803	20.219
54) 1,2-Dichloropropane	(2)	6.678	63	249937	9.203
57) Methyl Methacrylate	(2)	6.749	69	279089	9.344
55) Dibromomethane	(2)	6.771	174	318080	9.615
56) 1,4-Dioxane	(2)	6.778	88	183785	9.296
58) Bromodichloromethane	(2)	6.885	83	543960	9.559
59) cis-1,3-Dichloropropene	(2)	7.215	75	466297	9.363
60) 4-Methyl-2-Pentanone	(2)	7.330	43	513681	9.007
61) Toluene	(3)	7.466	91	879150	9.191
62) Octane	(3)	7.516	43	470841	8.521
63) trans-1,3-Dichloropropene	(3)	7.630	75	416378	9.698
65) Ethyl Methacrylate	(3)	7.673	69	480322	9.273
66) 1,1,2-Trichloroethane	(3)	7.774	97	308300	8.983
67) Tetrachloroethene	(3)	7.867	166	493821	9.489
68) 2-Hexanone	(3)	7.946	43	486546	9.062
69) Dibromochloromethane	(3)	8.067	127	415881	9.470
70) 1,2-Dibromoethane	(3)	8.160	107	489145	9.364
71)*Chlorobenzene-d5	(3)	8.497	117	1224597	10.000
72) Chlorobenzene	(3)	8.519	112	700692	9.254
73) 1,1,1,2-Tetrachloroethane	(3)	8.576	131	368449	9.376
74) Ethylbenzene	(3)	8.583	91	1209184	9.100
75) m/p-Xylene	(3)	8.669	91	953685	9.173
76) o-Xylene	(3)	8.970	91	941041	9.087
78) Styrene	(3)	8.977	104	718439	9.056
79) Bromoform	(3)	9.142	173	581400	9.423

* = Compound is an internal standard.

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on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00021.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 11:20 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:15
Date, time and analyst ID of latest file update: 05-Sep-2018 13:15 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
80) Cumene	(3)	9.235	105	1271743	9.002
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	678066	9.138
81) Bromobenzene	(3)	9.493	156	430944	9.019
83) 1,2,3-Trichloropropane	(3)	9.514	110	208192	9.019
84) n-Propylbenzene	(3)	9.543	120	342178	8.940
86) 4-Ethyltoluene	(3)	9.629	105	1260291M	8.953
85) 2-Chlorotoluene	(3)	9.629	126	301555	8.988
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	1040868M	8.669
88) Alpha Methyl Styrene	(3)	9.844	118	518842	9.249
89) tert-Butylbenzene	(3)	9.923	119	915935M	8.027
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	1016797	8.649
91) sec-Butylbenzene	(3)	10.087	105	1442575	8.650
92) 1,3-Dichlorobenzene	(3)	10.188	146	691319	9.004
94) p-Isopropyltoluene	(3)	10.188	119	1206344	8.641
93) 1,4-Dichlorobenzene	(3)	10.259	146	714297	9.000
95) Benzyl Chloride	(3)	10.359	91	945363	9.427
97) n-Butylbenzene	(3)	10.503	91	1139388	8.867
96) 1,2-Dichlorobenzene	(3)	10.546	146	645835	8.924
98) Hexachloroethane	(3)	10.732	117	334527	8.995
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	347835	9.222
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	471622	8.902
101) Hexachlorobutadiene	(3)	11.871	225	431497	8.727
102) Naphthalene	(3)	11.964	128	982416	8.931
64) 1,3-Dichloropropene (total)	(3)		75	882675	19.074
77) Xylene (total)	(3)		91	1894726	18.260

M = Compound was manually integrated.

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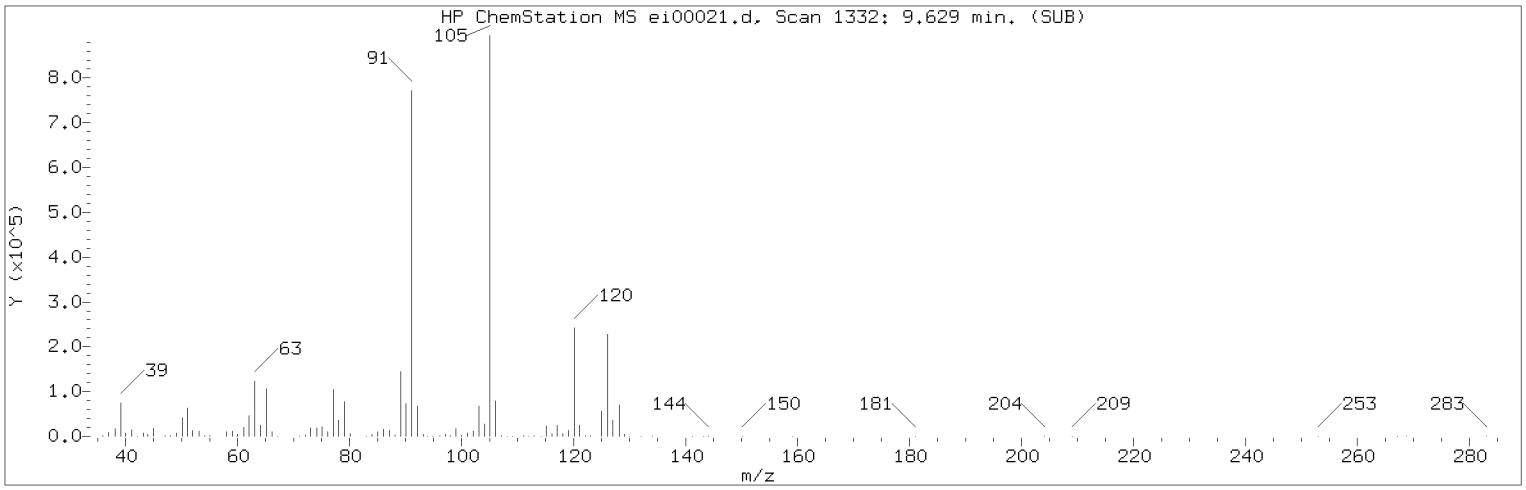
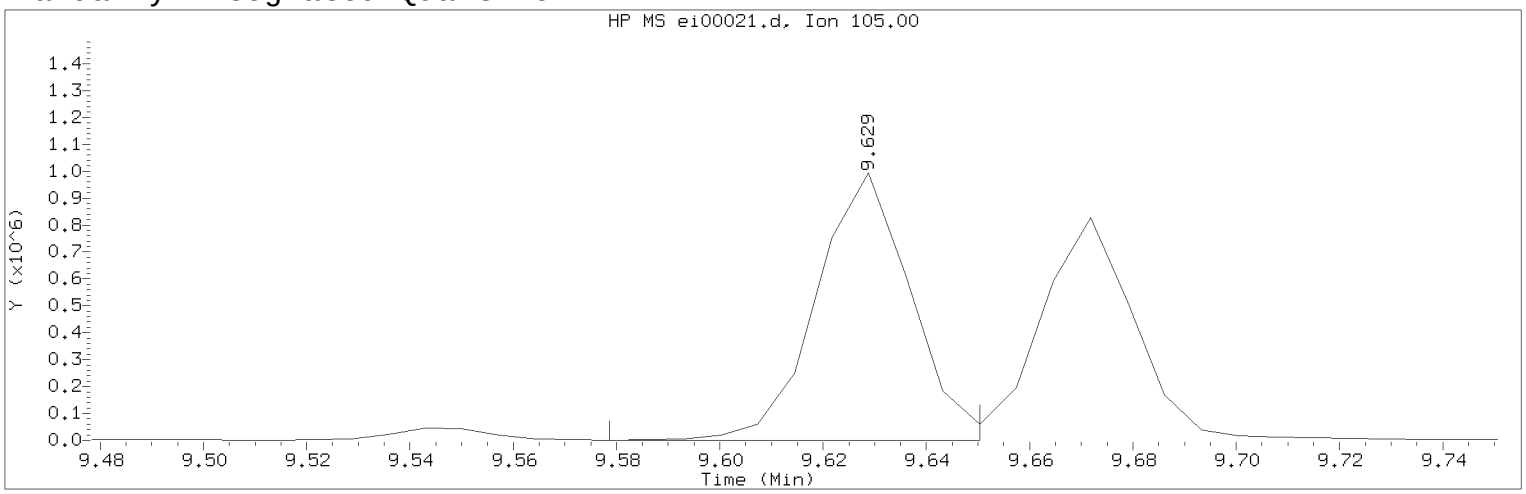
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00021.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 11:20 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:15
Date, time and analyst ID of latest file update: 05-Sep-2018 13:15 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

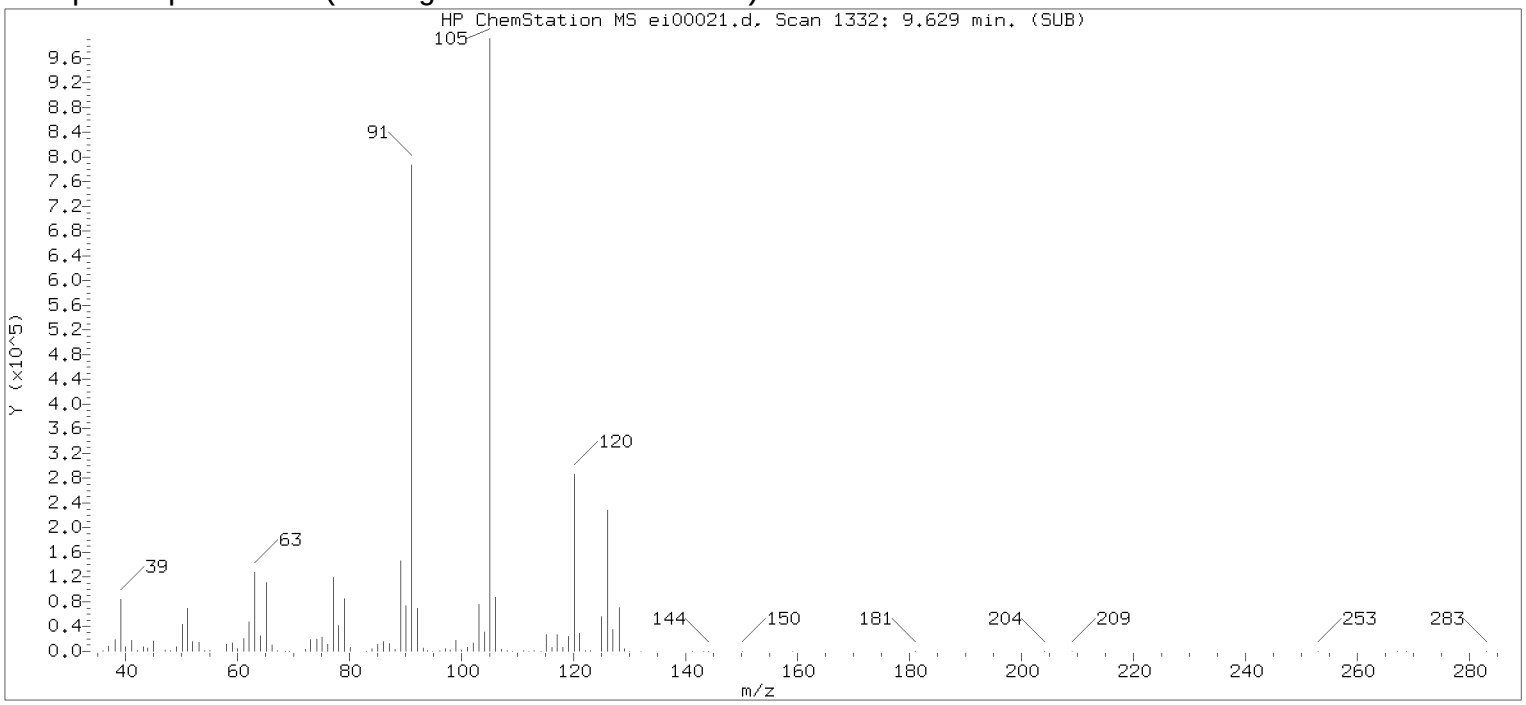
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 1260291M
Concentration (ppb(v)) : 8.9526
Integration start scan : 1324 Integration stop scan: 1334
Y at integration start : 923 Y at integration end: 923

Reason for manual integration: improper integration

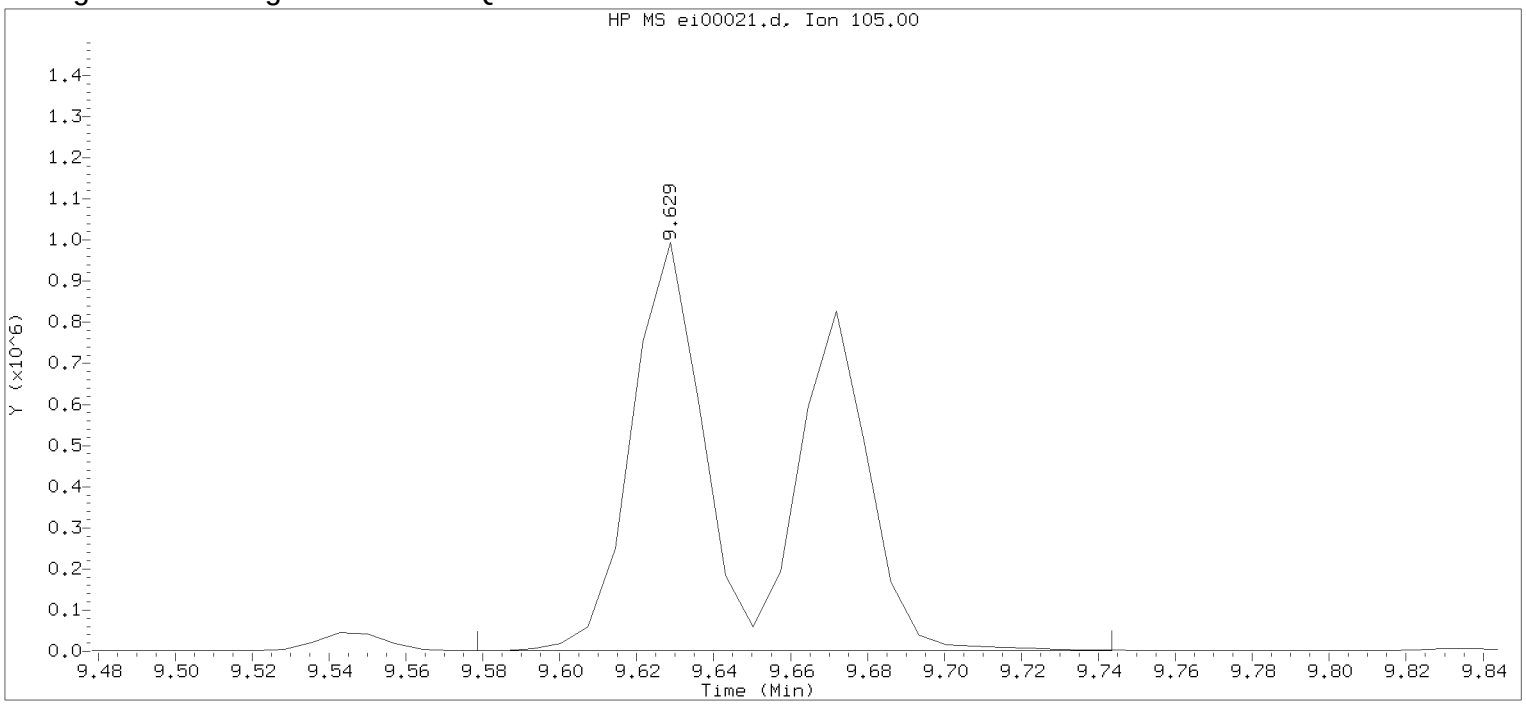
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:28.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



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Injection date and time: 05-SEP-2018 11:20 Analyst ID: jeb07445

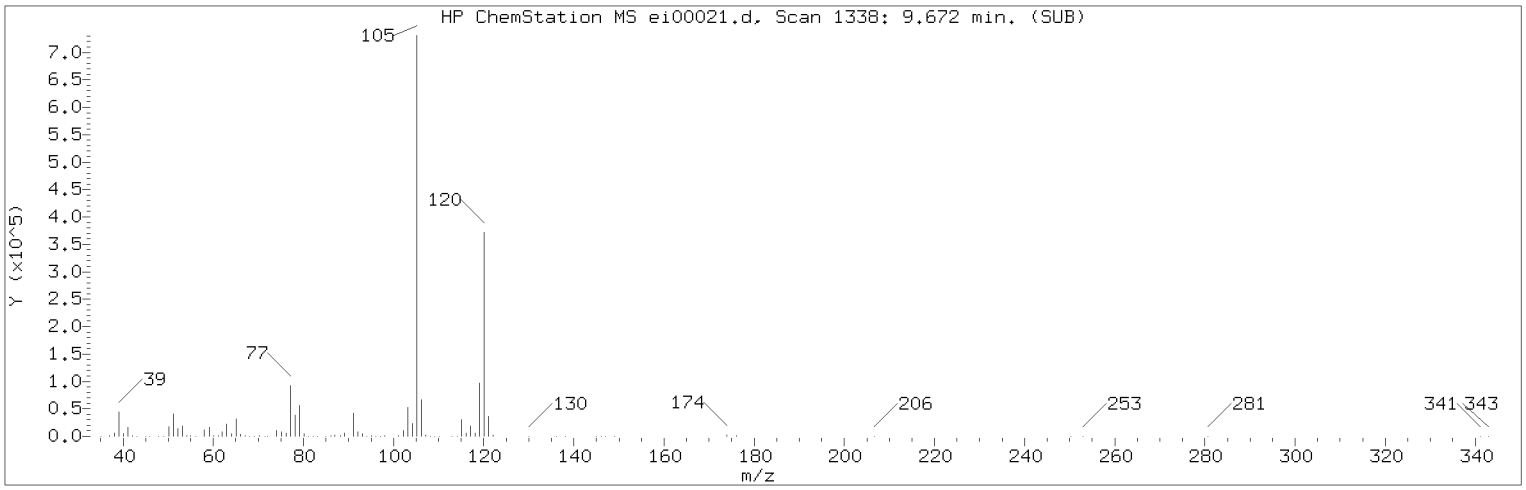
Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 27-AUG-2018 09:31
Date, time and analyst ID of latest file update: 05-Sep-2018 11:42 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

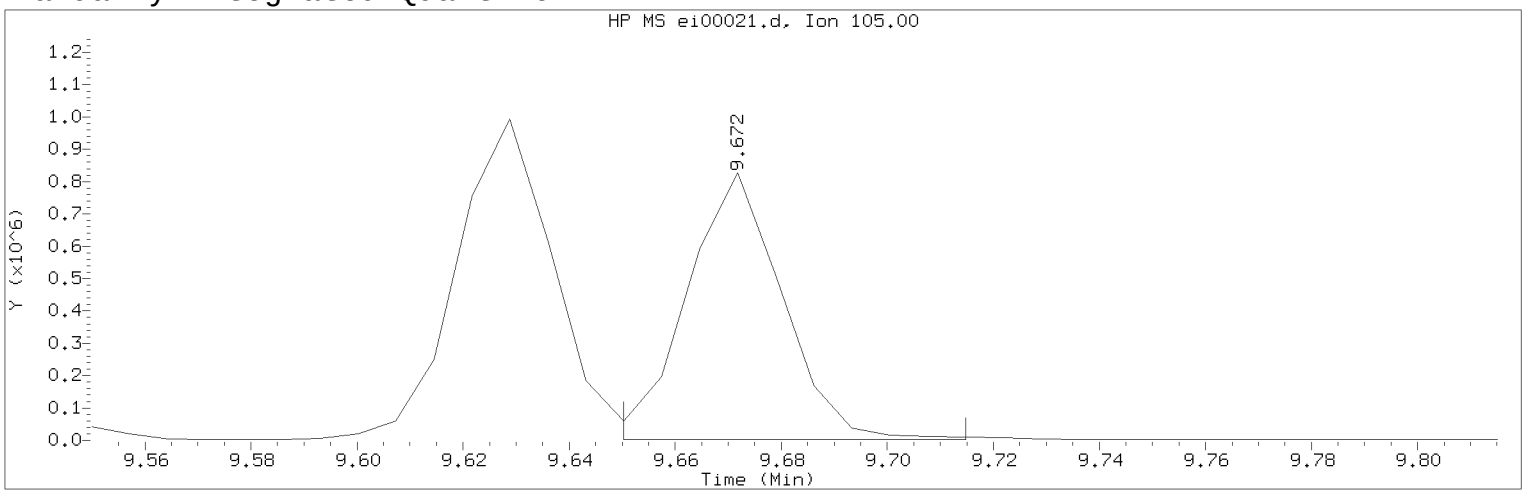
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 2282303
Concentration (ppb(v)) : 20.2461
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 923 Y at integration end: 923

Digitally signed by Jacob E. Bailey on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00021.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 11:20 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:15
Date, time and analyst ID of latest file update: 05-Sep-2018 13:15 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

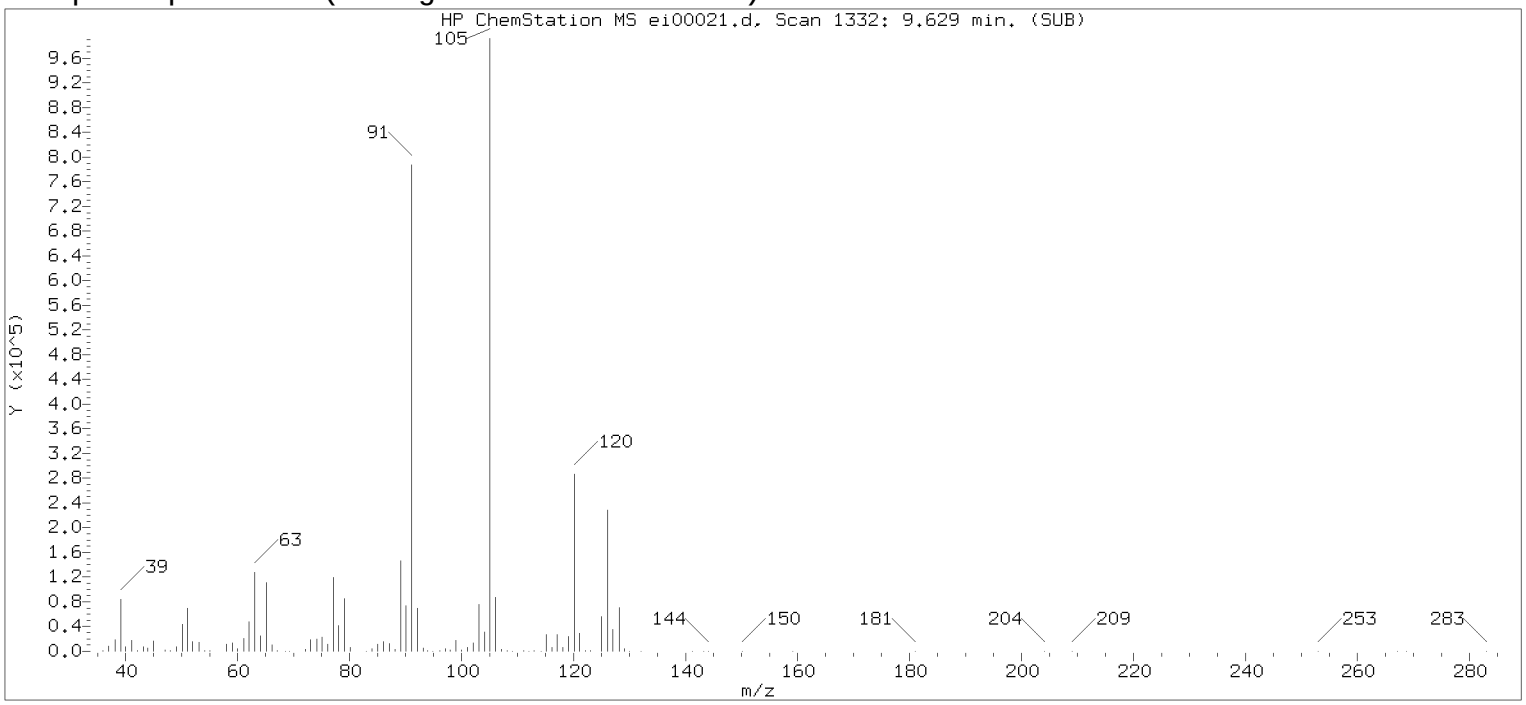
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 1040868M
Concentration (ppb(v)) : 8.6688
Integration start scan : 1334 Integration stop scan: 1343
Y at integration start : 1111 Y at integration end: 1111

Reason for manual integration: improper integration

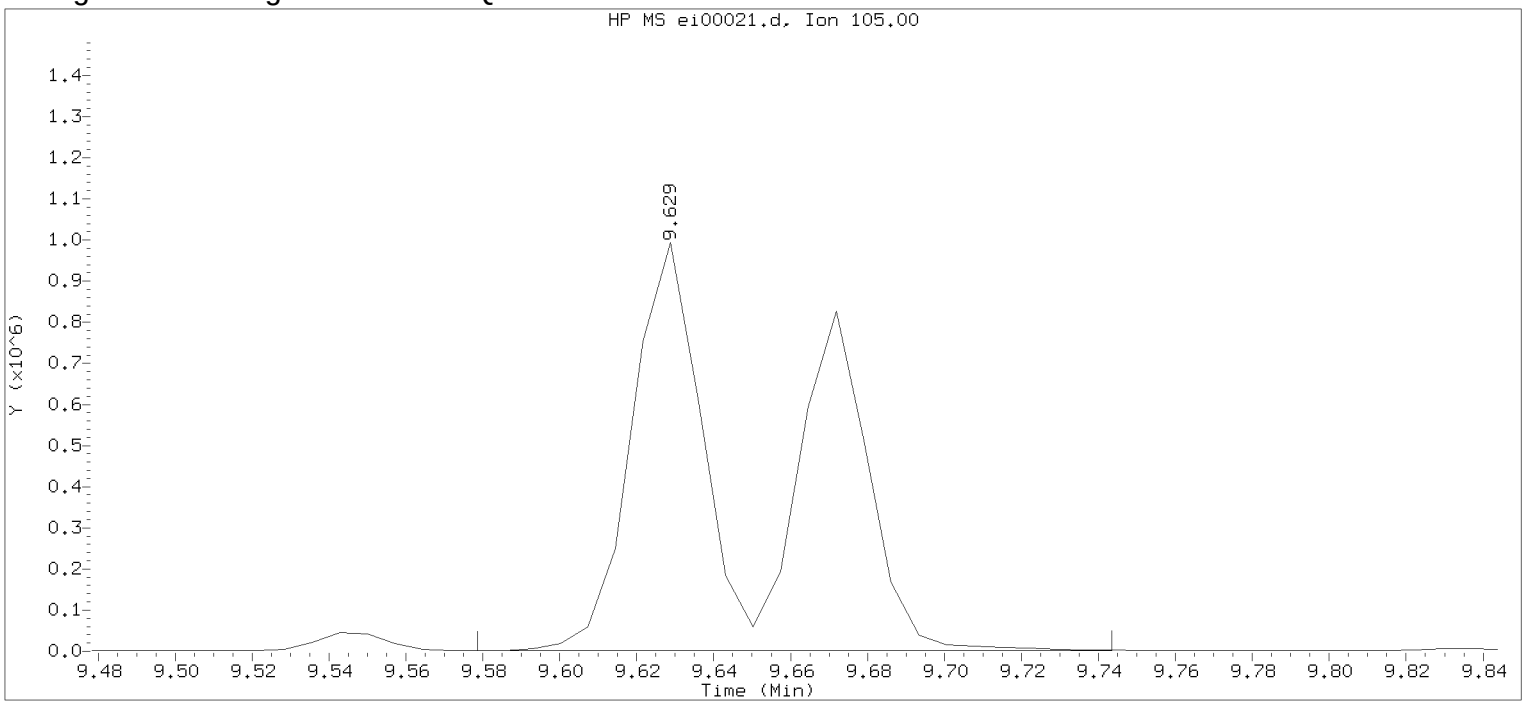
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:28.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00021.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 11:20 Analyst ID: jeb07445

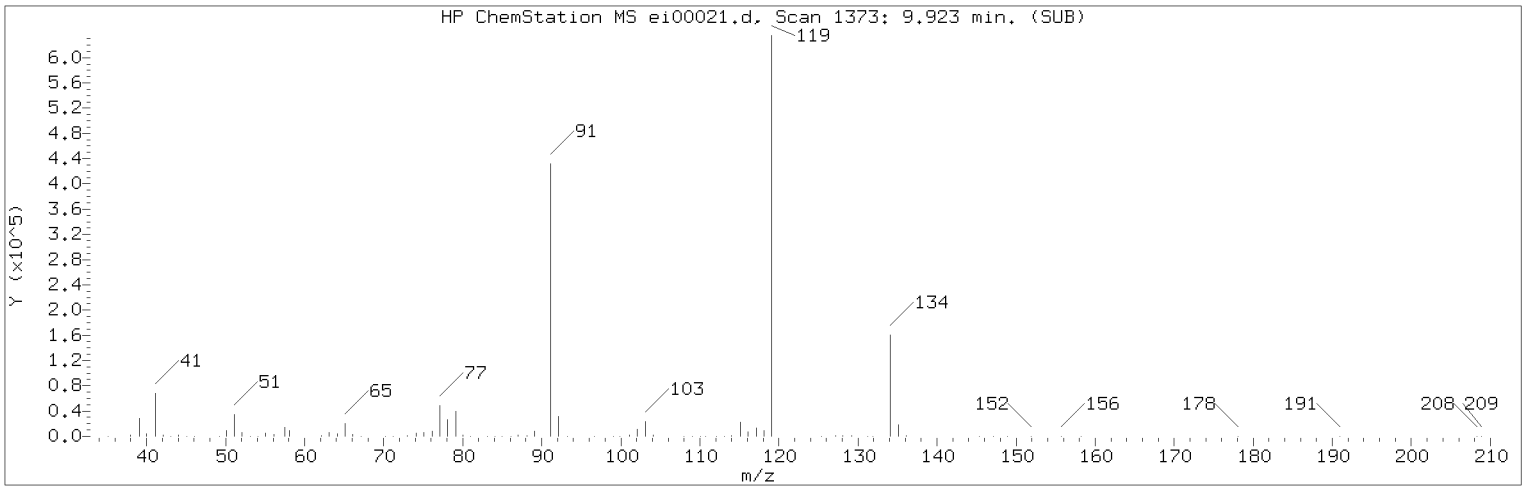
Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 27-AUG-2018 09:31
Date, time and analyst ID of latest file update: 05-Sep-2018 11:42 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

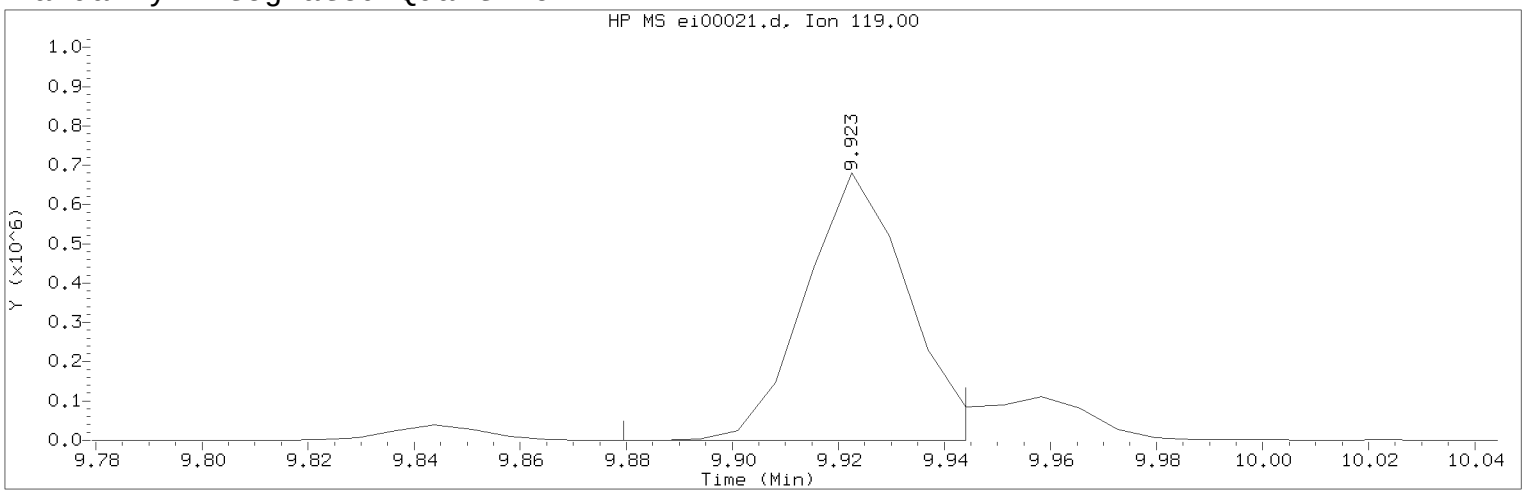
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 2281275
Concentration (ppb(v)) : 23.4322
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 1027 Y at integration end: 1027

Digitally signed by Jacob E. Bailey on 09/05/2018 at 15:39.
Target 3.5 esignature userGUID jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00021.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 11:20 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:15
Date, time and analyst ID of latest file update: 05-Sep-2018 13:15 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

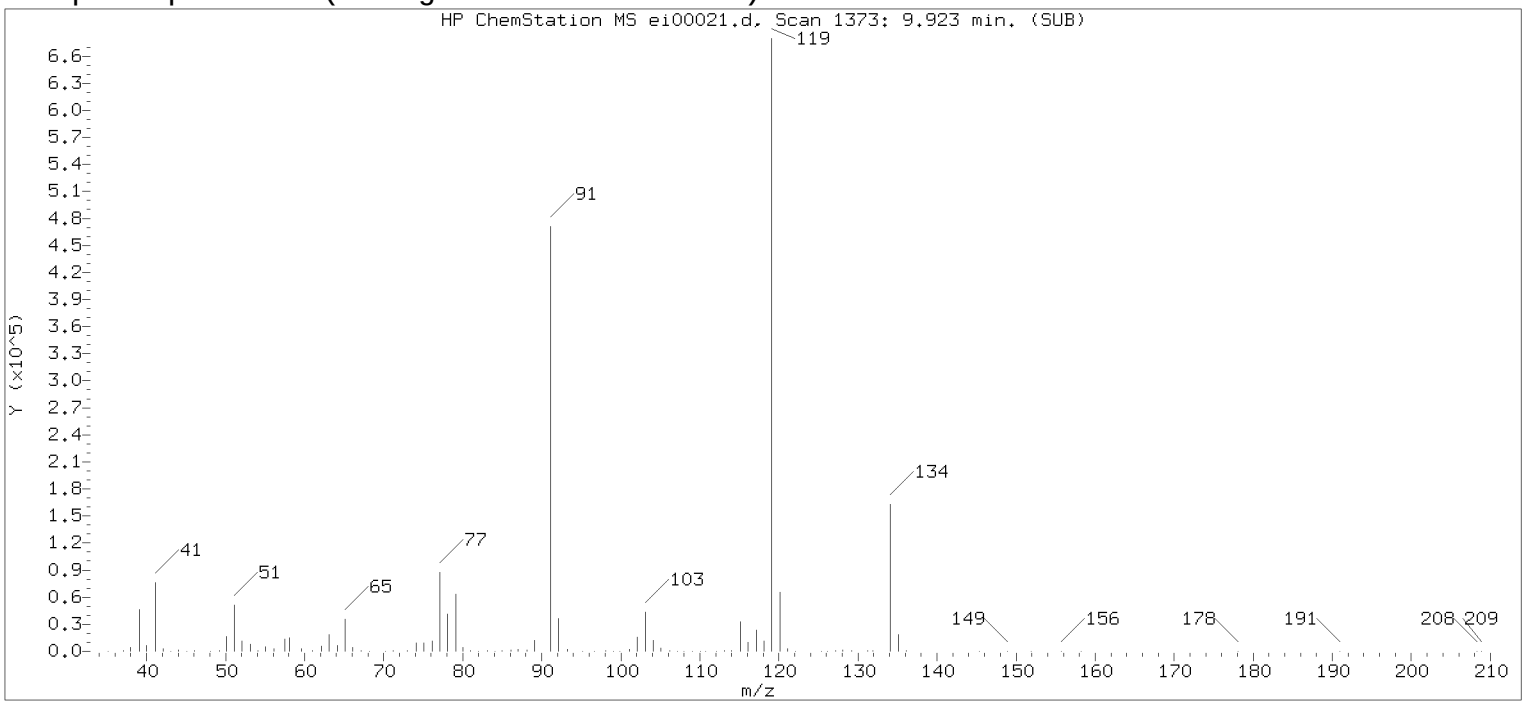
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.923
Quant Ion : 119.00
Area (flag) : 915935M
Concentration (ppb(v)) : 8.0270
Integration start scan : 1366 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

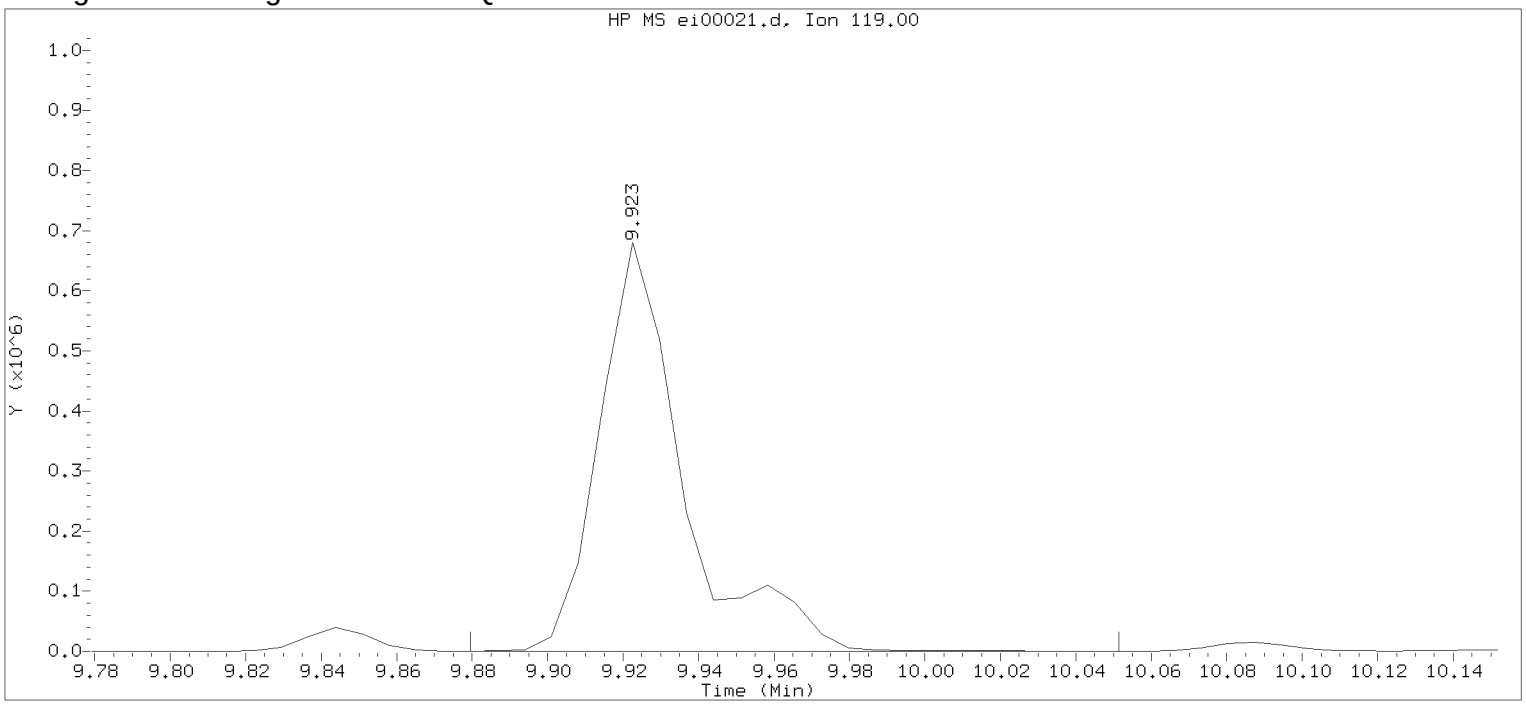
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:28.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



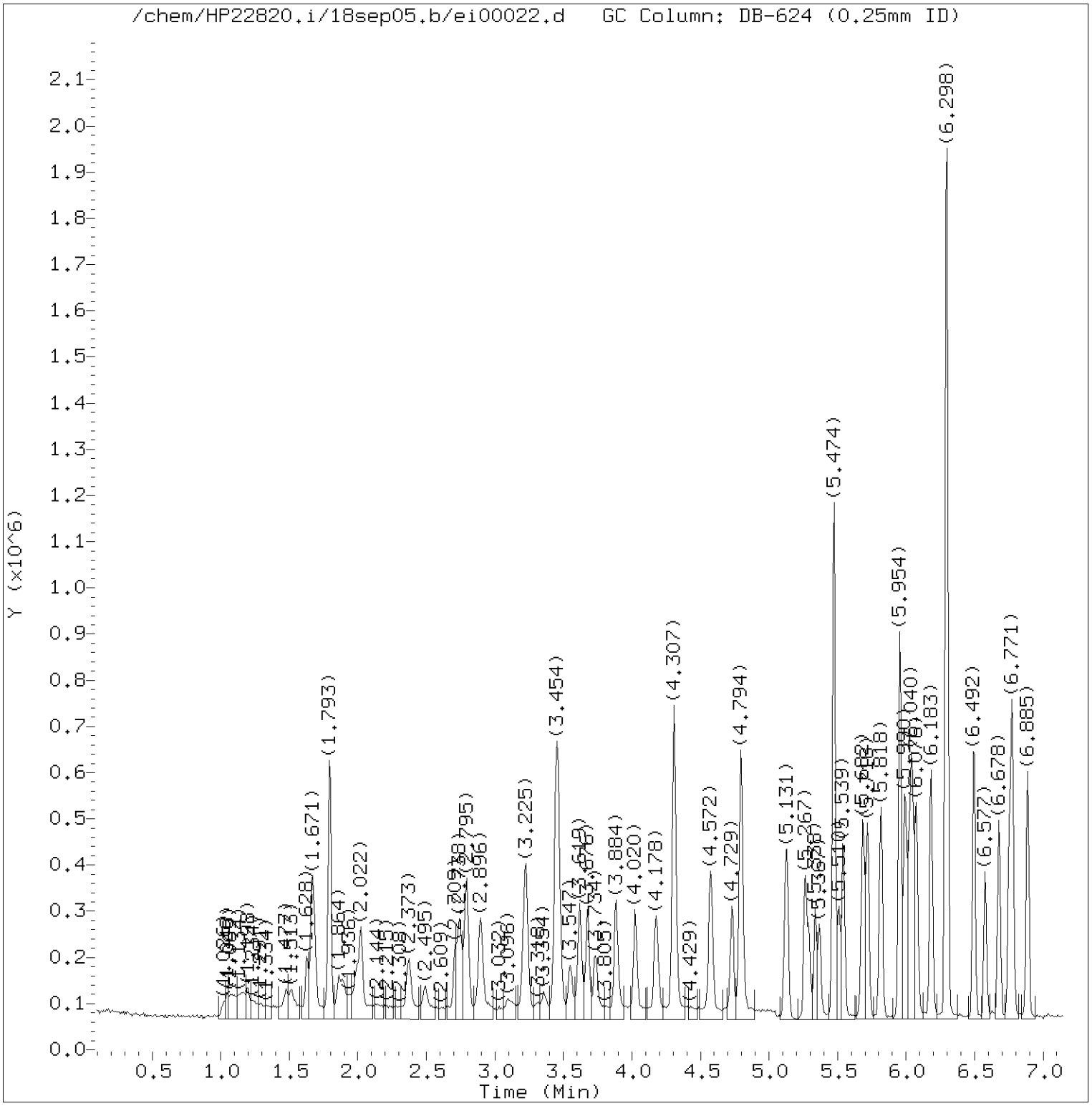
Data File: /chem/HP22820.i/18sep05.b/ei00021.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 11:20 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 27-AUG-2018 09:31
Date, time and analyst ID of latest file update: 05-Sep-2018 11:42 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.923
Quant Ion : 119.00
Area : 1054558
Concentration (ppb(v)) : 12.9986
Integration start scan : 1366 Integration stop scan: 1390
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

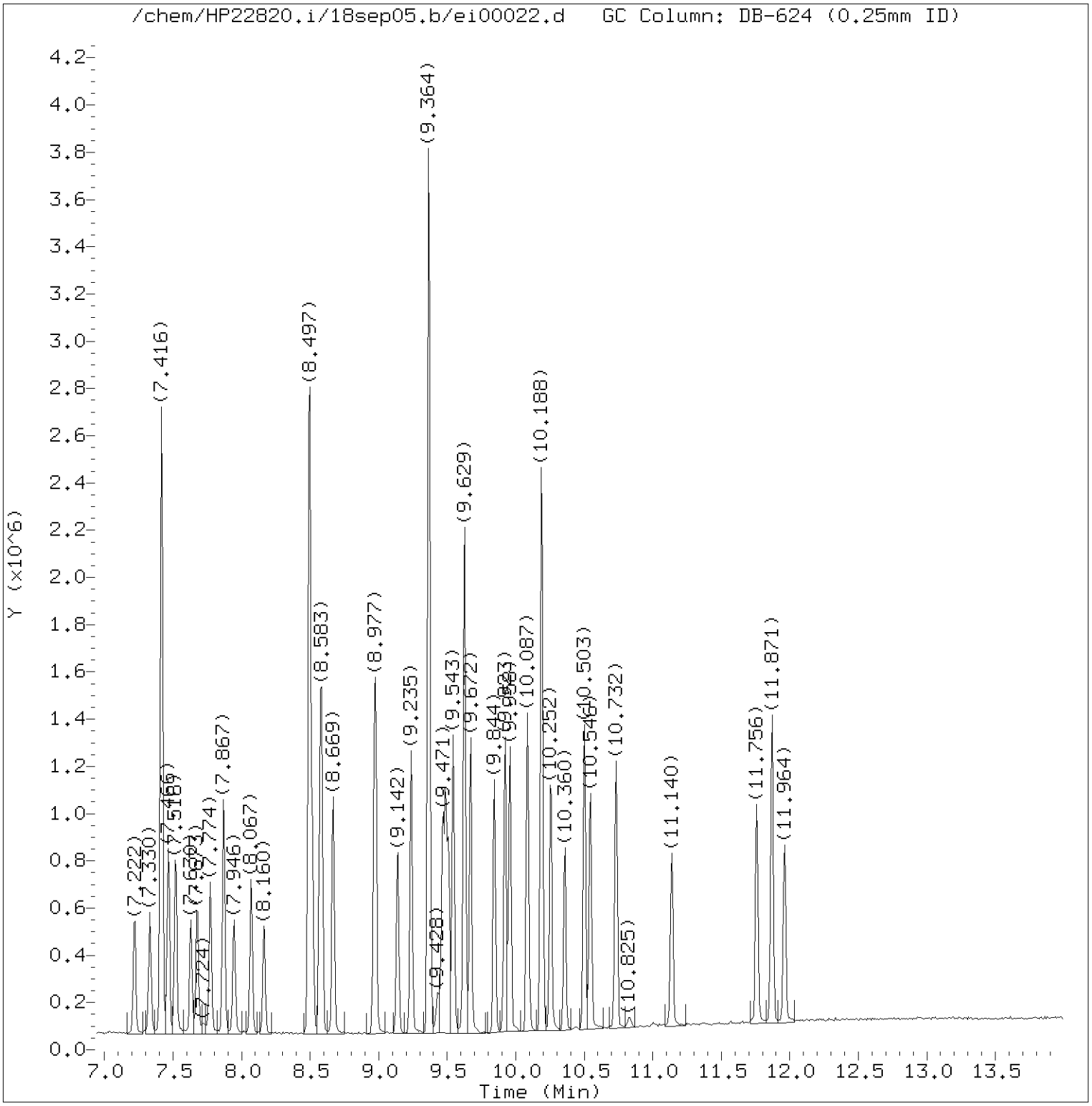
Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00022.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 11:44 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:15
Date, time and analyst ID of latest file update: 05-Sep-2018 13:15 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00022.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 11:44 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:15
Date, time and analyst ID of latest file update: 05-Sep-2018 13:15 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00022.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 11:44 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:15
Date, time and analyst ID of latest file update: 05-Sep-2018 13:15 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.628	41	70700	4.936
2) Dichlorodifluoromethane	(1)	1.664	85	275603	4.921
3) Chlorodifluoromethane	(1)	1.685	51	134847	4.814
4) Freon 114	(1)	1.793	85	272167	4.776
5) Chloromethane	(1)	1.857	50	52409	4.496
6) Vinyl Chloride	(1)	1.993	62	97846	4.882
7) 1,3-Butadiene	(1)	2.022	54	73505	4.736
8) Bromomethane	(1)	2.373	94	91314	4.889
9) Chloroethane	(1)	2.495	64	56290	4.902
10) Bromoethene	(1)	2.709	106	99308	4.930
11) Dichlorofluoromethane	(1)	2.745	67	231999	5.014
12) Trichlorofluoromethane	(1)	2.795	101	290657	4.795
13) Pentane	(1)	2.896	43	158933	4.580
14) Ethanol	(1)	3.096	45	38321	4.609
16) Acrolein	(1)	3.354	56	38877	4.795
17) 1,1-Dichloroethene	(1)	3.447	61	168015	4.917
18) Freon 113	(1)	3.462	103	151202	4.597
19) Acetone	(1)	3.547	43	140020	4.723
20) Methyl Iodide	(1)	3.619	142	274376	4.982
21) Carbon Disulfide	(1)	3.676	76	297736	4.939
22) Isopropanol	(1)	3.734	45	168719	4.679
23) Acetonitrile	(1)	3.884	40	64988	3.764
24) 3-Chloropropene	(1)	3.884	76	53538	5.347
25) Methylene Chloride	(1)	4.020	84	101447	5.506
26) tert-Butyl Alcohol	(1)	4.178	59	270729	5.253
28) trans-1,2-Dichloroethene	(1)	4.307	61	153060	5.058
29) Methyl t-Butyl Ether	(1)	4.307	73	334499	4.803
27) Acrylonitrile	(1)	4.314	53	83211	4.781
30) Hexane	(1)	4.572	57	162310	4.660
31) 1,1-Dichloroethane	(1)	4.729	63	194449	4.754
32) Vinyl Acetate	(1)	4.794	86	33867	5.113
33) Di-Isopropyl Ether	(1)	4.794	45	329911	4.900
34) Ethyl Tert-Butyl Ether	(1)	5.131	59	324713	4.780
35) cis-1,2-Dichloroethene	(1)	5.267	61	148004	4.979
37) 2-Butanone	(1)	5.295	72	63062	4.733
38) Ethyl Acetate	(1)	5.338	70	33414	4.956
39) Methyl Acrylate	(1)	5.367	55	187852	4.804
40)*Bromochloromethane	(1)	5.474	130	325670	10.000

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00022.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 11:44 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:15
Date, time and analyst ID of latest file update: 05-Sep-2018 13:15 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
41) Tetrahydrofuran	(1)	5.510	42	117243	4.728
42) Chloroform	(1)	5.539	83	246171	4.732
43) 1,1,1-Trichloroethane	(1)	5.682	97	256254	4.747
44) Cyclohexane	(1)	5.718	56	167817	4.675
45) Carbon Tetrachloride	(1)	5.818	117	250136	4.761
46) Benzene	(2)	5.990	78	363233	4.661
47) 1,2-Dichloroethane	(2)	6.019	62	161265	4.891
48) Isooctane	(2)	6.040	57	519309	5.720
49) Tert-Amyl Methyl Ether	(2)	6.076	73	328412	4.726
50) Heptane	(2)	6.183	43	187766	4.685
51)*1,4-Difluorobenzene	(2)	6.298	114	1251598	10.000
52) Trichloroethene	(2)	6.499	130	154167	4.639
53) Ethyl Acrylate	(2)	6.577	55	253083	4.626
36) 1,2-Dichloroethene (total)	(1)		61	301064	10.037
54) 1,2-Dichloropropane	(2)	6.678	63	121512	4.500
57) Methyl Methacrylate	(2)	6.749	69	141082	4.751
55) Dibromomethane	(2)	6.771	174	157892	4.800
56) 1,4-Dioxane	(2)	6.778	88	92452	4.703
58) Bromodichloromethane	(2)	6.885	83	269417	4.762
59) cis-1,3-Dichloropropene	(2)	7.222	75	232362	4.693
60) 4-Methyl-2-Pentanone	(2)	7.330	43	267779	4.723
61) Toluene	(3)	7.466	91	448098	4.788
62) Octane	(3)	7.516	43	250539	4.634
63) trans-1,3-Dichloropropene	(3)	7.630	75	200032	4.762
65) Ethyl Methacrylate	(3)	7.681	69	246434	4.863
66) 1,1,2-Trichloroethane	(3)	7.774	97	162350	4.835
67) Tetrachloroethene	(3)	7.867	166	248906	4.888
68) 2-Hexanone	(3)	7.946	43	242667	4.619
69) Dibromochloromethane	(3)	8.067	127	208535	4.853
70) 1,2-Dibromoethane	(3)	8.160	107	244356	4.781
71)*Chlorobenzene-d5	(3)	8.497	117	1198179	10.000
72) Chlorobenzene	(3)	8.519	112	350216	4.727
73) 1,1,1,2-Tetrachloroethane	(3)	8.576	131	187286	4.871
74) Ethylbenzene	(3)	8.583	91	612644	4.712
75) m/p-Xylene	(3)	8.669	91	480321	4.722
76) o-Xylene	(3)	8.970	91	482139	4.758
78) Styrene	(3)	8.977	104	369456	4.760
79) Bromoform	(3)	9.142	173	297886	4.934

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00022.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 11:44 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:15
Date, time and analyst ID of latest file update: 05-Sep-2018 13:15 jeb07445

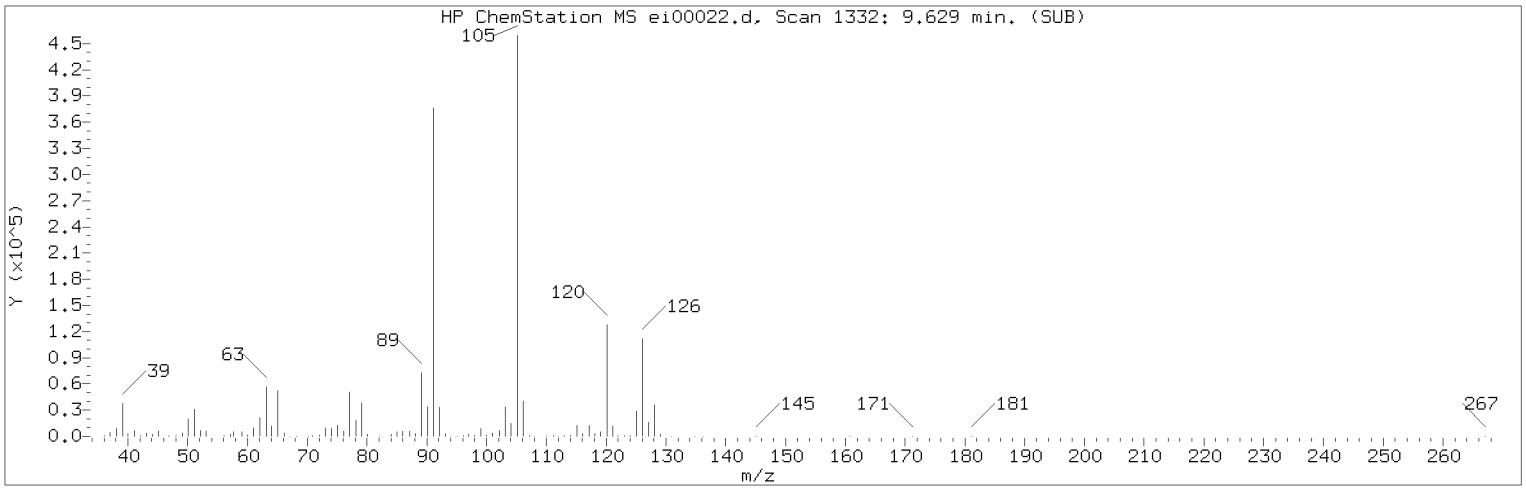
Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
80) Cumene	(3)	9.235	105	671524	4.858
82) 1,1,2,2-Tetrachloroethane	(3)	9.464	83	344556	4.746
81) Bromobenzene	(3)	9.493	156	222418	4.758
83) 1,2,3-Trichloropropane	(3)	9.514	110	106927	4.734
84) n-Propylbenzene	(3)	9.543	120	180739	4.826
86) 4-Ethyltoluene	(3)	9.629	105	665904M	4.835
85) 2-Chlorotoluene	(3)	9.629	126	155690	4.743
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	565411M	4.813
88) Alpha Methyl Styrene	(3)	9.844	118	263006	4.792
89) tert-Butylbenzene	(3)	9.923	119	513758M	4.602
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	544506	4.734
91) sec-Butylbenzene	(3)	10.087	105	780793	4.785
92) 1,3-Dichlorobenzene	(3)	10.188	146	357904	4.764
94) p-Isopropyltoluene	(3)	10.188	119	638667	4.675
93) 1,4-Dichlorobenzene	(3)	10.259	146	373298	4.807
95) Benzyl Chloride	(3)	10.360	91	469193	4.782
97) n-Butylbenzene	(3)	10.503	91	604128	4.805
96) 1,2-Dichlorobenzene	(3)	10.546	146	332728	4.699
98) Hexachloroethane	(3)	10.732	117	171687	4.718
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	179839	4.873
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	250700	4.837
101) Hexachlorobutadiene	(3)	11.871	225	236697	4.893
102) Naphthalene	(3)	11.964	128	520167	4.833
64) 1,3-Dichloropropene (total)	(3)		75	432394	9.550
77) Xylene (total)	(3)		91	962460	9.480

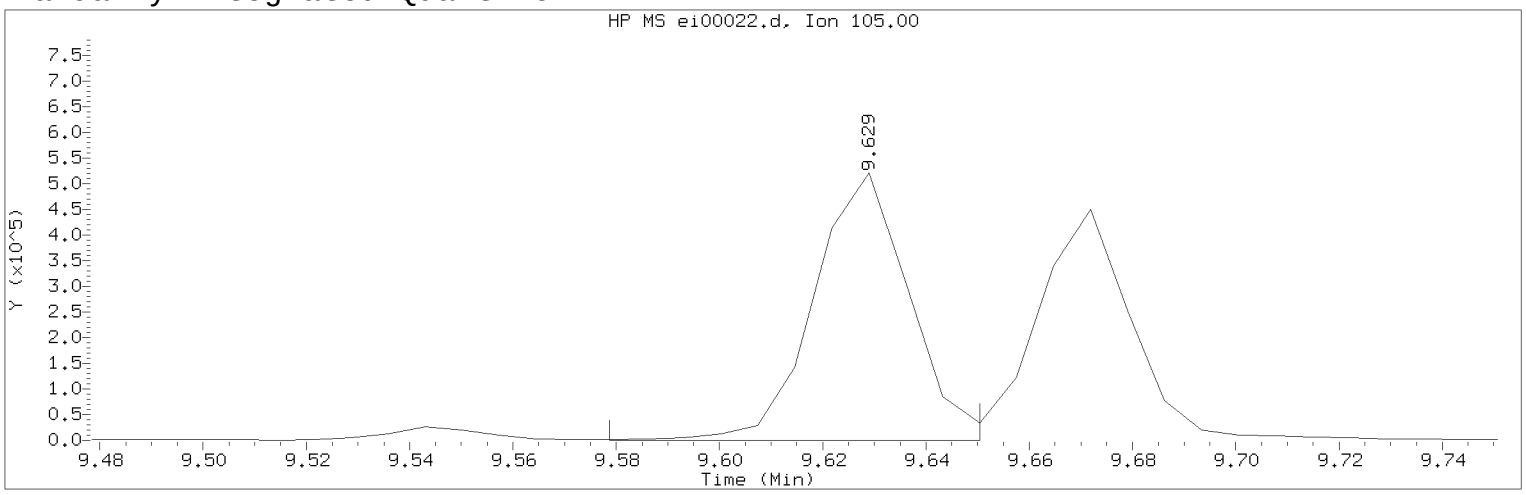
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



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Injection date and time: 05-SEP-2018 11:44 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:15
Date, time and analyst ID of latest file update: 05-Sep-2018 13:15 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

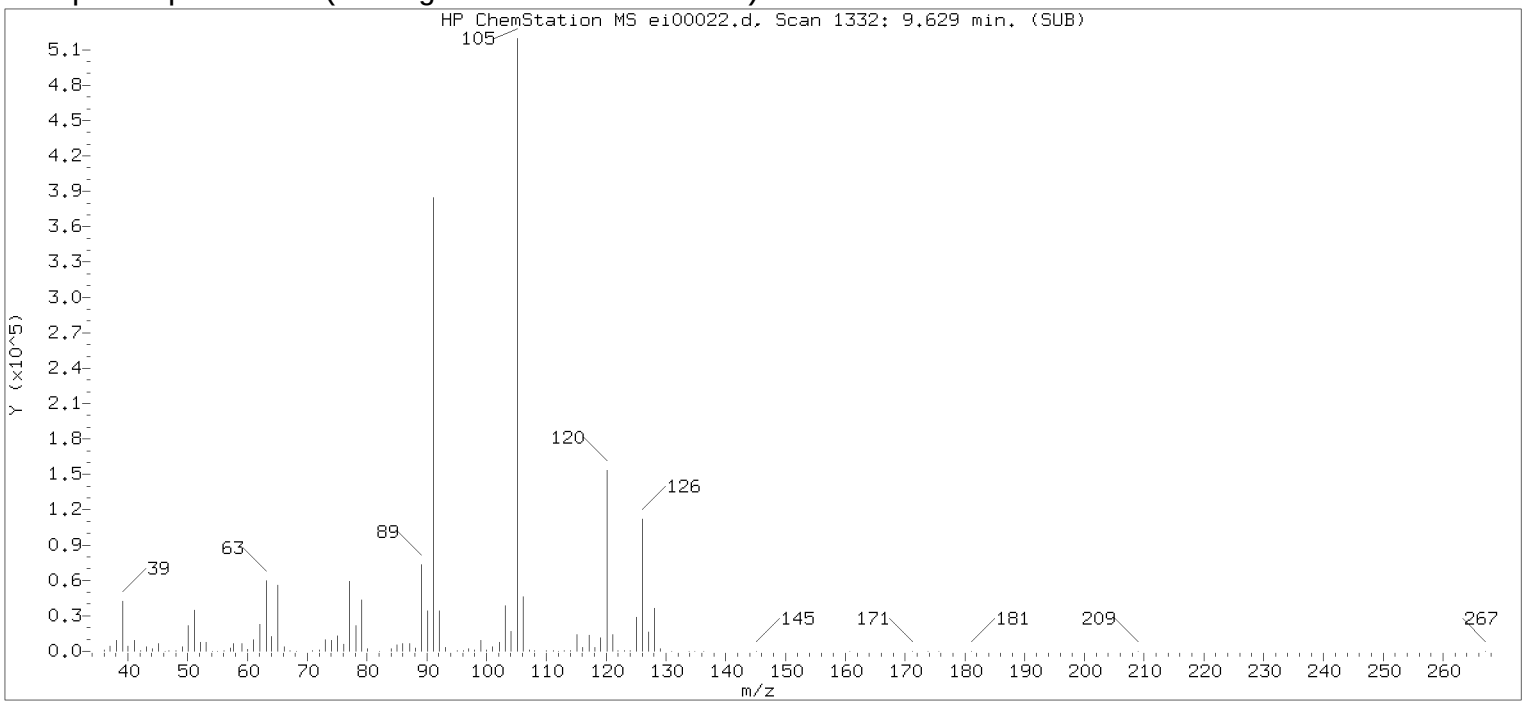
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 665904M
Concentration (ppb(v)) : 4.8346
Integration start scan : 1324 Integration stop scan: 1334
Y at integration start : 541 Y at integration end: 541

Reason for manual integration: improper integration

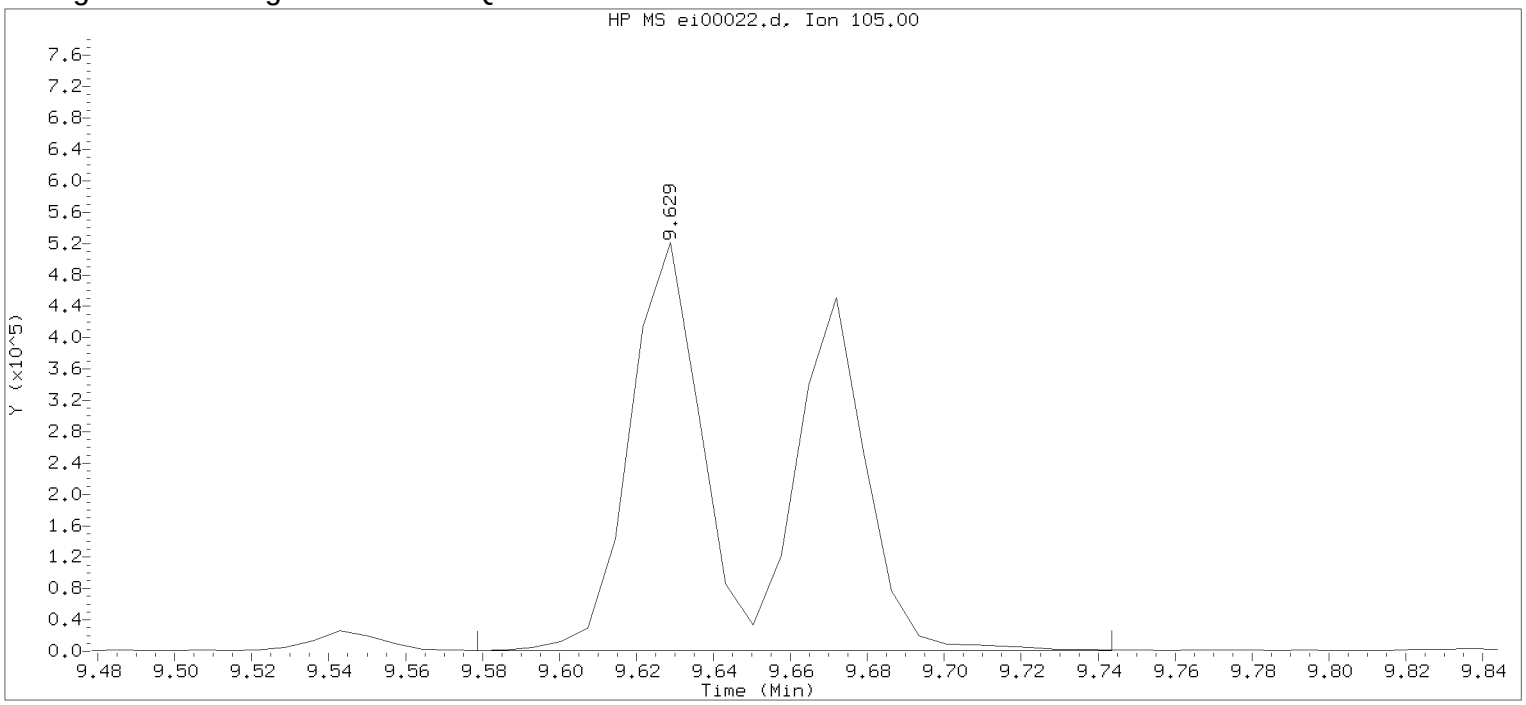
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:28.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00022.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 11:44 Analyst ID: jeb07445

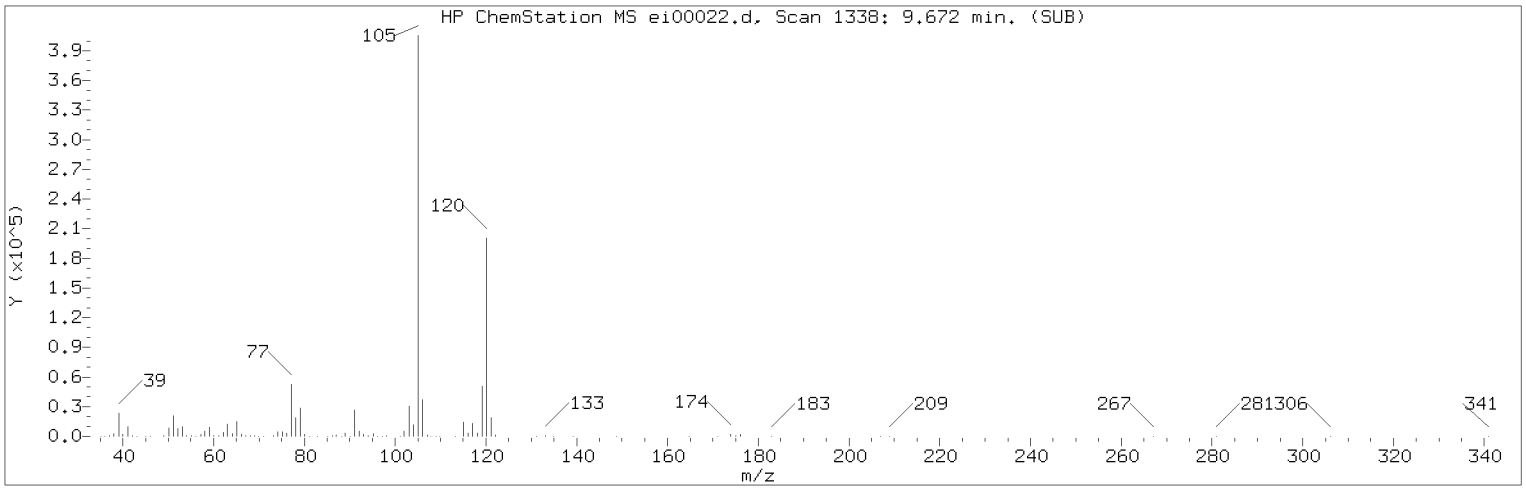
Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 27-AUG-2018 09:31
Date, time and analyst ID of latest file update: 05-Sep-2018 12:05 Unknown

Sample Name: VSTD005 Lab Sample ID: VSTD005

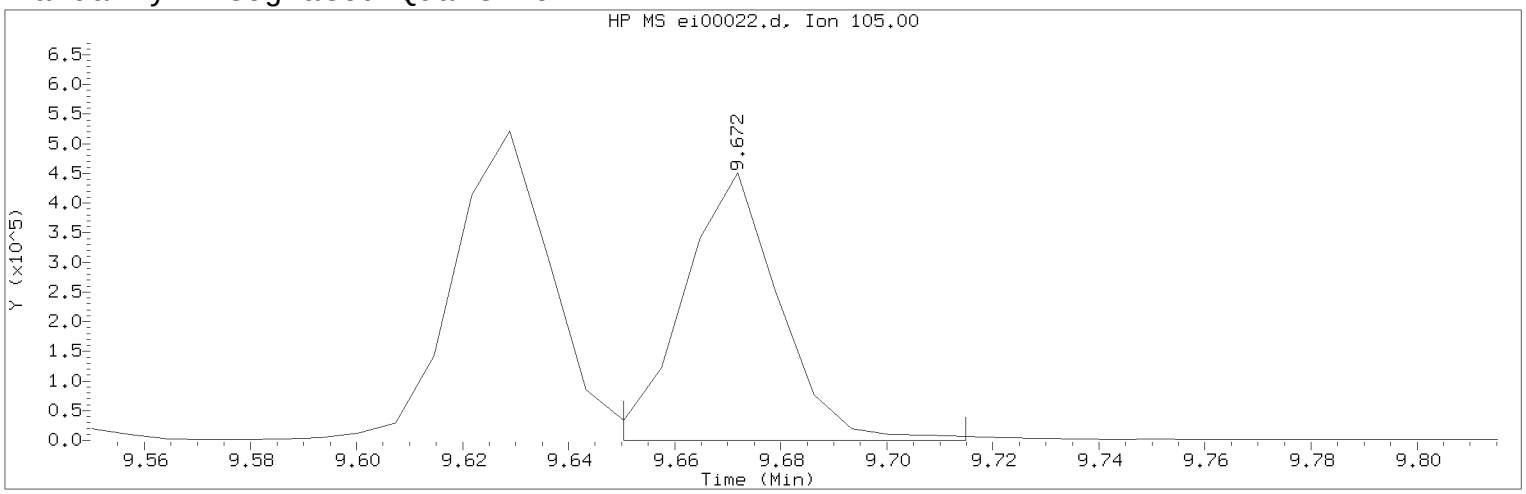
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 1219521
Concentration (ppb(v)) : 11.0568
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 541 Y at integration end: 541

Digitally signed by Jacob E. Bailey on 09/05/2018 at 15:39.
Target 3.5 esignature userGLE02jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00022.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 11:44 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:15
Date, time and analyst ID of latest file update: 05-Sep-2018 13:15 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

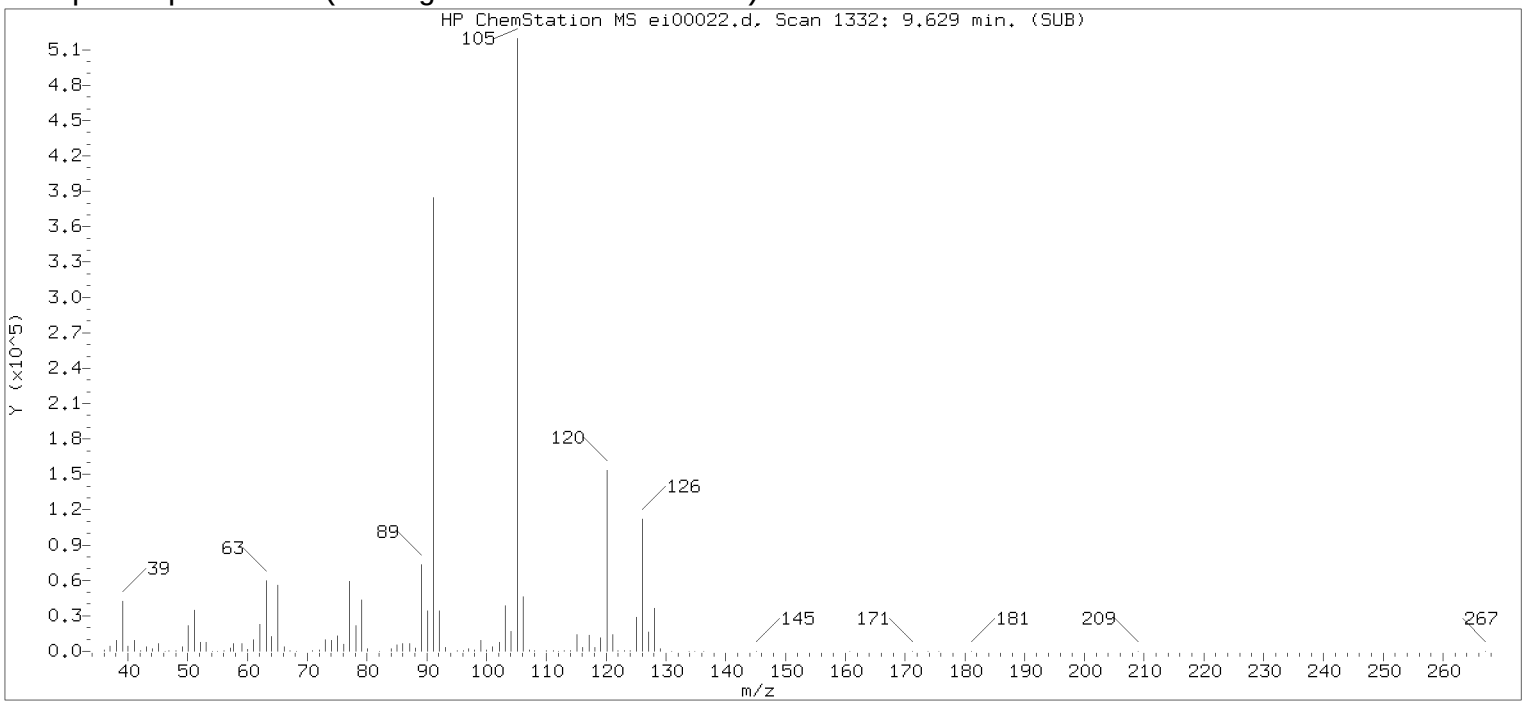
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 565411M
Concentration (ppb(v)) : 4.8128
Integration start scan : 1334 Integration stop scan: 1343
Y at integration start : 302 Y at integration end: 302

Reason for manual integration: improper integration

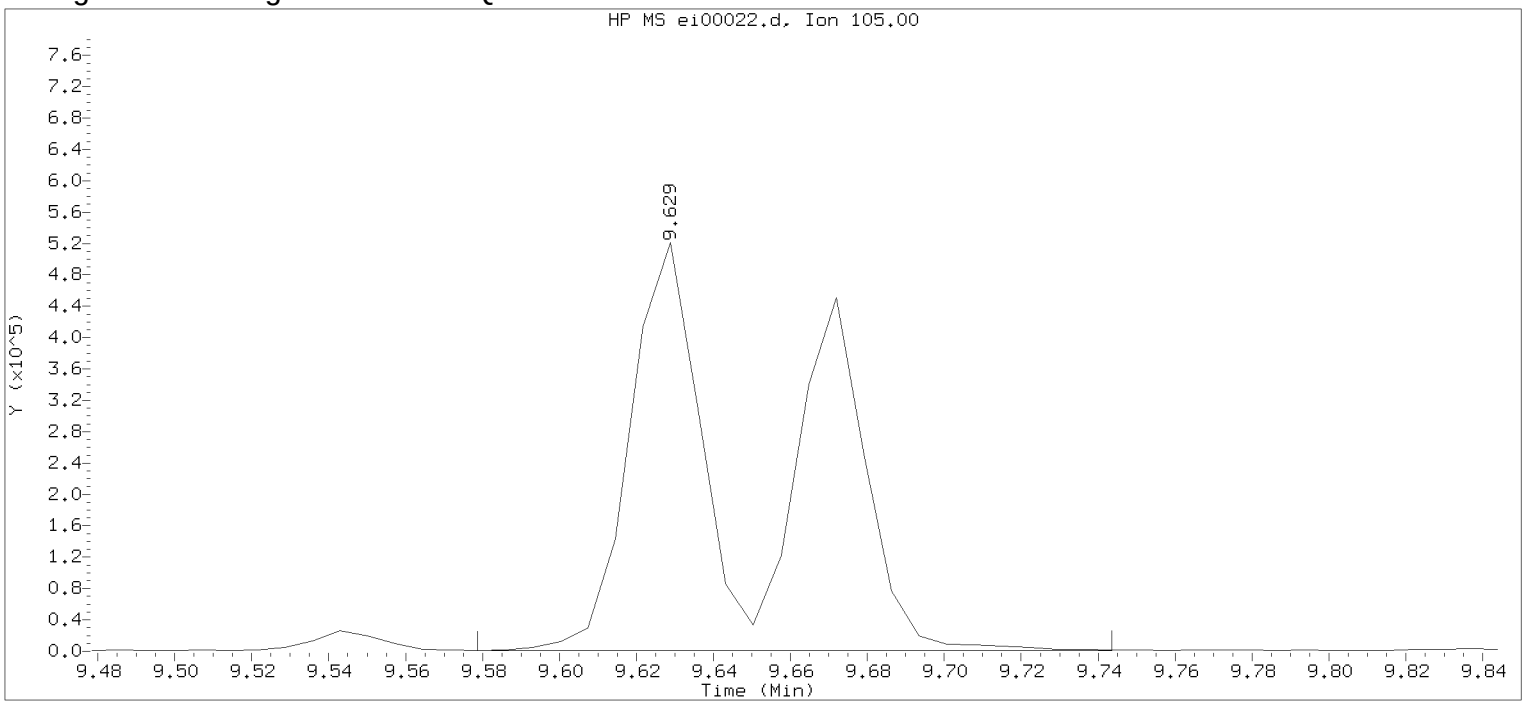
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:28.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00022.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 11:44 Analyst ID: jeb07445

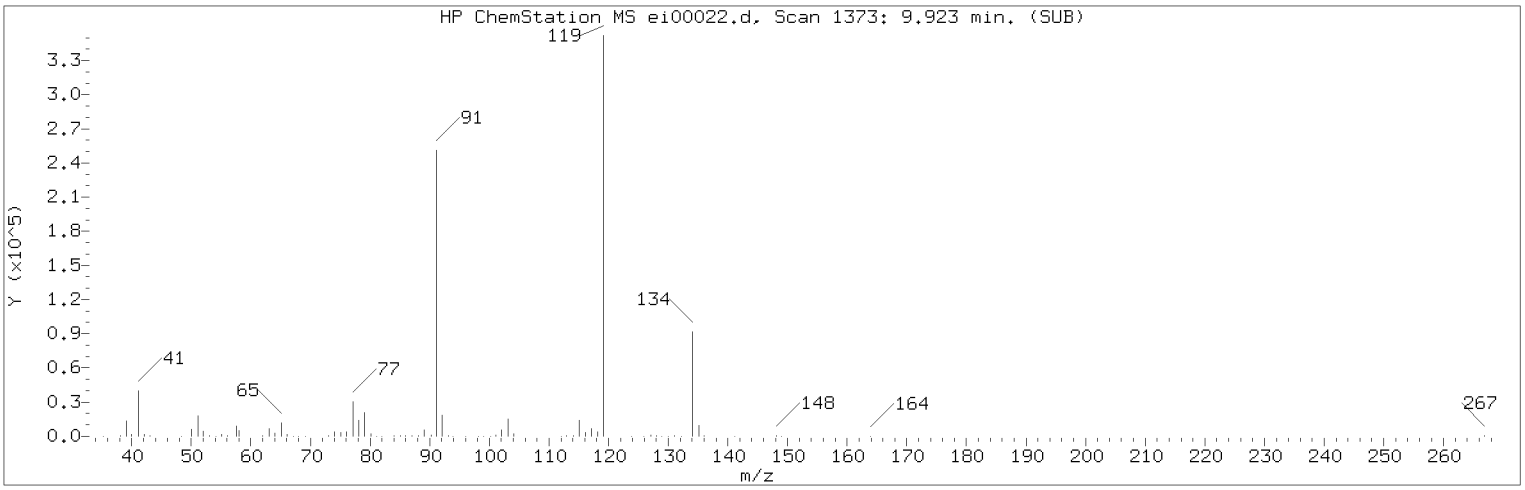
Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 27-AUG-2018 09:31
Date, time and analyst ID of latest file update: 05-Sep-2018 12:05 Unknown

Sample Name: VSTD005 Lab Sample ID: VSTD005

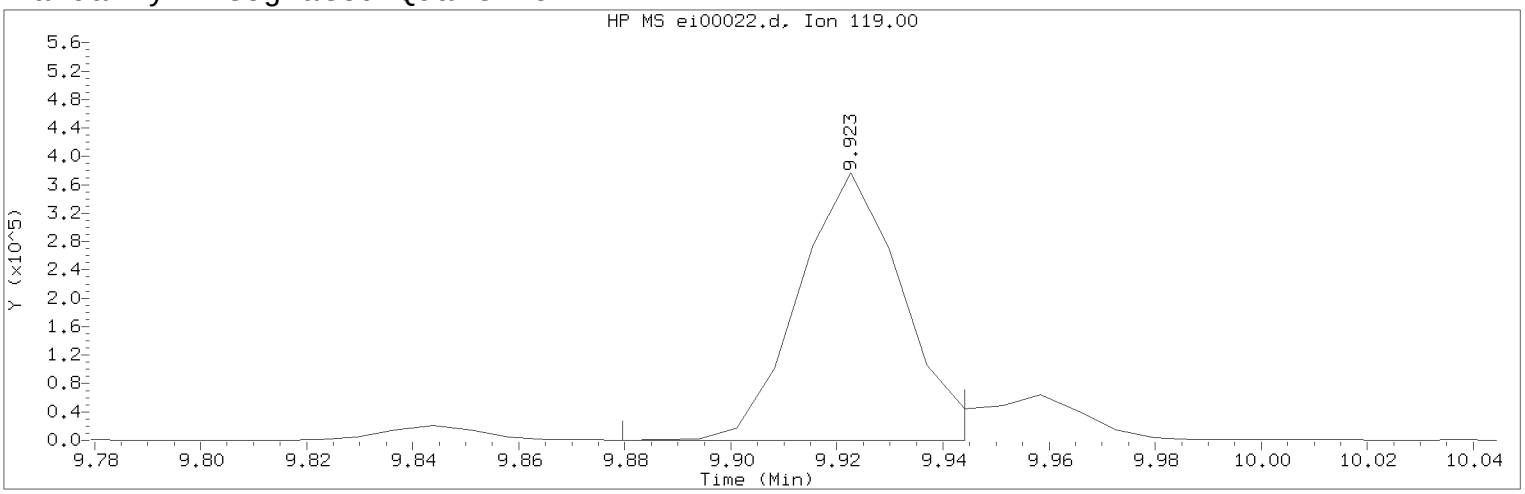
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 1216289
Concentration (ppb(v)) : 12.7686
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 868 Y at integration end: 868

Digitally signed by Jacob E. Bailey on 09/05/2018 at 15:39.
Target 3.5 esignature userGLE02jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00022.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 11:44 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:15
Date, time and analyst ID of latest file update: 05-Sep-2018 13:15 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

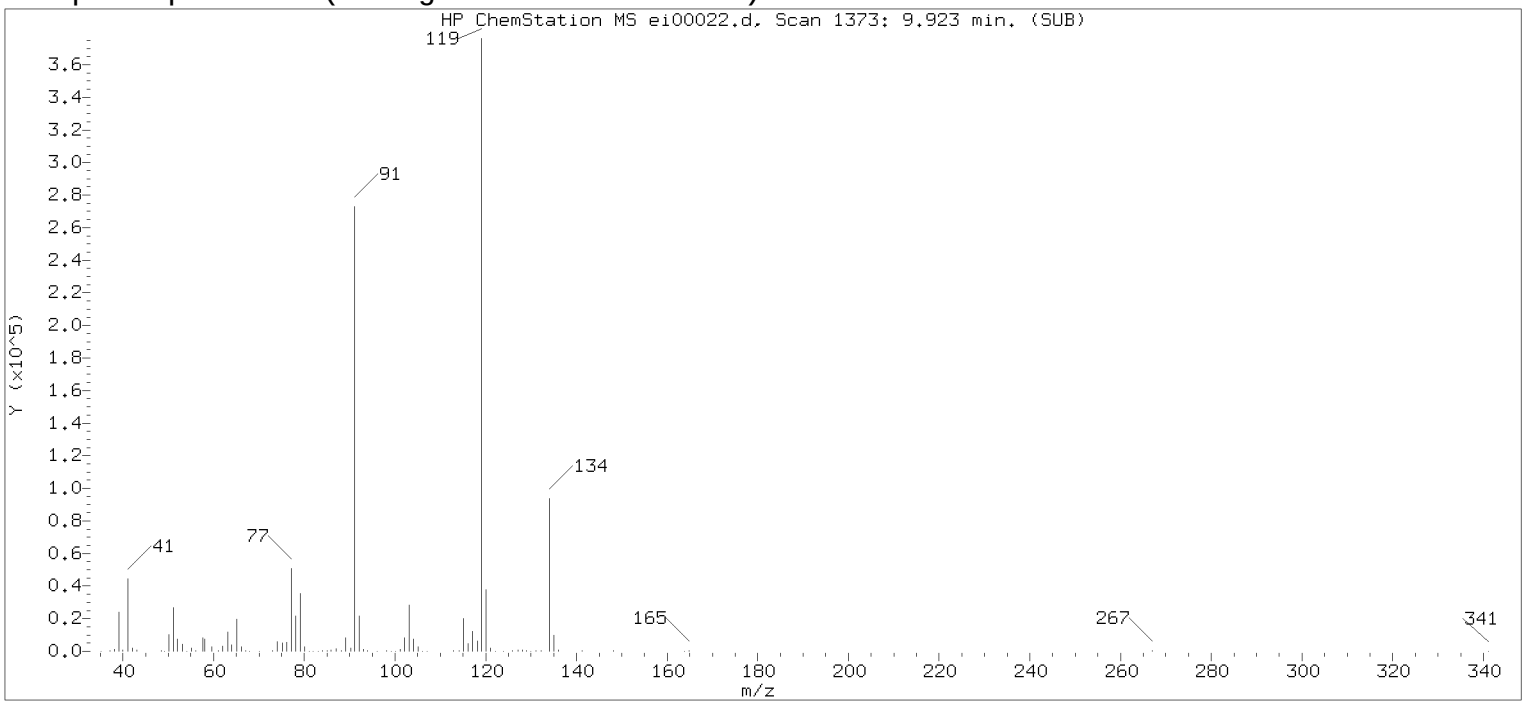
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.923
Quant Ion : 119.00
Area (flag) : 513758M
Concentration (ppb(v)) : 4.6017
Integration start scan : 1366 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

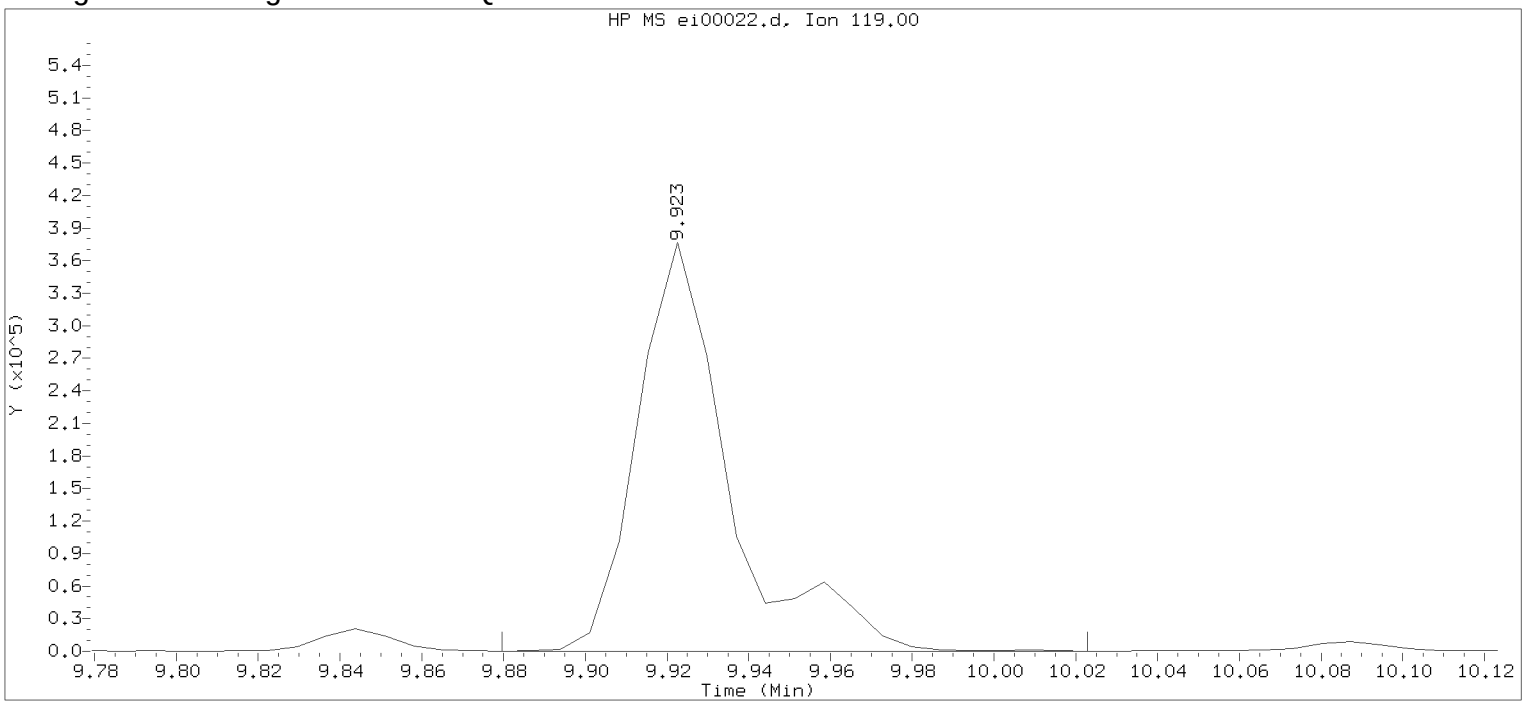
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:28.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



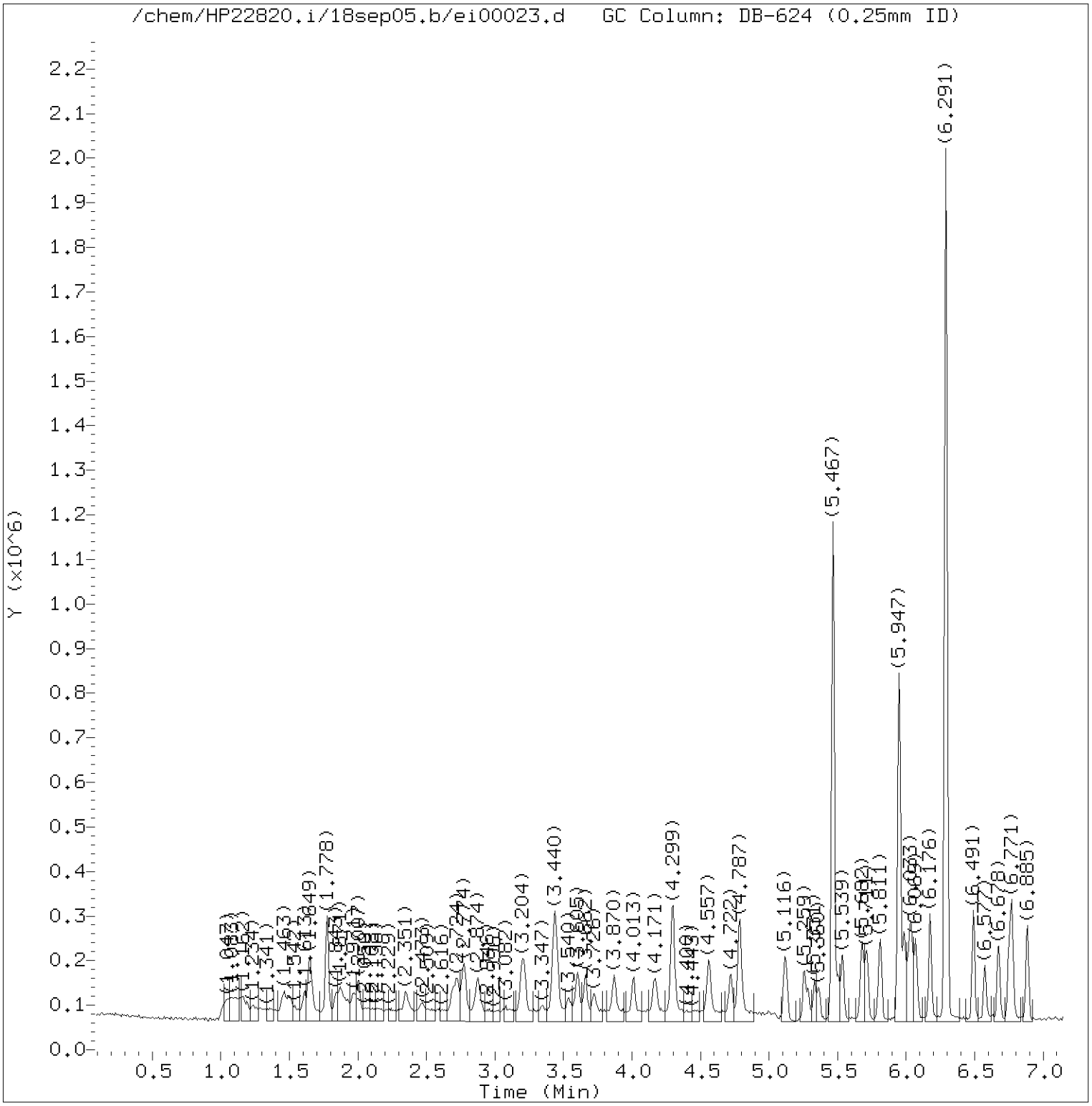
Data File: /chem/HP22820.i/18sep05.b/ei00022.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 11:44 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 27-AUG-2018 09:31
Date, time and analyst ID of latest file update: 05-Sep-2018 12:05 Unknown

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.923
Quant Ion : 119.00
Area : 589251
Concentration (ppb(v)) : 7.4233
Integration start scan : 1366 Integration stop scan: 1386
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

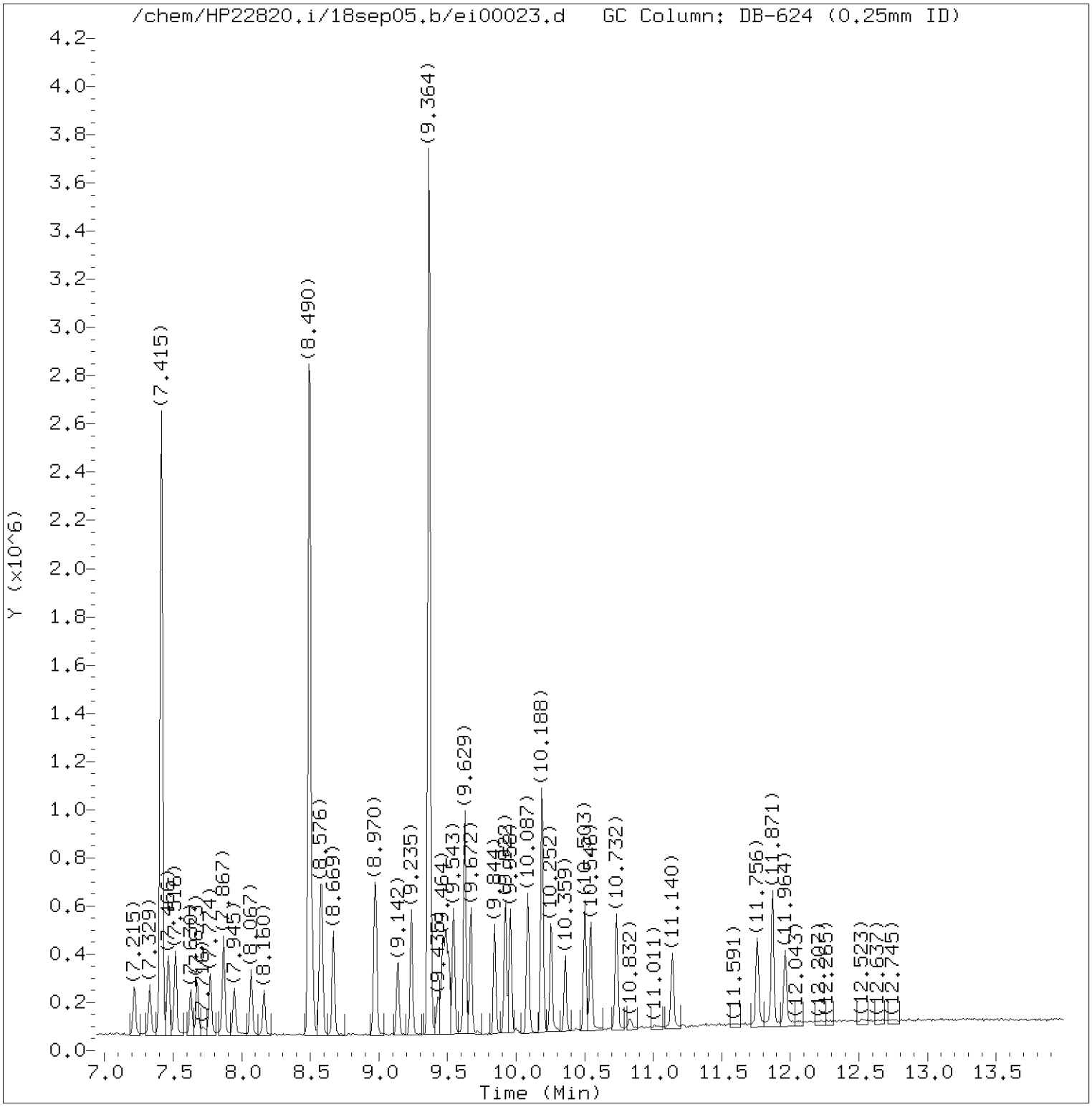
Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00023.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 12:08 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:15
Date, time and analyst ID of latest file update: 05-Sep-2018 13:15 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00023.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 12:08 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:15
Date, time and analyst ID of latest file update: 05-Sep-2018 13:15 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00023.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 12:08 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:15
Date, time and analyst ID of latest file update: 05-Sep-2018 13:15 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.606	41	26495	1.887
2) Dichlorodifluoromethane	(1)	1.642	85	105478	1.921
3) Chlorodifluoromethane	(1)	1.663	51	54230	1.975
4) Freon 114	(1)	1.778	85	105612	1.890
5) Chloromethane	(1)	1.835	50	23960	2.097
6) Vinyl Chloride	(1)	1.971	62	37398	1.904
7) 1,3-Butadiene	(1)	2.000	54	28375	1.865
8) Bromomethane	(1)	2.351	94	33579	1.834
9) Chloroethane	(1)	2.466	64	21068	1.871
10) Bromoethene	(1)	2.688	106	36353	1.841
11) Dichlorofluoromethane	(1)	2.724	67	82028	1.808
12) Trichlorofluoromethane	(1)	2.774	101	112182	1.888
13) Pentane	(1)	2.881	43	66020	1.941
14) Ethanol	(1)	3.082	45	17252	2.117
16) Acrolein	(1)	3.332	56	13801	1.736
17) 1,1-Dichloroethene	(1)	3.426	61	60186	1.797
18) Freon 113	(1)	3.440	103	61779	1.916
19) Acetone	(1)	3.540	43	54685	1.882
20) Methyl Iodide	(1)	3.605	142	105724	1.958
21) Carbon Disulfide	(1)	3.662	76	108795	1.841
22) Isopropanol	(1)	3.719	45	65213	1.845
24) 3-Chloropropene	(1)	3.870	76	19507	1.987
23) Acetonitrile	(1)	3.884	40	30112M	1.940
25) Methylene Chloride	(1)	4.006	84	35286	1.953
26) tert-Butyl Alcohol	(1)	4.171	59	108818	2.154
28) trans-1,2-Dichloroethene	(1)	4.292	61	54667	1.843
27) Acrylonitrile	(1)	4.299	53	32342	1.896
29) Methyl t-Butyl Ether	(1)	4.299	73	133781	1.959
30) Hexane	(1)	4.557	57	64855	1.899
31) 1,1-Dichloroethane	(1)	4.722	63	77214	1.926
32) Vinyl Acetate	(1)	4.787	86	14272	2.198
33) Di-Isopropyl Ether	(1)	4.787	45	126549	1.917
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	127573	1.916
35) cis-1,2-Dichloroethene	(1)	5.252	61	52595	1.805
37) 2-Butanone	(1)	5.288	72	25235	1.932
38) Ethyl Acetate	(1)	5.331	70	12405	1.877
39) Methyl Acrylate	(1)	5.360	55	71907	1.876
40)*Bromochloromethane	(1)	5.467	130	319260	10.000

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

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00023.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 12:08 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:15
Date, time and analyst ID of latest file update: 05-Sep-2018 13:15 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
41) Tetrahydrofuran	(1)	5.503	42	45665	1.879
42) Chloroform	(1)	5.539	83	97797	1.918
43) 1,1,1-Trichloroethane	(1)	5.675	97	102464	1.936
44) Cyclohexane	(1)	5.711	56	66778	1.898
45) Carbon Tetrachloride	(1)	5.811	117	97555	1.894
46) Benzene	(2)	5.983	78	145185	1.895
47) 1,2-Dichloroethane	(2)	6.011	62	61892	1.909
48) Isooctane	(2)	6.033	57	196958M	1.900
49) Tert-Amyl Methyl Ether	(2)	6.069	73	135830	1.988
50) Heptane	(2)	6.176	43	75117	1.906
51)*1,4-Difluorobenzene	(2)	6.291	114	1230754	10.000
52) Trichloroethene	(2)	6.491	130	65528	2.005
53) Ethyl Acrylate	(2)	6.577	55	106713	1.984
36) 1,2-Dichloroethene (total)	(1)		61	107262	3.648
54) 1,2-Dichloropropane	(2)	6.678	63	53126	2.001
57) Methyl Methacrylate	(2)	6.749	69	59324	2.032
55) Dibromomethane	(2)	6.771	174	59925	1.853
56) 1,4-Dioxane	(2)	6.778	88	37979	1.965
58) Bromodichloromethane	(2)	6.885	83	110000	1.977
59) cis-1,3-Dichloropropene	(2)	7.215	75	95701	1.966
60) 4-Methyl-2-Pentanone	(2)	7.329	43	107658M	1.962
61) Toluene	(3)	7.466	91	189315	1.973
62) Octane	(3)	7.516	43	109782	1.980
63) trans-1,3-Dichloropropene	(3)	7.630	75	84055	1.952
65) Ethyl Methacrylate	(3)	7.673	69	101083	1.945
66) 1,1,2-Trichloroethane	(3)	7.774	97	68596	1.992
67) Tetrachloroethene	(3)	7.867	166	96835	1.855
68) 2-Hexanone	(3)	7.945	43	103271	1.917
69) Dibromochloromethane	(3)	8.067	127	86175	1.956
70) 1,2-Dibromoethane	(3)	8.160	107	99389	1.897
71)*Chlorobenzene-d5	(3)	8.490	117	1228566	10.000
72) Chlorobenzene	(3)	8.518	112	146366	1.927
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	77435	1.964
74) Ethylbenzene	(3)	8.583	91	261061	1.958
75) m/p-Xylene	(3)	8.669	91	203806	1.954
76) o-Xylene	(3)	8.970	91	206991	1.992
78) Styrene	(3)	8.977	104	154709	1.944
79) Bromoform	(3)	9.142	173	116507	1.882

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

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on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00023.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 12:08 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:15
Date, time and analyst ID of latest file update: 05-Sep-2018 13:15 jeb07445

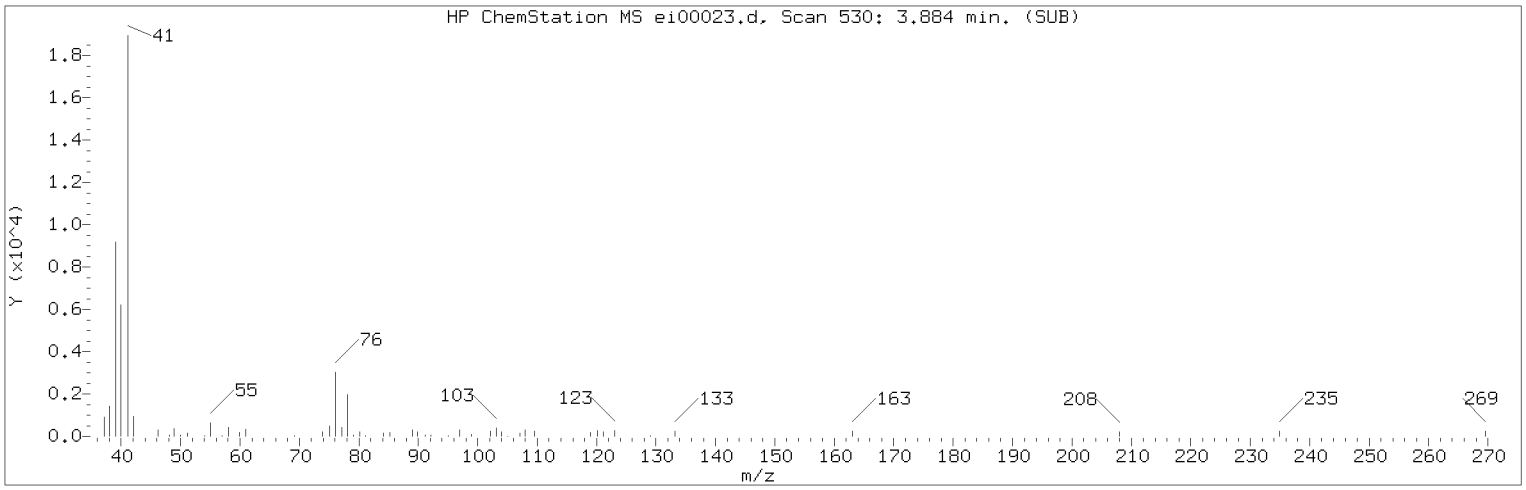
Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
80) Cumene	(3)	9.235	105	281871	1.989
82) 1,1,2,2-Tetrachloroethane	(3)	9.464	83	140696	1.890
81) Bromobenzene	(3)	9.493	156	92894	1.938
83) 1,2,3-Trichloropropane	(3)	9.514	110	45576	1.968
84) n-Propylbenzene	(3)	9.543	120	75131	1.957
85) 2-Chlorotoluene	(3)	9.622	126	67079	1.993
86) 4-Ethyltoluene	(3)	9.629	105	273950	1.940
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	240314	1.995
88) Alpha Methyl Styrene	(3)	9.844	118	111228	1.976
89) tert-Butylbenzene	(3)	9.922	119	225831M	2.041
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	237161	2.011
91) sec-Butylbenzene	(3)	10.087	105	337619	2.018
92) 1,3-Dichlorobenzene	(3)	10.188	146	151854	1.971
94) p-Isopropyltoluene	(3)	10.188	119	281946	2.013
93) 1,4-Dichlorobenzene	(3)	10.259	146	154111	1.936
95) Benzyl Chloride	(3)	10.359	91	192347	1.912
97) n-Butylbenzene	(3)	10.503	91	252606	1.960
96) 1,2-Dichlorobenzene	(3)	10.546	146	146408	2.017
98) Hexachloroethane	(3)	10.732	117	74636	2.000
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	74768	1.976
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	106608	2.006
101) Hexachlorobutadiene	(3)	11.871	225	97292	1.961
102) Naphthalene	(3)	11.964	128	217256	1.969
64) 1,3-Dichloropropene (total)	(3)		75	179756	3.872
77) Xylene (total)	(3)		91	410797	3.946

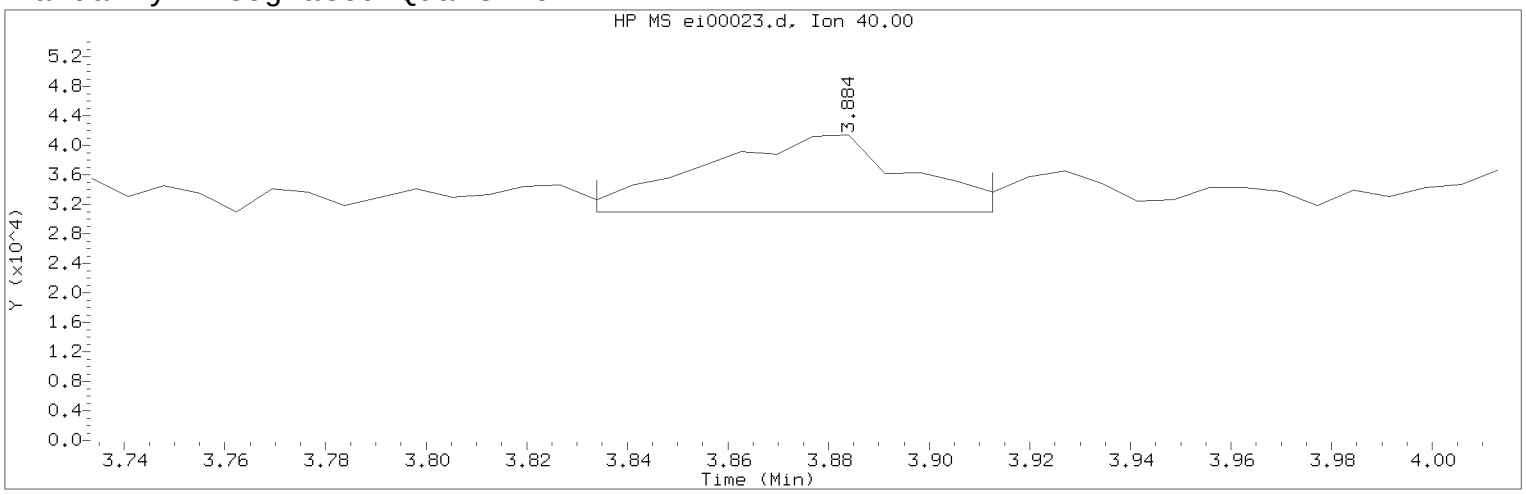
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



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Injection date and time: 05-SEP-2018 12:08 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:15
Date, time and analyst ID of latest file update: 05-Sep-2018 13:15 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

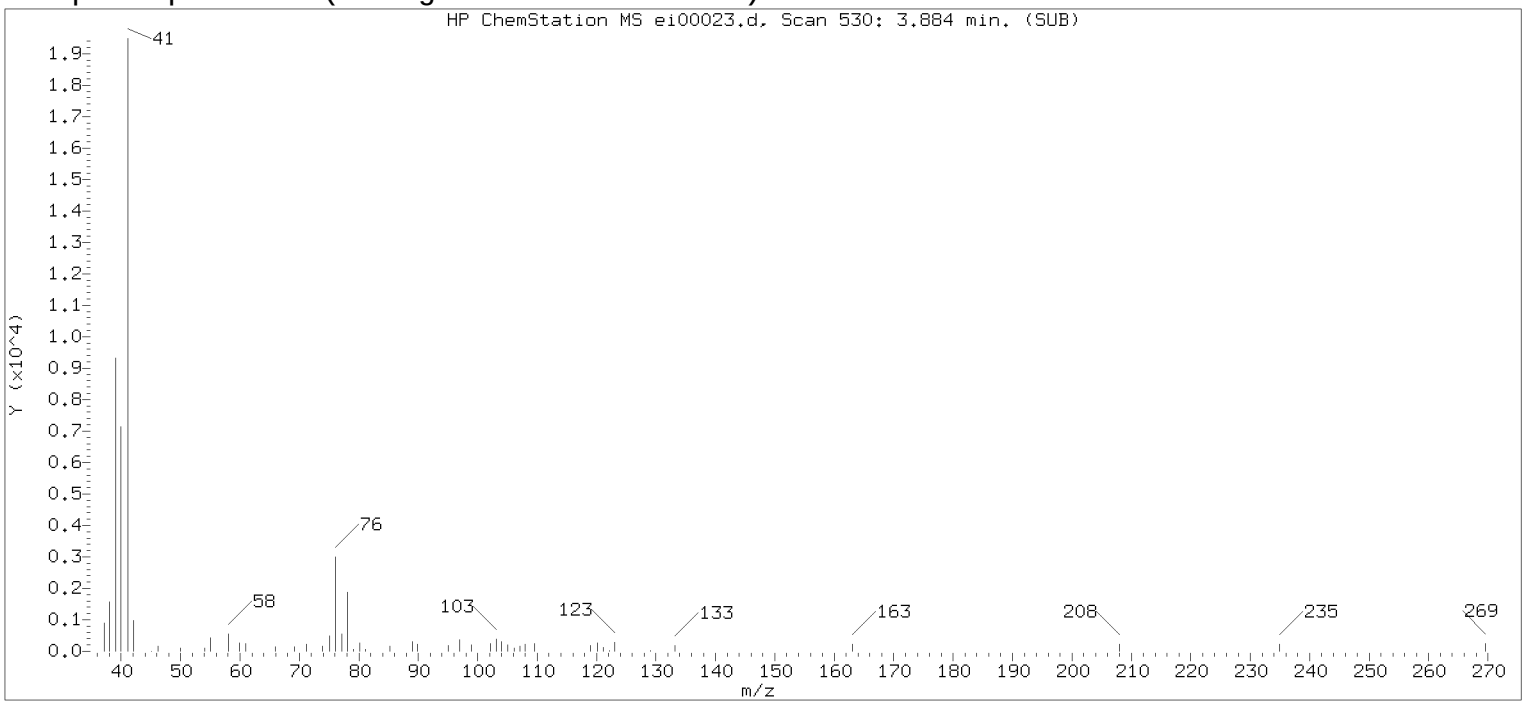
Compound Number : 23
Compound Name : Acetonitrile
Scan Number : 530
Retention Time (minutes): 3.884
Quant Ion : 40.00
Area (flag) : 30112M
Concentration (ppb(v)) : 1.9399
Integration start scan : 522 Integration stop scan: 533
Y at integration start : 30984 Y at integration end: 30984

Reason for manual integration: improper integration

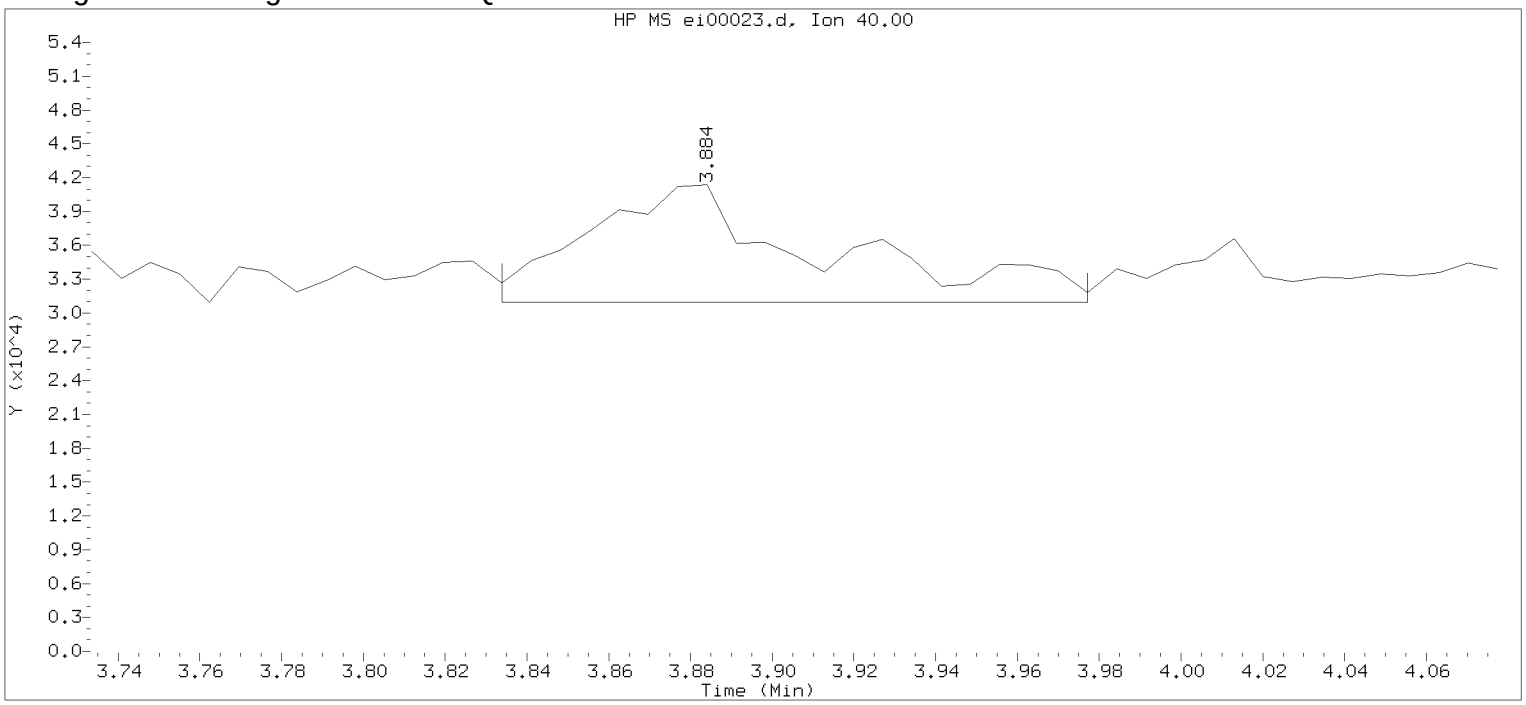
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:28.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00023.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 12:08 Analyst ID: jeb07445

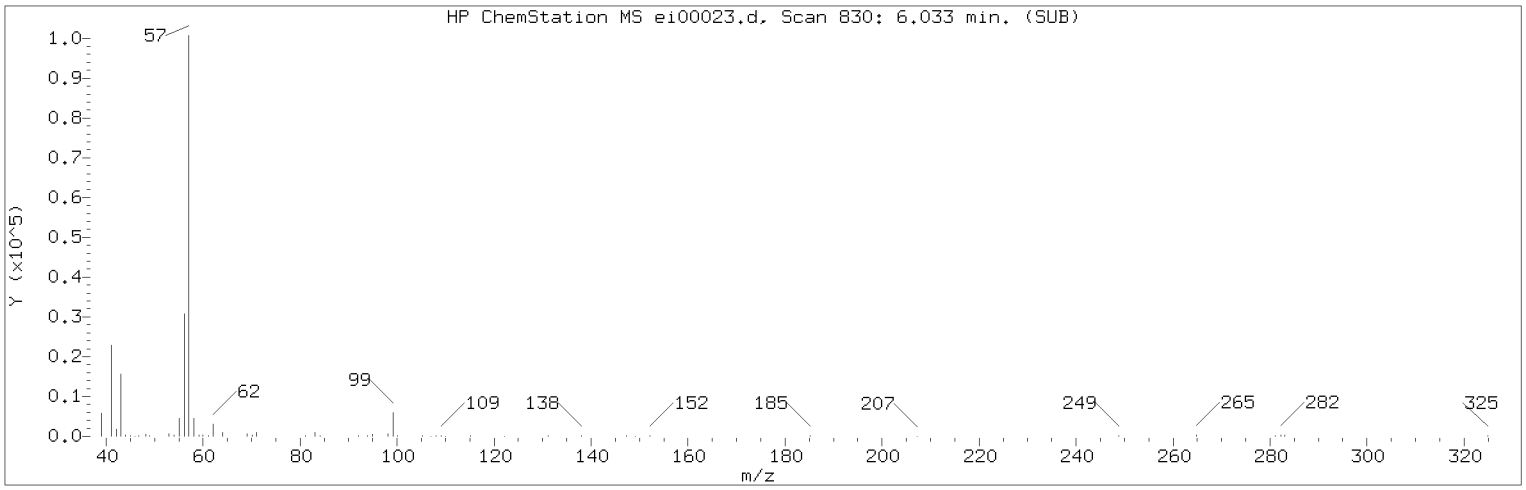
Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 27-AUG-2018 09:31
Date, time and analyst ID of latest file update: 05-Sep-2018 12:29 Unknown

Sample Name: VSTD002 Lab Sample ID: VSTD002

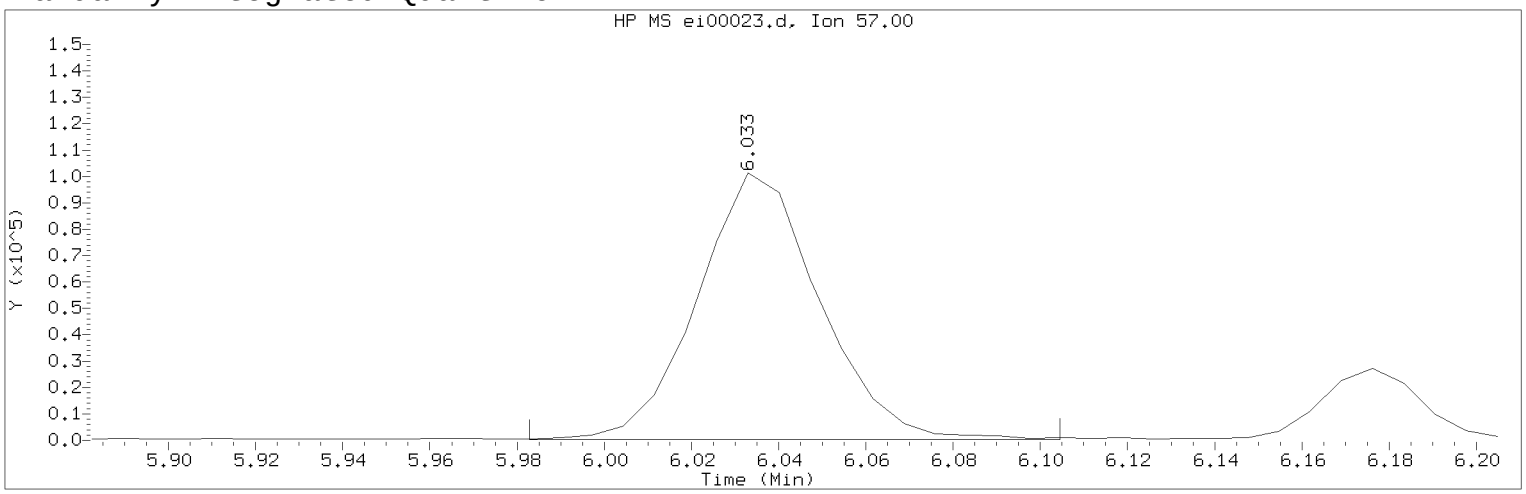
Compound Number : 23
Compound Name : Acetonitrile
Scan Number : 530
Retention Time (minutes): 3.884
Quant Ion : 40.00
Area : 41347
Concentration (ppb(v)) : 2.9148
Integration start scan : 522 Integration stop scan: 542
Y at integration start : 30984 Y at integration end: 30984

Digitally signed by Jacob E. Bailey on 09/05/2018 at 15:39.
Target 3.5 esignature userGUID jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00023.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 12:08 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:15
Date, time and analyst ID of latest file update: 05-Sep-2018 13:15 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

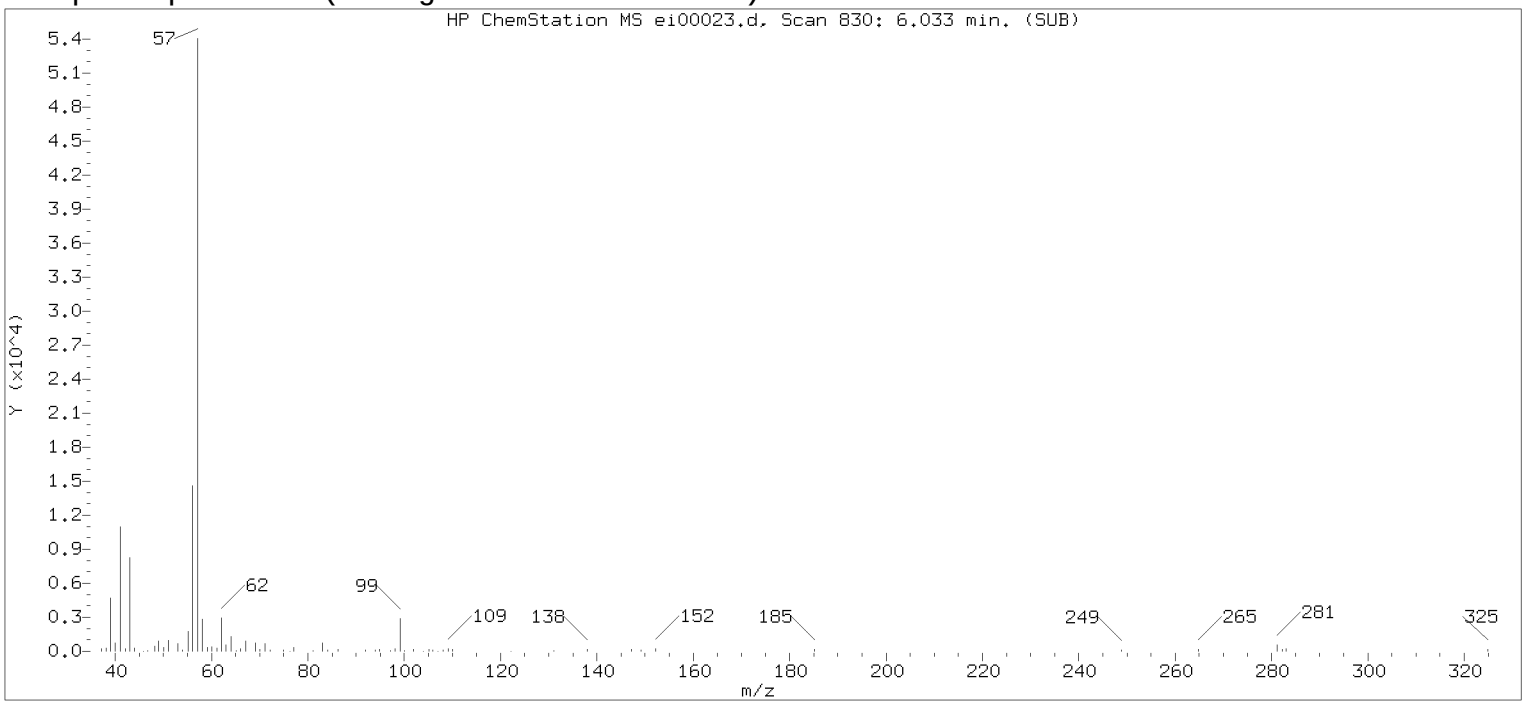
Compound Number : 48
Compound Name : Isooctane
Scan Number : 830
Retention Time (minutes): 6.033
Quant Ion : 57.00
Area (flag) : 196958M
Concentration (ppb(v)) : 1.9004
Integration start scan : 822 Integration stop scan: 839
Y at integration start : 226 Y at integration end: 226

Reason for manual integration: improper integration

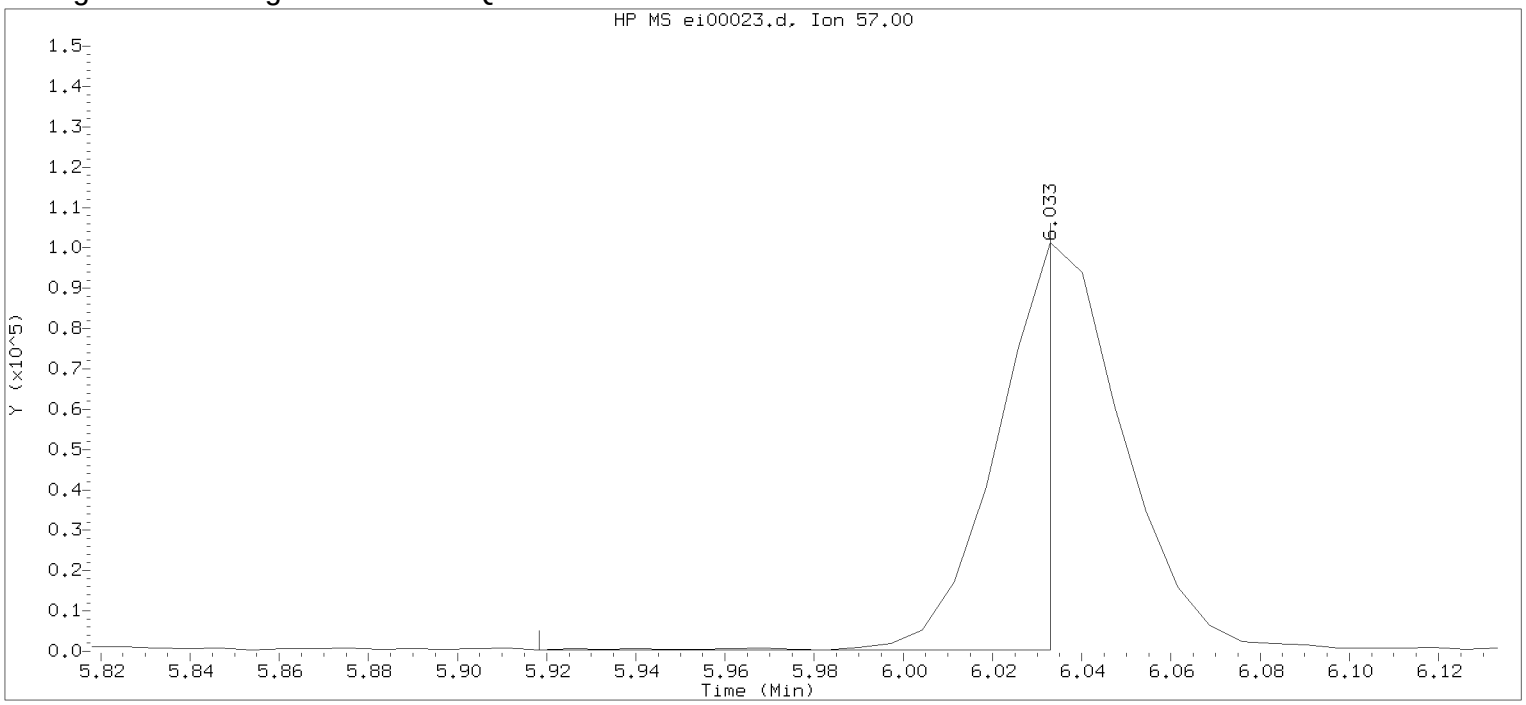
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:28.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00023.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 12:08 Analyst ID: jeb07445

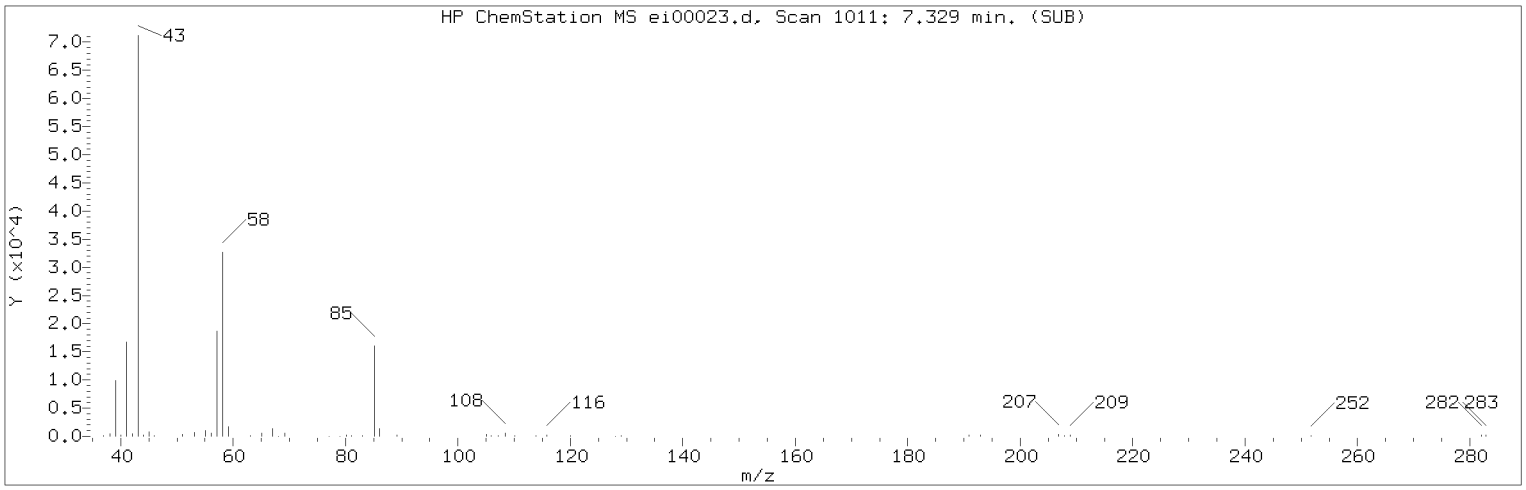
Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 27-AUG-2018 09:31
Date, time and analyst ID of latest file update: 05-Sep-2018 12:29 Unknown

Sample Name: VSTD002 Lab Sample ID: VSTD002

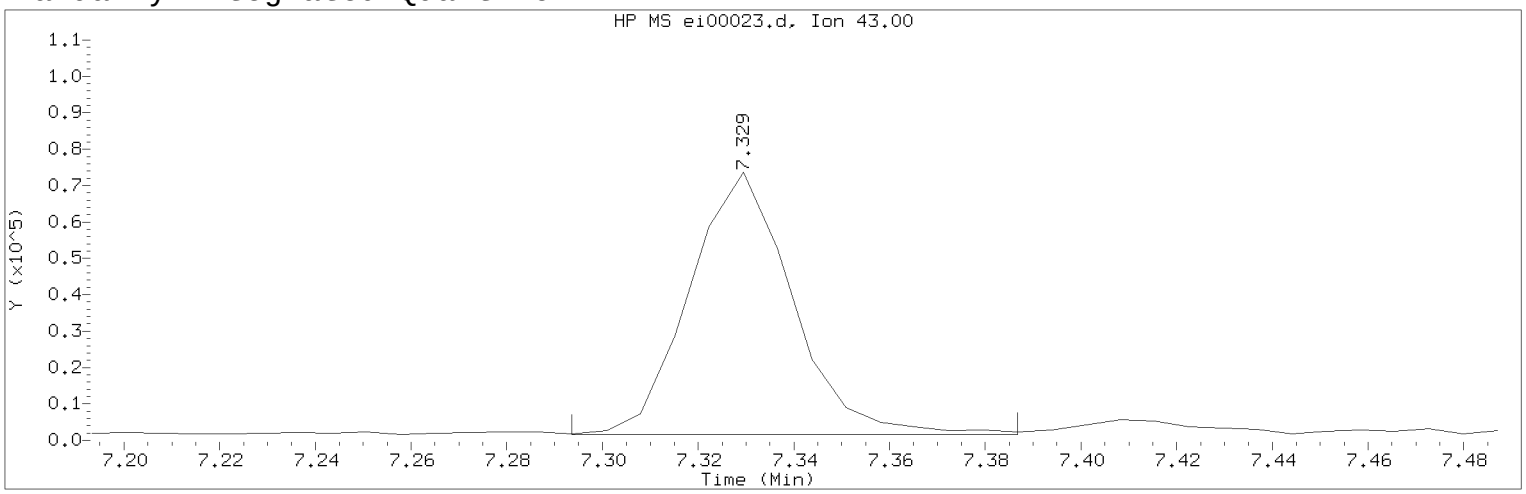
Compound Number : 48
Compound Name : Isooctane
Scan Number : 830
Retention Time (minutes): 6.033
Quant Ion : 57.00
Area : 82003
Concentration (ppb(v)) : 0.8347
Integration start scan : 813 Integration stop scan: 829
Y at integration start : 397 Y at integration end: 397

Digitally signed by Jacob E. Bailey on 09/05/2018 at 15:39.
Target 3.5 esignature userGLE02jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00023.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 12:08 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:15
Date, time and analyst ID of latest file update: 05-Sep-2018 13:15 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

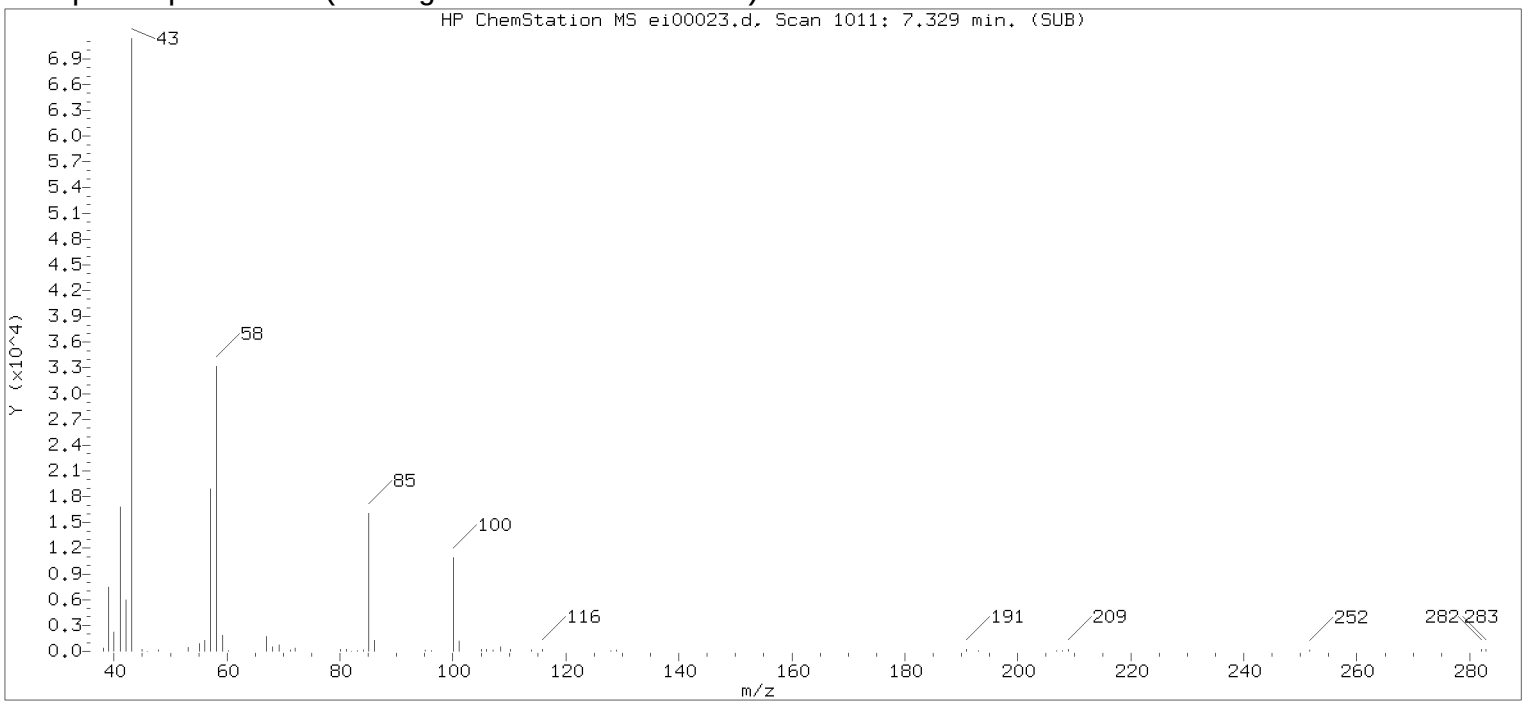
Compound Number : 60
Compound Name : 4-Methyl-2-Pentanone
Scan Number : 1011
Retention Time (minutes): 7.329
Quant Ion : 43.00
Area (flag) : 107658M
Concentration (ppb(v)) : 1.9623
Integration start scan : 1005 Integration stop scan: 1018
Y at integration start : 1625 Y at integration end: 1625

Reason for manual integration: improper integration

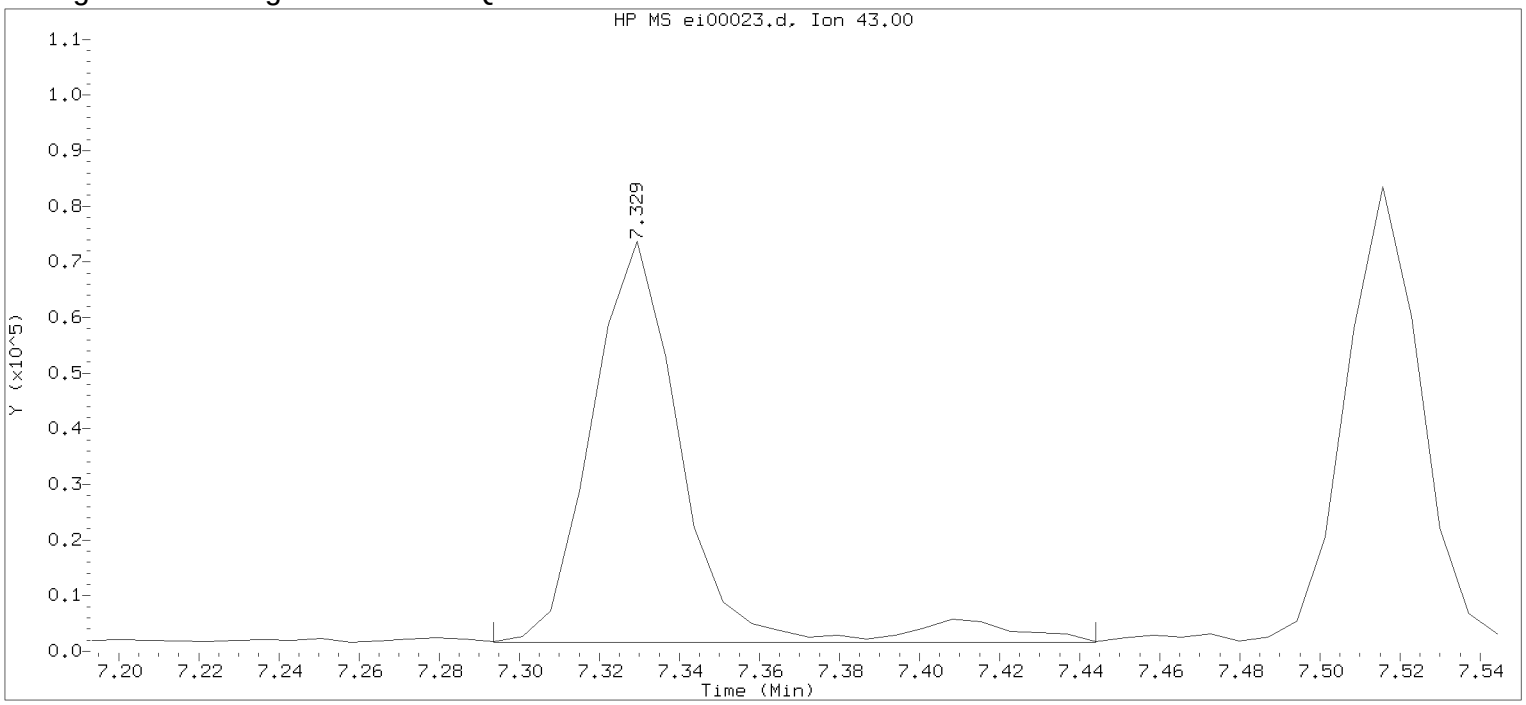
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:28.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00023.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 12:08 Analyst ID: jeb07445

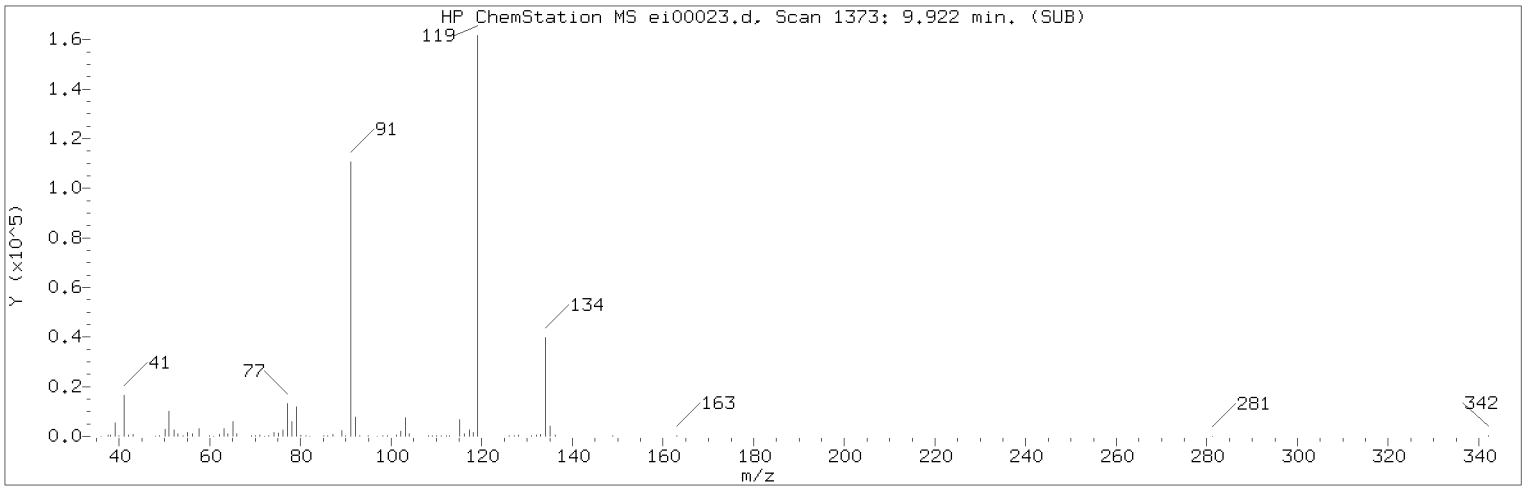
Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 27-AUG-2018 09:31
Date, time and analyst ID of latest file update: 05-Sep-2018 12:29 Unknown

Sample Name: VSTD002 Lab Sample ID: VSTD002

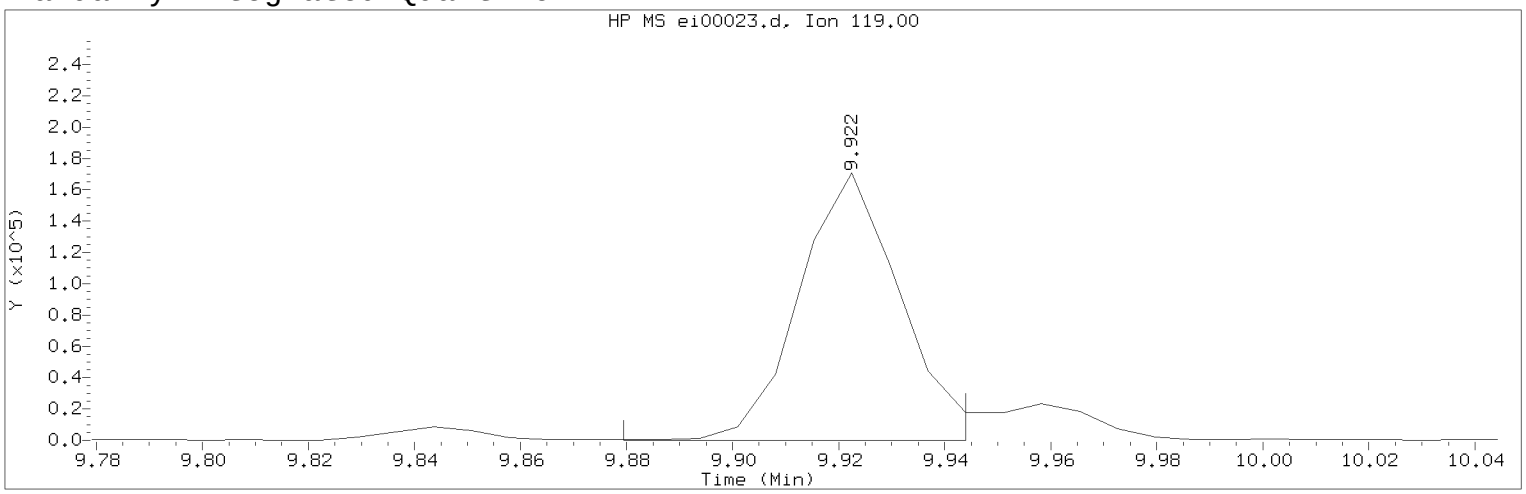
Compound Number : 60
Compound Name : 4-Methyl-2-Pentanone
Scan Number : 1011
Retention Time (minutes): 7.329
Quant Ion : 43.00
Area : 114817
Concentration (ppb(v)) : 2.4958
Integration start scan : 1005 Integration stop scan: 1026
Y at integration start : 1625 Y at integration end: 1625

Digitally signed by Jacob E. Bailey on 09/05/2018 at 15:39.
Target 3.5 esignature userGLE02jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00023.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 12:08 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:15
Date, time and analyst ID of latest file update: 05-Sep-2018 13:15 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

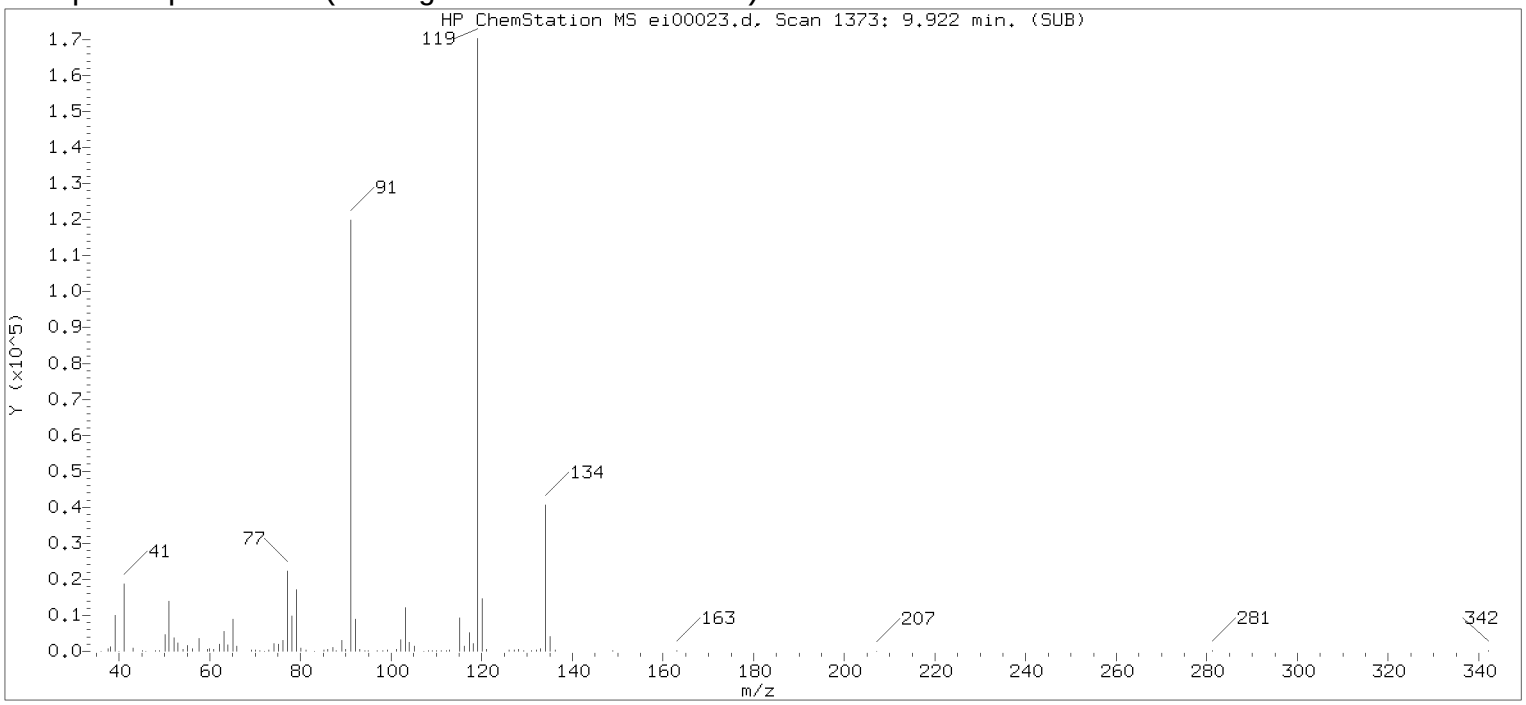
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 225831M
Concentration (ppb(v)) : 2.0413
Integration start scan : 1366 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

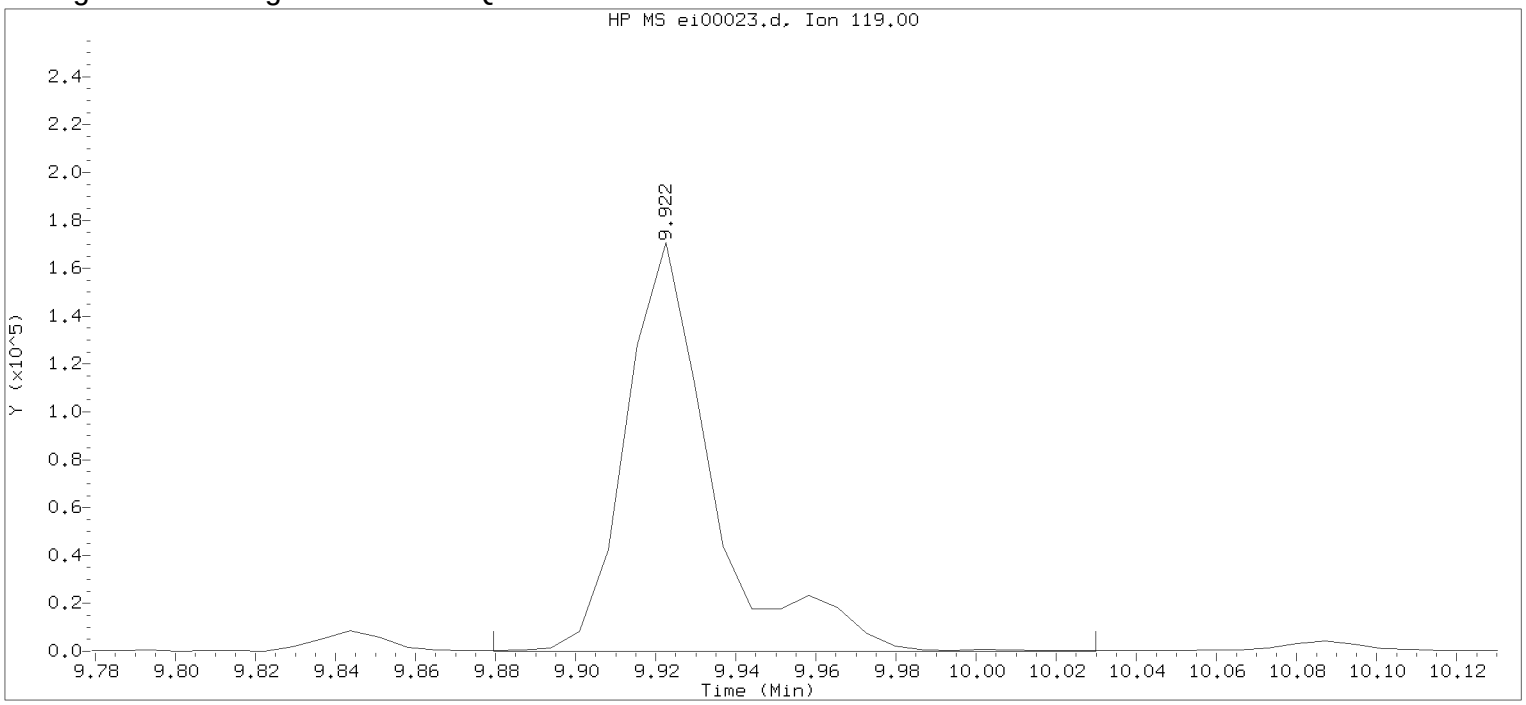
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:28.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



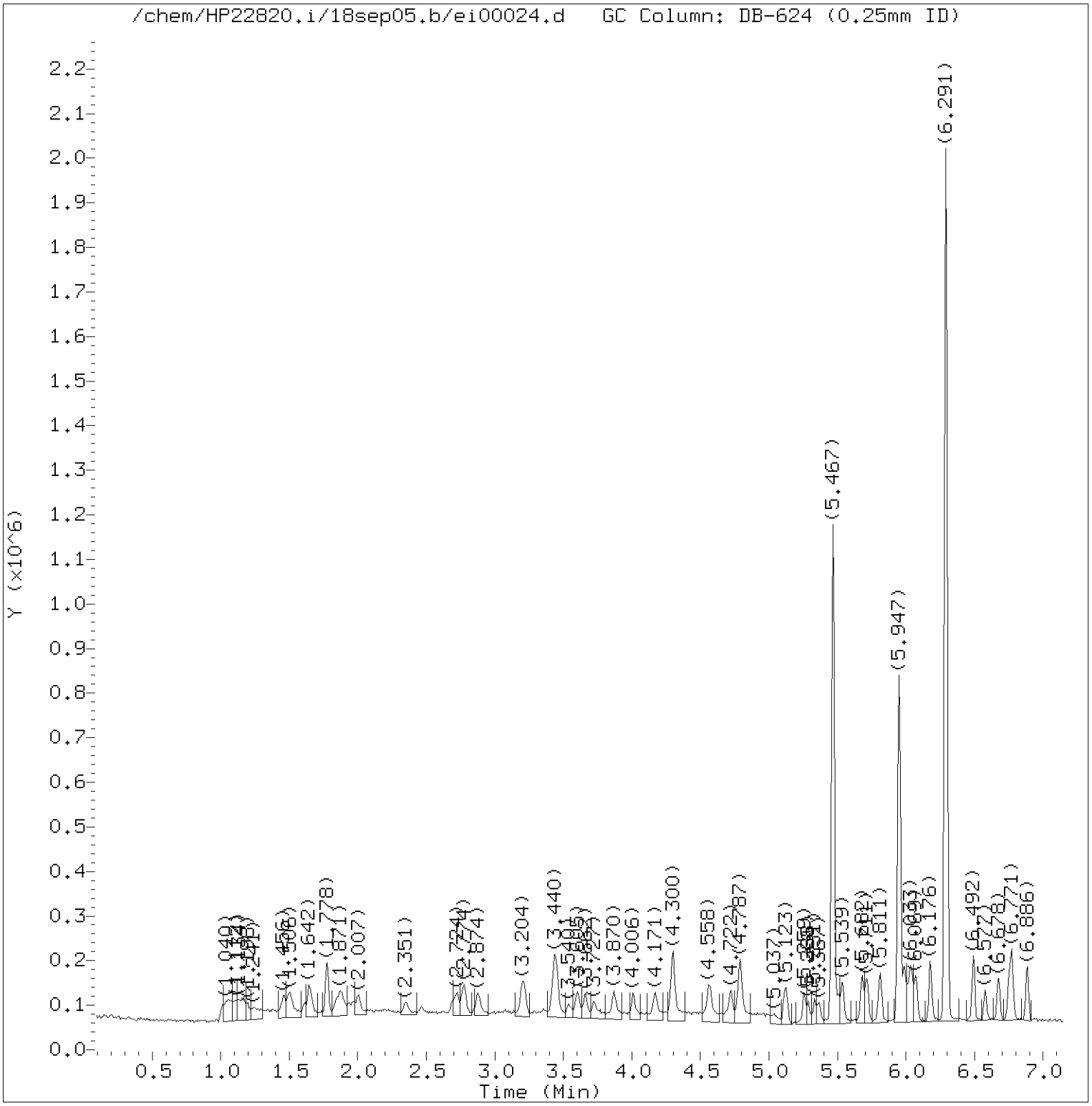
Data File: /chem/HP22820.i/18sep05.b/ei00023.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 12:08 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 27-AUG-2018 09:31
Date, time and analyst ID of latest file update: 05-Sep-2018 12:29 Unknown

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 256611
Concentration (ppb(v)) : 3.1528
Integration start scan : 1366 Integration stop scan: 1387
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 09/05/2018 at 15:39.
Target 3.5 esignature userGLE02jeb07445



Total Ion Chromatogram (TIC)

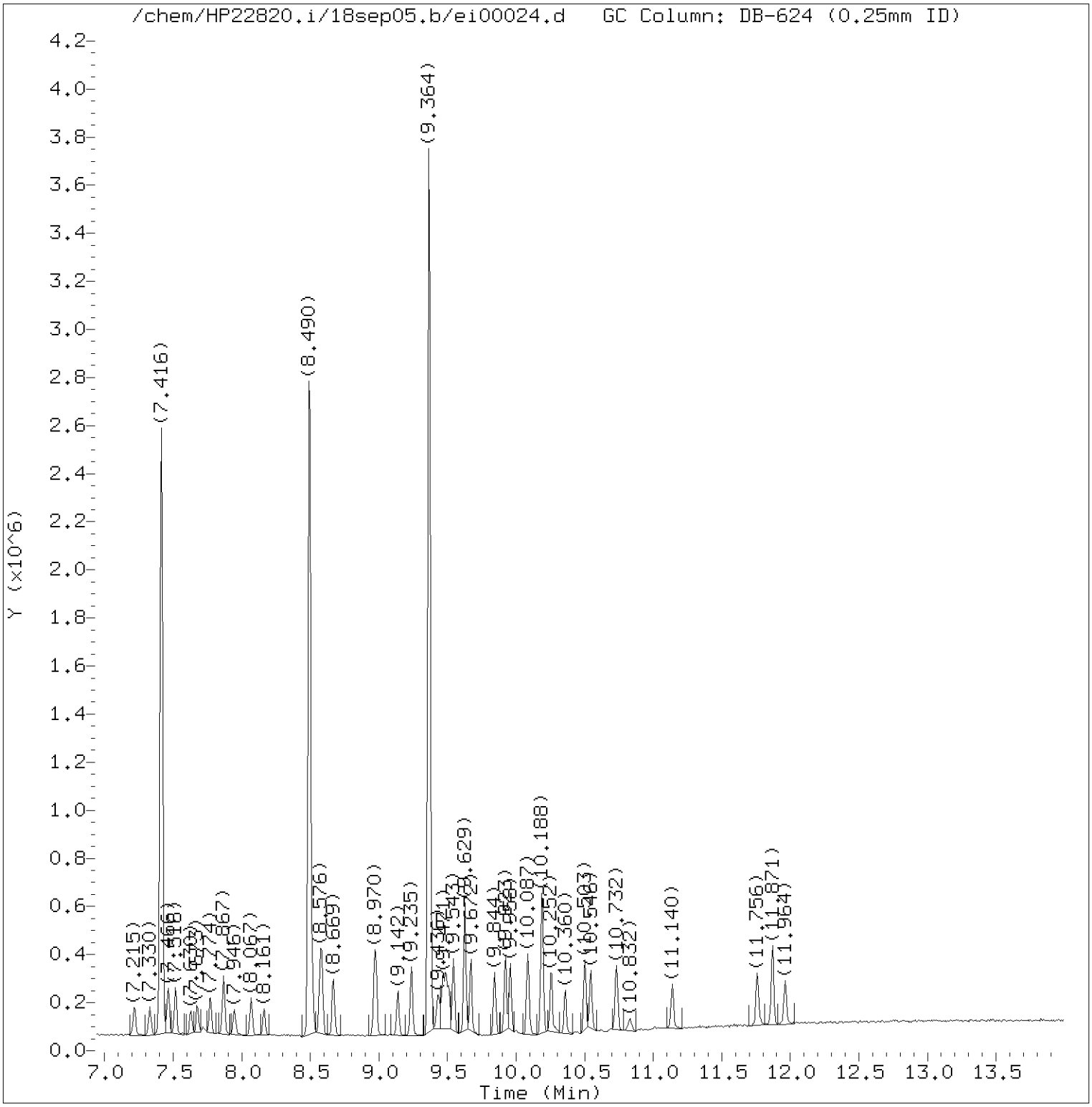
Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00024.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 12:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:07
Date, time and analyst ID of latest file update: 05-Sep-2018 14:07 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00024.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 12:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:07
Date, time and analyst ID of latest file update: 05-Sep-2018 14:07 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00024.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 12:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:07
Date, time and analyst ID of latest file update: 05-Sep-2018 14:07 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.606	41	15006	1.058
2) Dichlorodifluoromethane	(1)	1.642	85	57319	1.025
3) Chlorodifluoromethane	(1)	1.656	51	28807	1.030
4) Freon 114	(1)	1.771	85	61017	1.080
5) Chloromethane	(1)	1.836	50	13613	1.228
6) Vinyl Chloride	(1)	1.972	62	20681	1.030
7) 1,3-Butadiene	(1)	2.000	54	17083	1.115
8) Bromomethane	(1)	2.351	94	18397	0.971
9) Chloroethane	(1)	2.466	64	12444	1.097
10) Bromoethene	(1)	2.688	106	21173	1.052
11) Dichlorofluoromethane	(1)	2.724	67	49175	1.072
12) Trichlorofluoromethane	(1)	2.774	101	66789	1.123
13) Pentane	(1)	2.874	43	39433	1.175
14) Ethanol	(1)	3.075	45	8792M	1.104
16) Acrolein	(1)	3.354	56	9559	1.185
17) 1,1-Dichloroethene	(1)	3.426	61	37245	1.103
18) Freon 113	(1)	3.447	103	38842	1.229
19) Acetone	(1)	3.540	43	33602	1.173
20) Methyl Iodide	(1)	3.605	142	59385	1.103
21) Carbon Disulfide	(1)	3.662	76	62795	1.048
22) Isopropanol	(1)	3.719	45	41427	1.191
23) Acetonitrile	(1)	3.870	40	14391M	1.142
24) 3-Chloropropene	(1)	3.870	76	12675	1.307
25) Methylene Chloride	(1)	4.013	84	23036	1.271
26) tert-Butyl Alcohol	(1)	4.171	59	63729	1.295
28) trans-1,2-Dichloroethene	(1)	4.292	61	30716	1.027
27) Acrylonitrile	(1)	4.300	53	19423	1.146
29) Methyl t-Butyl Ether	(1)	4.300	73	75017	1.111
30) Hexane	(1)	4.565	57	40486	1.205
31) 1,1-Dichloroethane	(1)	4.722	63	44820	1.126
33) Di-Isopropyl Ether	(1)	4.787	45	72437	1.106
32) Vinyl Acetate	(1)	4.794	86	8529	1.317
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	74070	1.116
35) cis-1,2-Dichloroethene	(1)	5.259	61	32364	1.102
37) 2-Butanone	(1)	5.288	72	15171	1.190
38) Ethyl Acetate	(1)	5.331	70	7545	1.171
39) Methyl Acrylate	(1)	5.367	55	44446	1.177
40)*Bromochloromethane	(1)	5.467	130	319127	10.000

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

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00024.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 12:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:07
Date, time and analyst ID of latest file update: 05-Sep-2018 14:07 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
41) Tetrahydrofuran	(1)	5.503	42	29333	1.242
42) Chloroform	(1)	5.539	83	57760	1.145
43) 1,1,1-Trichloroethane	(1)	5.682	97	59954	1.147
44) Cyclohexane	(1)	5.711	56	41236	1.192
45) Carbon Tetrachloride	(1)	5.811	117	59417	1.162
46) Benzene	(2)	5.990	78	92208	1.203
47) 1,2-Dichloroethane	(2)	6.012	62	36635	1.125
48) Isooctane	(2)	6.033	57	114403	1.089
49) Tert-Amyl Methyl Ether	(2)	6.069	73	77306	1.130
50) Heptane	(2)	6.176	43	48823	1.260
51)*1,4-Difluorobenzene	(2)	6.291	114	1250892	10.000
52) Trichloroethene	(2)	6.492	130	38415	1.179
53) Ethyl Acrylate	(2)	6.577	55	63104	1.180
36) 1,2-Dichloroethene (total)	(1)		61	63080	2.129
54) 1,2-Dichloropropane	(2)	6.678	63	31821	1.201
57) Methyl Methacrylate	(2)	6.749	69	32630	1.125
55) Dibromomethane	(2)	6.771	174	37874	1.167
56) 1,4-Dioxane	(2)	6.778	88	22538	1.183
58) Bromodichloromethane	(2)	6.886	83	62376	1.122
59) cis-1,3-Dichloropropene	(2)	7.215	75	56526	1.165
60) 4-Methyl-2-Pentanone	(2)	7.330	43	63766	1.185
62) Octane	(3)	7.408	43	67865	1.297
61) Toluene	(3)	7.466	91	108491	1.172
63) trans-1,3-Dichloropropene	(3)	7.630	75	47204	1.121
65) Ethyl Methacrylate	(3)	7.673	69	58268	1.161
66) 1,1,2-Trichloroethane	(3)	7.774	97	38985	1.190
67) Tetrachloroethene	(3)	7.867	166	59505	1.181
68) 2-Hexanone	(3)	7.946	43	64883	1.250
69) Dibromochloromethane	(3)	8.067	127	48393	1.133
70) 1,2-Dibromoethane	(3)	8.161	107	60410	1.198
71)*Chlorobenzene-d5	(3)	8.490	117	1221815	10.000
72) Chlorobenzene	(3)	8.511	112	88076	1.203
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	43363	1.139
74) Ethylbenzene	(3)	8.583	91	154923	1.227
75) m/p-Xylene	(3)	8.669	91	120486	1.211
76) o-Xylene	(3)	8.970	91	118140	1.194
78) Styrene	(3)	8.977	104	92639	1.221
79) Bromoform	(3)	9.142	173	69552	1.156

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00024.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 12:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:07
Date, time and analyst ID of latest file update: 05-Sep-2018 14:07 jeb07445

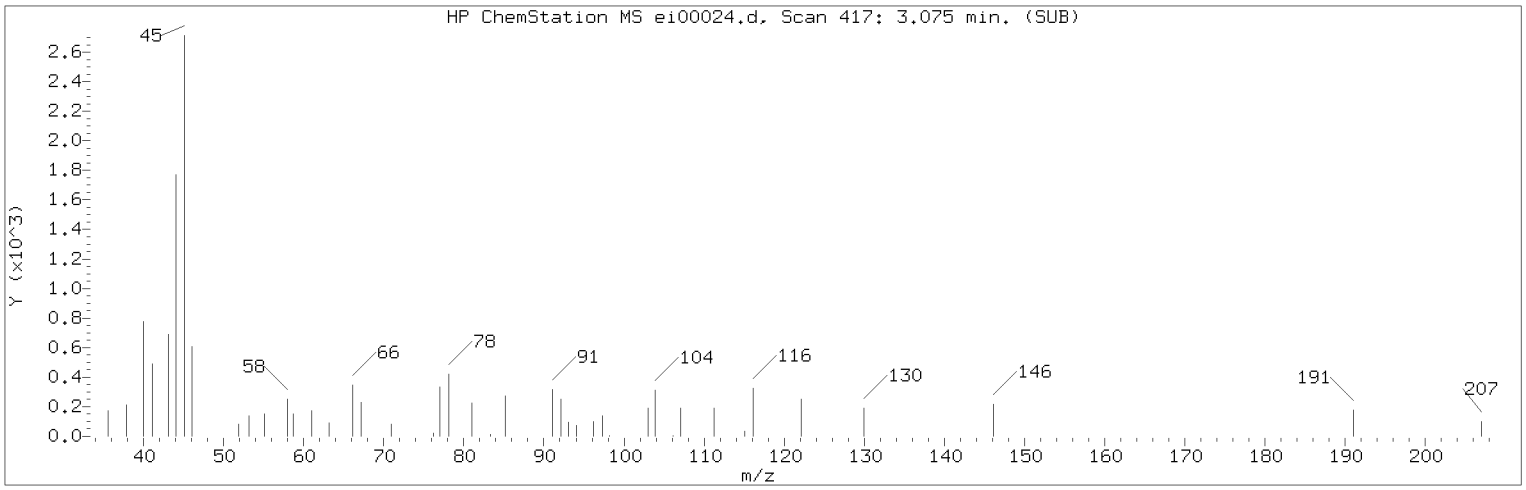
Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
80) Cumene	(3)	9.235	105	159809M	1.186
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	88256	1.241
81) Bromobenzene	(3)	9.493	156	56143	1.222
83) 1,2,3-Trichloropropane	(3)	9.514	110	26881	1.226
84) n-Propylbenzene	(3)	9.543	120	44395	1.211
86) 4-Ethyltoluene	(3)	9.629	105	164045	1.230
85) 2-Chlorotoluene	(3)	9.629	126	38706	1.174
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	140529	1.240
88) Alpha Methyl Styrene	(3)	9.844	118	63168	1.133
89) tert-Butylbenzene	(3)	9.923	119	131624M	1.225
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	138736	1.247
91) sec-Butylbenzene	(3)	10.087	105	194507	1.188
92) 1,3-Dichlorobenzene	(3)	10.188	146	88933	1.211
94) p-Isopropyltoluene	(3)	10.188	119	166370	1.213
93) 1,4-Dichlorobenzene	(3)	10.259	146	92697	1.218
95) Benzyl Chloride	(3)	10.360	91	114565	1.142
97) n-Butylbenzene	(3)	10.503	91	150297	1.174
96) 1,2-Dichlorobenzene	(3)	10.546	146	83716	1.202
98) Hexachloroethane	(3)	10.732	117	42925	1.150
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	41966	1.119
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	60232	1.115
101) Hexachlorobutadiene	(3)	11.871	225	57624	1.147
102) Naphthalene	(3)	11.964	128	126855	1.136
64) 1,3-Dichloropropene (total)	(3)		75	103730	2.290
77) Xylene (total)	(3)		91	238626	2.405

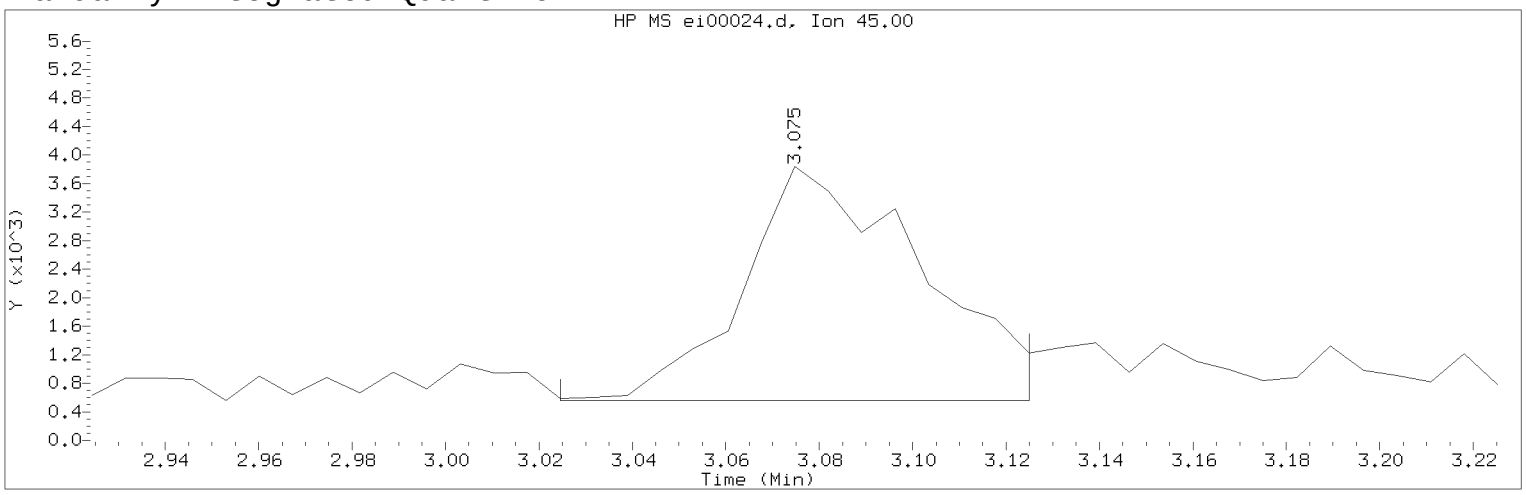
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00024.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 12:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:07
Date, time and analyst ID of latest file update: 05-Sep-2018 14:07 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

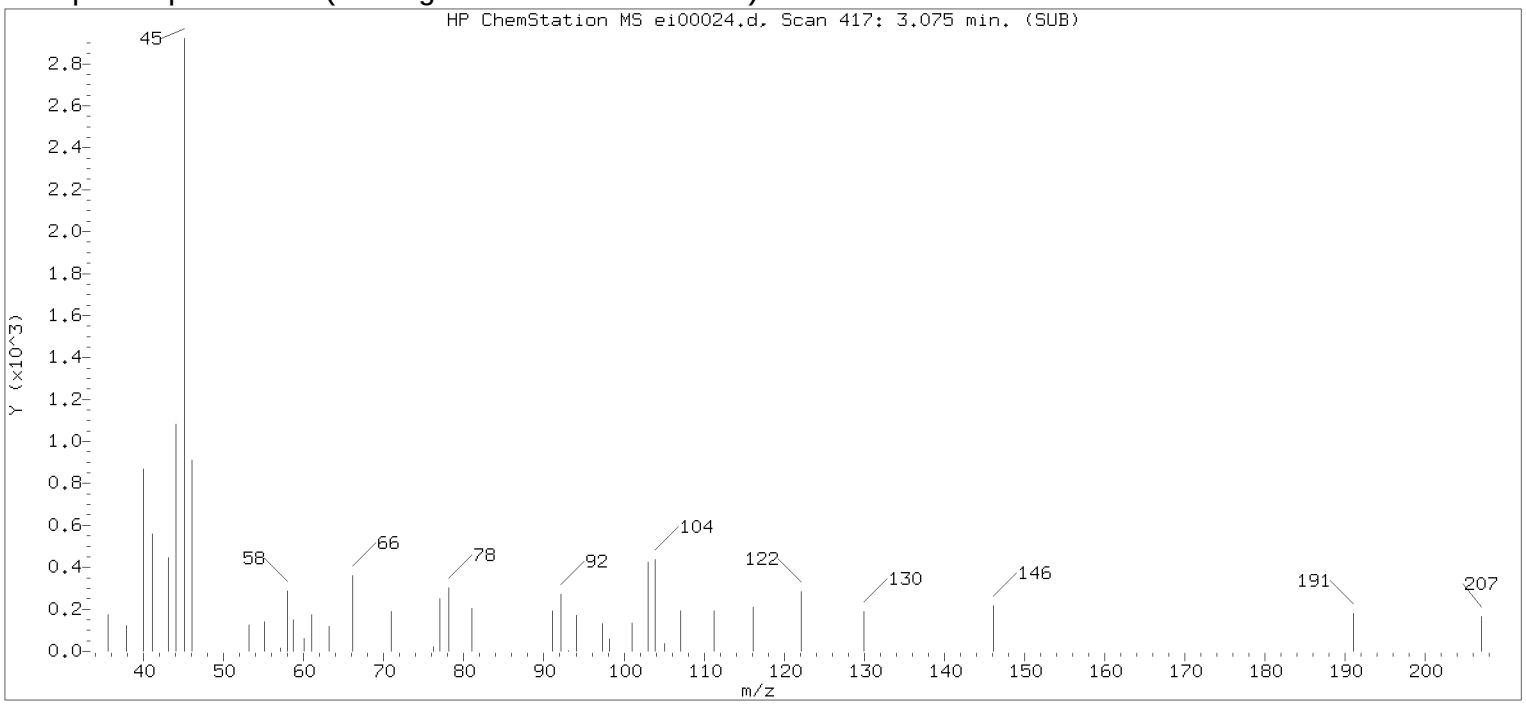
Compound Number : 14
Compound Name : Ethanol
Scan Number : 417
Retention Time (minutes): 3.075
Quant Ion : 45.00
Area (flag) : 8792M
Concentration (ppb(v)) : 1.1041
Integration start scan : 409 Integration stop scan: 423
Y at integration start : 562 Y at integration end: 562

Reason for manual integration: improper integration

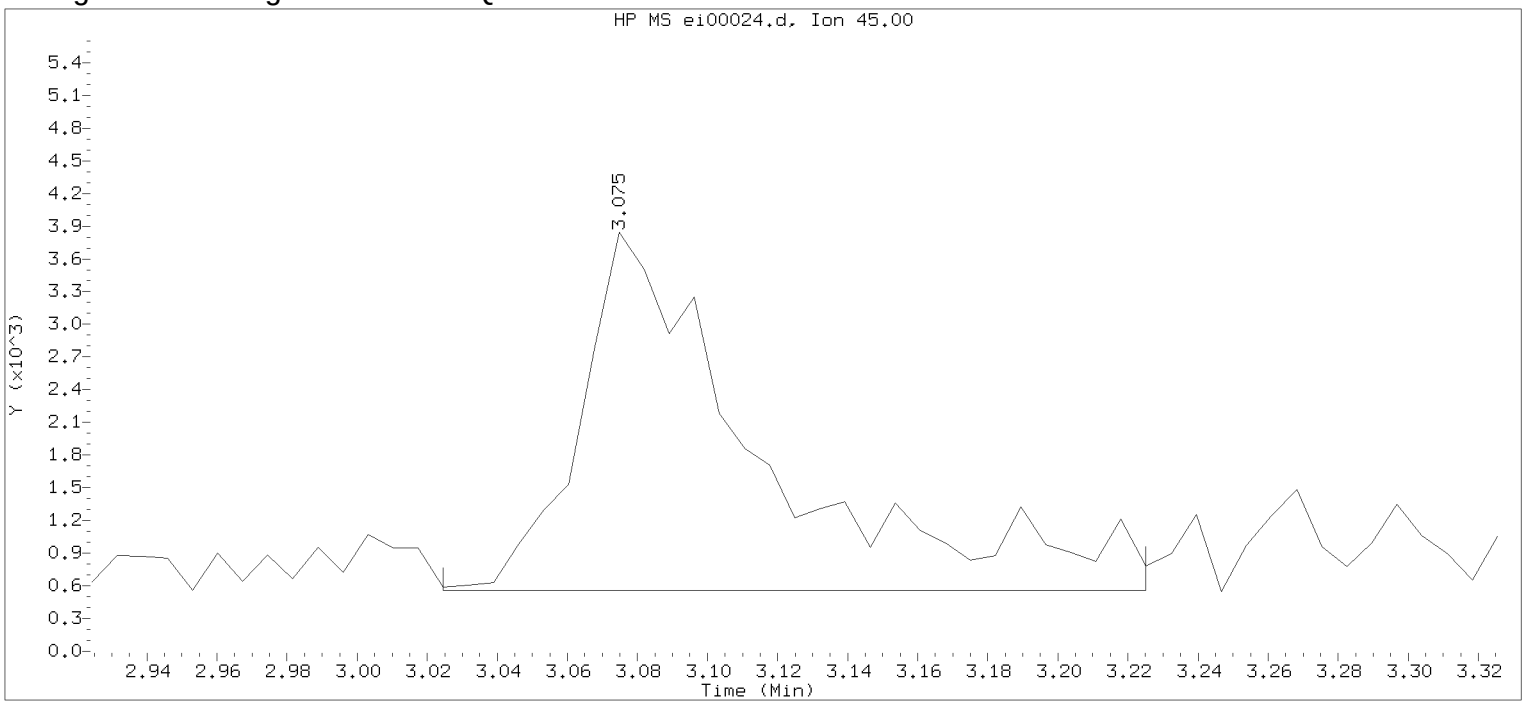
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:28.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00024.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 12:31 Analyst ID: jeb07445

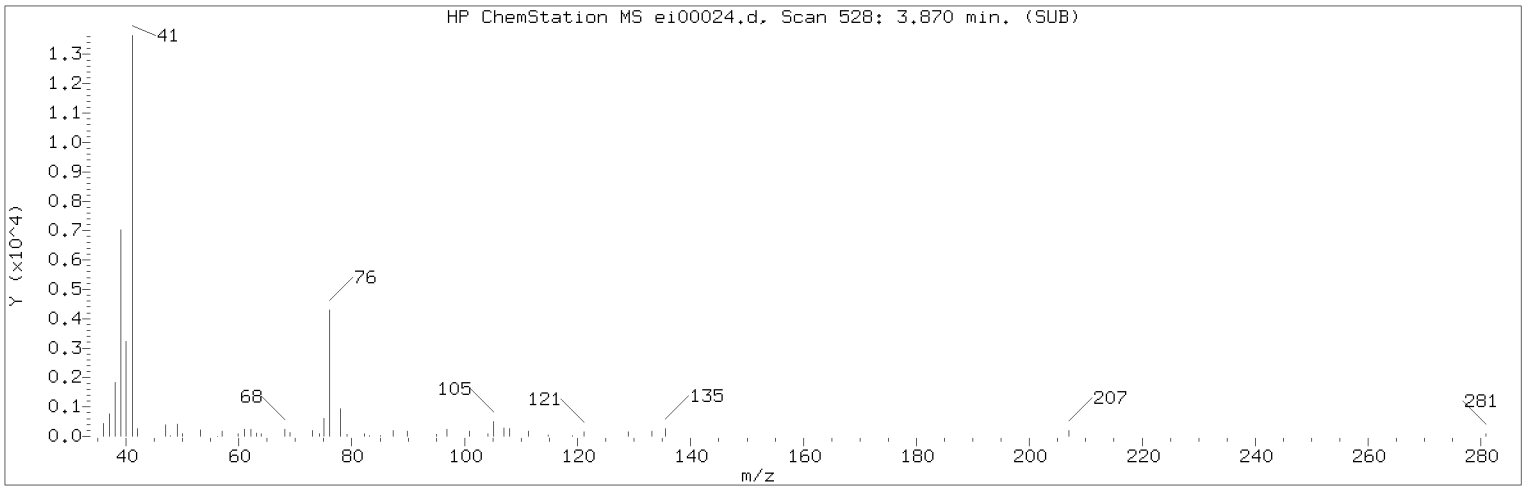
Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 27-AUG-2018 09:31
Date, time and analyst ID of latest file update: 05-Sep-2018 12:52 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

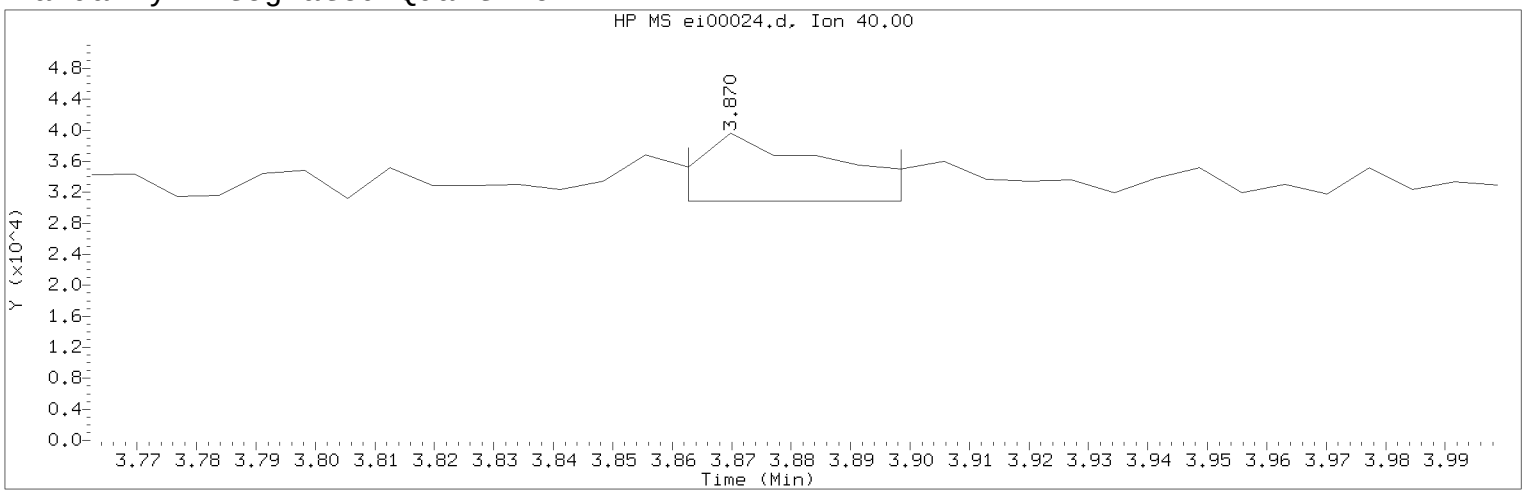
Compound Number : 14
Compound Name : Ethanol
Scan Number : 417
Retention Time (minutes): 3.075
Quant Ion : 45.00
Area : 11734
Concentration (ppb(v)) : 1.7199
Integration start scan : 409 Integration stop scan: 437
Y at integration start : 562 Y at integration end: 562

Digitally signed by Jacob E. Bailey on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00024.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 12:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:07
Date, time and analyst ID of latest file update: 05-Sep-2018 14:07 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

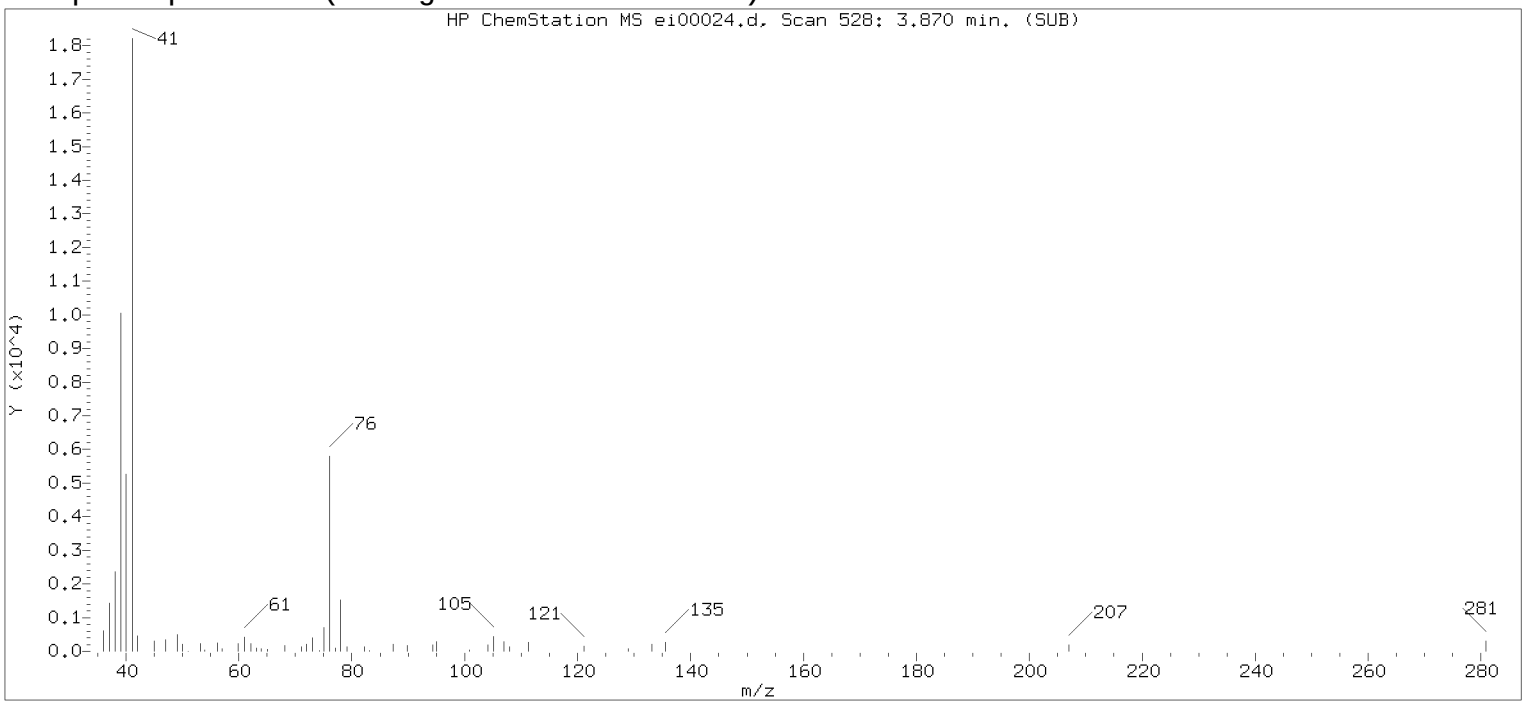
Compound Number : 23
Compound Name : Acetonitrile
Scan Number : 528
Retention Time (minutes): 3.870
Quant Ion : 40.00
Area (flag) : 14391M
Concentration (ppb(v)) : 1.1420
Integration start scan : 526 Integration stop scan: 531
Y at integration start : 30911 Y at integration end: 30911

Reason for manual integration: improper integration

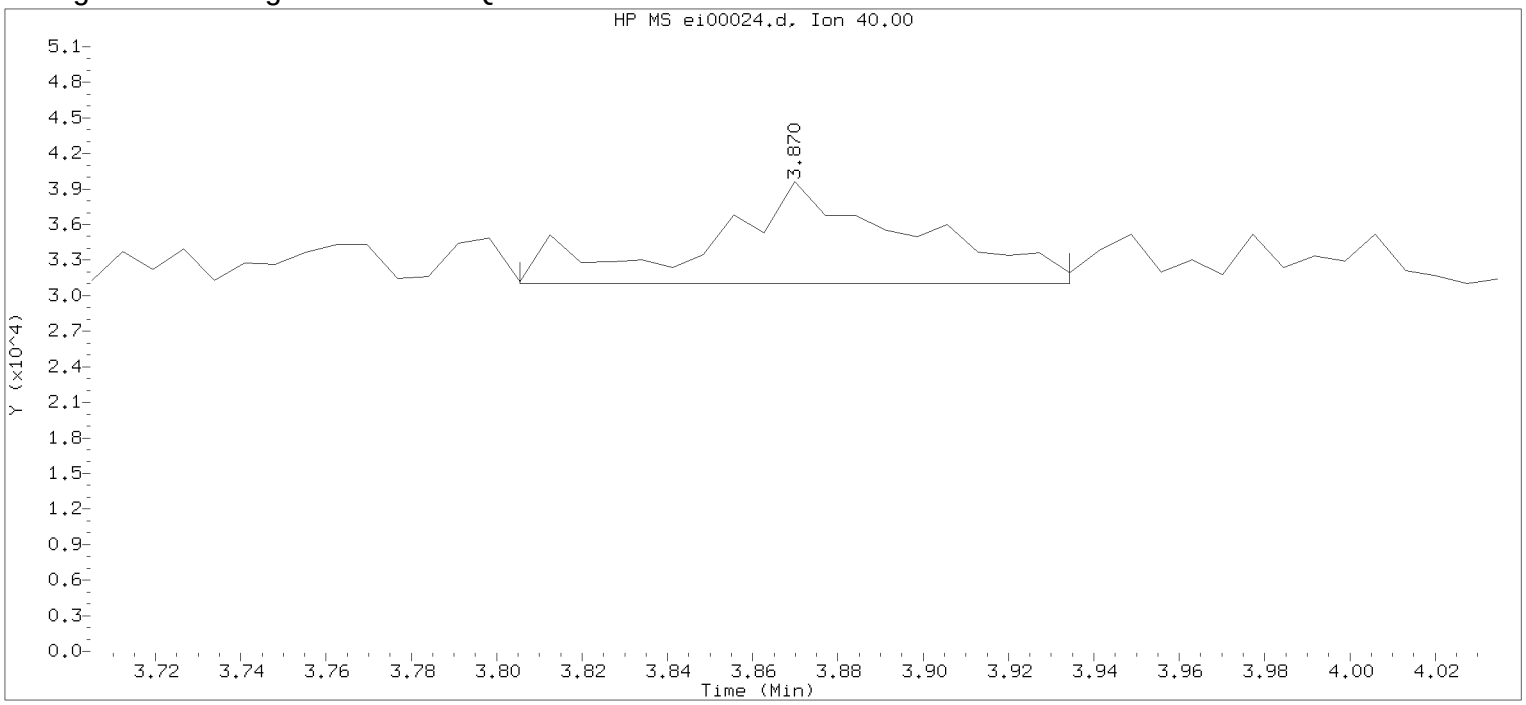
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:28.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00024.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 12:31 Analyst ID: jeb07445

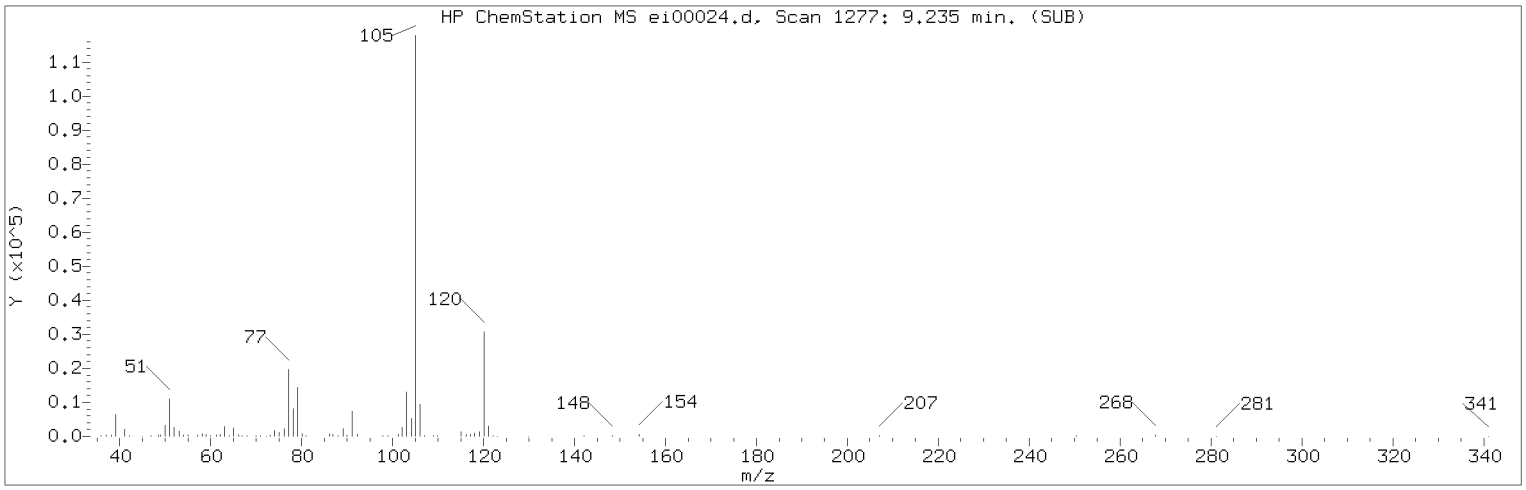
Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 27-AUG-2018 09:31
Date, time and analyst ID of latest file update: 05-Sep-2018 12:52 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

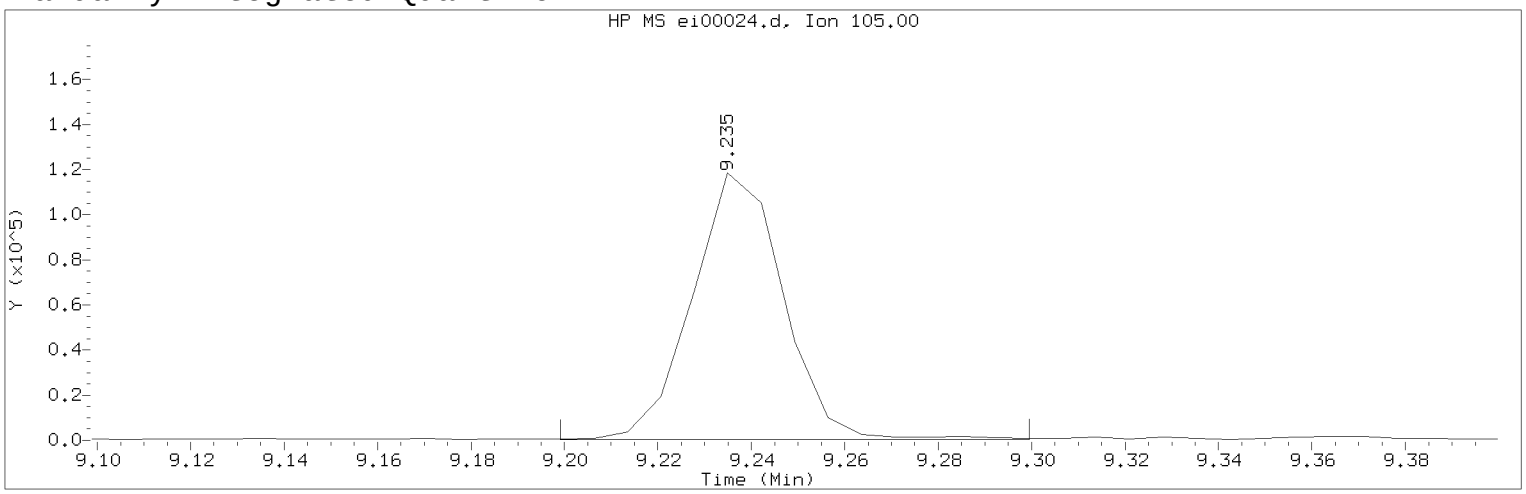
Compound Number : 23
Compound Name : Acetonitrile
Scan Number : 528
Retention Time (minutes): 3.870
Quant Ion : 40.00
Area : 27937
Concentration (ppb(v)) : 1.9703
Integration start scan : 518 Integration stop scan: 536
Y at integration start : 31040 Y at integration end: 31040

Digitally signed by Jacob E. Bailey on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00024.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 12:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:07
Date, time and analyst ID of latest file update: 05-Sep-2018 14:07 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

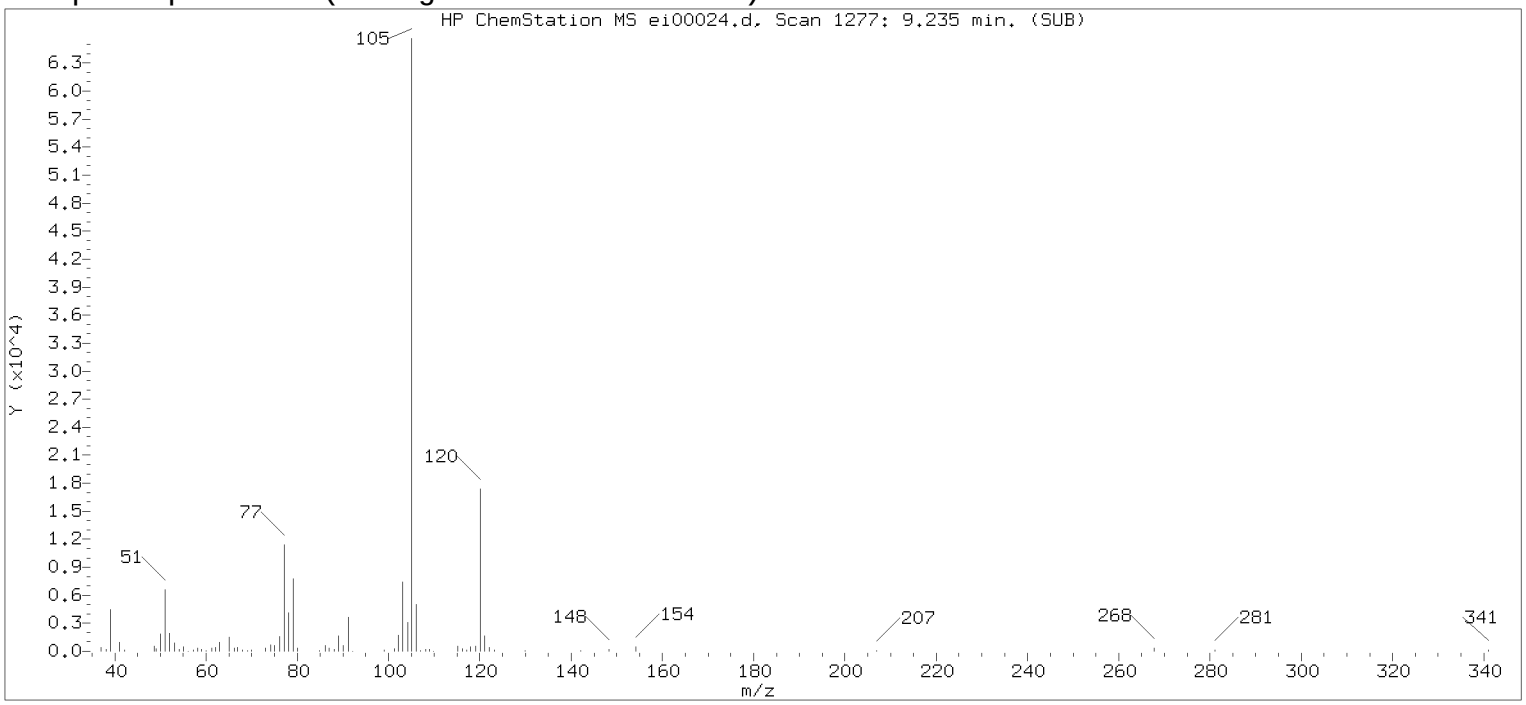
Compound Number : 80
Compound Name : Cumene
Scan Number : 1277
Retention Time (minutes): 9.235
Quant Ion : 105.00
Area (flag) : 159809M
Concentration (ppb(v)) : 1.1859
Integration start scan : 1271 Integration stop scan: 1285
Y at integration start : 302 Y at integration end: 302

Reason for manual integration: improper integration

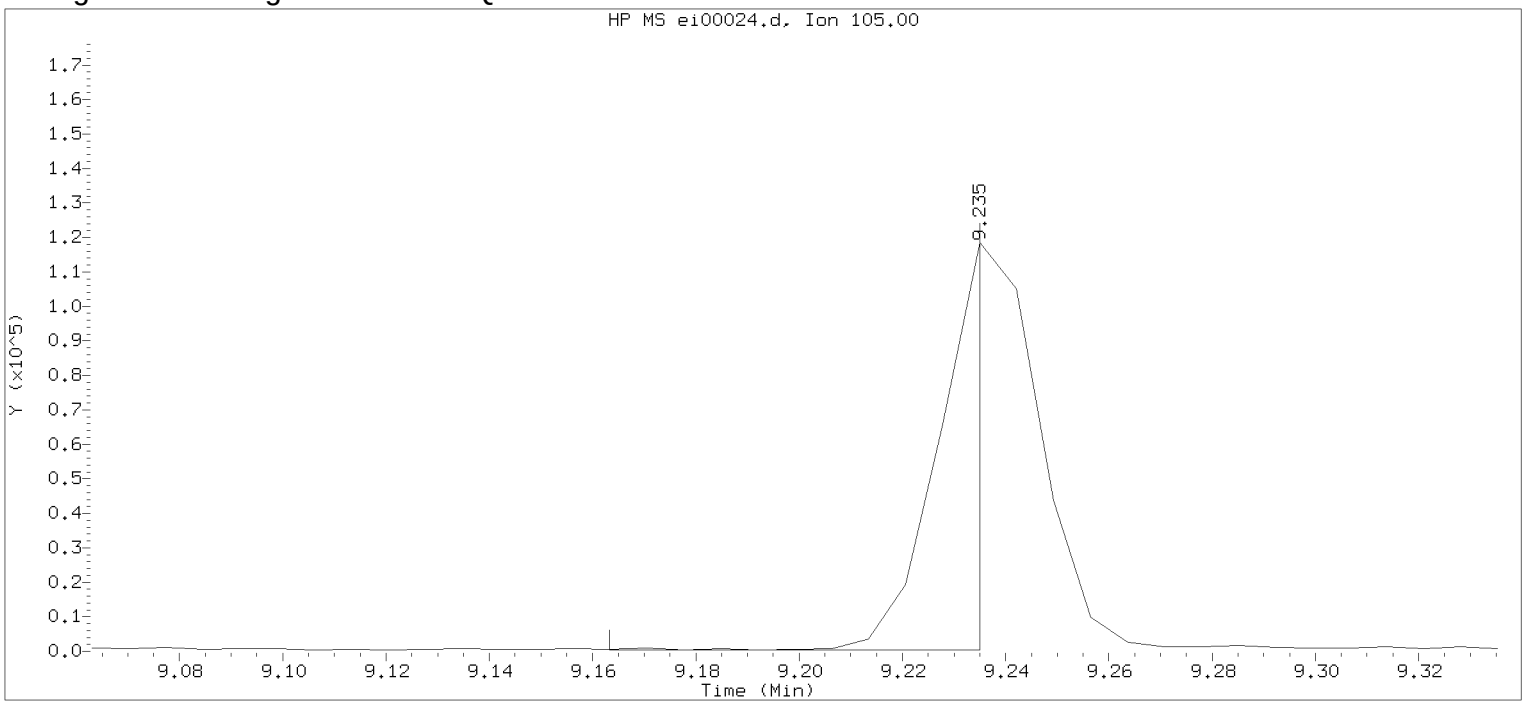
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:28.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00024.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 12:31 Analyst ID: jeb07445

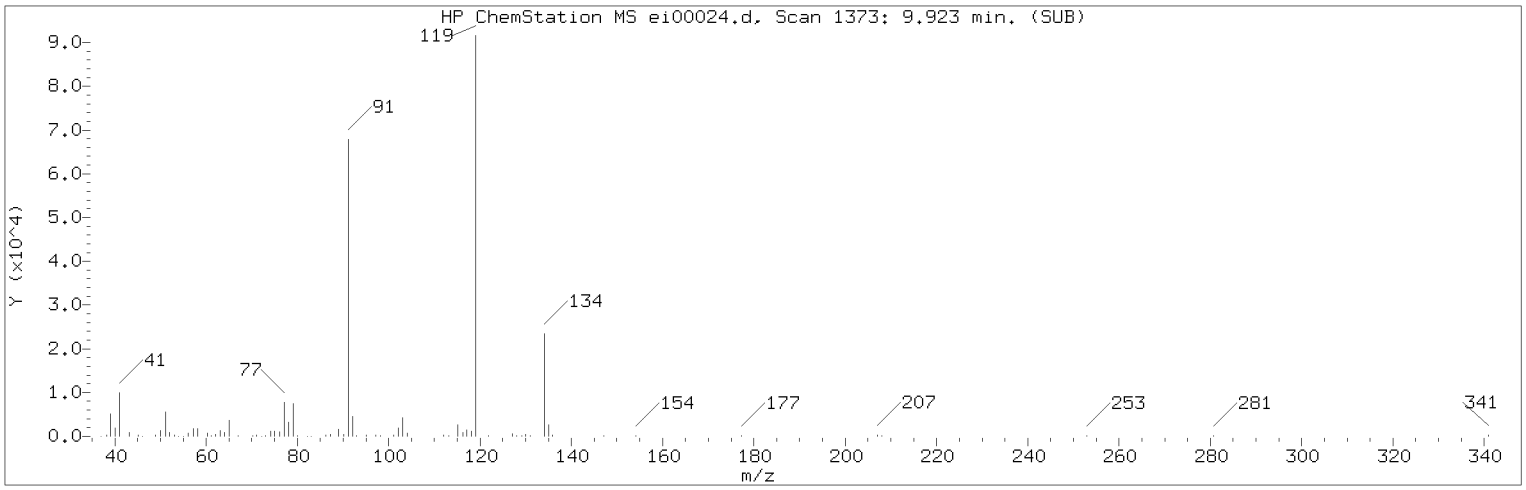
Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 27-AUG-2018 09:31
Date, time and analyst ID of latest file update: 05-Sep-2018 12:52 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

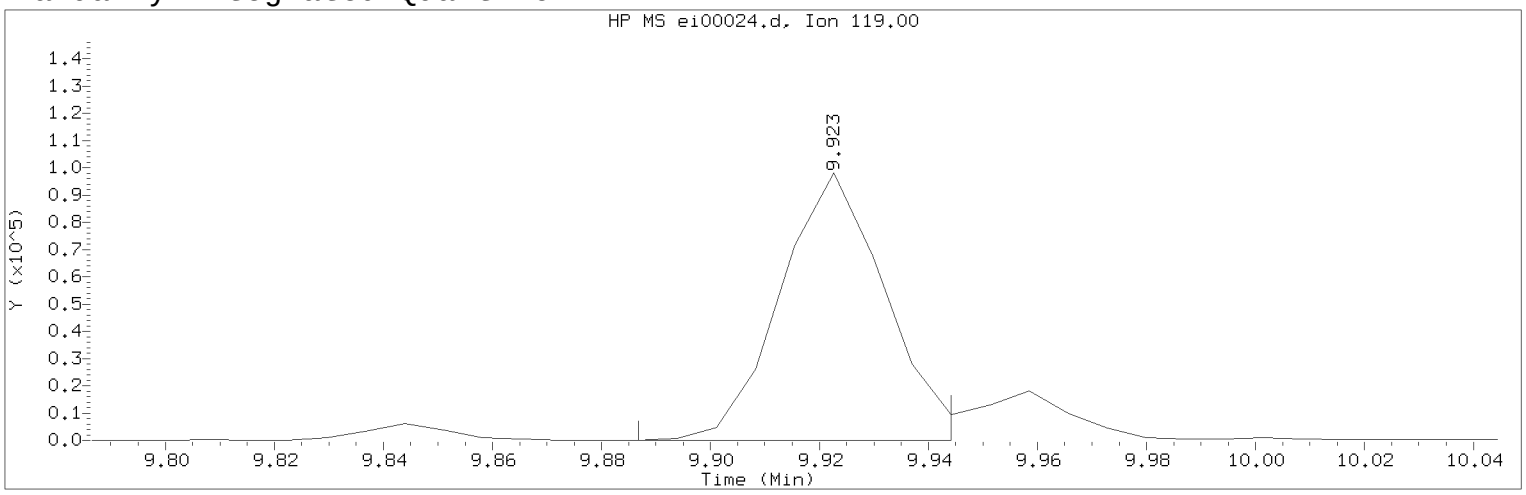
Compound Number : 80
Compound Name : Cumene
Scan Number : 1277
Retention Time (minutes): 9.235
Quant Ion : 105.00
Area : 63812
Concentration (ppb(v)) : 0.6455
Integration start scan : 1266 Integration stop scan: 1276
Y at integration start : 351 Y at integration end: 351

Digitally signed by Jacob E. Bailey on 09/05/2018 at 15:39.
Target 3.5 esignature userGLE02jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00024.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 12:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:07
Date, time and analyst ID of latest file update: 05-Sep-2018 14:07 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

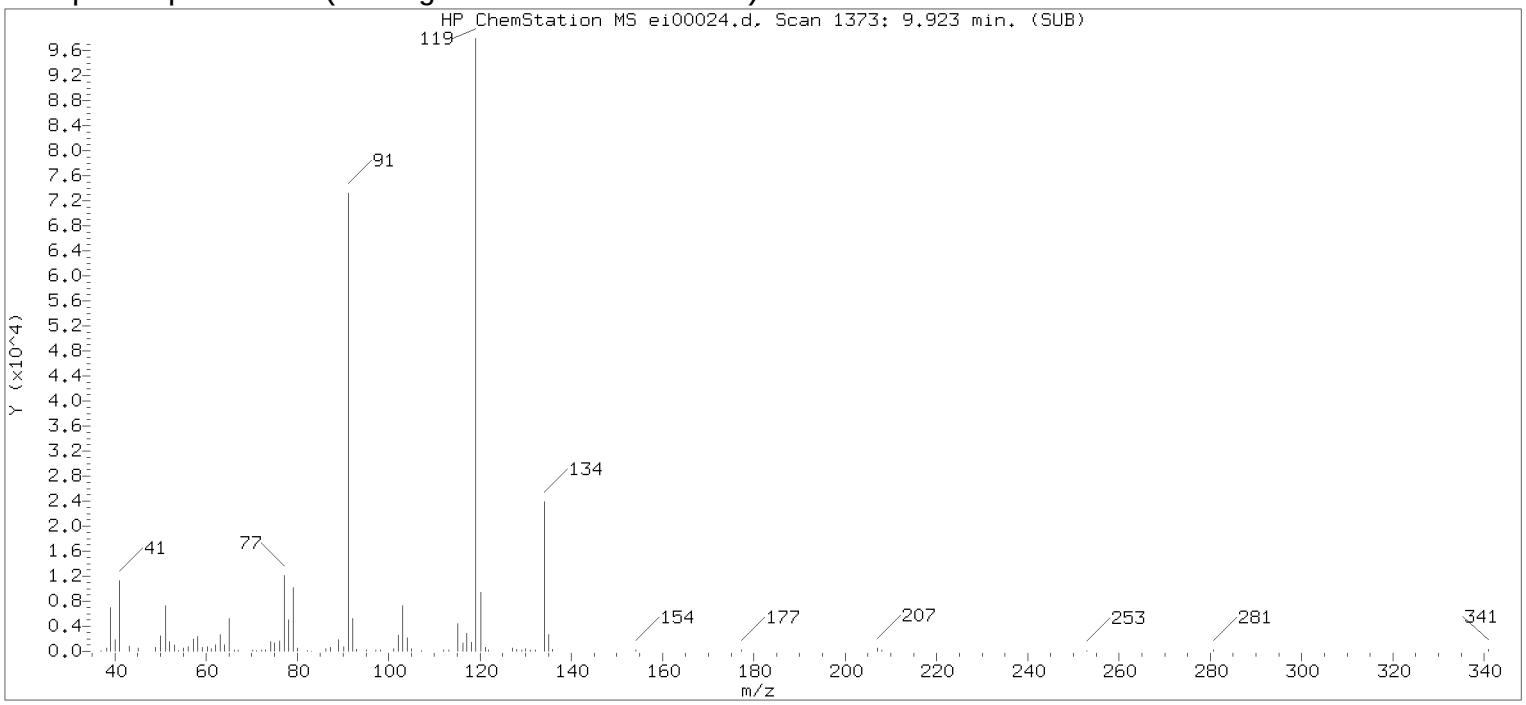
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.923
Quant Ion : 119.00
Area (flag) : 131624M
Concentration (ppb(v)) : 1.2255
Integration start scan : 1367 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

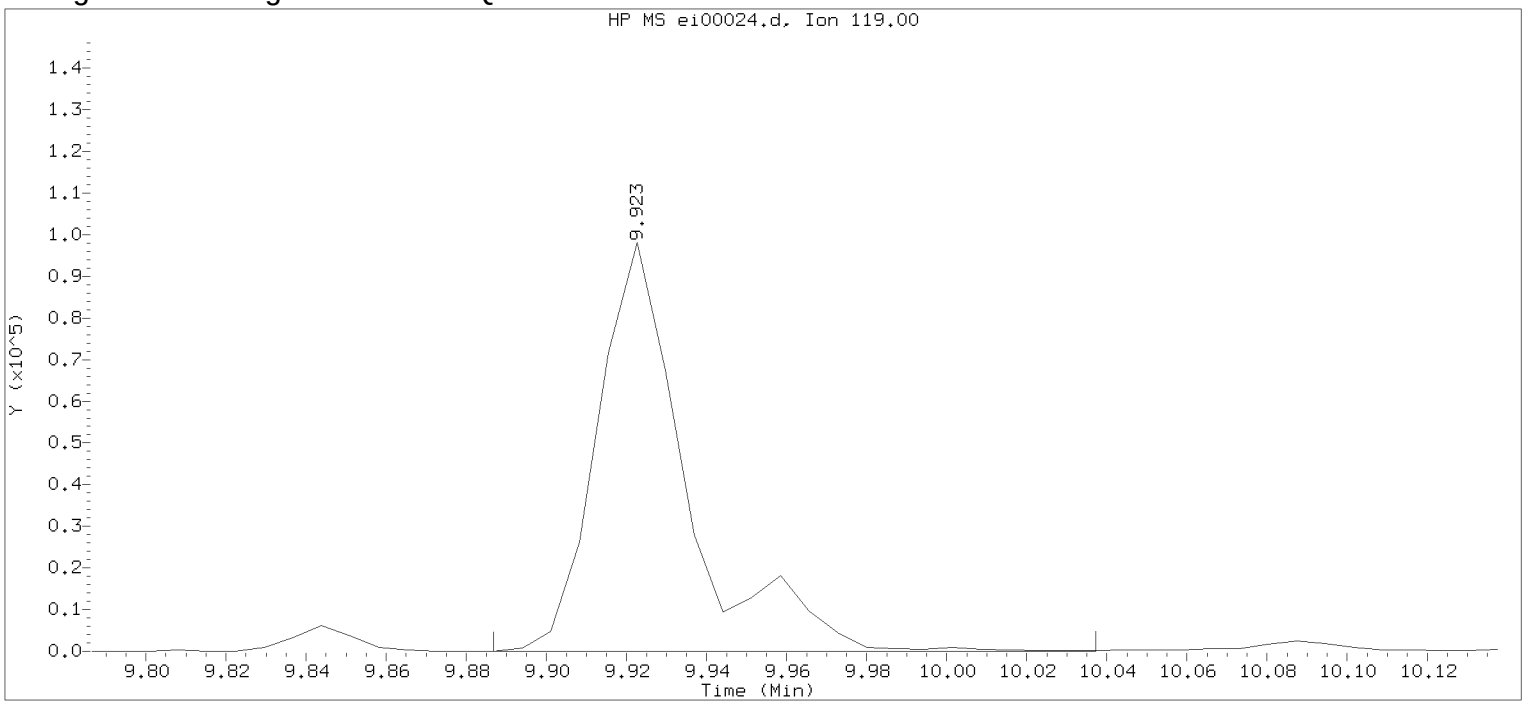
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:28.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



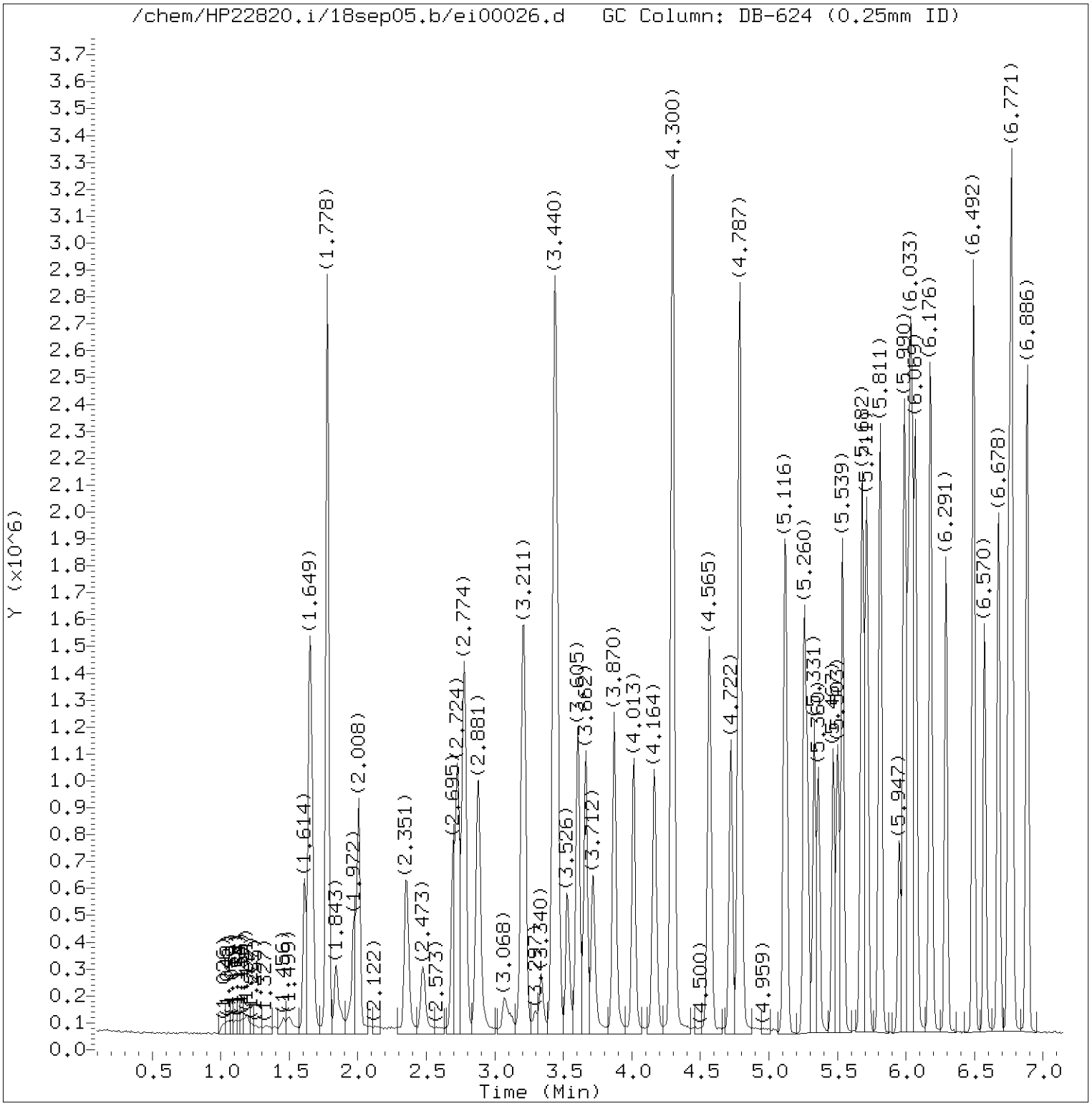
Data File: /chem/HP22820.i/18sep05.b/ei00024.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 12:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 27-AUG-2018 09:31
Date, time and analyst ID of latest file update: 05-Sep-2018 12:52 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.923
Quant Ion : 119.00
Area : 152798
Concentration (ppb(v)) : 1.8877
Integration start scan : 1367 Integration stop scan: 1388
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 09/05/2018 at 15:39.
Target 3.5 esignature userGLE02jeb07445



Total Ion Chromatogram (TIC)

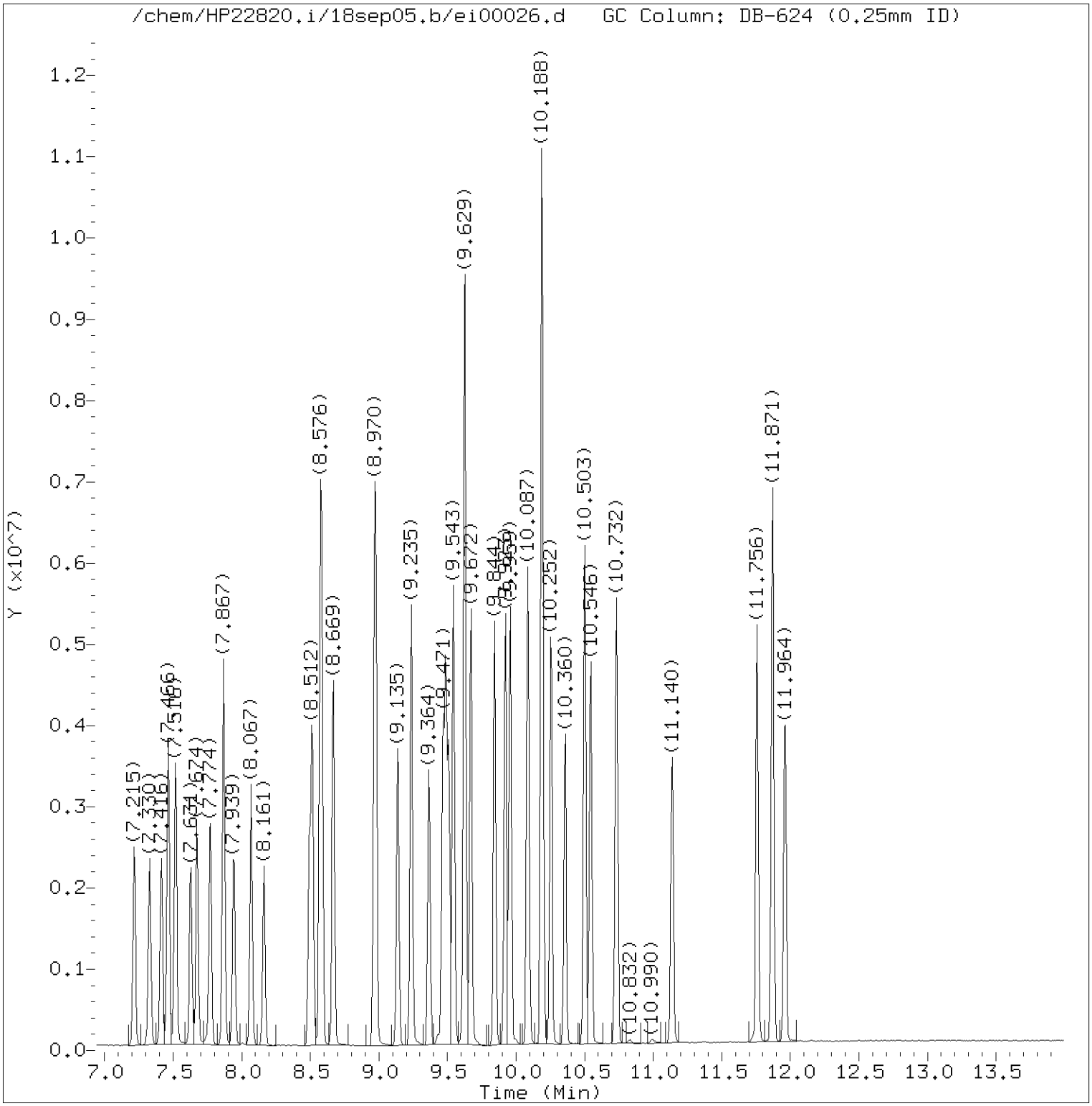
Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00026.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 13:18 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:47
Date, time and analyst ID of latest file update: 05-Sep-2018 13:47 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:39.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00026.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 13:18 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:47
Date, time and analyst ID of latest file update: 05-Sep-2018 13:47 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:40.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00026.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 13:18 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:47
Date, time and analyst ID of latest file update: 05-Sep-2018 13:47 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.614	41	340892	26.034
2) Dichlorodifluoromethane	(1)	1.649	85	1370605	26.615
3) Chlorodifluoromethane	(1)	1.664	51	691900	26.810
4) Freon 114	(1)	1.778	85	1378499	26.371
5) Chloromethane	(1)	1.843	50	252109	24.118
6) Vinyl Chloride	(1)	1.972	62	499019	26.979
7) 1,3-Butadiene	(1)	2.008	54	365671	25.825
8) Bromomethane	(1)	2.351	94	470453	27.223
9) Chloroethane	(1)	2.473	64	273359	26.039
10) Bromoethene	(1)	2.695	106	497837	26.820
11) Dichlorofluoromethane	(1)	2.724	67	1127068	26.514
12) Trichlorofluoromethane	(1)	2.774	101	1424214	25.771
13) Pentane	(1)	2.881	43	785615	25.021
14) Ethanol	(1)	3.068	45	181586	24.309
16) Acrolein	(1)	3.340	56	198372	26.609
17) 1,1-Dichloroethene	(1)	3.433	61	823501	26.294
18) Freon 113	(1)	3.447	103	733868	24.727
19) Acetone	(1)	3.526	43	667885	24.922
20) Methyl Iodide	(1)	3.605	142	1358005	26.770
21) Carbon Disulfide	(1)	3.662	76	1478850	26.663
22) Isopropanol	(1)	3.712	45	806728	24.783
23) Acetonitrile	(1)	3.870	40	258712	19.122
24) 3-Chloropropene	(1)	3.870	76	250911	27.708
25) Methylene Chloride	(1)	4.013	84	488085	28.960
26) tert-Butyl Alcohol	(1)	4.164	59	1247356	26.947
28) trans-1,2-Dichloroethene	(1)	4.293	61	733269	26.406
27) Acrylonitrile	(1)	4.300	53	402637	25.457
29) Methyl t-Butyl Ether	(1)	4.300	73	1607963	25.414
30) Hexane	(1)	4.565	57	783835	24.900
31) 1,1-Dichloroethane	(1)	4.722	63	936642	25.250
32) Vinyl Acetate	(1)	4.787	86	166167	27.784
33) Di-Isopropyl Ether	(1)	4.787	45	1565804	25.561
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	1585328	25.631
35) cis-1,2-Dichloroethene	(1)	5.260	61	718363	26.352
37) 2-Butanone	(1)	5.281	72	295304	24.597
38) Ethyl Acetate	(1)	5.331	70	146723	24.238
39) Methyl Acrylate	(1)	5.360	55	890653	25.139
40)*Bromochloromethane	(1)	5.467	130	294634	10.000

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:40.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00026.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 13:18 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:47
Date, time and analyst ID of latest file update: 05-Sep-2018 13:47 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
41) Tetrahydrofuran	(1)	5.503	42	537382	24.157
42) Chloroform	(1)	5.539	83	1196209	25.331
43) 1,1,1-Trichloroethane	(1)	5.682	97	1238240	25.283
44) Cyclohexane	(1)	5.711	56	816302	25.109
45) Carbon Tetrachloride	(1)	5.811	117	1225791	25.626
46) Benzene	(2)	5.990	78	1752543	25.169
47) 1,2-Dichloroethane	(2)	6.012	62	750782	25.420
48) Isooctane	(2)	6.033	57	2463343	25.953
49) Tert-Amyl Methyl Ether	(2)	6.069	73	1564538	25.193
50) Heptane	(2)	6.176	43	861950	24.284
51)*1,4-Difluorobenzene	(2)	6.291	114	1116407	10.000
52) Trichloroethene	(2)	6.492	130	739835	24.965
53) Ethyl Acrylate	(2)	6.570	55	1210382	24.842
36) 1,2-Dichloroethene (total)	(1)		61	1451632	52.758
54) 1,2-Dichloropropane	(2)	6.678	63	607485	25.178
57) Methyl Methacrylate	(2)	6.749	69	655686	24.804
56) 1,4-Dioxane	(2)	6.771	88	427301	24.494
55) Dibromomethane	(2)	6.771	174	748018	25.395
58) Bromodichloromethane	(2)	6.886	83	1268151	25.103
59) cis-1,3-Dichloropropene	(2)	7.215	75	1094209	24.820
60) 4-Methyl-2-Pentanone	(2)	7.330	43	1180964	23.974
61) Toluene	(3)	7.466	91	2080837	24.370
62) Octane	(3)	7.516	43	1118414	22.986
63) trans-1,3-Dichloropropene	(3)	7.631	75	957346	24.859
65) Ethyl Methacrylate	(3)	7.674	69	1125724	24.351
66) 1,1,2-Trichloroethane	(3)	7.774	97	711986	23.452
67) Tetrachloroethene	(3)	7.867	166	1141972	24.541
68) 2-Hexanone	(3)	7.939	43	1164917M	24.319
69) Dibromochloromethane	(3)	8.067	127	957478	24.413
70) 1,2-Dibromoethane	(3)	8.161	107	1126444	24.198
71)*Chlorobenzene-d5	(3)	8.490	117	1100048	10.000
72) Chlorobenzene	(3)	8.519	112	1634918	24.223
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	853756	24.345
74) Ethylbenzene	(3)	8.583	91	2757956	23.460
75) m/p-Xylene	(3)	8.669	91	2189892	23.742
76) o-Xylene	(3)	8.970	91	2178047	23.715
78) Styrene	(3)	8.977	104	1681963	23.870
79) Bromoform	(3)	9.135	173	1358930	24.613

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

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:40.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00026.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 13:18 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:47
Date, time and analyst ID of latest file update: 05-Sep-2018 13:47 jeb07445

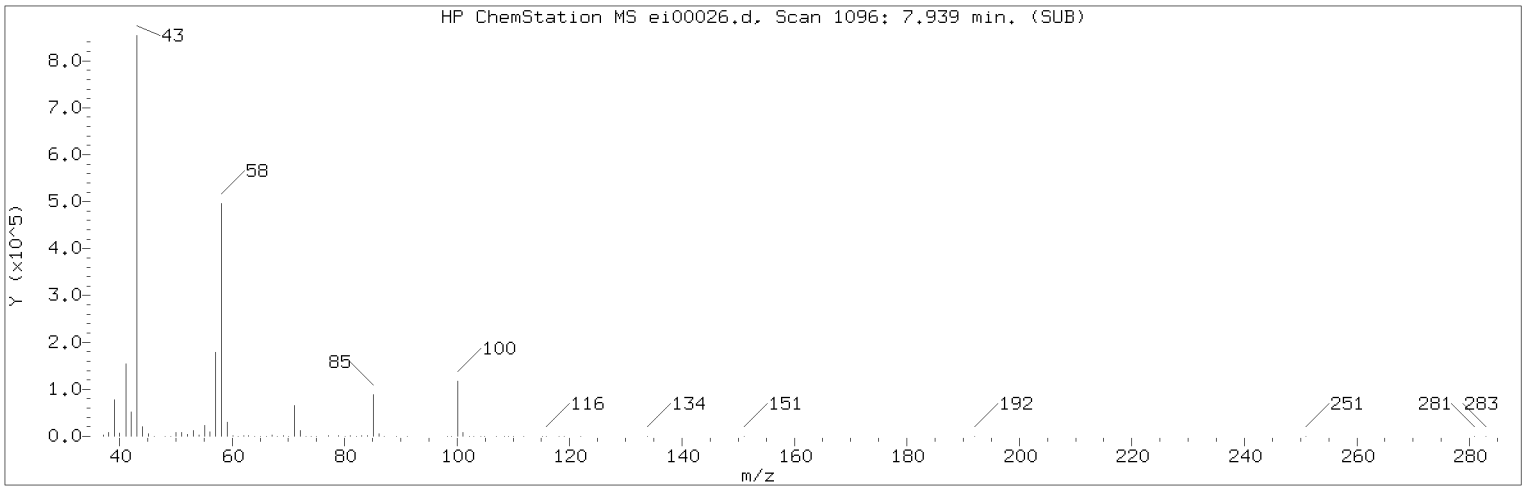
Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
80) Cumene	(3)	9.235	105	2969045	23.700
82) 1,1,2,2-Tetrachloroethane	(3)	9.464	83	1559372	23.699
81) Bromobenzene	(3)	9.493	156	1024882	24.094
83) 1,2,3-Trichloropropane	(3)	9.507	110	474575	23.281
84) n-Propylbenzene	(3)	9.543	120	814608	23.943
85) 2-Chlorotoluene	(3)	9.622	126	697267	23.485
86) 4-Ethyltoluene	(3)	9.629	105	2959227	23.704
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	2447138	23.116
88) Alpha Methyl Styrene	(3)	9.844	118	1235169	24.607
89) tert-Butylbenzene	(3)	9.923	119	2182394M	22.568
90) 1,2,4-Trimethylbenzene	(3)	9.959	105	2434185	23.416
91) sec-Butylbenzene	(3)	10.087	105	3441843	23.353
92) 1,3-Dichlorobenzene	(3)	10.188	146	1643421	24.054
94) p-Isopropyltoluene	(3)	10.188	119	2894209	23.438
93) 1,4-Dichlorobenzene	(3)	10.252	146	1694201	24.002
95) Benzyl Chloride	(3)	10.360	91	2282303	25.268
97) n-Butylbenzene	(3)	10.503	91	2864663	24.855
96) 1,2-Dichlorobenzene	(3)	10.546	146	1562402	24.221
98) Hexachloroethane	(3)	10.732	117	858972	25.565
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	881357	25.804
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	1326700	27.251
101) Hexachlorobutadiene	(3)	11.871	225	1210399	26.770
102) Naphthalene	(3)	11.964	128	2685977	26.717
64) 1,3-Dichloropropene (total)	(3)		75	2051555	49.481
77) Xylene (total)	(3)		91	4367939	47.457

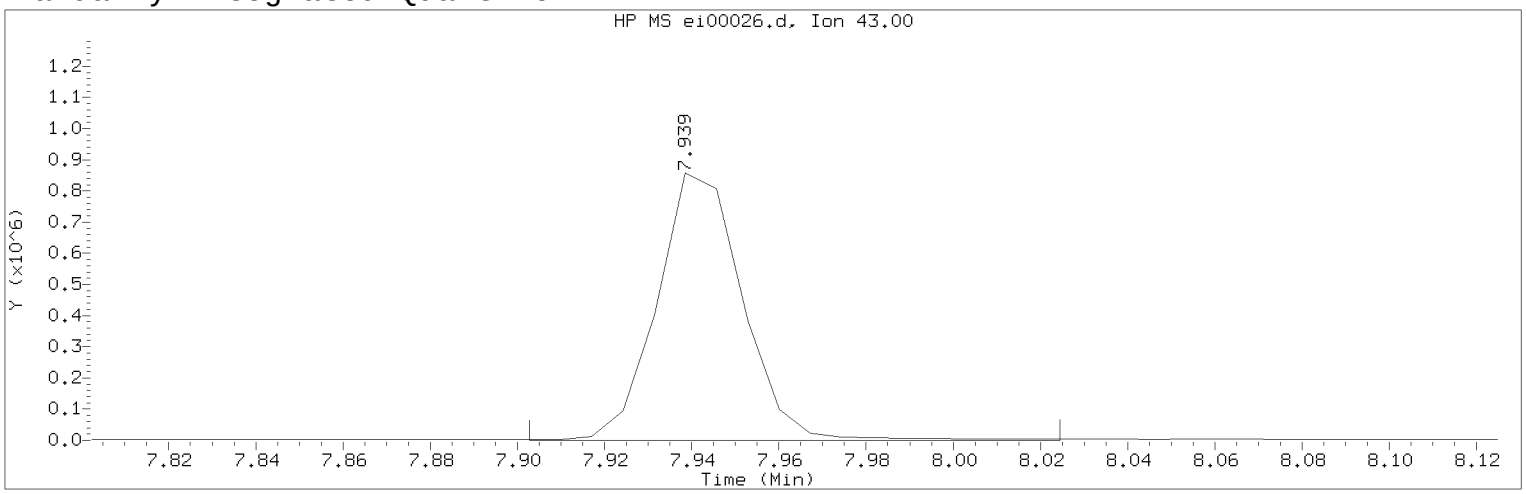
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:40.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00026.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 13:18 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:47
Date, time and analyst ID of latest file update: 05-Sep-2018 13:47 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

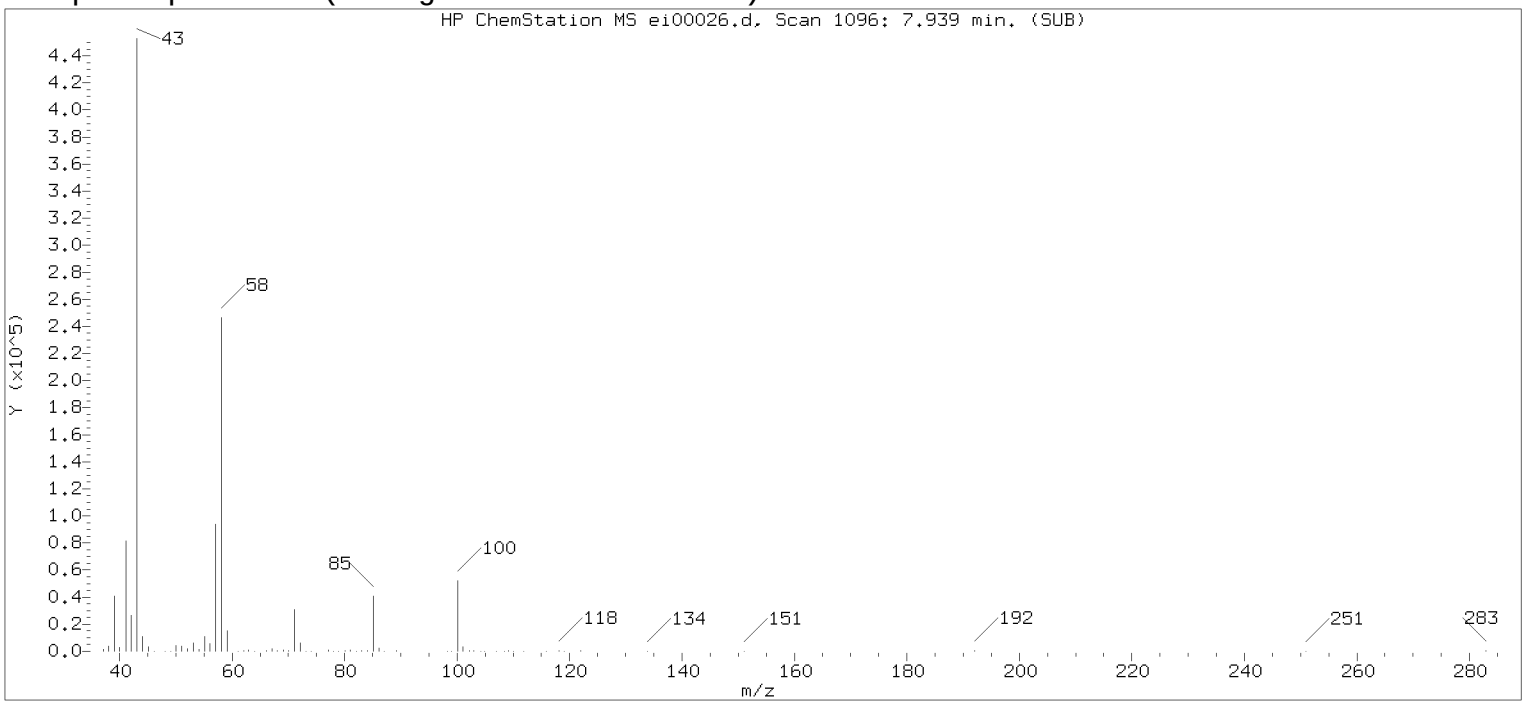
Compound Number : 68
Compound Name : 2-Hexanone
Scan Number : 1096
Retention Time (minutes): 7.939
Quant Ion : 43.00
Area (flag) : 1164917M
Concentration (ppb(v)) : 24.3185
Integration start scan : 1090 Integration stop scan: 1107
Y at integration start : 1013 Y at integration end: 1013

Reason for manual integration: improper integration

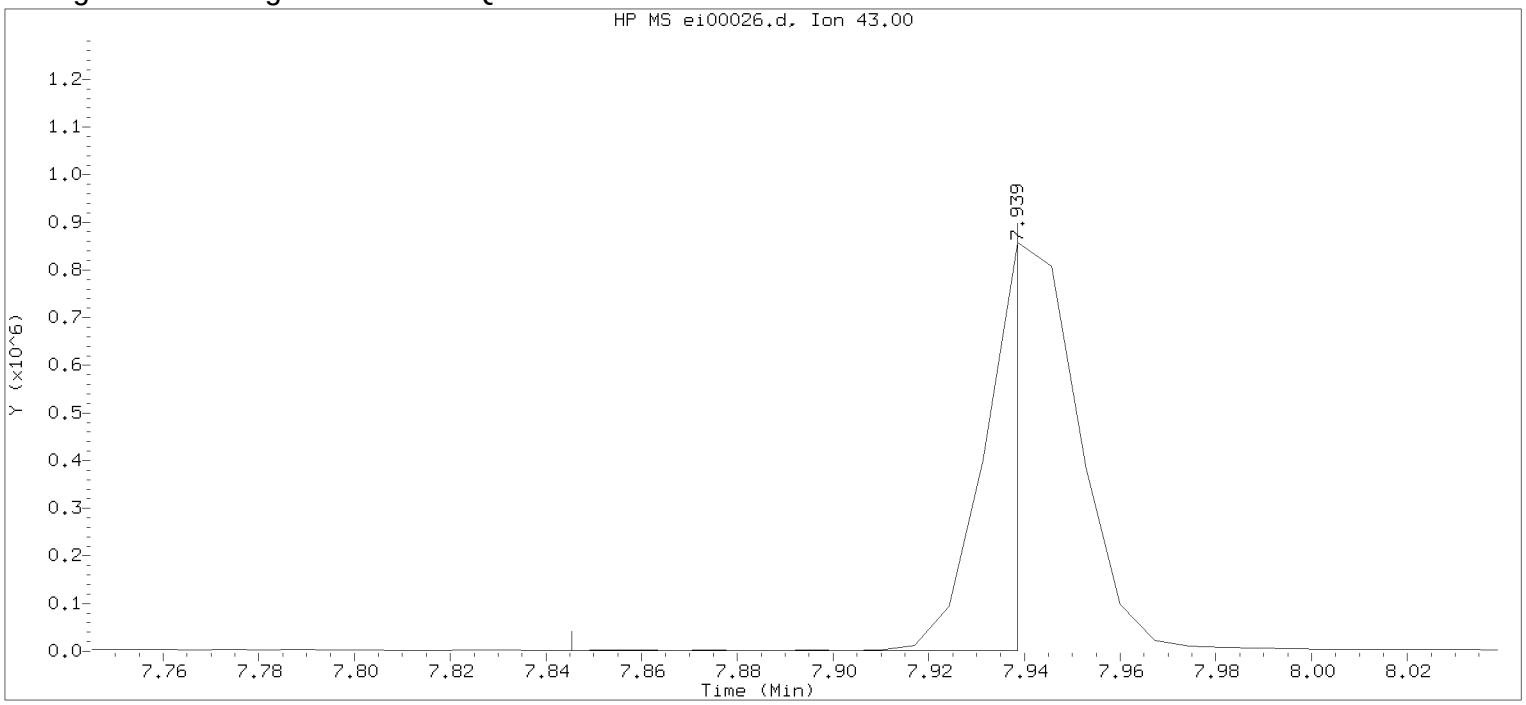
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:40.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:28.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00026.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 13:18 Analyst ID: jeb07445

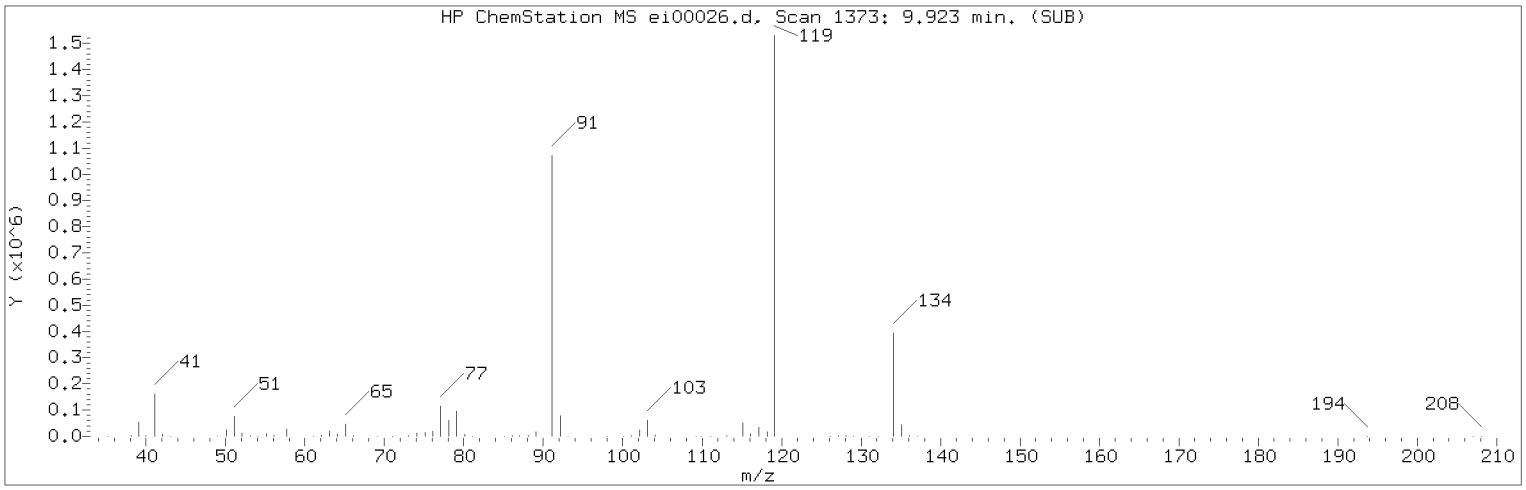
Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:16
Date, time and analyst ID of latest file update: 05-Sep-2018 13:39 Unknown

Sample Name: VSTD025 Lab Sample ID: VSTD025

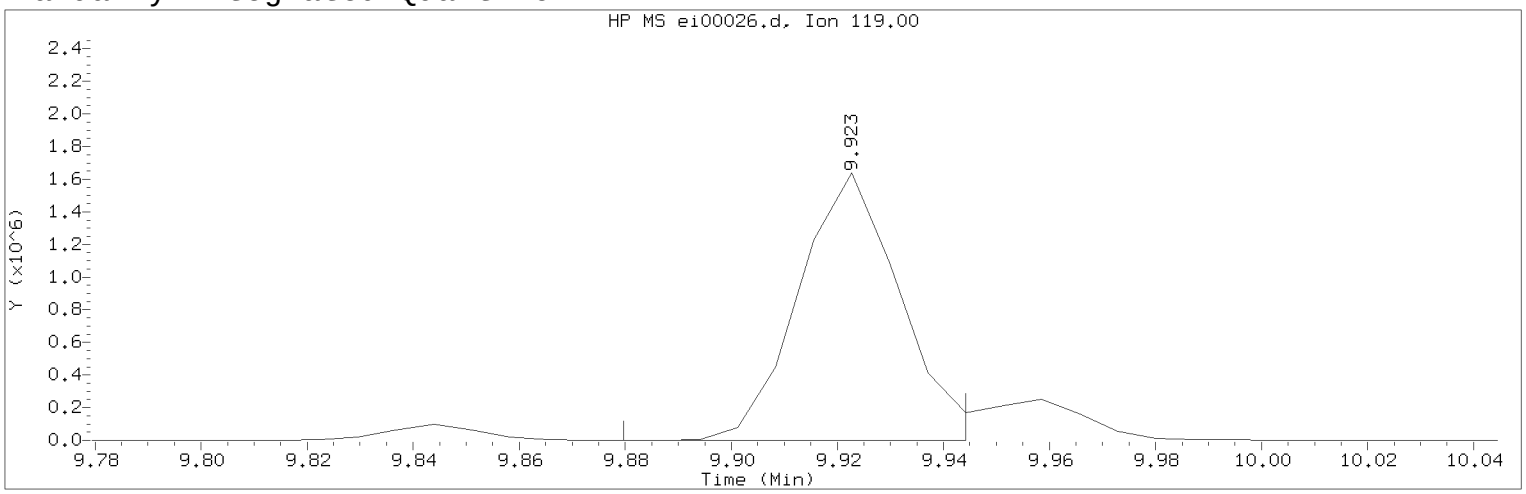
Compound Number : 68
Compound Name : 2-Hexanone
Scan Number : 1096
Retention Time (minutes): 7.939
Quant Ion : 43.00
Area : 401390
Concentration (ppb(v)) : 8.3226
Integration start scan : 1082 Integration stop scan: 1095
Y at integration start : 1772 Y at integration end: 1772

Digitally signed by Jacob E. Bailey on 09/05/2018 at 15:40.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00026.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 13:18 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:47
Date, time and analyst ID of latest file update: 05-Sep-2018 13:47 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

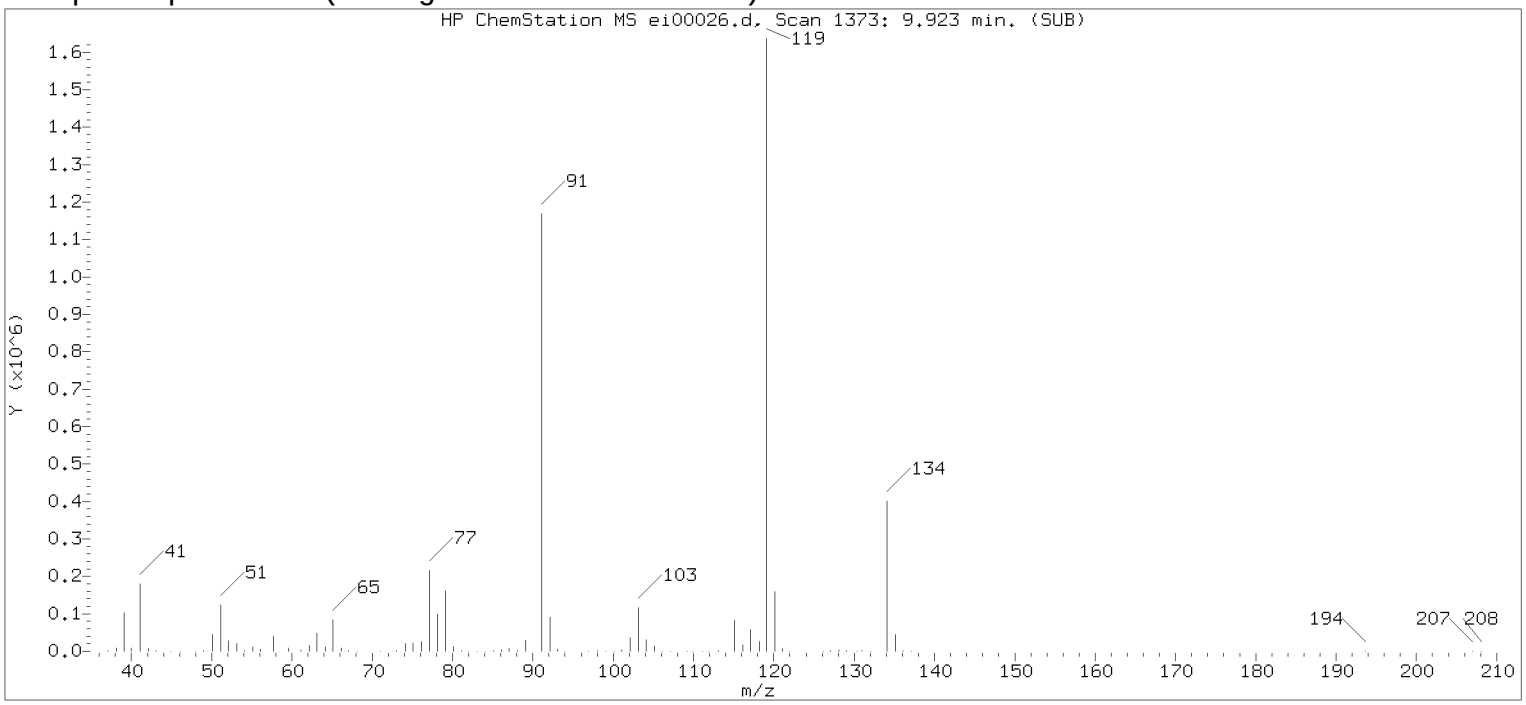
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.923
Quant Ion : 119.00
Area (flag) : 2182394M
Concentration (ppb(v)) : 22.5678
Integration start scan : 1366 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

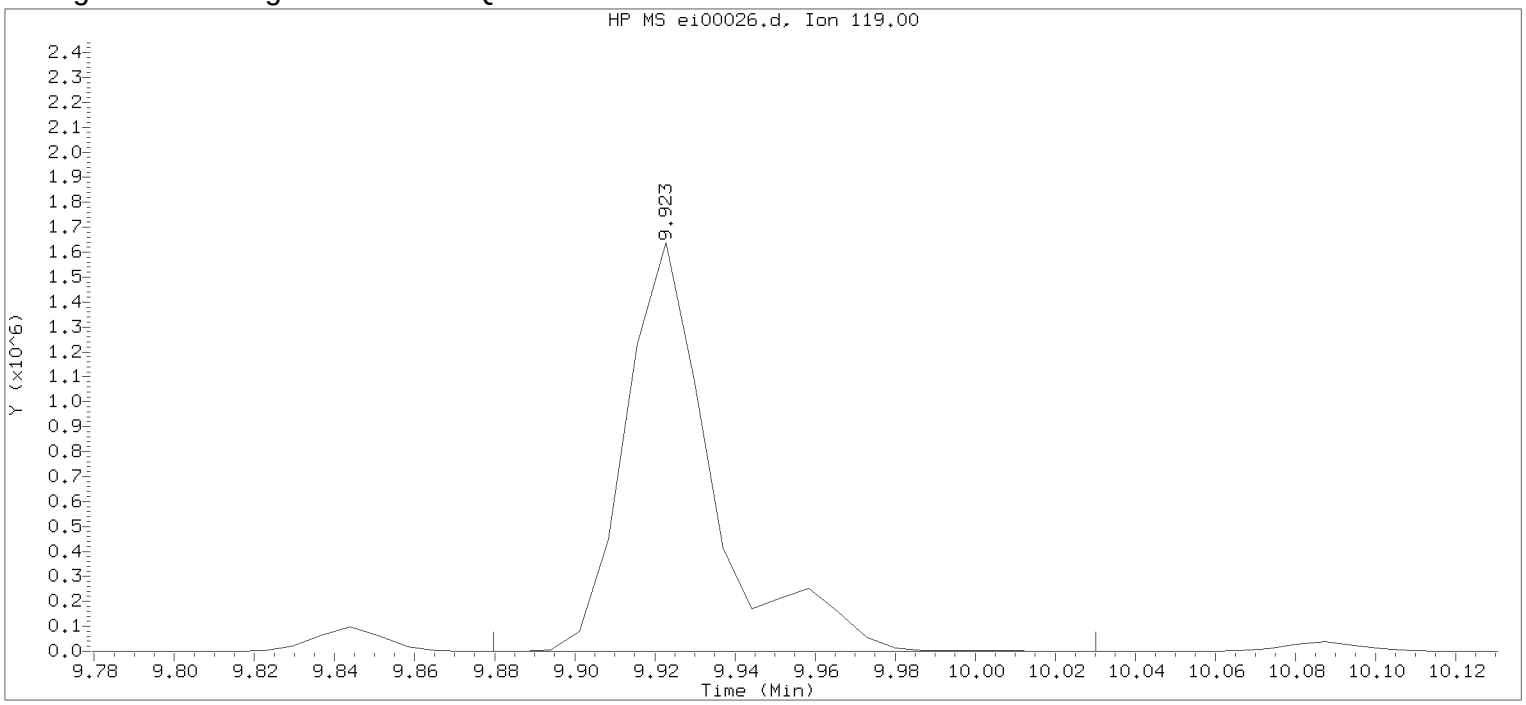
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:40.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:28.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



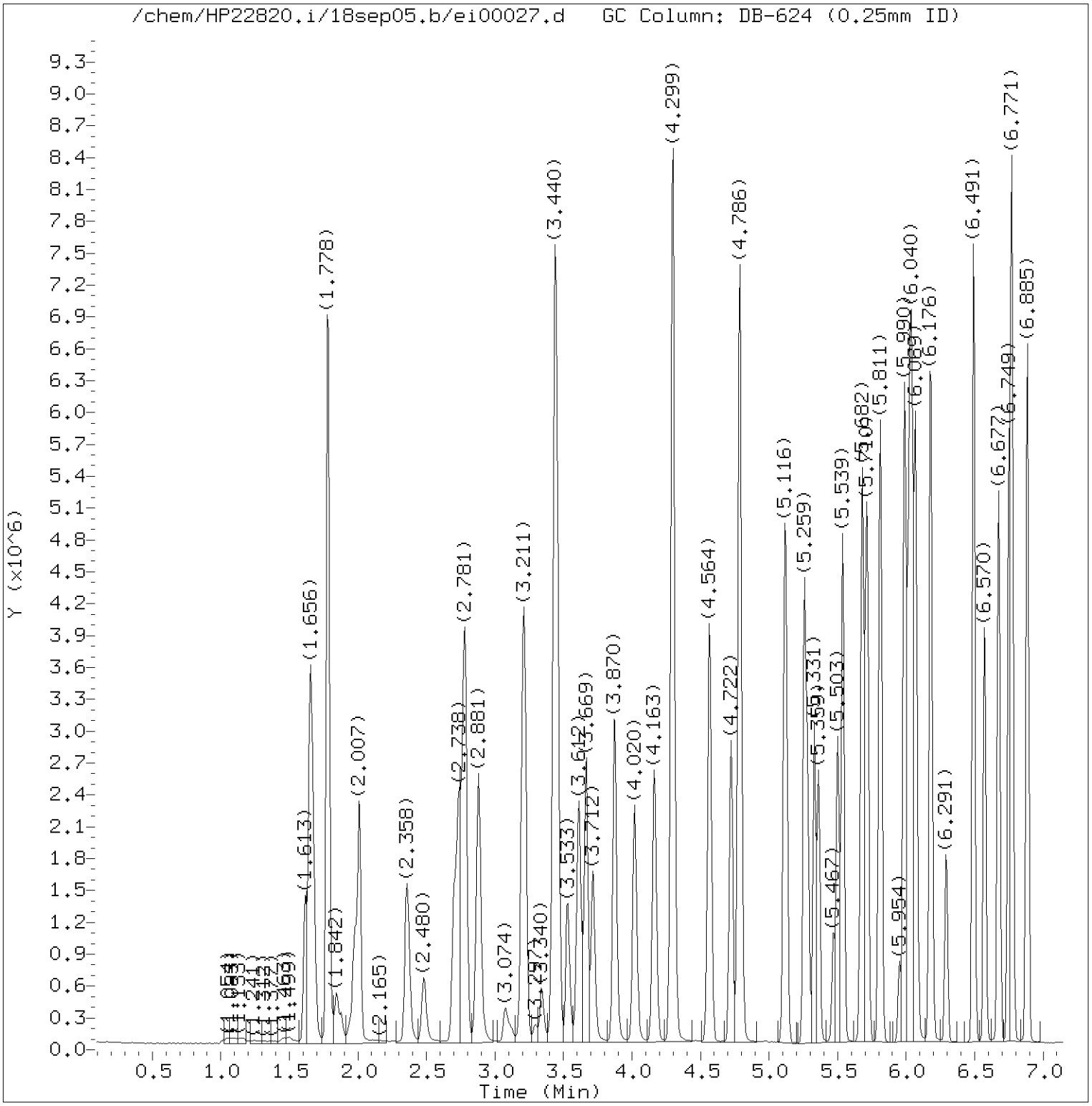
Data File: /chem/HP22820.i/18sep05.b/ei00026.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 13:18 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:16
Date, time and analyst ID of latest file update: 05-Sep-2018 13:39 Unknown

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.923
Quant Ion : 119.00
Area : 2484177
Concentration (ppb(v)) : 25.0785
Integration start scan : 1366 Integration stop scan: 1387
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 09/05/2018 at 15:40.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

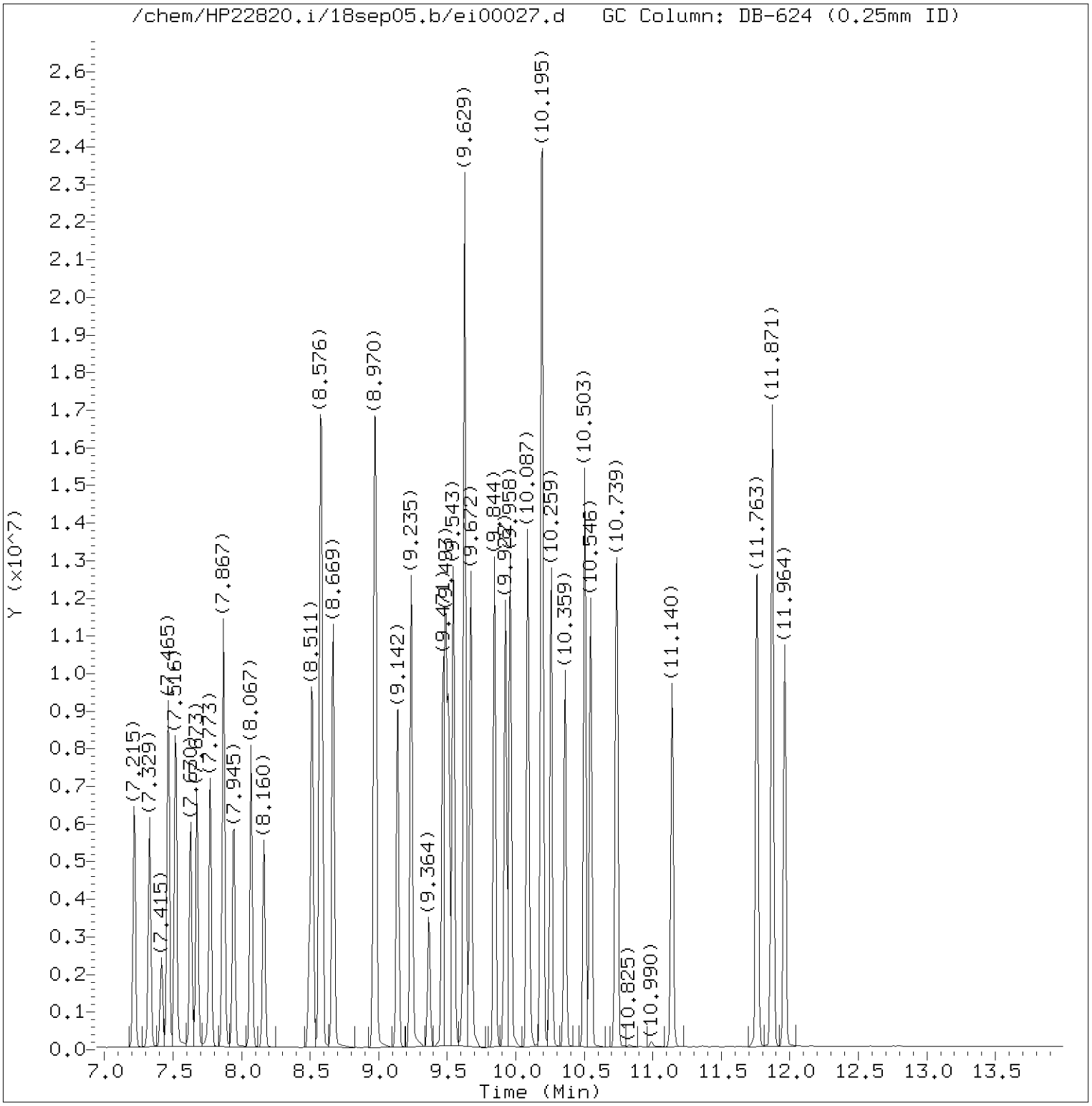
Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00027.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 13:43 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 14:09 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:40.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00027.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 13:43 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 14:09 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:40.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00027.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 13:43 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 14:09 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.613	41	941968	69.880
2) Dichlorodifluoromethane	(1)	1.649	85	3779552	71.052
3) Chlorodifluoromethane	(1)	1.671	51	1867782	70.231
4) Freon 114	(1)	1.778	85	3720358	69.257
5) Chloromethane	(1)	1.842	50	658998	62.525
6) Vinyl Chloride	(1)	1.979	62	1352215	70.822
7) 1,3-Butadiene	(1)	2.014	54	1012775	69.545
8) Bromomethane	(1)	2.358	94	1340523	74.381
9) Chloroethane	(1)	2.480	64	745524	69.130
10) Bromoethene	(1)	2.702	106	1346827	70.380
11) Dichlorofluoromethane	(1)	2.738	67	3002605	68.822
12) Trichlorofluoromethane	(1)	2.781	101	3837264	67.840
13) Pentane	(1)	2.881	43	2081458	65.247
14) Ethanol	(1)	3.074	45	487308	64.366
16) Acrolein	(1)	3.340	56	533565	69.582
17) 1,1-Dichloroethene	(1)	3.433	61	2191525	68.281
18) Freon 113	(1)	3.447	103	1922555	63.985
19) Acetone	(1)	3.533	43	1784578	65.495
20) Methyl Iodide	(1)	3.612	142	3217546	62.849
21) Carbon Disulfide	(1)	3.669	76	3924542	68.920
22) Isopropanol	(1)	3.712	45	2155925	65.196
24) 3-Chloropropene	(1)	3.870	76	674789	73.198
23) Acetonitrile	(1)	3.877	40	663358	55.364
25) Methylene Chloride	(1)	4.020	84	1289085	74.822
26) tert-Butyl Alcohol	(1)	4.163	59	3298374	70.478
28) trans-1,2-Dichloroethene	(1)	4.292	61	1932201	67.960
27) Acrylonitrile	(1)	4.299	53	1069933	66.369
29) Methyl t-Butyl Ether	(1)	4.299	73	4152762M	64.700
30) Hexane	(1)	4.564	57	2075231	64.940
31) 1,1-Dichloroethane	(1)	4.722	63	2522513	66.664
32) Vinyl Acetate	(1)	4.786	86	440215	72.542
33) Di-Isopropyl Ether	(1)	4.786	45	4071434	65.391
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	4200885	66.593
35) cis-1,2-Dichloroethene	(1)	5.259	61	1903062	68.148
37) 2-Butanone	(1)	5.281	72	764348	63.049
38) Ethyl Acetate	(1)	5.331	70	390514	63.761
39) Methyl Acrylate	(1)	5.359	55	2314421	64.442
40)*Bromochloromethane	(1)	5.474	130	303420	10.000

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

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:40.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00027.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 13:43 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 14:09 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
41) Tetrahydrofuran	(1)	5.503	42	1412529	62.909
42) Chloroform	(1)	5.539	83	3122514	65.106
43) 1,1,1-Trichloroethane	(1)	5.682	97	3220150	64.796
44) Cyclohexane	(1)	5.710	56	2098777	63.800
45) Carbon Tetrachloride	(1)	5.811	117	3178726	65.381
46) Benzene	(2)	5.990	78	4536600	63.606
47) 1,2-Dichloroethane	(2)	6.011	62	1952528	64.396
48) Isooctane	(2)	6.040	57	6417707	65.633
49) Tert-Amyl Methyl Ether	(2)	6.069	73	4076571	64.012
50) Heptane	(2)	6.176	43	2188308	60.681
51)*1,4-Difluorobenzene	(2)	6.291	114	1164457	10.000
52) Trichloroethene	(2)	6.491	130	1918694	63.268
53) Ethyl Acrylate	(2)	6.570	55	3122573	62.721
36) 1,2-Dichloroethene (total)	(1)		61	3835263	136.108
54) 1,2-Dichloropropane	(2)	6.677	63	1554494	63.005
57) Methyl Methacrylate	(2)	6.749	69	1690906	62.619
55) Dibromomethane	(2)	6.771	174	1938652	64.154
56) 1,4-Dioxane	(2)	6.778	88	1080964	60.945
58) Bromodichloromethane	(2)	6.885	83	3297594	63.707
59) cis-1,3-Dichloropropene	(2)	7.215	75	2870558	63.573
60) 4-Methyl-2-Pentanone	(2)	7.329	43	3061906	61.107
61) Toluene	(3)	7.465	91	5273056	61.555
62) Octane	(3)	7.516	43	2830886	58.486
63) trans-1,3-Dichloropropene	(3)	7.630	75	2511807	64.479
65) Ethyl Methacrylate	(3)	7.673	69	2872764	61.883
66) 1,1,2-Trichloroethane	(3)	7.773	97	1812694	59.804
67) Tetrachloroethene	(3)	7.867	166	2835525	60.854
68) 2-Hexanone	(3)	7.945	43	2938408	61.201
69) Dibromochloromethane	(3)	8.067	127	2492171	63.069
70) 1,2-Dibromoethane	(3)	8.160	107	2853351	61.163
71)*Chlorobenzene-d5	(3)	8.497	117	1130285	10.000
72) Chlorobenzene	(3)	8.518	112	4176217	61.656
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	2186866	62.066
74) Ethylbenzene	(3)	8.583	91	6762339	57.917
75) m/p-Xylene	(3)	8.669	91	5489802	59.641
76) o-Xylene	(3)	8.970	91	5415995	59.168
78) Styrene	(3)	8.977	104	4144144	59.032
79) Bromoform	(3)	9.142	173	3513020	63.139

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:40.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00027.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 13:43 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 14:09 jeb07445

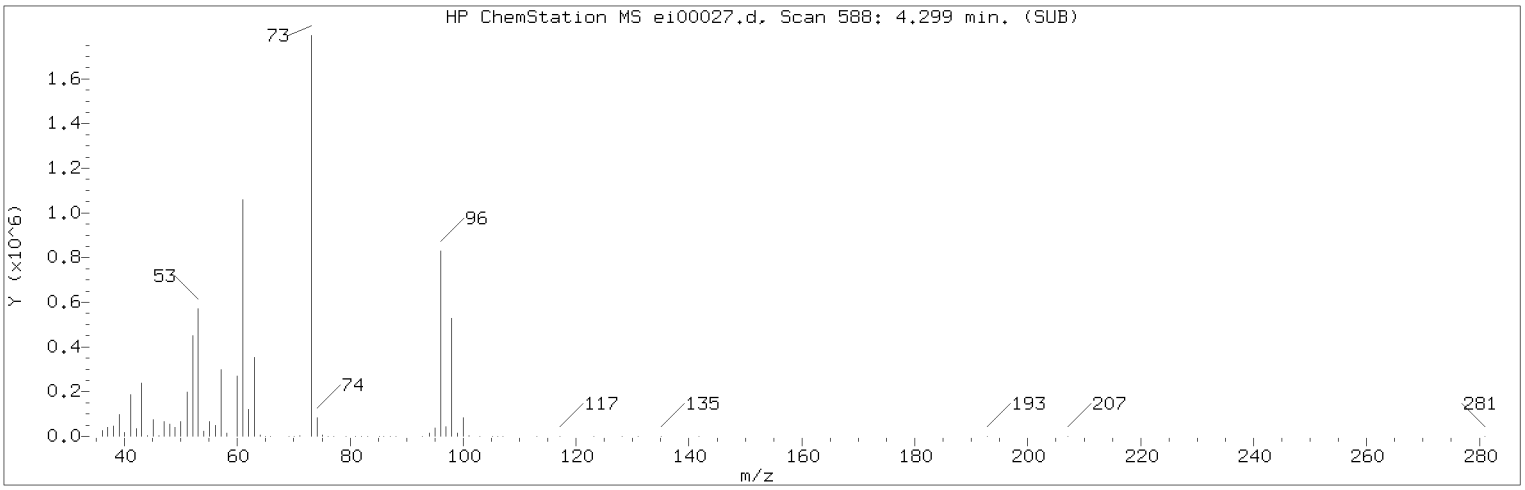
Sample Name: VSTD070 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
80) Cumene	(3)	9.235	105	7307848	58.619
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	3958647	60.193
81) Bromobenzene	(3)	9.493	156	2559038	60.192
83) 1,2,3-Trichloropropane	(3)	9.514	110	1188487	58.592
84) n-Propylbenzene	(3)	9.550	120	2014041	59.363
86) 4-Ethyltoluene	(3)	9.629	105	6935604	56.202
85) 2-Chlorotoluene	(3)	9.629	126	1694988	55.564
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	5974632	56.972
88) Alpha Methyl Styrene	(3)	9.844	118	3150609	61.088
89) tert-Butylbenzene	(3)	9.922	119	5076368M	51.090
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	5851011	56.838
91) sec-Butylbenzene	(3)	10.087	105	8061961	53.238
92) 1,3-Dichlorobenzene	(3)	10.195	146	3958548	58.278
94) p-Isopropyltoluene	(3)	10.195	119	6757931	53.263
93) 1,4-Dichlorobenzene	(3)	10.259	146	4180365	59.387
95) Benzyl Chloride	(3)	10.359	91	5885773	63.419
97) n-Butylbenzene	(3)	10.503	91	6837151	57.735
96) 1,2-Dichlorobenzene	(3)	10.546	146	3852420	59.816
98) Hexachloroethane	(3)	10.732	117	2270555	65.770
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	2283609	65.843
100) 1,2,4-Trichlorobenzene	(3)	11.763	180	3486990	69.756
101) Hexachlorobutadiene	(3)	11.871	225	3074489	66.177
102) Naphthalene	(3)	11.964	128	6907667	66.870
64) 1,3-Dichloropropene (total)	(3)		75	5382365	128.431
77) Xylene (total)	(3)		91	10905797	118.810

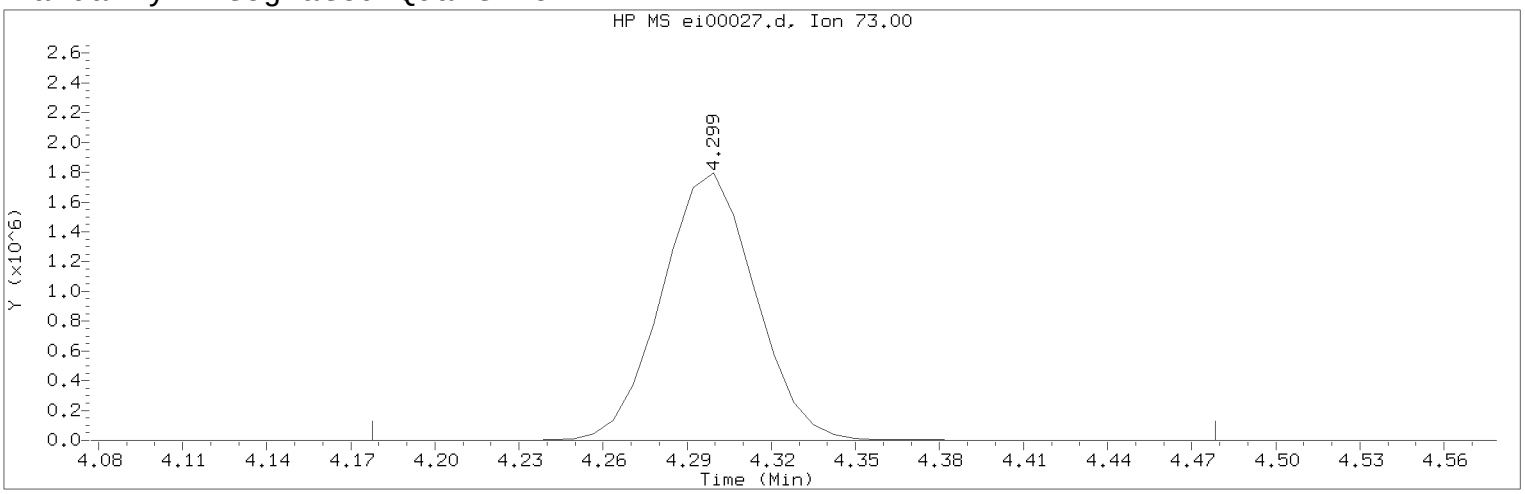
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:40.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



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Injection date and time: 05-SEP-2018 13:43 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 14:09 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

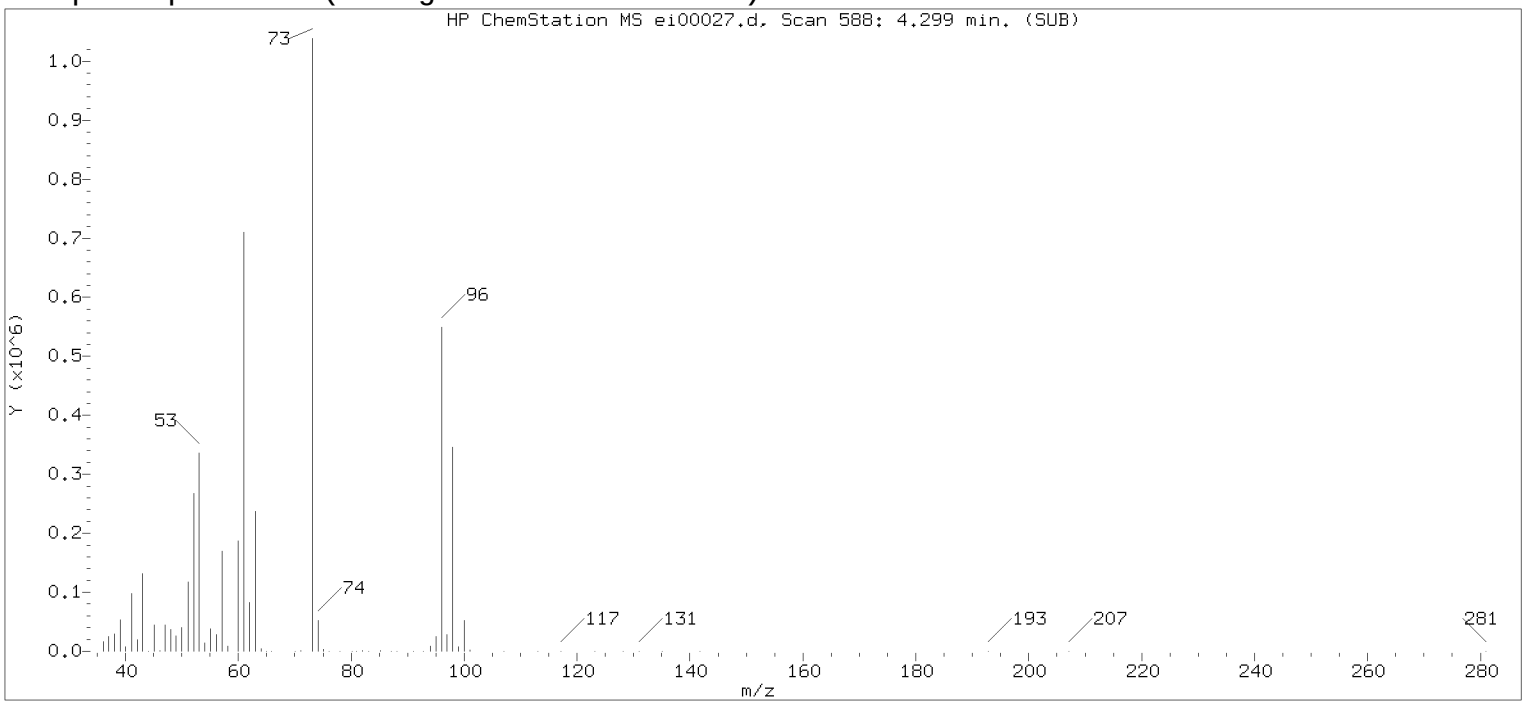
Compound Number : 29
Compound Name : Methyl t-Butyl Ether
Scan Number : 588
Retention Time (minutes): 4.299
Quant Ion : 73.00
Area (flag) : 4152762M
Concentration (ppb(v)) : 64.7005
Integration start scan : 570 Integration stop scan: 612
Y at integration start : 766 Y at integration end: 884

Reason for manual integration: improper integration

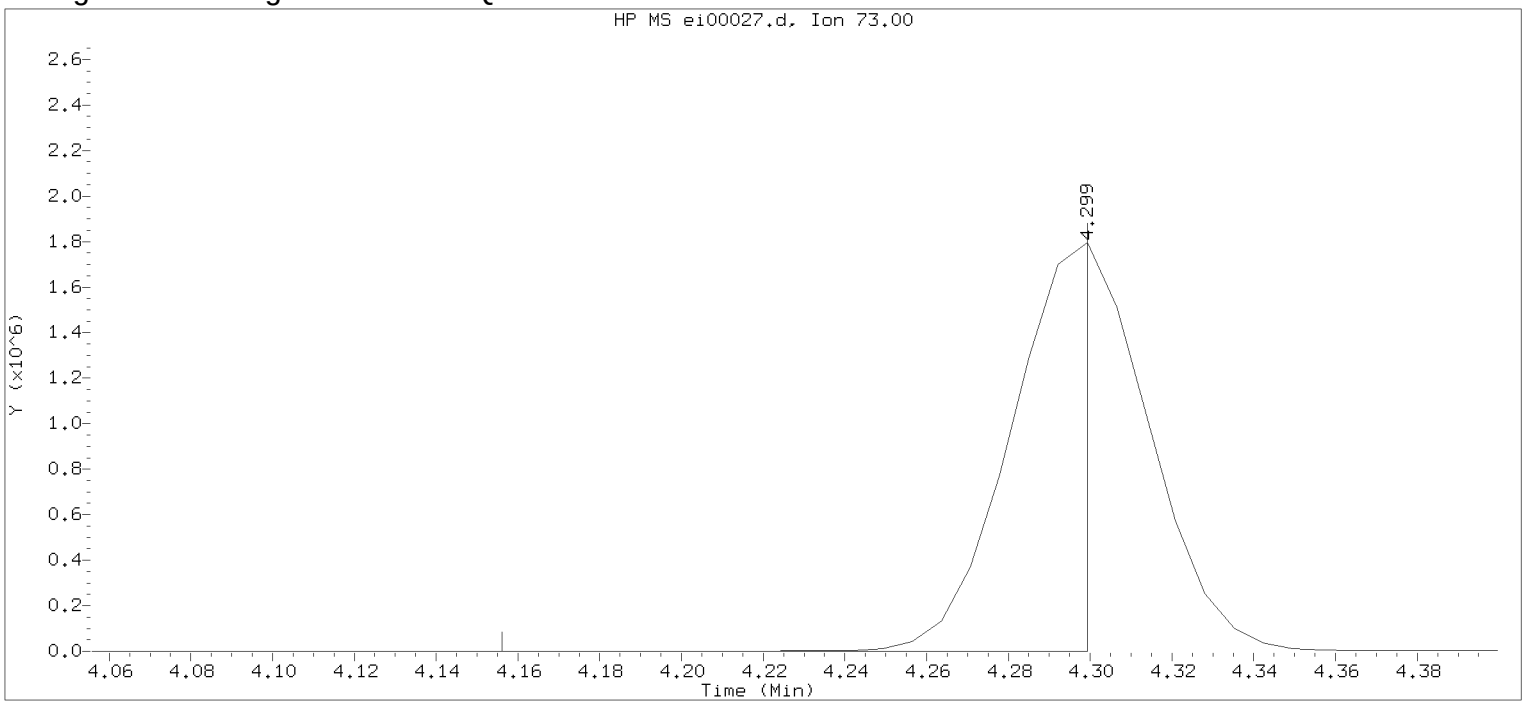
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:40.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:28.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00027.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 13:43 Analyst ID: jeb07445

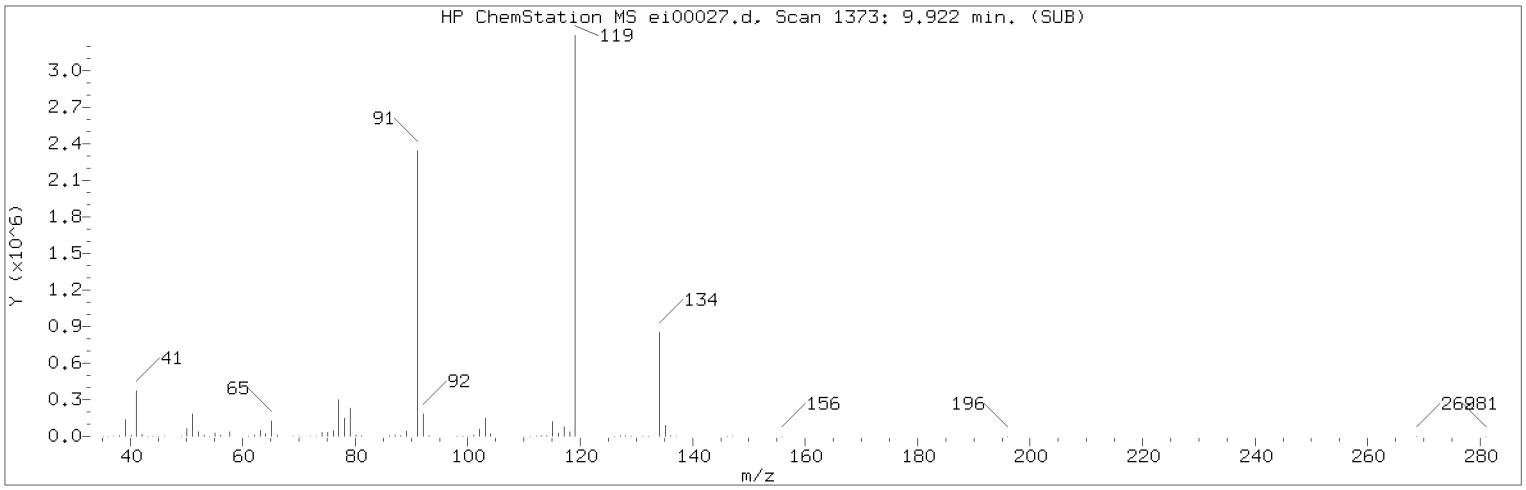
Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:47
Date, time and analyst ID of latest file update: 05-Sep-2018 14:04 Unknown

Sample Name: VSTD070 Lab Sample ID: VSTD070

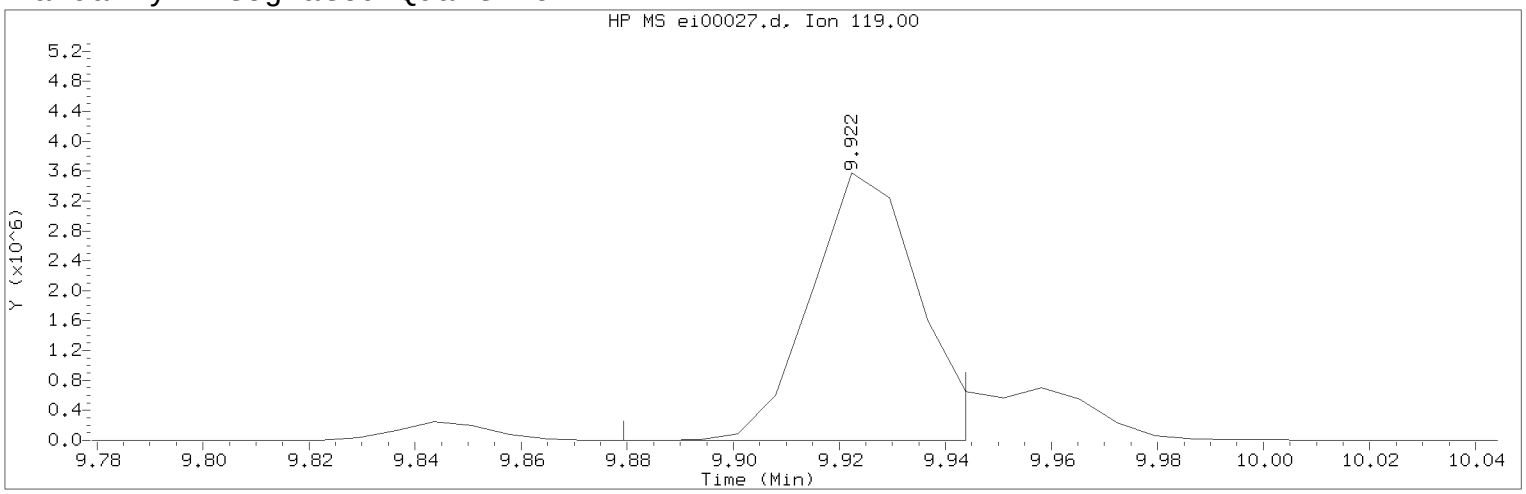
Compound Number : 29
Compound Name : Methyl t-Butyl Ether
Scan Number : 588
Retention Time (minutes): 4.299
Quant Ion : 73.00
Area : 2245695
Concentration (ppb(v)) : 34.4663
Integration start scan : 567 Integration stop scan: 587
Y at integration start : 519 Y at integration end: 519

Digitally signed by Jacob E. Bailey on 09/05/2018 at 15:40.
Target 3.5 esignature user=JEB07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00027.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 13:43 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 14:09 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

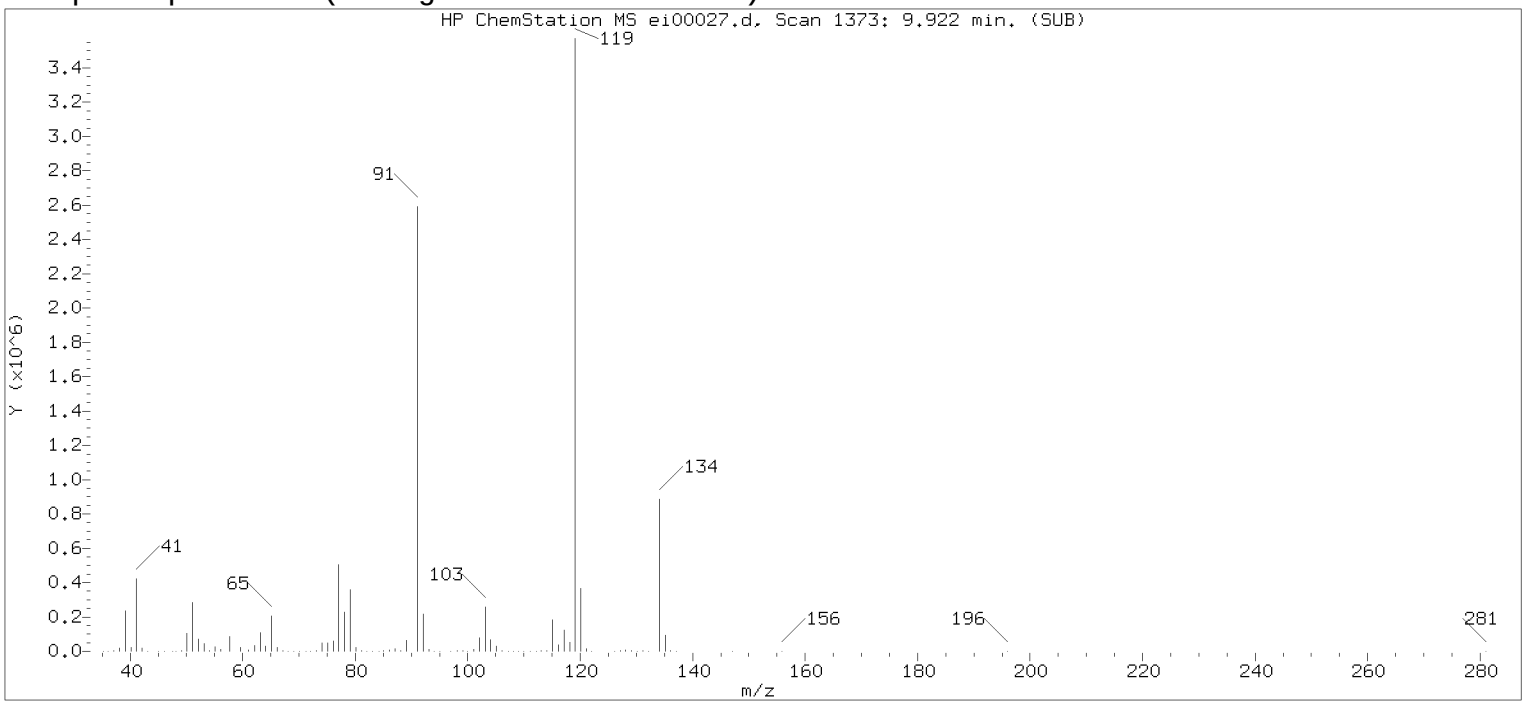
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 5076368M
Concentration (ppb(v)) : 51.0896
Integration start scan : 1366 Integration stop scan: 1375
Y at integration start : 197 Y at integration end: 197

Reason for manual integration: improper integration

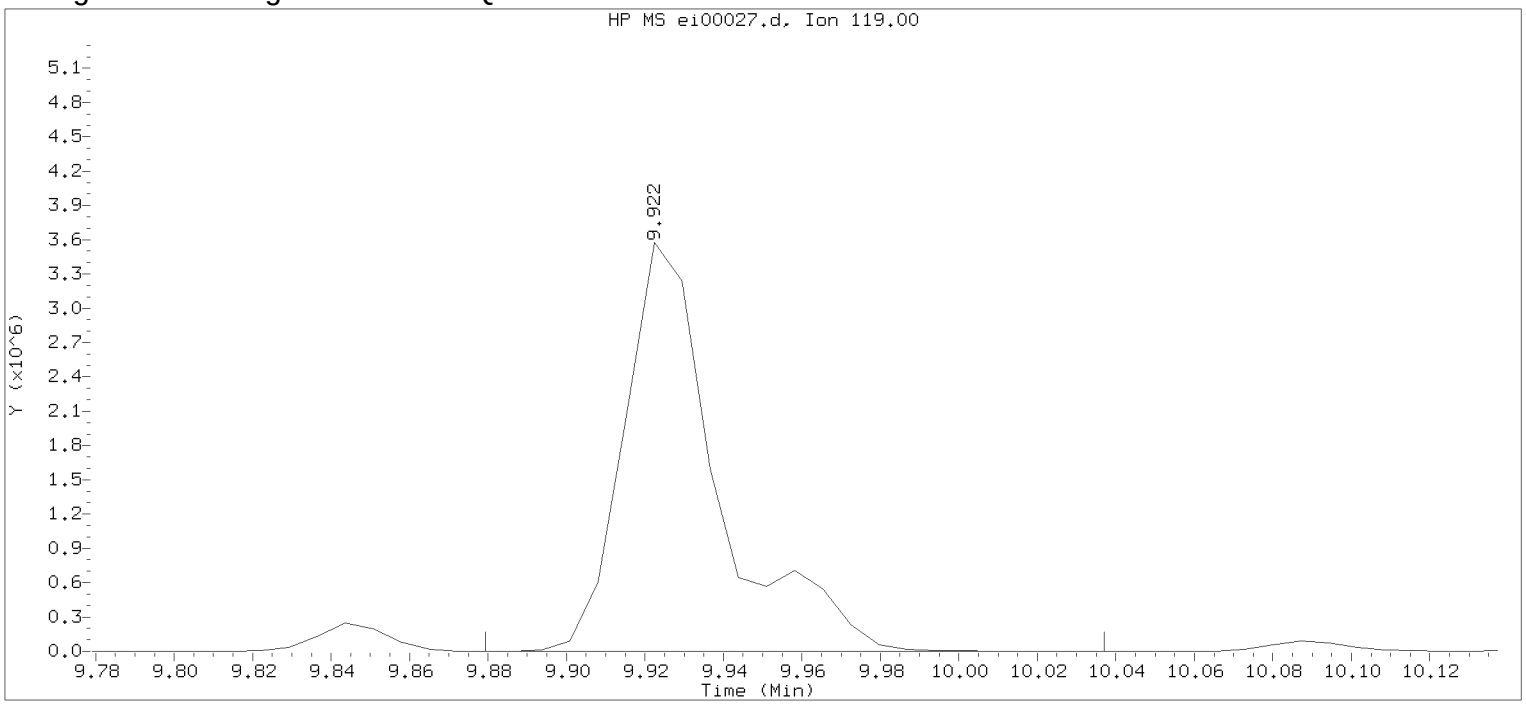
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:40.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:28.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



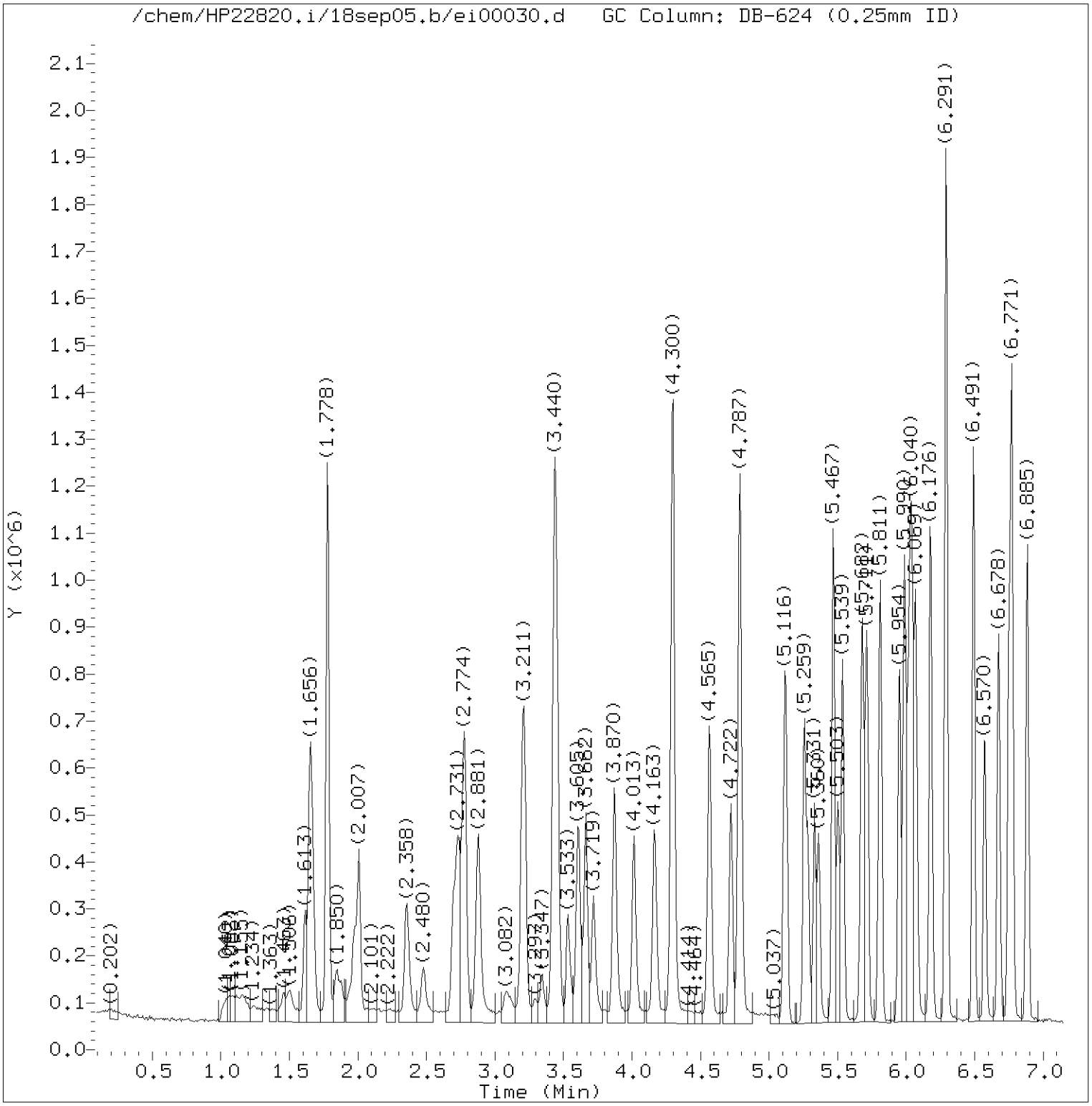
Data File: /chem/HP22820.i/18sep05.b/ei00027.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 13:43 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 13:47
Date, time and analyst ID of latest file update: 05-Sep-2018 14:04 Unknown

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 5997015
Concentration (ppb(v)) : 60.3552
Integration start scan : 1366 Integration stop scan: 1388
Y at integration start : 197 Y at integration end: 197

Digitally signed by Jacob E. Bailey on 09/05/2018 at 15:40.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

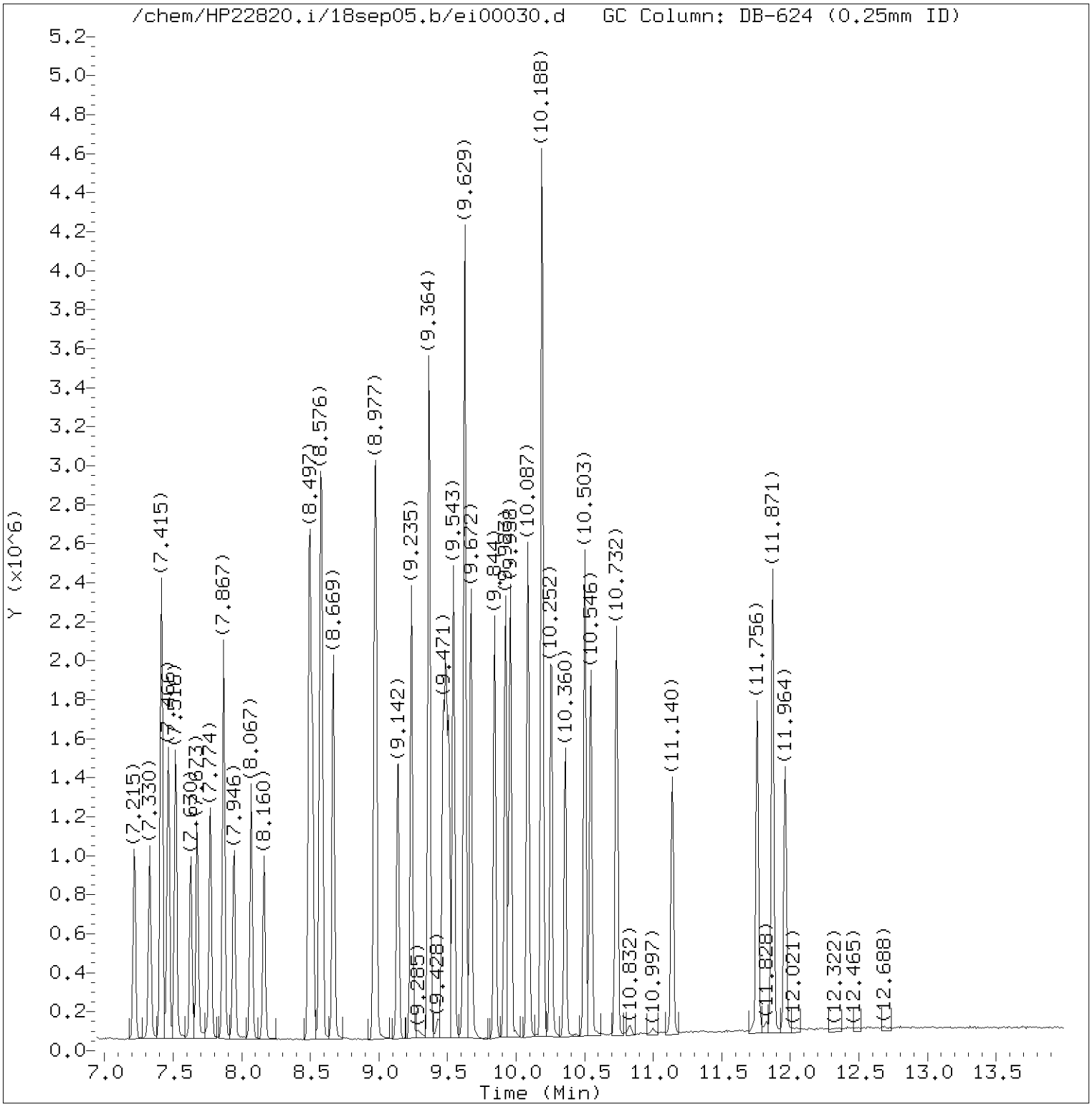
Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00030.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 15:09 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 15:40 jeb07445

Sample Name: LCSE01 Lab Sample ID: LCSE01

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:41.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00030.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 15:09 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 15:40 jeb07445

Sample Name: LCSE01 Lab Sample ID: LCSE01

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:41.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00030.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 15:09 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 15:40 jeb07445

Sample Name: LCSE01 Lab Sample ID: LCSE01

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.613	41	139632	10.479
2) Dichlorodifluoromethane	(1)	1.649	85	576853	10.970
3) Chlorodifluoromethane	(1)	1.671	51	308191	11.723
4) Freon 114	(1)	1.778	85	590447	11.119
5) Chloromethane	(1)	1.843	50	103598	9.943
6) Vinyl Chloride	(1)	1.979	62	210286	11.141
7) 1,3-Butadiene	(1)	2.007	54	152209	10.573
8) Bromomethane	(1)	2.358	94	199392	11.192
9) Chloroethane	(1)	2.480	64	115770	10.859
10) Bromoethene	(1)	2.695	106	212025	11.208
11) Dichlorofluoromethane	(1)	2.731	67	487248	11.298
12) Trichlorofluoromethane	(1)	2.774	101	596275	10.664
13) Pentane	(1)	2.881	43	315927	10.018
14) Ethanol	(1)	3.082	45	78901	10.542
16) Acrolein	(1)	3.340	56	86324	11.388
17) 1,1-Dichloroethene	(1)	3.433	61	345522	10.890
18) Freon 113	(1)	3.447	103	307186	10.342
19) Acetone	(1)	3.533	43	281164	10.438
20) Methyl Iodide	(1)	3.605	142	546744	10.803
21) Carbon Disulfide	(1)	3.662	76	600862	10.674
22) Isopropanol	(1)	3.719	45	348511	10.661
24) 3-Chloropropene	(1)	3.870	76	113131	12.414
23) Acetonitrile	(1)	3.877	40	127988	10.806
25) Methylene Chloride	(1)	4.013	84	205004	12.037
26) tert-Butyl Alcohol	(1)	4.163	59	508586	10.993
28) trans-1,2-Dichloroethene	(1)	4.292	61	299872	10.669
29) Methyl t-Butyl Ether	(1)	4.300	73	660011	10.402
27) Acrylonitrile	(1)	4.300	53	168924	10.600
30) Hexane	(1)	4.565	57	321140	10.166
31) 1,1-Dichloroethane	(1)	4.722	63	395831	10.582
32) Vinyl Acetate	(1)	4.787	86	68391	11.401
33) Di-Isopropyl Ether	(1)	4.787	45	661457	10.747
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	644317	10.332
35) cis-1,2-Dichloroethene	(1)	5.259	61	296454	10.739
37) 2-Butanone	(1)	5.281	72	124084	10.354
38) Ethyl Acetate	(1)	5.331	70	59101	9.762
39) Methyl Acrylate	(1)	5.360	55	369090	10.396
40)*Bromochloromethane	(1)	5.467	130	299944	10.000

* = Compound is an internal standard.

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on 09/05/2018 at 15:41.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00030.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 15:09 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 15:40 jeb07445

Sample Name: LCSE01 Lab Sample ID: LCSE01

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
41) Tetrahydrofuran	(1)	5.503	42	226064	10.185
42) Chloroform	(1)	5.539	83	493109	10.401
43) 1,1,1-Trichloroethane	(1)	5.682	97	516226	10.508
44) Cyclohexane	(1)	5.711	56	343164	10.553
45) Carbon Tetrachloride	(1)	5.811	117	501365	10.432
46) Benzene	(2)	5.990	78	722962	9.967
47) 1,2-Dichloroethane	(2)	6.012	62	318972	10.345
48) Isooctane	(2)	6.040	57	1025782	10.316
49) Tert-Amyl Methyl Ether	(2)	6.069	73	635474	9.812
50) Heptane	(2)	6.176	43	356069	9.709
51)*1,4-Difluorobenzene	(2)	6.291	114	1184202	10.000
52) Trichloroethene	(2)	6.491	130	319636	10.364
53) Ethyl Acrylate	(2)	6.570	55	507164	10.017
36) 1,2-Dichloroethene (total)	(1)		61	596326	21.408
54) 1,2-Dichloropropane	(2)	6.678	63	249702	9.952
57) Methyl Methacrylate	(2)	6.749	69	272728	9.931
55) Dibromomethane	(2)	6.771	174	316075	10.285
56) 1,4-Dioxane	(2)	6.778	88	185845	10.303
58) Bromodichloromethane	(2)	6.885	83	521027	9.898
59) cis-1,3-Dichloropropene	(2)	7.215	75	454337	9.894
60) 4-Methyl-2-Pentanone	(2)	7.330	43	500788	9.828
61) Toluene	(3)	7.466	91	872047	10.178
62) Octane	(3)	7.516	43	468150	9.670
63) trans-1,3-Dichloropropene	(3)	7.630	75	399576	10.255
65) Ethyl Methacrylate	(3)	7.673	69	477559	10.285
66) 1,1,2-Trichloroethane	(3)	7.774	97	303278	10.004
67) Tetrachloroethene	(3)	7.867	166	493421	10.587
68) 2-Hexanone	(3)	7.946	43	487566	10.153
69) Dibromochloromethane	(3)	8.067	127	400832	10.142
70) 1,2-Dibromoethane	(3)	8.160	107	478703	10.259
71)*Chlorobenzene-d5	(3)	8.497	117	1130510	10.000
72) Chlorobenzene	(3)	8.519	112	689385	10.176
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	362982	10.300
74) Ethylbenzene	(3)	8.583	91	1172014	10.036
75) m/p-Xylene	(3)	8.669	91	939303	10.203
76) o-Xylene	(3)	8.970	91	933612	10.197
78) Styrene	(3)	8.977	104	726562	10.348
79) Bromoform	(3)	9.142	173	550314	9.889

* = 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/HP22820.i/18sep05.b/ei00030.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 15:09 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 15:40 jeb07445

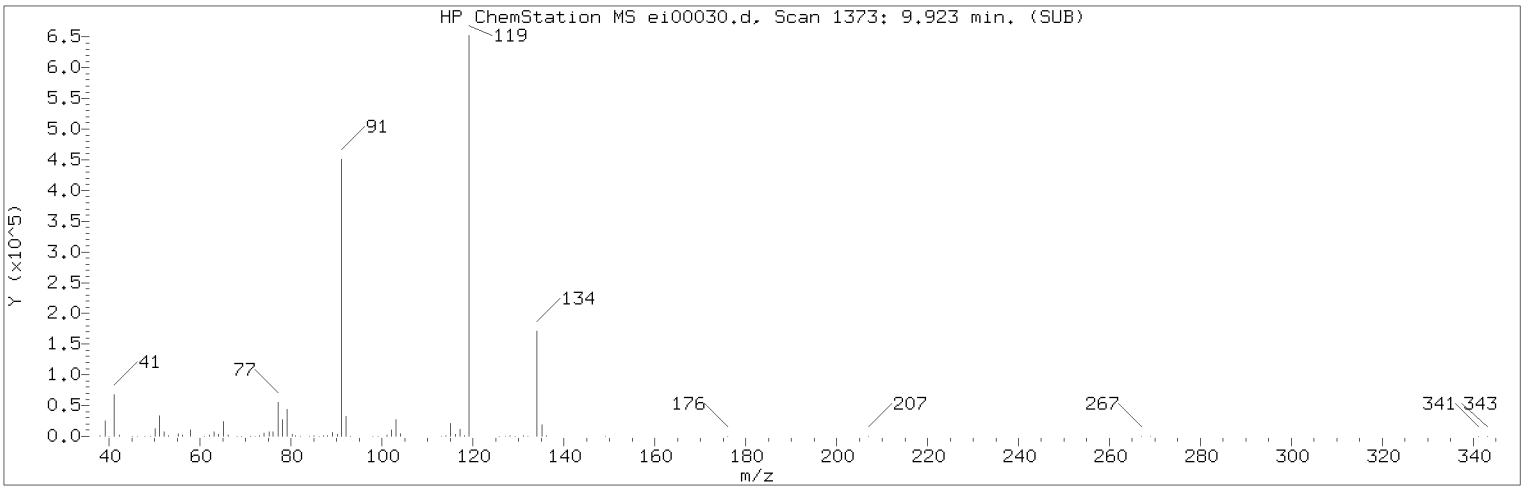
Sample Name: LCSE01 Lab Sample ID: LCSE01

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
80) Cumene	(3)	9.235	105	1293729	10.375
82) 1,1,2,2-Tetrachloroethane	(3)	9.464	83	653756	9.939
81) Bromobenzene	(3)	9.493	156	419893	9.875
83) 1,2,3-Trichloropropane	(3)	9.507	110	207099	10.208
84) n-Propylbenzene	(3)	9.543	120	346554	10.213
85) 2-Chlorotoluene	(3)	9.629	126	302756	9.923
86) 4-Ethyltoluene	(3)	9.629	105	1244897	10.086
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	1051587	10.026
88) Alpha Methyl Styrene	(3)	9.844	118	510079	9.888
89) tert-Butylbenzene	(3)	9.923	119	927966M	9.337
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	1035914	10.061
91) sec-Butylbenzene	(3)	10.087	105	1458429	9.629
92) 1,3-Dichlorobenzene	(3)	10.188	146	670349	9.867
94) p-Isopropyltoluene	(3)	10.188	119	1210013	9.535
93) 1,4-Dichlorobenzene	(3)	10.259	146	695148	9.873
95) Benzyl Chloride	(3)	10.360	91	891070	9.599
97) n-Butylbenzene	(3)	10.503	91	1157782	9.775
96) 1,2-Dichlorobenzene	(3)	10.546	146	619680	9.620
98) Hexachloroethane	(3)	10.732	117	320070	9.269
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	320088	9.227
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	449143	8.983
101) Hexachlorobutadiene	(3)	11.871	225	428784	9.228
102) Naphthalene	(3)	11.964	128	932812	9.028
64) 1,3-Dichloropropene (total)	(3)		75	853913	20.149
77) Xylene (total)	(3)		91	1872915	20.400

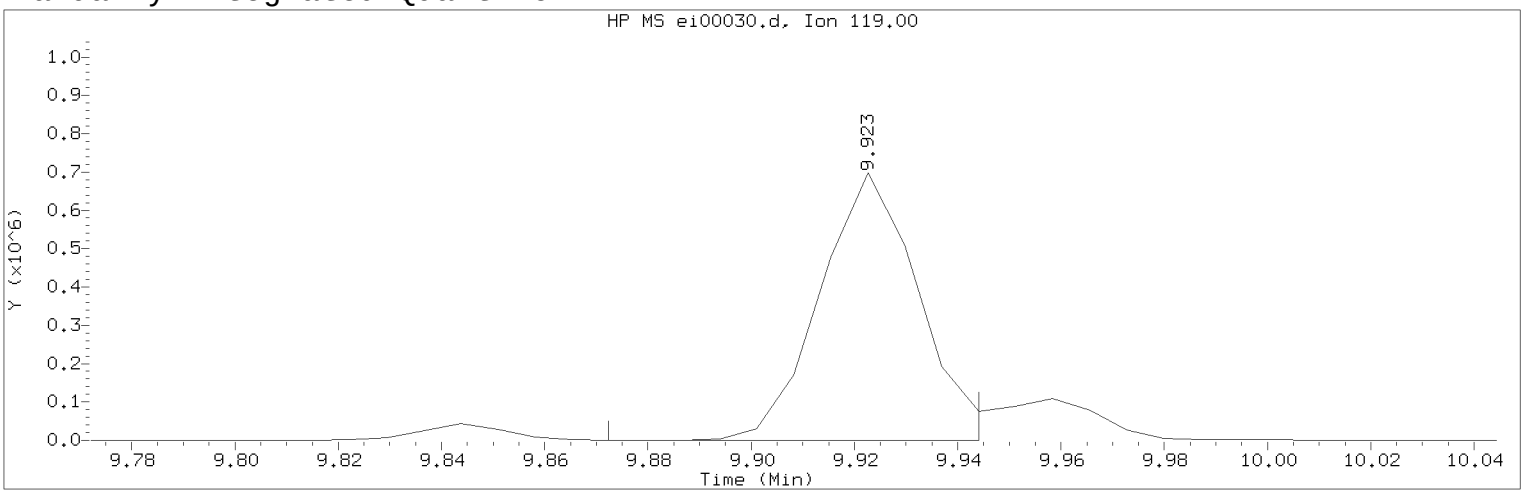
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:41.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00030.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 15:09 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 15:40 jeb07445

Sample Name: LCSE01 Lab Sample ID: LCSE01

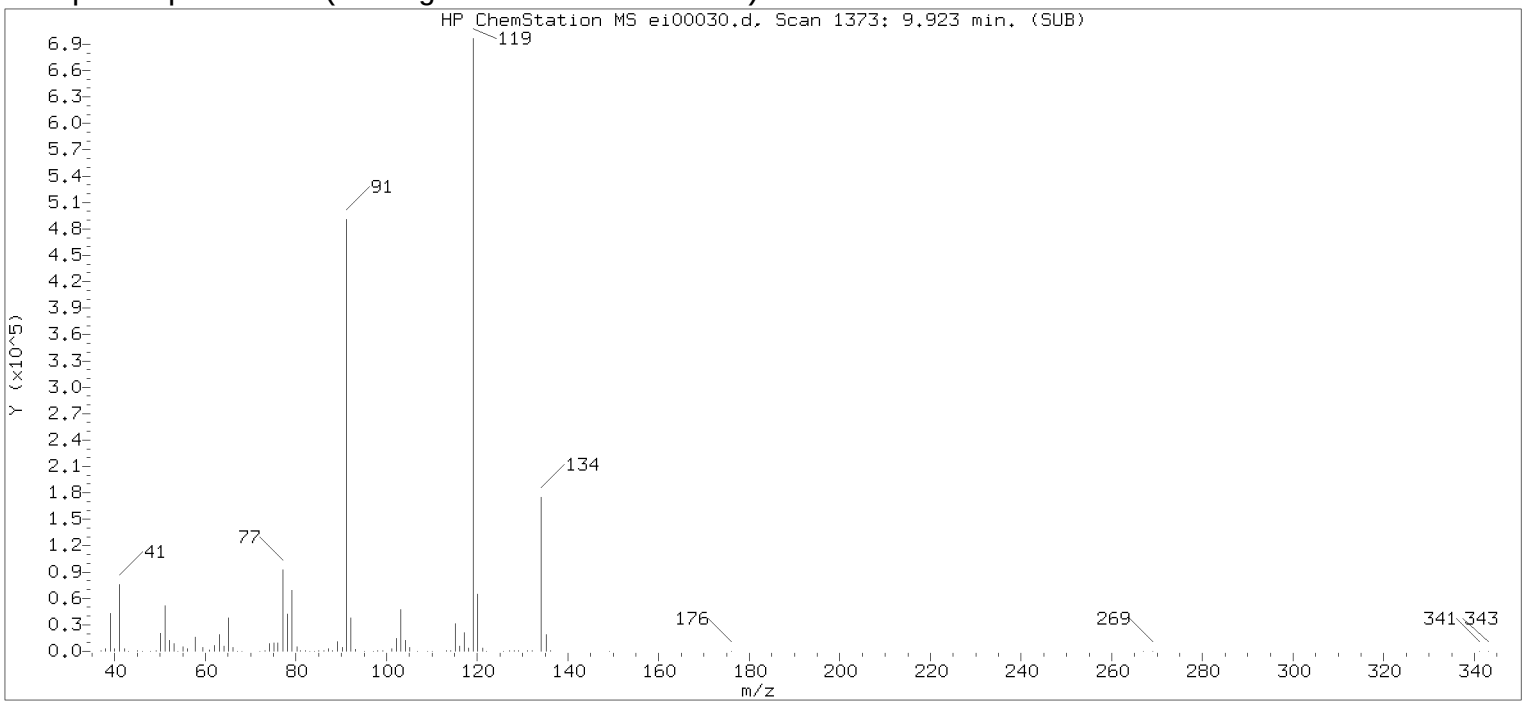
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.923
Quant Ion : 119.00
Area (flag) : 927966M
Concentration (ppb(v)) : 9.3374
Integration start scan : 1365 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

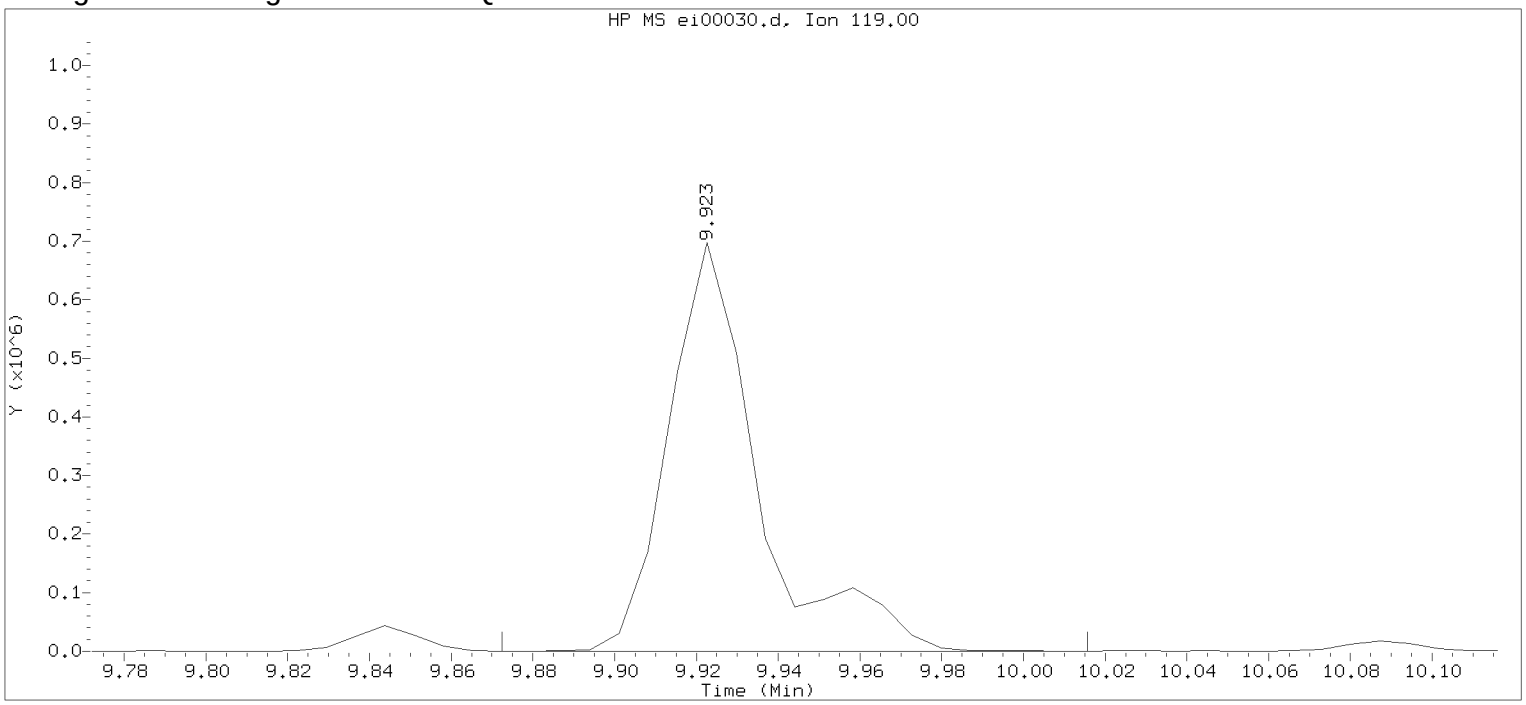
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/05/2018 at 15:41.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:28.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



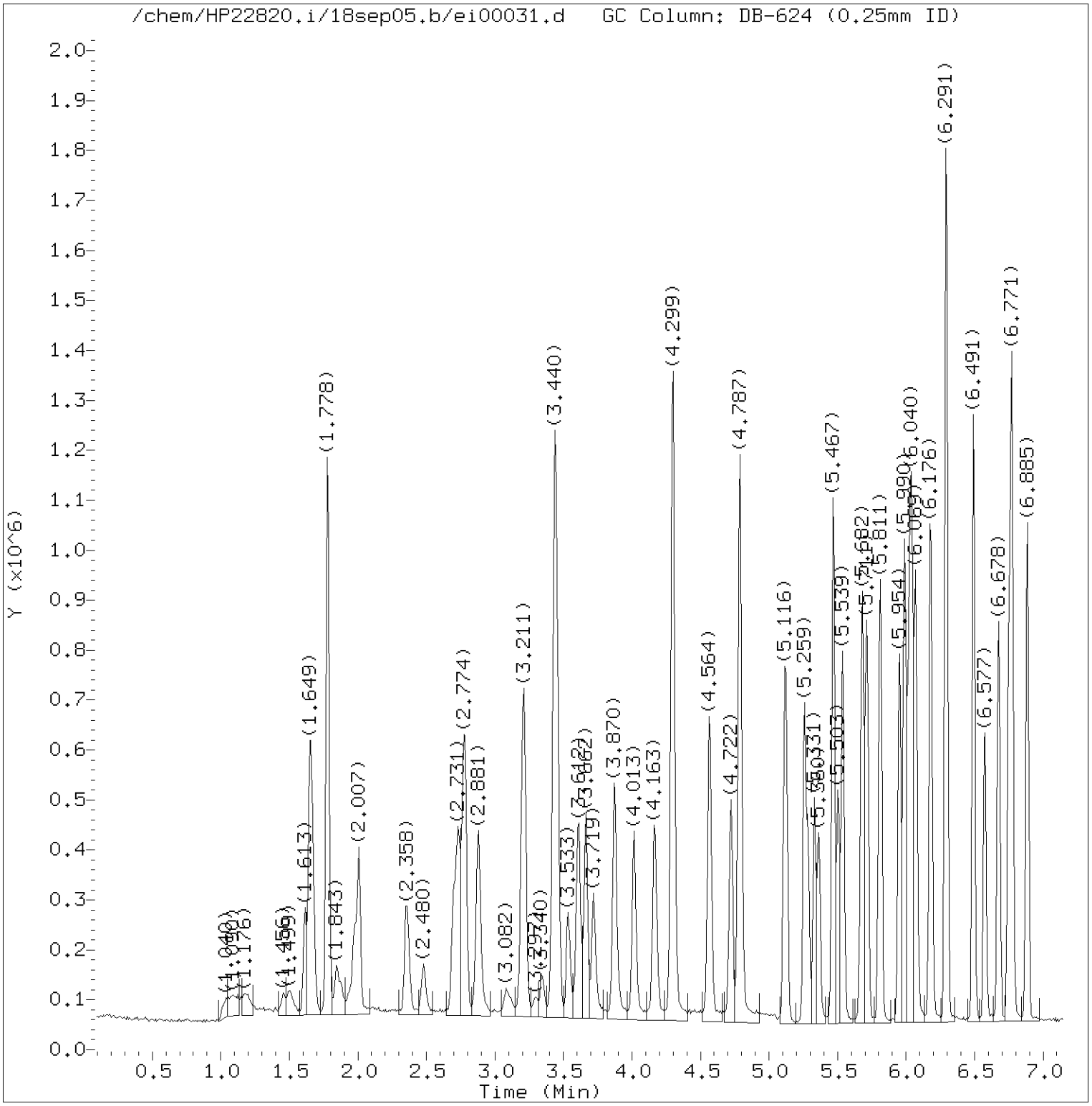
Data File: /chem/HP22820.i/18sep05.b/ei00030.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 15:09 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 15:30 Unknown

Sample Name: LCSE01 Lab Sample ID: LCSE01

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.923
Quant Ion : 119.00
Area : 1062747
Concentration (ppb(v)) : 10.6936
Integration start scan : 1365 Integration stop scan: 1385
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 09/05/2018 at 15:41.
Target 3.5 esignature user: JEB07445



Total Ion Chromatogram (TIC)

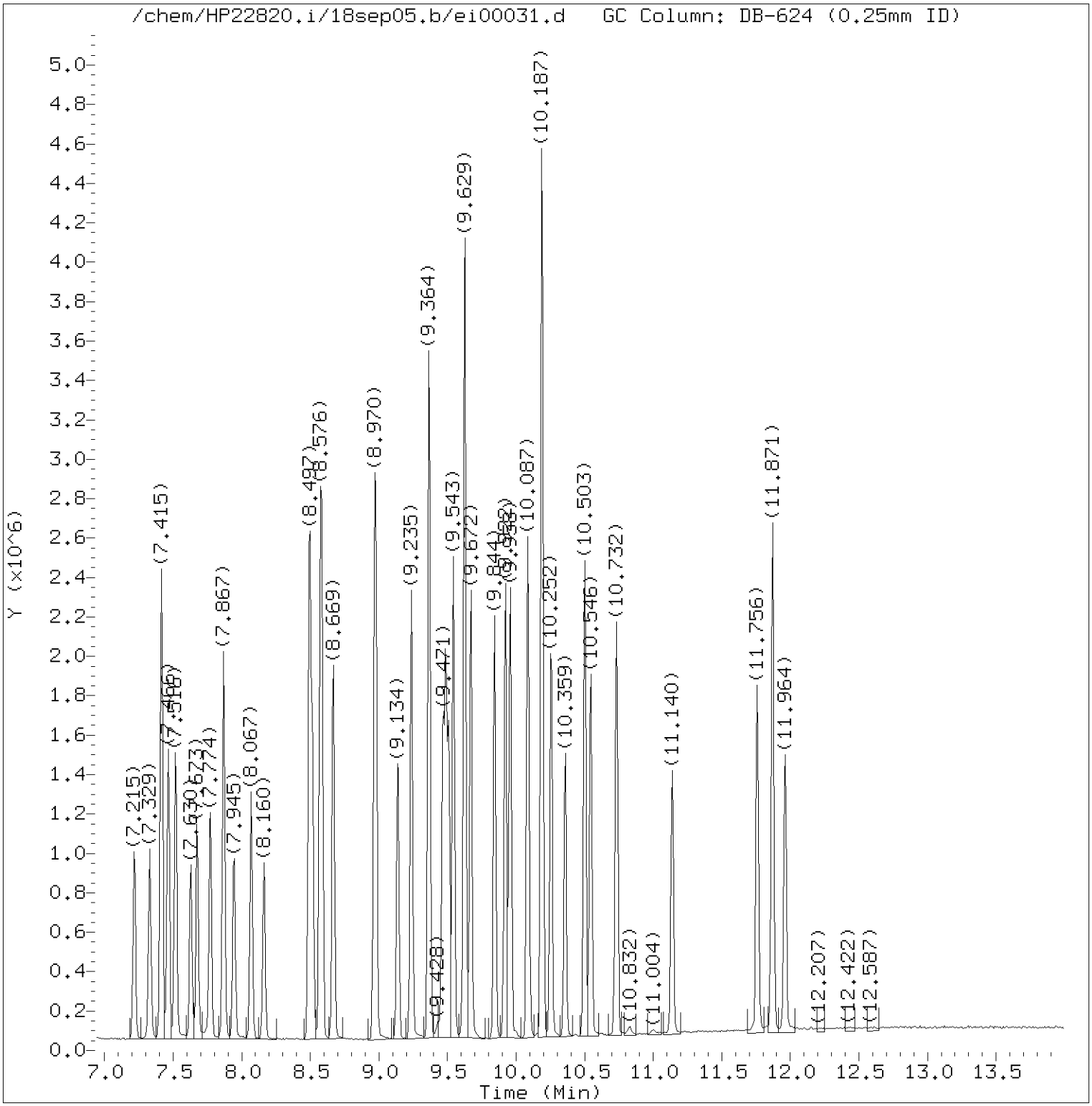
Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00031.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 15:34 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 17:05 jeb07445

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 17:05.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00031.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 15:34 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 17:05 jeb07445

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 17:05.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00031.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 15:34 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 17:05 jeb07445

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.613	41	134768	10.170
2) Dichlorodifluoromethane	(1)	1.649	85	554299	10.600
3) Chlorodifluoromethane	(1)	1.671	51	286130	10.944
4) Freon 114	(1)	1.778	85	561503	10.633
5) Chloromethane	(1)	1.843	50	97895	9.448
6) Vinyl Chloride	(1)	1.979	62	201454	10.733
7) 1,3-Butadiene	(1)	2.007	54	145348	10.153
8) Bromomethane	(1)	2.351	94	192585	10.870
9) Chloroethane	(1)	2.480	64	109894	10.366
10) Bromoethene	(1)	2.695	106	200261	10.645
11) Dichlorofluoromethane	(1)	2.731	67	470969	10.981
12) Trichlorofluoromethane	(1)	2.781	101	572026	10.287
13) Pentane	(1)	2.881	43	301939	9.628
14) Ethanol	(1)	3.082	45	77983	10.478
16) Acrolein	(1)	3.340	56	82011	10.879
17) 1,1-Dichloroethene	(1)	3.433	61	335443	10.631
18) Freon 113	(1)	3.447	103	297243	10.063
19) Acetone	(1)	3.533	43	276233	10.312
20) Methyl Iodide	(1)	3.612	142	521911	10.370
21) Carbon Disulfide	(1)	3.662	76	575532	10.281
22) Isopropanol	(1)	3.719	45	331674	10.203
24) 3-Chloropropene	(1)	3.870	76	107426	11.854
23) Acetonitrile	(1)	3.877	40	116972	9.930
25) Methylene Chloride	(1)	4.013	84	195416	11.538
26) tert-Butyl Alcohol	(1)	4.163	59	490501	10.661
28) trans-1,2-Dichloroethene	(1)	4.292	61	296182	10.597
29) Methyl t-Butyl Ether	(1)	4.299	73	641759	10.171
27) Acrylonitrile	(1)	4.299	53	164469	10.378
30) Hexane	(1)	4.564	57	310477	9.883
31) 1,1-Dichloroethane	(1)	4.722	63	375817	10.103
32) Vinyl Acetate	(1)	4.787	86	65452	10.971
33) Di-Isopropyl Ether	(1)	4.787	45	628378	10.266
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	617815	9.962
35) cis-1,2-Dichloroethene	(1)	5.259	61	283842	10.339
37) 2-Butanone	(1)	5.281	72	121107	10.162
38) Ethyl Acetate	(1)	5.331	70	60197	9.998
39) Methyl Acrylate	(1)	5.360	55	357253	10.118
40)*Bromochloromethane	(1)	5.467	130	298286	10.000

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 17:05.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00031.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 15:34 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 17:05 jeb07445

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
41) Tetrahydrofuran	(1)	5.503	42	218489	9.898
42) Chloroform	(1)	5.539	83	479124	10.162
43) 1,1,1-Trichloroethane	(1)	5.682	97	500263	10.239
44) Cyclohexane	(1)	5.711	56	331961	10.265
45) Carbon Tetrachloride	(1)	5.811	117	480079	10.044
46) Benzene	(2)	5.990	78	701897	9.961
47) 1,2-Dichloroethane	(2)	6.011	62	300571	10.034
48) Isooctane	(2)	6.040	57	998864	10.340
49) Tert-Amyl Methyl Ether	(2)	6.069	73	617203	9.810
50) Heptane	(2)	6.176	43	350462	9.837
51)*1,4-Difluorobenzene	(2)	6.291	114	1150387	10.000
52) Trichloroethene	(2)	6.491	130	300718	10.037
53) Ethyl Acrylate	(2)	6.577	55	479278	9.745
36) 1,2-Dichloroethene (total)	(1)		61	580024	20.936
54) 1,2-Dichloropropane	(2)	6.678	63	244231	10.020
57) Methyl Methacrylate	(2)	6.749	69	259461	9.726
55) Dibromomethane	(2)	6.771	174	307431	10.298
56) 1,4-Dioxane	(2)	6.778	88	176785	10.089
58) Bromodichloromethane	(2)	6.885	83	512031	10.013
59) cis-1,3-Dichloropropene	(2)	7.215	75	437895	9.816
60) 4-Methyl-2-Pentanone	(2)	7.329	43	483771	9.773
61) Toluene	(3)	7.466	91	845367	9.953
62) Octane	(3)	7.516	43	460618	9.598
63) trans-1,3-Dichloropropene	(3)	7.630	75	379440	9.824
65) Ethyl Methacrylate	(3)	7.673	69	456734	9.923
66) 1,1,2-Trichloroethane	(3)	7.774	97	302727	10.073
67) Tetrachloroethene	(3)	7.867	166	483916	10.475
68) 2-Hexanone	(3)	7.945	43	468721	9.846
69) Dibromochloromethane	(3)	8.067	127	392712	10.023
70) 1,2-Dibromoethane	(3)	8.160	107	465896	10.072
71)*Chlorobenzene-d5	(3)	8.497	117	1120672	10.000
72) Chlorobenzene	(3)	8.518	112	676827	10.078
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	356594	10.207
74) Ethylbenzene	(3)	8.583	91	1145765	9.897
75) m/p-Xylene	(3)	8.669	91	913298	10.007
76) o-Xylene	(3)	8.970	91	912593	10.055
78) Styrene	(3)	8.977	104	703351	10.105
79) Bromoform	(3)	9.134	173	540368	9.795

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 17:05.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00031.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 15:34 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 17:05 jeb07445

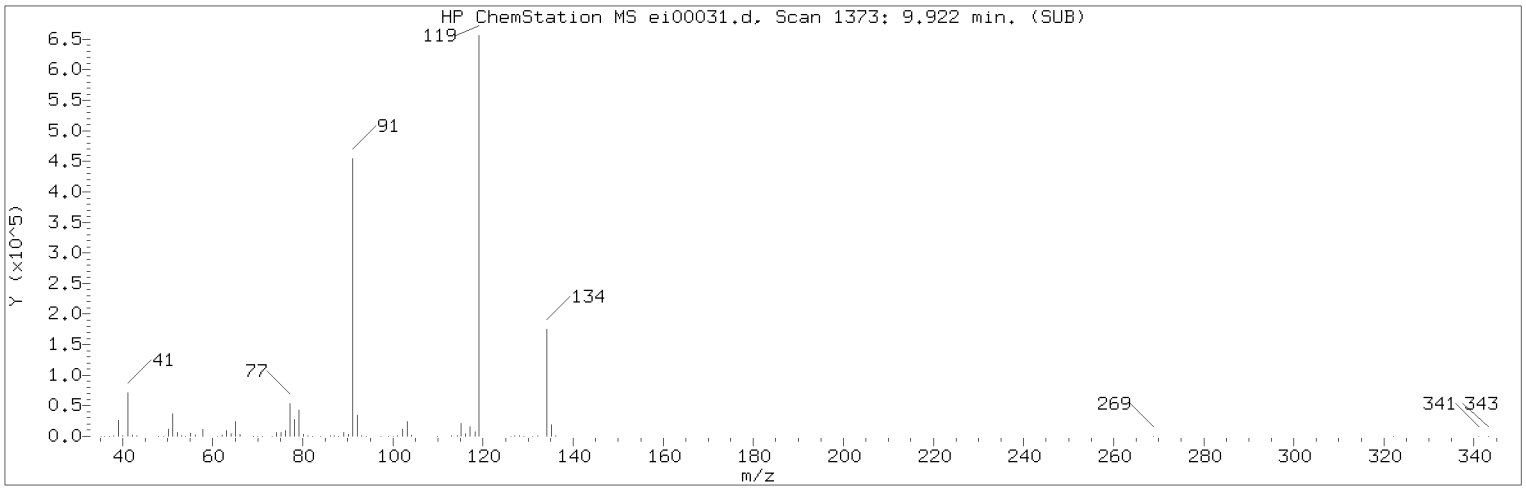
Sample Name: LCSDE01 Lab Sample ID: LCSDE01

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
80) Cumene	(3)	9.235	105	1275889	10.322
82) 1,1,2,2-Tetrachloroethane	(3)	9.464	83	644721	9.887
81) Bromobenzene	(3)	9.486	156	421685	10.004
83) 1,2,3-Trichloropropane	(3)	9.507	110	197339	9.812
84) n-Propylbenzene	(3)	9.543	120	335597	9.977
85) 2-Chlorotoluene	(3)	9.622	126	296917	9.817
86) 4-Ethyltoluene	(3)	9.629	105	1248630	10.205
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	1035221	9.956
88) Alpha Methyl Styrene	(3)	9.844	118	502871	9.834
89) tert-Butylbenzene	(3)	9.922	119	939993M	9.541
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	1029451	10.086
91) sec-Butylbenzene	(3)	10.087	105	1468490	9.781
92) 1,3-Dichlorobenzene	(3)	10.187	146	671920	9.977
94) p-Isopropyltoluene	(3)	10.187	119	1223164	9.723
93) 1,4-Dichlorobenzene	(3)	10.259	146	683711	9.796
95) Benzyl Chloride	(3)	10.359	91	856904	9.312
97) n-Butylbenzene	(3)	10.503	91	1146768	9.767
96) 1,2-Dichlorobenzene	(3)	10.546	146	618035	9.678
98) Hexachloroethane	(3)	10.732	117	317212	9.267
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	320249	9.313
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	471113	9.505
101) Hexachlorobutadiene	(3)	11.871	225	442242	9.601
102) Naphthalene	(3)	11.964	128	957110	9.345
64) 1,3-Dichloropropene (total)	(3)		75	817335	19.640
77) Xylene (total)	(3)		91	1825891	20.062

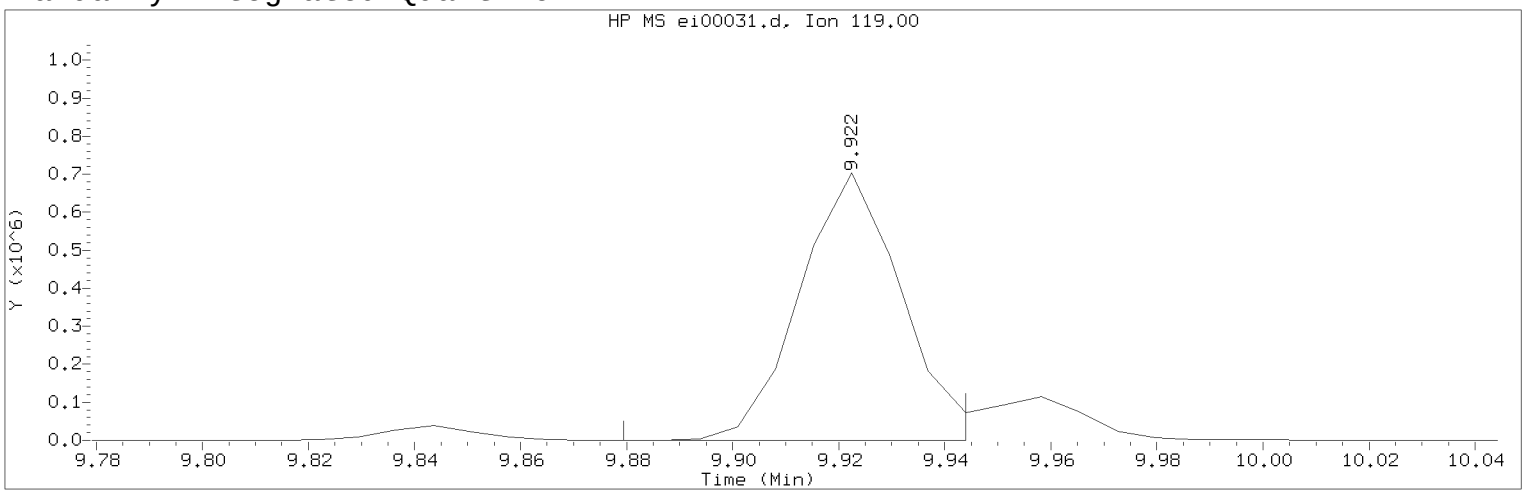
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 09/05/2018 at 17:05.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00031.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 15:34 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 17:05 jeb07445

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

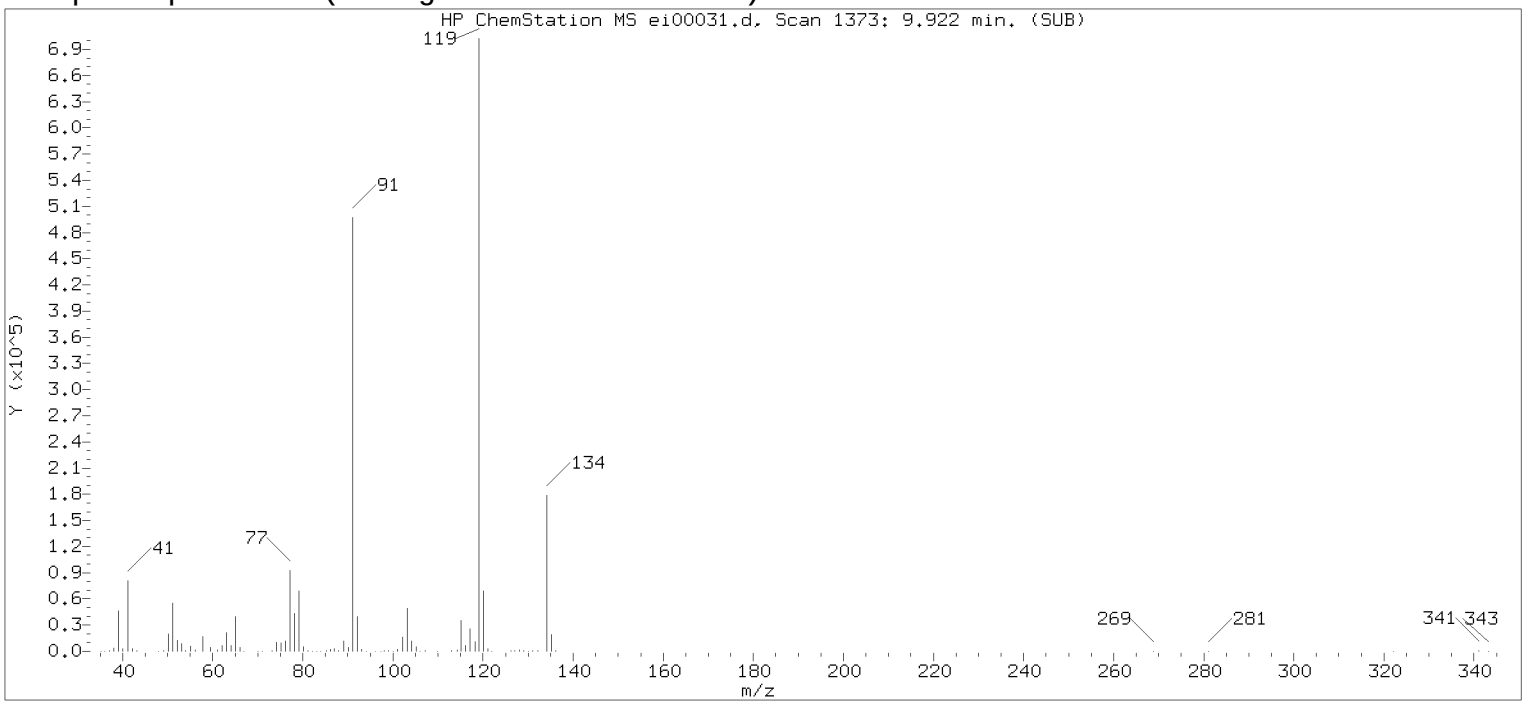
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 939993M
Concentration (ppb(v)) : 9.5414
Integration start scan : 1366 Integration stop scan: 1375
Y at integration start : 190 Y at integration end: 190

Reason for manual integration: improper integration

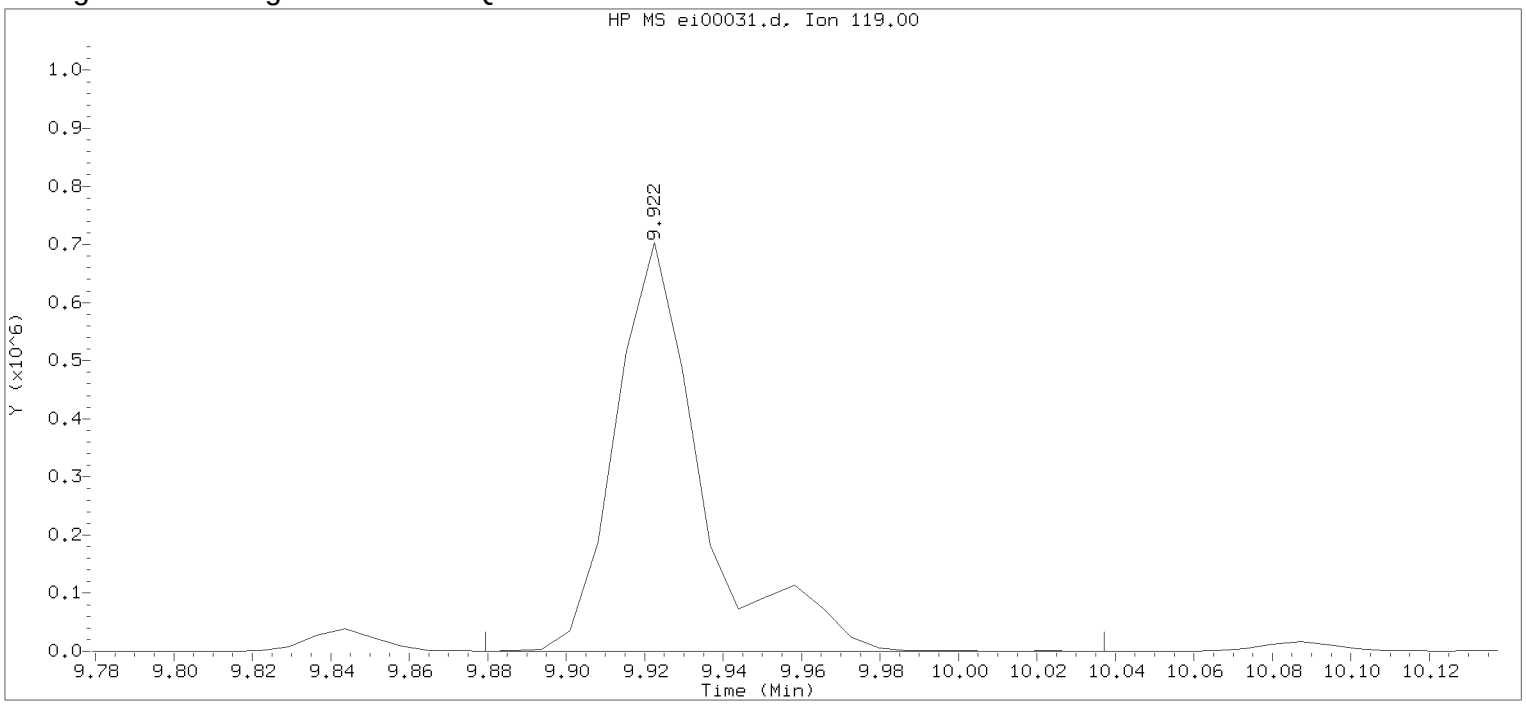
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/05/2018 at 17:05.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:28.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



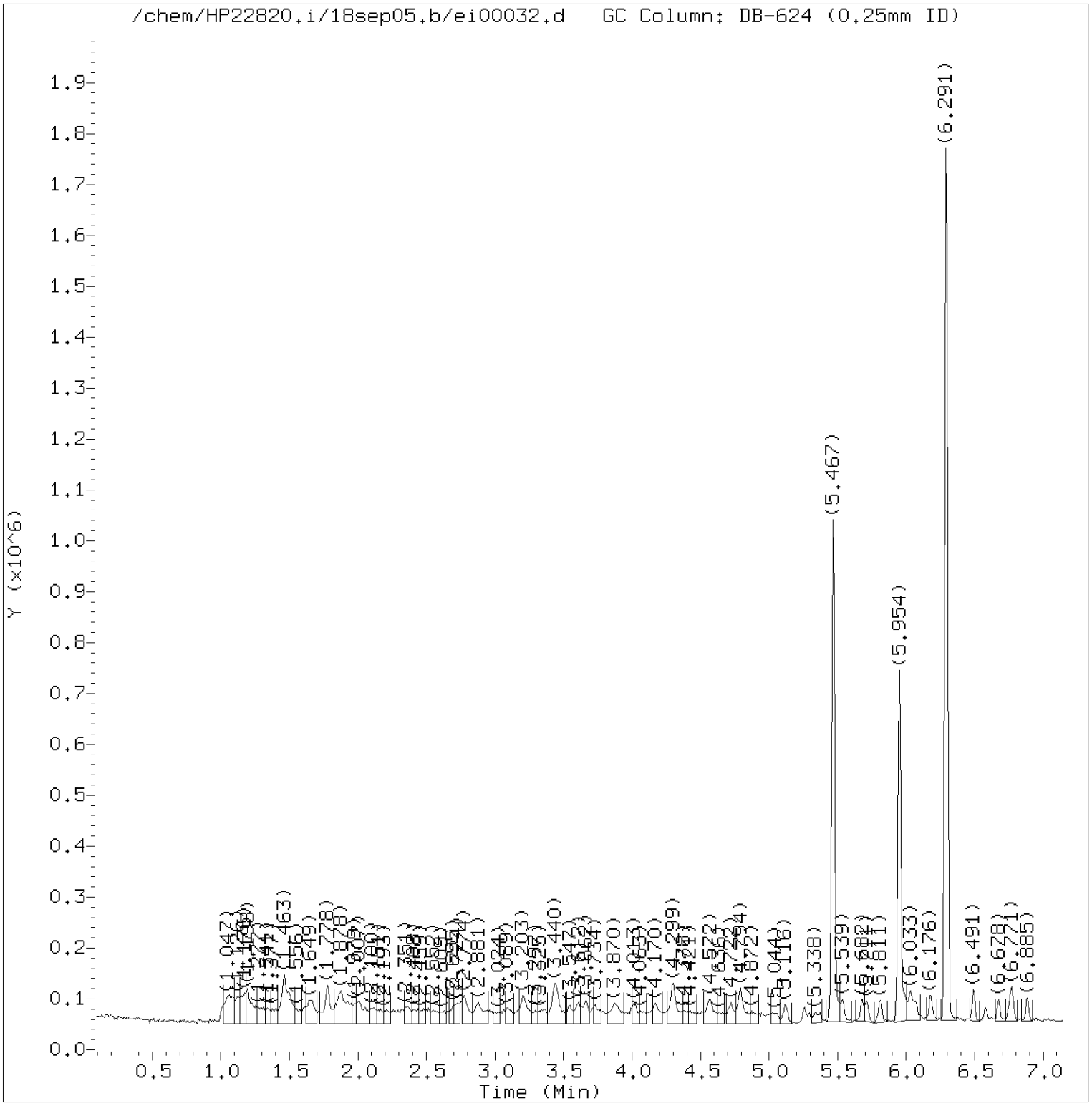
Data File: /chem/HP22820.i/18sep05.b/ei00031.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 15:34 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 15:54 Unknown

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 1075131
Concentration (ppb(v)) : 10.9132
Integration start scan : 1366 Integration stop scan: 1388
Y at integration start : 190 Y at integration end: 190

Digitally signed by Jacob E. Bailey on 09/05/2018 at 17:05.
Target 3.5 esignature userGLE02jeb07445



Total Ion Chromatogram (TIC)

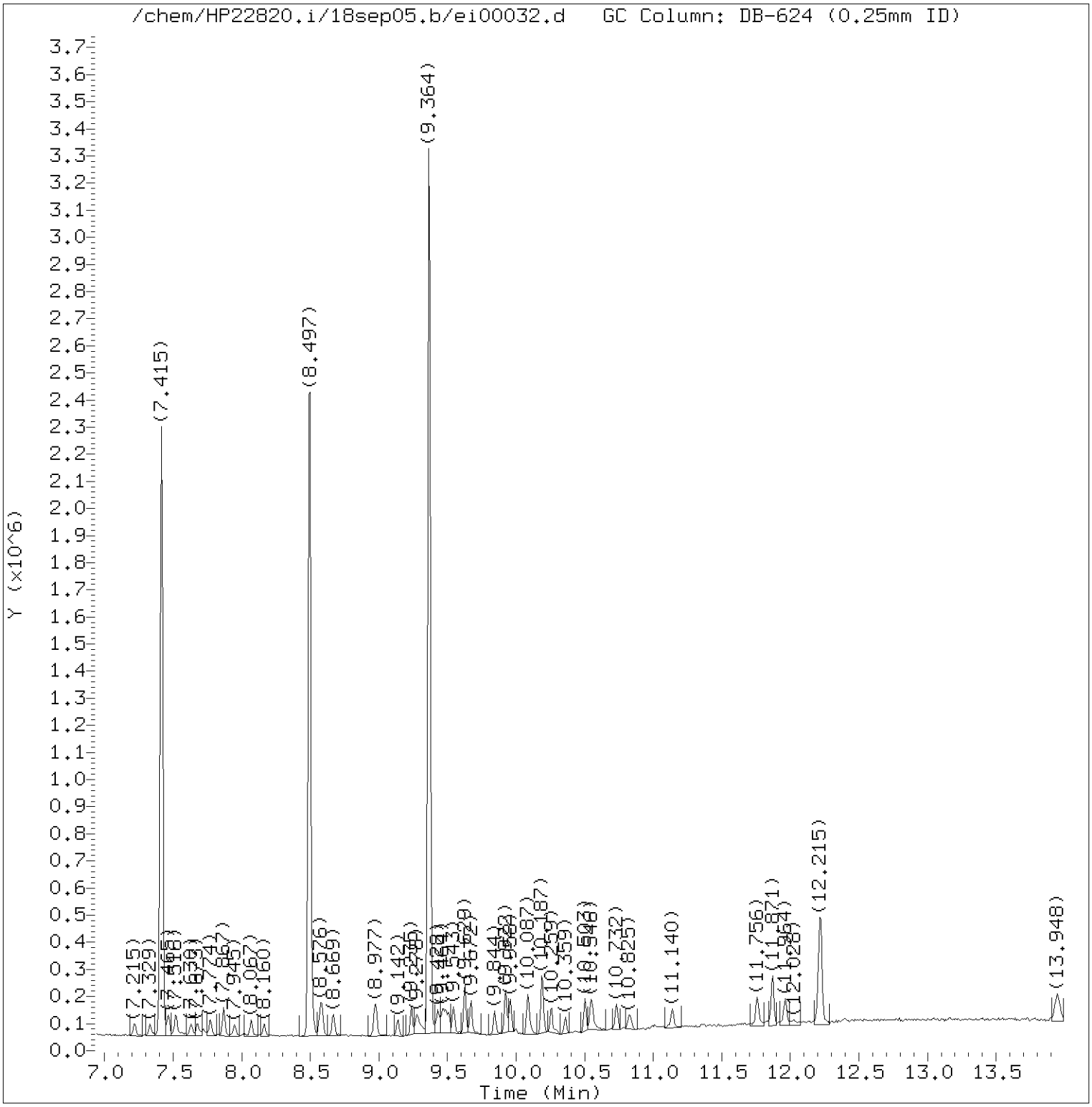
Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00032.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 15:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 12:24
Date, time and analyst ID of latest file update: 06-Sep-2018 13:32 jbs01304

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

Digitally signed by Jeffrey B. Smith
on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00032.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 15:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 12:24
Date, time and analyst ID of latest file update: 06-Sep-2018 13:32 jbs01304

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

Digitally signed by Jeffrey B. Smith
on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00032.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 15:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 12:24
Date, time and analyst ID of latest file update: 06-Sep-2018 13:32 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.613	41	9544	0.750
2) Dichlorodifluoromethane	(1)	1.649	85	26721	0.532
3) Chlorodifluoromethane	(1)	1.671	51	13697	0.545
4) Freon 114	(1)	1.778	85	27413	0.540
5) Chloromethane	(1)	1.842	50	8127	0.816
6) Vinyl Chloride	(1)	1.971	62	10184	0.565
7) 1,3-Butadiene	(1)	2.007	54	8462	0.615
8) Bromomethane	(1)	2.358	94	11726	0.689
9) Chloroethane	(1)	2.459	64	6032	0.592
10) Bromoethene	(1)	2.702	106	10511	0.582
11) Dichlorofluoromethane	(1)	2.724	67	23452	0.569
12) Trichlorofluoromethane	(1)	2.781	101	28650	0.536
13) Pentane	(1)	2.881	43	16610	0.551
14) Ethanol	(1)	3.089	45	14754	2.063
16) Acrolein	(1)	3.347	56	4879	0.674
17) 1,1-Dichloroethene	(1)	3.433	61	17643	0.582
18) Freon 113	(1)	3.447	103	16739	0.590
19) Acetone	(1)	3.547	43	22546	0.876
20) Methyl Iodide	(1)	3.612	142	24803	0.513
21) Carbon Disulfide	(1)	3.662	76	30531	0.568
22) Isopropanol	(1)	3.726	45	26195	0.839
24) 3-Chloropropene	(1)	3.870	76	6637	0.762
23) Acetonitrile	(1)	3.877	40	15796M	1.396
25) Methylene Chloride	(1)	4.020	84	10583	0.650
26) tert-Butyl Alcohol	(1)	4.170	59	23035	0.521
28) trans-1,2-Dichloroethene	(1)	4.299	61	15359	0.572
29) Methyl t-Butyl Ether	(1)	4.299	73	31547	0.520
27) Acrylonitrile	(1)	4.307	53	9199	0.604
30) Hexane	(1)	4.564	57	18176	0.602
31) 1,1-Dichloroethane	(1)	4.722	63	20219	0.566
32) Vinyl Acetate	(1)	4.794	86	3566	0.622
33) Di-Isopropyl Ether	(1)	4.794	45	31013	0.527
34) Ethyl Tert-Butyl Ether	(1)	5.123	59	28092	0.472
35) cis-1,2-Dichloroethene	(1)	5.259	61	15166	0.575
37) 2-Butanone	(1)	5.295	72	6433	0.562
38) Ethyl Acetate	(1)	5.331	70	5249	0.907
39) Methyl Acrylate	(1)	5.374	55	19842	0.585
40)*Bromochloromethane	(1)	5.467	130	286570	10.000

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

Digitally signed by Jeffrey B. Smith
on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00032.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 15:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 12:24
Date, time and analyst ID of latest file update: 06-Sep-2018 13:32 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
41) Tetrahydrofuran	(1)	5.510	42	12847	0.606
42) Chloroform	(1)	5.539	83	25638	0.566
43) 1,1,1-Trichloroethane	(1)	5.682	97	24251	0.517
44) Cyclohexane	(1)	5.711	56	19020	0.612
45) Carbon Tetrachloride	(1)	5.811	117	23469	0.511
46) Benzene	(2)	5.990	78	37867	0.556
47) 1,2-Dichloroethane	(2)	6.011	62	16562	0.572
48) Isooctane	(2)	6.033	57	49634	0.532
49) Tert-Amyl Methyl Ether	(2)	6.069	73	28478	0.468
50) Heptane	(2)	6.176	43	20677	0.601
51)*1,4-Difluorobenzene	(2)	6.291	114	1111581	10.000
52) Trichloroethene	(2)	6.491	130	15118	0.522
53) Ethyl Acrylate	(2)	6.577	55	21001	0.442
36) 1,2-Dichloroethene (total)	(1)		61	30525	1.147
54) 1,2-Dichloropropane	(2)	6.678	63	13236	0.562
57) Methyl Methacrylate	(2)	6.749	69	12564	0.487
55) Dibromomethane	(2)	6.771	174	15752	0.546
56) 1,4-Dioxane	(2)	6.785	88	8281	0.489
58) Bromodichloromethane	(2)	6.885	83	25462	0.515
59) cis-1,3-Dichloropropene	(2)	7.215	75	20996	0.487
60) 4-Methyl-2-Pentanone	(2)	7.329	43	23030	0.481
61) Toluene	(3)	7.465	91	39015	0.470
62) Octane	(3)	7.516	43	28665	0.611
63) trans-1,3-Dichloropropene	(3)	7.630	75	17214	0.456
65) Ethyl Methacrylate	(3)	7.673	69	21633	0.481
66) 1,1,2-Trichloroethane	(3)	7.774	97	13408	0.457
67) Tetrachloroethene	(3)	7.867	166	23430	0.519
68) 2-Hexanone	(3)	7.945	43	24285	0.522
69) Dibromochloromethane	(3)	8.074	127	16814	0.439
70) 1,2-Dibromoethane	(3)	8.160	107	21995	0.487
71)*Chlorobenzene-d5	(3)	8.497	117	1094745	10.000
72) Chlorobenzene	(3)	8.518	112	36498	0.556
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	15846	0.464
74) Ethylbenzene	(3)	8.583	91	54078	0.478
75) m/p-Xylene	(3)	8.669	91	44000	0.494
76) o-Xylene	(3)	8.970	91	45150	0.509
78) Styrene	(3)	8.977	104	30332	0.446
79) Bromoform	(3)	9.142	173	23189	0.430

* = Compound is an internal standard.

Digitally signed by Jeffrey B. Smith
on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00032.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 15:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 12:24
Date, time and analyst ID of latest file update: 06-Sep-2018 13:32 jbs01304

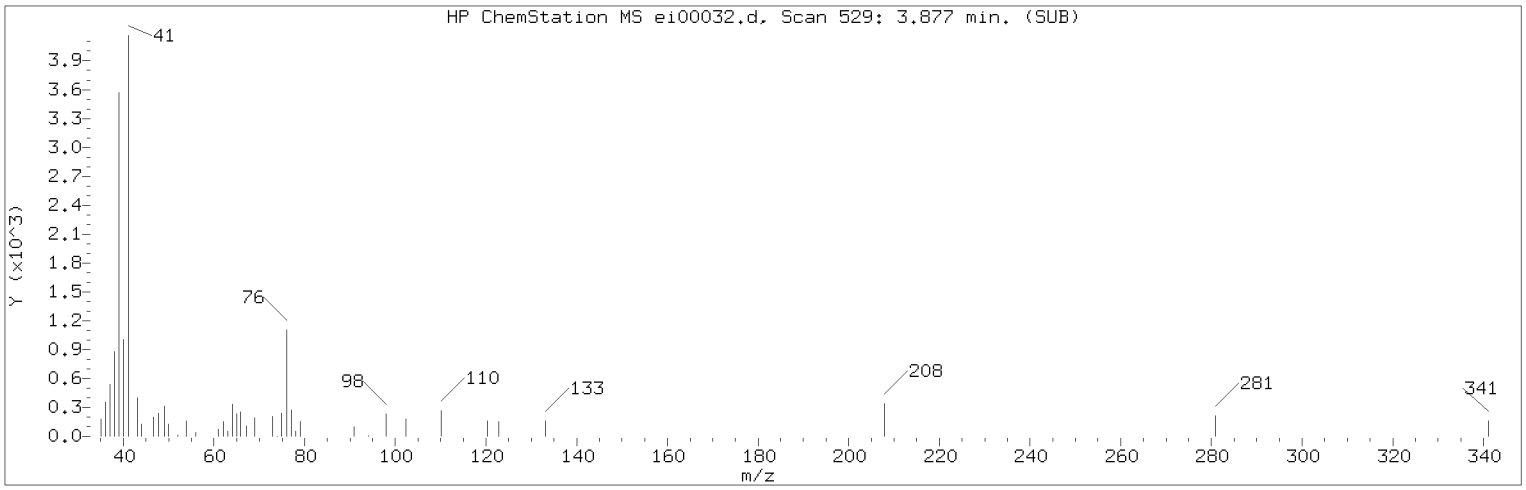
Sample Name: mdlv0.5 Lab Sample ID: mdlv0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
80) Cumene	(3)	9.235	105	66753	0.553
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	31548	0.495
81) Bromobenzene	(3)	9.493	156	18314	0.445
83) 1,2,3-Trichloropropane	(3)	9.514	110	8822	0.449
84) n-Propylbenzene	(3)	9.543	120	16875	0.514
85) 2-Chlorotoluene	(3)	9.629	126	14017	0.474
86) 4-Ethyltoluene	(3)	9.629	105	57758	0.483
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	60989	0.600
88) Alpha Methyl Styrene	(3)	9.844	118	21908M	0.439
89) tert-Butylbenzene	(3)	9.922	119	71799M	0.746
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	52603M	0.528
91) sec-Butylbenzene	(3)	10.087	105	96759	0.660
92) 1,3-Dichlorobenzene	(3)	10.187	146	33291	0.506
94) p-Isopropyltoluene	(3)	10.187	119	67970	0.553
93) 1,4-Dichlorobenzene	(3)	10.259	146	34745	0.510
95) Benzyl Chloride	(3)	10.359	91	36189	0.403
97) n-Butylbenzene	(3)	10.503	91	57133	0.498
96) 1,2-Dichlorobenzene	(3)	10.546	146	33118	0.531
98) Hexachloroethane	(3)	10.732	117	15004	0.449
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	16423	0.489
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	29139	0.602
101) Hexachlorobutadiene	(3)	11.871	225	31475	0.699
102) Naphthalene	(3)	11.964	128	70179	0.701
64) 1,3-Dichloropropene (total)	(3)		75	38210	0.943
77) Xylene (total)	(3)		91	89150	1.003

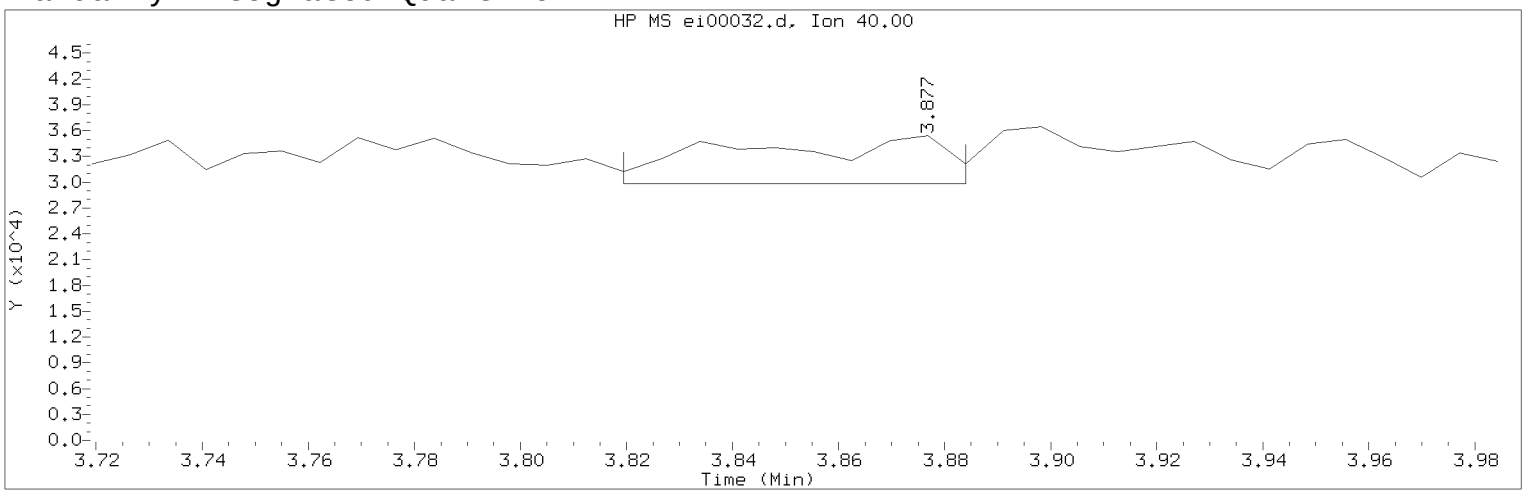
M = Compound was manually integrated.

Digitally signed by Jeffrey B. Smith
on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00032.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 15:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 12:24
Date, time and analyst ID of latest file update: 06-Sep-2018 13:32 jbs01304

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

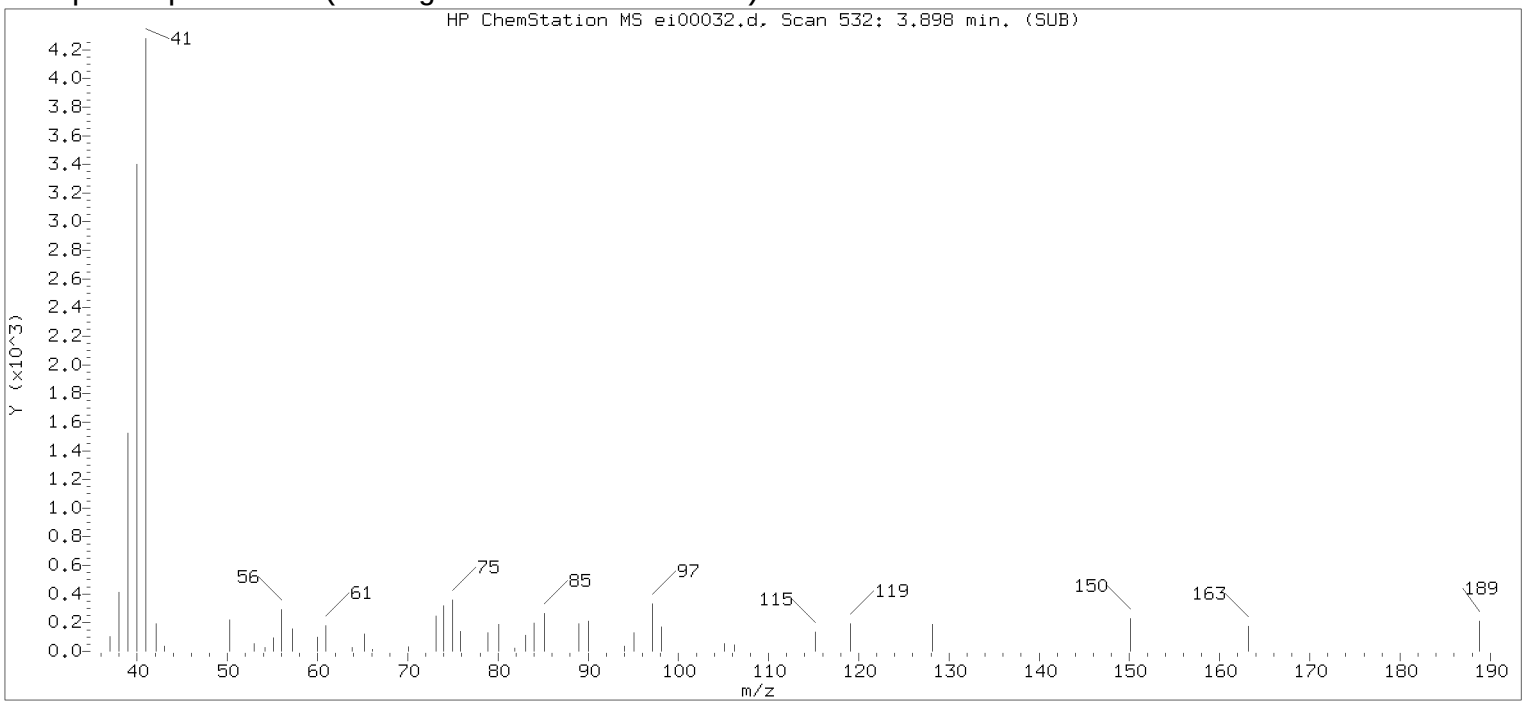
Compound Number : 23
Compound Name : Acetonitrile
Scan Number : 529
Retention Time (minutes): 3.877
Quant Ion : 40.00
Area (flag) : 15796M
Concentration (ppb(v)) : 1.3958
Integration start scan : 520 Integration stop scan: 529
Y at integration start : 29831 Y at integration end: 29831

Reason for manual integration: improper integration

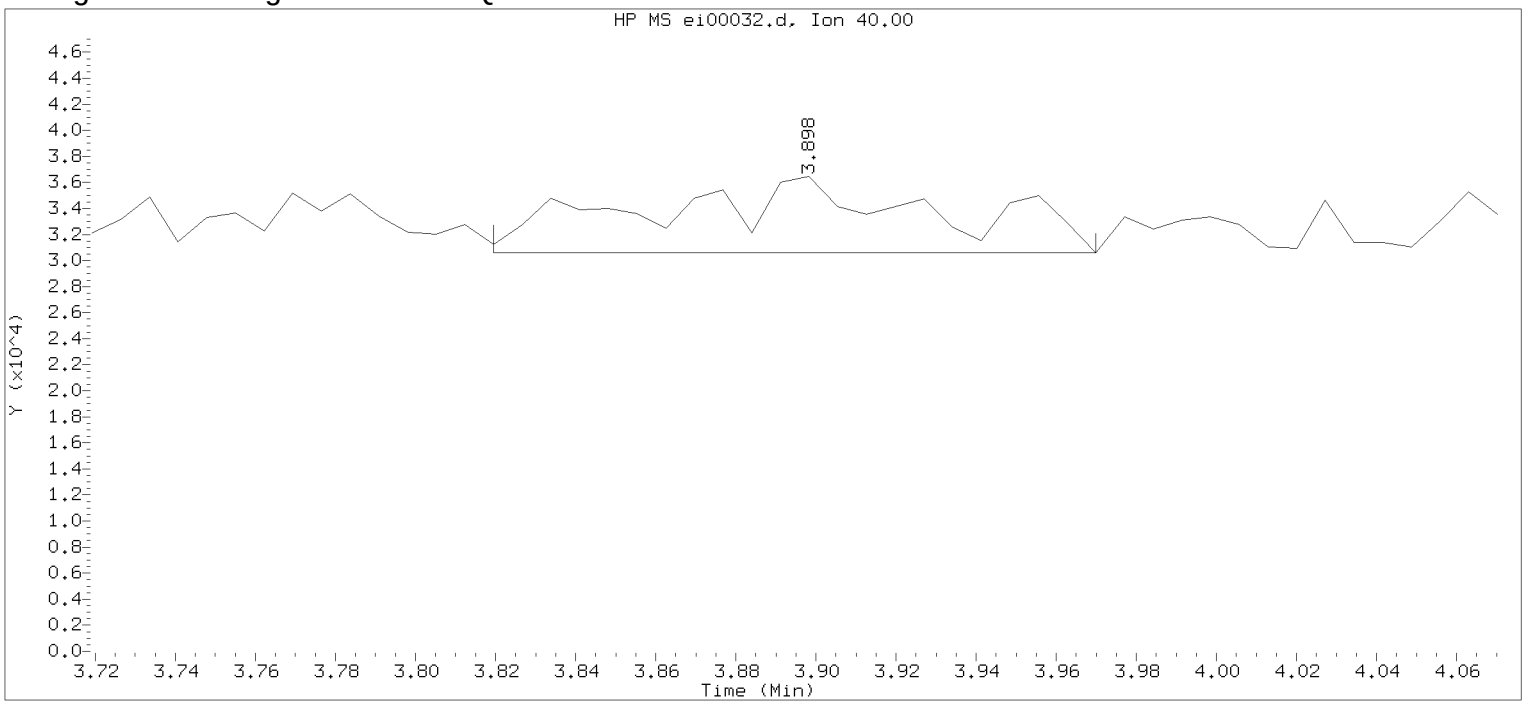
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:32.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00032.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 15:58 Analyst ID: jeb07445

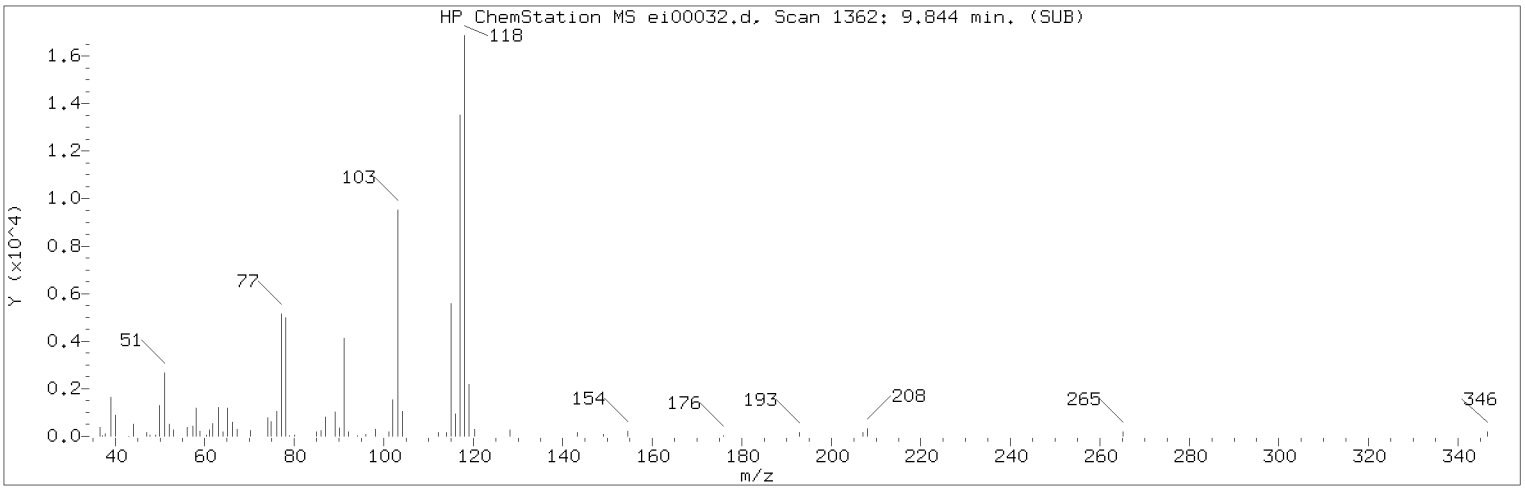
Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 16:20 Unknown

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

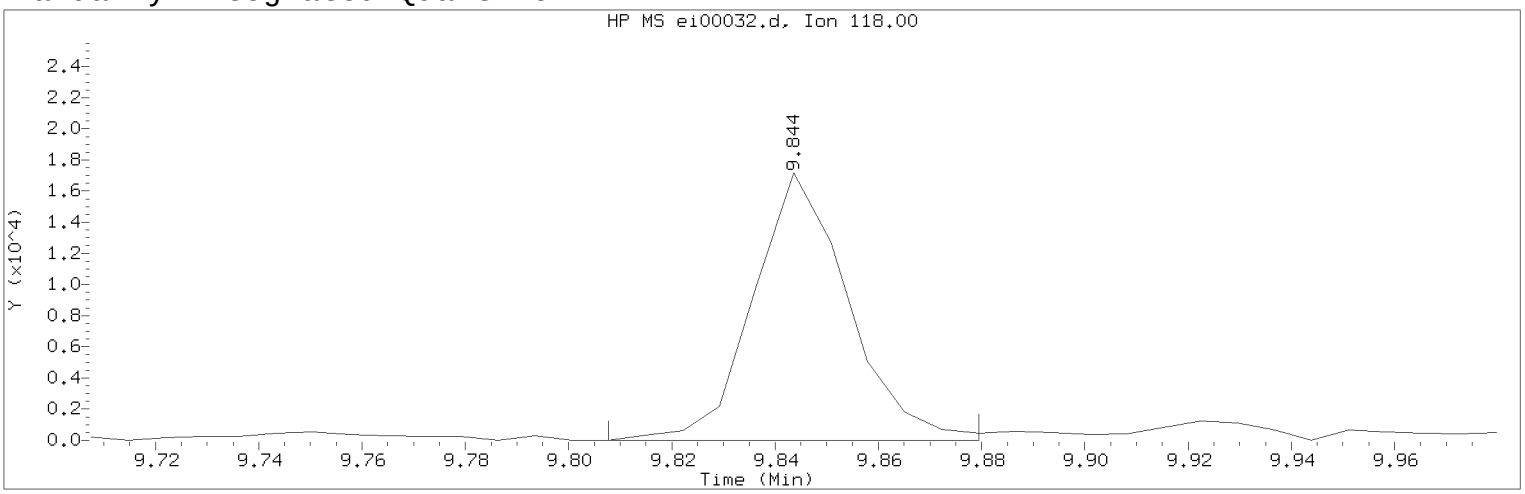
Compound Number : 23
Compound Name : Acetonitrile
Scan Number : 532
Retention Time (minutes): 3.898
Quant Ion : 40.00
Area : 29287
Concentration (ppb(v)) : 2.5880
Integration start scan : 520 Integration stop scan: 541
Y at integration start : 30576 Y at integration end: 30576

Digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:35.
Target 3.5 esignature user GLP02 jbs01388

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00032.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 15:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 12:24
Date, time and analyst ID of latest file update: 06-Sep-2018 13:32 jbs01304

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

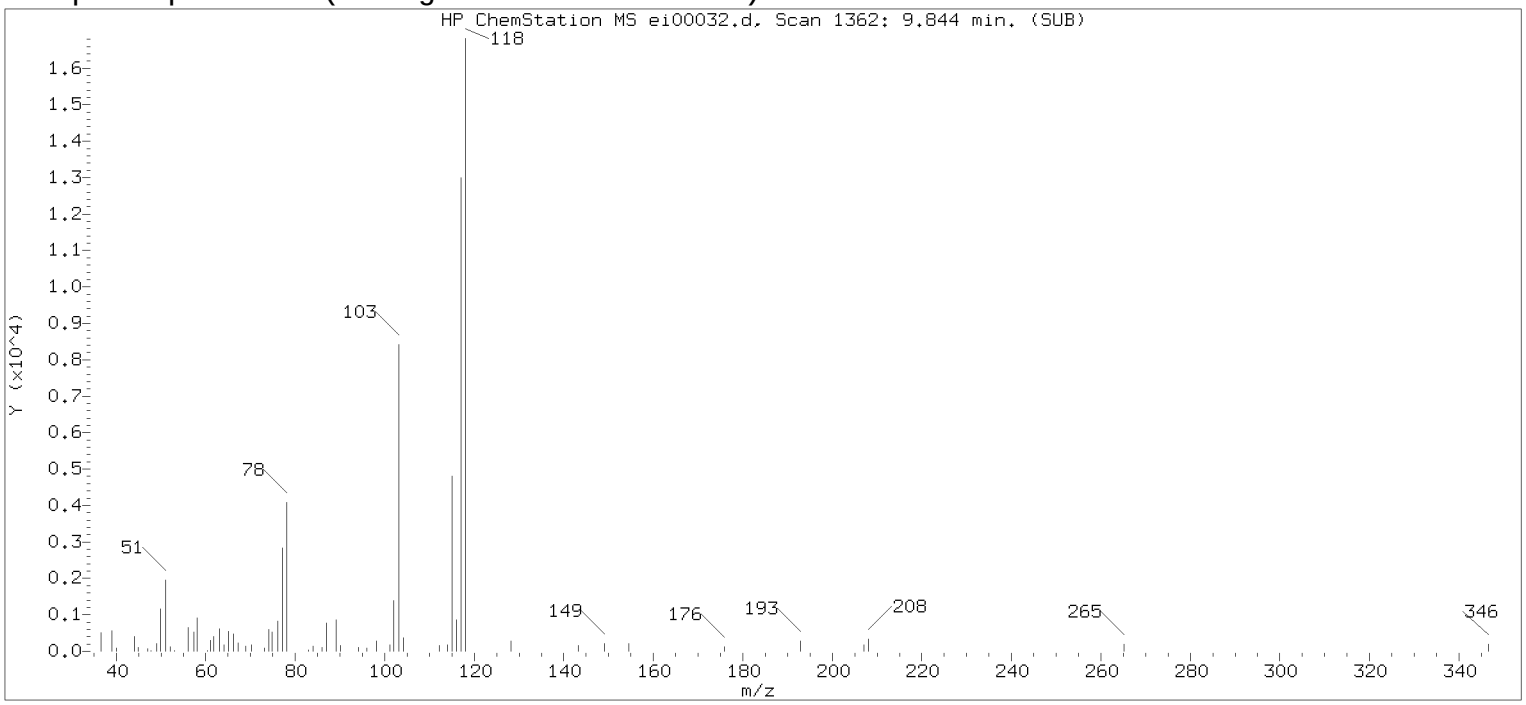
Compound Number : 88
Compound Name : Alpha Methyl Styrene
Scan Number : 1362
Retention Time (minutes): 9.844
Quant Ion : 118.00
Area (flag) : 21908M
Concentration (ppb(v)) : 0.4386
Integration start scan : 1356 Integration stop scan: 1366
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

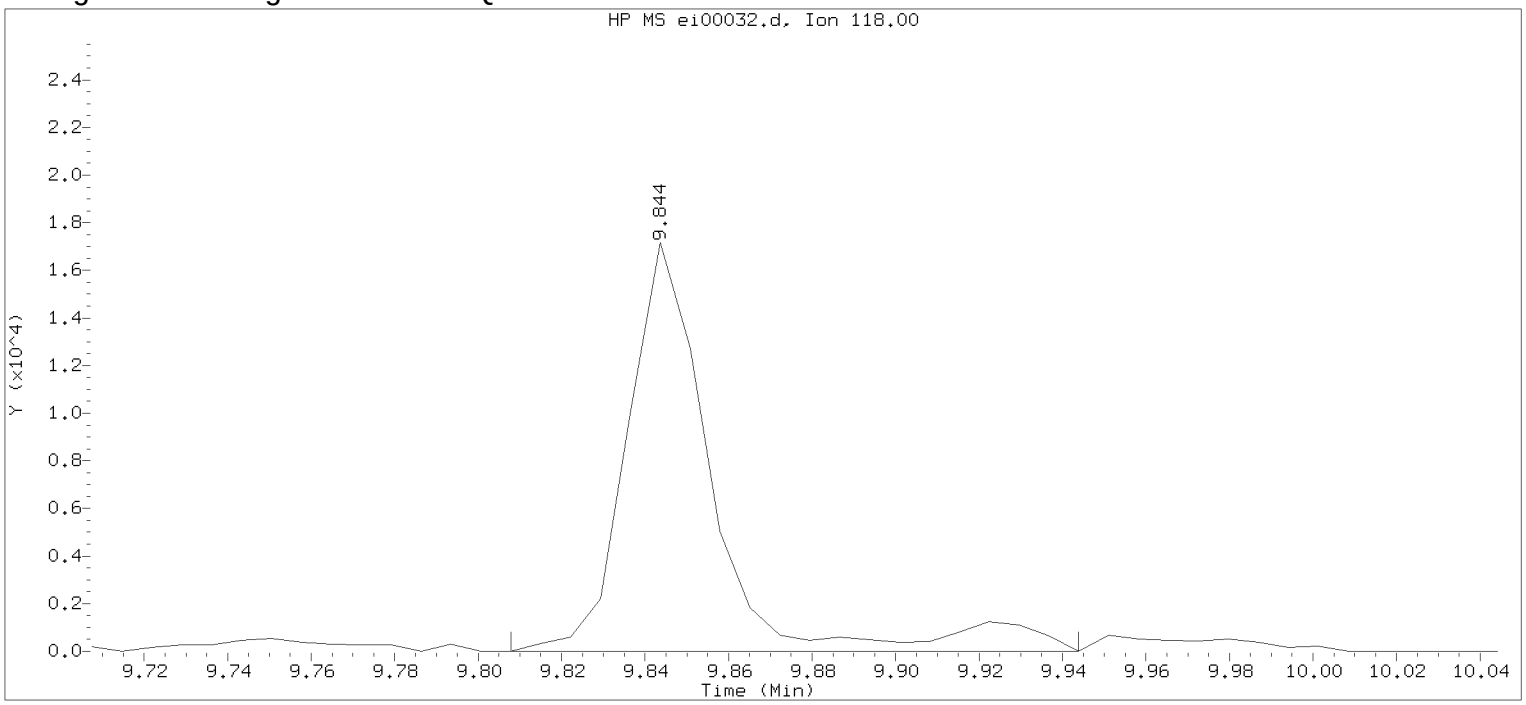
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:32.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00032.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 15:58 Analyst ID: jeb07445

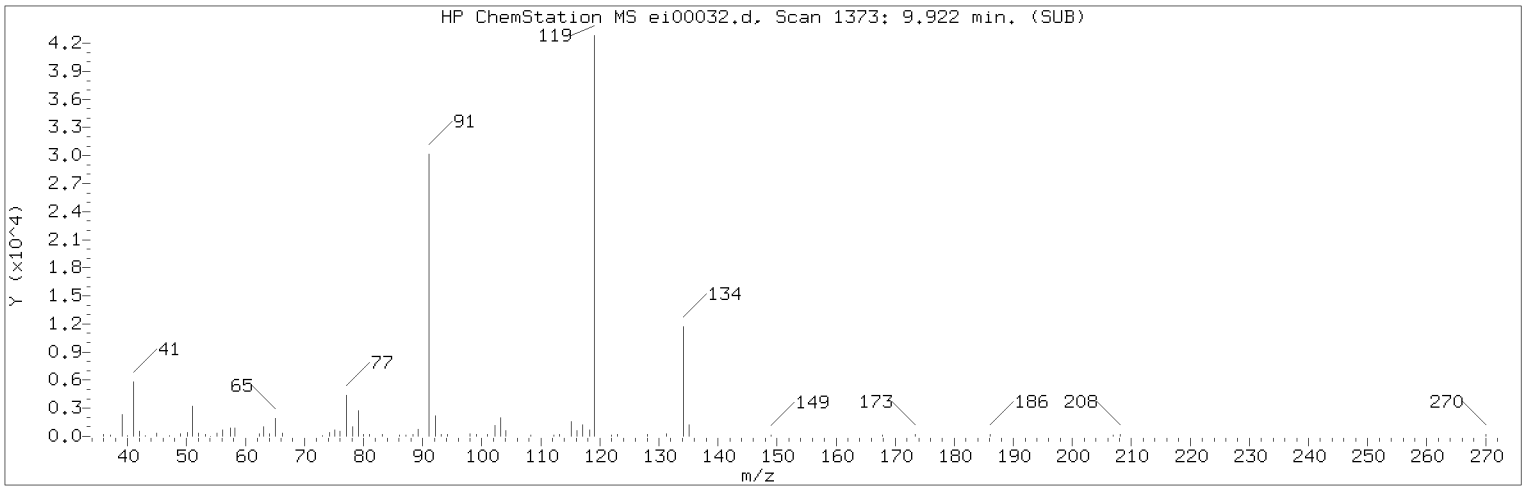
Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 16:20 Unknown

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

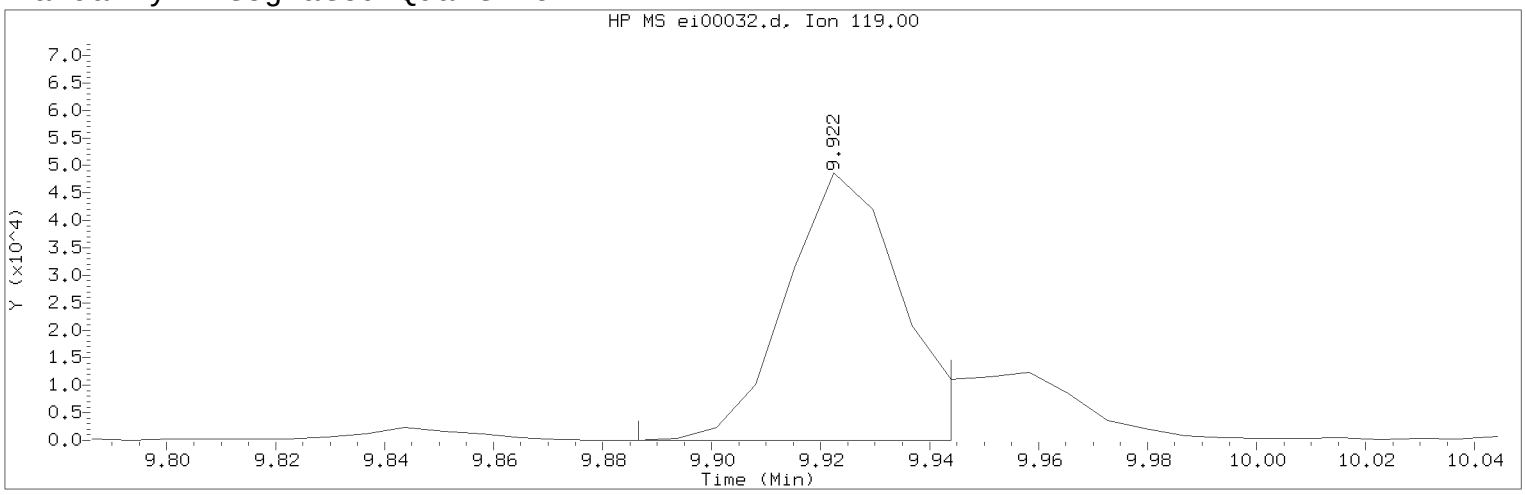
Compound Number : 88
Compound Name : Alpha Methyl Styrene
Scan Number : 1362
Retention Time (minutes): 9.844
Quant Ion : 118.00
Area : 24352
Concentration (ppb(v)) : 0.4875
Integration start scan : 1356 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:35.
Target 3.5 esignature user GLE02jbs01394

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00032.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 15:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 12:24
Date, time and analyst ID of latest file update: 06-Sep-2018 13:32 jbs01304

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

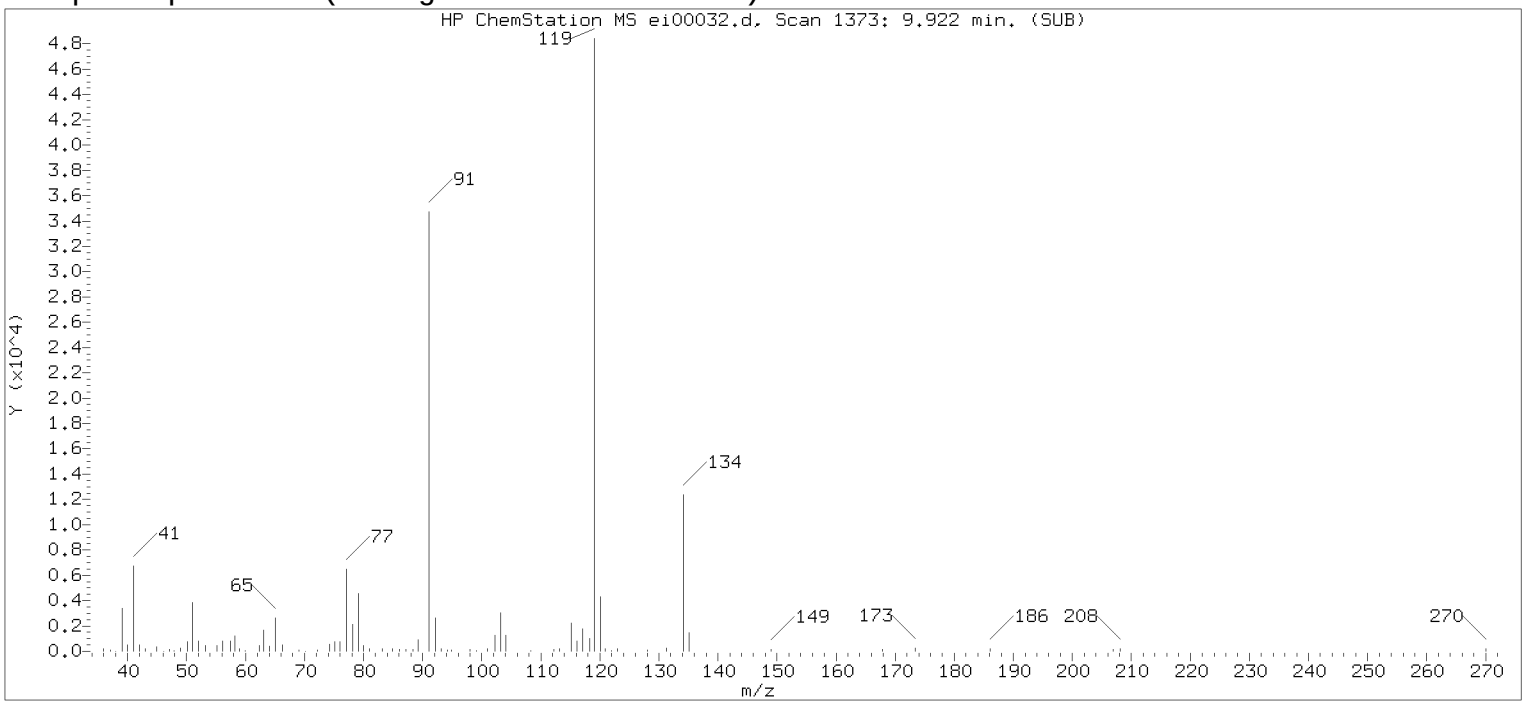
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 71799M
Concentration (ppb(v)) : 0.7461
Integration start scan : 1367 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

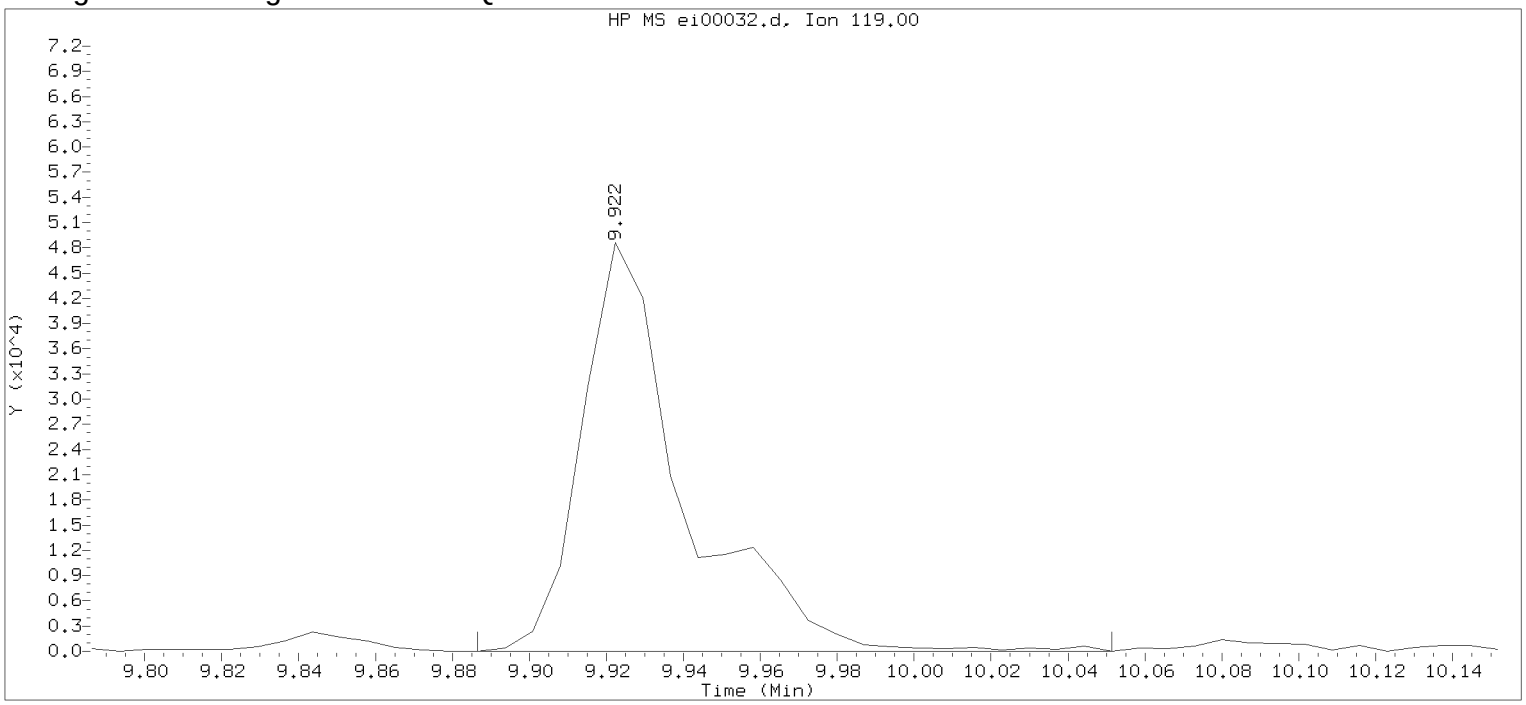
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:32.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00032.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 15:58 Analyst ID: jeb07445

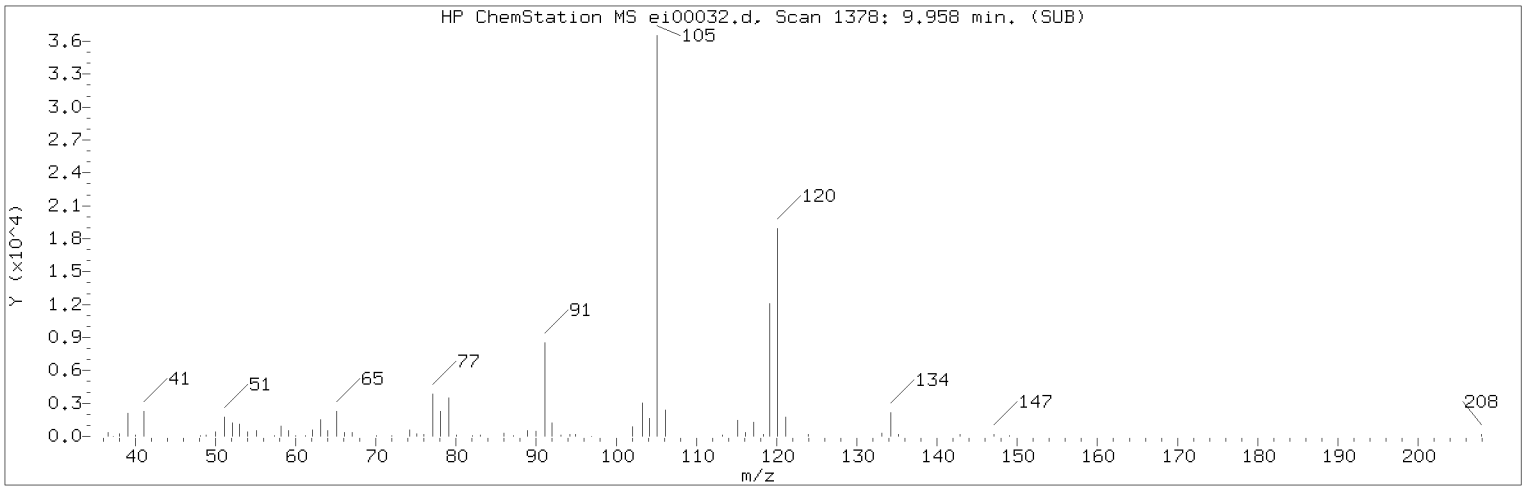
Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 16:20 Unknown

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

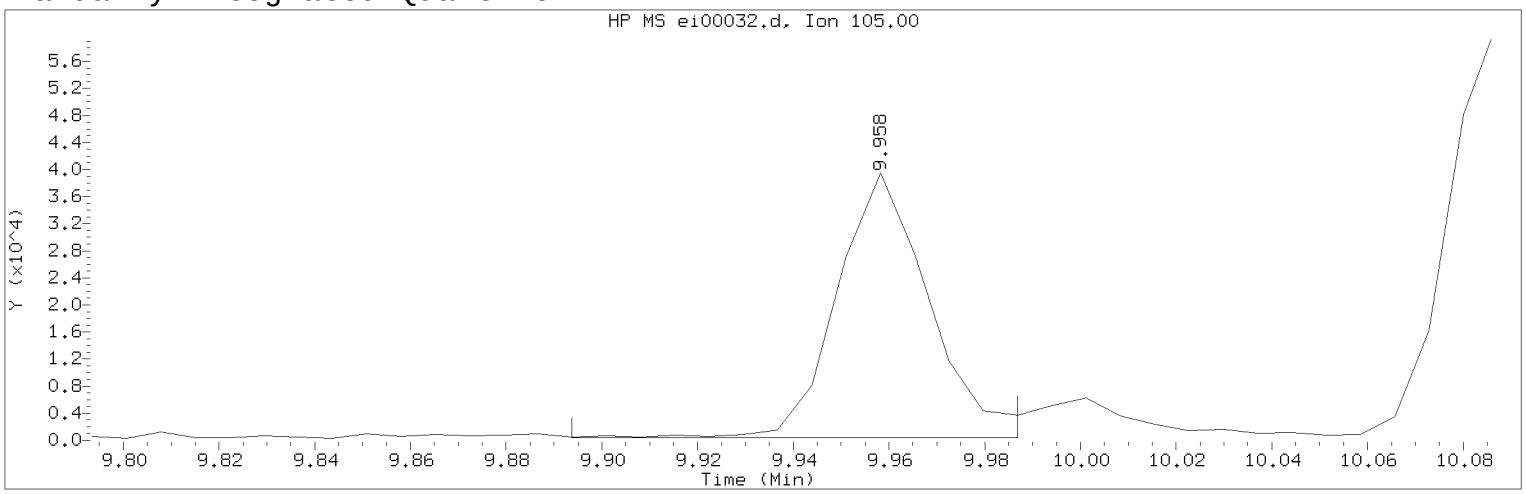
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 89844
Concentration (ppb(v)) : 0.9336
Integration start scan : 1367 Integration stop scan: 1390
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbsmith

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00032.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 15:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 12:24
Date, time and analyst ID of latest file update: 06-Sep-2018 13:32 jbs01304

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

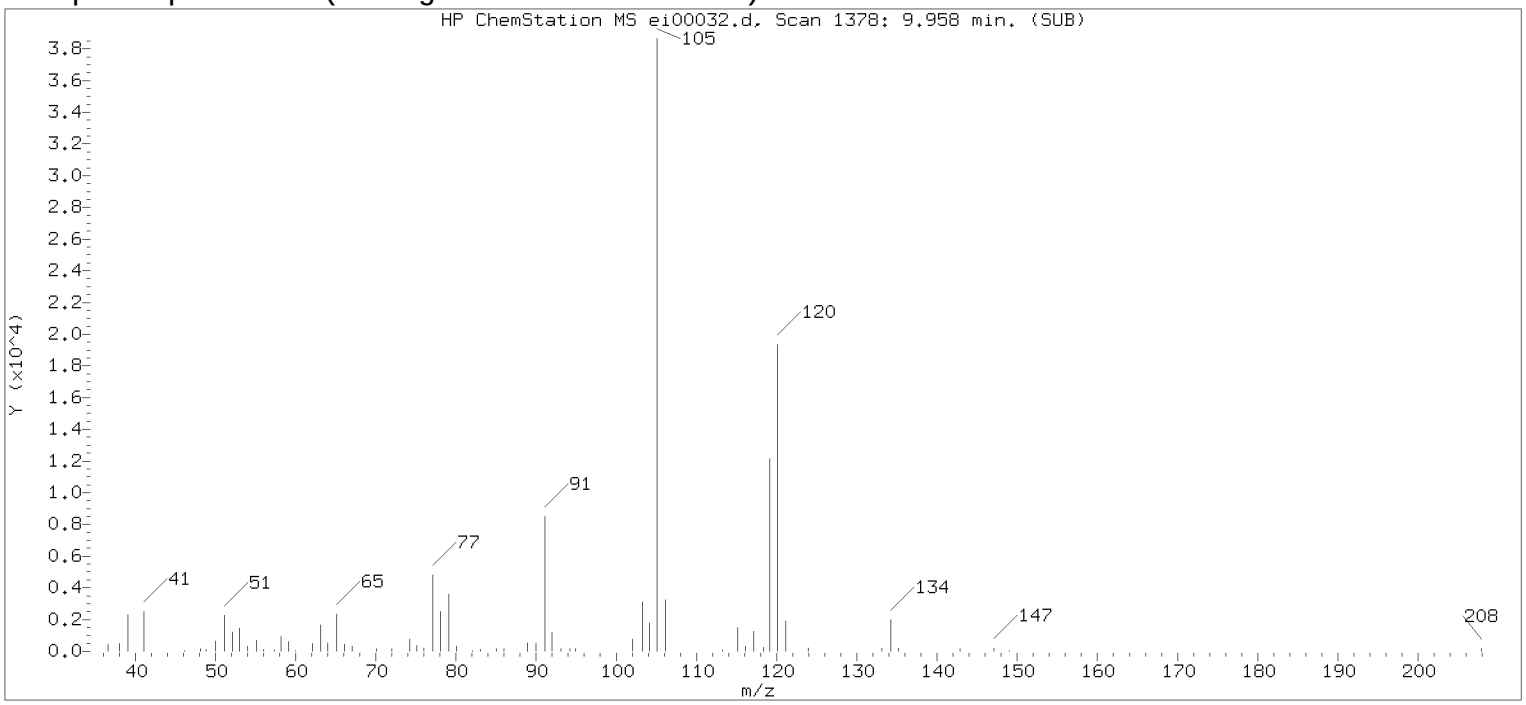
Compound Number : 90
Compound Name : 1,2,4-Trimethylbenzene
Scan Number : 1378
Retention Time (minutes): 9.958
Quant Ion : 105.00
Area (flag) : 52603M
Concentration (ppb(v)) : 0.5276
Integration start scan : 1368 Integration stop scan: 1381
Y at integration start : 364 Y at integration end: 364

Reason for manual integration: improper integration

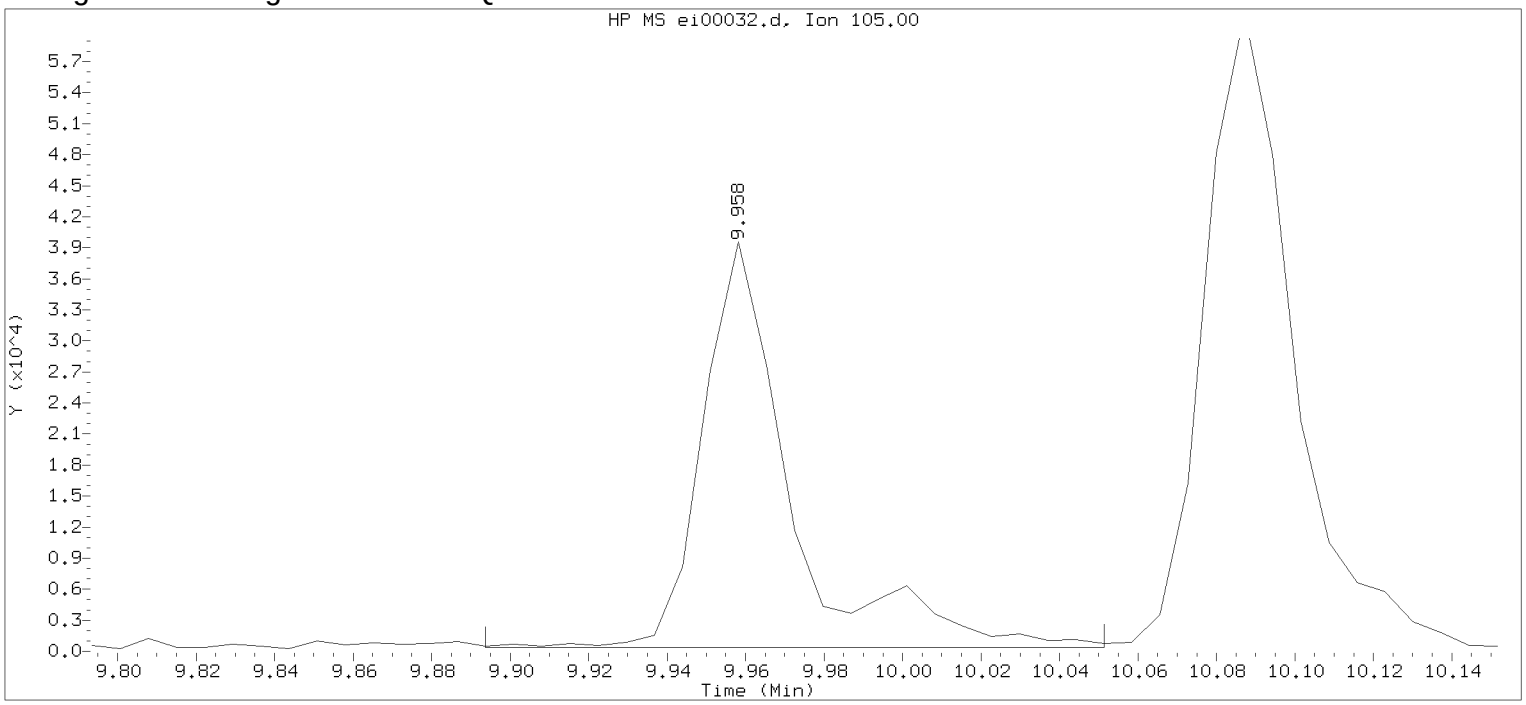
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:32.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



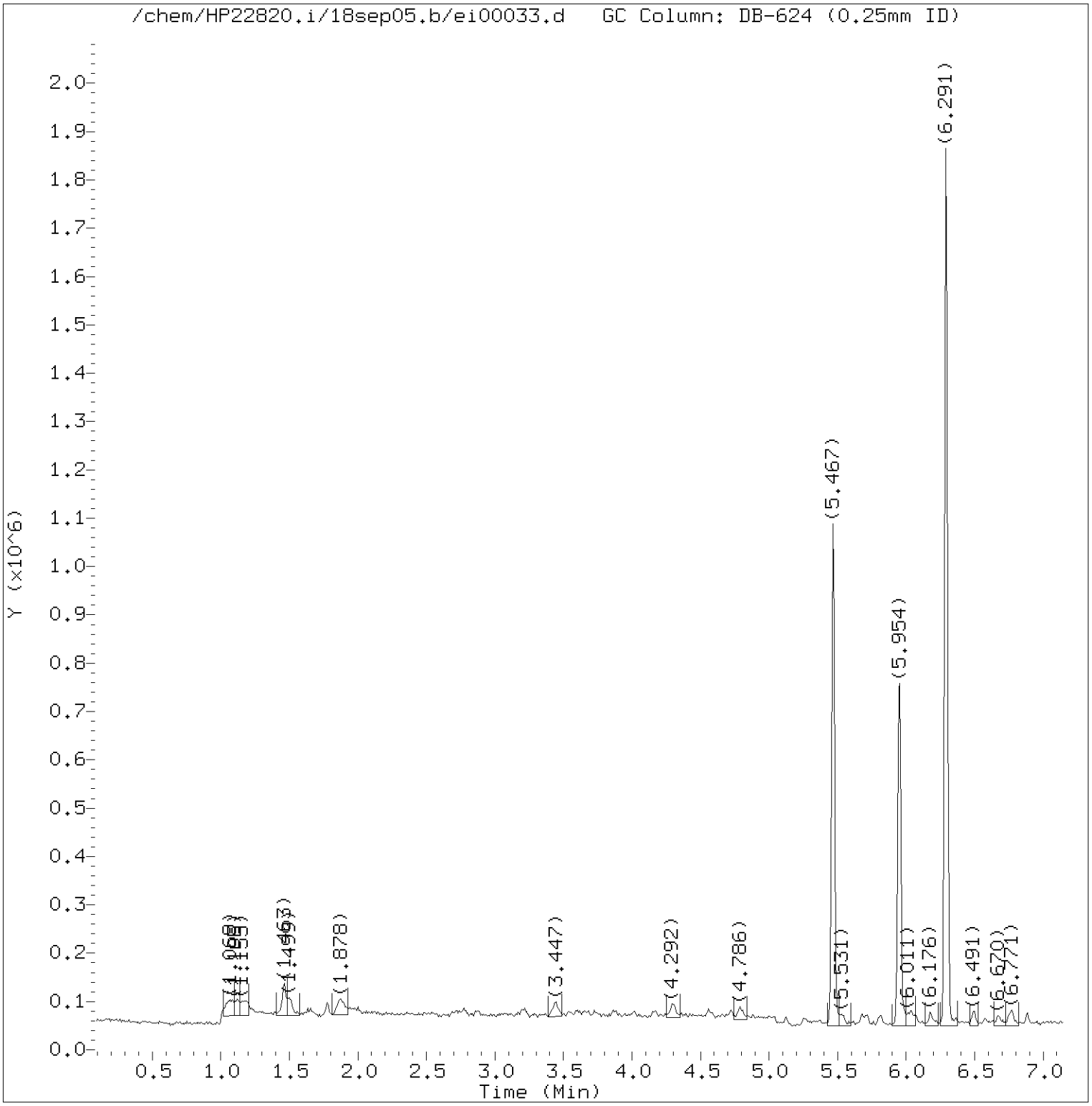
Data File: /chem/HP22820.i/18sep05.b/ei00032.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 15:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 16:20 Unknown

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

Compound Number : 90
Compound Name : 1,2,4-Trimethylbenzene
Scan Number : 1378
Retention Time (minutes): 9.958
Quant Ion : 105.00
Area : 61166
Concentration (ppb(v)) : 0.6135
Integration start scan : 1368 Integration stop scan: 1390
Y at integration start : 364 Y at integration end: 364

Digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:35.
Target 3.5 esignature user GLP02jbs01394



Total Ion Chromatogram (TIC)

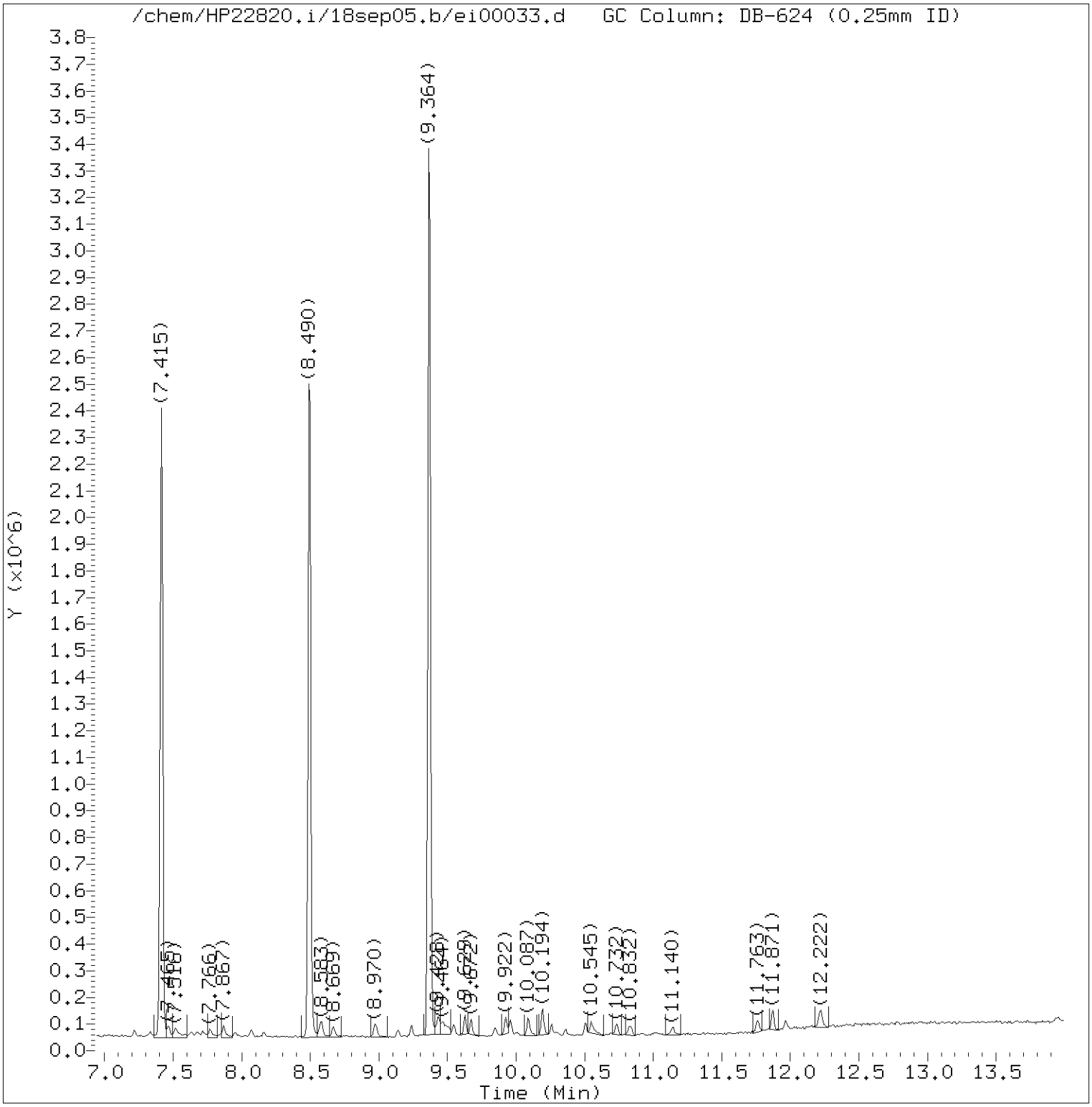
Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00033.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 16:22 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 12:24
Date, time and analyst ID of latest file update: 06-Sep-2018 13:32 jbs01304

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

Digitally signed by Jeffrey B. Smith
on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00033.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 16:22 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 12:24
Date, time and analyst ID of latest file update: 06-Sep-2018 13:32 jbs01304

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

Digitally signed by Jeffrey B. Smith
on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00033.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 16:22 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 12:24
Date, time and analyst ID of latest file update: 06-Sep-2018 13:32 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.613	41	4234M	0.319
2) Dichlorodifluoromethane	(1)	1.649	85	11570	0.221
3) Chlorodifluoromethane	(1)	1.656	51	6479	0.247
4) Freon 114	(1)	1.778	85	11756	0.222
5) Chloromethane	(1)	1.835	50	5037	0.485
6) Vinyl Chloride	(1)	1.986	62	4260M	0.226
7) 1,3-Butadiene	(1)	2.000	54	3996M	0.279
8) Bromomethane	(1)	2.351	94	4397	0.248
9) Chloroethane	(1)	2.480	64	3664M	0.345
10) Bromoethene	(1)	2.702	106	4823M	0.256
11) Dichlorofluoromethane	(1)	2.731	67	10441	0.243
12) Trichlorofluoromethane	(1)	2.774	101	12436	0.223
13) Pentane	(1)	2.874	43	8327	0.265
14) Ethanol	(1)	3.089	45	9791	1.313
16) Acrolein	(1)	3.347	56	2307	0.305
17) 1,1-Dichloroethene	(1)	3.433	61	7548	0.239
18) Freon 113	(1)	3.440	103	7877	0.266
19) Acetone	(1)	3.540	43	13232	0.493
20) Methyl Iodide	(1)	3.604	142	11950	0.237
21) Carbon Disulfide	(1)	3.669	76	14624	0.261
22) Isopropanol	(1)	3.726	45	10506	0.322
24) 3-Chloropropene	(1)	3.870	76	3299M	0.363
23) Acetonitrile	(1)	3.884	40	12477	1.057
25) Methylene Chloride	(1)	4.013	84	5232	0.308
26) tert-Butyl Alcohol	(1)	4.170	59	10912	0.237
28) trans-1,2-Dichloroethene	(1)	4.292	61	6967	0.249
29) Methyl t-Butyl Ether	(1)	4.299	73	12545	0.198
27) Acrylonitrile	(1)	4.314	53	7927	0.499
30) Hexane	(1)	4.564	57	7123	0.226
31) 1,1-Dichloroethane	(1)	4.715	63	8868	0.238
32) Vinyl Acetate	(1)	4.779	86	2079	0.348
33) Di-Isopropyl Ether	(1)	4.794	45	13064	0.213
34) Ethyl Tert-Butyl Ether	(1)	5.123	59	11510	0.185
35) cis-1,2-Dichloroethene	(1)	5.259	61	6726	0.244
37) 2-Butanone	(1)	5.302	72	3265M	0.273
38) Ethyl Acetate	(1)	5.338	70	3147	0.522
39) Methyl Acrylate	(1)	5.374	55	8938	0.253
40)*Bromochloromethane	(1)	5.467	130	298943	10.000

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

Digitally signed by Jeffrey B. Smith
on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00033.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 16:22 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 12:24
Date, time and analyst ID of latest file update: 06-Sep-2018 13:32 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
41) Tetrahydrofuran	(1)	5.503	42	7180	0.325
42) Chloroform	(1)	5.539	83	10747	0.227
43) 1,1,1-Trichloroethane	(1)	5.682	97	11206	0.229
44) Cyclohexane	(1)	5.710	56	8098	0.250
45) Carbon Tetrachloride	(1)	5.811	117	11186	0.234
46) Benzene	(2)	5.990	78	16418	0.237
47) 1,2-Dichloroethane	(2)	6.011	62	7234	0.245
48) Isooctane	(2)	6.033	57	20852	0.219
49) Tert-Amyl Methyl Ether	(2)	6.076	73	13460	0.217
50) Heptane	(2)	6.183	43	9845	0.281
51)*1,4-Difluorobenzene	(2)	6.291	114	1132842	10.000
52) Trichloroethene	(2)	6.491	130	6372	0.216
53) Ethyl Acrylate	(2)	6.577	55	11379	0.235
36) 1,2-Dichloroethene (total)	(1)		61	13693	0.493
54) 1,2-Dichloropropane	(2)	6.670	63	6943	0.289
57) Methyl Methacrylate	(2)	6.749	69	7241	0.276
55) Dibromomethane	(2)	6.771	174	5867	0.200
56) 1,4-Dioxane	(2)	6.785	88	3754	0.218
58) Bromodichloromethane	(2)	6.885	83	10181	0.202
59) cis-1,3-Dichloropropene	(2)	7.215	75	10071	0.229
60) 4-Methyl-2-Pentanone	(2)	7.336	43	11684	0.240
61) Toluene	(3)	7.465	91	17635	0.207
62) Octane	(3)	7.516	43	11037	0.230
63) trans-1,3-Dichloropropene	(3)	7.637	75	9737	0.252
65) Ethyl Methacrylate	(3)	7.673	69	12323	0.267
66) 1,1,2-Trichloroethane	(3)	7.773	97	7585	0.252
67) Tetrachloroethene	(3)	7.867	166	9197	0.199
68) 2-Hexanone	(3)	7.952	43	9818	0.206
69) Dibromochloromethane	(3)	7.974	127	7459	0.190
70) 1,2-Dibromoethane	(3)	8.160	107	8593	0.185
71)*Chlorobenzene-d5	(3)	8.497	117	1122775	10.000
72) Chlorobenzene	(3)	8.518	112	15481	0.230
73) 1,1,1,2-Tetrachloroethane	(3)	8.568	131	6756	0.193
74) Ethylbenzene	(3)	8.583	91	21068	0.182
75) m/p-Xylene	(3)	8.669	91	18842	0.206
76) o-Xylene	(3)	8.970	91	19320	0.212
78) Styrene	(3)	8.984	104	11727	0.168
79) Bromoform	(3)	9.142	173	9556	0.173

* = Compound is an internal standard.

Digitally signed by Jeffrey B. Smith
on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep05.b/ei00033.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 16:22 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 12:24
Date, time and analyst ID of latest file update: 06-Sep-2018 13:32 jbs01304

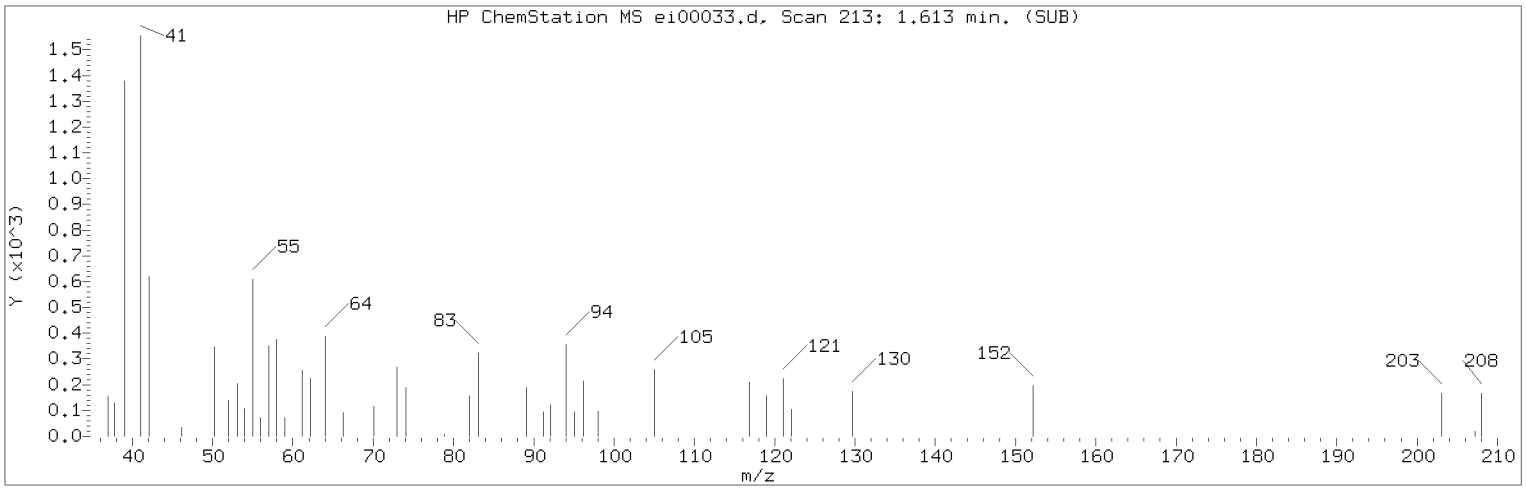
Sample Name: mdlv0.2 Lab Sample ID: mdlv0.2

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
80) Cumene	(3)	9.242	105	25235	0.204
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	11489	0.176
81) Bromobenzene	(3)	9.493	156	8079	0.191
83) 1,2,3-Trichloropropane	(3)	9.507	110	4195	0.208
84) n-Propylbenzene	(3)	9.550	120	7664	0.227
85) 2-Chlorotoluene	(3)	9.629	126	5492	0.181
86) 4-Ethyltoluene	(3)	9.629	105	24526	0.200
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	30913	0.297
88) Alpha Methyl Styrene	(3)	9.851	118	10717	0.209
89) tert-Butylbenzene	(3)	9.922	119	34033M	0.345
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	23030M	0.225
91) sec-Butylbenzene	(3)	10.087	105	42755	0.284
92) 1,3-Dichlorobenzene	(3)	10.194	146	13324	0.197
94) p-Isopropyltoluene	(3)	10.194	119	33132	0.263
93) 1,4-Dichlorobenzene	(3)	10.259	146	14744	0.211
95) Benzyl Chloride	(3)	10.366	91	14524	0.158
97) n-Butylbenzene	(3)	10.502	91	26279	0.223
96) 1,2-Dichlorobenzene	(3)	10.545	146	13135	0.205
98) Hexachloroethane	(3)	10.739	117	6304	0.184
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	7258	0.211
100) 1,2,4-Trichlorobenzene	(3)	11.763	180	12281	0.247
101) Hexachlorobutadiene	(3)	11.871	225	13260	0.287
102) Naphthalene	(3)	11.964	128	26040	0.254
64) 1,3-Dichloropropene (total)	(3)		75	19808	0.481
77) Xylene (total)	(3)		91	38162	0.419

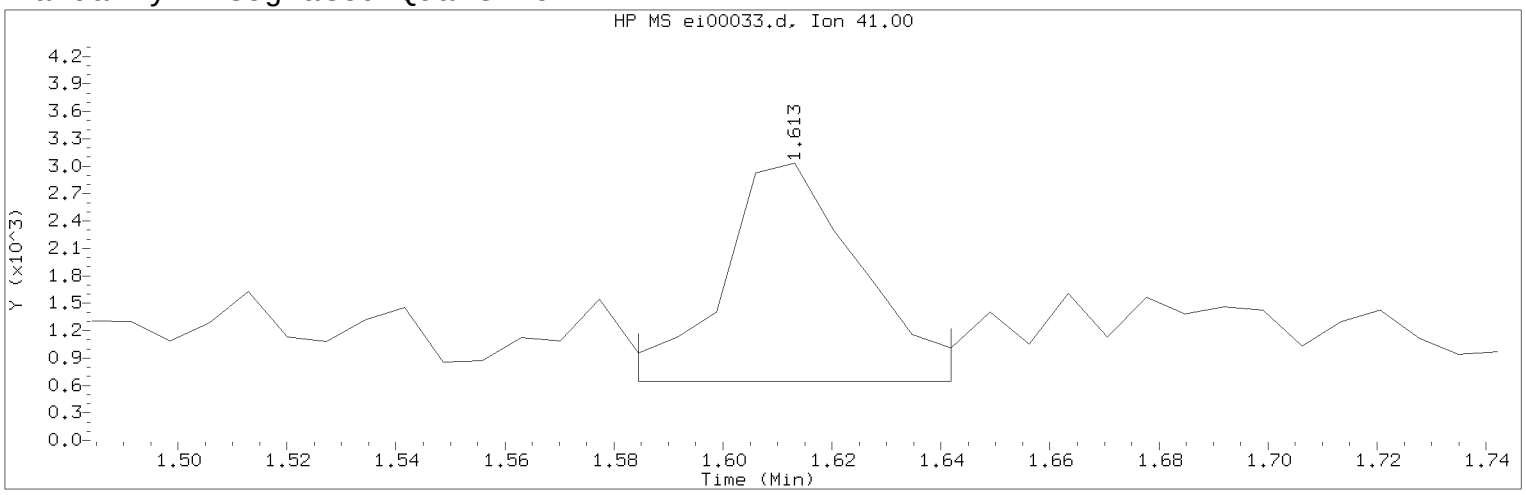
M = Compound was manually integrated.

Digitally signed by Jeffrey B. Smith
on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00033.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 16:22 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 12:24
Date, time and analyst ID of latest file update: 06-Sep-2018 13:32 jbs01304

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

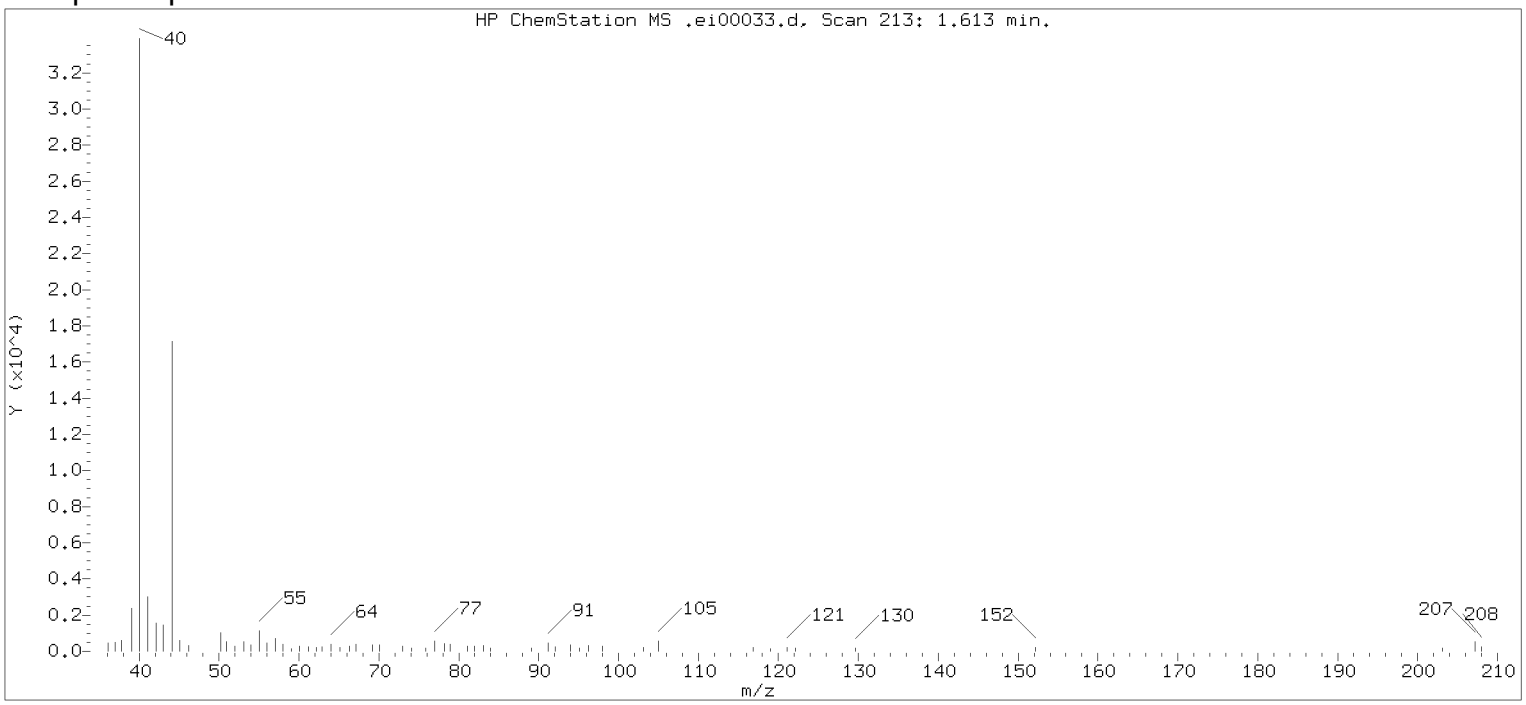
Compound Number : 1
Compound Name : Propene
Scan Number : 213
Retention Time (minutes): 1.613
Quant Ion : 41.00
Area (flag) : 4234M
Concentration (ppb(v)) : 0.3188
Integration start scan : 208 Integration stop scan: 216
Y at integration start : 645 Y at integration end: 645

Reason for manual integration: missed peak

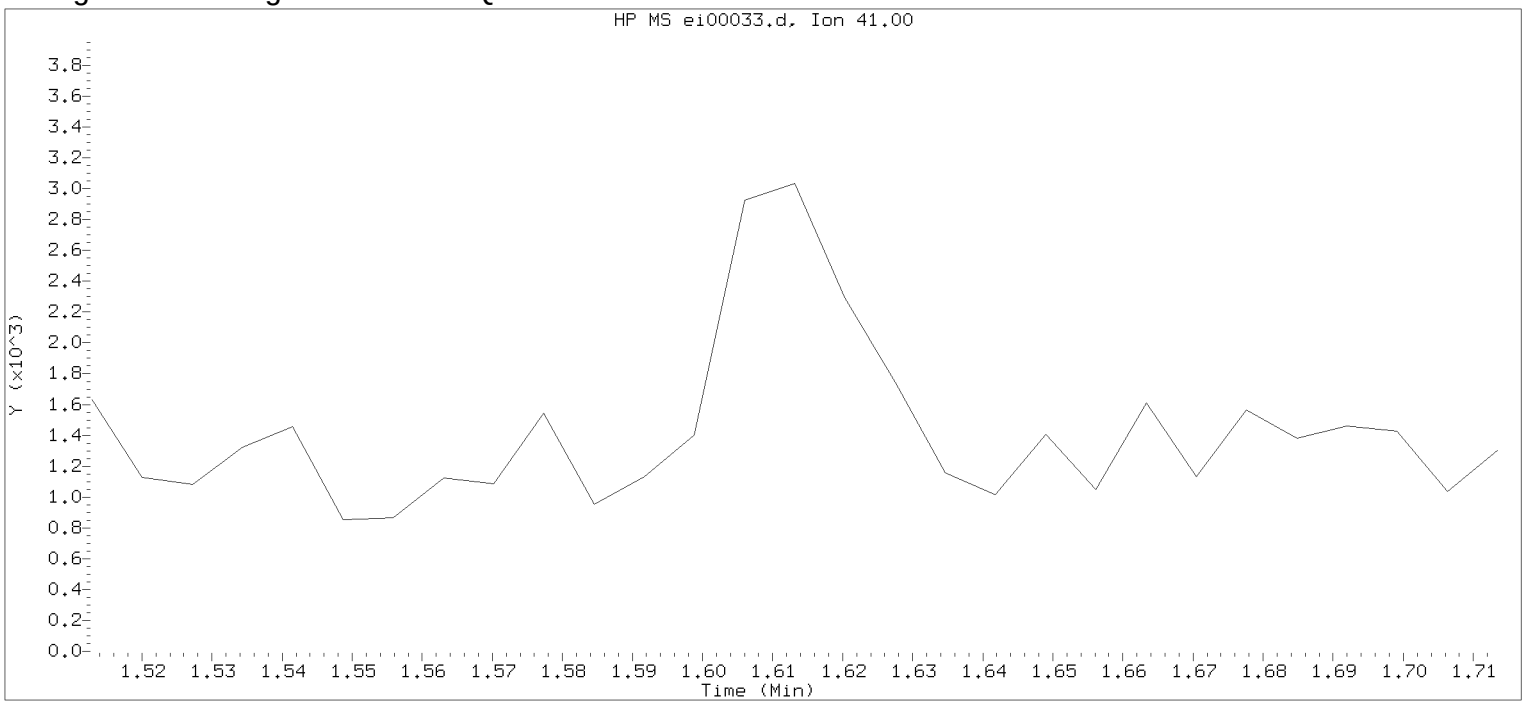
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:32.
PARALLAX ID: jbs01304

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00033.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 16:22 Analyst ID: jeb07445

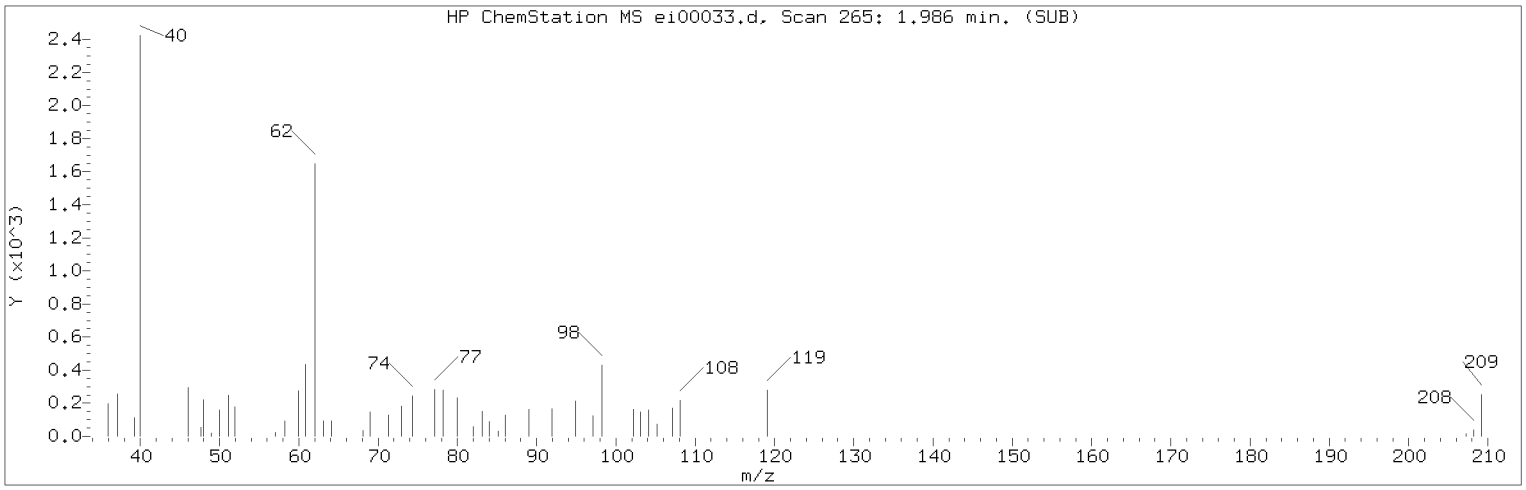
Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 16:43 Unknown

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

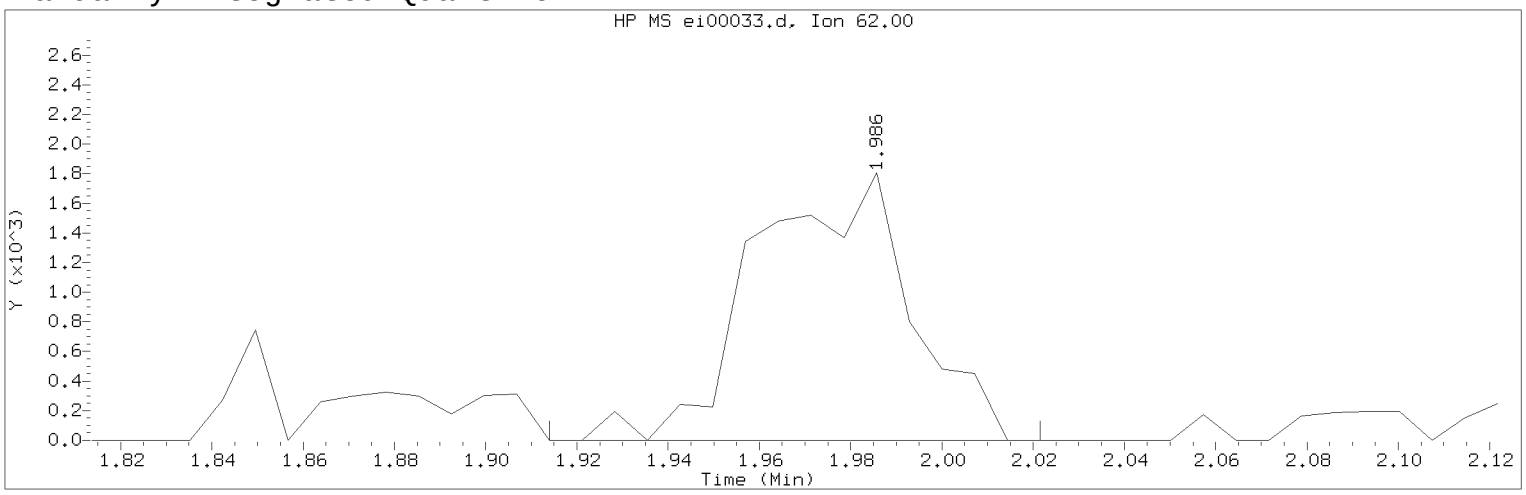
Compound Number : 1
Compound Name : Propene
Expected RT (minutes) : 1.614
Quant Ion : 41.00

Digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00033.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 16:22 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 12:24
Date, time and analyst ID of latest file update: 06-Sep-2018 13:32 jbs01304

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

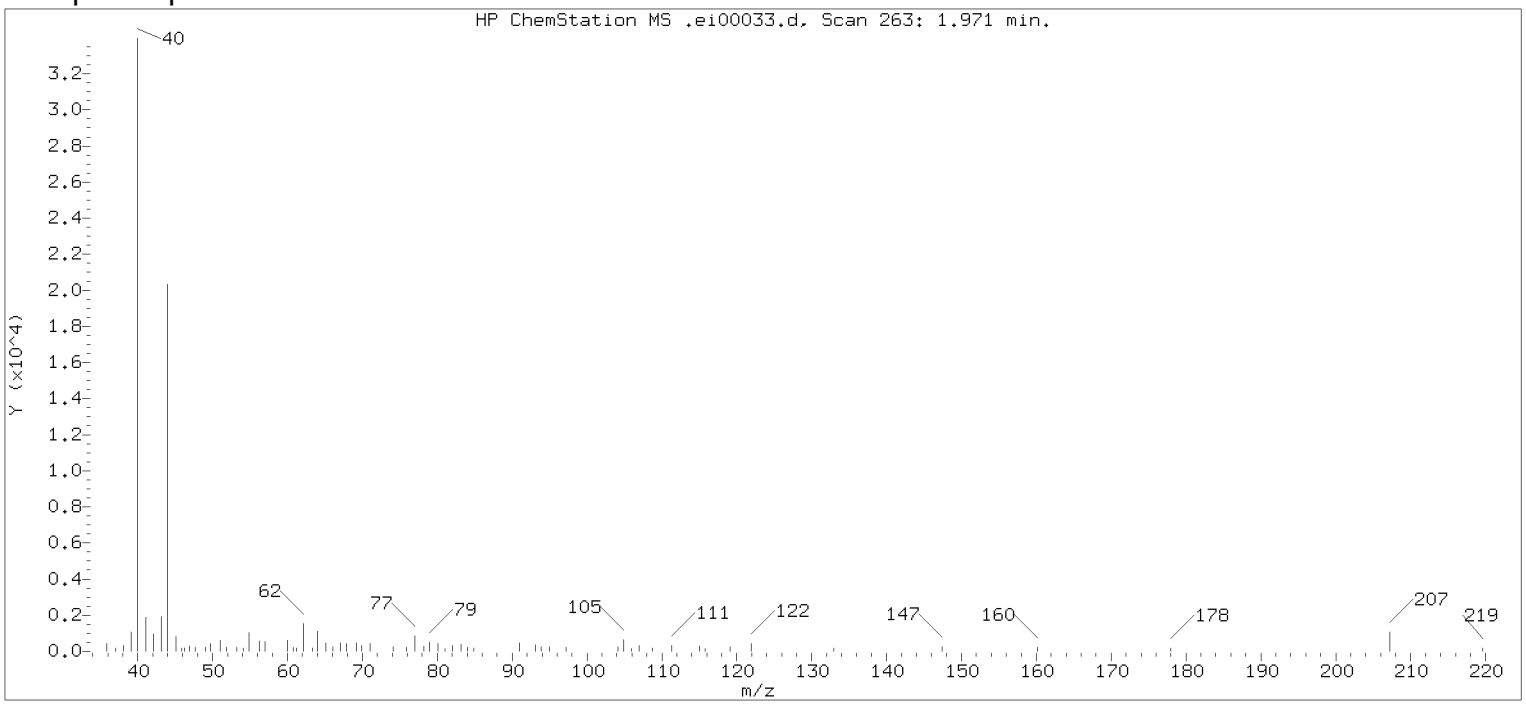
Compound Number : 6
Compound Name : Vinyl Chloride
Scan Number : 265
Retention Time (minutes): 1.986
Quant Ion : 62.00
Area (flag) : 4260M
Concentration (ppb(v)) : 0.2265
Integration start scan : 254 Integration stop scan: 269
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

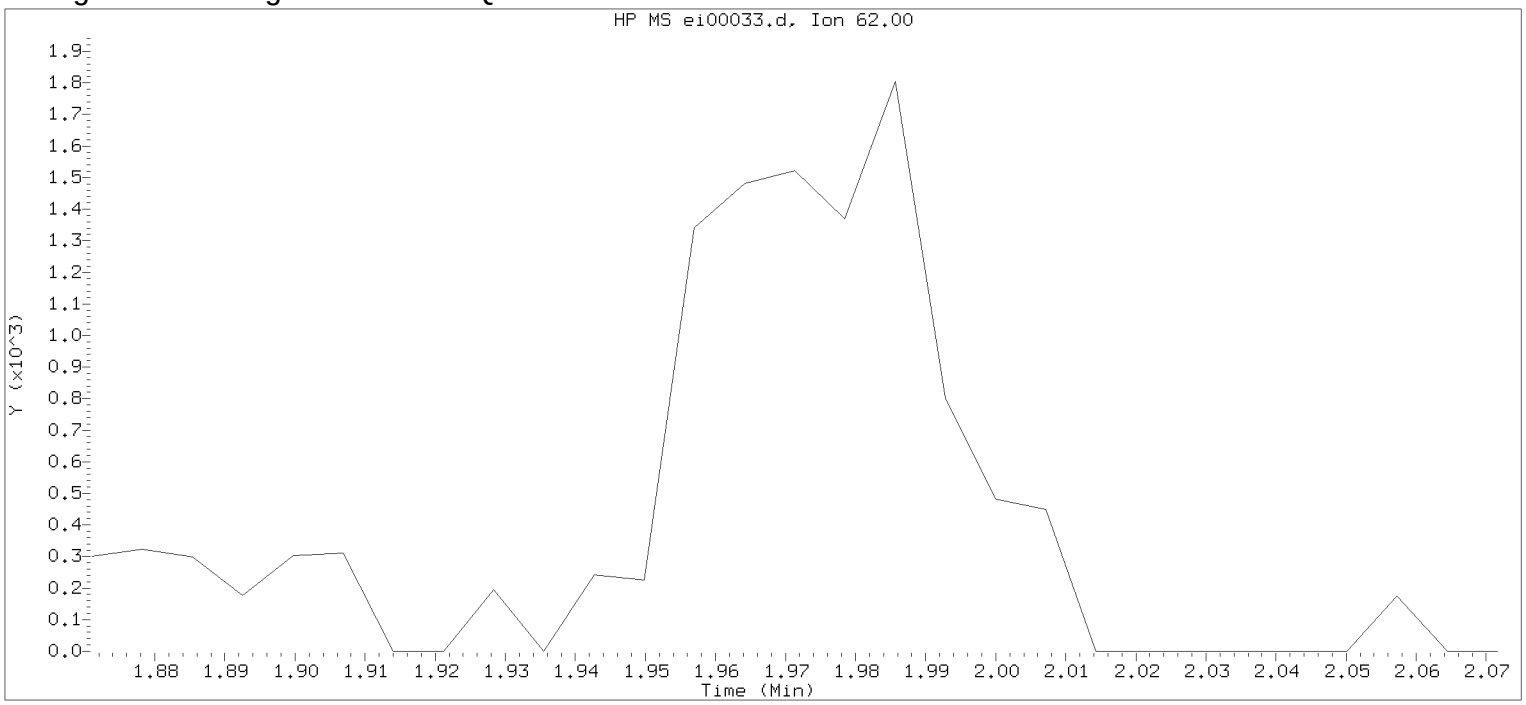
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:32.
PARALLAX ID: jbs01304

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00033.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 16:22 Analyst ID: jeb07445

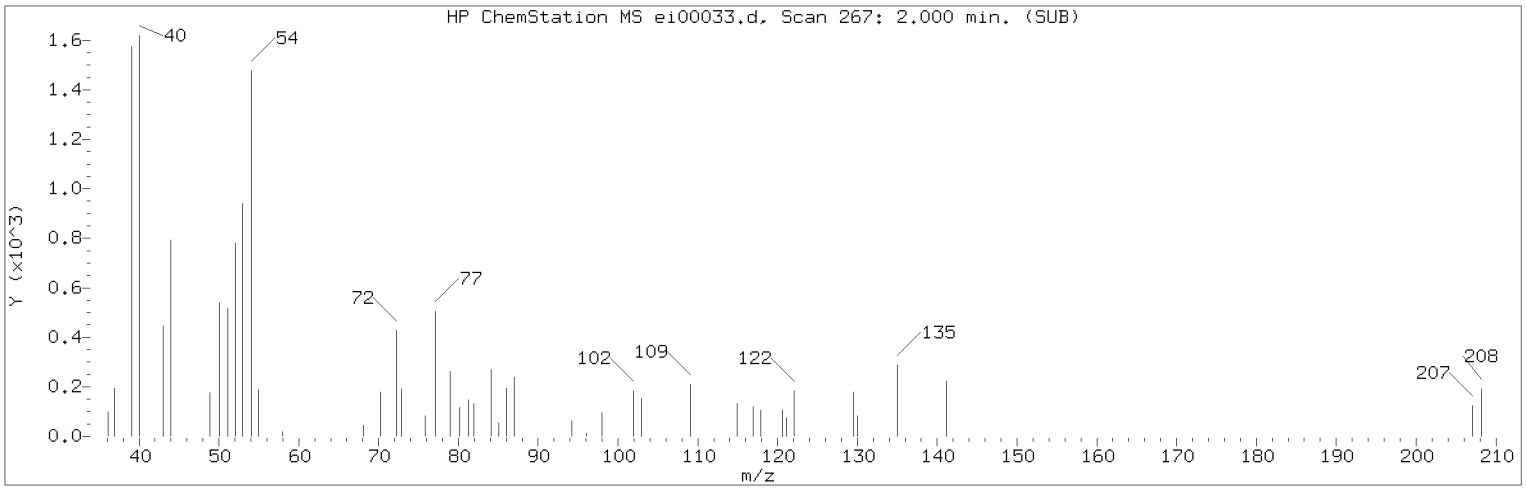
Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 16:43 Unknown

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

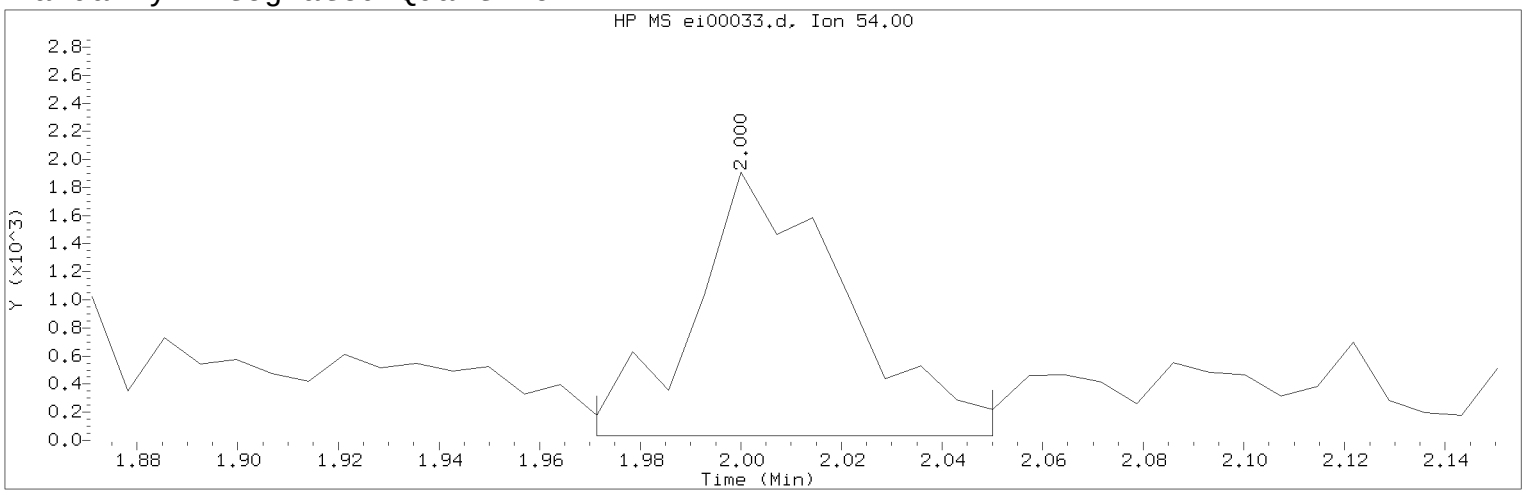
Compound Number : 6
Compound Name : Vinyl Chloride
Expected RT (minutes) : 1.972
Quant Ion : 62.00

Digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00033.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 16:22 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 12:24
Date, time and analyst ID of latest file update: 06-Sep-2018 13:32 jbs01304

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

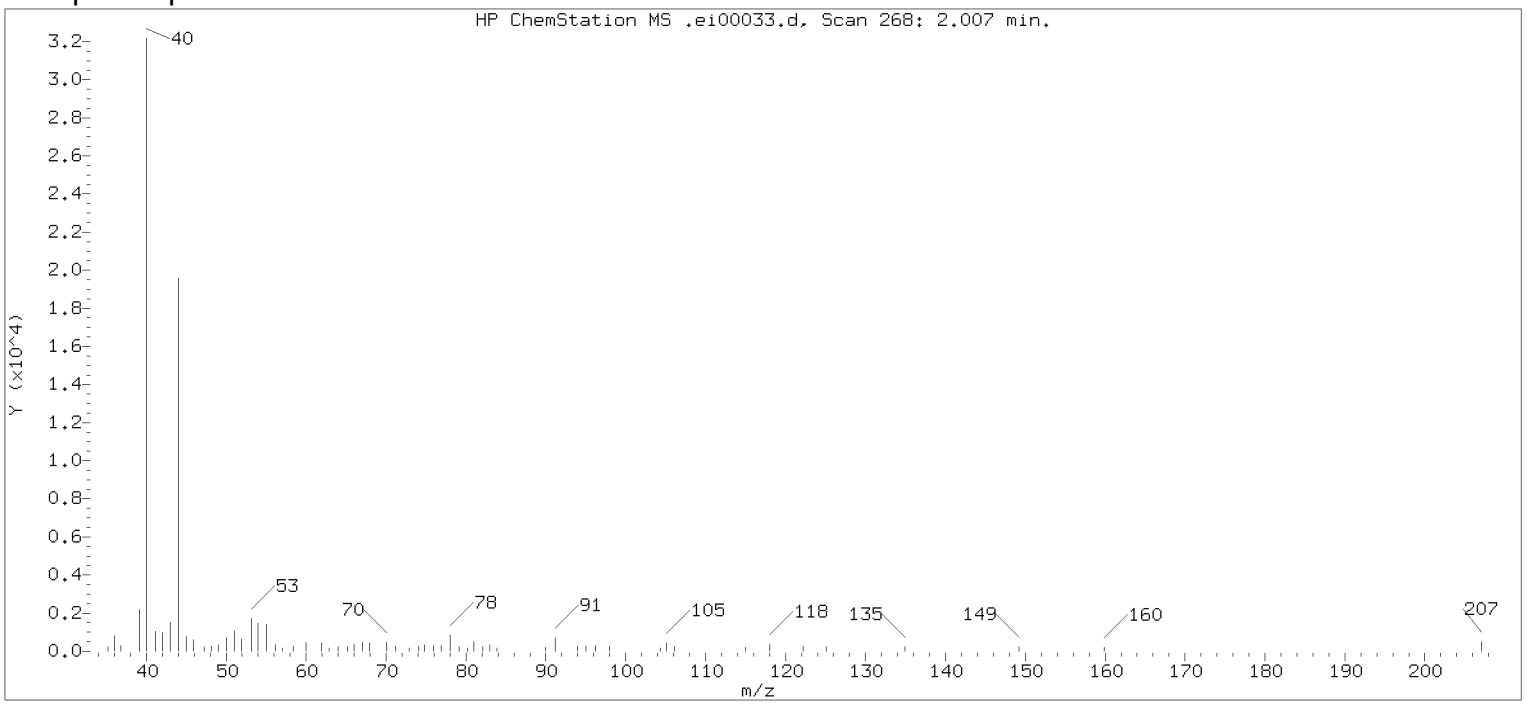
Compound Number : 7
Compound Name : 1,3-Butadiene
Scan Number : 267
Retention Time (minutes): 2.000
Quant Ion : 54.00
Area (flag) : 3996M
Concentration (ppb(v)) : 0.2785
Integration start scan : 262 Integration stop scan: 273
Y at integration start : 30 Y at integration end: 30

Reason for manual integration: missed peak

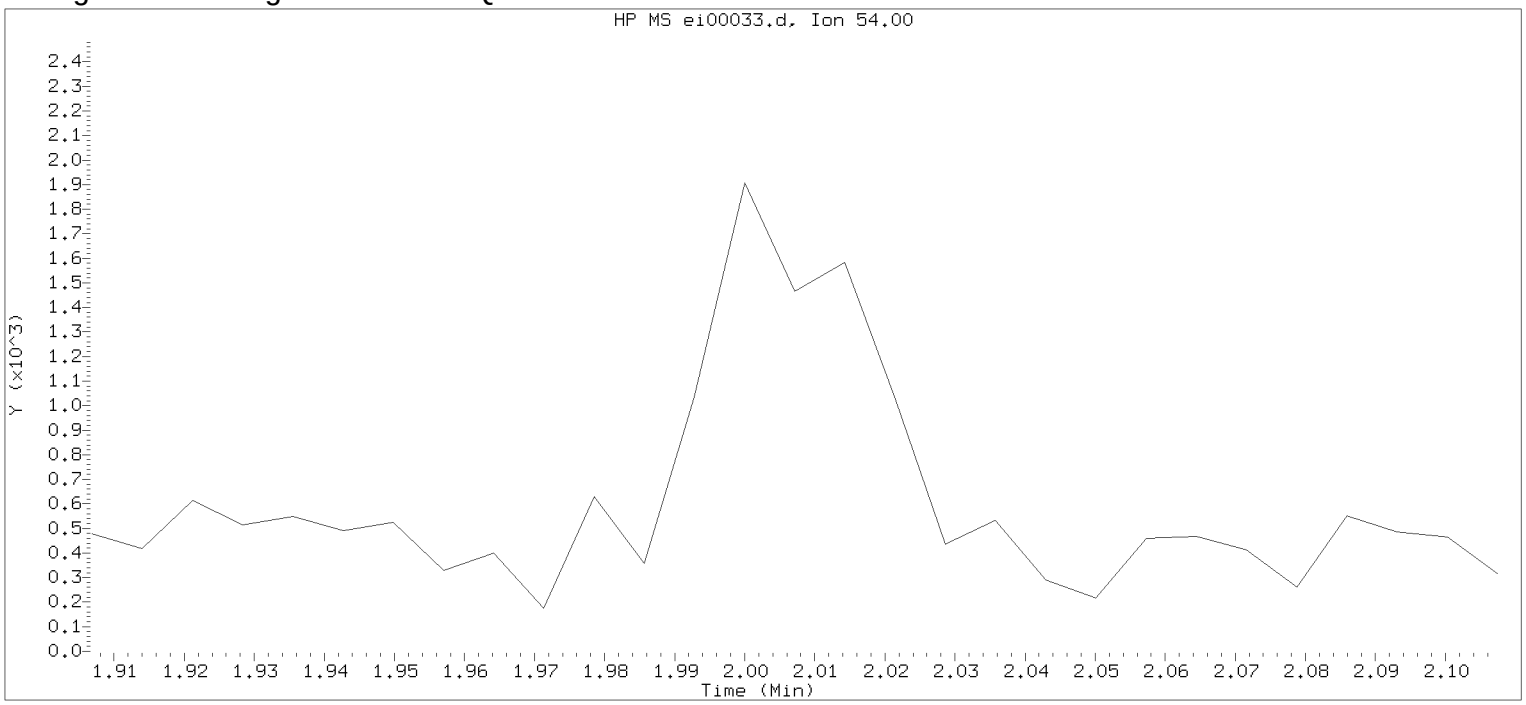
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:32.
PARALLAX ID: jbs01304

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00033.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 16:22 Analyst ID: jeb07445

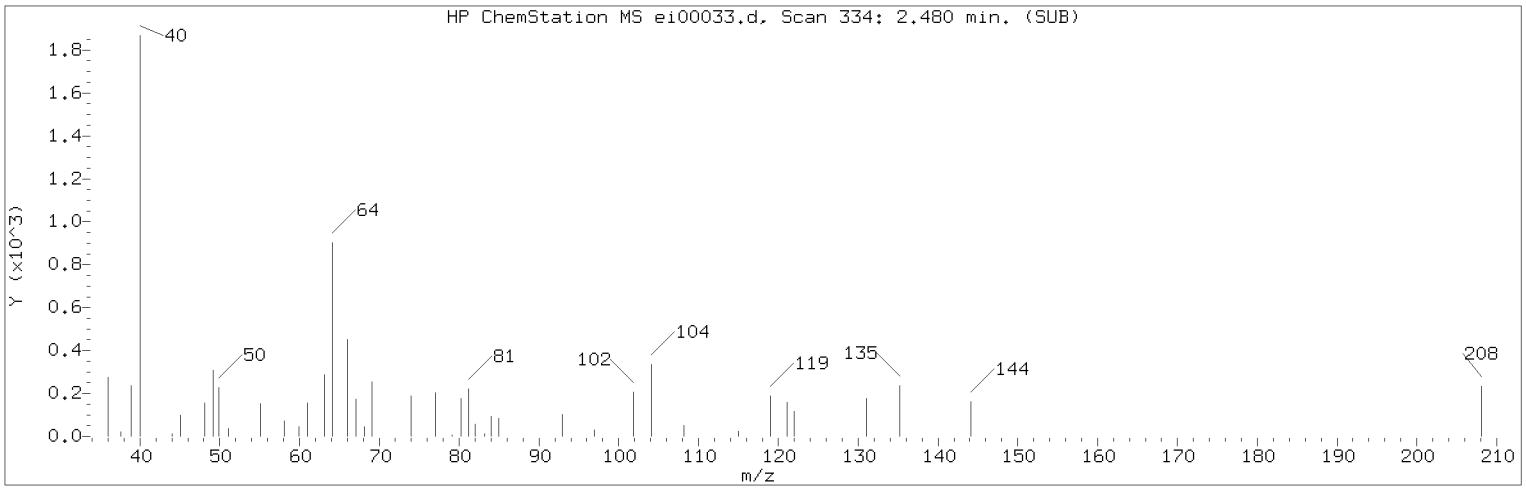
Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 16:43 Unknown

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

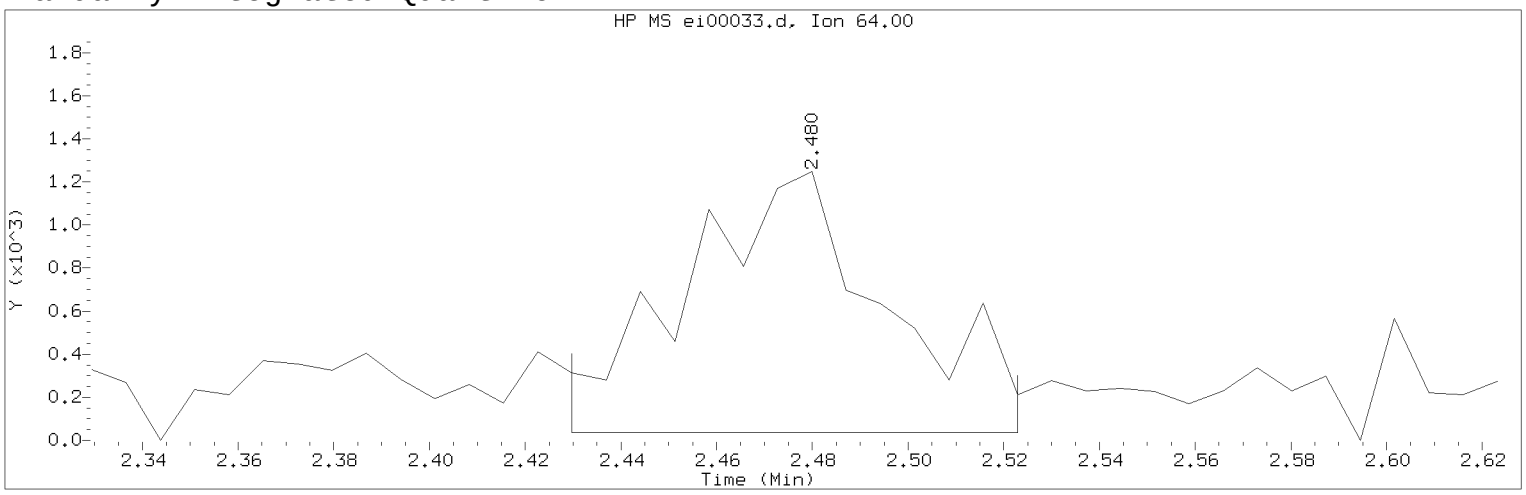
Compound Number : 7
Compound Name : 1,3-Butadiene
Expected RT (minutes) : 2.008
Quant Ion : 54.00

Digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00033.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 16:22 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 12:24
Date, time and analyst ID of latest file update: 06-Sep-2018 13:32 jbs01304

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

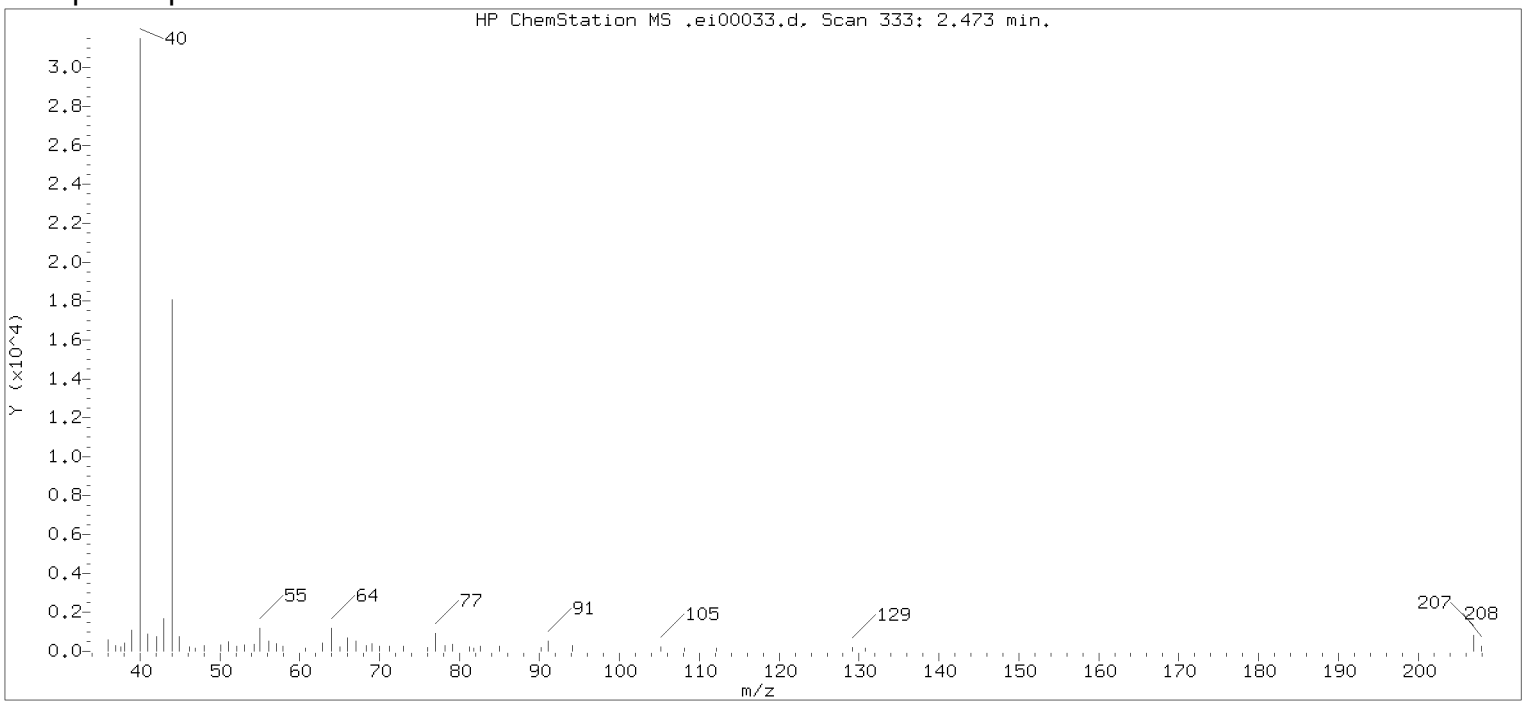
Compound Number : 9
Compound Name : Chloroethane
Scan Number : 334
Retention Time (minutes): 2.480
Quant Ion : 64.00
Area (flag) : 3664M
Concentration (ppb(v)) : 0.3448
Integration start scan : 326 Integration stop scan: 339
Y at integration start : 35 Y at integration end: 35

Reason for manual integration: missed peak

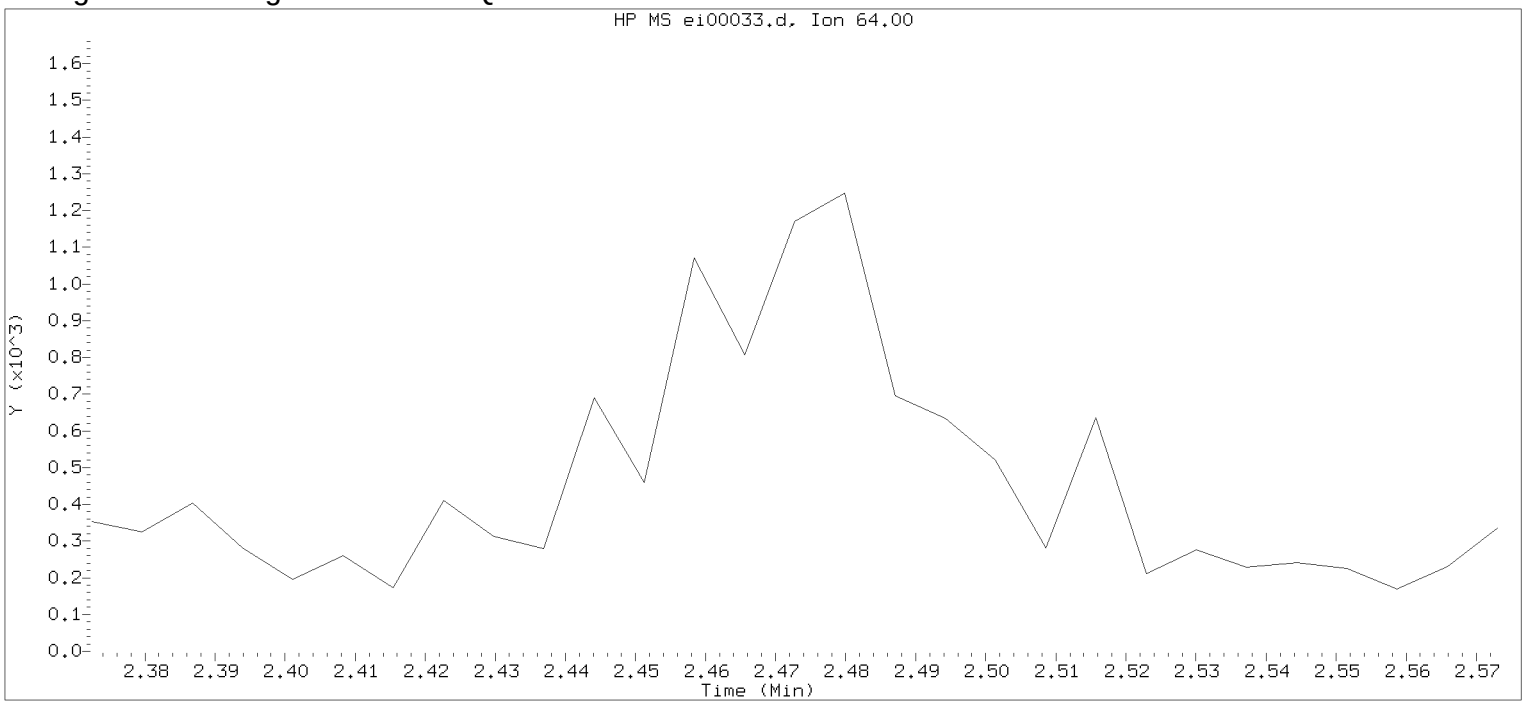
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:32.
PARALLAX ID: jbs01304

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00033.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 16:22 Analyst ID: jeb07445

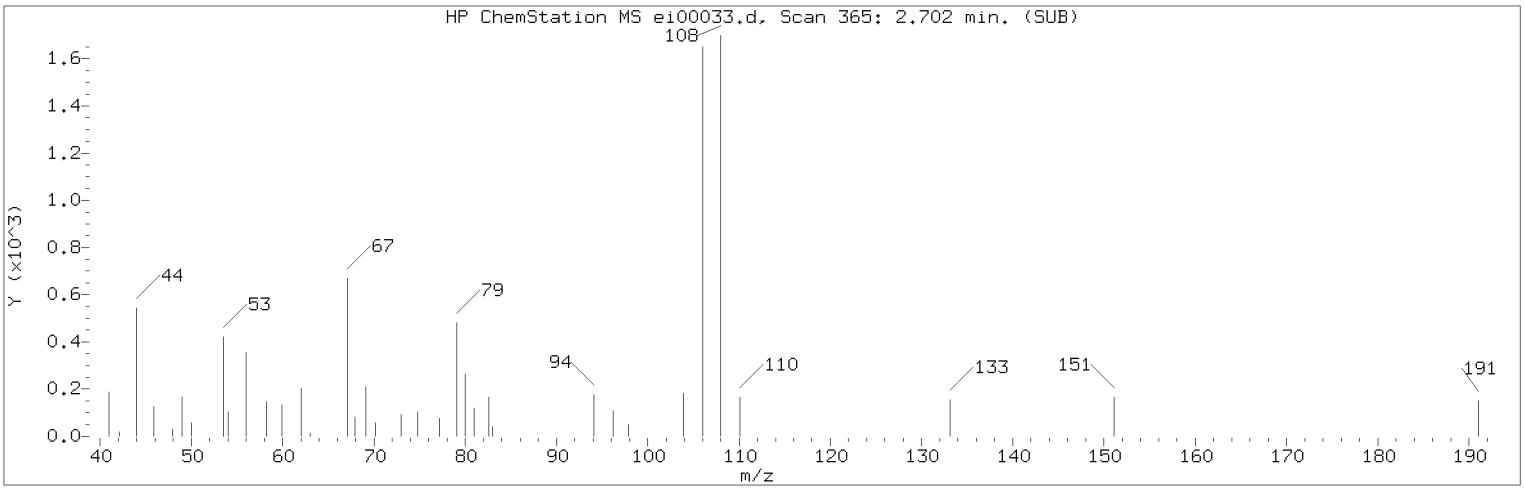
Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 16:43 Unknown

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

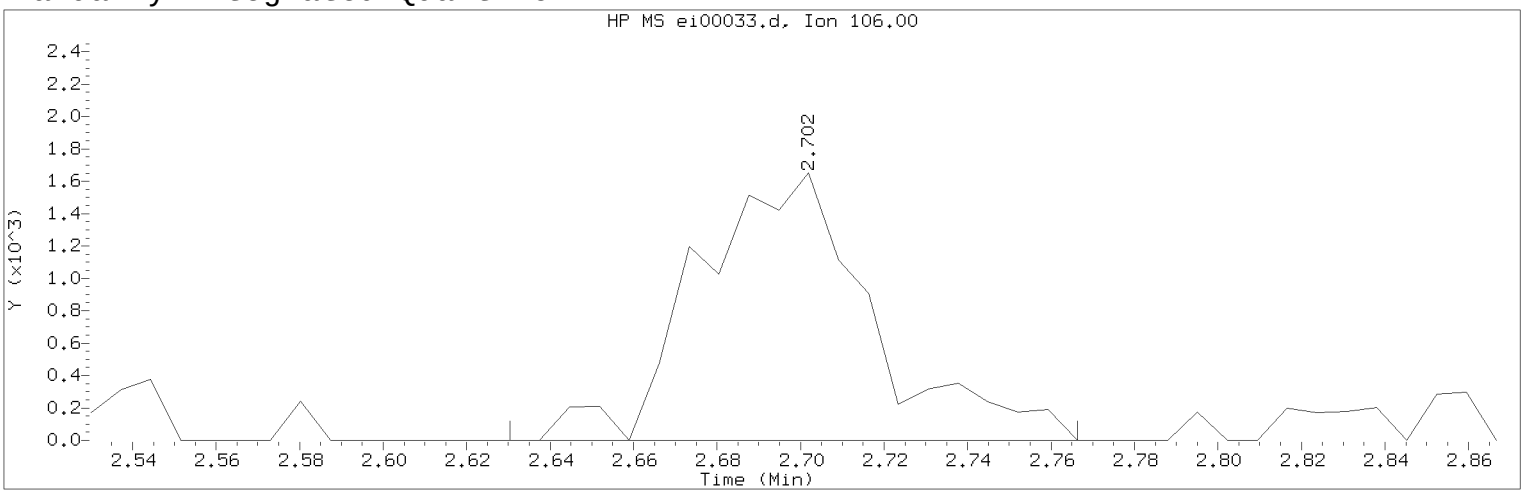
Compound Number : 9
Compound Name : Chloroethane
Expected RT (minutes) : 2.473
Quant Ion : 64.00

Digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00033.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 16:22 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 12:24
Date, time and analyst ID of latest file update: 06-Sep-2018 13:32 jbs01304

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

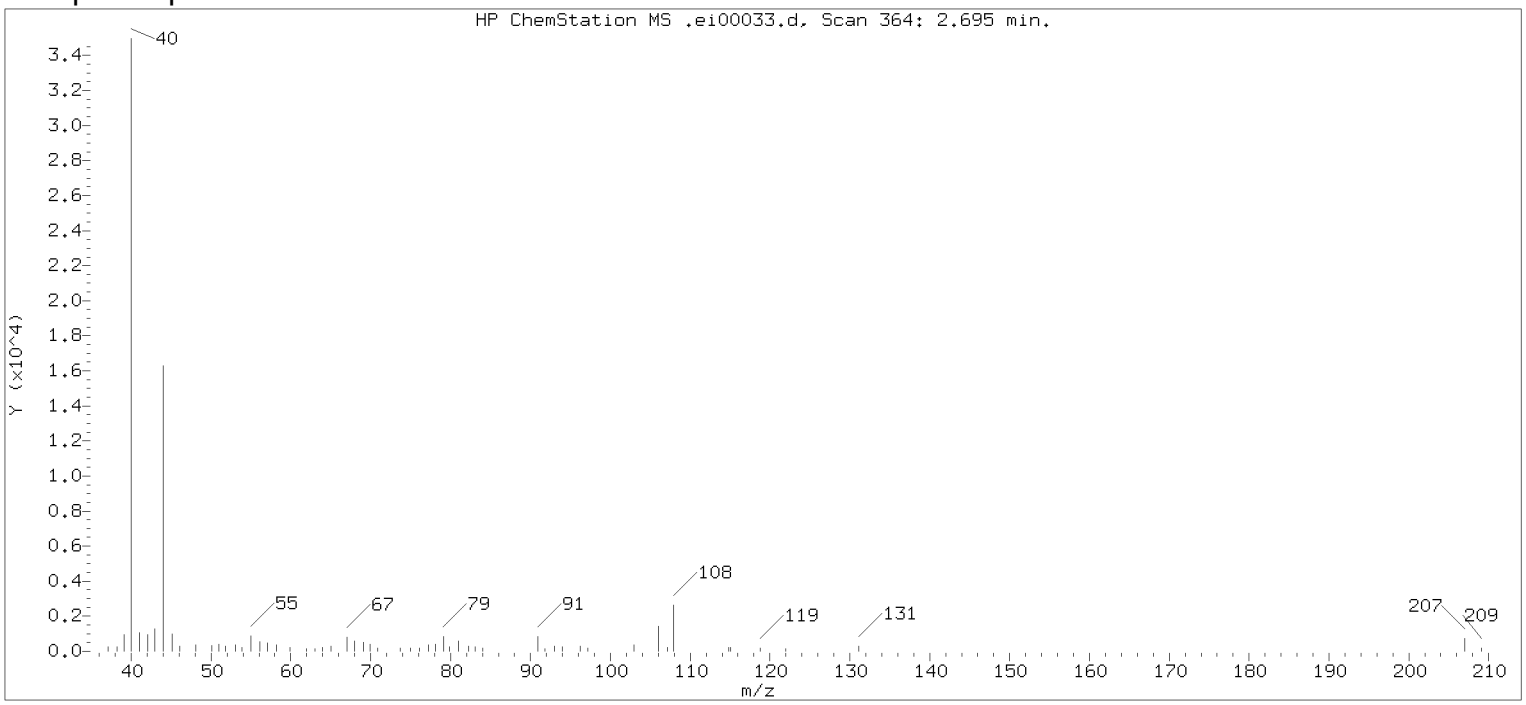
Compound Number : 10
Compound Name : Bromoethene
Scan Number : 365
Retention Time (minutes): 2.702
Quant Ion : 106.00
Area (flag) : 4823M
Concentration (ppb(v)) : 0.2558
Integration start scan : 354 Integration stop scan: 373
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

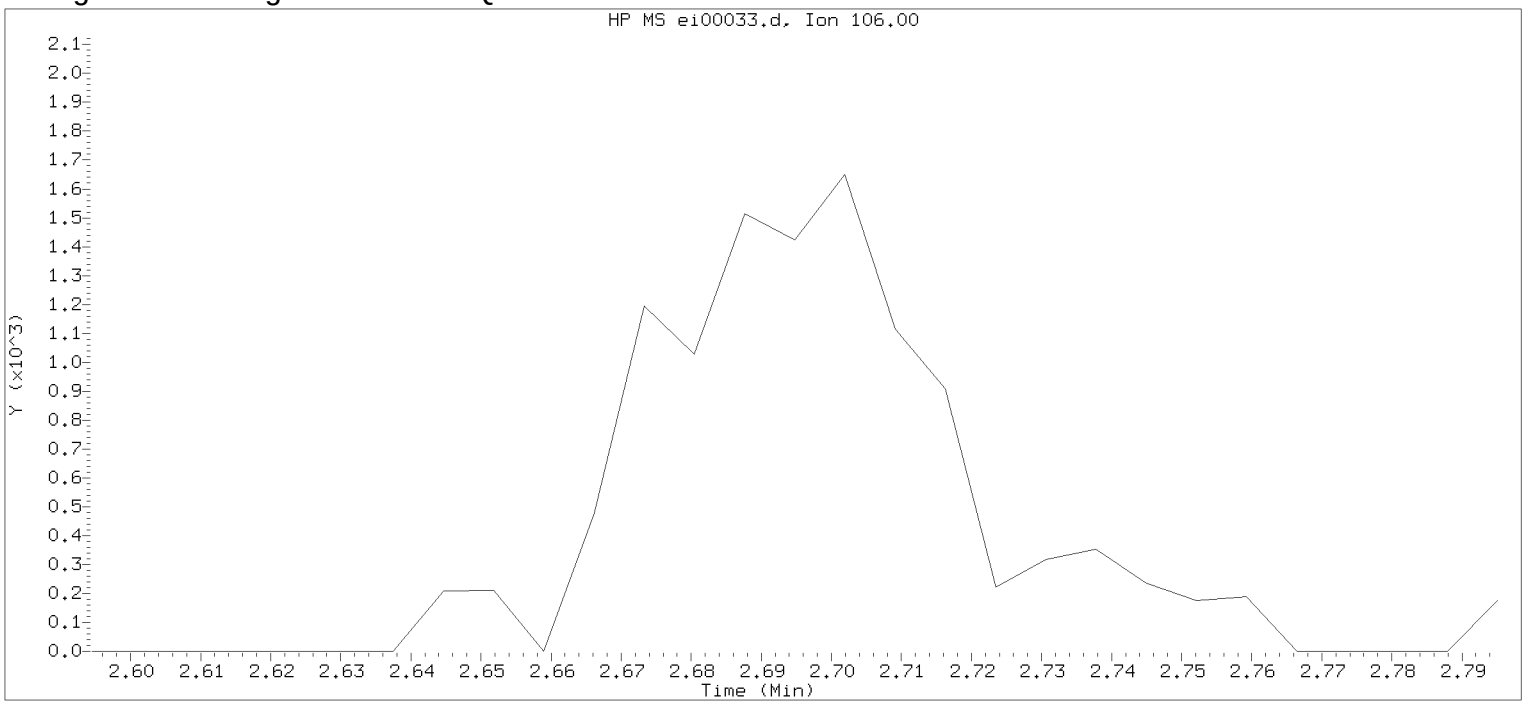
Analyst responsible for change: Digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:32.
PARALLAX ID: jbs01304

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00033.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 16:22 Analyst ID: jeb07445

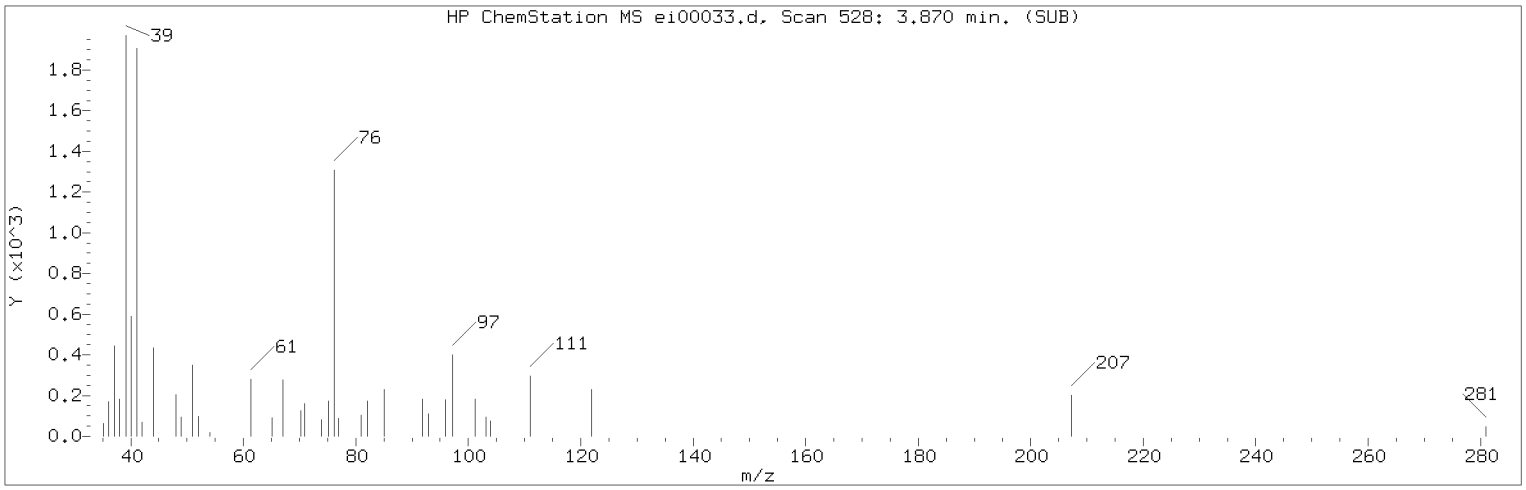
Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 16:43 Unknown

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

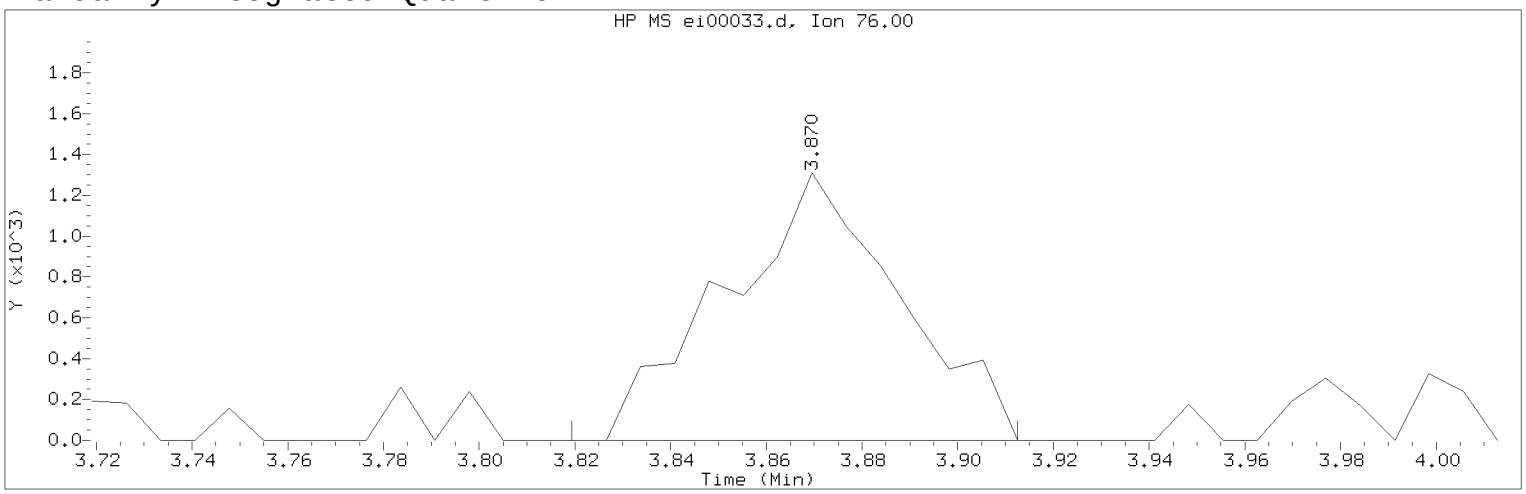
Compound Number : 10
Compound Name : Bromoethene
Expected RT (minutes) : 2.695
Quant Ion : 106.00

Digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00033.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 16:22 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 12:24
Date, time and analyst ID of latest file update: 06-Sep-2018 13:32 jbs01304

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

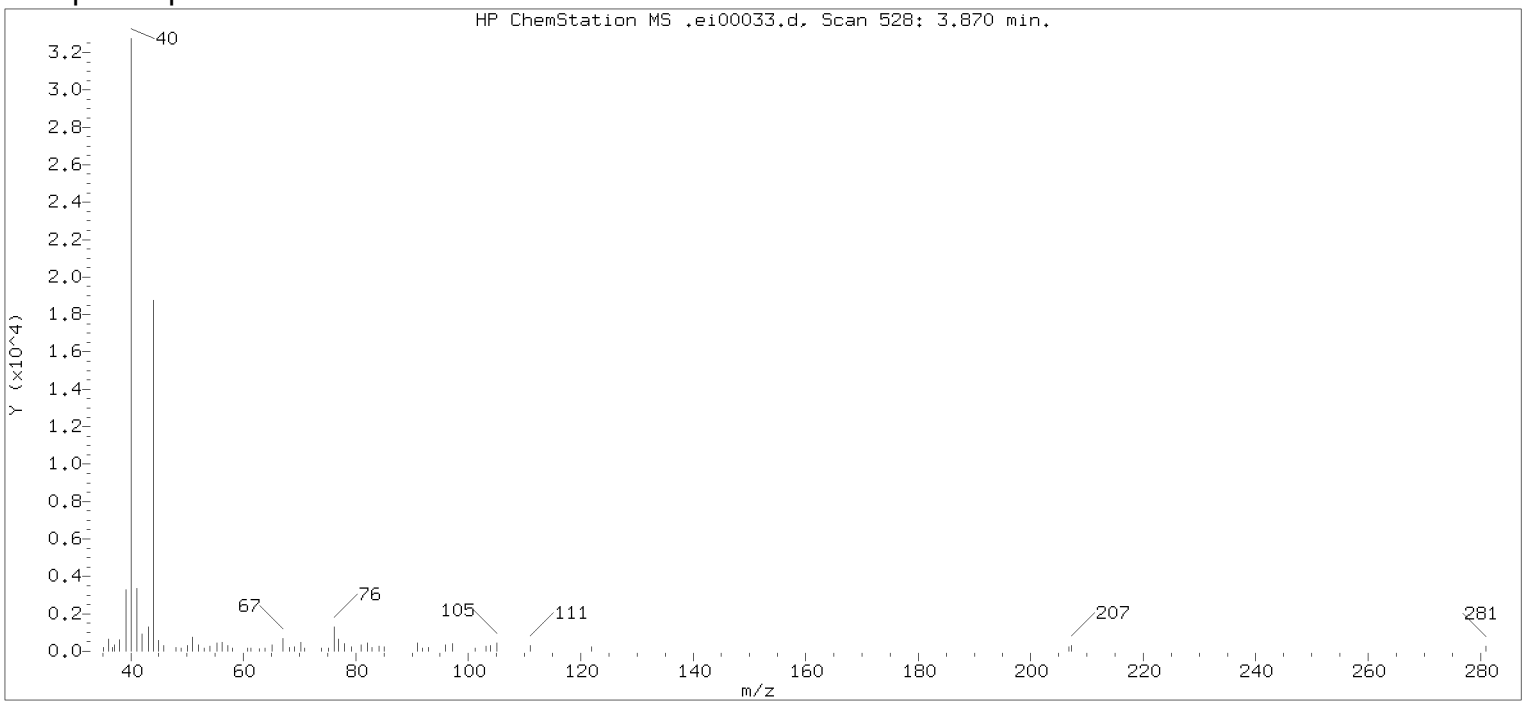
Compound Number : 24
Compound Name : 3-Chloropropene
Scan Number : 528
Retention Time (minutes): 3.870
Quant Ion : 76.00
Area (flag) : 3299M
Concentration (ppb(v)) : 0.3632
Integration start scan : 520 Integration stop scan: 533
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

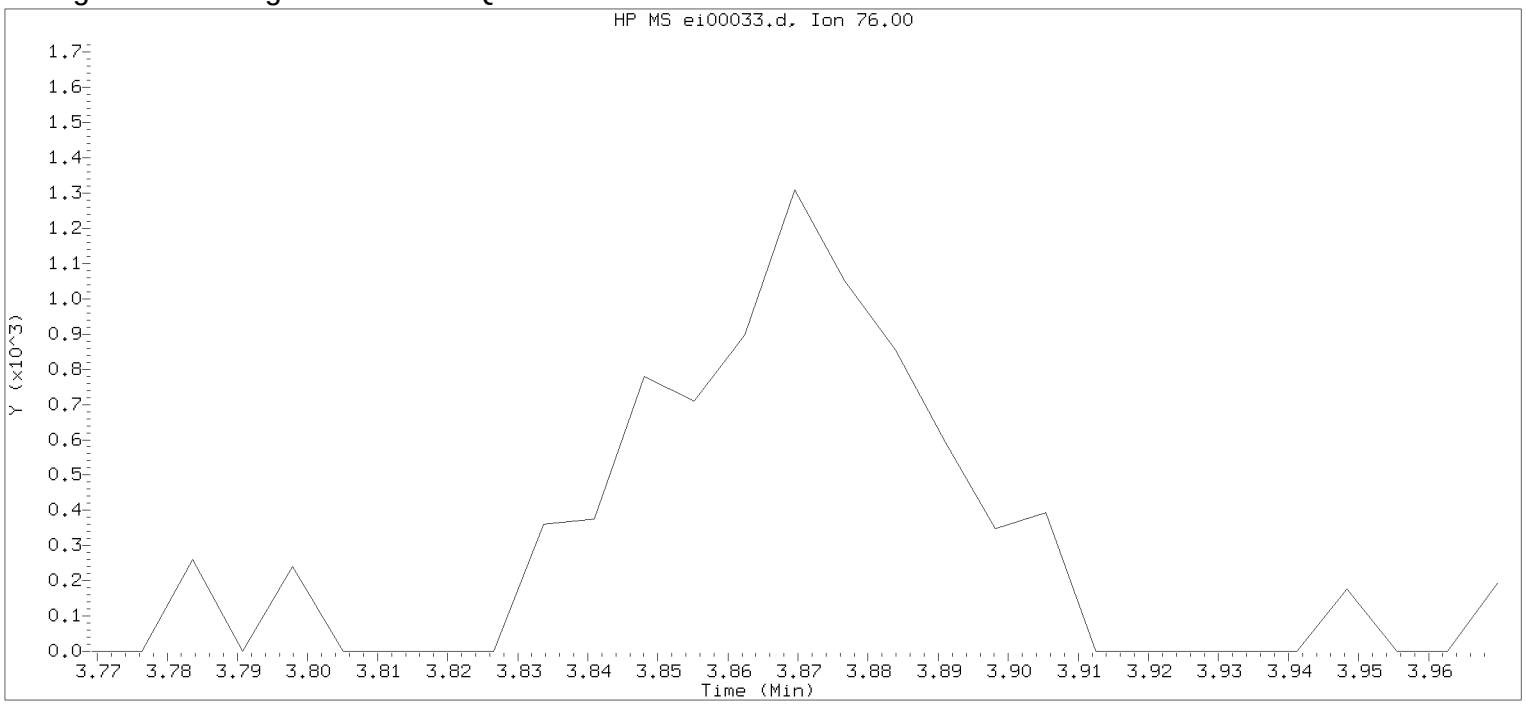
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:32.
PARALLAX ID: jbs01304

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00033.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 16:22 Analyst ID: jeb07445

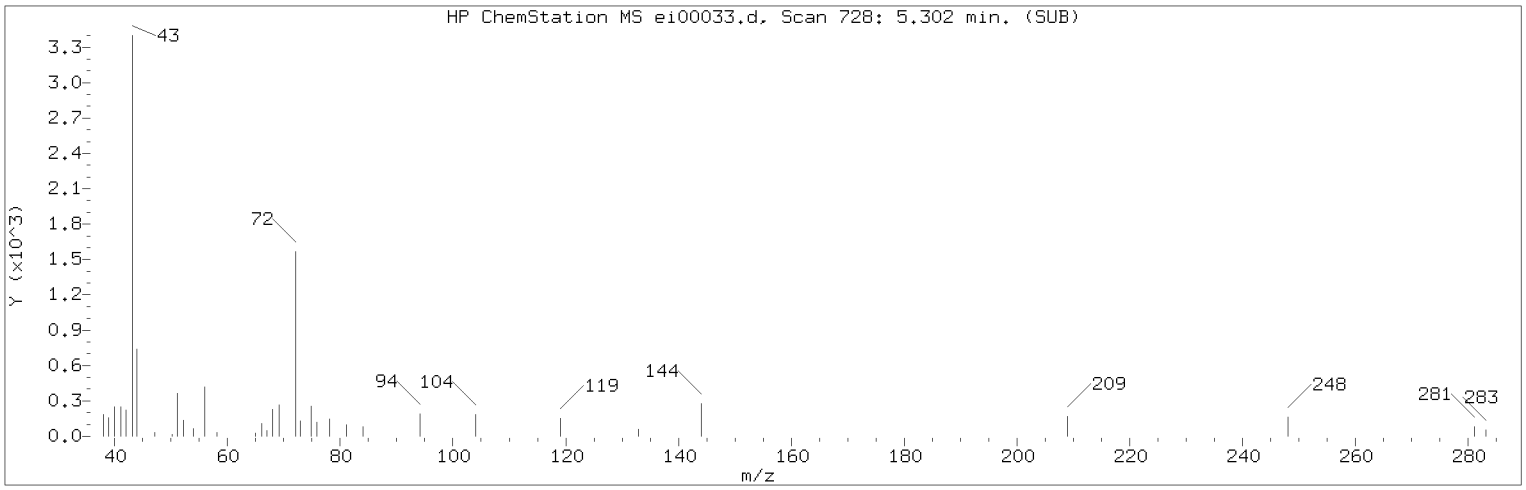
Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 16:43 Unknown

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

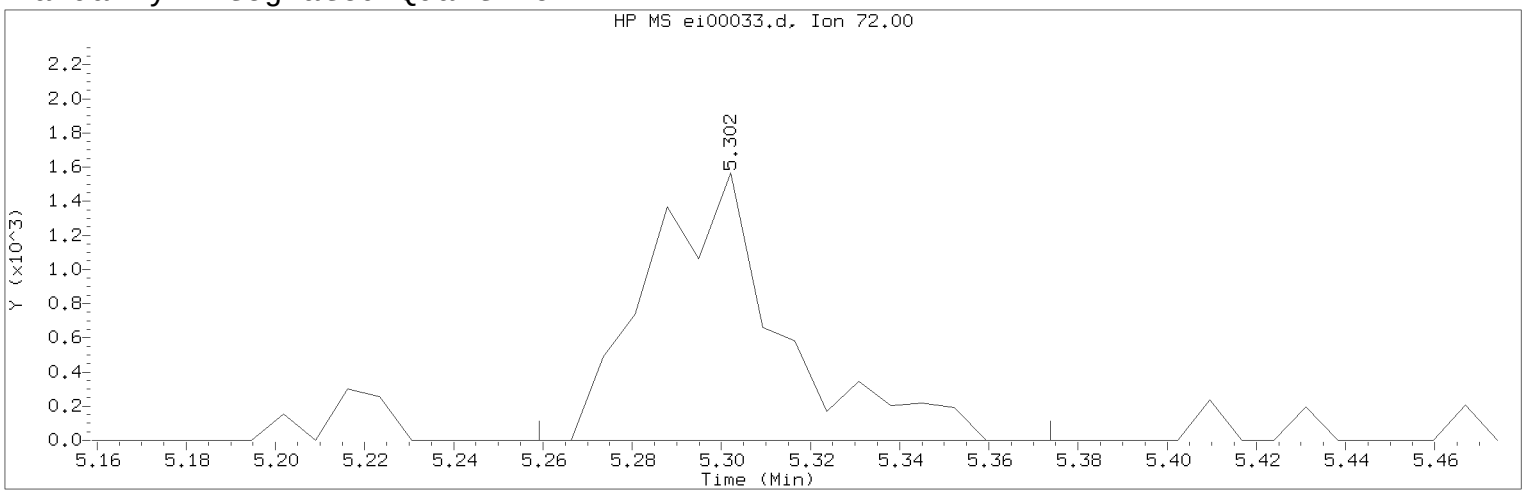
Compound Number : 24
Compound Name : 3-Chloropropene
Expected RT (minutes) : 3.870
Quant Ion : 76.00

Digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00033.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 16:22 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 12:24
Date, time and analyst ID of latest file update: 06-Sep-2018 13:32 jbs01304

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

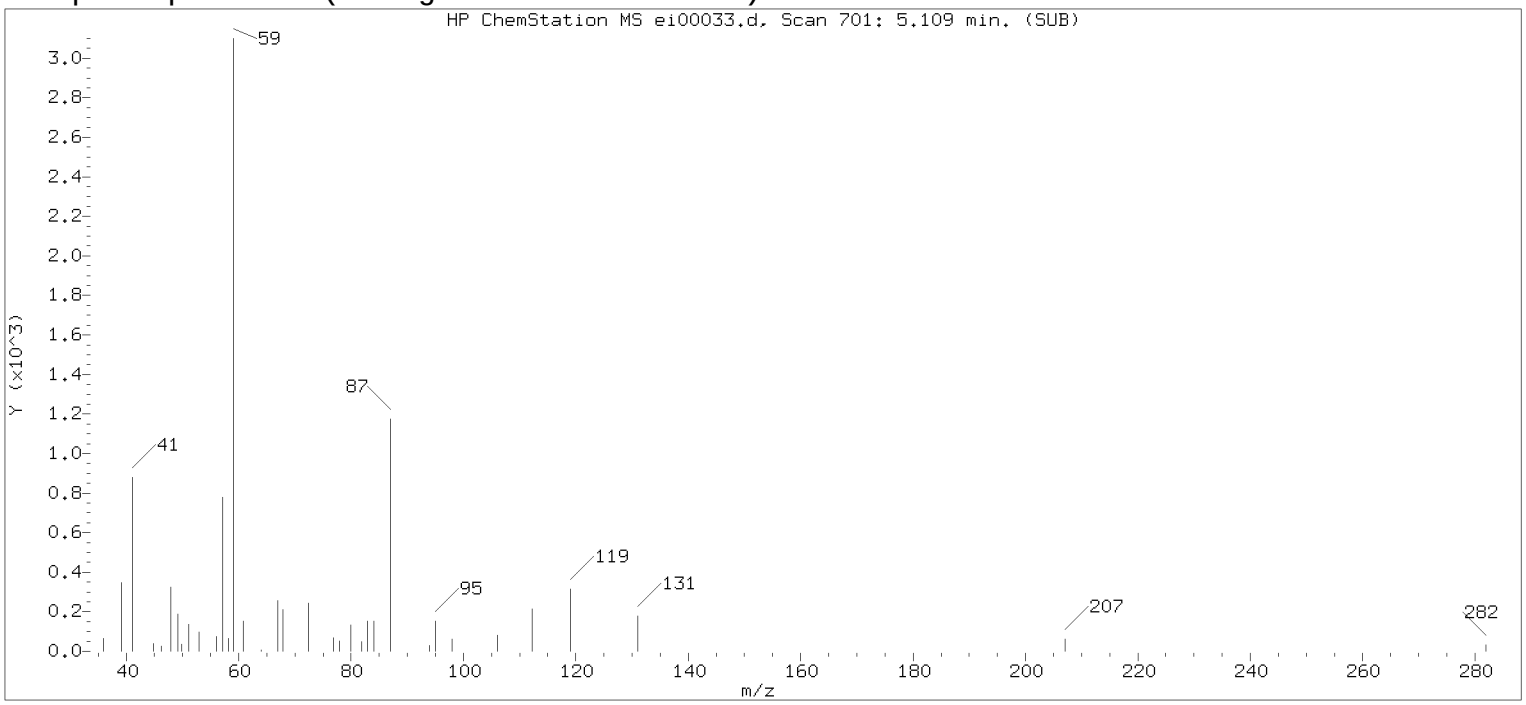
Compound Number : 37
Compound Name : 2-Butanone
Scan Number : 728
Retention Time (minutes): 5.302
Quant Ion : 72.00
Area (flag) : 3265M
Concentration (ppb(v)) : 0.2734
Integration start scan : 721 Integration stop scan: 737
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

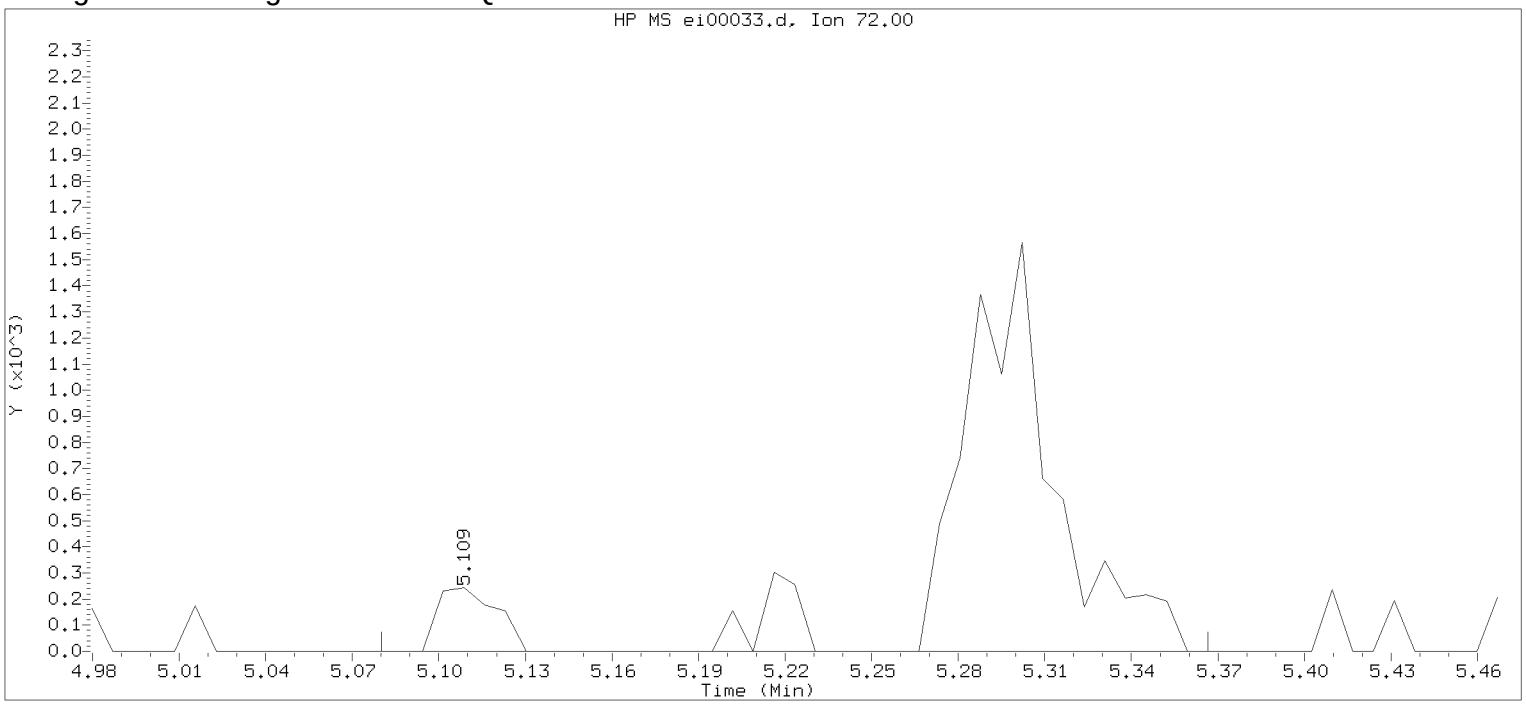
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:32.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00033.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 16:22 Analyst ID: jeb07445

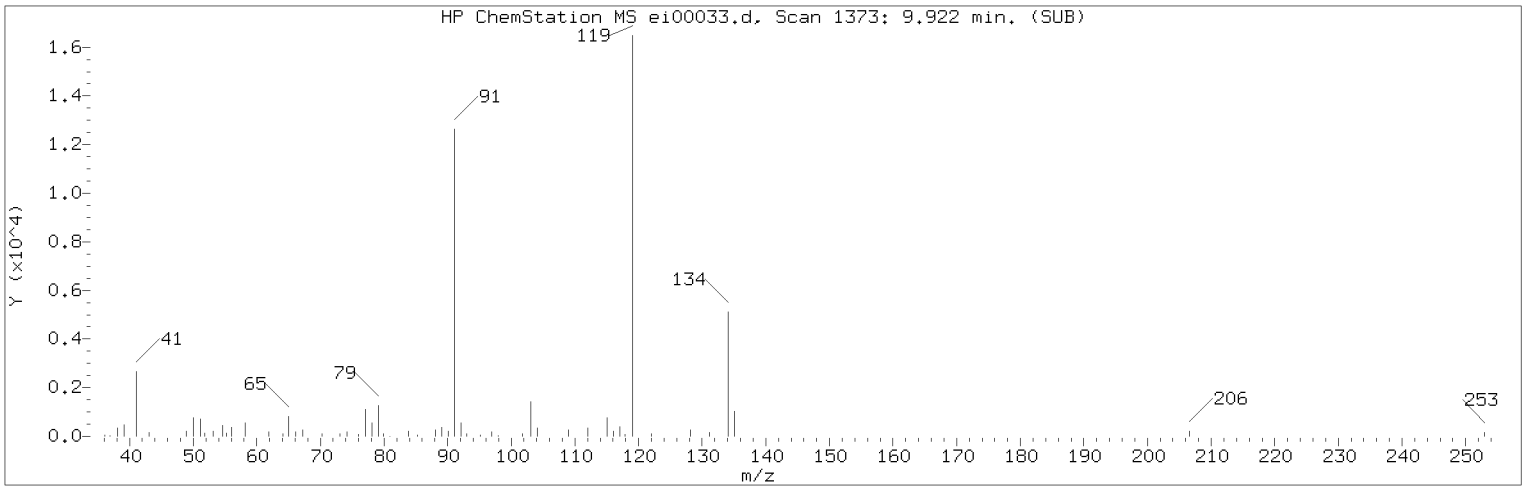
Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 16:43 Unknown

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

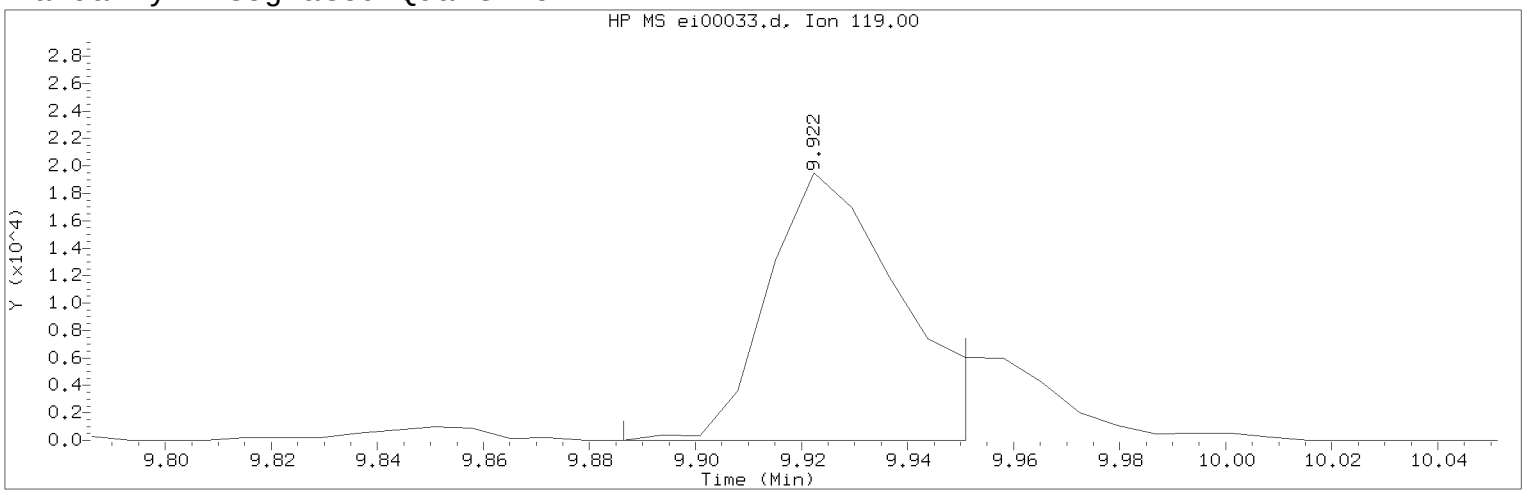
Compound Number : 37
Compound Name : 2-Butanone
Scan Number : 701
Retention Time (minutes): 5.109
Quant Ion : 72.00
Area : 3919
Concentration (ppb(v)) : 0.3282
Integration start scan : 696 Integration stop scan: 736
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:35.
Target 3.5 esignature user GLE02jbs01403

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00033.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 16:22 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 12:24
Date, time and analyst ID of latest file update: 06-Sep-2018 13:32 jbs01304

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

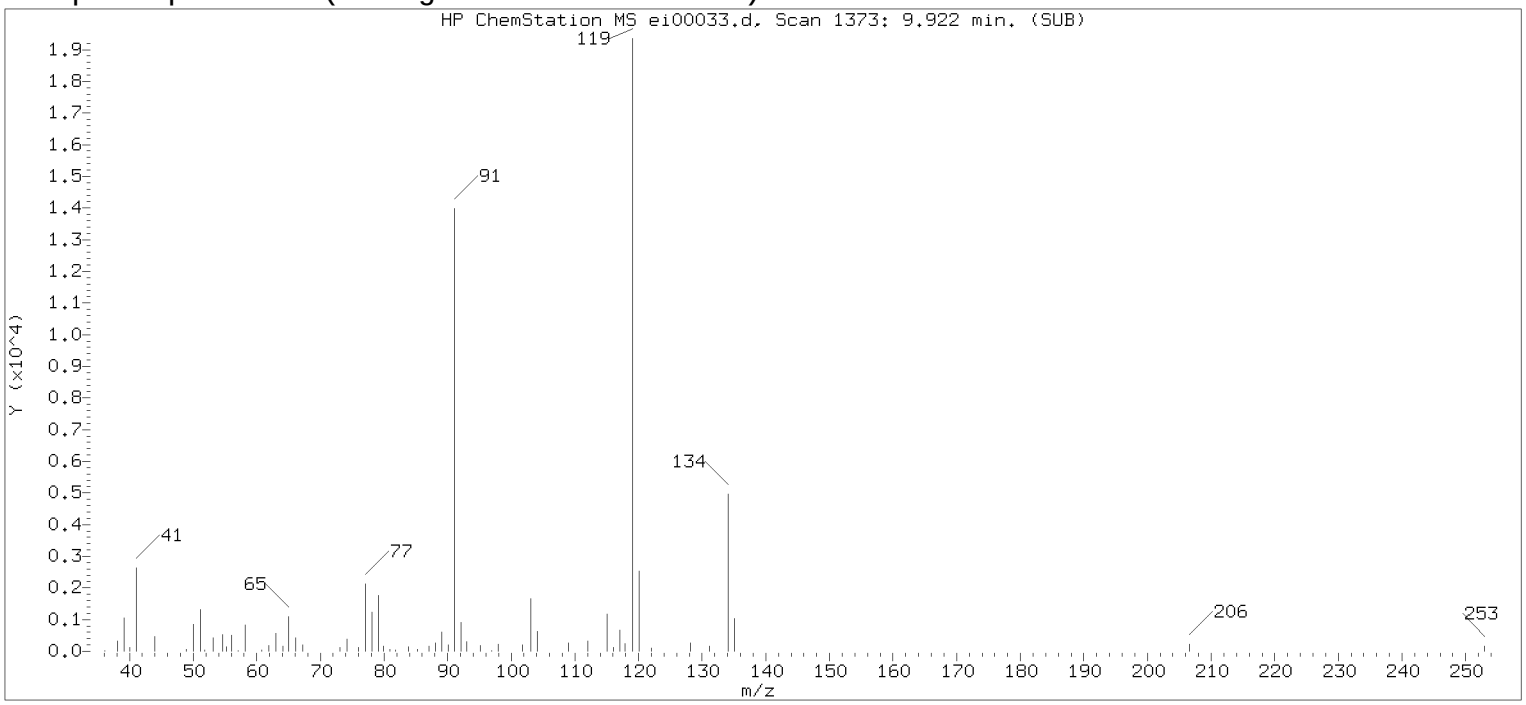
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 34033M
Concentration (ppb(v)) : 0.3448
Integration start scan : 1367 Integration stop scan: 1376
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

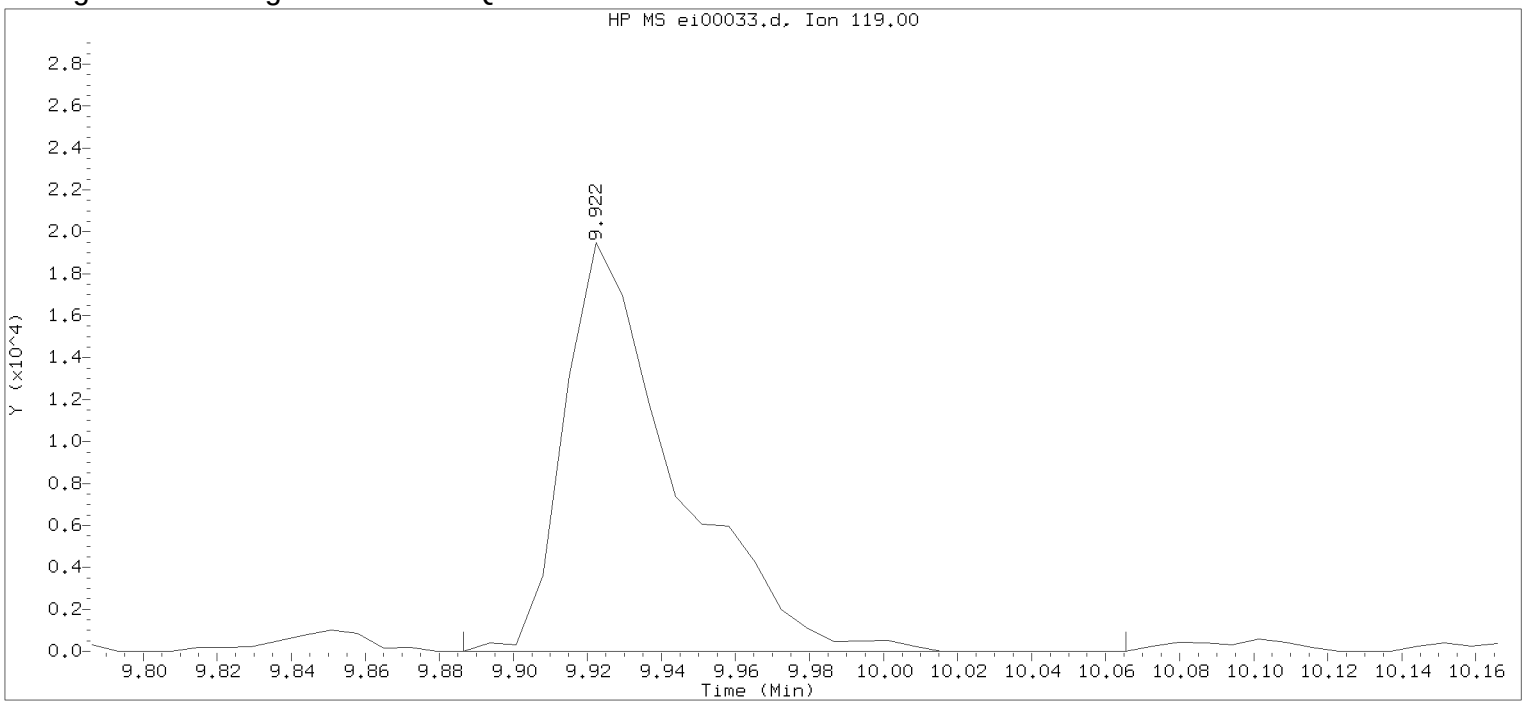
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:32.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00033.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 16:22 Analyst ID: jeb07445

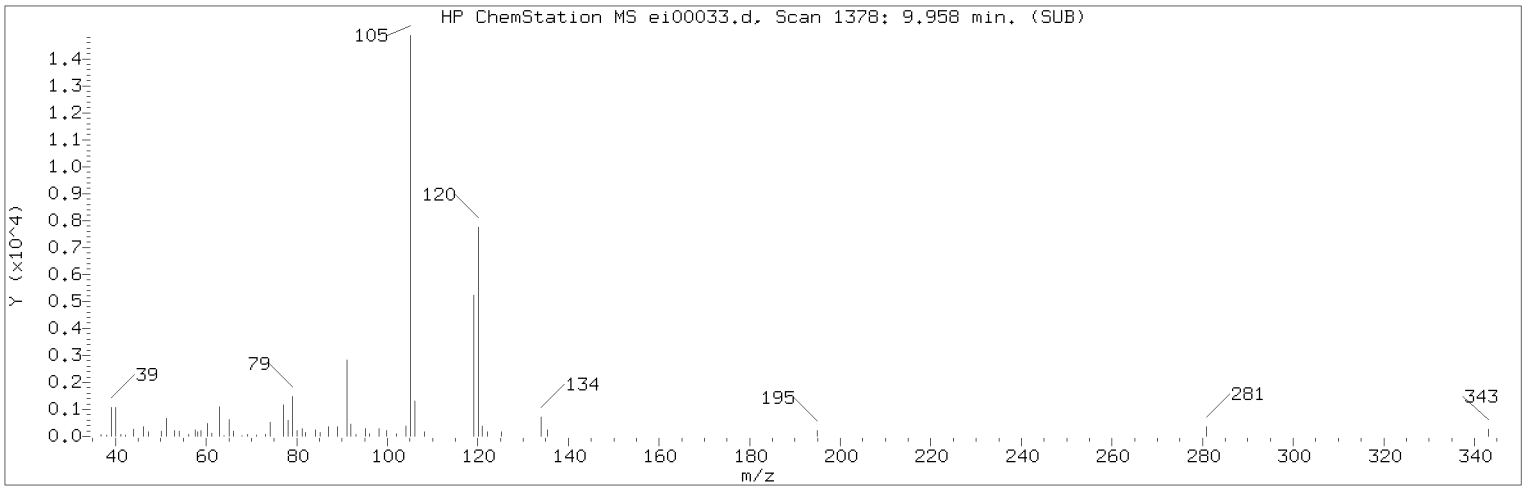
Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 16:43 Unknown

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

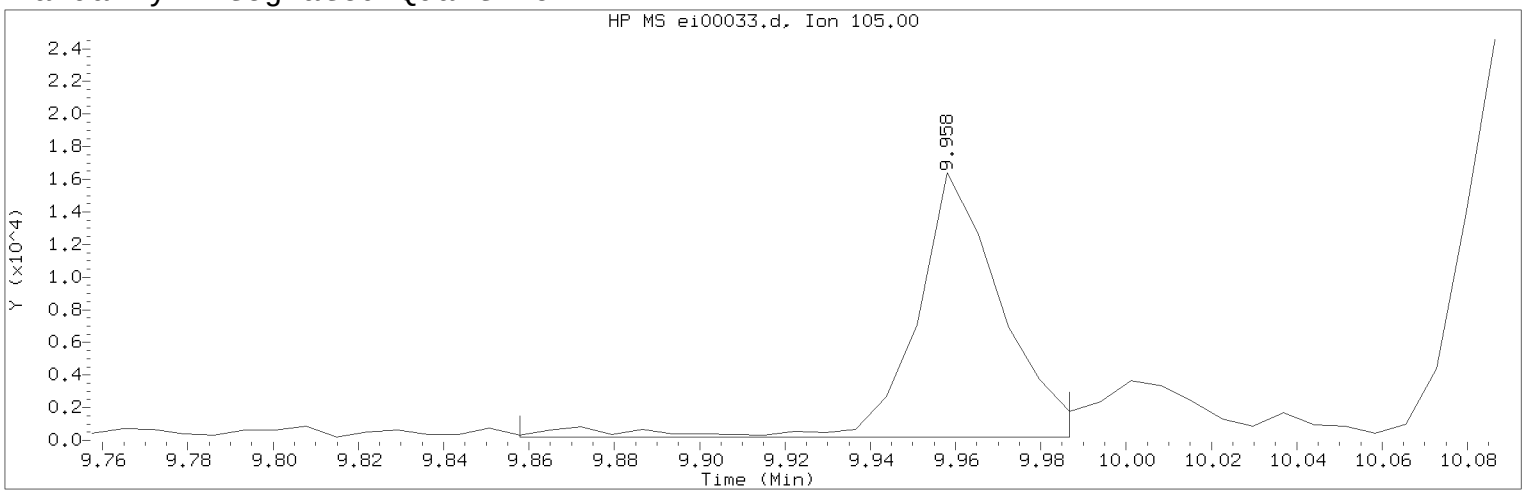
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 40480
Concentration (ppb(v)) : 0.4101
Integration start scan : 1367 Integration stop scan: 1392
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01345

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00033.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 16:22 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 12:24
Date, time and analyst ID of latest file update: 06-Sep-2018 13:32 jbs01304

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

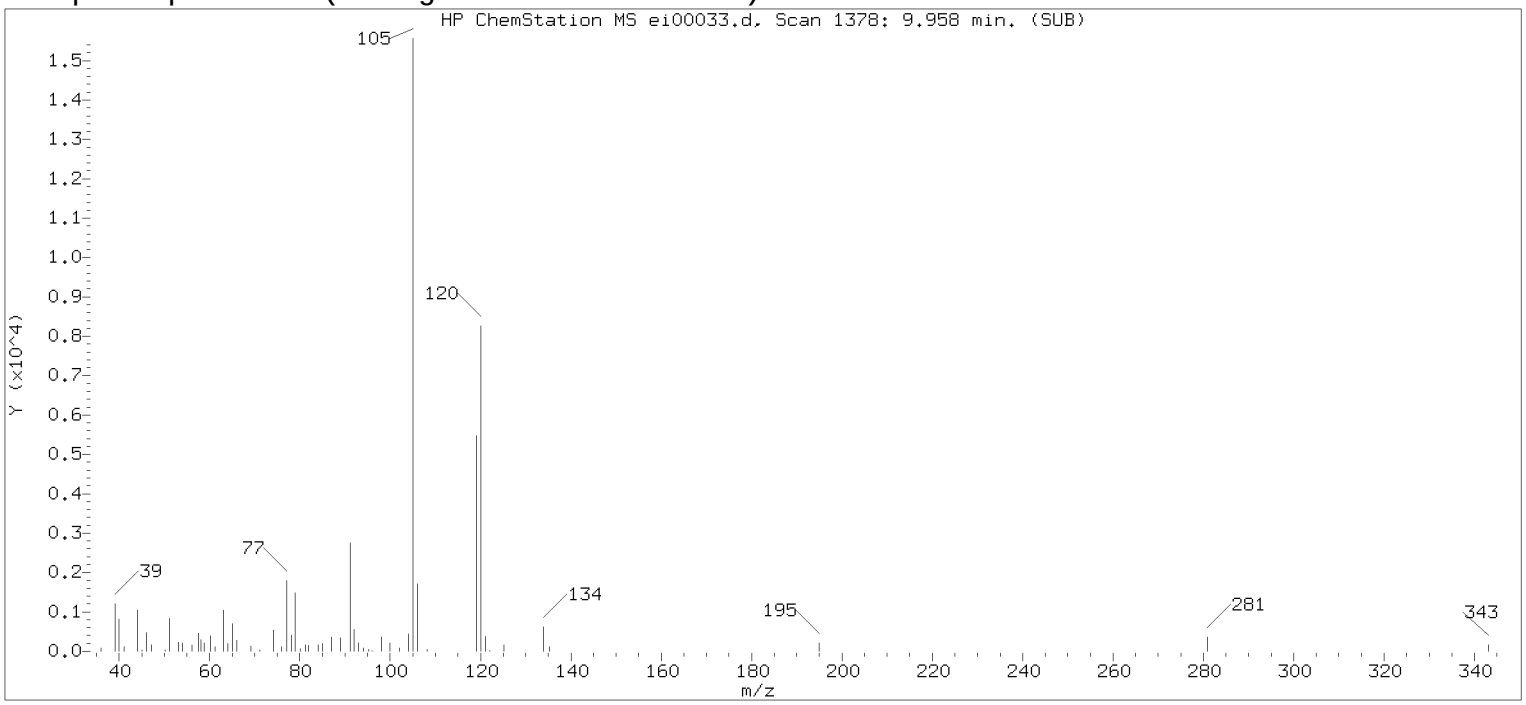
Compound Number : 90
Compound Name : 1,2,4-Trimethylbenzene
Scan Number : 1378
Retention Time (minutes): 9.958
Quant Ion : 105.00
Area (flag) : 23030M
Concentration (ppb(v)) : 0.2252
Integration start scan : 1363 Integration stop scan: 1381
Y at integration start : 194 Y at integration end: 194

Reason for manual integration: improper integration

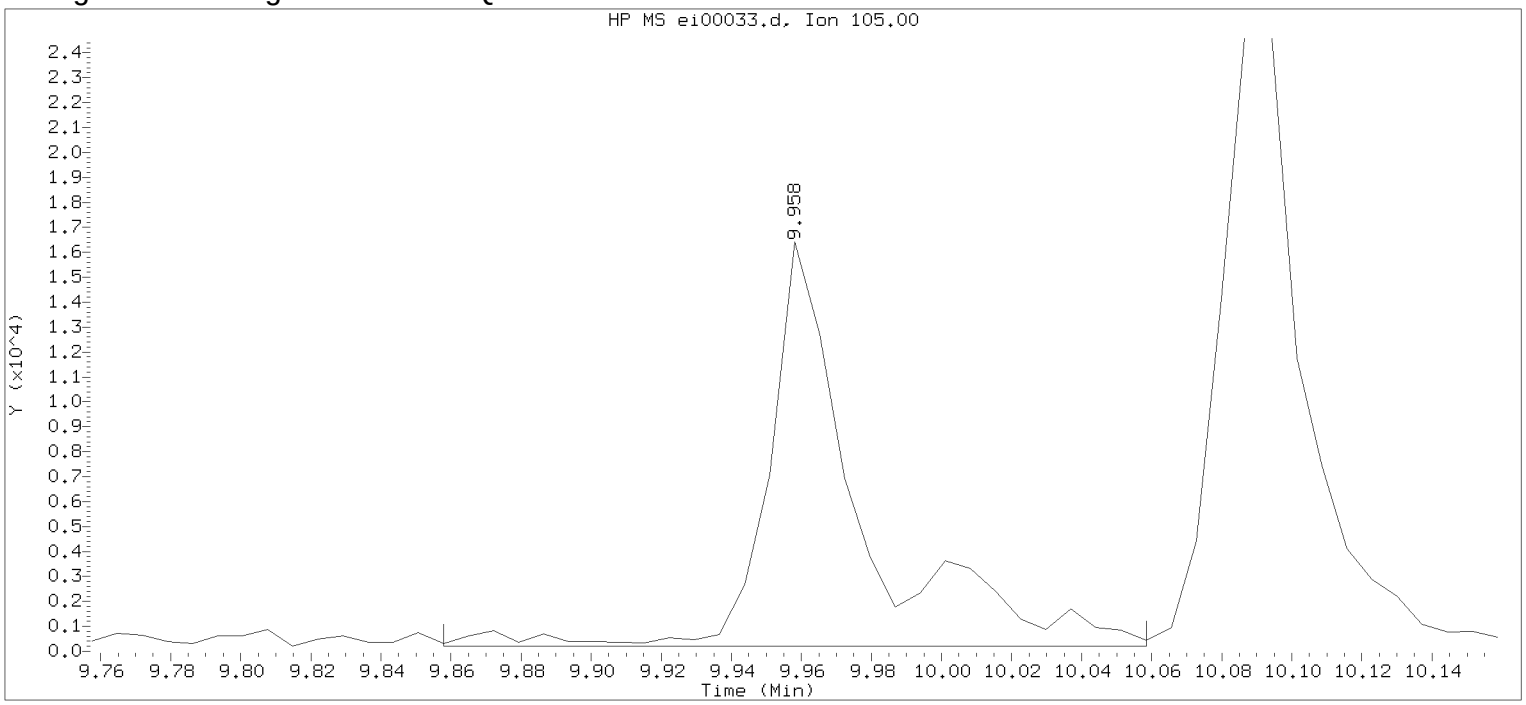
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 09/06/2018 at 13:35.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:32.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep05.b/ei00033.d Instrument ID: HP22820.i
Injection date and time: 05-SEP-2018 16:22 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep05.b/to-15.m Sublist used: all
Calibration date and time: 05-SEP-2018 14:09
Date, time and analyst ID of latest file update: 05-Sep-2018 16:43 Unknown

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

Compound Number : 90
Compound Name : 1,2,4-Trimethylbenzene
Scan Number : 1378
Retention Time (minutes): 9.958
Quant Ion : 105.00
Area : 29777
Concentration (ppb(v)) : 0.2912
Integration start scan : 1363 Integration stop scan: 1391
Y at integration start : 194 Y at integration end: 194

Digitally signed by Jeffrey B. Smith on 09/06/2018 at 13:35.
Target 3.5 esignature user: JBS02 Page 407

Data File: /chem/HP22820.i/18sep06.b/ei00060.d

Date : 06-SEP-2018 12:08

Client ID: 50NGBFB

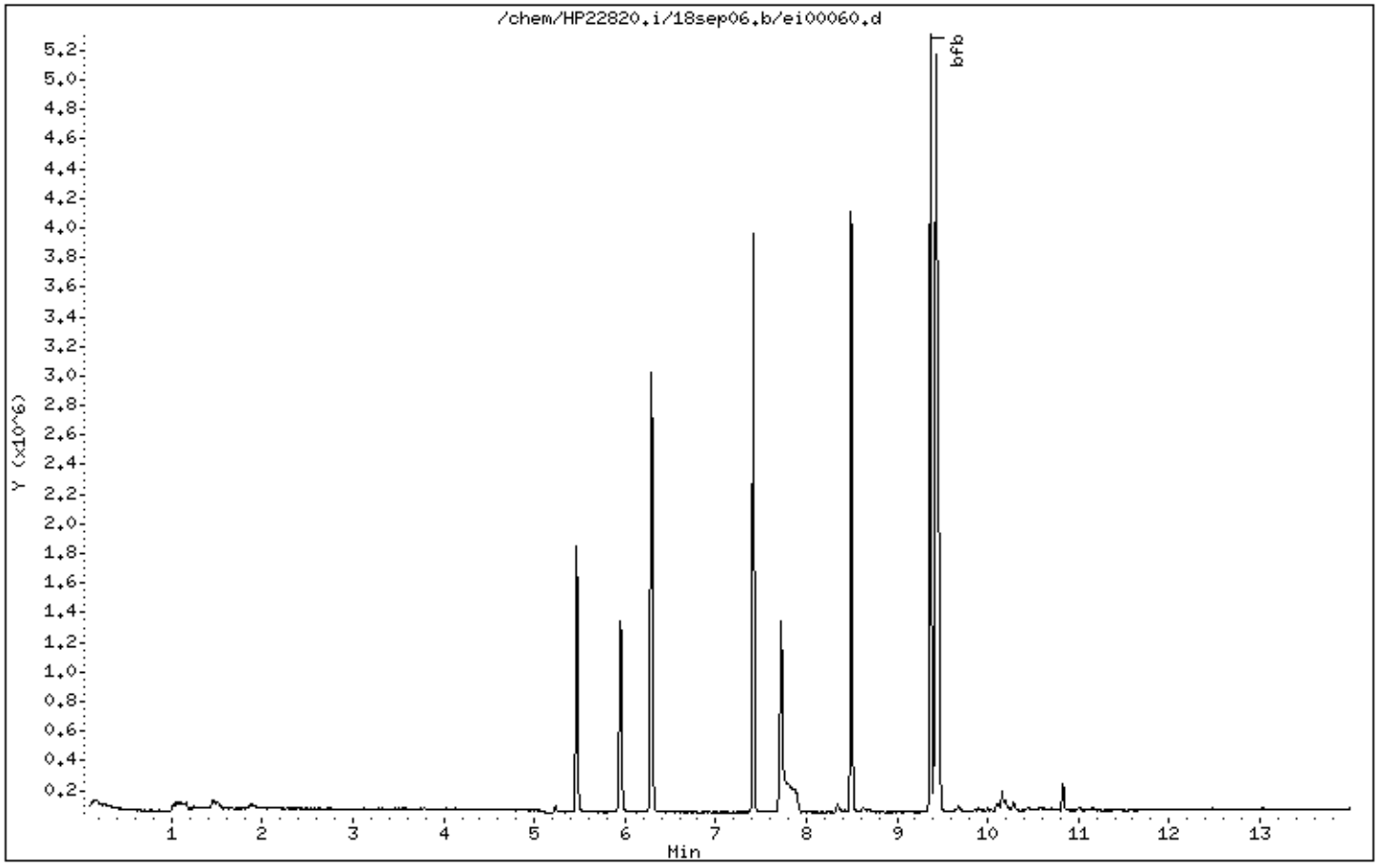
Instrument: HP22820.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25



Digitally signed by Jacob E. Bailey on 09/06/2018 at 14:05.
Target 3.5 esignature user ID: jeb07445

Data File: /chem/HP22820.i/18sep06.b/ei00060.d

Date : 06-SEP-2018 12:08

Client ID: 50NGBFB

Instrument: HP22820.i

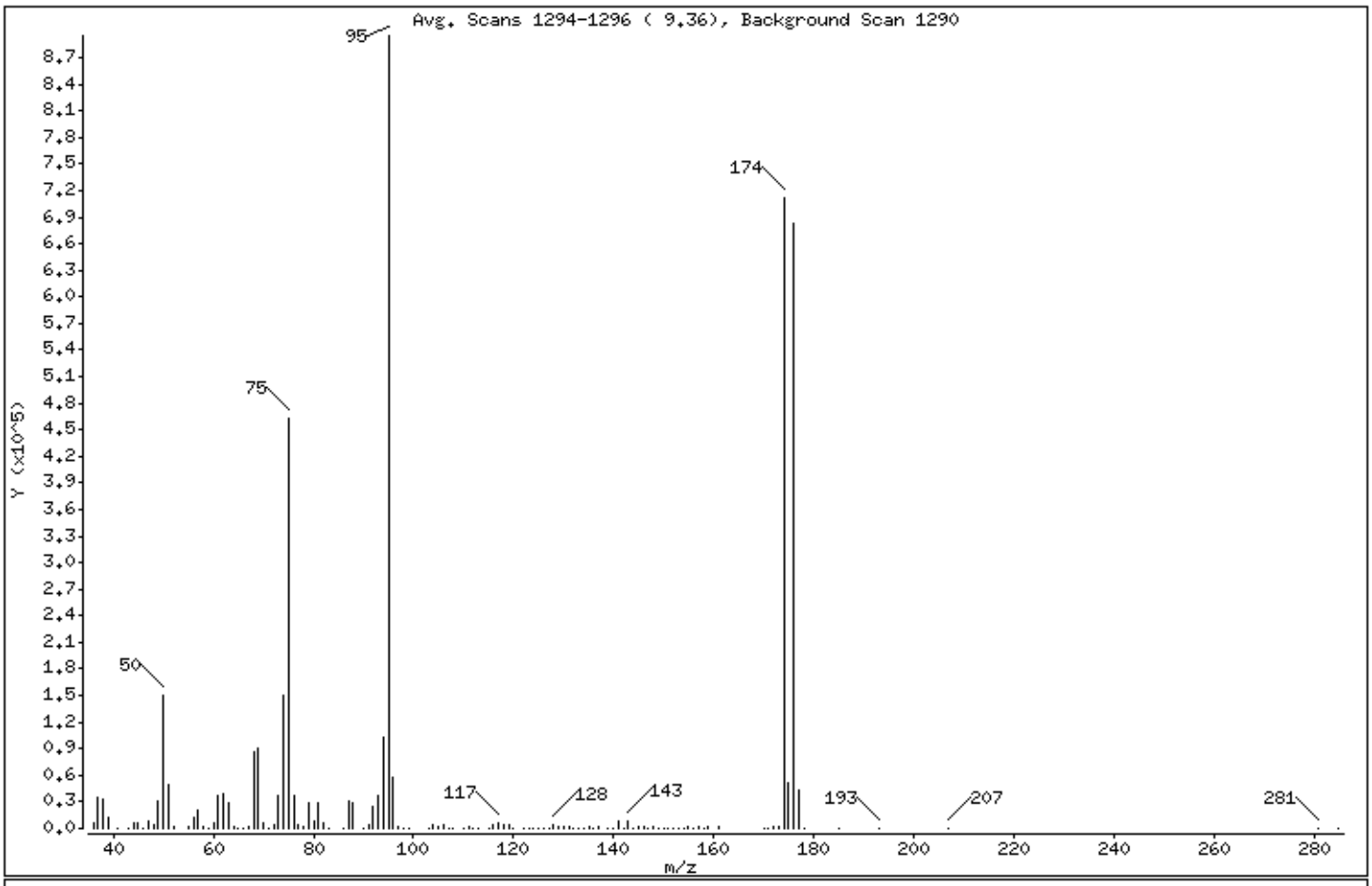
Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	16.69
75	30.00 - 66.00% of mass 95	51.75
96	5.00 - 9.00% of mass 95	6.53
173	Less than 2.00% of mass 174	0.15 (0.18)
174	50.00 - 120.00% of mass 95	79.59
175	4.00 - 9.00% of mass 174	5.80 (7.29)
176	93.00 - 101.00% of mass 174	76.28 (95.85)
177	5.00 - 9.00% of mass 176	4.92 (6.44)

Digitally signed by Jacob E. Bailey on 09/06/2018 at 14:05.
Target 3.5 esignature user ID: jeb07445

Date : 06-SEP-2018 12:08

Client ID: 50NGBFB Instrument: HP22820.i

Sample Info: 50NGBFB;;;BFB;0;;;

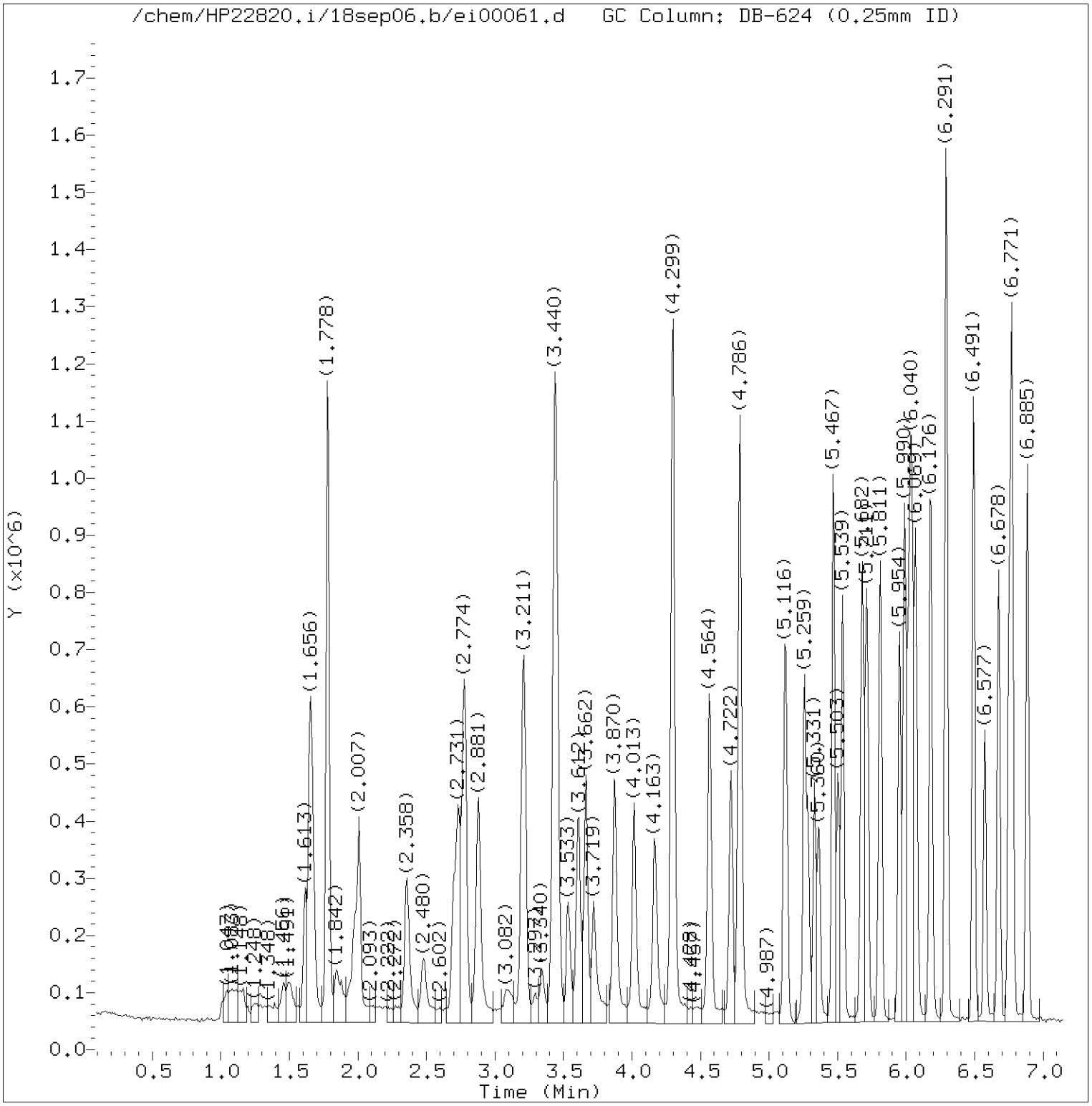
Operator: jeb07445

Column phase: DB-624 Column diameter: 0.25

Data File: ei00060.d
Spectrum: Avg. Scans 1294-1296 (9.36), Background Scan 1290
Location of Maximum: 95.00
Number of points: 125

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	5700	72.00	4198	111.00	1240	146.00	1257
37.00	34768	73.00	36720	112.00	737	147.00	466
38.00	32144	74.00	149888	113.00	852	148.00	2516
39.00	11825	75.00	463104	115.00	898	149.00	582
41.00	41	76.00	37096	116.00	3392	150.00	928
43.00	292	77.00	4425	117.00	5604	151.00	76
44.00	5572	78.00	2751	118.00	3890	152.00	490
45.00	6228	79.00	28032	119.00	4947	153.00	553
46.00	582	80.00	7858	120.00	136	154.00	609
47.00	8447	81.00	28136	122.00	347	155.00	2269
48.00	4755	82.00	5802	123.00	309	156.00	450
49.00	31672	83.00	703	124.00	602	157.00	1577
50.00	149376	86.00	728	125.00	352	158.00	190
51.00	48936	87.00	30656	126.00	408	159.00	1182
52.00	2055	88.00	29200	127.00	292	161.00	1040
55.00	1677	90.00	69	128.00	3204	170.00	67
56.00	11787	91.00	3128	129.00	1729	171.00	413
57.00	21136	92.00	24184	130.00	3071	172.00	1491
58.00	1123	93.00	36976	131.00	1290	173.00	1303
59.00	152	94.00	102808	132.00	141	174.00	712192
60.00	6720	95.00	894848	133.00	211	175.00	51912
61.00	37592	96.00	58456	134.00	138	176.00	682624
62.00	39520	97.00	1541	135.00	1648	177.00	43984
63.00	29696	98.00	187	136.00	201	178.00	968
64.00	2664	99.00	135	137.00	1701	185.00	62
65.00	1012	103.00	549	139.00	196	193.00	64
66.00	126	104.00	4063	140.00	587	207.00	291
67.00	1932	105.00	1436	141.00	8789	281.00	363
68.00	86656	106.00	3953	142.00	899	285.00	109
69.00	90224	107.00	957	143.00	8963		
70.00	6592	108.00	219	144.00	980		
71.00	14	110.00	727	145.00	1158		

Digitally signed by Jacob E. Bailey on 09/06/2018 at 14:05.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

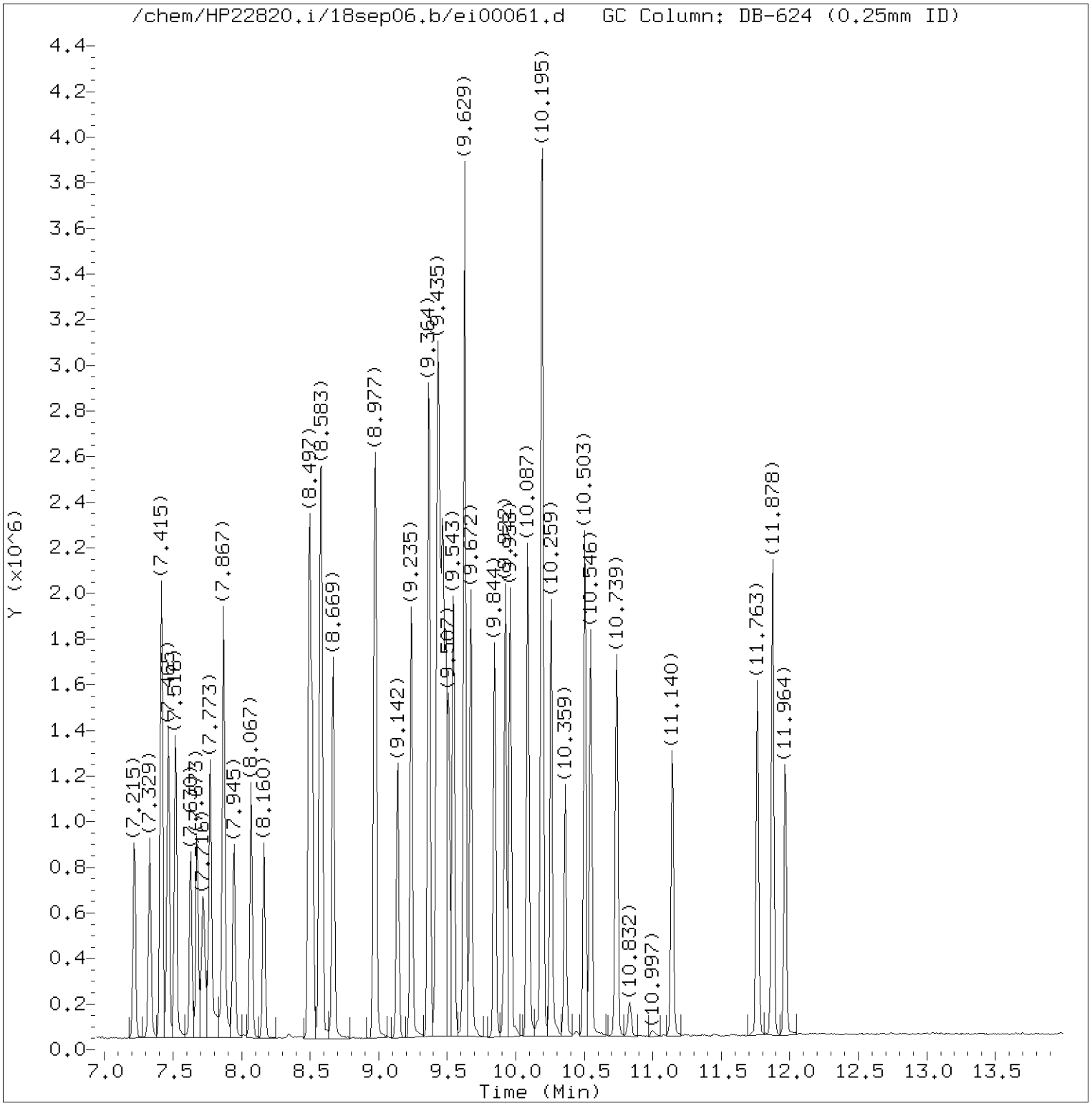
Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00061.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 12:45 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: all
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 13:08 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 09/06/2018 at 14:05.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00061.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 12:45 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: all
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 13:08 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 09/06/2018 at 14:05.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00061.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 12:45 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: all
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 13:08 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.613	41	136855	11.704
2) Dichlorodifluoromethane	(1)	1.649	85	564279	12.229
3) Chlorodifluoromethane	(1)	1.671	51	278996	12.094
4) Freon 114	(1)	1.778	85	563212	12.087
5) Chloromethane	(1)	1.842	50	90901	9.943
6) Vinyl Chloride	(1)	1.979	62	194685	11.755
7) 1,3-Butadiene	(1)	2.007	54	138898	10.996
8) Bromomethane	(1)	2.358	94	195495	12.505
9) Chloroethane	(1)	2.480	64	108868	11.638
10) Bromoethene	(1)	2.695	106	180000	10.844
11) Dichlorofluoromethane	(1)	2.731	67	456288	12.057
12) Trichlorofluoromethane	(1)	2.774	101	571179	11.641
13) Pentane	(1)	2.881	43	297873	10.764
14) Ethanol	(1)	3.089	45	63348	9.646
16) Acrolein	(1)	3.340	56	74134	11.145
17) 1,1-Dichloroethene	(1)	3.433	61	317648	11.409
18) Freon 113	(1)	3.447	103	291181	11.172
19) Acetone	(1)	3.533	43	271442	11.485
20) Methyl Iodide	(1)	3.605	142	450966	10.155
21) Carbon Disulfide	(1)	3.662	76	591370	11.972
22) Isopropanol	(1)	3.719	45	291423	10.160
24) 3-Chloropropene	(1)	3.870	76	92941	11.623
23) Acetonitrile	(1)	3.877	40	107460	10.339
25) Methylene Chloride	(1)	4.013	84	191155	12.791
26) tert-Butyl Alcohol	(1)	4.163	59	401389	9.887
28) trans-1,2-Dichloroethene	(1)	4.292	61	287506	11.658
27) Acrylonitrile	(1)	4.299	53	152680	10.918
29) Methyl t-Butyl Ether	(1)	4.299	73	574813	10.324
30) Hexane	(1)	4.564	57	283964	10.244
31) 1,1-Dichloroethane	(1)	4.722	63	369892	11.269
32) Vinyl Acetate	(1)	4.786	86	53025	10.073
33) Di-Isopropyl Ether	(1)	4.786	45	586139	10.853
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	543429	9.931
35) cis-1,2-Dichloroethene	(1)	5.259	61	274249	11.322
37) 2-Butanone	(1)	5.281	72	107679	10.240
38) Ethyl Acetate	(1)	5.331	70	52880	9.954
39) Methyl Acrylate	(1)	5.367	55	314168	10.085
40)*Bromochloromethane	(1)	5.467	130	263195	10.000

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 09/06/2018 at 14:05.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00061.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 12:45 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: all
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 13:08 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
41) Tetrahydrofuran	(1)	5.503	42	205738	10.563
42) Chloroform	(1)	5.539	83	478450	11.501
43) 1,1,1-Trichloroethane	(1)	5.682	97	467772	10.851
44) Cyclohexane	(1)	5.711	56	295297	10.348
45) Carbon Tetrachloride	(1)	5.811	117	426076	10.103
46) Benzene	(2)	5.990	78	653558	10.971
47) 1,2-Dichloroethane	(2)	6.011	62	307498	12.142
48) Isooctane	(2)	6.040	57	909468	11.136
49) Tert-Amyl Methyl Ether	(2)	6.069	73	558344	10.497
50) Heptane	(2)	6.176	43	306202	10.166
51)*1,4-Difluorobenzene	(2)	6.291	114	972599	10.000
52) Trichloroethene	(2)	6.491	130	280500	11.074
53) Ethyl Acrylate	(2)	6.577	55	411884	9.905
36) 1,2-Dichloroethene (total)	(1)		61	561755	22.979
54) 1,2-Dichloropropane	(2)	6.678	63	231793	11.248
57) Methyl Methacrylate	(2)	6.749	69	225876	10.015
55) Dibromomethane	(2)	6.771	174	283092	11.216
56) 1,4-Dioxane	(2)	6.778	88	161157	10.878
58) Bromodichloromethane	(2)	6.885	83	488012	11.288
59) cis-1,3-Dichloropropene	(2)	7.215	75	393040	10.422
60) 4-Methyl-2-Pentanone	(2)	7.329	43	439802	10.509
61) Toluene	(3)	7.465	91	773271	10.732
62) Octane	(3)	7.516	43	416574	10.232
63) trans-1,3-Dichloropropene	(3)	7.630	75	337396	10.297
65) Ethyl Methacrylate	(3)	7.673	69	375065	9.605
66) 1,1,2-Trichloroethane	(3)	7.773	97	280696	11.010
67) Tetrachloroethene	(3)	7.867	166	435014	11.099
68) 2-Hexanone	(3)	7.945	43	418551	10.364
69) Dibromochloromethane	(3)	8.067	127	351077	10.563
70) 1,2-Dibromoethane	(3)	8.160	107	432801	11.030
71)*Chlorobenzene-d5	(3)	8.497	117	950709	10.000
72) Chlorobenzene	(3)	8.518	112	623432	10.943
73) 1,1,1,2-Tetrachloroethane	(3)	8.576	131	311525	10.512
74) Ethylbenzene	(3)	8.583	91	1011944	10.304
75) m/p-Xylene	(3)	8.669	91	790428	10.209
76) o-Xylene	(3)	8.970	91	794530	10.320
78) Styrene	(3)	8.977	104	606428	10.270
79) Bromoform	(3)	9.142	173	441458	9.433

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 09/06/2018 at 14:05.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00061.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 12:45 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: all
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 13:08 jeb07445

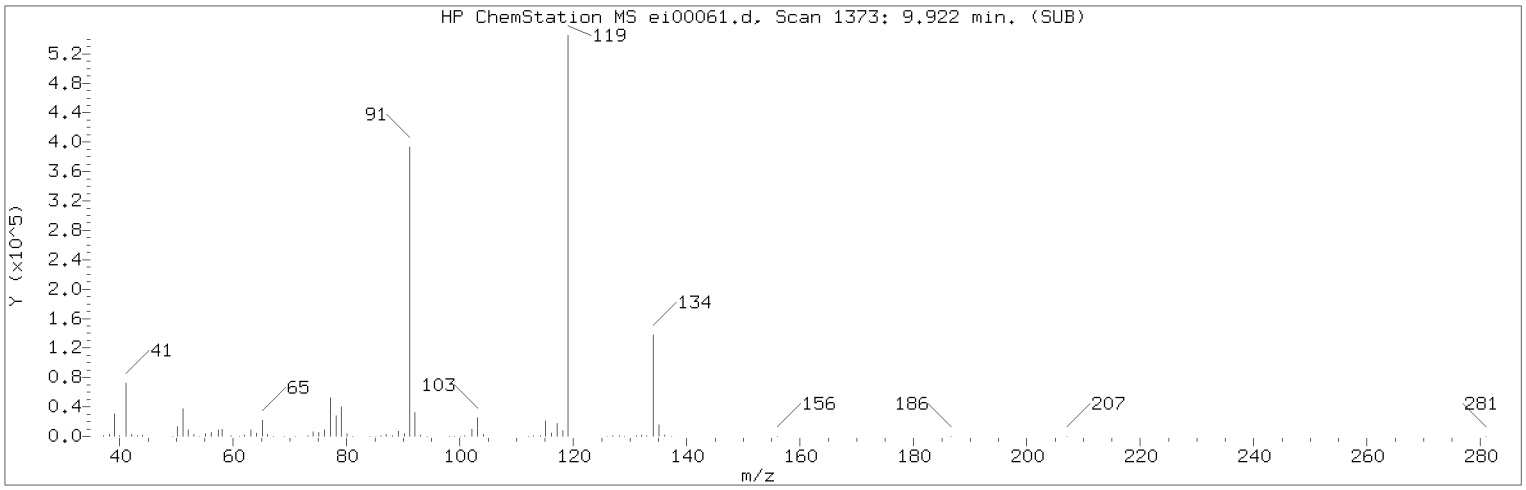
Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
80) Cumene	(3)	9.235	105	1068973	10.194
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	608811	11.006
81) Bromobenzene	(3)	9.493	156	373534	10.446
83) 1,2,3-Trichloropropane	(3)	9.514	110	187135	10.968
84) n-Propylbenzene	(3)	9.550	120	287760	10.084
86) 4-Ethyltoluene	(3)	9.629	105	1060678	10.219
85) 2-Chlorotoluene	(3)	9.629	126	260986	10.171
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	893131	10.125
88) Alpha Methyl Styrene	(3)	9.844	118	424823	9.793
89) tert-Butylbenzene	(3)	9.922	119	768951M	9.201
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	875954	10.117
91) sec-Butylbenzene	(3)	10.087	105	1210620	9.505
92) 1,3-Dichlorobenzene	(3)	10.195	146	617446	10.807
94) p-Isopropyltoluene	(3)	10.195	119	1025050	9.605
93) 1,4-Dichlorobenzene	(3)	10.259	146	623035	10.523
95) Benzyl Chloride	(3)	10.359	91	639772	8.196
97) n-Butylbenzene	(3)	10.503	91	971302	9.751
96) 1,2-Dichlorobenzene	(3)	10.546	146	567368	10.473
98) Hexachloroethane	(3)	10.739	117	217813	7.501
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	279699	9.588
100) 1,2,4-Trichlorobenzene	(3)	11.763	180	390102	9.278
101) Hexachlorobutadiene	(3)	11.878	225	370825	9.490
102) Naphthalene	(3)	11.964	128	768598	8.846
64) 1,3-Dichloropropene (total)	(3)		75	730436	20.721
77) Xylene (total)	(3)		91	1584958	20.528

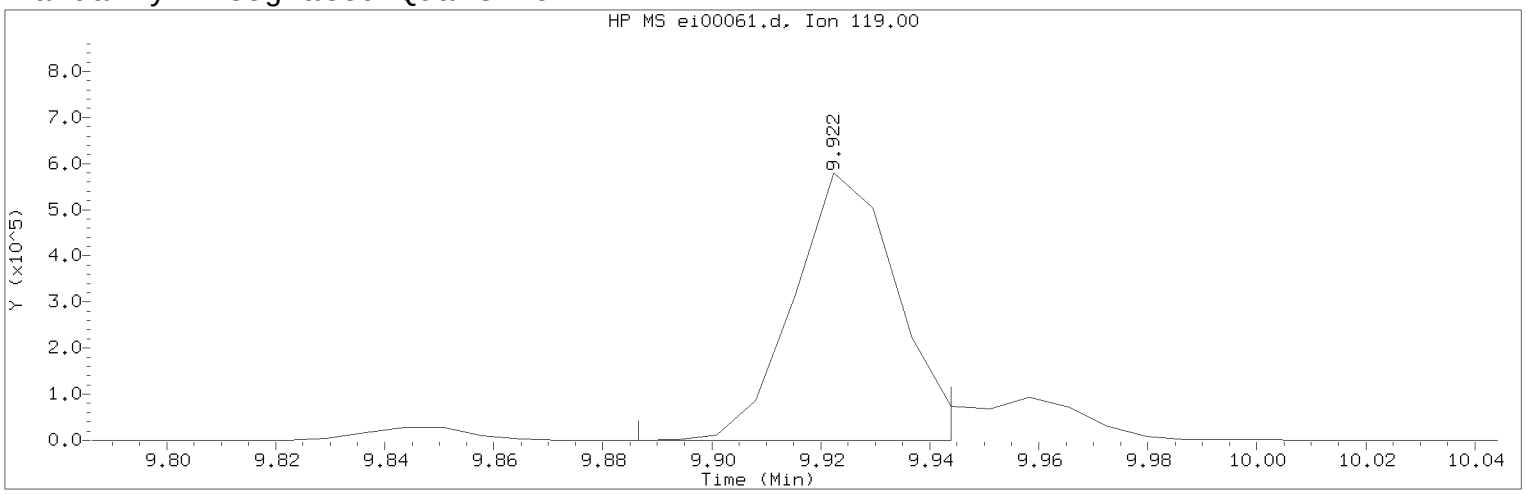
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 09/06/2018 at 14:05.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep06.b/ei00061.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 12:45 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: all
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 13:08 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

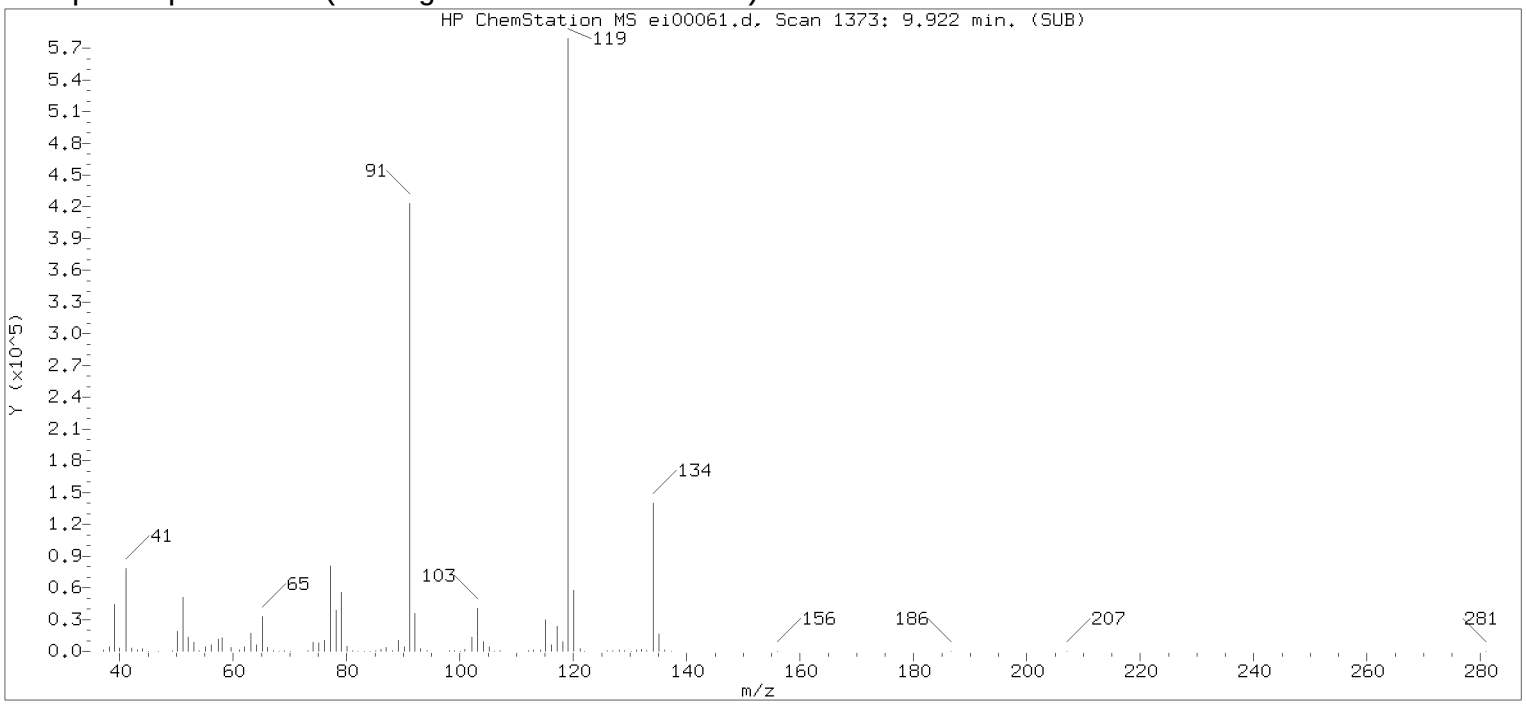
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 768951M
Concentration (ppb(v)) : 9.2006
Integration start scan : 1367 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

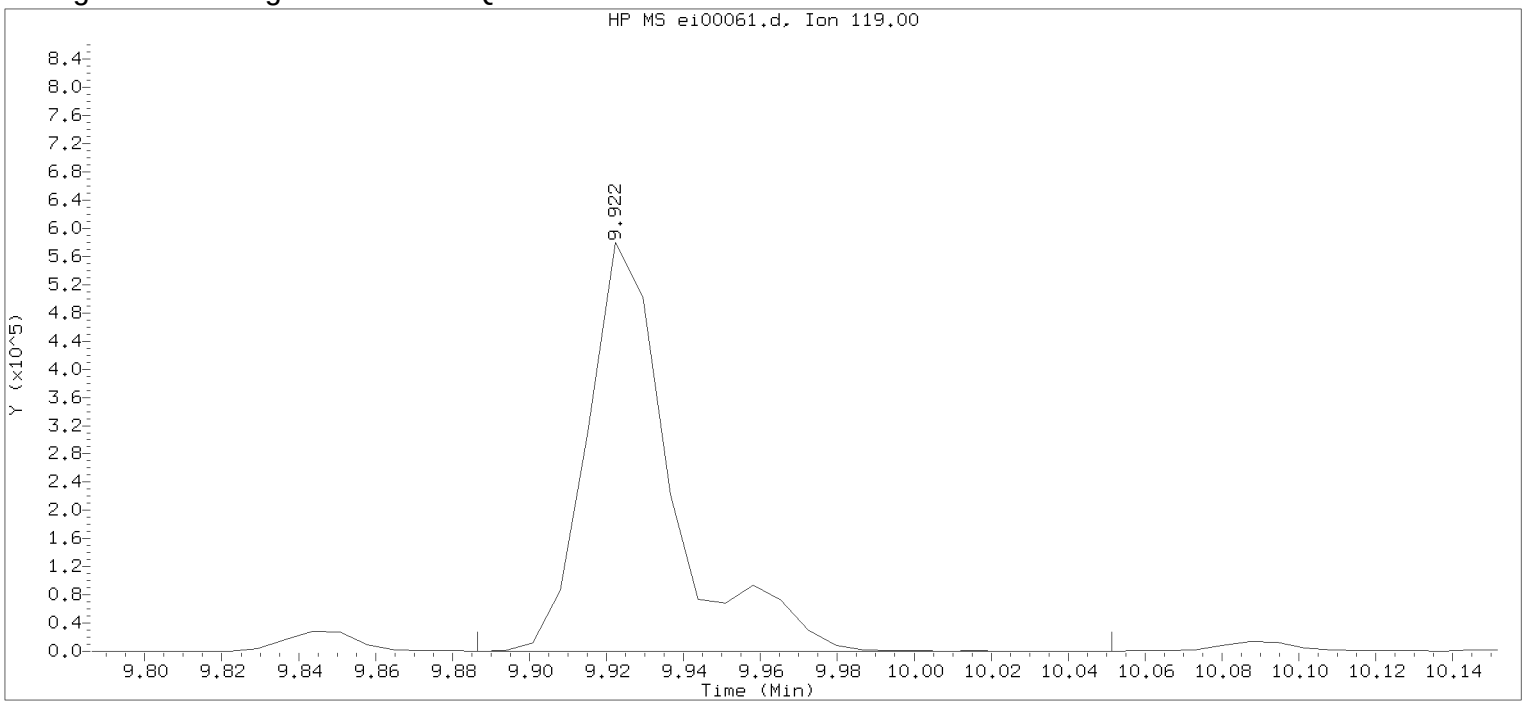
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/06/2018 at 14:05.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/07/2018 at 14:17.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep06.b/ei00061.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 12:45 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: all
Calibration date and time: 06-SEP-2018 12:24
Date, time and analyst ID of latest file update: 06-Sep-2018 13:06 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 888785
Concentration (ppb(v)) : 10.6345
Integration start scan : 1367 Integration stop scan: 1390
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 09/06/2018 at 14:05.
Target 3.5 esignature user ID: jeb07445

Raw QC Data

Volatile Organics in Air by GC/MS

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18sep06.b/ei00062.d Injection date and time: **06-SEP-2018 13:23**
Data file Sample Info. Line: VBLKE02;200;E1824930AA;VBLKE02;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1824930AA**
Date, time and analyst ID of latest file update: 06-Sep-2018 13:45 jeb07445

Blank Data file reference: **/chem/HP22820.i/18sep06.b/ei00062.d**

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: **all1**
Calibration date and time (Last Method Edit): 06-SEP-2018 13:08
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18sep06.b/ei00061.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
71) Chlorobenzene-d5	8.497(0.000)	1174	117	1031464 (8)	10.00		570426 - 1330992
40) Bromochloromethane	5.467(0.000)	751	130	282991 (8)	10.00		157917 - 368473
51) 1,4-Difluorobenzene	6.291(0.000)	866	114	1054020 (8)	10.00		583560 - 1361638

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					0.13	1
3) Chlorodifluoromethane	(1)			Not Detected					0.15	1
4) Freon 114	(1)			Not Detected					0.12	1
5) Chloromethane	(1)			Not Detected					0.24	1
6) Vinyl Chloride	(1)			Not Detected					0.12	1
7) 1,3-Butadiene	(1)			Not Detected					0.17	1
8) Bromomethane	(1)			Not Detected					0.18	1
9) Chloroethane	(1)			Not Detected					0.19	1
67) Tetrachloroethene	(3)			Not Detected					0.25	2
11) Dichlorofluoromethane	(1)			Not Detected					0.11	1
12) Trichlorofluoromethane	(1)			Not Detected					0.15	1
13) Pentane	(1)			Not Detected					0.13	1
68) 2-Hexanone	(3)			Not Detected					0.18	1
69) Dibromochloromethane	(3)			Not Detected					0.13	1
17) 1,1-Dichloroethene	(1)			Not Detected					0.14	1
18) Freon 113	(1)			Not Detected					0.11	1
19) Acetone	(1)			Not Detected					0.53	5
70) 1,2-Dibromoethane	(3)			Not Detected					0.13	1
21) Carbon Disulfide	(1)			Not Detected					0.13	1
24) 3-Chloropropene	(1)			Not Detected					0.15	1
72) Chlorobenzene	(3)			Not Detected					0.13	1
25) Methylene Chloride	(1)			Not Detected					0.25	2
73) 1,1,1,2-Tetrachloroethane	(3)			Not Detected					0.15	1
28) trans-1,2-Dichloroethene	(1)			Not Detected					0.086	1
74) Ethylbenzene	(3)			Not Detected					0.19	1
29) Methyl t-Butyl Ether	(1)			Not Detected					0.15	1
30) Hexane	(1)			Not Detected					0.13	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.089	1
75) m/p-Xylene	(3)			Not Detected					0.26	2
76) o-Xylene	(3)			Not Detected					0.19	1
78) Styrene	(3)			Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.12	1
37) 2-Butanone	(1)			Not Detected					0.21	1
79) Bromoform	(3)			Not Detected					0.17	1
80) Cumene	(3)			Not Detected					0.24	1
82) 1,1,2,2-Tetrachloroethane	(3)			Not Detected					0.15	1
42) Chloroform	(1)			Not Detected					0.092	1
81) Bromobenzene	(3)			Not Detected					0.1	1
43) 1,1,1-Trichloroethane	(1)			Not Detected					0.12	1
90) 1,2,4-Trimethylbenzene	(3)			Not Detected					0.28	2
86) 4-Ethyltoluene	(3)			Not Detected					0.18	1
45) Carbon Tetrachloride	(1)			Not Detected					0.14	1
46) Benzene	(2)			Not Detected					0.11	1

Digitally signed by Jacob E. Bailey on 09/06/2018 at 14:05. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18sep06.b/ei00062.d Injection date and time: **06-SEP-2018 13:23**
Data file Sample Info. Line: VBLKE02;200;E1824930AA;VBLKE02;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1824930AA**
Date, time and analyst ID of latest file update: 06-Sep-2018 13:45 jeb07445

Blank Data file reference: **/chem/HP22820.i/18sep06.b/ei00062.d**

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: **all1**
Calibration date and time (Last Method Edit): 06-SEP-2018 13:08
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18sep06.b/ei00061.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
47) 1,2-Dichloroethane	(2)			Not Detected					0.08	1
48) Isooctane	(2)			Not Detected					0.13	1
87) 1,3,5-Trimethylbenzene	(3)			Not Detected					0.32	2
50) Heptane	(2)			Not Detected					0.23	1
52) Trichloroethene	(2)			Not Detected					0.18	1
98) Hexachloroethane	(3)			Not Detected					0.27	2
83) 1,2,3-Trichloropropane	(3)			Not Detected					0.14	1
54) 1,2-Dichloropropane	(2)			Not Detected					0.13	1
96) 1,2-Dichlorobenzene	(3)			Not Detected					0.2	1
55) Dibromomethane	(2)			Not Detected					0.14	1
93) 1,4-Dichlorobenzene	(3)			Not Detected					0.17	1
58) Bromodichloromethane	(2)			Not Detected					0.12	1
59) cis-1,3-Dichloropropene	(2)			Not Detected					0.1	1
60) 4-Methyl-2-Pentanone	(2)			Not Detected					0.15	1
61) Toluene	(3)			Not Detected					0.12	1
62) Octane	(3)			Not Detected					0.4	2
63) trans-1,3-Dichloropropene	(3)			Not Detected					0.12	1
92) 1,3-Dichlorobenzene	(3)			Not Detected					0.19	1
66) 1,1,2-Trichloroethane	(3)			Not Detected					0.12	1
1) Propene	(1)			Not Detected					0.16	1
10) Bromoethene	(1)			Not Detected					0.18	1
14) Ethanol	(1)			Not Detected					0.69	5
16) Acrolein	(1)			Not Detected					0.62	5
20) Methyl Iodide	(1)			Not Detected					0.15	1
22) Isopropanol	(1)			Not Detected					0.24	1
23) Acetonitrile	(1)			Not Detected					0.83	5
26) tert-Butyl Alcohol	(1)			Not Detected					0.21	1
27) Acrylonitrile	(1)			Not Detected					0.13	1
32) Vinyl Acetate	(1)			Not Detected					0.16	1
33) Di-Isopropyl Ether	(1)			Not Detected					0.15	1
34) Ethyl Tert-Butyl Ether	(1)			Not Detected					0.15	1
36) 1,2-Dichloroethene (total)	(1)			Not Detected					0.2	1
38) Ethyl Acetate	(1)			Not Detected					0.25	2
39) Methyl Acrylate	(1)			Not Detected					0.14	1
41) Tetrahydrofuran	(1)			Not Detected					0.24	1
44) Cyclohexane	(1)			Not Detected					0.11	1
49) Tert-Amyl Methyl Ether	(2)			Not Detected					0.11	1
53) Ethyl Acrylate	(2)			Not Detected					0.16	1
56) 1,4-Dioxane	(2)			Not Detected					0.17	1
57) Methyl Methacrylate	(2)			Not Detected					0.15	1
64) 1,3-Dichloropropene (total)	(3)			Not Detected					0.23	1
65) Ethyl Methacrylate	(3)			Not Detected					0.19	1
77) Xylene (total)	(3)			Not Detected					0.44	2
84) n-Propylbenzene	(3)			Not Detected					0.21	1
85) 2-Chlorotoluene	(3)			Not Detected					0.22	1
88) Alpha Methyl Styrene	(3)			Not Detected					0.18	1
89) tert-Butylbenzene	(3)			Not Detected					0.76	5
91) sec-Butylbenzene	(3)			Not Detected					0.39	2
94) p-Isopropyltoluene	(3)			Not Detected					0.28	2
95) Benzyl Chloride	(3)			Not Detected					0.25	2
97) n-Butylbenzene	(3)			Not Detected					0.26	2
99) 1,2-Dibromo-3-chloropropane	(3)			Not Detected					0.28	2
100) 1,2,4-Trichlorobenzene	(3)			Not Detected					0.38	2
101) Hexachlorobutadiene	(3)			Not Detected					0.47	2

Digitally signed by Jacob E. Bailey on 09/06/2018 at 14:05. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18sep06.b/ei00062.d Injection date and time: **06-SEP-2018 13:23**
Data file Sample Info. Line: VBLKE02;200;E1824930AA;VBLKE02;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1824930AA**
Date, time and analyst ID of latest file update: 06-Sep-2018 13:45 jeb07445

Blank Data file reference: **/chem/HP22820.i/18sep06.b/ei00062.d**

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: **all1**
Calibration date and time (Last Method Edit): 06-SEP-2018 13:08
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18sep06.b/ei00061.d**

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

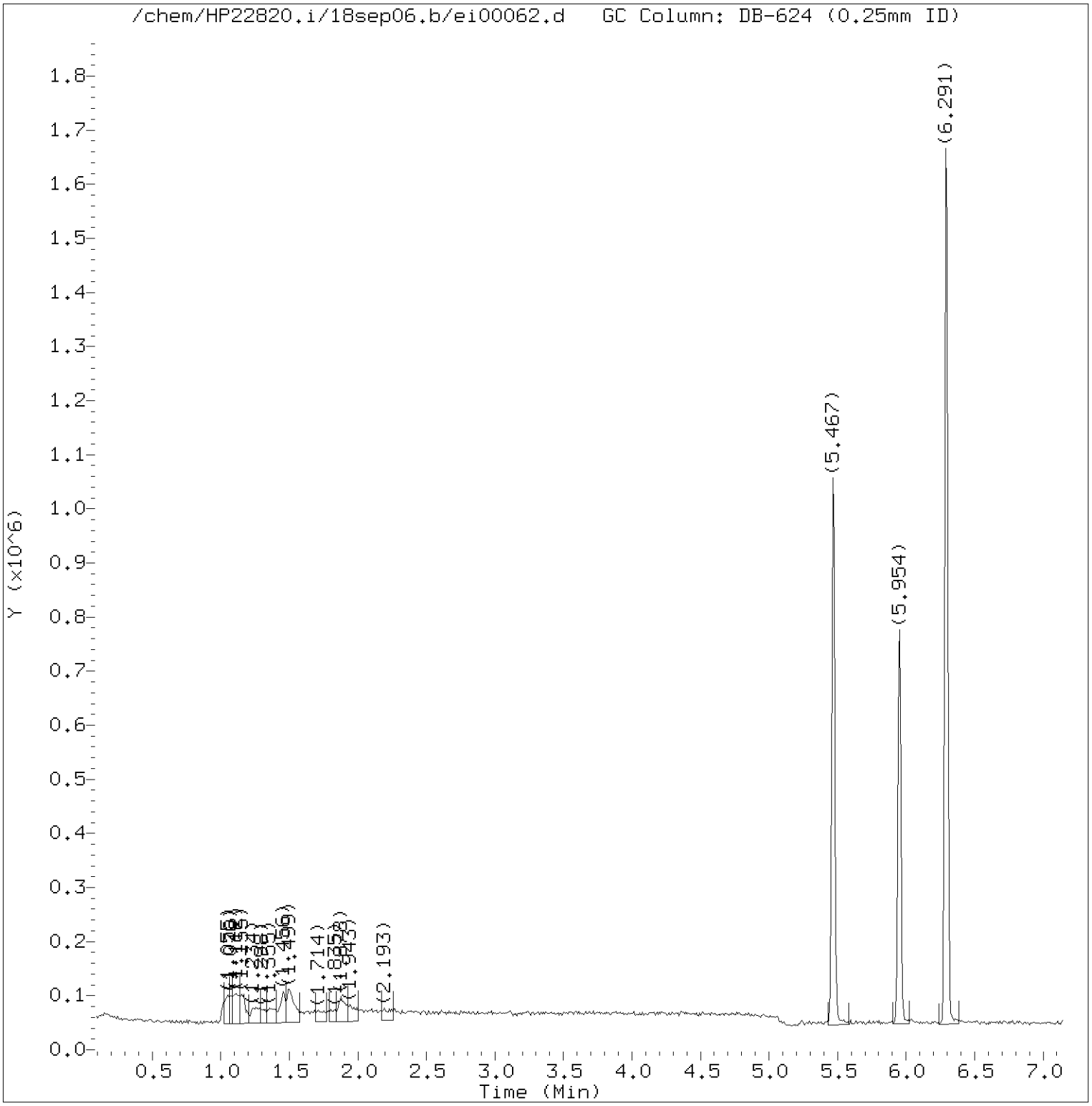
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
102) Naphthalene	(3)				Not Detected					0.5	2

Total number of targets = 98

Digitally signed by Jacob E. Bailey on 09/06/2018 at 14:05. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/07/2018 at 14:17. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

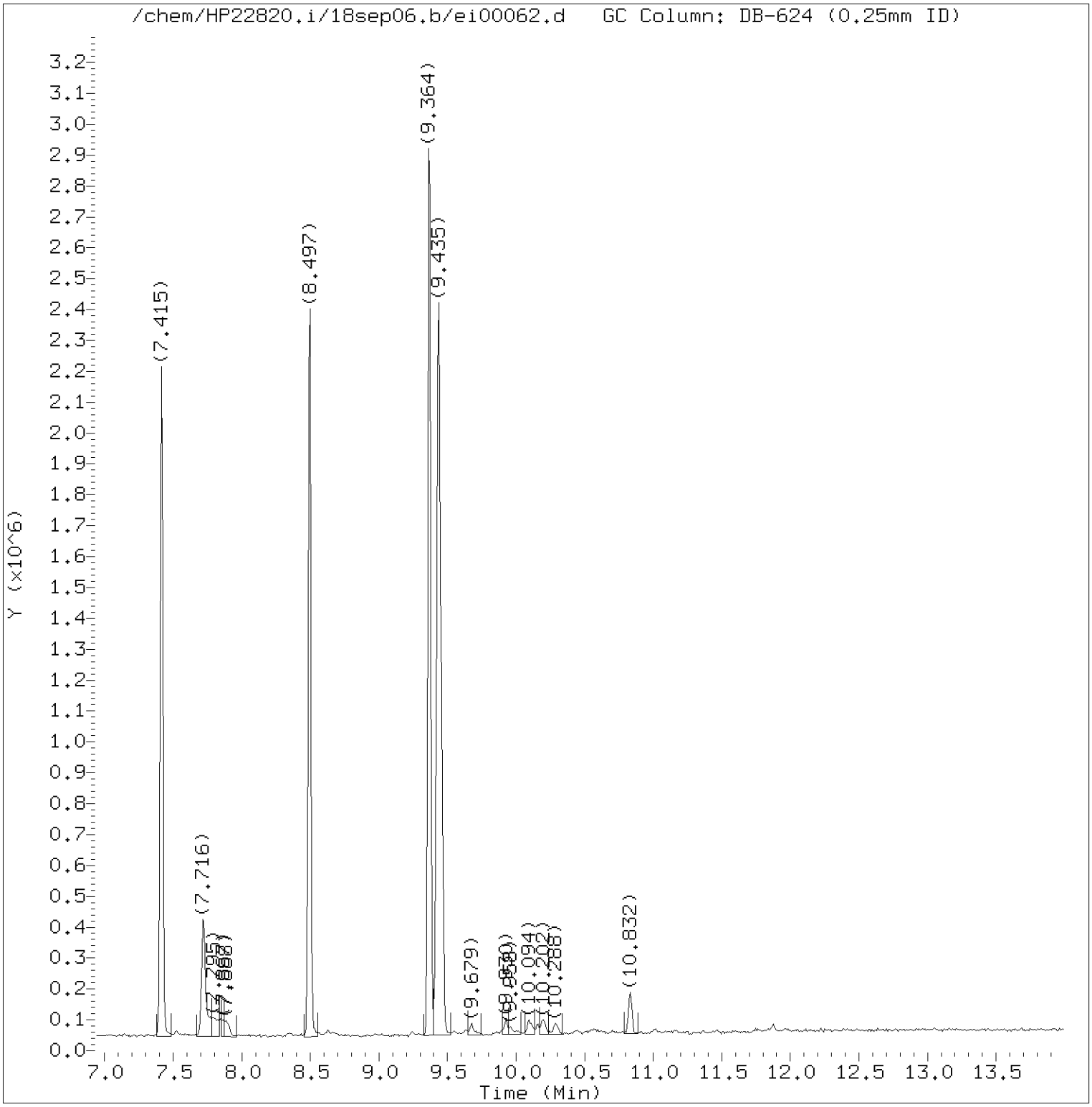
Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00062.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 13:23 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 13:45 jeb07445

Sample Name: VBLKE02 Lab Sample ID: VBLKE02

Digitally signed by Jacob E. Bailey
on 09/06/2018 at 14:05.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00062.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 13:23 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 13:45 jeb07445

Sample Name: VBLKE02 Lab Sample ID: VBLKE02

Digitally signed by Jacob E. Bailey
on 09/06/2018 at 14:05.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00062.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 13:23 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 13:45 jeb07445

Sample Name: VBLKE02 Lab Sample ID: VBLKE02

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	282991	10.000
51)*1,4-Difluorobenzene	(2)	6.291	114	1054020	10.000
71)*Chlorobenzene-d5	(3)	8.497	117	1031464	10.000

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 09/06/2018 at 14:05.
Target 3.5 esignature user ID: jeb07445

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE02

Sample Media:	CANISTER	Lab Sample ID:	9785623DUP
Canister ID:	1263	Lab File ID:	ei00073.d
Pressure Received:	13.3 psia	Date Collected:	08/30/2018
Final Pressure:	26.6 psia	Date Received:	09/05/2018
Nominal Volume:	200 cc	Analyzed Date:	09/06/2018
Injection Volume:	10 cc	Analyzed Time:	18:38
Instrument ID:	22820	Dilution Factor:	40

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-71-8	Dichlorodifluoromethane	280	
75-45-6	Chlorodifluoromethane	21	U
76-14-2	Freon 114	34	U
74-87-3	Chloromethane	20	U
75-01-4	Vinyl Chloride	12	U
106-99-0	1,3-Butadiene	15	U
74-83-9	Bromomethane	28	U
75-00-3	Chloroethane	20	U
75-43-4	Dichlorofluoromethane	19	U
75-69-4	Trichlorofluoromethane	34	U
109-66-0	Pentane	15	U
75-35-4	1,1-Dichloroethene	22	U
76-13-1	Freon 113	15000	
67-64-1	Acetone	91	J
75-15-0	Carbon Disulfide	16	U
107-05-1	3-Chloropropene	19	U
75-09-2	Methylene Chloride	35	U
156-60-5	trans-1,2-Dichloroethene	14	U
1634-04-4	Methyl t-Butyl Ether	22	U
110-54-3	Hexane	18	U
75-34-3	1,1-Dichloroethane	32	J
156-59-2	cis-1,2-Dichloroethene	19	U
78-93-3	2-Butanone	25	U
67-66-3	Chloroform	18	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE02

Sample Media:	CANISTER	Lab Sample ID:	9785623DUP
Canister ID:	1263	Lab File ID:	ei00073.d
Pressure Received:	13.3 psia	Date Collected:	08/30/2018
Final Pressure:	26.6 psia	Date Received:	09/05/2018
Nominal Volume:	200 cc	Analyzed Date:	09/06/2018
Injection Volume:	10 cc	Analyzed Time:	18:38
Instrument ID:	22820	Dilution Factor:	40

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
71-55-6	1,1,1-Trichloroethane	38	J
56-23-5	Carbon Tetrachloride	35	U
71-43-2	Benzene	150	
107-06-2	1,2-Dichloroethane	13	U
540-84-1	Isooctane	24	U
142-82-5	Heptane	38	U
79-01-6	Trichloroethene	340	
78-87-5	1,2-Dichloropropane	24	U
74-95-3	Dibromomethane	40	U
75-27-4	Bromodichloromethane	32	U
10061-01-5	cis-1,3-Dichloropropene	18	U
108-10-1	4-Methyl-2-Pentanone	30	J
108-88-3	Toluene	100	J
111-65-9	Octane	75	U
10061-02-6	trans-1,3-Dichloropropene	22	U
79-00-5	1,1,2-Trichloroethane	26	U
127-18-4	Tetrachloroethene	1600	
591-78-6	2-Hexanone	29	U
124-48-1	Dibromochloromethane	44	U
106-93-4	1,2-Dibromoethane	40	U
108-90-7	Chlorobenzene	24	U
630-20-6	1,1,1,2-Tetrachloroethane	41	U
100-41-4	Ethylbenzene	33	U
179601-23-1	m/p-Xylene	1000	

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE02

Sample Media:	CANISTER	Lab Sample ID:	9785623DUP
Canister ID:	1263	Lab File ID:	ei00073.d
Pressure Received:	13.3 psia	Date Collected:	08/30/2018
Final Pressure:	26.6 psia	Date Received:	09/05/2018
Nominal Volume:	200 cc	Analyzed Date:	09/06/2018
Injection Volume:	10 cc	Analyzed Time:	18:38
Instrument ID:	22820	Dilution Factor:	40

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
95-47-6	o-Xylene	33	U
100-42-5	Styrene	34	U
75-25-2	Bromoform	70	U
98-82-8	Cumene	47	U
108-86-1	Bromobenzene	26	U
79-34-5	1,1,2,2-Tetrachloroethane	41	U
96-18-4	1,2,3-Trichloropropane	34	U
622-96-8	4-Ethyltoluene	35	U
108-67-8	1,3,5-Trimethylbenzene	63	U
95-63-6	1,2,4-Trimethylbenzene	55	U
541-73-1	1,3-Dichlorobenzene	46	U
106-46-7	1,4-Dichlorobenzene	41	U
95-50-1	1,2-Dichlorobenzene	48	U
67-72-1	Hexachloroethane	100	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

Lancaster Laboratories, Inc.

Analysis Summary for GC/MS Volatiles in Air 9785623

Data file: /chem/HP22820.i/18sep06.b/ei00073.d Injection date and time: **06-SEP-2018 18:38**
Data file Sample Info. Line: 9785623;10;E1824930AA;1263-;0;0;SAMPLE; Instrument ID: **HP22820.i** Batch: **E1824930AA**
Date, time and analyst ID of latest file update: 06-Sep-2018 19:12 jeb07445

Blank Data file reference: **/chem/HP22820.i/18sep06.b/ei00062.d**

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 06-SEP-2018 13:08
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18sep06.b/ei00061.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): 26.6 psia Canister Pressure before dilution (Ya): 13.3 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 10 cc

Analysis Comments:DUP

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	5.467(0.000)	751	130	228339 (-13)	10.00		157917 - 368473
51) 1,4-Difluorobenzene	6.291(0.000)	866	114	833573 (-14)	10.00		583560 - 1361638
71) Chlorobenzene-d5	8.497(0.000)	1174	117	849019 (-11)	10.00		570426 - 1330992

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)	1.606(0.007)	85	57669	1.441	57.62			0.13	1
3) Chlorodifluoromethane	(1)			Not Detected					0.15	1
4) Freon 114	(1)			Not Detected					0.12	1
5) Chloromethane	(1)			Not Detected					0.24	1
6) Vinyl Chloride	(1)			Not Detected					0.12	1
7) 1,3-Butadiene	(1)			Not Detected					0.17	1
8) Bromomethane	(1)			Not Detected					0.18	1
9) Chloroethane	(1)			Not Detected					0.19	1
11) Dichlorofluoromethane	(1)			Not Detected					0.11	1
12) Trichlorofluoromethane	(1)			Not Detected					0.15	1
13) Pentane	(1)			Not Detected					0.13	1
17) 1,1-Dichloroethene	(1)			Not Detected					0.14	1
18) Freon 113	(1)	3.447(-0.000)	103	1141179	50.468	2018.72			0.11	1
19) Acetone	(1)	3.540(-0.001)	43	19696	0.961	38.42		J	0.53	5
21) Carbon Disulfide	(1)			Not Detected					0.13	1
24) 3-Chloropropene	(1)			Not Detected					0.15	1
25) Methylene Chloride	(1)			Not Detected					0.25	2
28) trans-1,2-Dichloroethene	(1)			Not Detected					0.086	1
29) Methyl t-Butyl Ether	(1)			Not Detected					0.15	1
30) Hexane	(1)			Not Detected					0.13	1
31) 1,1-Dichloroethane	(1)	4.715(0.001)	63	5599	0.197	7.86		J	0.089	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.12	1
37) 2-Butanone	(1)			Not Detected					0.21	1
42) Chloroform	(1)			Not Detected					0.092	1
43) 1,1,1-Trichloroethane	(1)	5.682(0.000)	97	6566	0.176	7.02		J	0.12	1
45) Carbon Tetrachloride	(1)			Not Detected					0.14	1
46) Benzene	(2)	5.983(0.001)	78	61836	1.211	48.44			0.11	1
47) 1,2-Dichloroethane	(2)			Not Detected					0.08	1
48) Isooctane	(2)			Not Detected					0.13	1
50) Heptane	(2)			Not Detected					0.23	1
52) Trichloroethene	(2)	6.491(0.000)	130	34274	1.579	63.15			0.18	1
54) 1,2-Dichloropropane	(2)			Not Detected					0.13	1
55) Dibromomethane	(2)			Not Detected					0.14	1
58) Bromodichloromethane	(2)			Not Detected					0.12	1
59) cis-1,3-Dichloropropene	(2)			Not Detected					0.1	1
60) 4-Methyl-2-Pentanone	(2)	7.336(-0.001)	43	6633	0.185	7.40		J	0.15	1
61) Toluene	(3)	7.465(-0.000)	91	43186	0.671	26.85		J	0.12	1
62) Octane	(3)			Not Detected					0.4	2
63) trans-1,3-Dichloropropene	(3)			Not Detected					0.12	1
66) 1,1,2-Trichloroethane	(3)			Not Detected					0.12	1
67) Tetrachloroethene	(3)	7.867(-0.000)	166	204261	5.836	233.44			0.25	2
68) 2-Hexanone	(3)			Not Detected					0.18	1

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18sep06.b/ei00073.d Injection date and time: **06-SEP-2018 18:38**
Data file Sample Info. Line: 9785623;10;E1824930AA;1263-;0;0;SAMPLE; Instrument ID: **HP22820.i** Batch: **E1824930AA**
Date, time and analyst ID of latest file update: 06-Sep-2018 19:12 jeb07445

Blank Data file reference: **/chem/HP22820.i/18sep06.b/ei00062.d**

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 06-SEP-2018 13:08
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18sep06.b/ei00061.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): 26.6 psia Canister Pressure before dilution (Ya): 13.3 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 10 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
69) Dibromochloromethane	(3)			Not Detected					0.13	1
70) 1,2-Dibromoethane	(3)			Not Detected					0.13	1
72) Chlorobenzene	(3)			Not Detected					0.13	1
73) 1,1,1,2-Tetrachloroethane	(3)			Not Detected					0.15	1
74) Ethylbenzene	(3)			Not Detected					0.19	1
75) m/p-Xylene	(3)	8.669(0.000)	91	407873	5.899	235.96			0.26	2
76) o-Xylene	(3)			Not Detected					0.19	1
78) Styrene	(3)			Not Detected					0.2	1
79) Bromoform	(3)			Not Detected					0.17	1
80) Cumene	(3)			Not Detected					0.24	1
81) Bromobenzene	(3)			Not Detected					0.1	1
82) 1,1,2,2-Tetrachloroethane	(3)			Not Detected					0.15	1
83) 1,2,3-Trichloropropane	(3)			Not Detected					0.14	1
86) 4-Ethyltoluene	(3)			Not Detected					0.18	1
87) 1,3,5-Trimethylbenzene	(3)			Not Detected					0.32	2
90) 1,2,4-Trimethylbenzene	(3)			Not Detected					0.28	2
92) 1,3-Dichlorobenzene	(3)			Not Detected					0.19	1
93) 1,4-Dichlorobenzene	(3)			Not Detected					0.17	1
96) 1,2-Dichlorobenzene	(3)			Not Detected					0.2	1
98) Hexachloroethane	(3)			Not Detected					0.27	2

Total number of targets = 62

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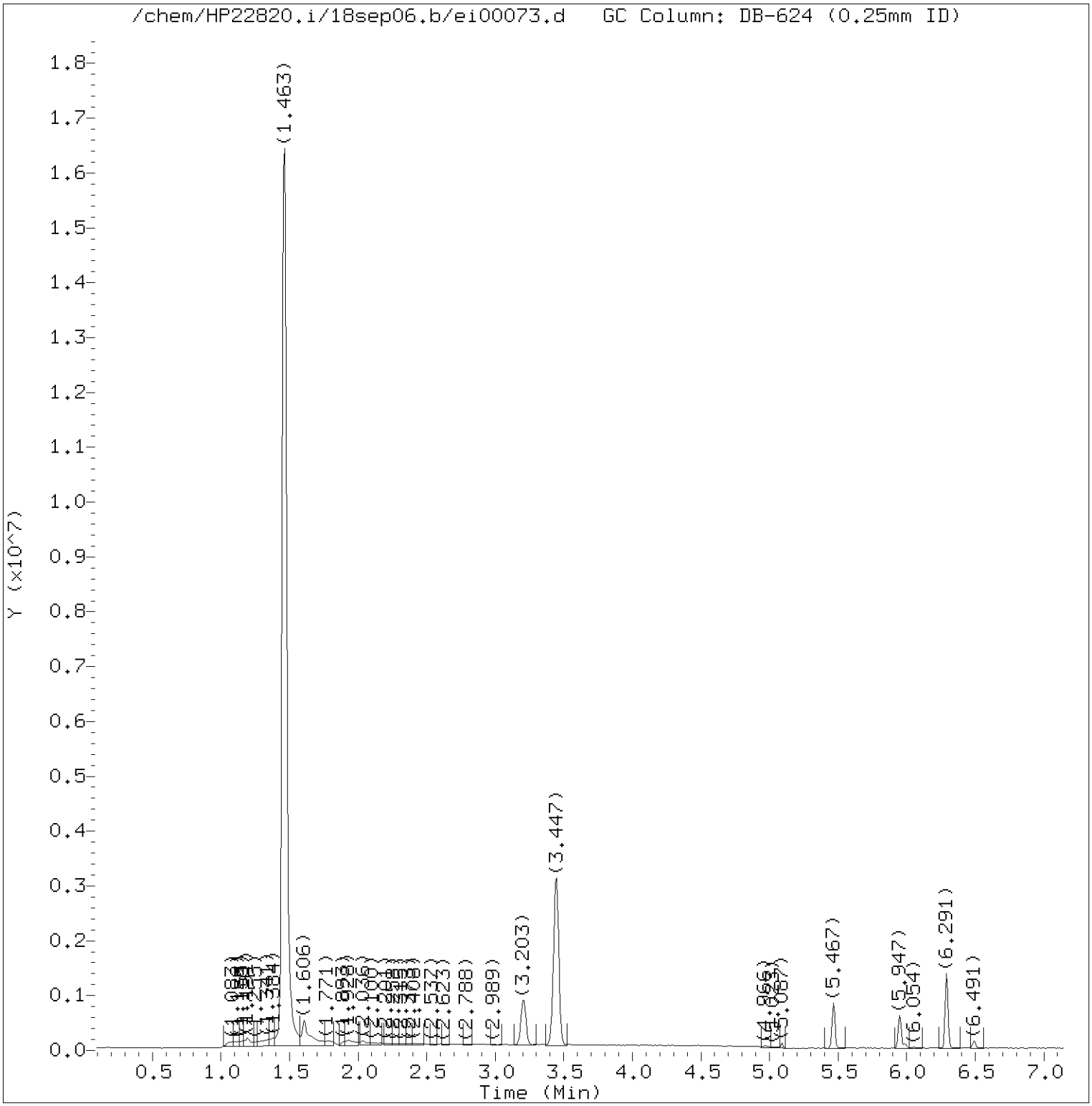
Secondary review performed and digitally signed by Jeffrey B. Smith on 09/07/2018 at 14:25. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00073.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 18:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:12 jeb07445

Sample Name: 1263- Lab Sample ID: 9785623

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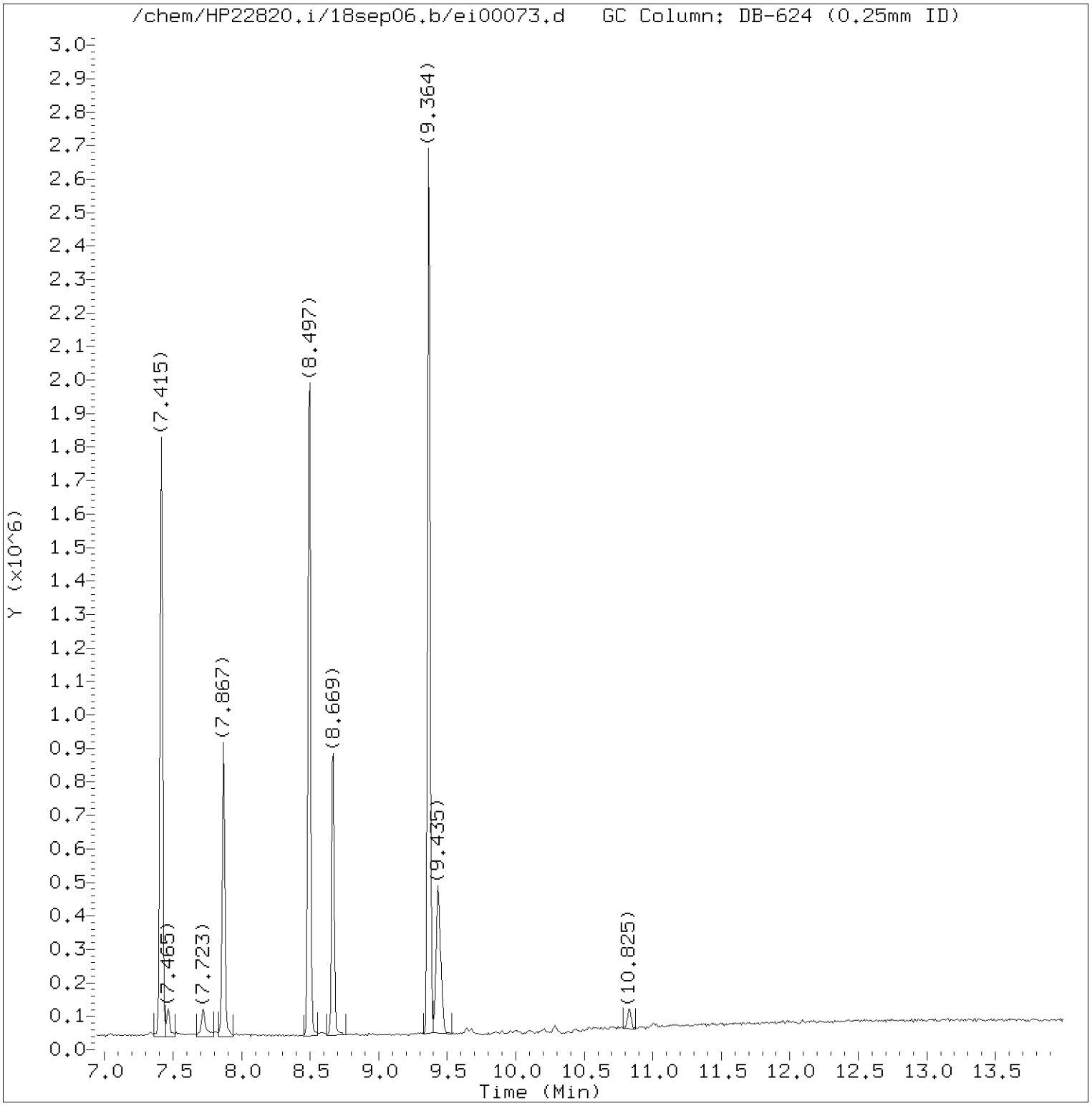
on 09/06/2018 at 19:13.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00073.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 18:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:12 jeb07445

Sample Name: 1263- Lab Sample ID: 9785623

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on 09/06/2018 at 19:13.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00073.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 18:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: 292
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 19:12 jeb07445

Sample Name: 1263- Lab Sample ID: 9785623

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
2) Dichlorodifluoromethane	(1)	1.606	85	57669	1.441
18) Freon 113	(1)	3.447	103	1141179	50.468
19) Acetone	(1)	3.540	43	19696	0.961
31) 1,1-Dichloroethane	(1)	4.715	63	5599	0.197
40)*Bromochloromethane	(1)	5.467	130	228339	10.000
43) 1,1,1-Trichloroethane	(1)	5.682	97	6566	0.176
46) Benzene	(2)	5.983	78	61836	1.211
51)*1,4-Difluorobenzene	(2)	6.291	114	833573	10.000
52) Trichloroethene	(2)	6.491	130	34274	1.579
60) 4-Methyl-2-Pentanone	(2)	7.337	43	6633	0.185
61) Toluene	(3)	7.465	91	43186	0.671
67) Tetrachloroethene	(3)	7.867	166	204261	5.836
71)*Chlorobenzene-d5	(3)	8.497	117	849019	10.000
75) m/p-Xylene	(3)	8.669	91	407873	5.899

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 09/06/2018 at 19:13.
Target 3.5 esignature user ID: jeb07445

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE02

Sample Media:	N/A	Lab Sample ID:	LCSE02
Canister ID:	N/A	Lab File ID:	ei00063.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	09/06/2018
Injection Volume:	200 cc	Analyzed Time:	13:58
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
100-41-4	Ethylbenzene	43	
100-42-5	Styrene	41	
10061-01-5	cis-1,3-Dichloropropene	42	
10061-02-6	trans-1,3-Dichloropropene	43	
106-46-7	1,4-Dichlorobenzene	58	
106-93-4	1,2-Dibromoethane	78	
106-99-0	1,3-Butadiene	22	
107-05-1	3-Chloropropene	36	
107-06-2	1,2-Dichloroethane	44	
108-10-1	4-Methyl-2-Pentanone	40	
108-67-8	1,3,5-Trimethylbenzene	48	
108-86-1	Bromobenzene	62	
108-88-3	Toluene	38	
108-90-7	Chlorobenzene	46	
109-66-0	Pentane	28	
110-54-3	Hexane	32	
111-65-9	Octane	45	
124-48-1	Dibromochloromethane	82	
127-18-4	Tetrachloroethene	71	
142-82-5	Heptane	39	
156-59-2	cis-1,2-Dichloroethene	40	
156-60-5	trans-1,2-Dichloroethene	42	
1634-04-4	Methyl t-Butyl Ether	34	
179601-23-1	m/p-Xylene	42	

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE02

Sample Media:	N/A	Lab Sample ID:	LCSE02
Canister ID:	N/A	Lab File ID:	ei00063.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	09/06/2018
Injection Volume:	200 cc	Analyzed Time:	13:58
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
540-84-1	Isooctane	48	
541-73-1	1,3-Dichlorobenzene	59	
56-23-5	Carbon Tetrachloride	58	
591-78-6	2-Hexanone	41	
622-96-8	4-Ethyltoluene	49	
630-20-6	1,1,1,2-Tetrachloroethane	67	
67-64-1	Acetone	25	
67-66-3	Chloroform	50	
67-72-1	Hexachloroethane	68	
71-43-2	Benzene	32	
71-55-6	1,1,1-Trichloroethane	53	
74-83-9	Bromomethane	44	
74-87-3	Chloromethane	19	
74-95-3	Dibromomethane	74	
75-00-3	Chloroethane	29	
75-01-4	Vinyl Chloride	28	
75-09-2	Methylene Chloride	40	
75-15-0	Carbon Disulfide	32	
75-25-2	Bromoform	91	
75-27-4	Bromodichloromethane	69	
75-34-3	1,1-Dichloroethane	41	
75-35-4	1,1-Dichloroethene	41	
75-43-4	Dichlorofluoromethane	47	
75-45-6	Chlorodifluoromethane	42	

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE02

Sample Media:	N/A	Lab Sample ID:	LCSE02
Canister ID:	N/A	Lab File ID:	ei00063.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	09/06/2018
Injection Volume:	200 cc	Analyzed Time:	13:58
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-69-4	Trichlorofluoromethane	60	
75-71-8	Dichlorodifluoromethane	55	
76-13-1	Freon 113	78	
76-14-2	Freon 114	77	
78-87-5	1,2-Dichloropropane	48	
78-93-3	2-Butanone	27	
79-00-5	1,1,2-Trichloroethane	56	
79-01-6	Trichloroethene	55	
79-34-5	1,1,2,2-Tetrachloroethane	69	
95-47-6	o-Xylene	43	
95-50-1	1,2-Dichlorobenzene	57	
95-63-6	1,2,4-Trimethylbenzene	48	
96-18-4	1,2,3-Trichloropropane	62	
98-82-8	Cumene	49	
115-07-1	Propene	17	
593-60-2	Bromoethene	46	
64-17-5	Ethanol	18	
107-02-8	Acrolein	24	
74-88-4	Methyl Iodide	56	
67-63-0	Isopropanol	22	
75-05-8	Acetonitrile	18	
75-65-0	tert-Butyl Alcohol	27	
107-13-1	Acrylonitrile	22	
108-05-4	Vinyl Acetate	33	

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE02

Sample Media:	N/A	Lab Sample ID:	LCSE02
Canister ID:	N/A	Lab File ID:	ei00063.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	09/06/2018
Injection Volume:	200 cc	Analyzed Time:	13:58
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
108-20-3	Di-Isopropyl Ether	41	
637-92-3	Ethyl Tert-Butyl Ether	37	
540-59-0	1,2-Dichloroethene (total)	81	
141-78-6	Ethyl Acetate	34	
96-33-3	Methyl Acrylate	33	
109-99-9	Tetrahydrofuran	29	
110-82-7	Cyclohexane	33	
994-05-8	Tert-Amyl Methyl Ether	40	
140-88-5	Ethyl Acrylate	37	
123-91-1	1,4-Dioxane	36	
80-62-6	Methyl Methacrylate	38	
542-75-6	1,3-Dichloropropene (total)	86	
97-63-2	Ethyl Methacrylate	42	
1330-20-7	Xylene (total)	85	
103-65-1	n-Propylbenzene	47	
95-49-8	2-Chlorotoluene	50	
98-83-9	Alpha Methyl Styrene	45	
98-06-6	tert-Butylbenzene	50	
135-98-8	sec-Butylbenzene	51	
99-87-6	p-Isopropyltoluene	51	
100-44-7	Benzyl Chloride	40	
104-51-8	n-Butylbenzene	51	
96-12-8	1,2-Dibromo-3-chloropropane	83	
120-82-1	1,2,4-Trichlorobenzene	63	

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE02

Sample Media:	N/A	Lab Sample ID:	LCSE02
Canister ID:	N/A	Lab File ID:	ei00063.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	09/06/2018
Injection Volume:	200 cc	Analyzed Time:	13:58
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
87-68-3	Hexachlorobutadiene	96	
91-20-3	Naphthalene	42	

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18sep06.b/ei00063.d Injection date and time: **06-SEP-2018 13:58**
Data file Sample Info. Line: LCSE02;200;E1824930AA;LCSE02;0;3;LCS; Instrument ID: **HP22820.i** Batch: **E1824930AA**
Date, time and analyst ID of latest file update: 06-Sep-2018 14:35 jeb07445

Blank Data file reference: **/chem/HP22820.i/18sep06.b/ei00062.d**

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: **all1**
Calibration date and time (Last Method Edit): 06-SEP-2018 13:08
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18sep06.b/ei00061.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
71) Chlorobenzene-d5	8.497(0.000)	1174	117	1006800 (6)	10.00		570426 - 1330992
40) Bromochloromethane	5.467(0.000)	751	130	286760 (9)	10.00		157917 - 368473
51) 1,4-Difluorobenzene	6.291(0.000)	866	114	1045187 (7)	10.00		583560 - 1361638

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)	1.649(-0.000)	85	557995	11.099	11.10			0.13	1
3) Chlorodifluoromethane	(1)	1.671(-0.000)	51	297604	11.840	11.84			0.15	1
4) Freon 114	(1)	1.778(-0.000)	85	555979	10.951	10.95			0.12	1
5) Chloromethane	(1)	1.843(-0.000)	50	93628	9.399	9.40			0.24	1
6) Vinyl Chloride	(1)	1.979(-0.000)	62	195754	10.848	10.85			0.12	1
7) 1,3-Butadiene	(1)	2.007(-0.000)	54	135079	9.814	9.81			0.17	1
8) Bromomethane	(1)	2.358(-0.000)	94	194404	11.414	11.41			0.18	1
9) Chloroethane	(1)	2.480(-0.000)	64	110708	10.862	10.86			0.19	1
67) Tetrachloroethene	(3)	7.867(-0.000)	166	432855	10.429	10.43			0.25	2
11) Dichlorofluoromethane	(1)	2.731(-0.000)	67	463182	11.233	11.23			0.11	1
12) Trichlorofluoromethane	(1)	2.781(-0.001)	101	566654	10.600	10.60			0.15	1
13) Pentane	(1)	2.881(-0.000)	43	282944	9.385	9.38			0.13	1
68) 2-Hexanone	(3)	7.946(-0.000)	43	431948	10.100	10.10			0.18	1
69) Dibromochloromethane	(3)	8.067(-0.000)	127	339049	9.633	9.63			0.13	1
17) 1,1-Dichloroethene	(1)	3.433(-0.000)	61	316213	10.425	10.42			0.14	1
18) Freon 113	(1)	3.447(-0.000)	103	287790	10.134	10.13			0.11	1
19) Acetone	(1)	3.533(-0.000)	43	270392	10.500	10.50			0.53	5
70) 1,2-Dibromoethane	(3)	8.160(-0.000)	107	420490	10.119	10.12			0.13	1
21) Carbon Disulfide	(1)	3.662(-0.000)	76	548966	10.201	10.20			0.13	1
24) 3-Chloropropene	(1)	3.870(-0.000)	76	99473	11.417	11.42			0.15	1
72) Chlorobenzene	(3)	8.518(0.000)	112	606856	10.058	10.06			0.13	1
25) Methylene Chloride	(1)	4.013(-0.000)	84	185962	11.421	11.42			0.25	2
73) 1,1,1,2-Tetrachloroethane	(3)	8.569(0.000)	131	305187	9.724	9.72			0.15	1
28) trans-1,2-Dichloroethene	(1)	4.292(-0.000)	61	282167	10.501	10.50			0.086	1
74) Ethylbenzene	(3)	8.583(0.000)	91	1028253	9.887	9.89			0.19	1
29) Methyl t-Butyl Ether	(1)	4.300(-0.000)	73	569046	9.381	9.38			0.15	1
30) Hexane	(1)	4.564(-0.000)	57	277862	9.200	9.20			0.13	1
31) 1,1-Dichloroethane	(1)	4.722(-0.000)	63	366519	10.249	10.25			0.089	1
75) m/p-Xylene	(3)	8.669(0.000)	91	797365	9.725	9.73			0.26	2
76) o-Xylene	(3)	8.970(-0.000)	91	799778	9.809	9.81			0.19	1
78) Styrene	(3)	8.977(0.000)	104	608893	9.737	9.74			0.2	1
35) cis-1,2-Dichloroethene	(1)	5.259(-0.000)	61	263317	9.977	9.98			0.12	1
37) 2-Butanone	(1)	5.288(-0.001)	72	106372	9.284	9.28			0.21	1
79) Bromoform	(3)	9.142(0.000)	173	434892	8.775	8.77			0.17	1
80) Cumene	(3)	9.235(0.000)	105	1099764	9.904	9.90			0.24	1
82) 1,1,2,2-Tetrachloroethane	(3)	9.471(0.000)	83	591355	10.095	10.09			0.15	1
42) Chloroform	(1)	5.539(0.000)	83	459595	10.139	10.14			0.092	1
81) Bromobenzene	(3)	9.493(0.000)	156	363898	9.609	9.61			0.1	1
43) 1,1,1-Trichloroethane	(1)	5.682(0.000)	97	459358	9.780	9.78			0.12	1
90) 1,2,4-Trimethylbenzene	(3)	9.958(0.000)	105	896013	9.772	9.77			0.28	2
86) 4-Ethyltoluene	(3)	9.629(0.000)	105	1091782M	9.932	9.93			0.18	1
45) Carbon Tetrachloride	(1)	5.811(-0.000)	117	425545	9.261	9.26			0.14	1
46) Benzene	(2)	5.990(-0.000)	78	640051	9.998	10.00			0.11	1

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey on 09/06/2018 at 14:35. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18sep06.b/ei00063.d Injection date and time: **06-SEP-2018 13:58**
Data file Sample Info. Line: LCSE02;200;E1824930AA;LCSE02;0;3;LCS; Instrument ID: **HP22820.i** Batch: **E1824930AA**
Date, time and analyst ID of latest file update: 06-Sep-2018 14:35 jeb07445

Blank Data file reference: **/chem/HP22820.i/18sep06.b/ei00062.d**

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: **all1**
Calibration date and time (Last Method Edit): 06-SEP-2018 13:08
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18sep06.b/ei00061.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
47) 1,2-Dichloroethane	(2)	6.012(-0.000)	62	299076	10.989	10.99			0.08	1
48) Isooctane	(2)	6.040(-0.000)	57	898862	10.242	10.24			0.13	1
87) 1,3,5-Trimethylbenzene	(3)	9.672(0.000)	105	907196M	9.712	9.71			0.32	2
50) Heptane	(2)	6.176(-0.000)	43	311197	9.614	9.61			0.23	1
52) Trichloroethene	(2)	6.491(0.000)	130	276955	10.175	10.17			0.18	1
98) Hexachloroethane	(3)	10.732(0.000)	117	215092	6.995	6.99			0.27	2
83) 1,2,3-Trichloropropane	(3)	9.514(0.000)	110	186802	10.339	10.34			0.14	1
54) 1,2-Dichloropropane	(2)	6.678(0.000)	63	230874	10.425	10.43			0.13	1
96) 1,2-Dichlorobenzene	(3)	10.546(0.000)	146	544188	9.486	9.49			0.2	1
55) Dibromomethane	(2)	6.771(0.000)	174	281767	10.388	10.39			0.14	1
93) 1,4-Dichlorobenzene	(3)	10.259(0.000)	146	603378	9.623	9.62			0.17	1
58) Bromodichloromethane	(2)	6.885(0.000)	83	476471	10.256	10.26			0.12	1
59) cis-1,3-Dichloropropene	(2)	7.215(0.000)	75	378254	9.333	9.33			0.1	1
60) 4-Methyl-2-Pentanone	(2)	7.330(0.000)	43	442986	9.850	9.85			0.15	1
61) Toluene	(3)	7.466(-0.000)	91	759364	9.952	9.95			0.12	1
62) Octane	(3)	7.516(-0.000)	43	410743	9.527	9.53			0.4	2
63) trans-1,3-Dichloropropene	(3)	7.630(-0.000)	75	330029	9.511	9.51			0.12	1
92) 1,3-Dichlorobenzene	(3)	10.188(0.000)	146	595027	9.834	9.83			0.19	1
66) 1,1,2-Trichloroethane	(3)	7.774(-0.000)	97	278466	10.314	10.31			0.12	1
1) Propene	(1)	1.613(-0.000)	41	127911	10.040	10.04			0.16	1
10) Bromoethene	(1)	2.695(-0.000)	106	188657	10.431	10.43			0.18	1
14) Ethanol	(1)	3.082(0.001)	45	70092	9.796	9.80			0.69	5
16) Acrolein	(1)	3.340(-0.000)	56	75409	10.405	10.41			0.62	5
20) Methyl Iodide	(1)	3.612(-0.001)	142	464944	9.610	9.61			0.15	1
22) Isopropanol	(1)	3.719(-0.000)	45	276788	8.857	8.86			0.24	1
23) Acetonitrile	(1)	3.877(-0.000)	40	122325	10.802	10.80			0.83	5
26) tert-Butyl Alcohol	(1)	4.163(-0.000)	59	387832	8.768	8.77			0.21	1
27) Acrylonitrile	(1)	4.300(-0.000)	53	157223	10.319	10.32			0.13	1
32) Vinyl Acetate	(1)	4.787(-0.000)	86	54312	9.470	9.47			0.16	1
33) Di-Isopropyl Ether	(1)	4.787(-0.000)	45	580839	9.871	9.87			0.15	1
34) Ethyl Tert-Butyl Ether	(1)	5.116(-0.000)	59	527376	8.846	8.85			0.15	1
36) 1,2-Dichloroethene (total)	(1)		61	545484	20.478	20.48			0.2	1
38) Ethyl Acetate	(1)	5.331(-0.000)	70	53930	9.317	9.32			0.25	2
39) Methyl Acrylate	(1)	5.360(0.001)	55	313928	9.249	9.25			0.14	1
41) Tetrahydrofuran	(1)	5.503(0.000)	42	205671	9.692	9.69			0.24	1
44) Cyclohexane	(1)	5.711(0.000)	56	295708	9.511	9.51			0.11	1
49) Tert-Amyl Methyl Ether	(2)	6.069(-0.000)	73	551804	9.653	9.65			0.11	1
53) Ethyl Acrylate	(2)	6.577(0.000)	55	404753	9.058	9.06			0.16	1
56) 1,4-Dioxane	(2)	6.778(0.000)	88	157100	9.868	9.87			0.17	1
57) Methyl Methacrylate	(2)	6.749(0.000)	69	222695	9.188	9.19			0.15	1
64) 1,3-Dichloropropene (total)	(3)		75	708283	18.844	18.84			0.23	1
65) Ethyl Methacrylate	(3)	7.673(-0.000)	69	374897	9.066	9.07			0.19	1
77) Xylene (total)	(3)		91	1597143	19.534	19.53			0.44	2
84) n-Propylbenzene	(3)	9.543(0.000)	120	288184	9.536	9.54			0.21	1
85) 2-Chlorotoluene	(3)	9.629(0.000)	126	264222	9.724	9.72			0.22	1
88) Alpha Methyl Styrene	(3)	9.844(0.000)	118	425028	9.252	9.25			0.18	1
89) tert-Butylbenzene	(3)	9.922(0.000)	119	808302M	9.133	9.13			0.76	5
91) sec-Butylbenzene	(3)	10.087(0.000)	105	1257189	9.320	9.32			0.39	2
94) p-Isopropyltoluene	(3)	10.188(0.000)	119	1046799	9.262	9.26			0.28	2
95) Benzyl Chloride	(3)	10.359(0.000)	91	631790	7.642	7.64			0.25	2
97) n-Butylbenzene	(3)	10.503(0.000)	91	987914	9.365	9.37			0.26	2
99) 1,2-Dibromo-3-chloropropane	(3)	11.140(0.000)	157	264845	8.573	8.57			0.28	2
100) 1,2,4-Trichlorobenzene	(3)	11.756(0.000)	180	375437	8.432	8.43			0.38	2
101) Hexachlorobutadiene	(3)	11.871(0.000)	225	371849	8.986	8.99			0.47	2

M = Compound was manually integrated.

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18sep06.b/ei00063.d Injection date and time: **06-SEP-2018 13:58**
Data file Sample Info. Line: LCSE02;200;E1824930AA;LCSE02;0;3;LCS; Instrument ID: **HP22820.i** Batch: **E1824930AA**
Date, time and analyst ID of latest file update: 06-Sep-2018 14:35 jeb07445

Blank Data file reference: **/chem/HP22820.i/18sep06.b/ei00062.d**

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: **all1**
Calibration date and time (Last Method Edit): 06-SEP-2018 13:08
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18sep06.b/ei00061.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
102) Naphthalene	(3)	11.964(0.000)	128	741121	8.054	8.05			0.5	2

Total number of targets = 98

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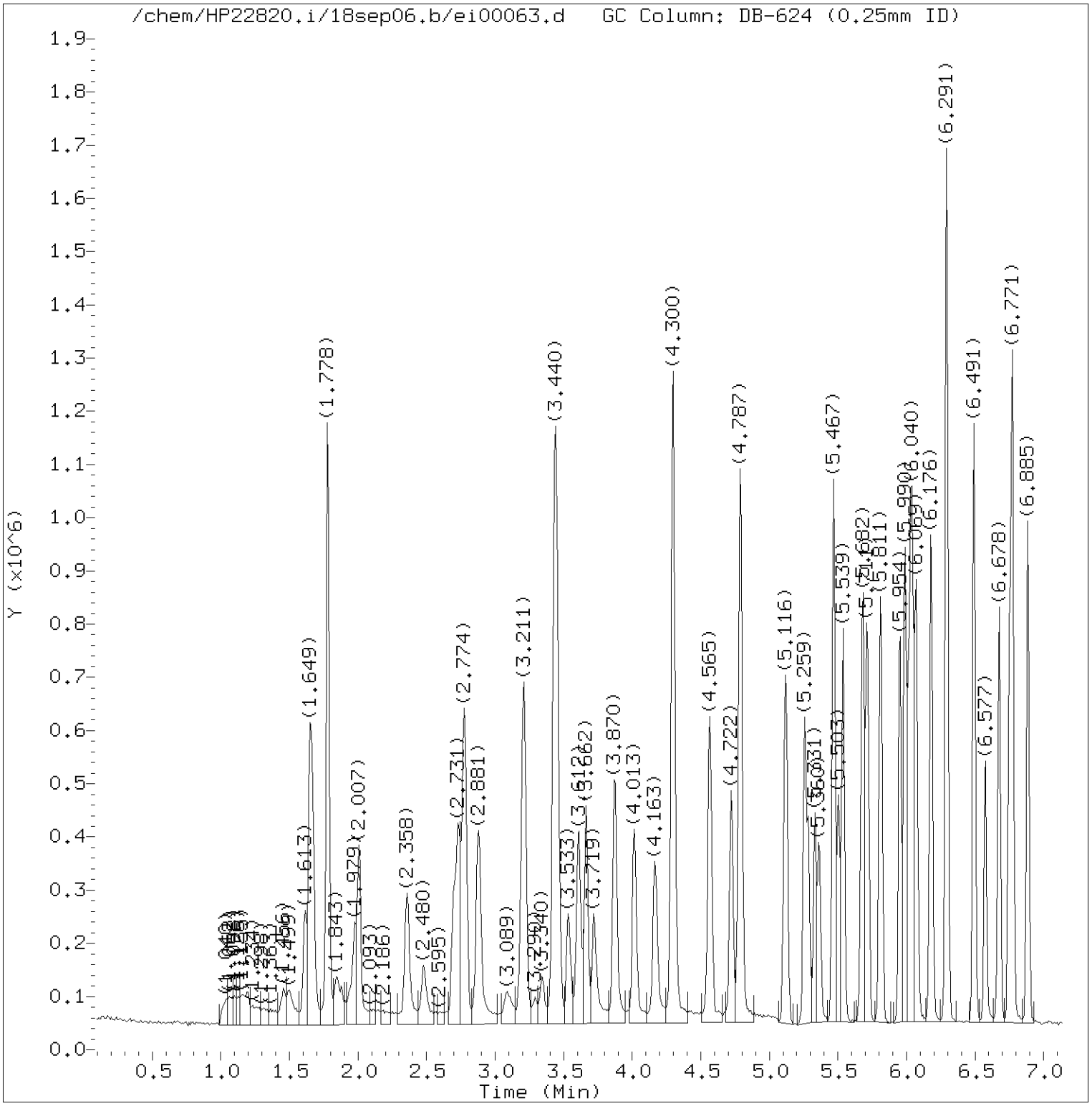
Secondary review performed and digitally signed by Jeffrey B. Smith on 09/07/2018 at 14:18. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

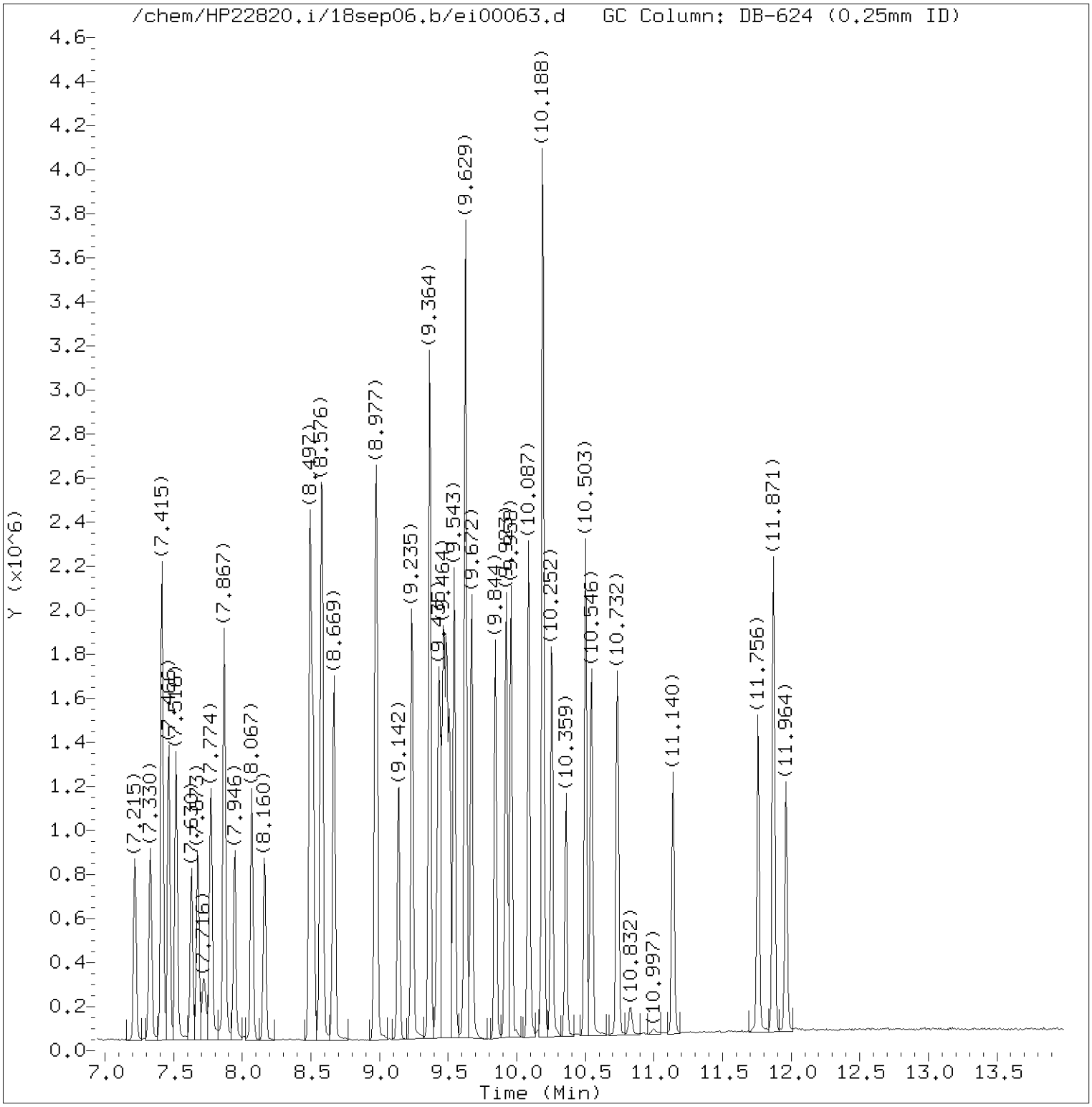
Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00063.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 13:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 14:35 jeb07445

Sample Name: LCSE02 Lab Sample ID: LCSE02

Digitally signed by Jacob E. Bailey
on 09/06/2018 at 14:35.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00063.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 13:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 14:35 jeb07445

Sample Name: LCSE02 Lab Sample ID: LCSE02

Digitally signed by Jacob E. Bailey
on 09/06/2018 at 14:35.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00063.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 13:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 14:35 jeb07445

Sample Name: LCSE02 Lab Sample ID: LCSE02

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.613	41	127911	10.040
2) Dichlorodifluoromethane	(1)	1.649	85	557995	11.099
3) Chlorodifluoromethane	(1)	1.671	51	297604	11.840
4) Freon 114	(1)	1.778	85	555979	10.951
5) Chloromethane	(1)	1.843	50	93628	9.399
6) Vinyl Chloride	(1)	1.979	62	195754	10.848
7) 1,3-Butadiene	(1)	2.007	54	135079	9.814
8) Bromomethane	(1)	2.358	94	194404	11.414
9) Chloroethane	(1)	2.480	64	110708	10.862
10) Bromoethene	(1)	2.695	106	188657	10.431
11) Dichlorofluoromethane	(1)	2.731	67	463182	11.233
12) Trichlorofluoromethane	(1)	2.781	101	566654	10.600
13) Pentane	(1)	2.881	43	282944	9.385
14) Ethanol	(1)	3.082	45	70092	9.796
16) Acrolein	(1)	3.340	56	75409	10.405
17) 1,1-Dichloroethene	(1)	3.433	61	316213	10.425
18) Freon 113	(1)	3.447	103	287790	10.134
19) Acetone	(1)	3.533	43	270392	10.500
20) Methyl Iodide	(1)	3.612	142	464944	9.610
21) Carbon Disulfide	(1)	3.662	76	548966	10.201
22) Isopropanol	(1)	3.719	45	276788	8.857
24) 3-Chloropropene	(1)	3.870	76	99473	11.417
23) Acetonitrile	(1)	3.877	40	122325	10.802
25) Methylene Chloride	(1)	4.013	84	185962	11.421
26) tert-Butyl Alcohol	(1)	4.163	59	387832	8.768
28) trans-1,2-Dichloroethene	(1)	4.292	61	282167	10.501
29) Methyl t-Butyl Ether	(1)	4.300	73	569046	9.381
27) Acrylonitrile	(1)	4.300	53	157223	10.319
30) Hexane	(1)	4.565	57	277862	9.200
31) 1,1-Dichloroethane	(1)	4.722	63	366519	10.249
32) Vinyl Acetate	(1)	4.787	86	54312	9.470
33) Di-Isopropyl Ether	(1)	4.787	45	580839	9.871
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	527376	8.846
35) cis-1,2-Dichloroethene	(1)	5.259	61	263317	9.977
37) 2-Butanone	(1)	5.288	72	106372	9.284
38) Ethyl Acetate	(1)	5.331	70	53930	9.317
39) Methyl Acrylate	(1)	5.360	55	313928	9.249
40)*Bromochloromethane	(1)	5.467	130	286760	10.000

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 09/06/2018 at 14:35.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00063.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 13:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 14:35 jeb07445

Sample Name: LCSE02 Lab Sample ID: LCSE02

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
41) Tetrahydrofuran	(1)	5.503	42	205671	9.692
42) Chloroform	(1)	5.539	83	459595	10.139
43) 1,1,1-Trichloroethane	(1)	5.682	97	459358	9.780
44) Cyclohexane	(1)	5.711	56	295708	9.511
45) Carbon Tetrachloride	(1)	5.811	117	425545	9.261
46) Benzene	(2)	5.990	78	640051	9.998
47) 1,2-Dichloroethane	(2)	6.012	62	299076	10.989
48) Isooctane	(2)	6.040	57	898862	10.242
49) Tert-Amyl Methyl Ether	(2)	6.069	73	551804	9.653
50) Heptane	(2)	6.176	43	311197	9.614
51)*1,4-Difluorobenzene	(2)	6.291	114	1045187	10.000
52) Trichloroethene	(2)	6.491	130	276955	10.175
53) Ethyl Acrylate	(2)	6.577	55	404753	9.058
36) 1,2-Dichloroethene (total)	(1)		61	545484	20.478
54) 1,2-Dichloropropane	(2)	6.678	63	230874	10.425
57) Methyl Methacrylate	(2)	6.749	69	222695	9.188
55) Dibromomethane	(2)	6.771	174	281767	10.388
56) 1,4-Dioxane	(2)	6.778	88	157100	9.868
58) Bromodichloromethane	(2)	6.885	83	476471	10.256
59) cis-1,3-Dichloropropene	(2)	7.215	75	378254	9.333
60) 4-Methyl-2-Pentanone	(2)	7.330	43	442986	9.850
61) Toluene	(3)	7.466	91	759364	9.952
62) Octane	(3)	7.516	43	410743	9.527
63) trans-1,3-Dichloropropene	(3)	7.630	75	330029	9.511
65) Ethyl Methacrylate	(3)	7.673	69	374897	9.066
66) 1,1,2-Trichloroethane	(3)	7.774	97	278466	10.314
67) Tetrachloroethene	(3)	7.867	166	432855	10.429
68) 2-Hexanone	(3)	7.946	43	431948	10.100
69) Dibromochloromethane	(3)	8.067	127	339049	9.633
70) 1,2-Dibromoethane	(3)	8.160	107	420490	10.119
71)*Chlorobenzene-d5	(3)	8.497	117	1006800	10.000
72) Chlorobenzene	(3)	8.519	112	606856	10.058
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	305187	9.724
74) Ethylbenzene	(3)	8.583	91	1028253	9.887
75) m/p-Xylene	(3)	8.669	91	797365	9.725
76) o-Xylene	(3)	8.970	91	799778	9.809
78) Styrene	(3)	8.977	104	608893	9.737
79) Bromoform	(3)	9.142	173	434892	8.775

* = Compound is an internal standard.

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on 09/06/2018 at 14:35.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00063.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 13:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 14:35 jeb07445

Sample Name: LCSE02 Lab Sample ID: LCSE02

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
80) Cumene	(3)	9.235	105	1099764	9.904
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	591355	10.095
81) Bromobenzene	(3)	9.493	156	363898	9.609
83) 1,2,3-Trichloropropane	(3)	9.514	110	186802	10.339
84) n-Propylbenzene	(3)	9.543	120	288184	9.536
85) 2-Chlorotoluene	(3)	9.629	126	264222	9.724
86) 4-Ethyltoluene	(3)	9.629	105	1091782M	9.932
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	907196M	9.712
88) Alpha Methyl Styrene	(3)	9.844	118	425028	9.252
89) tert-Butylbenzene	(3)	9.923	119	808302M	9.133
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	896013	9.772
91) sec-Butylbenzene	(3)	10.087	105	1257189	9.320
92) 1,3-Dichlorobenzene	(3)	10.188	146	595027	9.834
94) p-Isopropyltoluene	(3)	10.188	119	1046799	9.262
93) 1,4-Dichlorobenzene	(3)	10.259	146	603378	9.623
95) Benzyl Chloride	(3)	10.359	91	631790	7.642
97) n-Butylbenzene	(3)	10.503	91	987914	9.365
96) 1,2-Dichlorobenzene	(3)	10.546	146	544188	9.486
98) Hexachloroethane	(3)	10.732	117	215092	6.995
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	264845	8.573
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	375437	8.432
101) Hexachlorobutadiene	(3)	11.871	225	371849	8.986
102) Naphthalene	(3)	11.964	128	741121	8.054
64) 1,3-Dichloropropene (total)	(3)		75	708283	18.844
77) Xylene (total)	(3)		91	1597143	19.534

M = Compound was manually integrated.

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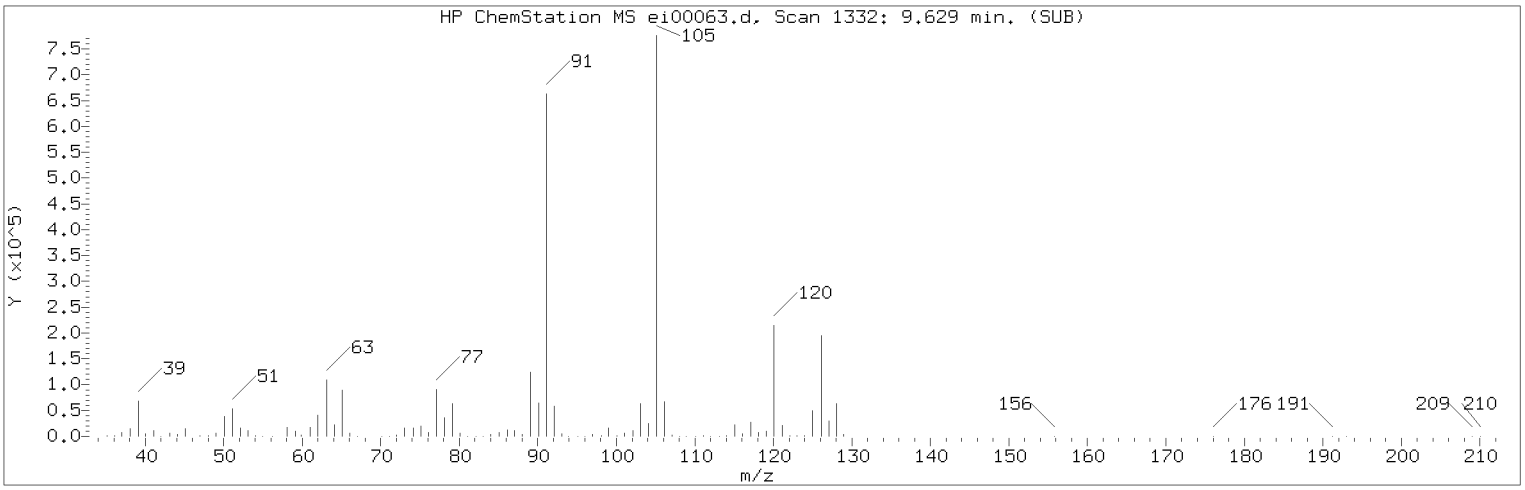
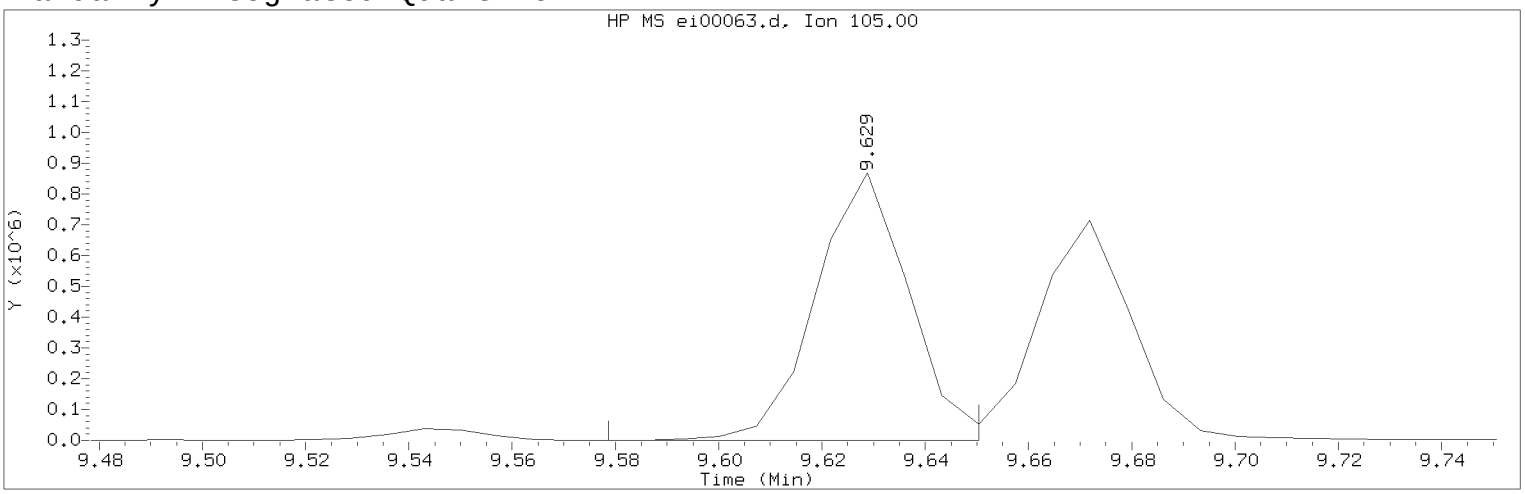
on 09/06/2018 at 14:35.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep06.b/ei00063.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 13:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 14:35 jeb07445

Sample Name: LCSE02 Lab Sample ID: LCSE02

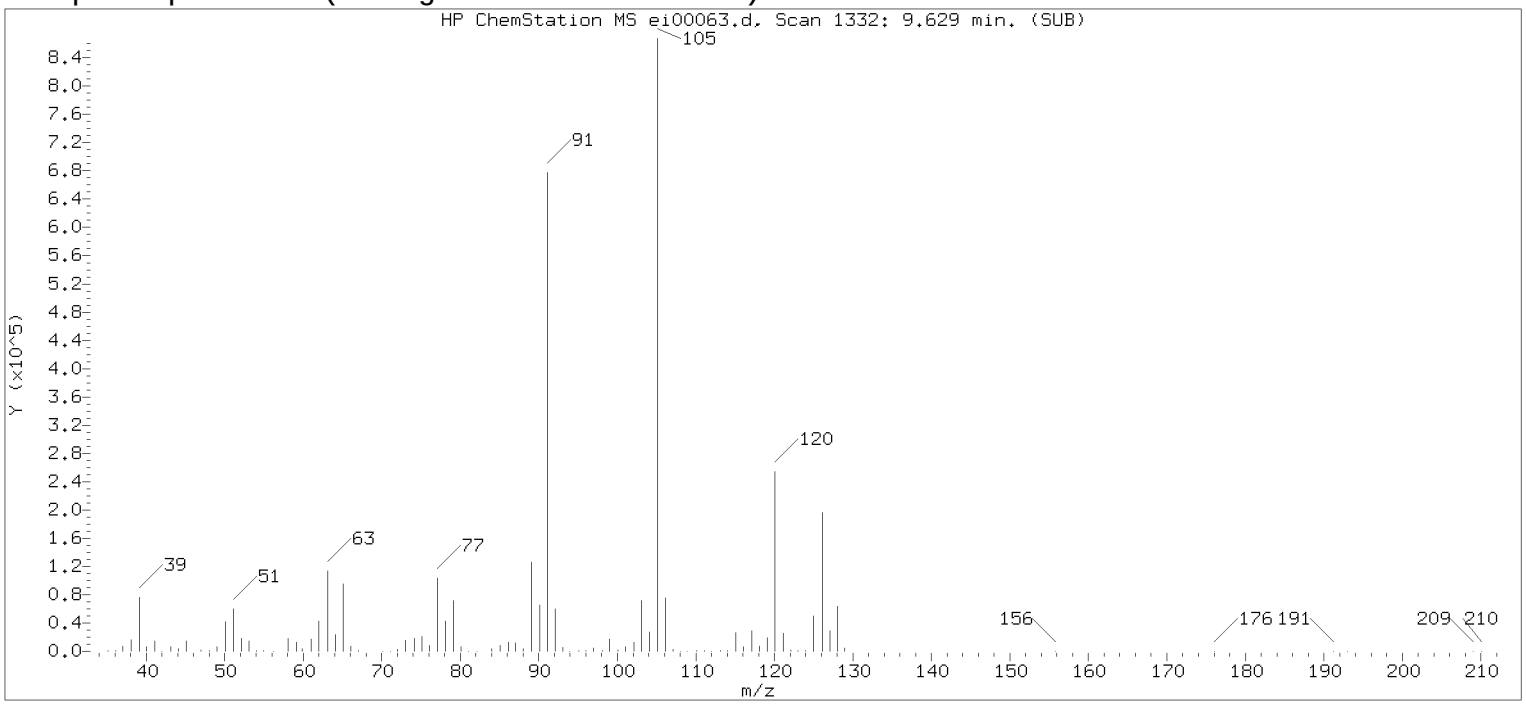
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 1091782M
Concentration (ppb(v)) : 9.9322
Integration start scan : 1324 Integration stop scan: 1334
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

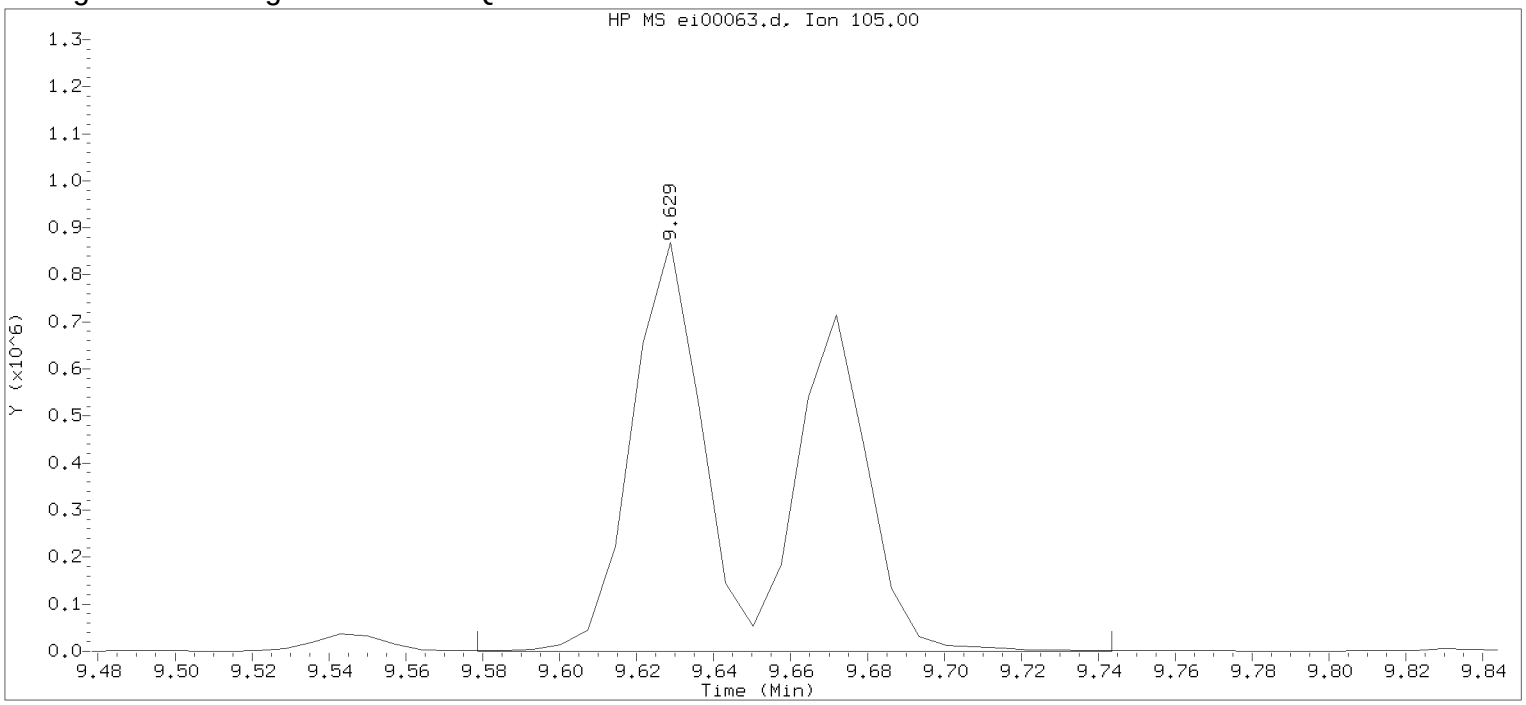
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/06/2018 at 14:35.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/07/2018 at 14:18.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep06.b/ei00063.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 13:58 Analyst ID: jeb07445

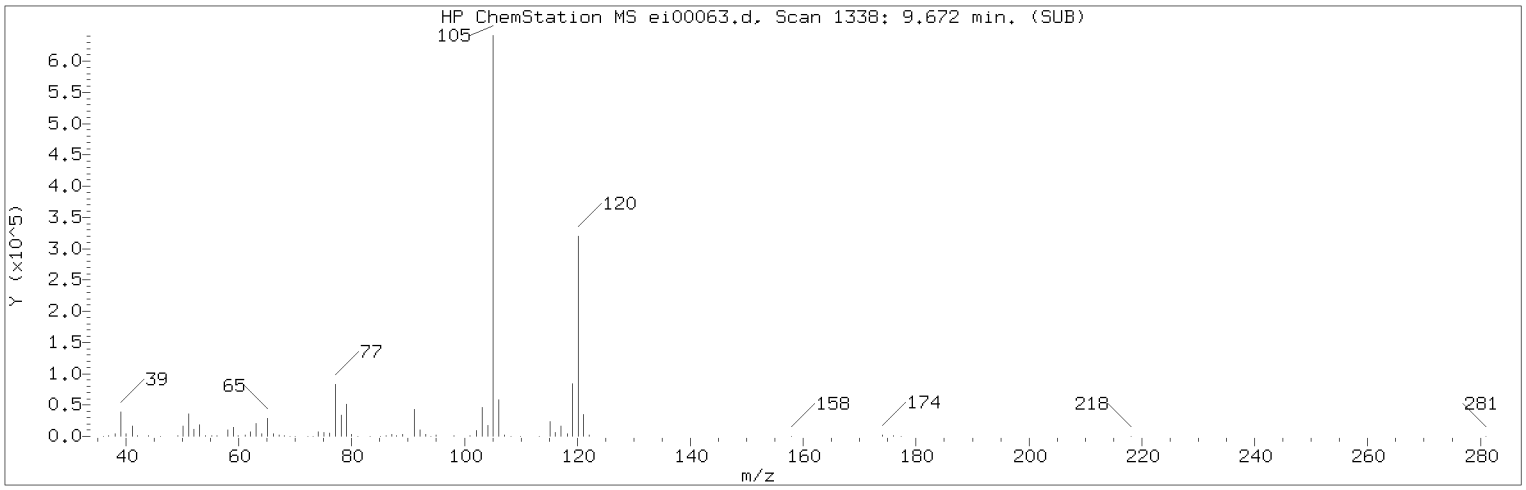
Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: all
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 14:20 Unknown

Sample Name: LCSE02 Lab Sample ID: LCSE02

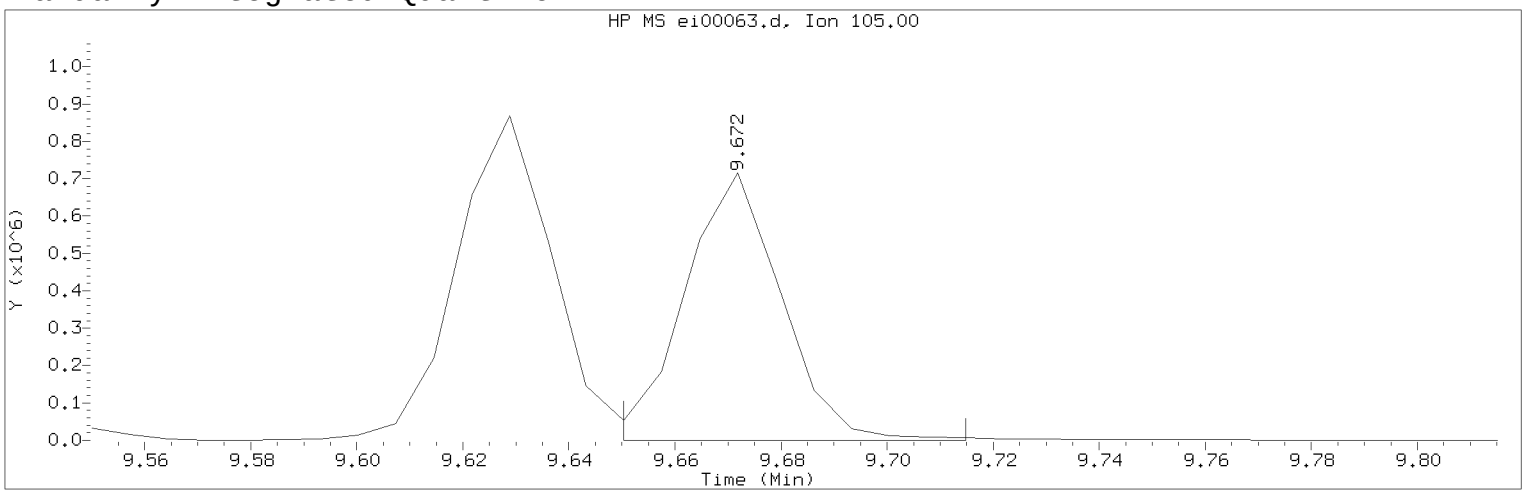
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 1982979
Concentration (ppb(v)) : 18.0397
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 09/06/2018 at 14:35.
Target 3.5 esignature userGLE02jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep06.b/ei00063.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 13:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 14:35 jeb07445

Sample Name: LCSE02 Lab Sample ID: LCSE02

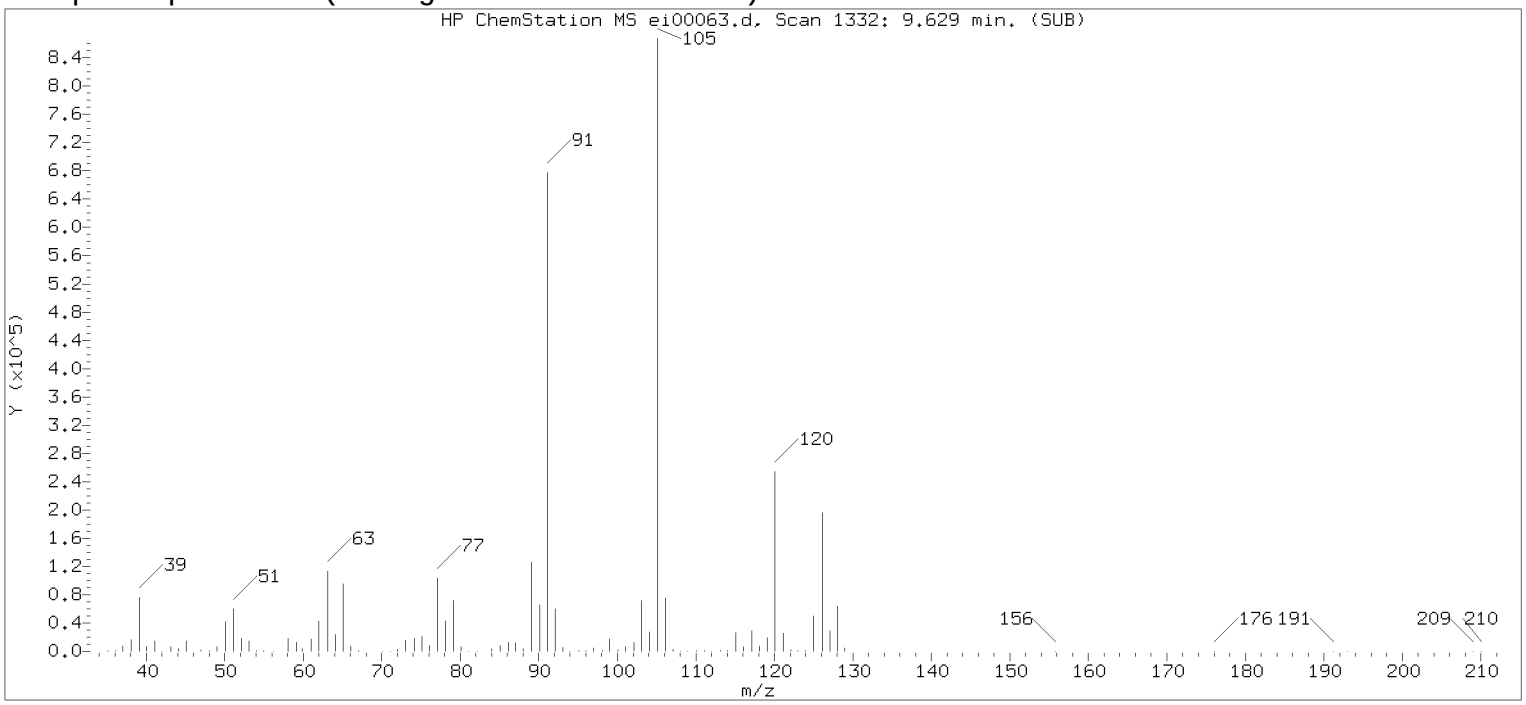
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 907196M
Concentration (ppb(v)) : 9.7117
Integration start scan : 1334 Integration stop scan: 1343
Y at integration start : 711 Y at integration end: 711

Reason for manual integration: improper integration

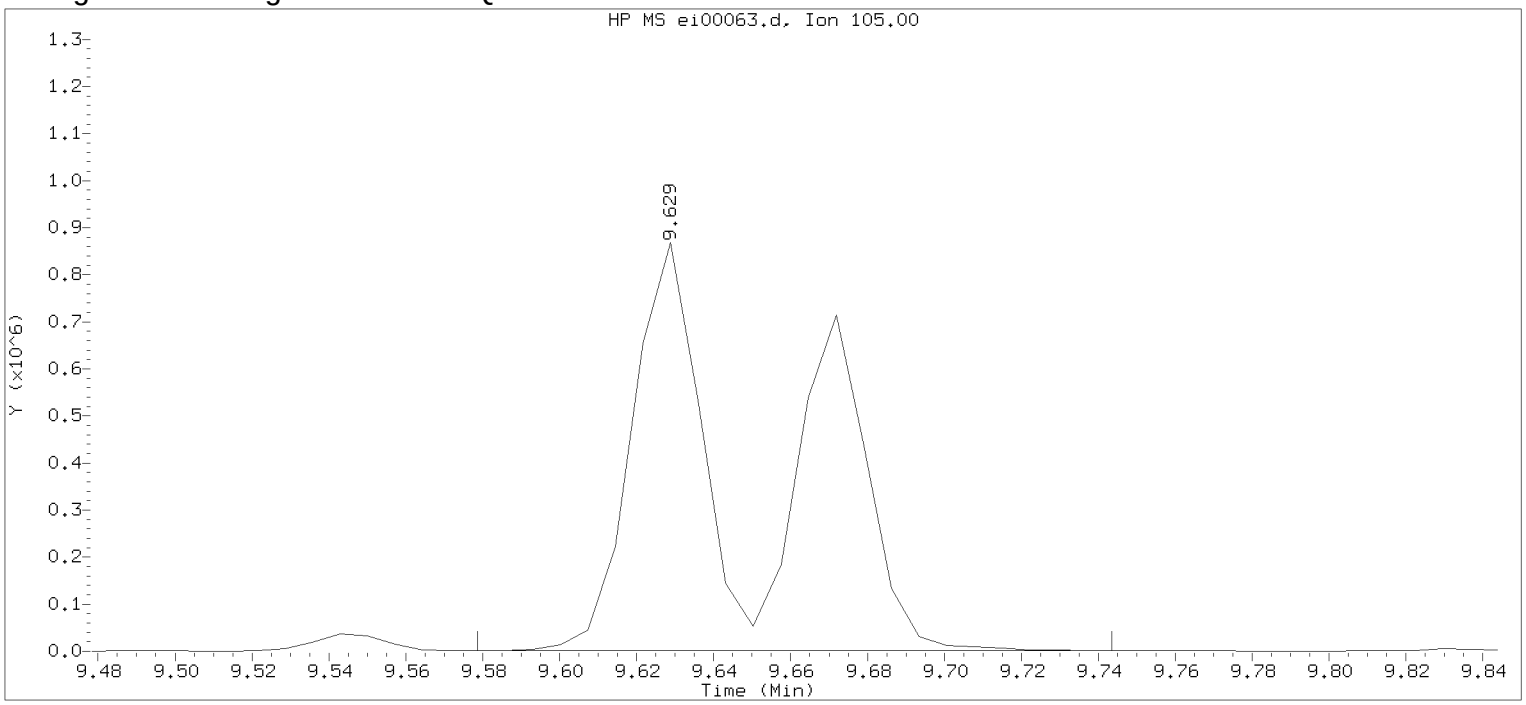
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/06/2018 at 14:35.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/07/2018 at 14:18.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep06.b/ei00063.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 13:58 Analyst ID: jeb07445

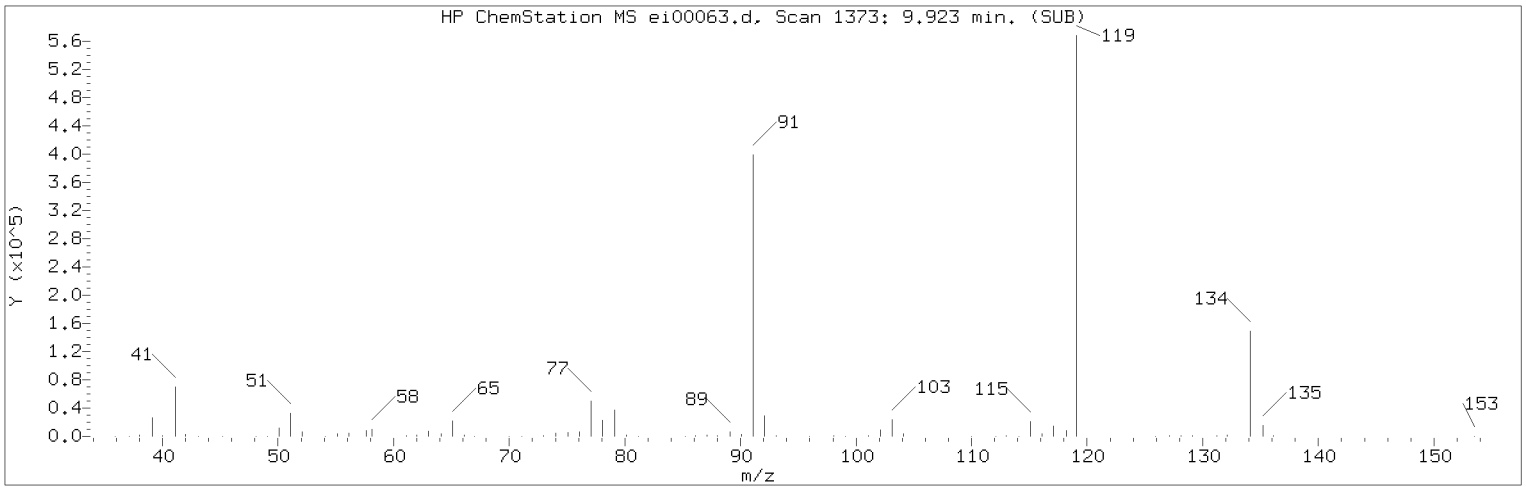
Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: all
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 14:20 Unknown

Sample Name: LCSE02 Lab Sample ID: LCSE02

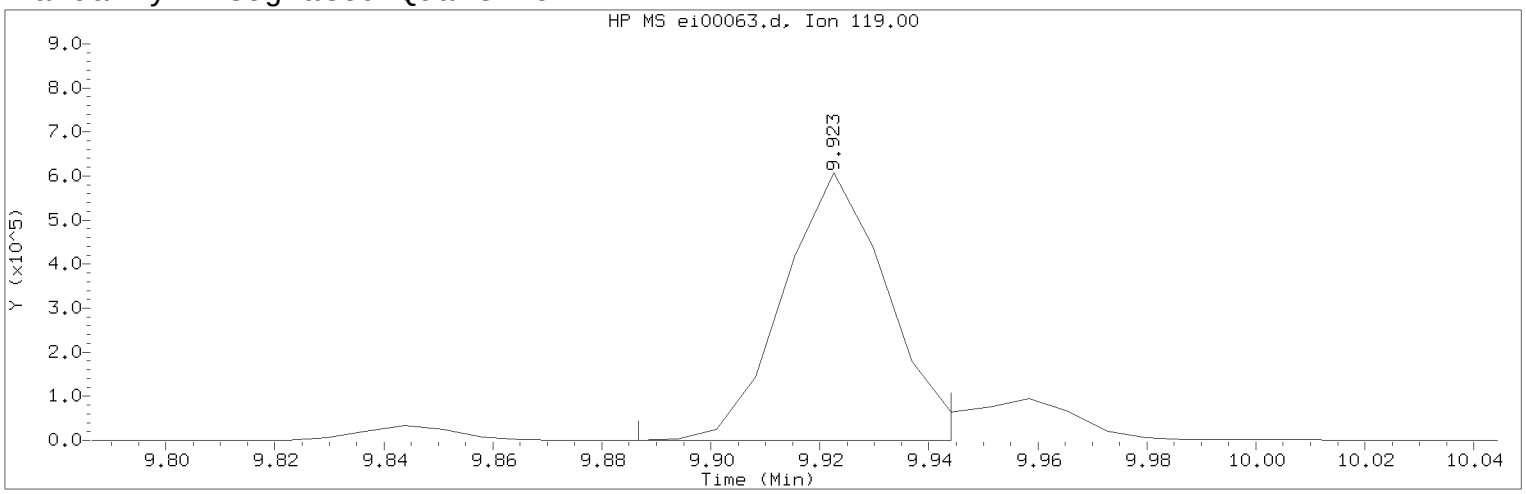
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 1975723
Concentration (ppb(v)) : 21.1505
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 734 Y at integration end: 734

Digitally signed by Jacob E. Bailey on 09/06/2018 at 14:35.
Target 3.5 esignature userGLE02jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep06.b/ei00063.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 13:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 14:35 jeb07445

Sample Name: LCSE02 Lab Sample ID: LCSE02

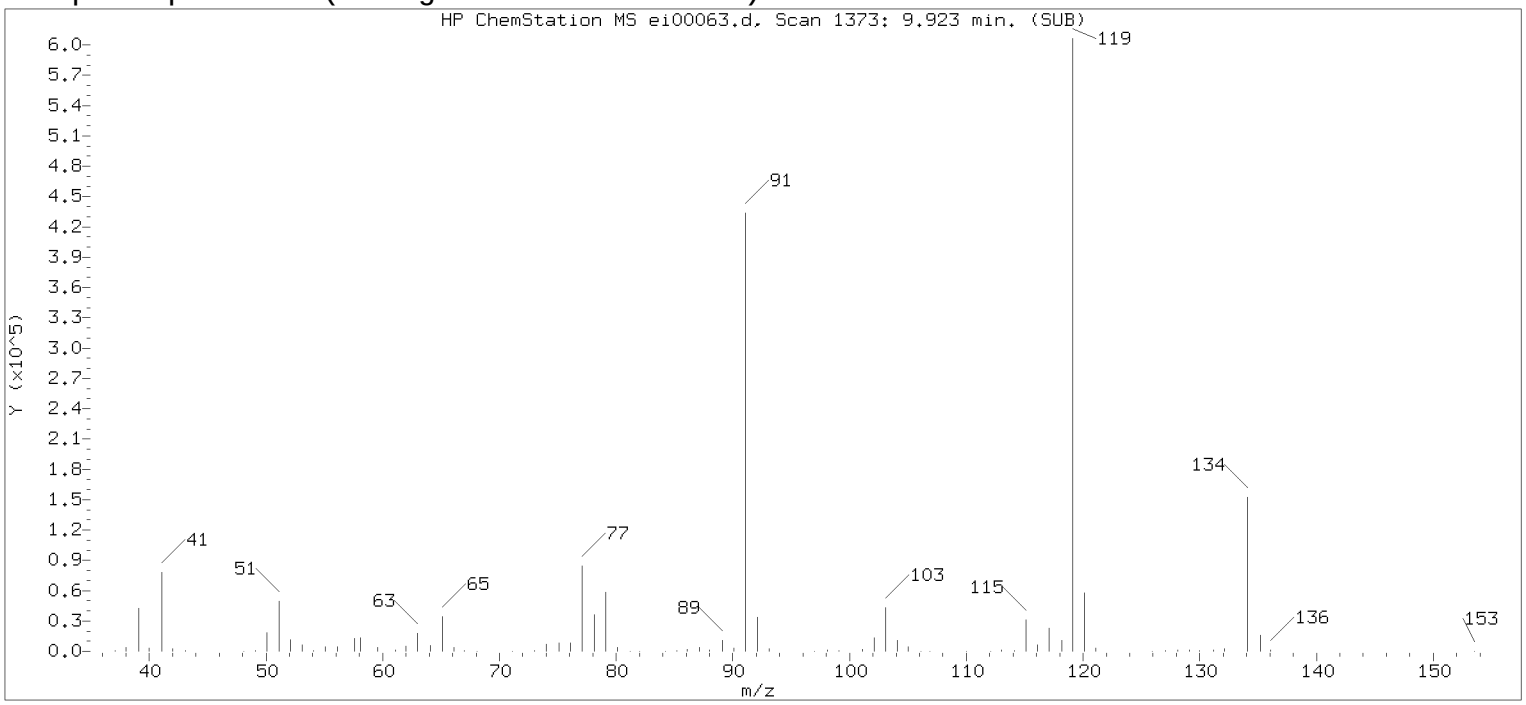
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.923
Quant Ion : 119.00
Area (flag) : 808302M
Concentration (ppb(v)) : 9.1327
Integration start scan : 1367 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

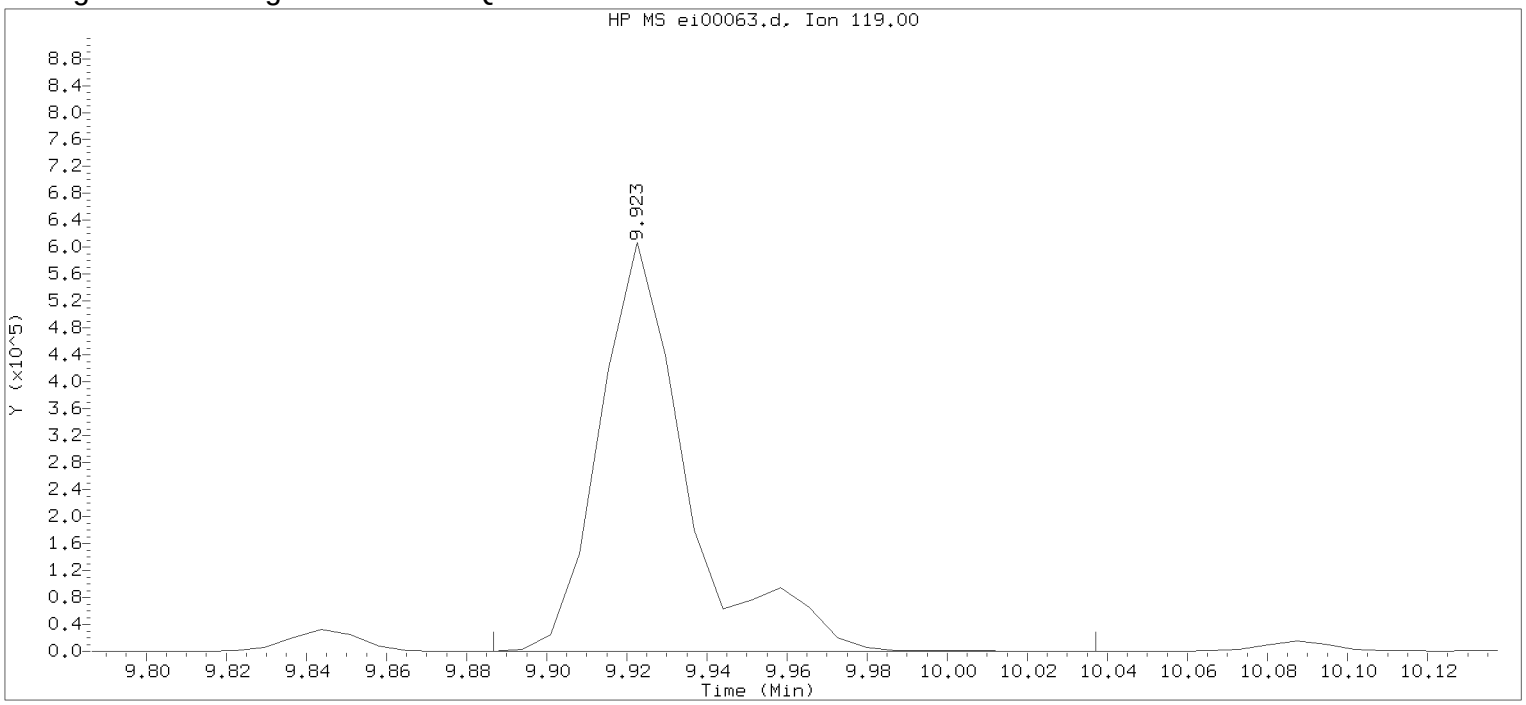
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/06/2018 at 14:35.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/07/2018 at 14:18.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep06.b/ei00063.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 13:58 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: all
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 14:20 Unknown

Sample Name: LCSE02 Lab Sample ID: LCSE02

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.923
Quant Ion : 119.00
Area : 923373
Concentration (ppb(v)) : 10.4328
Integration start scan : 1367 Integration stop scan: 1388
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 09/06/2018 at 14:35.
Target 3.5 esignature user=LE02jeb07445

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE02

Sample Media:	N/A	Lab Sample ID:	LCSDE02
Canister ID:	N/A	Lab File ID:	ei00064.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	09/06/2018
Injection Volume:	200 cc	Analyzed Time:	14:23
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
100-41-4	Ethylbenzene	43	
100-42-5	Styrene	43	
10061-01-5	cis-1,3-Dichloropropene	43	
10061-02-6	trans-1,3-Dichloropropene	44	
106-46-7	1,4-Dichlorobenzene	59	
106-93-4	1,2-Dibromoethane	80	
106-99-0	1,3-Butadiene	22	
107-05-1	3-Chloropropene	37	
107-06-2	1,2-Dichloroethane	45	
108-10-1	4-Methyl-2-Pentanone	41	
108-67-8	1,3,5-Trimethylbenzene	49	
108-86-1	Bromobenzene	65	
108-88-3	Toluene	38	
108-90-7	Chlorobenzene	47	
109-66-0	Pentane	29	
110-54-3	Hexane	34	
111-65-9	Octane	45	
124-48-1	Dibromochloromethane	86	
127-18-4	Tetrachloroethene	71	
142-82-5	Heptane	39	
156-59-2	cis-1,2-Dichloroethene	41	
156-60-5	trans-1,2-Dichloroethene	42	
1634-04-4	Methyl t-Butyl Ether	35	
179601-23-1	m/p-Xylene	43	

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE02

Sample Media:	N/A	Lab Sample ID:	LCSDE02
Canister ID:	N/A	Lab File ID:	ei00064.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	09/06/2018
Injection Volume:	200 cc	Analyzed Time:	14:23
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
540-84-1	Isooctane	48	
541-73-1	1,3-Dichlorobenzene	62	
56-23-5	Carbon Tetrachloride	60	
591-78-6	2-Hexanone	42	
622-96-8	4-Ethyltoluene	50	
630-20-6	1,1,1,2-Tetrachloroethane	68	
67-64-1	Acetone	25	
67-66-3	Chloroform	51	
67-72-1	Hexachloroethane	70	
71-43-2	Benzene	33	
71-55-6	1,1,1-Trichloroethane	55	
74-83-9	Bromomethane	45	
74-87-3	Chloromethane	19	
74-95-3	Dibromomethane	74	
75-00-3	Chloroethane	29	
75-01-4	Vinyl Chloride	28	
75-09-2	Methylene Chloride	41	
75-15-0	Carbon Disulfide	33	
75-25-2	Bromoform	93	
75-27-4	Bromodichloromethane	69	
75-34-3	1,1-Dichloroethane	42	
75-35-4	1,1-Dichloroethene	43	
75-43-4	Dichlorofluoromethane	48	
75-45-6	Chlorodifluoromethane	42	

Abbreviations:
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J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE02

Sample Media:	N/A	Lab Sample ID:	LCSDE02
Canister ID:	N/A	Lab File ID:	ei00064.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	09/06/2018
Injection Volume:	200 cc	Analyzed Time:	14:23
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-69-4	Trichlorofluoromethane	61	
75-71-8	Dichlorodifluoromethane	55	
76-13-1	Freon 113	79	
76-14-2	Freon 114	77	
78-87-5	1,2-Dichloropropane	49	
78-93-3	2-Butanone	29	
79-00-5	1,1,2-Trichloroethane	59	
79-01-6	Trichloroethene	56	
79-34-5	1,1,2,2-Tetrachloroethane	71	
95-47-6	o-Xylene	44	
95-50-1	1,2-Dichlorobenzene	60	
95-63-6	1,2,4-Trimethylbenzene	49	
96-18-4	1,2,3-Trichloropropane	63	
98-82-8	Cumene	49	
115-07-1	Propene	18	
593-60-2	Bromoethene	45	
64-17-5	Ethanol	19	
107-02-8	Acrolein	24	
74-88-4	Methyl Iodide	57	
67-63-0	Isopropanol	23	
75-05-8	Acetonitrile	15	
75-65-0	tert-Butyl Alcohol	27	
107-13-1	Acrylonitrile	23	
108-05-4	Vinyl Acetate	35	

Abbreviations:
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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE02

Sample Media:	N/A	Lab Sample ID:	LCSDE02
Canister ID:	N/A	Lab File ID:	ei00064.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	09/06/2018
Injection Volume:	200 cc	Analyzed Time:	14:23
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
108-20-3	Di-Isopropyl Ether	43	
637-92-3	Ethyl Tert-Butyl Ether	38	
540-59-0	1,2-Dichloroethene (total)	83	
141-78-6	Ethyl Acetate	35	
96-33-3	Methyl Acrylate	34	
109-99-9	Tetrahydrofuran	29	
110-82-7	Cyclohexane	34	
994-05-8	Tert-Amyl Methyl Ether	39	
140-88-5	Ethyl Acrylate	37	
123-91-1	1,4-Dioxane	36	
80-62-6	Methyl Methacrylate	37	
542-75-6	1,3-Dichloropropene (total)	87	
97-63-2	Ethyl Methacrylate	44	
1330-20-7	Xylene (total)	87	
103-65-1	n-Propylbenzene	49	
95-49-8	2-Chlorotoluene	52	
98-83-9	Alpha Methyl Styrene	46	
98-06-6	tert-Butylbenzene	52	
135-98-8	sec-Butylbenzene	53	
99-87-6	p-Isopropyltoluene	53	
100-44-7	Benzyl Chloride	40	
104-51-8	n-Butylbenzene	53	
96-12-8	1,2-Dibromo-3-chloropropane	86	
120-82-1	1,2,4-Trichlorobenzene	67	

Abbreviations:
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J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.: GLE02

Sample Media:	N/A	Lab Sample ID:	LCSDE02
Canister ID:	N/A	Lab File ID:	ei00064.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	09/06/2018
Injection Volume:	200 cc	Analyzed Time:	14:23
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ug/m3 Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
87-68-3	Hexachlorobutadiene	100	
91-20-3	Naphthalene	45	

Abbreviations:
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E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18sep06.b/ei00064.d Injection date and time: **06-SEP-2018 14:23**
Data file Sample Info. Line: LCSDE02;200;E1824930AA;LCSDE02;0;3;LCSD; Instrument ID: **HP22820.i** Batch: **E1824930AA**
Date, time and analyst ID of latest file update: 06-Sep-2018 14:53 jeb07445

Blank Data file reference: **/chem/HP22820.i/18sep06.b/ei00062.d**

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: **all1**
Calibration date and time (Last Method Edit): 06-SEP-2018 13:08
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18sep06.b/ei00061.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
71) Chlorobenzene-d5	8.490(0.007)	1173	117	973204 (2)	10.00		570426 - 1330992
40) Bromochloromethane	5.467(0.000)	751	130	272106 (3)	10.00		157917 - 368473
51) 1,4-Difluorobenzene	6.291(0.000)	866	114	1016194 (4)	10.00		583560 - 1361638

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)	1.649(-0.000)	85	531829	11.149	11.15			0.13	1
3) Chlorodifluoromethane	(1)	1.671(-0.000)	51	282851	11.860	11.86			0.15	1
4) Freon 114	(1)	1.778(-0.000)	85	531187	11.026	11.03			0.12	1
5) Chloromethane	(1)	1.842(-0.000)	50	86665	9.169	9.17			0.24	1
6) Vinyl Chloride	(1)	1.979(-0.000)	62	186634	10.900	10.90			0.12	1
7) 1,3-Butadiene	(1)	2.007(-0.000)	54	132554	10.150	10.15			0.17	1
8) Bromomethane	(1)	2.358(-0.000)	94	185292	11.464	11.46			0.18	1
9) Chloroethane	(1)	2.480(-0.000)	64	105641	10.923	10.92			0.19	1
67) Tetrachloroethene	(3)	7.867(-0.000)	166	422837	10.539	10.54			0.25	2
11) Dichlorofluoromethane	(1)	2.731(-0.000)	67	447912	11.448	11.45			0.11	1
12) Trichlorofluoromethane	(1)	2.774(-0.000)	101	554700	10.935	10.94			0.15	1
13) Pentane	(1)	2.881(-0.000)	43	277119	9.686	9.69			0.13	1
68) 2-Hexanone	(3)	7.945(-0.000)	43	420383	10.169	10.17			0.18	1
69) Dibromochloromethane	(3)	8.067(-0.000)	127	341752	10.045	10.04			0.13	1
17) 1,1-Dichloroethene	(1)	3.433(-0.000)	61	310142	10.775	10.78			0.14	1
18) Freon 113	(1)	3.447(-0.000)	103	278651	10.341	10.34			0.11	1
19) Acetone	(1)	3.533(-0.000)	43	259810	10.632	10.63			0.53	5
70) 1,2-Dibromoethane	(3)	8.160(-0.000)	107	419639	10.447	10.45			0.13	1
21) Carbon Disulfide	(1)	3.662(-0.000)	76	539864	10.572	10.57			0.13	1
24) 3-Chloropropene	(1)	3.870(-0.000)	76	97068	11.741	11.74			0.15	1
72) Chlorobenzene	(3)	8.518(-0.000)	112	592156	10.153	10.15			0.13	1
25) Methylene Chloride	(1)	4.013(-0.000)	84	180235	11.665	11.67			0.25	2
73) 1,1,1,2-Tetrachloroethane	(3)	8.569(-0.000)	131	299300	9.866	9.87			0.15	1
28) trans-1,2-Dichloroethene	(1)	4.292(-0.000)	61	271414	10.645	10.64			0.086	1
74) Ethylbenzene	(3)	8.583(-0.000)	91	994934	9.897	9.90			0.19	1
29) Methyl t-Butyl Ether	(1)	4.299(-0.000)	73	559881	9.727	9.73			0.15	1
30) Hexane	(1)	4.564(-0.000)	57	276000	9.631	9.63			0.13	1
31) 1,1-Dichloroethane	(1)	4.722(-0.000)	63	354751	10.454	10.45			0.089	1
75) m/p-Xylene	(3)	8.669(-0.000)	91	782997	9.879	9.88			0.26	2
76) o-Xylene	(3)	8.970(-0.000)	91	791393	10.041	10.04			0.19	1
78) Styrene	(3)	8.977(-0.000)	104	605973	10.025	10.03			0.2	1
35) cis-1,2-Dichloroethene	(1)	5.259(-0.000)	61	257180	10.269	10.27			0.12	1
37) 2-Butanone	(1)	5.288(-0.001)	72	107242	9.864	9.86			0.21	1
79) Bromoform	(3)	9.142(-0.000)	173	431099	8.999	9.00			0.17	1
80) Cumene	(3)	9.235(-0.000)	105	1069509	9.964	9.96			0.24	1
82) 1,1,2,2-Tetrachloroethane	(3)	9.471(-0.000)	83	583805	10.310	10.31			0.15	1
42) Chloroform	(1)	5.539(0.000)	83	450447	10.473	10.47			0.092	1
81) Bromobenzene	(3)	9.493(-0.000)	156	370149	10.112	10.11			0.1	1
43) 1,1,1-Trichloroethane	(1)	5.682(-0.000)	97	451573	10.132	10.13			0.12	1
90) 1,2,4-Trimethylbenzene	(3)	9.958(-0.000)	105	891894	10.063	10.06			0.28	2
86) 4-Ethyltoluene	(3)	9.629(-0.000)	105	1078353	10.149	10.15			0.18	1
45) Carbon Tetrachloride	(1)	5.811(-0.000)	117	419061	9.611	9.61			0.14	1
46) Benzene	(2)	5.990(-0.000)	78	635517	10.210	10.21			0.11	1

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18sep06.b/ei00064.d Injection date and time: **06-SEP-2018 14:23**
Data file Sample Info. Line: LCSDE02;200;E1824930AA;LCSDE02;0;3;LCSD; Instrument ID: **HP22820.i** Batch: **E1824930AA**
Date, time and analyst ID of latest file update: 06-Sep-2018 14:53 jeb07445

Blank Data file reference: **/chem/HP22820.i/18sep06.b/ei00062.d**

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: **all1**
Calibration date and time (Last Method Edit): 06-SEP-2018 13:08
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18sep06.b/ei00061.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
47) 1,2-Dichloroethane	(2)	6.011(-0.000)	62	295077	11.152	11.15			0.08	1
48) Isooctane	(2)	6.040(-0.000)	57	875511	10.260	10.26			0.13	1
87) 1,3,5-Trimethylbenzene	(3)	9.672(-0.000)	105	903178	10.002	10.00			0.32	2
50) Heptane	(2)	6.176(-0.000)	43	303242	9.636	9.64			0.23	1
52) Trichloroethene	(2)	6.491(0.000)	130	273901	10.349	10.35			0.18	1
98) Hexachloroethane	(3)	10.732(-0.000)	117	213492	7.182	7.18			0.27	2
83) 1,2,3-Trichloropropane	(3)	9.514(-0.000)	110	182895	10.472	10.47			0.14	1
54) 1,2-Dichloropropane	(2)	6.678(0.000)	63	227116	10.548	10.55			0.13	1
96) 1,2-Dichlorobenzene	(3)	10.546(-0.001)	146	549092	9.902	9.90			0.2	1
55) Dibromomethane	(2)	6.771(0.000)	174	272740	10.342	10.34			0.14	1
93) 1,4-Dichlorobenzene	(3)	10.259(-0.001)	146	592093	9.769	9.77			0.17	1
58) Bromodichloromethane	(2)	6.885(0.000)	83	464520	10.284	10.28			0.12	1
59) cis-1,3-Dichloropropene	(2)	7.215(0.000)	75	374413	9.502	9.50			0.1	1
60) 4-Methyl-2-Pentanone	(2)	7.329(0.000)	43	434576	9.938	9.94			0.15	1
61) Toluene	(3)	7.466(-0.000)	91	747061	10.128	10.13			0.12	1
62) Octane	(3)	7.516(-0.000)	43	401098	9.624	9.62			0.4	2
63) trans-1,3-Dichloropropene	(3)	7.630(-0.000)	75	324461	9.673	9.67			0.12	1
92) 1,3-Dichlorobenzene	(3)	10.195(-0.001)	146	602632	10.304	10.30			0.19	1
66) 1,1,2-Trichloroethane	(3)	7.774(-0.000)	97	282078	10.808	10.81			0.12	1
1) Propene	(1)	1.613(-0.000)	41	125389	10.373	10.37			0.16	1
10) Bromoethene	(1)	2.695(-0.000)	106	174863	10.189	10.19			0.18	1
14) Ethanol	(1)	3.082(0.001)	45	68161	10.039	10.04			0.69	5
16) Acrolein	(1)	3.347(-0.001)	56	73443	10.680	10.68			0.62	5
20) Methyl Iodide	(1)	3.612(-0.001)	142	449734	9.796	9.80			0.15	1
22) Isopropanol	(1)	3.719(-0.000)	45	271597	9.158	9.16			0.24	1
23) Acetonitrile	(1)	3.877(-0.000)	40	98199	9.139	9.14			0.83	5
26) tert-Butyl Alcohol	(1)	4.163(-0.000)	59	375274	8.941	8.94			0.21	1
27) Acrylonitrile	(1)	4.299(-0.000)	53	155394	10.749	10.75			0.13	1
32) Vinyl Acetate	(1)	4.786(-0.000)	86	53900	9.904	9.90			0.16	1
33) Di-Isopropyl Ether	(1)	4.786(-0.000)	45	569001	10.190	10.19			0.15	1
34) Ethyl Tert-Butyl Ether	(1)	5.116(-0.000)	59	520218	9.196	9.20			0.15	1
36) 1,2-Dichloroethene (total)	(1)		61	528594	20.914	20.91			0.2	1
38) Ethyl Acetate	(1)	5.331(-0.000)	70	52705	9.596	9.60			0.25	2
39) Methyl Acrylate	(1)	5.360(0.001)	55	312190	9.693	9.69			0.14	1
41) Tetrahydrofuran	(1)	5.503(0.000)	42	197898	9.828	9.83			0.24	1
44) Cyclohexane	(1)	5.711(0.000)	56	292829	9.926	9.93			0.11	1
49) Tert-Amyl Methyl Ether	(2)	6.069(-0.000)	73	520663	9.369	9.37			0.11	1
53) Ethyl Acrylate	(2)	6.570(0.001)	55	397082	9.140	9.14			0.16	1
56) 1,4-Dioxane	(2)	6.778(0.000)	88	154579	9.987	9.99			0.17	1
57) Methyl Methacrylate	(2)	6.749(0.000)	69	214212	9.090	9.09			0.15	1
64) 1,3-Dichloropropene (total)	(3)		75	698874	19.175	19.18			0.23	1
65) Ethyl Methacrylate	(3)	7.673(-0.000)	69	377522	9.445	9.44			0.19	1
77) Xylene (total)	(3)		91	1574390	19.921	19.92			0.44	2
84) n-Propylbenzene	(3)	9.543(-0.000)	120	289844	9.922	9.92			0.21	1
85) 2-Chlorotoluene	(3)	9.629(-0.000)	126	265200	10.097	10.10			0.22	1
88) Alpha Methyl Styrene	(3)	9.844(-0.000)	118	425871	9.590	9.59			0.18	1
89) tert-Butylbenzene	(3)	9.922(-0.000)	119	811091M	9.481	9.48			0.76	5
91) sec-Butylbenzene	(3)	10.087(-0.001)	105	1270583	9.745	9.74			0.39	2
94) p-Isopropyltoluene	(3)	10.195(-0.001)	119	1046150	9.576	9.58			0.28	2
95) Benzyl Chloride	(3)	10.359(-0.001)	91	617988	7.734	7.73			0.25	2
97) n-Butylbenzene	(3)	10.503(-0.001)	91	976259	9.574	9.57			0.26	2
99) 1,2-Dibromo-3-chloropropane	(3)	11.140(-0.001)	157	265338	8.885	8.89			0.28	2
100) 1,2,4-Trichlorobenzene	(3)	11.763(-0.001)	180	386492	8.980	8.98			0.38	2
101) Hexachlorobutadiene	(3)	11.878(-0.001)	225	381314	9.532	9.53			0.47	2

M = Compound was manually integrated.

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18sep06.b/ei00064.d Injection date and time: **06-SEP-2018 14:23**
Data file Sample Info. Line: LCSDE02;200;E1824930AA;LCSDE02;0;3;LCSD; Instrument ID: **HP22820.i** Batch: **E1824930AA**
Date, time and analyst ID of latest file update: 06-Sep-2018 14:53 jeb07445

Blank Data file reference: **/chem/HP22820.i/18sep06.b/ei00062.d**

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: **all1**
Calibration date and time (Last Method Edit): 06-SEP-2018 13:08
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18sep06.b/ei00061.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
102) Naphthalene	(3)	11.964(-0.001)	128	761119	8.557	8.56			0.5	2

Total number of targets = 98

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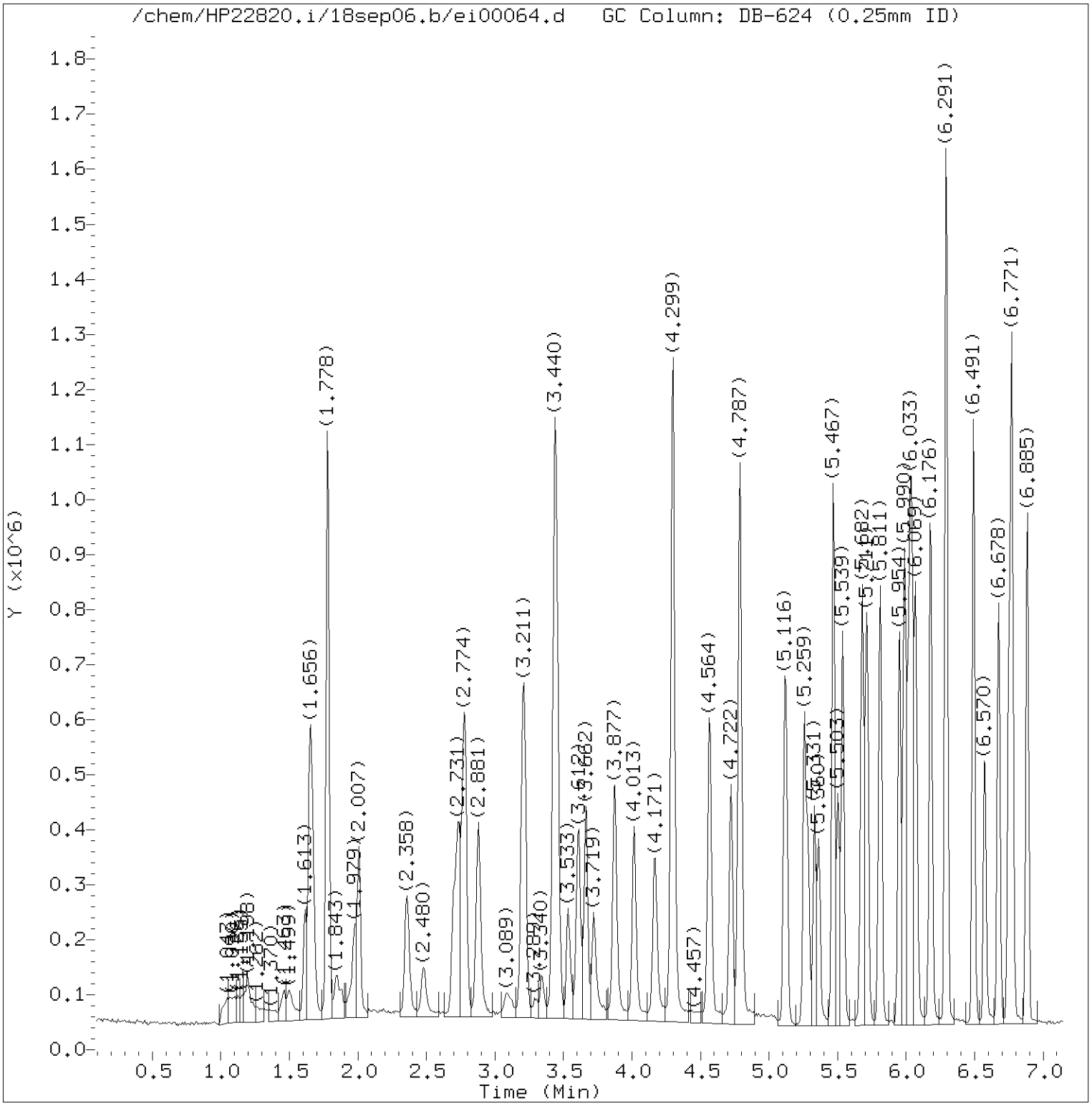
Secondary review performed and digitally signed by Jeffrey B. Smith on 09/07/2018 at 14:18. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

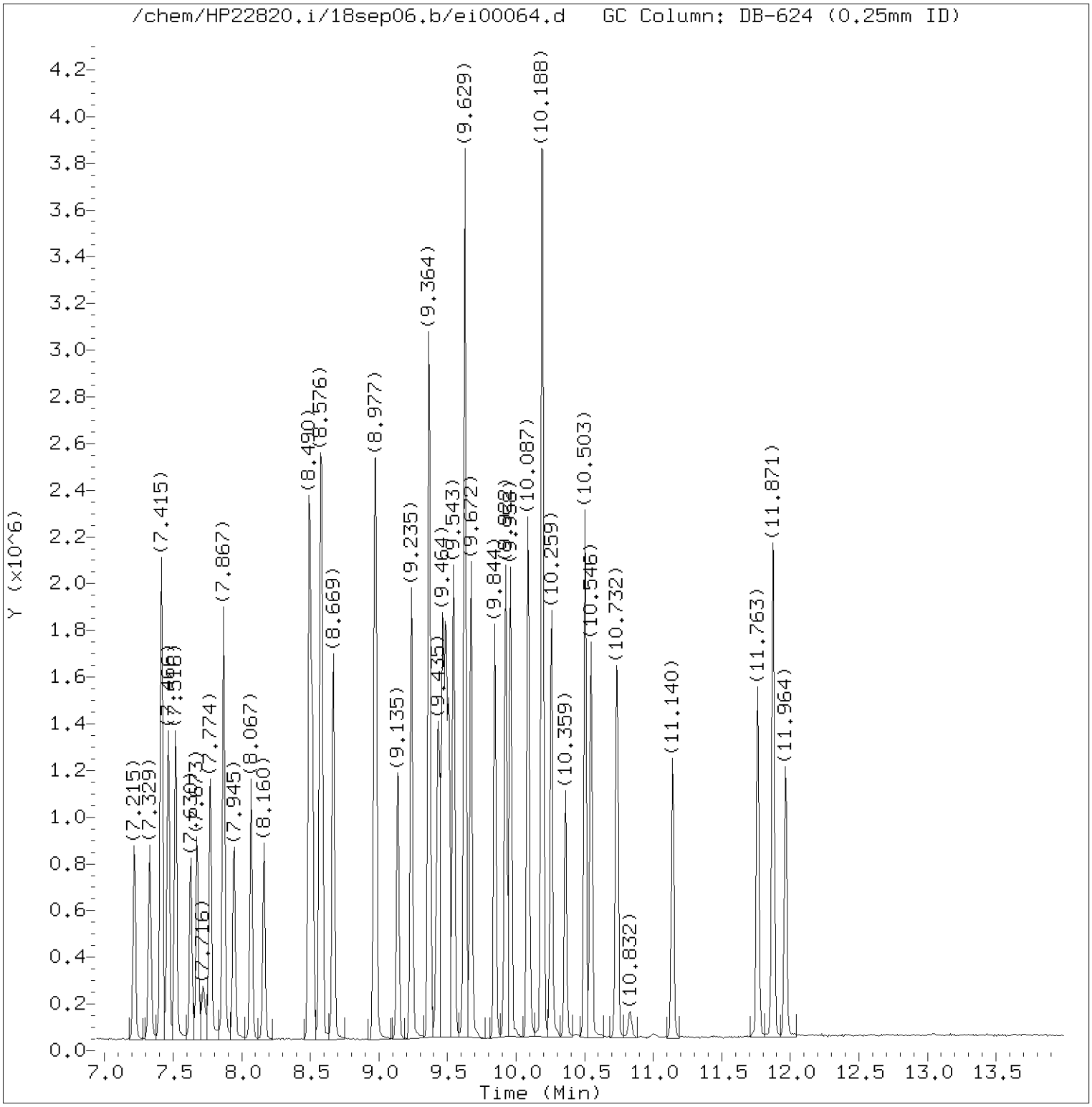
Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00064.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 14:23 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 14:53 jeb07445

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

Digitally signed by Jacob E. Bailey
on 09/06/2018 at 14:53.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00064.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 14:23 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 14:53 jeb07445

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

Digitally signed by Jacob E. Bailey
on 09/06/2018 at 14:53.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00064.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 14:23 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 14:53 jeb07445

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.613	41	125389	10.373
2) Dichlorodifluoromethane	(1)	1.649	85	531829	11.149
3) Chlorodifluoromethane	(1)	1.671	51	282851	11.860
4) Freon 114	(1)	1.778	85	531187	11.026
5) Chloromethane	(1)	1.843	50	86665	9.169
6) Vinyl Chloride	(1)	1.979	62	186634	10.900
7) 1,3-Butadiene	(1)	2.007	54	132554	10.150
8) Bromomethane	(1)	2.358	94	185292	11.464
9) Chloroethane	(1)	2.480	64	105641	10.923
10) Bromoethene	(1)	2.695	106	174863	10.189
11) Dichlorofluoromethane	(1)	2.731	67	447912	11.448
12) Trichlorofluoromethane	(1)	2.774	101	554700	10.935
13) Pentane	(1)	2.881	43	277119	9.686
14) Ethanol	(1)	3.082	45	68161	10.039
16) Acrolein	(1)	3.347	56	73443	10.680
17) 1,1-Dichloroethene	(1)	3.433	61	310142	10.775
18) Freon 113	(1)	3.447	103	278651	10.341
19) Acetone	(1)	3.533	43	259810	10.632
20) Methyl Iodide	(1)	3.612	142	449734	9.796
21) Carbon Disulfide	(1)	3.662	76	539864	10.572
22) Isopropanol	(1)	3.719	45	271597	9.158
24) 3-Chloropropene	(1)	3.870	76	97068	11.741
23) Acetonitrile	(1)	3.877	40	98199	9.139
25) Methylene Chloride	(1)	4.013	84	180235	11.665
26) tert-Butyl Alcohol	(1)	4.163	59	375274	8.941
28) trans-1,2-Dichloroethene	(1)	4.292	61	271414	10.645
29) Methyl t-Butyl Ether	(1)	4.299	73	559881	9.727
27) Acrylonitrile	(1)	4.299	53	155394	10.749
30) Hexane	(1)	4.564	57	276000	9.631
31) 1,1-Dichloroethane	(1)	4.722	63	354751	10.454
32) Vinyl Acetate	(1)	4.787	86	53900	9.904
33) Di-Isopropyl Ether	(1)	4.787	45	569001	10.190
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	520218	9.196
35) cis-1,2-Dichloroethene	(1)	5.259	61	257180	10.269
37) 2-Butanone	(1)	5.288	72	107242	9.864
38) Ethyl Acetate	(1)	5.331	70	52705	9.596
39) Methyl Acrylate	(1)	5.360	55	312190	9.693
40)*Bromochloromethane	(1)	5.467	130	272106	10.000

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 09/06/2018 at 14:53.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00064.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 14:23 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 14:53 jeb07445

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
41) Tetrahydrofuran	(1)	5.503	42	197898	9.828
42) Chloroform	(1)	5.539	83	450447	10.473
43) 1,1,1-Trichloroethane	(1)	5.682	97	451573	10.132
44) Cyclohexane	(1)	5.711	56	292829	9.926
45) Carbon Tetrachloride	(1)	5.811	117	419061	9.611
46) Benzene	(2)	5.990	78	635517	10.210
47) 1,2-Dichloroethane	(2)	6.011	62	295077	11.152
48) Isooctane	(2)	6.040	57	875511	10.260
49) Tert-Amyl Methyl Ether	(2)	6.069	73	520663	9.369
50) Heptane	(2)	6.176	43	303242	9.636
51)*1,4-Difluorobenzene	(2)	6.291	114	1016194	10.000
52) Trichloroethene	(2)	6.491	130	273901	10.349
53) Ethyl Acrylate	(2)	6.570	55	397082	9.140
36) 1,2-Dichloroethene (total)	(1)		61	528594	20.914
54) 1,2-Dichloropropane	(2)	6.678	63	227116	10.548
57) Methyl Methacrylate	(2)	6.749	69	214212	9.090
55) Dibromomethane	(2)	6.771	174	272740	10.342
56) 1,4-Dioxane	(2)	6.778	88	154579	9.987
58) Bromodichloromethane	(2)	6.885	83	464520	10.284
59) cis-1,3-Dichloropropene	(2)	7.215	75	374413	9.502
60) 4-Methyl-2-Pentanone	(2)	7.329	43	434576	9.938
61) Toluene	(3)	7.466	91	747061	10.128
62) Octane	(3)	7.516	43	401098	9.624
63) trans-1,3-Dichloropropene	(3)	7.630	75	324461	9.673
65) Ethyl Methacrylate	(3)	7.673	69	377522	9.445
66) 1,1,2-Trichloroethane	(3)	7.774	97	282078	10.808
67) Tetrachloroethene	(3)	7.867	166	422837	10.539
68) 2-Hexanone	(3)	7.945	43	420383	10.169
69) Dibromochloromethane	(3)	8.067	127	341752	10.045
70) 1,2-Dibromoethane	(3)	8.160	107	419639	10.447
71)*Chlorobenzene-d5	(3)	8.490	117	973204	10.000
72) Chlorobenzene	(3)	8.518	112	592156	10.153
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	299300	9.866
74) Ethylbenzene	(3)	8.583	91	994934	9.897
75) m/p-Xylene	(3)	8.669	91	782997	9.879
76) o-Xylene	(3)	8.970	91	791393	10.041
78) Styrene	(3)	8.977	104	605973	10.025
79) Bromoform	(3)	9.142	173	431099	8.999

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 09/06/2018 at 14:53.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18sep06.b/ei00064.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 14:23 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 14:53 jeb07445

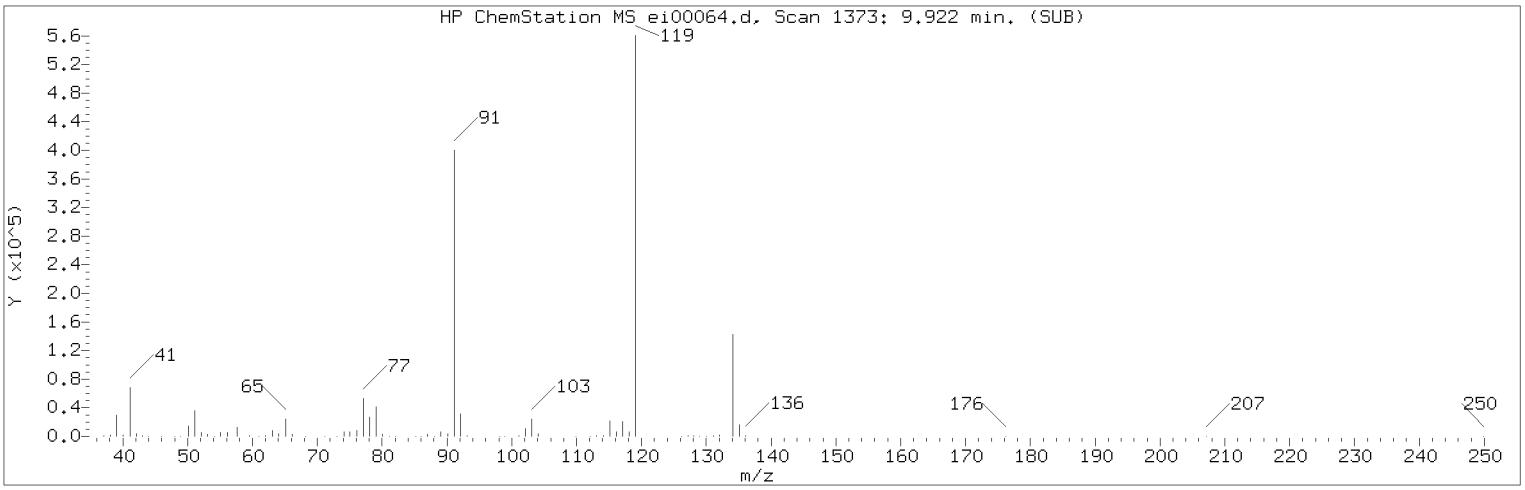
Sample Name: LCSDE02 Lab Sample ID: LCSDE02

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
80) Cumene	(3)	9.235	105	1069509	9.964
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	583805	10.310
81) Bromobenzene	(3)	9.493	156	370149	10.112
83) 1,2,3-Trichloropropane	(3)	9.514	110	182895	10.472
84) n-Propylbenzene	(3)	9.543	120	289844	9.922
85) 2-Chlorotoluene	(3)	9.629	126	265200	10.097
86) 4-Ethyltoluene	(3)	9.629	105	1078353	10.149
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	903178	10.002
88) Alpha Methyl Styrene	(3)	9.844	118	425871	9.590
89) tert-Butylbenzene	(3)	9.922	119	811091M	9.481
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	891894	10.063
91) sec-Butylbenzene	(3)	10.087	105	1270583	9.745
92) 1,3-Dichlorobenzene	(3)	10.195	146	602632	10.304
94) p-Isopropyltoluene	(3)	10.195	119	1046150	9.576
93) 1,4-Dichlorobenzene	(3)	10.259	146	592093	9.769
95) Benzyl Chloride	(3)	10.359	91	617988	7.734
97) n-Butylbenzene	(3)	10.503	91	976259	9.574
96) 1,2-Dichlorobenzene	(3)	10.546	146	549092	9.902
98) Hexachloroethane	(3)	10.732	117	213492	7.182
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	265338	8.885
100) 1,2,4-Trichlorobenzene	(3)	11.763	180	386492	8.980
101) Hexachlorobutadiene	(3)	11.878	225	381314	9.532
102) Naphthalene	(3)	11.964	128	761119	8.557
64) 1,3-Dichloropropene (total)	(3)		75	698874	19.175
77) Xylene (total)	(3)		91	1574390	19.921

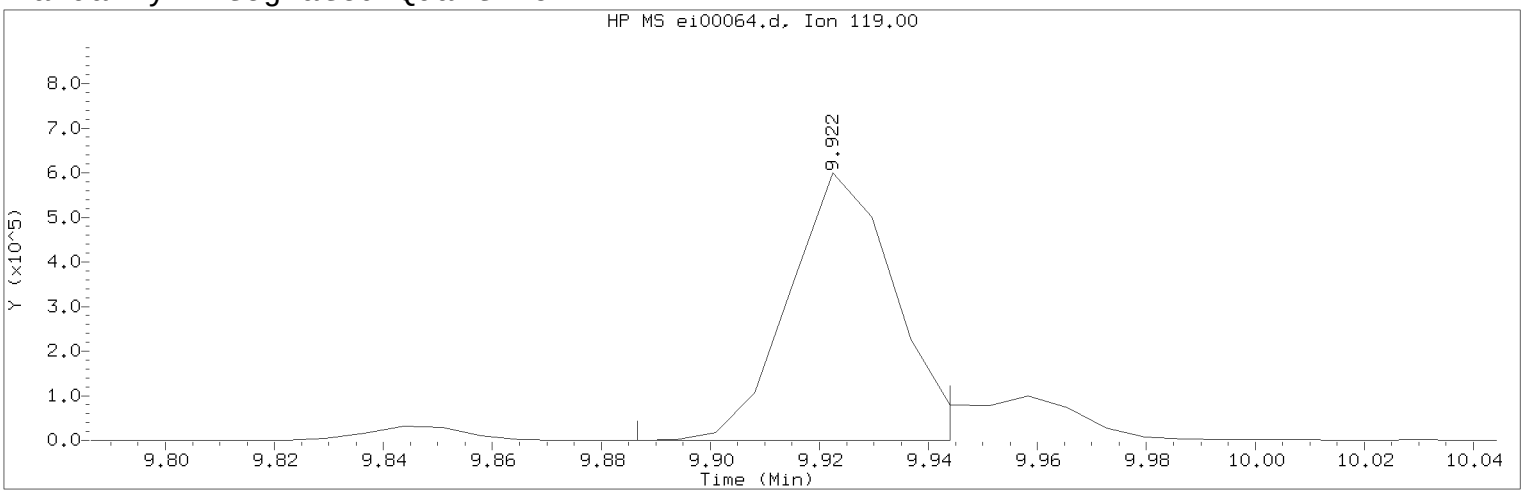
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 09/06/2018 at 14:53.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18sep06.b/ei00064.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 14:23 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: all1
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 14:53 jeb07445

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

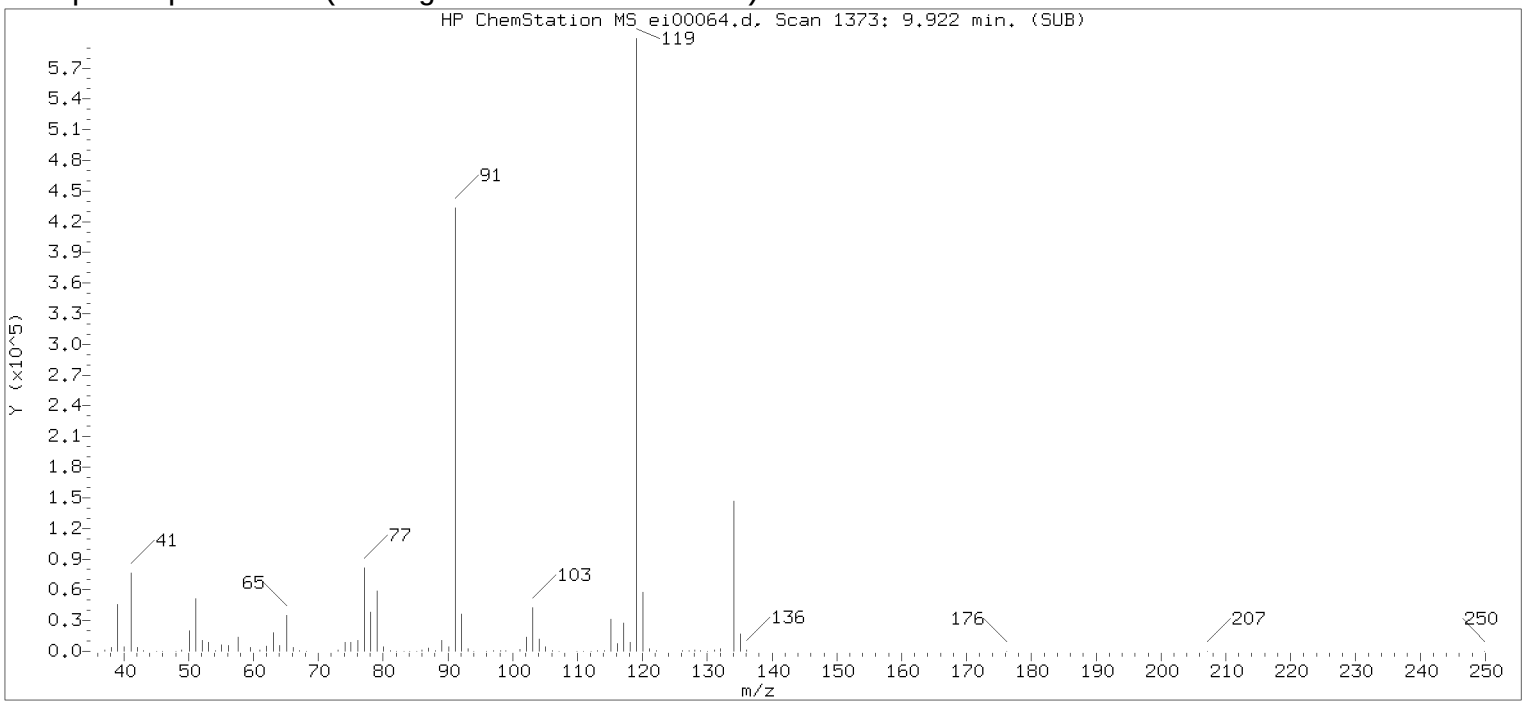
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 811091M
Concentration (ppb(v)) : 9.4805
Integration start scan : 1367 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

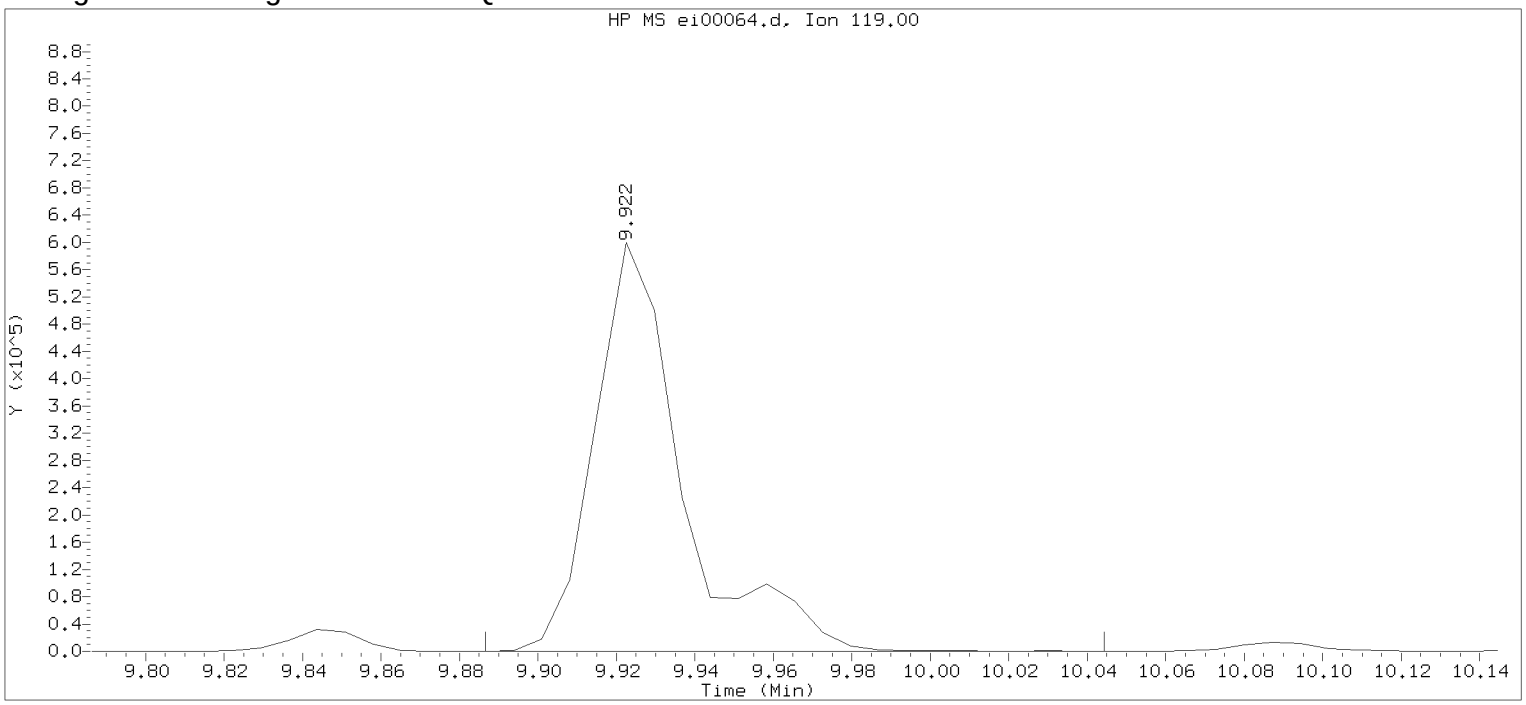
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 09/06/2018 at 14:53.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/07/2018 at 14:18.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18sep06.b/ei00064.d Instrument ID: HP22820.i
Injection date and time: 06-SEP-2018 14:23 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18sep06.b/to-15.m Sublist used: all
Calibration date and time: 06-SEP-2018 13:08
Date, time and analyst ID of latest file update: 06-Sep-2018 14:44 Unknown

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 936696
Concentration (ppb(v)) : 10.9487
Integration start scan : 1367 Integration stop scan: 1389
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 09/06/2018 at 14:53.
Target 3.5 esignature user=JEB07445

Canister Dilution Calc/Pressure Gauge Readings

Volatile Organics in Air by GC/MS

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Summa Sample Prep Worksheet

Sample	Can_ID	Initial Pressure	Units	Final Pressure (PSIG)	Dilution Factor	SDG
9785623	1263	-2.8	"Hg	11.9	2	GLE02
9785624	1176	-7.0	"Hg	7.8	2	GLE02
9785625	1374	-1.8	"Hg	12.9	2	GLE02

Clean Canister Certification Data

Volatile Organics in Air by GC/MS

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Cleaning Data Summary
SDG# GLE02

Sample #	Can ID	Certified File	Instrument #
9785623	1263	fe00117	HP26379
9785624	1176	fh00471	HP26379
9785625	1374	ef00081	HP22820

Lancaster Laboratories
Volatiles in Air
Runlog for Agilent GC/MS System HP22820 **HP #05**

Data Directory Path is - D:\data\18jun04\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
jeb07445	EF00030.D	50NGBFB	06/04/2018	09:51		
jeb07445	EF00031.D	VSTD010	06/04/2018	10:38		
jeb07445	EF00032.D	VSTD005	06/04/2018	11:06		
jeb07445	EF00033.D	VSTD002	06/04/2018	11:31		
jeb07445	EF00034.D	VSTD001	06/04/2018	11:56		
jeb07445	EF00035.D	VSTD0.50	06/04/2018	12:19		
jeb07445	EF00036.D	VSTD025	06/04/2018	12:47		
jeb07445	EF00037.D	VSTD070	06/04/2018	13:24		
jeb07445	EF00038.D	VBLKE01	06/04/2018	13:44	E1815530AA	
jeb07445	EF00039.D	VBLKE01	06/04/2018	14:21	E1815530AA	
jeb07445	EF00040.D	LCSE01	06/04/2018	15:05	E1815530AA	
jeb07445	EF00041.D	LCSDE01	06/04/2018	15:39	E1815530AA	
jeb07445	EF00042.D	mdlv0.5	06/04/2018	16:13	E1815530AA	
jeb07445	EF00043.D	mdlv0.2	06/04/2018	16:40	E1815530AA	
jeb07445	EF00044.D	LCSDE01	06/04/2018	17:24	E1815530AA	
jeb07445	EF00045.D	fc1	06/04/2018	18:29	E1815530AA	
jeb07445	EF00046.D	fc2	06/04/2018	19:03	E1815530AA	
jeb07445	EF00047.D	9639644	06/04/2018	20:07	E1815530AA	
jeb07445	EF00048.D	9639644DL	06/04/2018	20:32	E1815530AA	
jeb07445	EF00049.D	9639645	06/04/2018	21:16	E1815530AA	
jeb07445	EF00050.D	9639645DL	06/04/2018	21:41	E1815530AA	
jeb07445	EF00051.D	9639648	06/04/2018	22:24	E1815530AA	
jeb07445	EF00052.D	9639648DL	06/04/2018	22:49	E1815530AA	
jeb07445	EF00053.D	9639649	06/04/2018	23:33	E1815530AA	
jeb07445	EF00054.D	9639649DL	06/04/2018	23:58	E1815530AA	
jeb07445	EF00055.D	9639696	06/05/2018	00:52	E1815530AA	
jeb07445	EF00056.D	9639696	06/05/2018	01:46	E1815530AA	
jeb07445	EF00057.D	VBLKE01	06/05/2018	02:20	E1815530AA	
jeb07445	EF00058.D	cc911	06/05/2018	02:53	E1815530AA	
jeb07445	EF00059.D	cc856	06/05/2018	03:27	E1815530AA	
jeb07445	EF00060.D	9639696DL	06/05/2018	08:22	E1815530AA	

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

SDG No.:

Lab File ID: ef00030.d

BFB Injection Date: 06/04/2018

Instrument ID: 22820

BFB Injection Time: 09:51

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0% - 40.0% of mass 95	15.05
75	30.0% - 66.0% of mass 95	44.91
95	Base peak, 100% relative abundance	100.00
96	5.0% - 9.0% of mass 95	6.89
173	< 2.0% of mass 174	0.50 (0.57)
174	> 50.0% of mass 95	87.65
175	4.0% - 9.0% of mass 174	6.41 (7.31)
176	93.0% - 101.0% of mass 174	84.73 (96.67)
177	5.0% - 9.0% of mass 176	5.80 (6.84)

THIS CHECK APPLIES TO THE FOLLOWING:

LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD010	ef00031.d	06/04/2018	10:38
VSTD005	ef00032.d	06/04/2018	11:06
VSTD002	ef00033.d	06/04/2018	11:31
VSTD001	ef00034.d	06/04/2018	11:56
VSTD025	ef00036.d	06/04/2018	12:47
VSTD070	ef00037.d	06/04/2018	13:24
VBLKE01	ef00039.d	06/04/2018	14:21
LCSE01	ef00040.d	06/04/2018	15:05
mdlv0.5	ef00042.d	06/04/2018	16:13
mdlv0.2	ef00043.d	06/04/2018	16:40
LCSDE01	ef00044.d	06/04/2018	17:24
9639644	ef00047.d	06/04/2018	20:07
9639645	ef00049.d	06/04/2018	21:16
9639648	ef00051.d	06/04/2018	22:24
9639648DL	ef00052.d	06/04/2018	22:49
9639649	ef00053.d	06/04/2018	23:33
9639649DL	ef00054.d	06/04/2018	23:58
9639696	ef00055.d	06/05/2018	00:52
9639696	ef00056.d	06/05/2018	01:46
cc856	ef00059.d	06/05/2018	03:27
9639696DL	ef00060.d	06/05/2018	08:22

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FORM 06
VOLATILE ORGANICS IN AIR
INITIAL CALIBRATION DATA

SDG No.:

Instrument ID: 22820 Calibration Start Date: 06/04/2018 Calibration End Date: 06/04/2018

Calibration Start Time: 10:38 Calibration End Time: 13:24

LAB FILE IDs:
RRF 1 = ef00034.d RRF 2 = ef00033.d RRF 5 = ef00032.d RRF 10 = ef00031.d RRF 25 = ef00036.d
RRF 70 = ef00037.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
Propene	0.656	0.604	0.632	0.628	0.588	0.612	0.620	4	AVG
Dichlorodifluoromethane	2.254	2.311	2.412	2.518	2.424	2.501	2.403	4	AVG
Chlorodifluoromethane	1.233	1.225	1.299	1.315	1.268	1.301	1.274	3	AVG
Freon 114	2.398	2.376	2.505	2.563	2.461	2.452	2.459	3	AVG
Chloromethane	0.768	0.711	0.734	0.738	0.706	0.705	0.727	3	AVG
Vinyl Chloride	0.823	0.872	0.926	0.936	0.889	0.907	0.892	5	AVG
1,3-Butadiene	0.616	0.642	0.658	0.685	0.635	0.649	0.647	4	AVG
Bromomethane	0.758	0.858	0.967	1.023	0.929	0.970	0.918	10	AVG
Chloroethane	0.475	0.508	0.516	0.534	0.489	0.504	0.504	4	AVG
Bromoethene	0.926	0.960	0.993	1.001	0.969	1.001	0.975	3	AVG
Dichlorofluoromethane	1.870	1.843	1.999	2.049	1.928	1.981	1.945	4	AVG
Trichlorofluoromethane	2.519	2.450	2.598	2.632	2.519	2.565	2.547	3	AVG
Pentane	1.405	1.344	1.396	1.425	1.303	1.333	1.368	3	AVG
Ethanol	0.268	0.273	0.302	0.318	0.294	0.311	0.294	7	AVG
Freon123a	1.730	1.669	1.718	1.741	1.635	1.652	1.691	3	AVG
Acrolein	0.357	0.311	0.363	0.360	0.342	0.358	0.348	6	AVG
1,1-Dichloroethene	1.316	1.376	1.471	1.485	1.404	1.433	1.414	4	AVG
Freon 113	1.470	1.424	1.426	1.451	1.384	1.402	1.426	2	AVG
Acetone	1.126	1.182	1.211	1.226	1.147	1.161	1.176	3	AVG
Methyl Iodide	2.847	2.880	2.814	2.541	2.713	2.614	2.735	5	AVG
Carbon Disulfide	2.520	2.579	2.741	2.800	2.613	2.637	2.648	4	AVG
Isopropanol	1.181	1.162	1.182	1.260	1.194	1.294	1.212	4	AVG
Acetonitrile	0.840	0.616	0.602	0.465	0.453	0.449	0.571	27	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: 22820 Calibration Start Date: 06/04/2018 Calibration End Date: 06/04/2018

Calibration Start Time: 10:38 Calibration End Time: 13:24

LAB FILE IDs:
RRF 1 = ef00034.d RRF 2 = ef00033.d RRF 5 = ef00032.d RRF 10 = ef00031.d RRF 25 = ef00036.d
RRF 70 = ef00037.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
3-Chloropropene	0.419	0.400	0.431	0.436	0.392	0.413	0.415	4	AVG
Methylene Chloride	0.787	0.798	0.824	0.839	0.785	0.799	0.805	3	AVG
tert-Butyl Alcohol	1.568	1.578	1.673	1.681	1.608	1.725	1.639	4	AVG
Acrylonitrile	0.642	0.692	0.758	0.767	0.717	0.723	0.717	6	AVG
trans-1,2-Dichloroethene	1.165	1.263	1.359	1.348	1.261	1.278	1.279	5	AVG
Methyl t-Butyl Ether	2.846	2.680	2.819	2.846	2.582	2.601	2.729	5	AVG
Hexane	1.437	1.432	1.411	1.469	1.328	1.351	1.405	4	AVG
1,1-Dichloroethane	1.629	1.639	1.716	1.736	1.621	1.657	1.666	3	AVG
Vinyl Acetate	0.238	0.234	0.246	0.250	0.235	0.259	0.244	4	AVG
Di-Isopropyl Ether	2.784	2.739	2.881	2.904	2.680	2.666	2.776	4	AVG
Ethyl Tert-Butyl Ether	2.590	2.658	2.724	2.742	2.570	2.608	2.649	3	AVG
cis-1,2-Dichloroethene	1.158	1.200	1.272	1.307	1.225	1.246	1.235	4	AVG
2-Butanone	0.532	0.499	0.522	0.539	0.485	0.506	0.514	4	AVG
Ethyl Acetate	0.305	0.242	0.248	0.252	0.234	0.241	0.254	10	AVG
Methyl Acrylate	1.625	1.497	1.558	1.625	1.498	1.546	1.558	4	AVG
Tetrahydrofuran	0.894	0.919	0.935	0.943	0.881	0.890	0.910	3	AVG
Chloroform	2.051	2.040	2.155	2.193	2.028	2.076	2.090	3	AVG
1,1,1-Trichloroethane	2.149	2.061	2.170	2.165	2.060	2.100	2.117	2	AVG
Cyclohexane	1.491	1.478	1.494	1.507	1.394	1.375	1.456	4	AVG
Carbon Tetrachloride	2.054	2.014	2.094	2.102	2.054	2.154	2.079	2	AVG
Benzene	0.900	0.860	0.873	0.877	0.821	0.829	0.860	3	AVG
1,2-Dichloroethane	0.359	0.342	0.354	0.354	0.341	0.347	0.350	2	AVG
Isooctane	1.176	1.157	1.226	1.233	1.182	1.168	1.190	3	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.

SDG No.:

Instrument ID: 22820 Calibration Start Date: 06/04/2018 Calibration End Date: 06/04/2018

Calibration Start Time: 10:38 Calibration End Time: 13:24

LAB FILE IDs:
RRF 1 = ef00034.d RRF 2 = ef00033.d RRF 5 = ef00032.d RRF 10 = ef00031.d RRF 25 = ef00036.d
RRF 70 = ef00037.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
Tert-Amyl Methyl Ether	0.721	0.710	0.740	0.731	0.696	0.705	0.717	2	AVG
Heptane	0.429	0.413	0.410	0.410	0.391	0.388	0.407	4	AVG
Trichloroethene	0.446	0.403	0.436	0.429	0.418	0.432	0.427	3	AVG
Ethyl Acrylate	0.553	0.523	0.550	0.555	0.530	0.555	0.544	3	AVG
1,2-Dichloropropane	0.330	0.300	0.301	0.300	0.286	0.289	0.301	5	AVG
Dibromomethane	0.423	0.389	0.418	0.418	0.408	0.425	0.413	3	AVG
1,4-Dioxane	0.230	0.211	0.223	0.219	0.212	0.217	0.219	3	AVG
Methyl Methacrylate	0.311	0.299	0.299	0.305	0.290	0.303	0.301	2	AVG
Bromodichloromethane	0.614	0.570	0.598	0.588	0.574	0.592	0.589	3	AVG
cis-1,3-Dichloropropene	0.522	0.508	0.529	0.530	0.504	0.525	0.520	2	AVG
4-Methyl-2-Pentanone	0.602	0.556	0.574	0.581	0.544	0.540	0.566	4	AVG
Toluene	1.229	1.196	1.209	1.187	1.086	1.017	1.154	7	AVG
Octane	0.667	0.633	0.631	0.600	0.553	0.516	0.600	9	AVG
trans-1,3-Dichloropropene	0.454	0.445	0.461	0.475	0.445	0.449	0.455	3	AVG
Ethyl Methacrylate	0.505	0.497	0.534	0.533	0.514	0.515	0.516	3	AVG
1,1,2-Trichloroethane	0.462	0.413	0.410	0.411	0.383	0.367	0.408	8	AVG
Tetrachloroethene	0.681	0.656	0.669	0.643	0.621	0.604	0.646	5	AVG
2-Hexanone	0.606	0.584	0.603	0.598	0.546	0.525	0.577	6	AVG
Dibromochloromethane	0.526	0.501	0.514	0.517	0.507	0.520	0.514	2	AVG
1,2-Dibromoethane	0.658	0.637	0.654	0.651	0.610	0.597	0.634	4	AVG
Chlorobenzene	1.076	1.002	1.015	0.998	0.941	0.893	0.987	6	AVG
1,1,1,2-Tetrachloroethane	0.473	0.467	0.493	0.492	0.471	0.487	0.481	2	AVG
Ethylbenzene	1.691	1.606	1.655	1.619	1.415	1.273	1.543	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: 22820 Calibration Start Date: 06/04/2018 Calibration End Date: 06/04/2018

Calibration Start Time: 10:38 Calibration End Time: 13:24

LAB FILE IDs:
RRF 1 = ef00034.d RRF 2 = ef00033.d RRF 5 = ef00032.d RRF 10 = ef00031.d RRF 25 = ef00036.d
RRF 70 = ef00037.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
m/p-Xylene	1.366	1.332	1.357	1.322	1.107	1.032	1.253	12	AVG
o-Xylene	1.370	1.294	1.325	1.292	1.110	1.038	1.238	11	AVG
Styrene	0.968	0.930	1.001	0.982	0.896	0.852	0.938	6	AVG
Bromoform	0.635	0.624	0.657	0.678	0.670	0.705	0.661	4	AVG
Cumene	1.854	1.780	1.822	1.772	1.600	****	1.766	6	AVG
Bromobenzene	0.661	0.635	0.657	0.639	0.604	0.568	0.627	6	AVG
1,1,2,2-Tetrachloroethane	0.960	0.888	0.907	0.895	0.808	0.752	0.868	9	AVG
1,2,3-Trichloropropane	0.304	0.291	0.291	0.283	0.253	0.242	0.277	9	AVG
n-Propylbenzene	0.552	0.525	0.528	0.520	0.472	0.448	0.507	8	AVG
2-Chlorotoluene	0.502	0.459	0.478	0.465	0.431	****	0.467	6	AVG
4-Ethyltoluene	1.827	1.757	1.854	1.809	1.590	1.410	1.708	10	AVG
1,3,5-Trimethylbenzene	1.599	1.485	1.537	1.460	1.285	1.162	1.421	12	AVG
Alpha Methyl Styrene	0.764	0.728	0.768	0.779	0.689	****	0.745	5	AVG
tert-Butylbenzene	1.676	1.608	1.518	1.378	1.232	****	1.483	12	AVG
1,2,4-Trimethylbenzene	1.543	1.466	1.510	1.463	1.281	1.156	1.403	11	AVG
sec-Butylbenzene	2.283	2.151	2.225	2.126	1.831	****	2.123	8	AVG
1,3-Dichlorobenzene	1.145	1.078	1.094	1.065	0.957	0.917	1.043	8	AVG
1,4-Dichlorobenzene	1.173	1.108	1.124	1.097	0.969	0.905	1.063	10	AVG
p-Isopropyltoluene	1.909	1.822	1.888	1.857	1.609	****	1.817	7	AVG
Benzyl Chloride	0.887	0.890	1.018	1.076	0.936	****	0.961	9	AVG
1,2-Dichlorobenzene	1.132	1.029	1.047	1.013	0.889	0.845	0.992	11	AVG
n-Butylbenzene	1.695	1.651	1.698	1.674	1.445	****	1.633	7	AVG
Hexachloroethane	0.361	0.362	0.396	0.400	0.410	****	0.386	6	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.

SDG No.:

Instrument ID: 22820 Calibration Start Date: 06/04/2018 Calibration End Date: 06/04/2018

Calibration Start Time: 10:38 Calibration End Time: 13:24

LAB FILE IDs:
RRF 1 = ef00034.d RRF 2 = ef00033.d RRF 5 = ef00032.d RRF 10 = ef00031.d RRF 25 = ef00036.d
RRF 70 = ef00037.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
1,2-Dibromo-3-chloropropane	0.515	0.511	0.556	0.558	0.464	0.475	0.513	8	AVG
1,2,4-Trichlorobenzene	0.927	0.904	0.912	0.888	0.740	0.732	0.851	11	AVG
Hexachlorobutadiene	0.802	0.737	0.750	0.726	0.622	****	0.727	9	AVG
Naphthalene	2.001	1.946	1.992	1.938	1.526	****	1.881	11	AVG

Average % RSD: 6

* 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.

Internal Standard
Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP22820.i/18jun04.b/ef00031.d VSTD010
/chem/HP22820.i/18jun04.b/ef00032.d VSTD005
/chem/HP22820.i/18jun04.b/ef00033.d VSTD002
/chem/HP22820.i/18jun04.b/ef00034.d VSTD001
/chem/HP22820.i/18jun04.b/ef00036.d VSTD025
/chem/HP22820.i/18jun04.b/ef00037.d VSTD070

Area Summary

Internal Standard Name	File ID: ef00031.d	ef00032.d	ef00033.d	ef00034.d	ef00036.d	ef00037.d	Avg. Area	%RSD	In Spec
Bromochloromethane	343847	344184	346670	337271	325792	310785	334758	4	Yes
1,4-Difluorobenzene	1313938	1298937	1309255	1262174	1197569	1134459	1252722	6	Yes
Chlorobenzene-d5	1253254	1232550	1253482	1219205	1139855	1122091	1203406	5	Yes

%RSD of internal standard area is flagged out of spec if greater than 30.

RT Summary

Internal Standard Name	File ID: ef00031.d	ef00032.d	ef00033.d	ef00034.d	ef00036.d	ef00037.d	Avg. RT
Bromochloromethane	5.467	5.467	5.467	5.467	5.467	5.467	5.467
1,4-Difluorobenzene	6.291	6.291	6.291	6.291	6.291	6.291	6.291
Chlorobenzene-d5	8.497	8.497	8.497	8.497	8.497	8.497	8.497

Comments:_____

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Report generated on 06/04/2018 at 14:26

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 LCS File ID: ef00040.d LCSD File ID: ef00044.d

Batch: E1815530AA LCS Injected: 06/04/2018 LCSD Injected: 06/04/2018

Method: EPA TO-15 LCS Client ID: LCSE01 LCSD Client ID: LCSDE01

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	10.00	9.58	9.76	96	98	78-126	2	25	YES
Dichlorodifluoromethane	10.00	10.36	10.48	104	105	74-133	1	25	YES
Chlorodifluoromethane	10.00	10.67	10.97	107	110	70-138	3	25	YES
Freon 114	10.00	10.33	10.34	103	103	66-126	0	25	YES
Chloromethane	10.00	10.22	10.61	102	106	65-140	4	25	YES
Vinyl Chloride	10.00	10.34	10.40	103	104	75-130	1	25	YES
1,3-Butadiene	10.00	9.71	9.79	97	98	72-122	1	25	YES
Bromomethane	10.00	10.54	10.40	105	104	71-133	1	25	YES
Chloroethane	10.00	9.81	10.22	98	102	76-129	4	25	YES
Bromoethene	10.00	10.34	10.32	103	103	77-123	0	25	YES
Dichlorofluoromethane	10.00	10.58	10.76	106	108	75-137	2	25	YES
Trichlorofluoromethane	10.00	10.38	10.46	104	105	73-132	1	25	YES
Pentane	10.00	11.40	11.54	114	115	69-125	1	25	YES
Ethanol	10.00	9.63	9.54	96	95	56-149	1	25	YES
Acrolein	10.00	9.76	10.13	98	101	54-132	4	25	YES
1,1-Dichloroethene	10.00	10.40	10.57	104	106	70-129	2	25	YES
Freon 113	10.00	10.04	9.98	100	100	66-119	1	25	YES
Acetone	10.00	10.17	10.51	102	105	71-136	3	25	YES
Methyl Iodide	10.00	9.94	10.03	99	100	72-127	1	25	YES
Carbon Disulfide	10.00	9.81	9.92	98	99	72-128	1	25	YES
Isopropanol	10.00	10.21	9.87	102	99	69-160	3	25	YES
Acetonitrile	10.00	8.97	9.21	90	92	56-136	3	25	YES
3-Chloropropene	10.00	11.99	11.69	120	117	67-141	2	25	YES
Methylene Chloride	10.00	11.11	11.17	111	112	69-128	1	25	YES
tert-Butyl Alcohol	10.00	10.76	10.55	108	106	71-154	2	25	YES
Acrylonitrile	10.00	10.16	10.18	102	102	68-135	0	25	YES
trans-1,2-Dichloroethene	10.00	10.13	10.31	101	103	77-128	2	25	YES
Methyl t-Butyl Ether	10.00	10.34	10.51	103	105	71-119	2	25	YES
Hexane	10.00	11.61	11.77	116	118	70-118	1	25	YES
1,1-Dichloroethane	10.00	10.15	10.27	101	103	74-129	1	25	YES
Vinyl Acetate	10.00	11.05	10.56	111	106	75-161	5	25	YES
Di-Isopropyl Ether	10.00	9.69	10.02	97	100	71-122	3	25	YES
Ethyl Tert-Butyl Ether	10.00	9.02	9.39	90	94	68-121	4	25	YES
cis-1,2-Dichloroethene	10.00	9.97	10.11	100	101	76-126	1	25	YES
2-Butanone	10.00	9.80	9.68	98	97	75-126	1	25	YES
Ethyl Acetate	10.00	8.70	9.28	87	93	73-124	6	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 LCS File ID: ef00040.d LCSD File ID: ef00044.d

Batch: E1815530AA LCS Injected: 06/04/2018 LCSD Injected: 06/04/2018

Method: EPA TO-15 LCS Client ID: LCSE01 LCSD Client ID: LCSDE01

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	10.00	9.59	9.83	96	98	75-125	2	25	YES
Tetrahydrofuran	10.00	9.91	9.96	99	100	67-127	0	25	YES
Chloroform	10.00	10.10	10.27	101	103	75-127	2	25	YES
1,1,1-Trichloroethane	10.00	10.12	10.03	101	100	74-122	1	25	YES
Cyclohexane	10.00	9.70	9.77	97	98	70-118	1	25	YES
Carbon Tetrachloride	10.00	10.40	10.30	104	103	72-127	1	25	YES
Benzene	10.00	11.78	12.13	118	121	76-123	3	25	YES
1,2-Dichloroethane	10.00	10.37	10.81	104	108	72-138	4	25	YES
Isooctane	10.00	9.77	10.12	98	101	74-127	4	25	YES
Tert-Amyl Methyl Ether	10.00	8.96	9.42	90	94	78-124	5	25	YES
Heptane	10.00	9.66	10.02	97	100	74-122	4	25	YES
Trichloroethene	10.00	10.31	10.29	103	103	76-118	0	25	YES
Ethyl Acrylate	10.00	9.76	9.87	98	99	71-126	1	25	YES
1,2-Dichloropropane	10.00	9.68	9.86	97	99	75-127	2	25	YES
Dibromomethane	10.00	10.28	10.31	103	103	76-124	0	25	YES
1,4-Dioxane	10.00	9.73	9.75	97	97	76-124	0	25	YES
Methyl Methacrylate	10.00	9.33	9.43	93	94	73-117	1	25	YES
Bromodichloromethane	10.00	9.97	10.27	100	103	75-134	3	25	YES
cis-1,3-Dichloropropene	10.00	9.61	9.67	96	97	51-120	1	25	YES
4-Methyl-2-Pentanone	10.00	9.60	9.97	96	100	79-131	4	25	YES
Toluene	10.00	11.54	11.85	115	119	78-119	3	25	YES
Octane	10.00	10.59	11.24	106	112	73-122	6	25	YES
trans-1,3-Dichloropropene	10.00	9.68	9.61	97	96	76-131	1	25	YES
Ethyl Methacrylate	10.00	9.75	9.64	98	96	69-137	1	25	YES
1,1,2-Trichloroethane	10.00	9.66	9.89	97	99	76-127	2	25	YES
Tetrachloroethene	10.00	10.00	9.92	100	99	68-123	1	25	YES
2-Hexanone	10.00	9.21	9.60	92	96	74-134	4	25	YES
Dibromochloromethane	10.00	10.12	10.15	101	102	74-131	0	25	YES
1,2-Dibromoethane	10.00	9.84	9.95	98	99	73-121	1	25	YES
Chlorobenzene	10.00	9.65	9.63	96	96	76-117	0	25	YES
1,1,1,2-Tetrachloroethane	10.00	10.07	10.22	101	102	73-137	1	25	YES
Ethylbenzene	10.00	11.08	11.26	111	113	77-117	2	25	YES
m/p-Xylene	10.00	12.62	12.62	126*	126*	78-119	0	25	NO
o-Xylene	10.00	11.17	11.41	112	114	78-121	2	25	YES
Xylene (total)	20.00	23.79	24.02	119	120	79-120	1	25	YES
Styrene	10.00	9.96	10.02	100	100	77-143	1	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 LCS File ID: ef00040.d LCSD File ID: ef00044.d

Batch: E1815530AA LCS Injected: 06/04/2018 LCSD Injected: 06/04/2018

Method: EPA TO-15 LCS Client ID: LCSE01 LCSD Client ID: LCSDE01

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	10.29	10.22	103	102	58-144	1	25	YES
Cumene	10.00	9.35	9.31	94	93	80-133	1	25	YES
Bromobenzene	10.00	9.73	9.62	97	96	74-118	1	25	YES
1,1,2,2-Tetrachloroethane	10.00	9.37	9.71	94	97	72-133	4	25	YES
1,2,3-Trichloropropane	10.00	9.91	9.79	99	98	71-127	1	25	YES
n-Propylbenzene	10.00	9.33	9.16	93	92	73-120	2	25	YES
2-Chlorotoluene	10.00	9.45	9.49	94	95	74-123	0	25	YES
4-Ethyltoluene	10.00	9.67	9.54	97	95	73-130	1	25	YES
1,3,5-Trimethylbenzene	10.00	9.35	9.52	93	95	72-130	2	25	YES
Alpha Methyl Styrene	10.00	8.95	9.02	89	90	71-138	1	25	YES
tert-Butylbenzene	10.00	8.41	8.71	84	87	78-138	3	25	YES
1,2,4-Trimethylbenzene	10.00	9.42	9.47	94	95	70-138	1	25	YES
sec-Butylbenzene	10.00	8.87	8.92	89	89	79-139	1	25	YES
1,3-Dichlorobenzene	10.00	9.38	9.52	94	95	75-129	1	25	YES
1,4-Dichlorobenzene	10.00	9.36	9.34	94	93	74-123	0	25	YES
p-Isopropyltoluene	10.00	8.96	8.94	90	89	75-145	0	25	YES
Benzyl Chloride	10.00	9.03	8.47	90	85	49-163	6	25	YES
1,2-Dichlorobenzene	10.00	9.15	9.10	91	91	71-126	1	25	YES
n-Butylbenzene	10.00	8.58	8.71	86	87	72-143	1	25	YES
Hexachloroethane	10.00	9.95	9.84	100	98	59-135	1	25	YES
1,2-Dibromo-3-chloropropane	10.00	8.69	8.43	87	84	52-156	3	25	YES
1,2,4-Trichlorobenzene	10.00	7.65	7.55	76	76	45-156	1	25	YES
Hexachlorobutadiene	10.00	7.76	7.59	78	76	49-154	2	25	YES
Naphthalene	10.00	7.06	6.90	71	69	39-152	2	25	YES

COMMENTS:

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Data File: /chem/HP22820.i/18jun04.b/ef00030.d

Date : 04-JUN-2018 09:51

Client ID: 50NGBFB

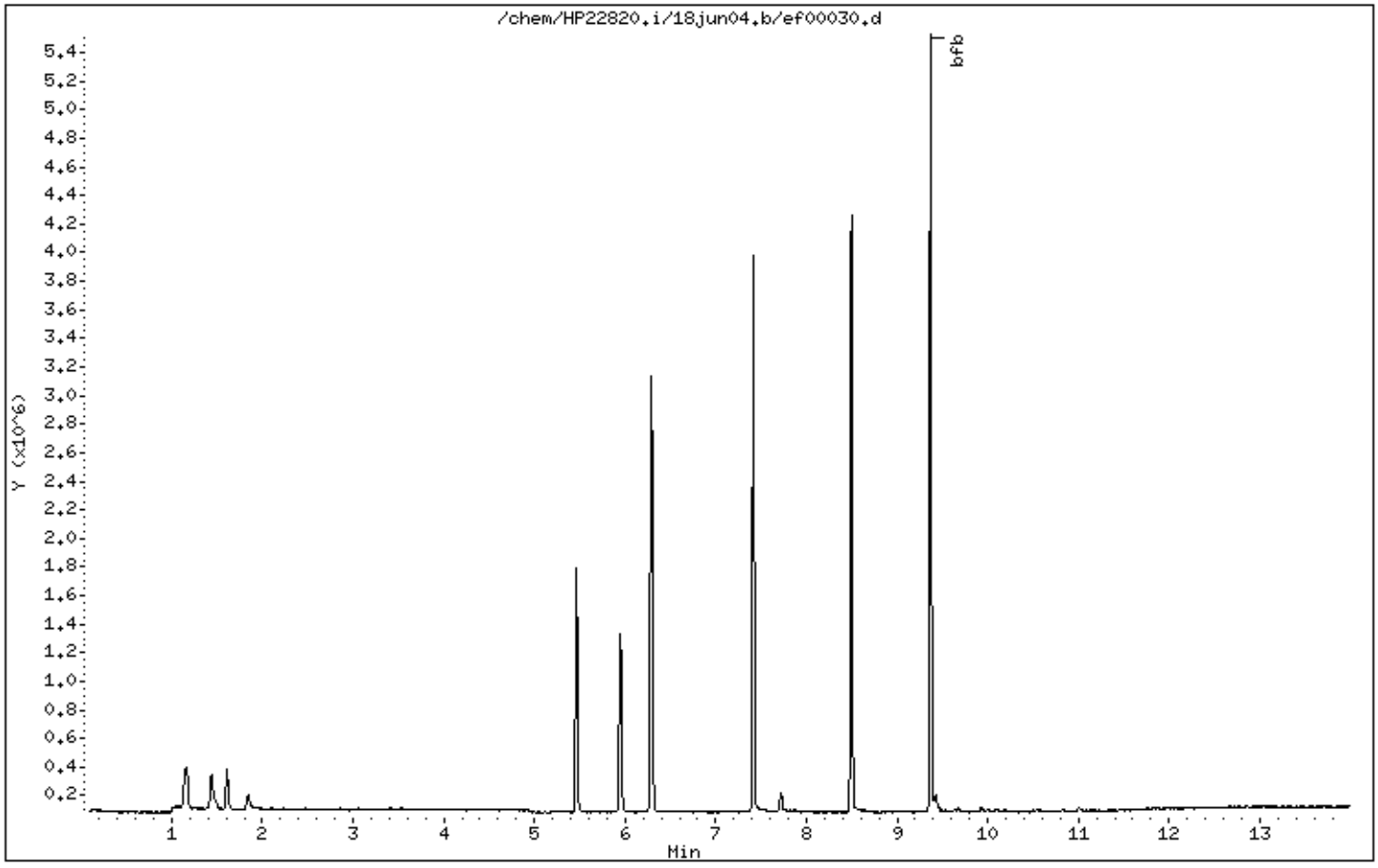
Instrument: HP22820.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25



Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:08.
Target 3.5 esignature user ID: jeb07445

Data File: /chem/HP22820.i/18jun04.b/ef00030.d

Date : 04-JUN-2018 09:51

Client ID: 50NGBFB

Instrument: HP22820.i

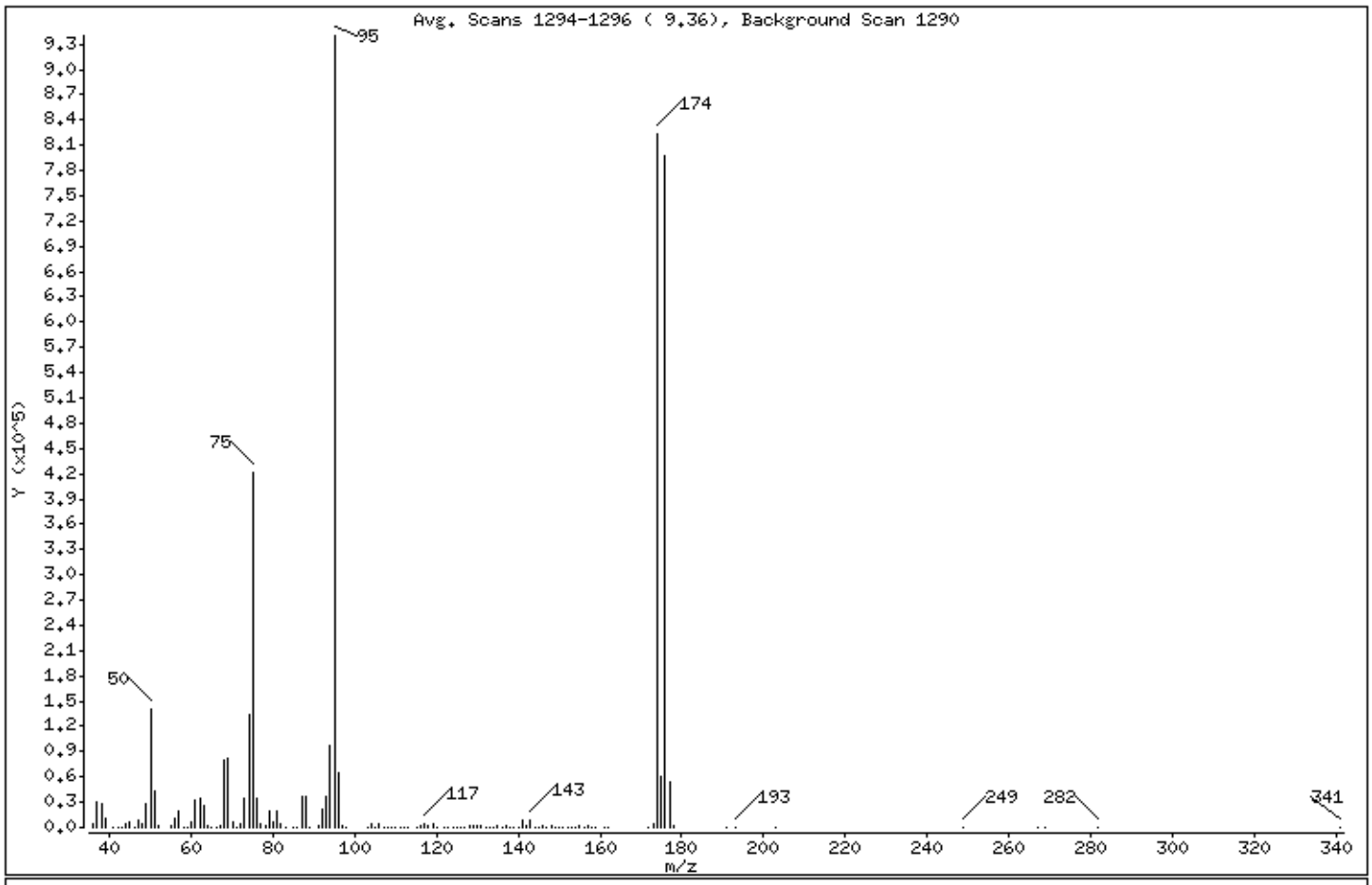
Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	15.05
75	30.00 - 66.00% of mass 95	44.91
96	5.00 - 9.00% of mass 95	6.89
173	Less than 2.00% of mass 174	0.50 (0.57)
174	50.00 - 120.00% of mass 95	87.65
175	4.00 - 9.00% of mass 174	6.41 (7.31)
176	93.00 - 101.00% of mass 174	84.73 (96.67)
177	5.00 - 9.00% of mass 176	5.80 (6.84)

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:08.
Target 3.5 esignature user ID: jeb07445

Data File: /chem/HP22820.i/18jun04.b/ef00030.d

Date : 04-JUN-2018 09:51

Client ID: 50NGBFB

Instrument: HP22820.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

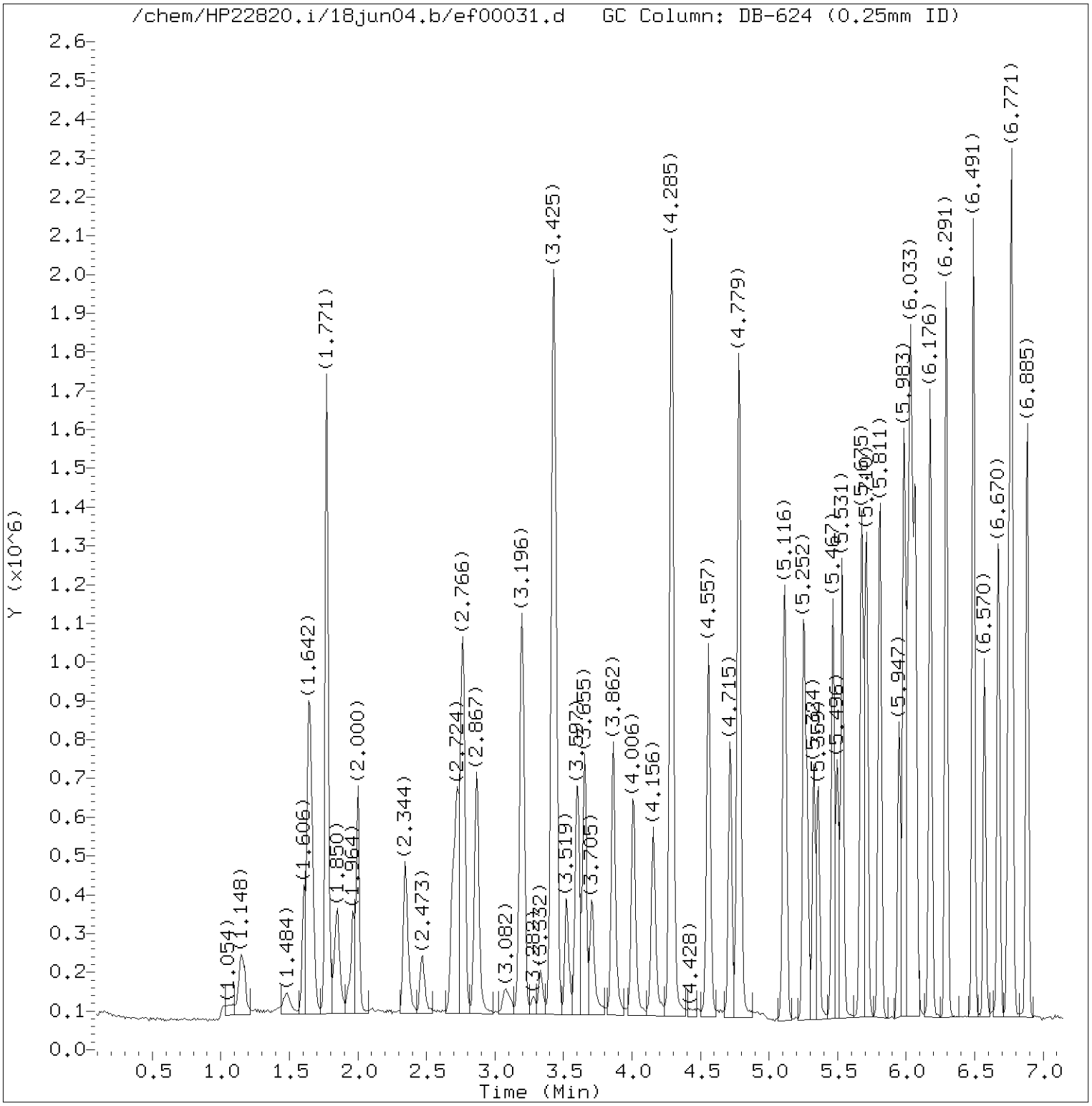
Column phase: DB-624

Column diameter: 0.25

Data File: ef00030.d
Spectrum: Avg. Scans 1294-1296 (9.36), Background Scan 1290
Location of Maximum: 95.00
Number of points: 130

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4704	72.00	3630	111.00	611	146.00	1185
37.00	29752	73.00	34592	112.00	439	147.00	658
38.00	27488	74.00	134976	113.00	536	148.00	1712
39.00	11202	75.00	422208	115.00	900	149.00	823
41.00	249	76.00	35032	116.00	2885	150.00	713
42.00	195	77.00	4133	117.00	4172	151.00	95
43.00	833	78.00	3039	118.00	2903	152.00	412
44.00	3552	79.00	20016	119.00	4005	153.00	760
45.00	5930	80.00	5499	120.00	324	154.00	529
46.00	266	81.00	20512	122.00	276	155.00	2594
47.00	8337	82.00	4059	123.00	298	156.00	351
48.00	3674	83.00	287	124.00	548	157.00	1741
49.00	28504	85.00	14	125.00	441	158.00	164
50.00	141440	86.00	931	126.00	228	159.00	948
51.00	43648	87.00	36568	127.00	328	161.00	856
52.00	1562	88.00	35904	128.00	2851	162.00	55
55.00	1668	89.00	7	129.00	1442	172.00	396
56.00	10220	91.00	2592	130.00	3165	173.00	4727
57.00	20200	92.00	22000	131.00	1439	174.00	823936
58.00	972	93.00	36152	132.00	264	175.00	60224
59.00	66	94.00	98264	133.00	1	176.00	796480
60.00	6557	95.00	940032	134.00	345	177.00	54512
61.00	33144	96.00	64768	135.00	1400	178.00	1591
62.00	34096	97.00	1837	136.00	304	191.00	77
63.00	26144	98.00	277	137.00	1337	193.00	183
64.00	2412	103.00	285	138.00	166	203.00	53
65.00	197	104.00	3554	139.00	268	249.00	65
66.00	82	105.00	747	140.00	639	267.00	51
67.00	1758	106.00	3590	141.00	7904	269.00	74
68.00	80904	107.00	876	142.00	1099	282.00	80
69.00	82968	108.00	223	143.00	8308	341.00	100
70.00	6064	109.00	50	144.00	663		
71.00	80	110.00	345	145.00	787		

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:08.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

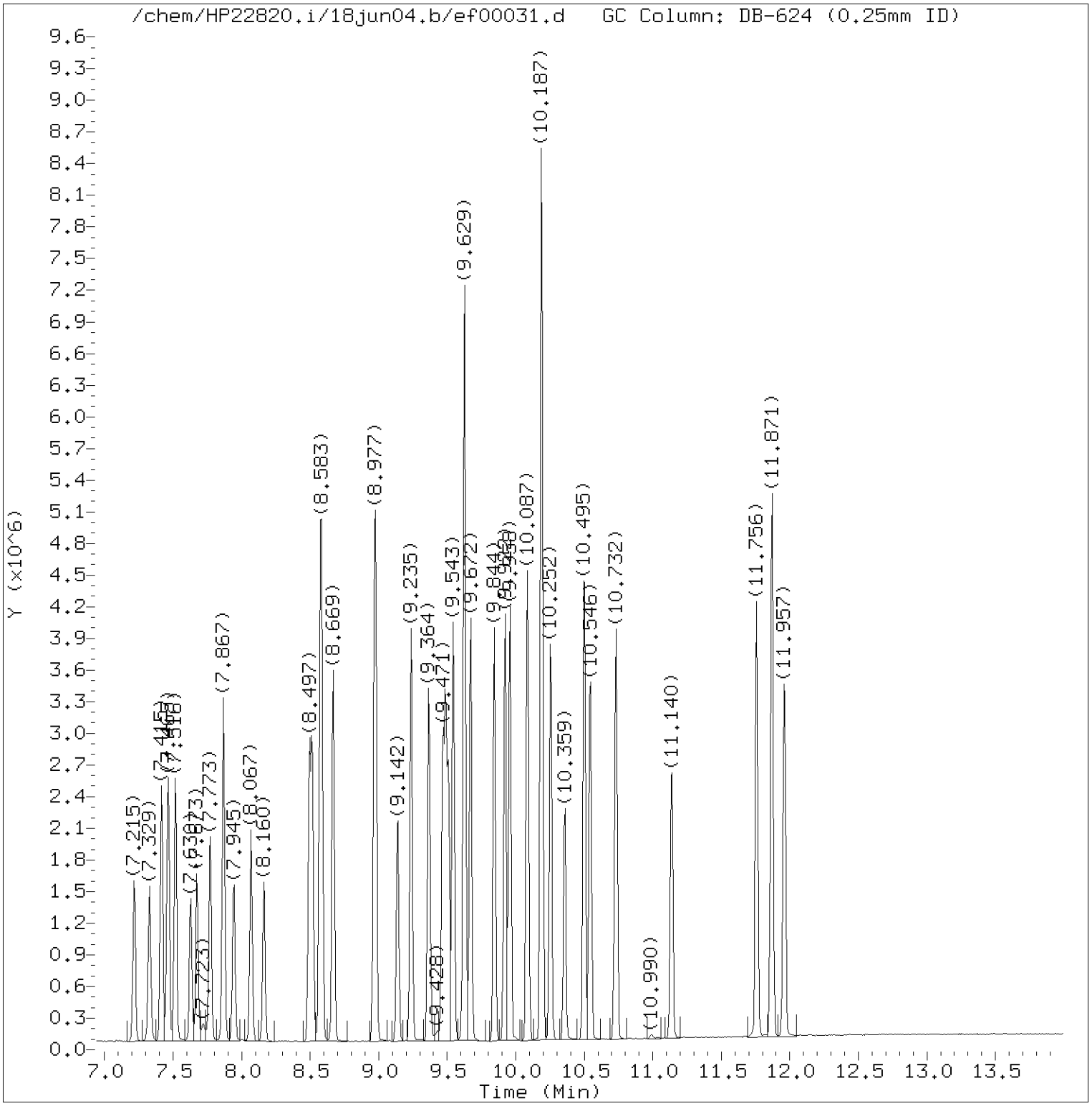
Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00031.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 10:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:25 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:25.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00031.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 10:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:25 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:25.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00031.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 10:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:25 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.606	41	215975	10.130
2) Dichlorodifluoromethane	(1)	1.642	85	865728	10.476
3) Chlorodifluoromethane	(1)	1.663	51	452151	10.326
4) Freon 114	(1)	1.771	85	881391	10.423
5) Chloromethane	(1)	1.850	50	253681	10.149
6) Vinyl Chloride	(1)	1.964	62	321870	10.492
7) 1,3-Butadiene	(1)	2.000	54	235404	10.575
8) Bromomethane	(1)	2.344	94	351796	11.150
9) Chloroethane	(1)	2.473	64	183645	10.591
10) Bromoethene	(1)	2.688	106	344068	10.265
11) Dichlorofluoromethane	(1)	2.724	67	704579	10.536
12) Trichlorofluoromethane	(1)	2.766	101	905168	10.334
13) Pentane	(1)	2.867	43	490139	10.421
14) Ethanol	(1)	3.074	45	109210	10.796
15) Freon123a	(1)	3.196	67	664342	11.427
16) Acrolein	(1)	3.332	56	123901	10.343
17) 1,1-Dichloroethene	(1)	3.418	61	510555	10.500
18) Freon 113	(1)	3.433	103	498755	10.171
19) Acetone	(1)	3.519	43	421468	10.427
20) Methyl Iodide	(1)	3.597	142	873734	9.292
21) Carbon Disulfide	(1)	3.655	76	962668	10.571
22) Isopropanol	(1)	3.705	45	433292	10.395
24) 3-Chloropropene	(1)	3.862	76	166223	11.650
23) Acetonitrile	(1)	3.870	40	160021	8.154
25) Methylene Chloride	(1)	4.006	84	320347	11.569
26) tert-Butyl Alcohol	(1)	4.156	59	641541	11.385
28) trans-1,2-Dichloroethene	(1)	4.285	61	463605	10.542
27) Acrylonitrile	(1)	4.292	53	263779	10.706
29) Methyl t-Butyl Ether	(1)	4.292	73	978492	10.427
30) Hexane	(1)	4.557	57	504943	10.456
31) 1,1-Dichloroethane	(1)	4.715	63	596943	10.418
32) Vinyl Acetate	(1)	4.779	86	96264	11.490
33) Di-Isopropyl Ether	(1)	4.779	45	998532	10.462
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	942903	10.353
35) cis-1,2-Dichloroethene	(1)	5.252	61	449414	10.586
37) 2-Butanone	(1)	5.281	72	185255	10.484
38) Ethyl Acetate	(1)	5.331	70	86513	9.922
39) Methyl Acrylate	(1)	5.359	55	558755	10.430

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Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00031.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 10:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:25 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	343847	10.000
41) Tetrahydrofuran	(1)	5.496	42	324312	10.363
42) Chloroform	(1)	5.531	83	754120	10.491
43) 1,1,1-Trichloroethane	(1)	5.675	97	744521	10.226
44) Cyclohexane	(1)	5.710	56	518100	10.346
45) Carbon Tetrachloride	(1)	5.811	117	722893	10.113
46) Benzene	(2)	5.983	78	1152038	10.195
47) 1,2-Dichloroethane	(2)	6.011	62	465607	10.137
48) Isooctane	(2)	6.033	57	1620697	10.362
49) Tert-Amyl Methyl Ether	(2)	6.069	73	960507	10.191
50) Heptane	(2)	6.176	43	538936	10.082
51)*1,4-Difluorobenzene	(2)	6.291	114	1313938	10.000
52) Trichloroethene	(2)	6.491	130	563400	10.036
53) Ethyl Acrylate	(2)	6.570	55	729110	10.195
36) 1,2-Dichloroethene (total)	(1)		61	913019	21.128
54) 1,2-Dichloropropane	(2)	6.670	63	393621	9.951
57) Methyl Methacrylate	(2)	6.749	69	400495	10.125
56) 1,4-Dioxane	(2)	6.771	88	287771	10.018
55) Dibromomethane	(2)	6.771	174	549410	10.113
58) Bromodichloromethane	(2)	6.885	83	773231	9.985
59) cis-1,3-Dichloropropene	(2)	7.215	75	696111	10.196
60) 4-Methyl-2-Pentanone	(2)	7.329	43	762830	10.259
61) Toluene	(3)	7.465	91	1487198	10.286
62) Octane	(3)	7.516	43	751888	9.998
63) trans-1,3-Dichloropropene	(3)	7.630	75	595446	10.445
65) Ethyl Methacrylate	(3)	7.673	69	668218	10.329
66) 1,1,2-Trichloroethane	(3)	7.773	97	515284	10.087
67) Tetrachloroethene	(3)	7.867	166	806397	9.967
68) 2-Hexanone	(3)	7.945	43	749701	10.364
69) Dibromochloromethane	(3)	8.067	127	647764	10.053
70) 1,2-Dibromoethane	(3)	8.160	107	815611	10.260
71)*Chlorobenzene-d5	(3)	8.497	117	1253254	10.000
72) Chlorobenzene	(3)	8.518	112	1250766	10.107
73) 1,1,1,2-Tetrachloroethane	(3)	8.576	131	616660	10.238
74) Ethylbenzene	(3)	8.583	91	2028398	10.489
75) m/p-Xylene	(3)	8.669	91	1657385	10.557
76) o-Xylene	(3)	8.970	91	1619652	10.437
78) Styrene	(3)	8.977	104	1230976	10.470

* = Compound is an internal standard.

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on 06/04/2018 at 16:25.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00031.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 10:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:25 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	849956	10.253
80) Cumene	(3)	9.235	105	2220462	10.035
82) 1,1,2,2-Tetrachloroethane	(3)	9.464	83	1121635	10.306
81) Bromobenzene	(3)	9.493	156	801244	10.190
83) 1,2,3-Trichloropropane	(3)	9.507	110	355010	10.212
84) n-Propylbenzene	(3)	9.543	120	651835	10.249
85) 2-Chlorotoluene	(3)	9.621	126	583126	9.961
86) 4-Ethyltoluene	(3)	9.629	105	2266796M	10.591
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	1829351M	10.270
88) Alpha Methyl Styrene	(3)	9.844	118	975879	10.445
89) tert-Butylbenzene	(3)	9.922	119	1726472M	9.292
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	1833102	10.424
91) sec-Butylbenzene	(3)	10.087	105	2664807	10.014
92) 1,3-Dichlorobenzene	(3)	10.187	146	1334571	10.212
94) p-Isopropyltoluene	(3)	10.187	119	2327195	10.220
93) 1,4-Dichlorobenzene	(3)	10.252	146	1374971	10.323
95) Benzyl Chloride	(3)	10.359	91	1348173	11.190
97) n-Butylbenzene	(3)	10.495	91	2098552	10.256
96) 1,2-Dichlorobenzene	(3)	10.546	146	1270141	10.212
98) Hexachloroethane	(3)	10.732	117	501047	10.364
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	698740	10.867
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	1112590	10.437
101) Hexachlorobutadiene	(3)	11.871	225	909631	9.978
102) Naphthalene	(3)	11.957	128	2429359	10.307
64) 1,3-Dichloropropene (total)	(3)		75	1291557	20.704
77) Xylene (total)	(3)		91	3277037	20.995

M = Compound was manually integrated.

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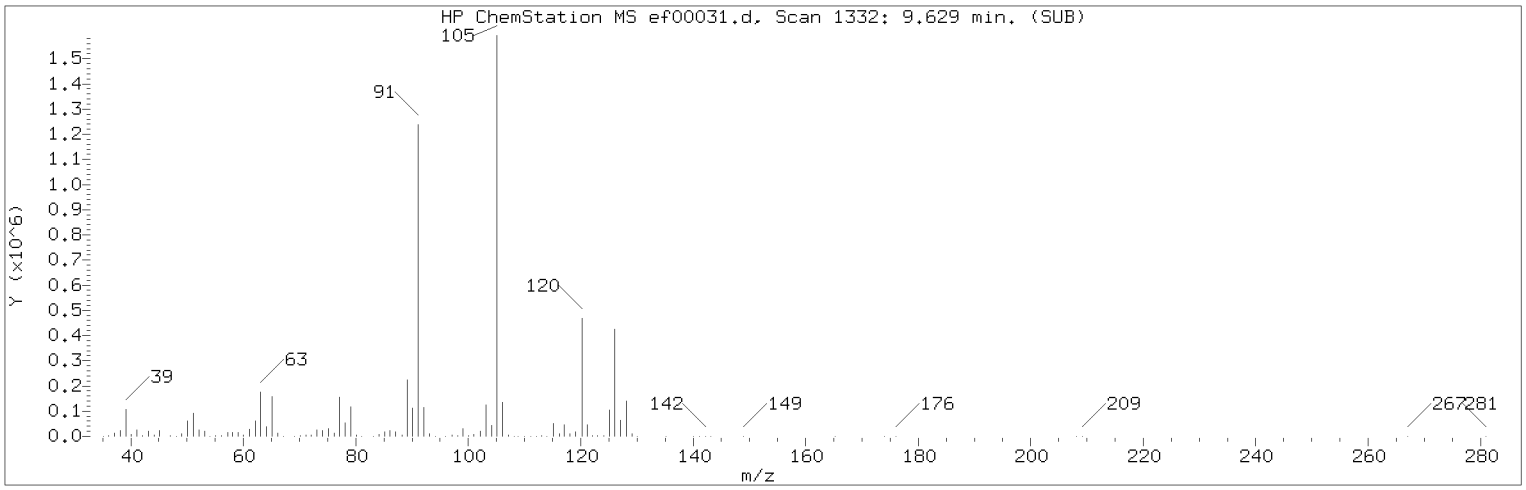
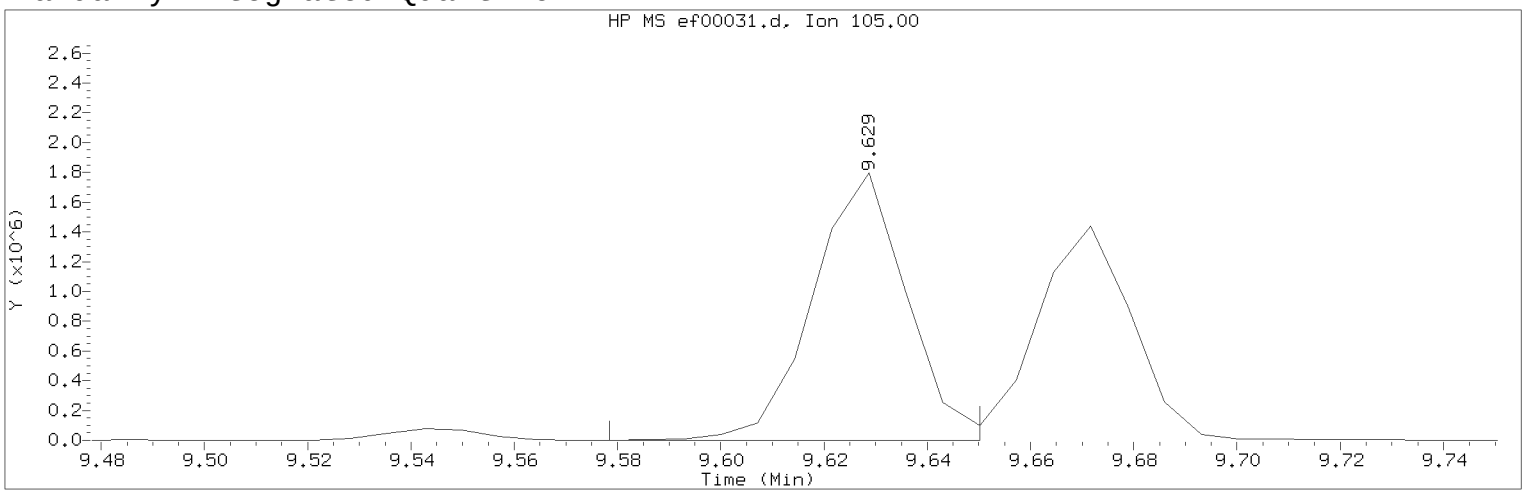
on 06/04/2018 at 16:25.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00031.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 10:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:25 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

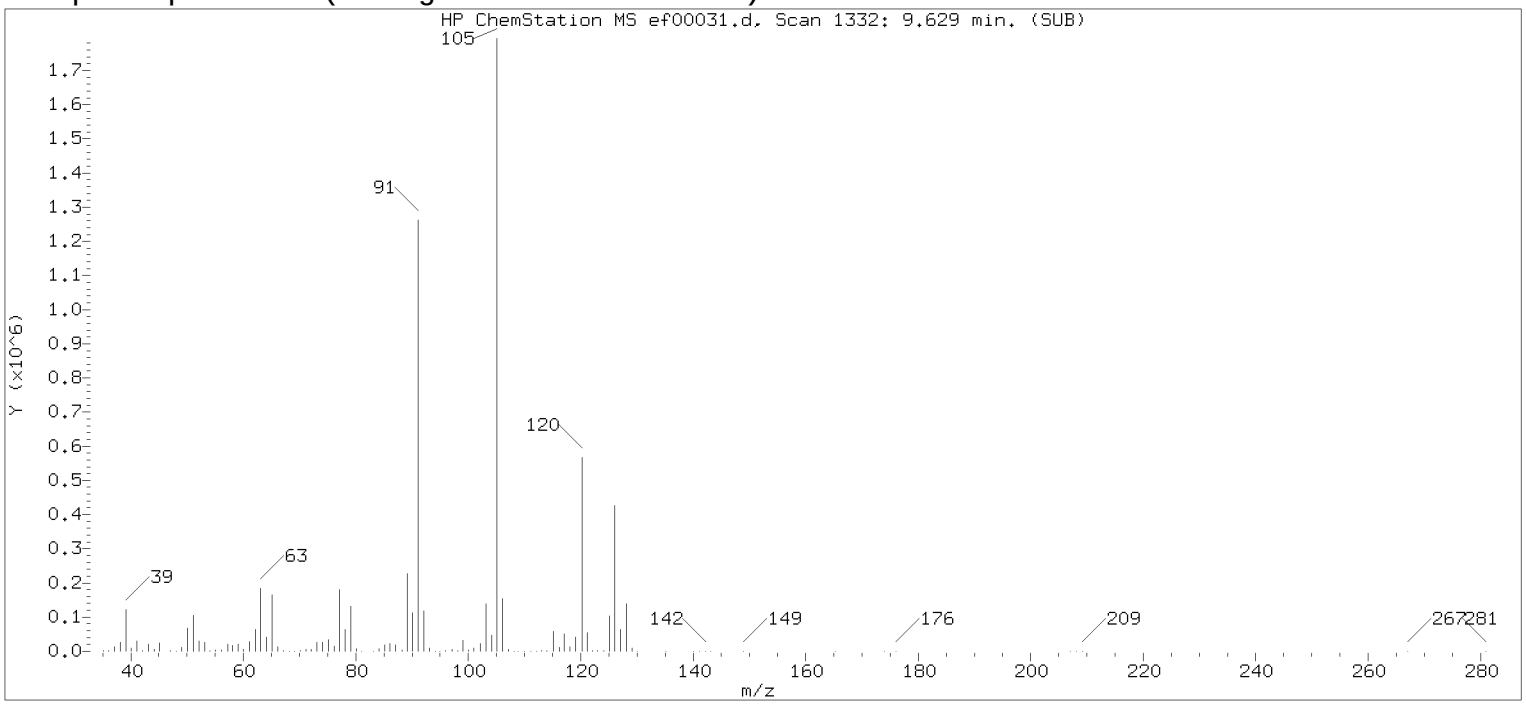
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 2266796M
Concentration (ppb(v)) : 10.5914
Integration start scan : 1324 Integration stop scan: 1334
Y at integration start : 544 Y at integration end: 544

Reason for manual integration: improper integration

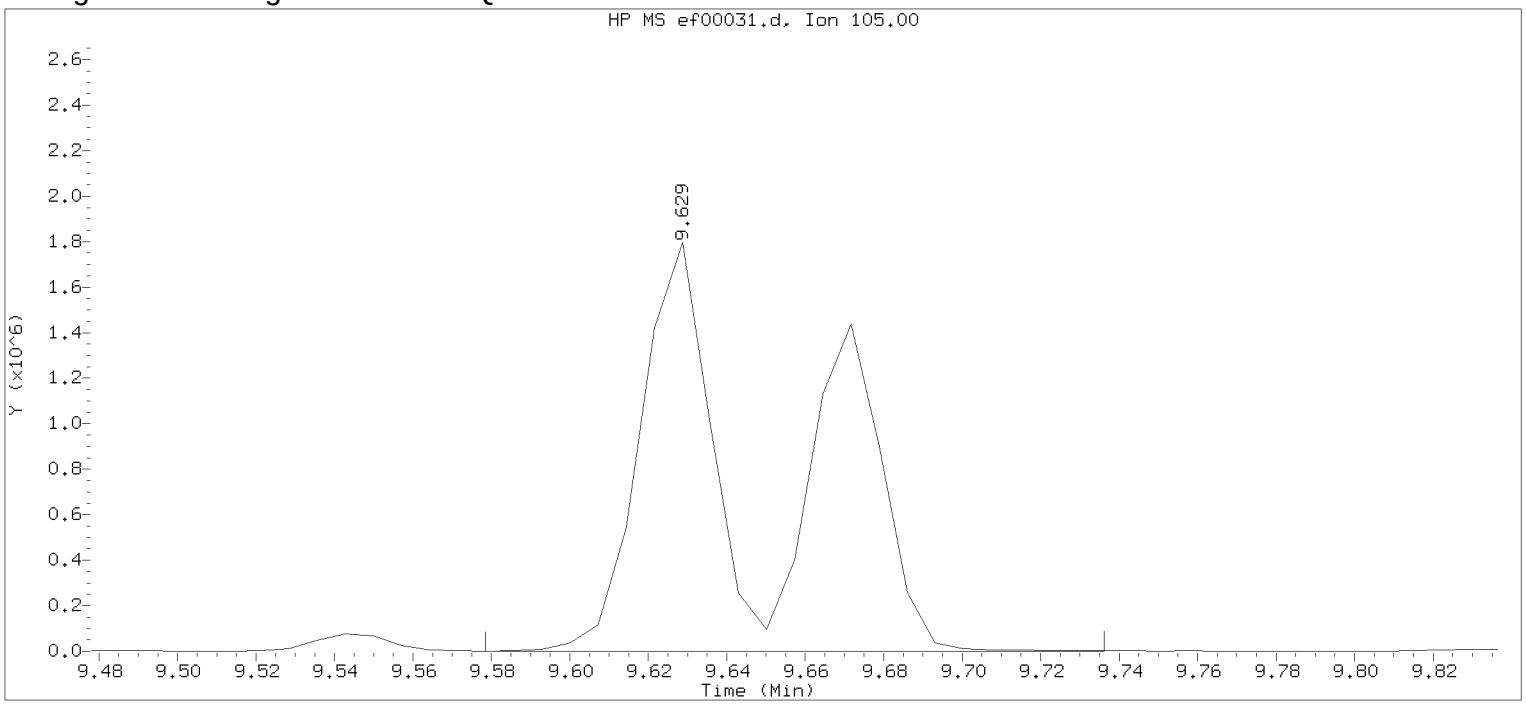
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:25.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



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Injection date and time: 04-JUN-2018 10:38 Analyst ID: jeb07445

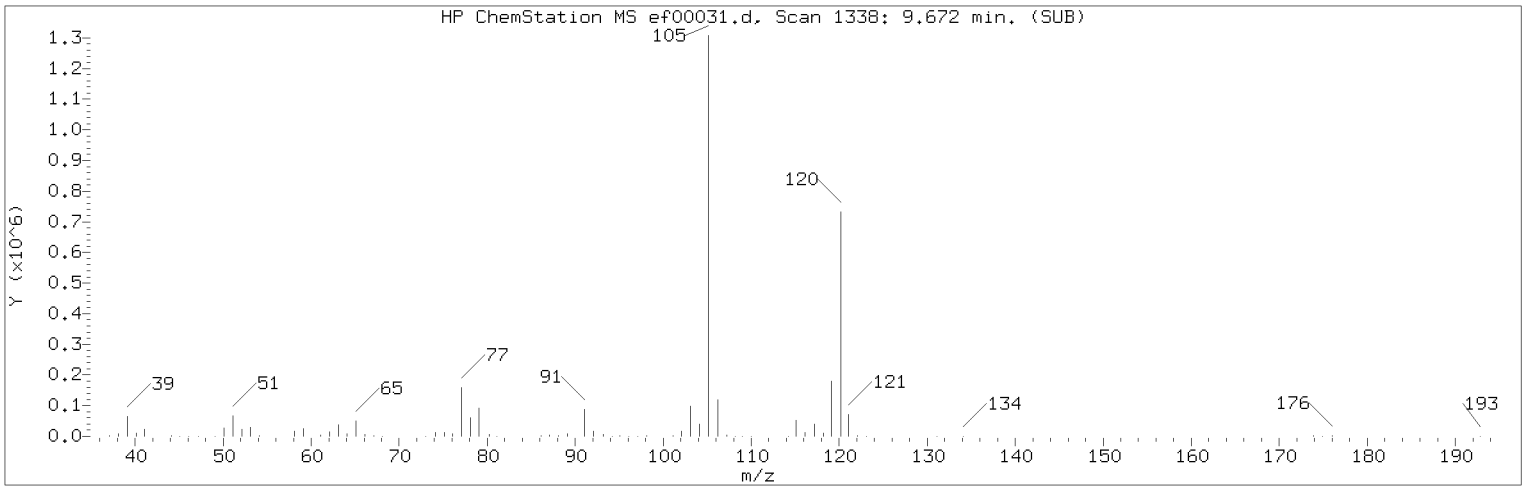
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 10:57 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

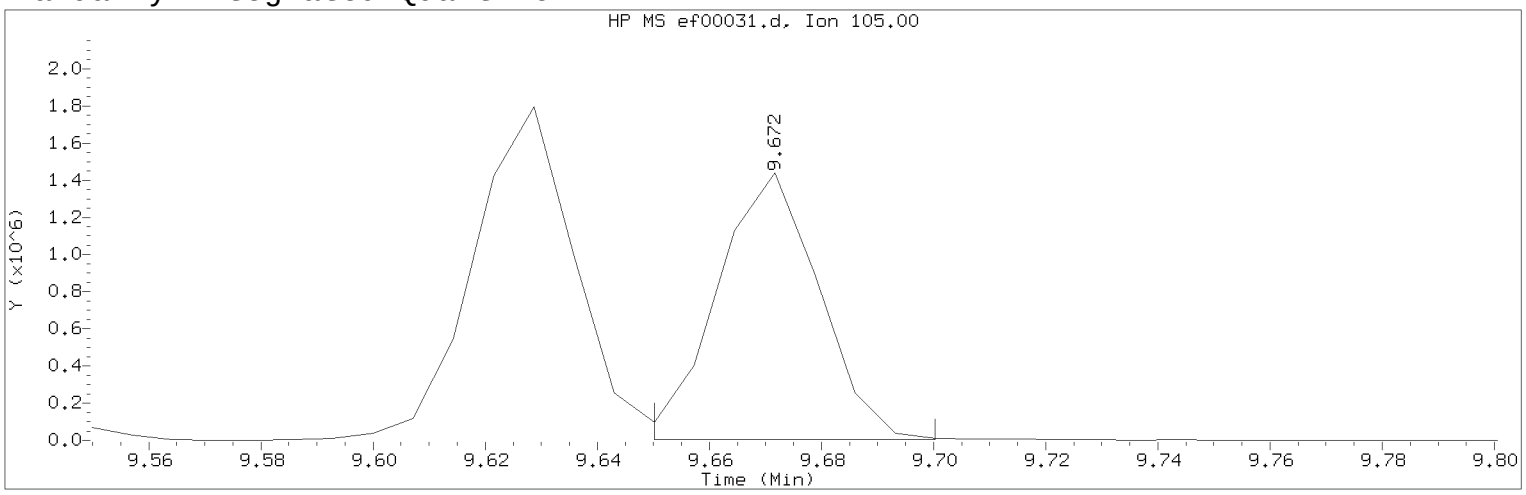
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 4067917
Concentration (ppb(v)) : 19.7260
Integration start scan : 1324 Integration stop scan: 1346
Y at integration start : 544 Y at integration end: 544

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:25.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00031.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 10:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:25 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

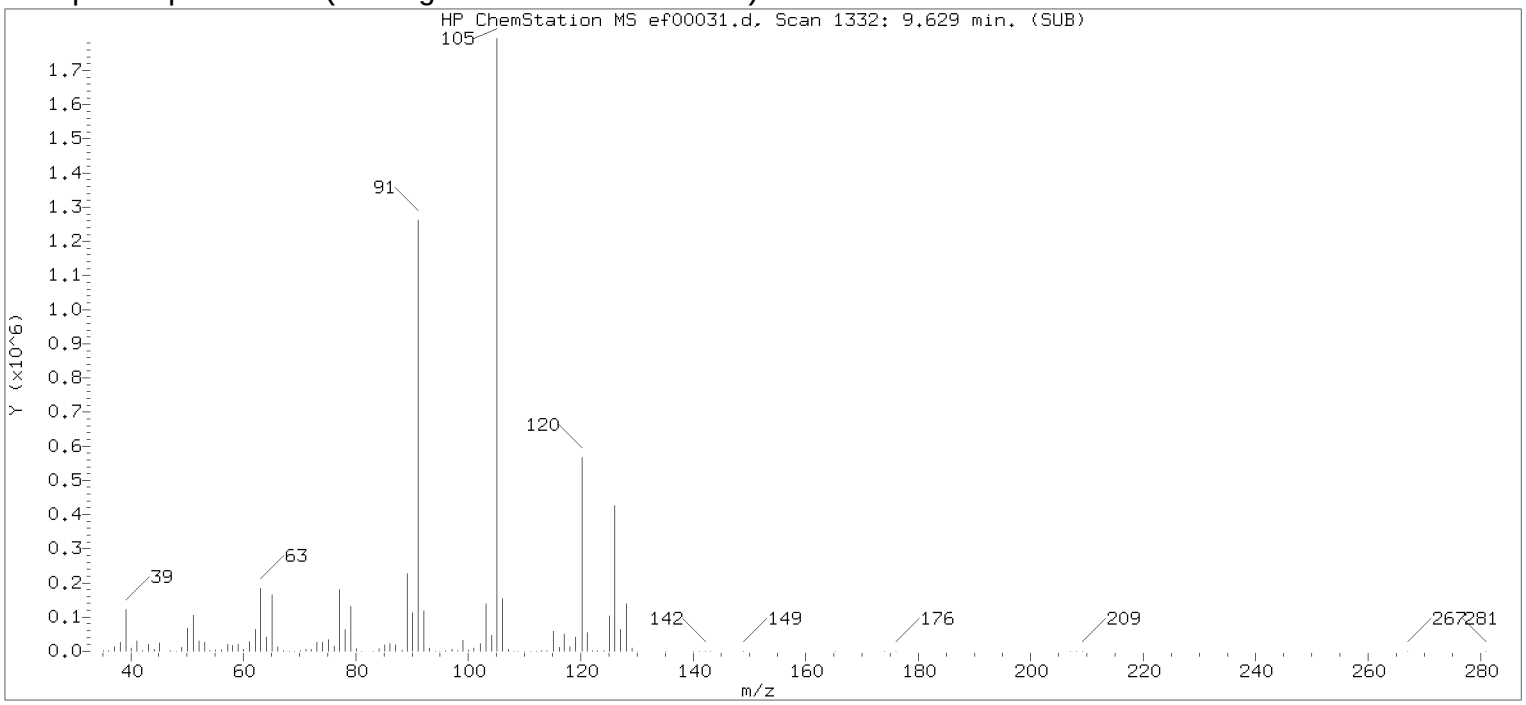
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 1829351M
Concentration (ppb(v)) : 10.2702
Integration start scan : 1334 Integration stop scan: 1341
Y at integration start : 2292 Y at integration end: 2292

Reason for manual integration: improper integration

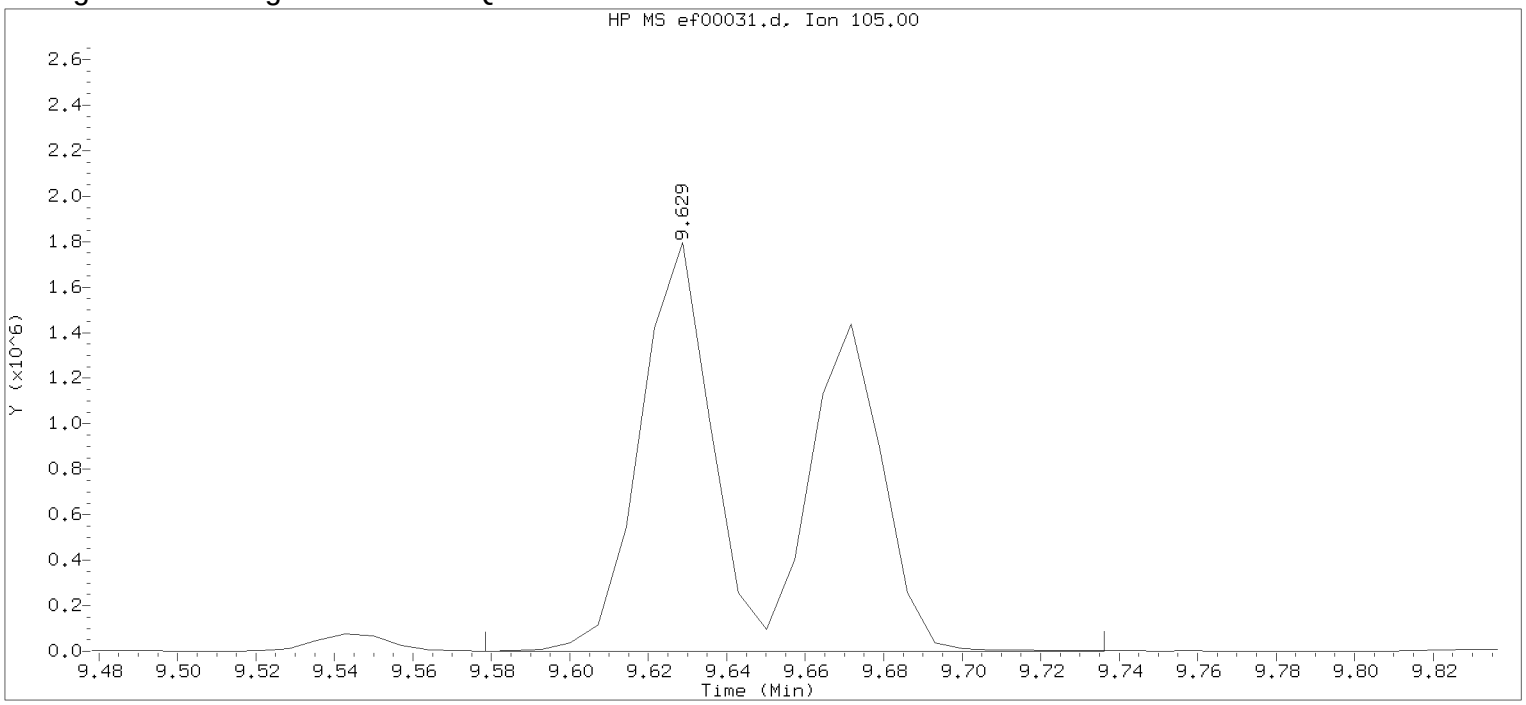
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:25.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00031.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 10:38 Analyst ID: jeb07445

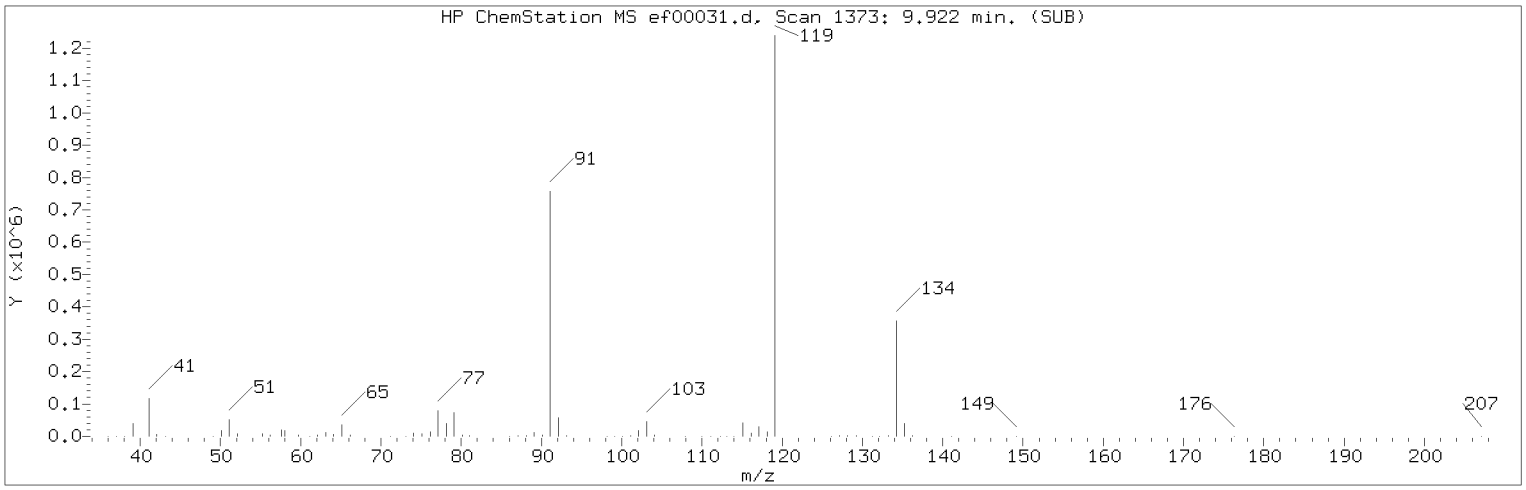
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 10:57 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

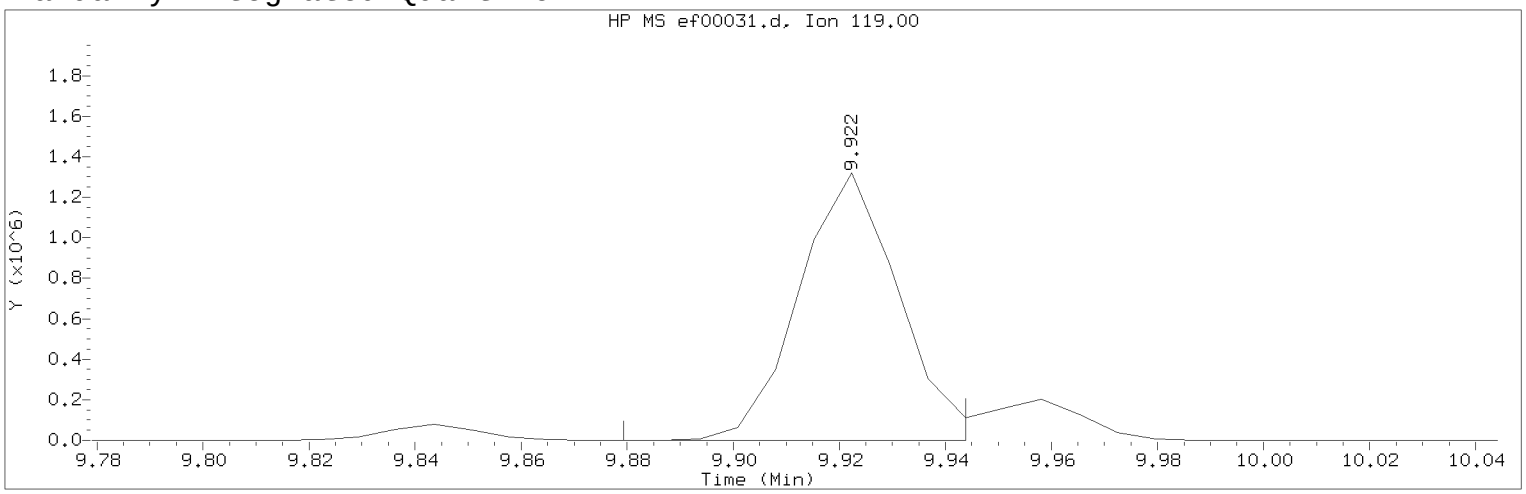
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 4065014
Concentration (ppb(v)) : 23.7426
Integration start scan : 1324 Integration stop scan: 1346
Y at integration start : 851 Y at integration end: 851

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:25.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



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Injection date and time: 04-JUN-2018 10:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:25 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

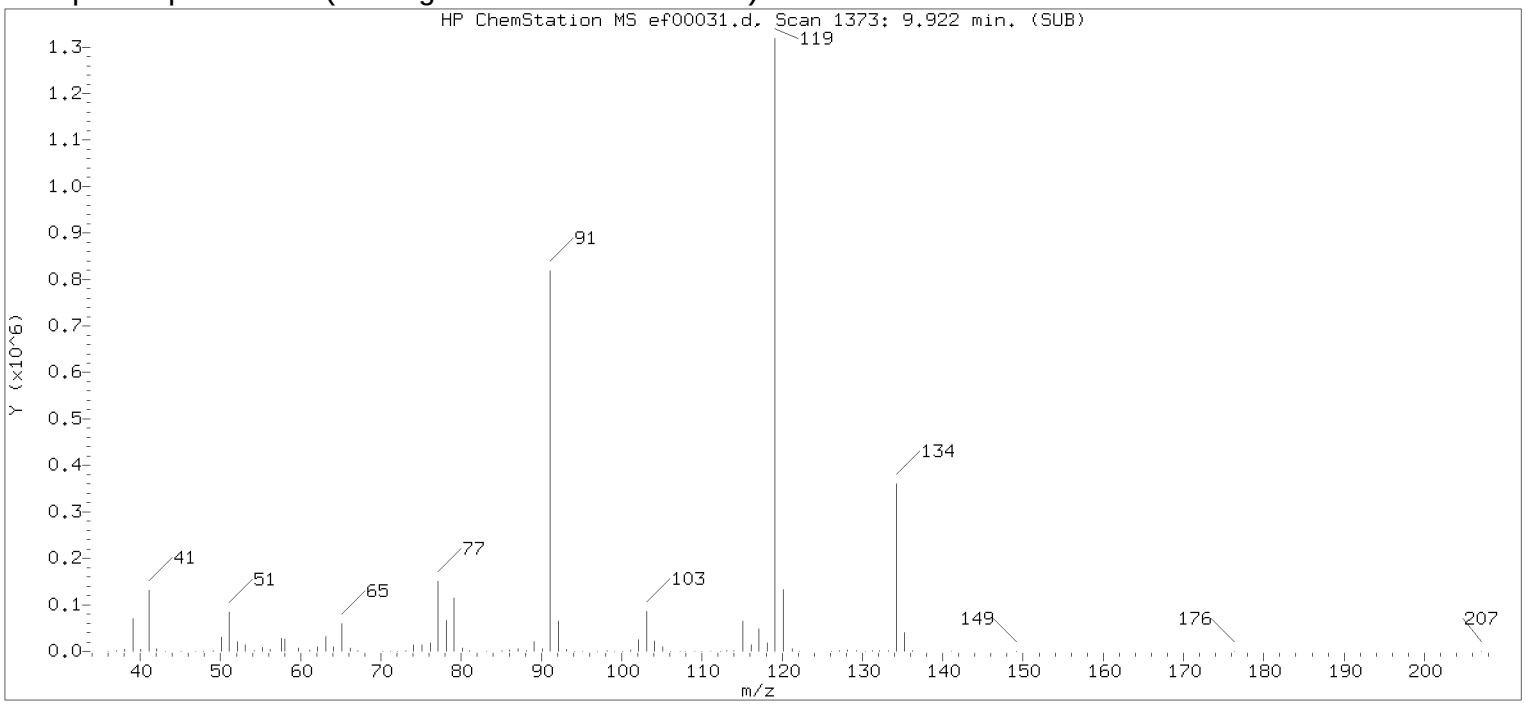
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 1726472M
Concentration (ppb(v)) : 9.2917
Integration start scan : 1366 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

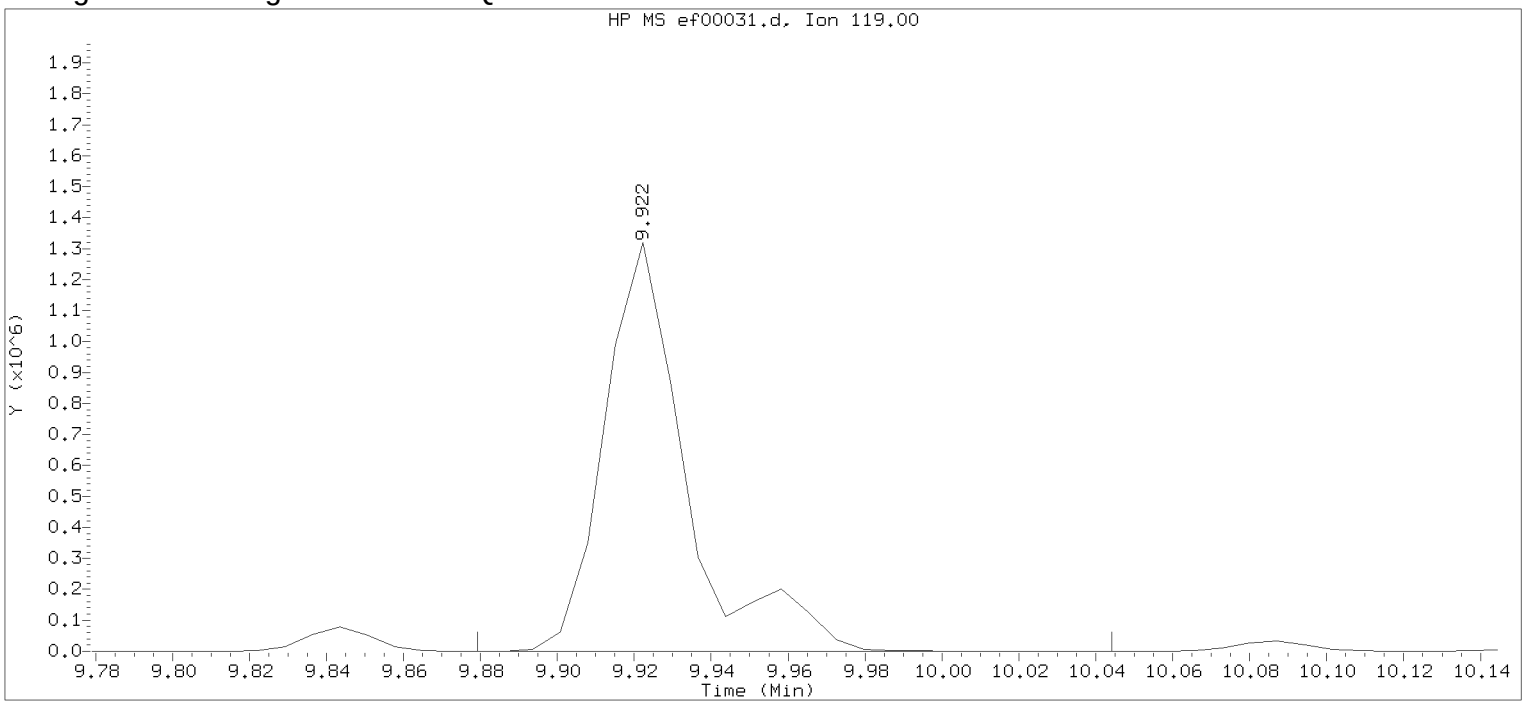
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:25.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



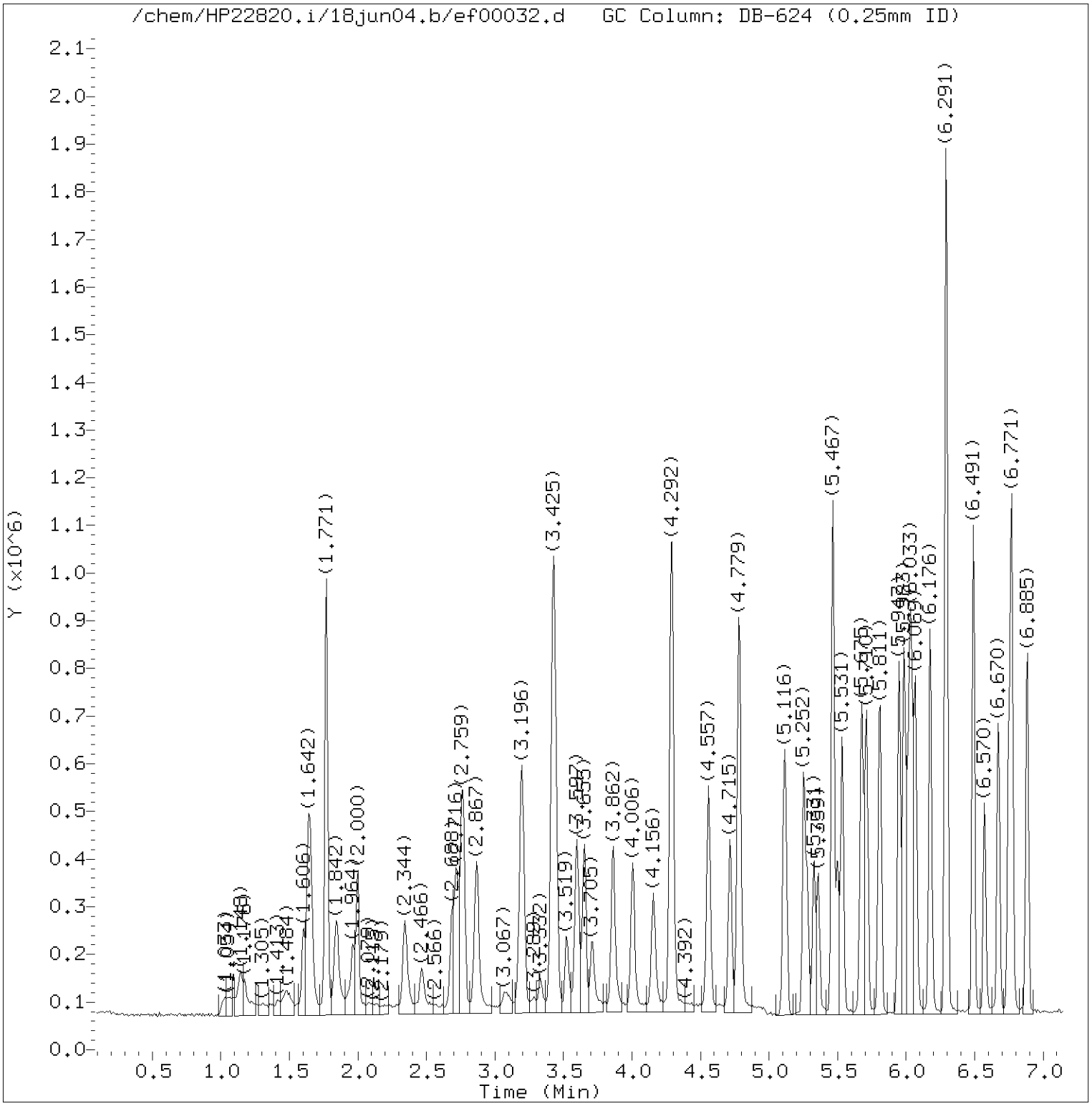
Data File: /chem/HP22820.i/18jun04.b/ef00031.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 10:38 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 10:57 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 1957915
Concentration (ppb(v)) : 12.4227
Integration start scan : 1366 Integration stop scan: 1389
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:25.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

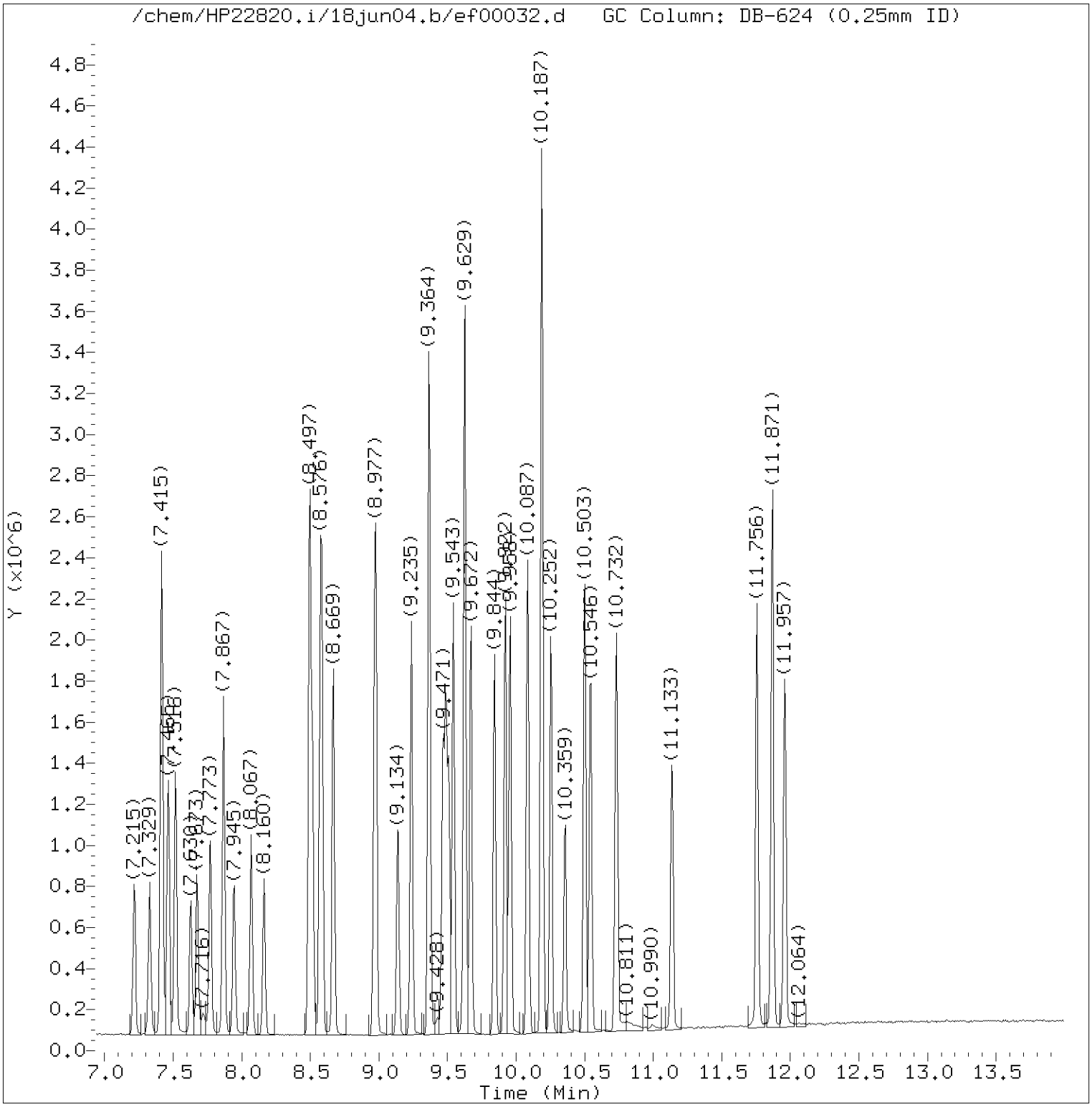
Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00032.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 14:32 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00032.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 14:32 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00032.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 14:32 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.606	41	108758	5.096
2) Dichlorodifluoromethane	(1)	1.642	85	415142	5.019
3) Chlorodifluoromethane	(1)	1.663	51	223520	5.099
4) Freon 114	(1)	1.771	85	431036	5.092
5) Chloromethane	(1)	1.842	50	126285	5.047
6) Vinyl Chloride	(1)	1.964	62	159438	5.192
7) 1,3-Butadiene	(1)	2.000	54	113241	5.082
8) Bromomethane	(1)	2.344	94	166498	5.272
9) Chloroethane	(1)	2.466	64	88775	5.115
10) Bromoethene	(1)	2.688	106	170819	5.091
11) Dichlorofluoromethane	(1)	2.723	67	343943	5.138
12) Trichlorofluoromethane	(1)	2.766	101	447116	5.100
13) Pentane	(1)	2.867	43	240283	5.104
14) Ethanol	(1)	3.074	45	51924	5.128
15) Freon123a	(1)	3.196	67	328238	5.640
16) Acrolein	(1)	3.332	56	62418	5.206
17) 1,1-Dichloroethene	(1)	3.418	61	253133	5.201
18) Freon 113	(1)	3.433	103	245379	4.999
19) Acetone	(1)	3.519	43	208395	5.150
20) Methyl Iodide	(1)	3.597	142	484186	5.144
21) Carbon Disulfide	(1)	3.655	76	471736	5.175
22) Isopropanol	(1)	3.705	45	203421M	4.875
24) 3-Chloropropene	(1)	3.862	76	82258	5.759
23) Acetonitrile	(1)	3.870	40	103536	5.271
25) Methylene Chloride	(1)	4.006	84	157435	5.680
26) tert-Butyl Alcohol	(1)	4.156	59	319573	5.666
28) trans-1,2-Dichloroethene	(1)	4.285	61	233787	5.311
27) Acrylonitrile	(1)	4.292	53	130418	5.288
29) Methyl t-Butyl Ether	(1)	4.292	73	485198	5.165
30) Hexane	(1)	4.557	57	242750	5.022
31) 1,1-Dichloroethane	(1)	4.715	63	295301	5.149
32) Vinyl Acetate	(1)	4.779	86	47447	5.658
33) Di-Isopropyl Ether	(1)	4.779	45	495855	5.190
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	468859	5.143
35) cis-1,2-Dichloroethene	(1)	5.252	61	218818	5.149
37) 2-Butanone	(1)	5.281	72	89866	5.081
38) Ethyl Acetate	(1)	5.331	70	42744	4.897
39) Methyl Acrylate	(1)	5.359	55	268117	5.000

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00032.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 14:32 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	344184	10.000
41) Tetrahydrofuran	(1)	5.503	42	160837	5.134
42) Chloroform	(1)	5.531	83	370843	5.154
43) 1,1,1-Trichloroethane	(1)	5.675	97	373359	5.123
44) Cyclohexane	(1)	5.710	56	257091	5.129
45) Carbon Tetrachloride	(1)	5.811	117	360415	5.037
46) Benzene	(2)	5.983	78	566761	5.073
47) 1,2-Dichloroethane	(2)	6.011	62	229994	5.065
48) Isooctane	(2)	6.033	57	796449	5.151
49) Tert-Amyl Methyl Ether	(2)	6.069	73	480581	5.158
50) Heptane	(2)	6.176	43	266076	5.035
51)*1,4-Difluorobenzene	(2)	6.291	114	1298937	10.000
52) Trichloroethene	(2)	6.491	130	282976	5.099
53) Ethyl Acrylate	(2)	6.570	55	357016	5.050
36) 1,2-Dichloroethene (total)	(1)		61	452605	10.460
54) 1,2-Dichloropropane	(2)	6.670	63	195633	5.003
57) Methyl Methacrylate	(2)	6.749	69	194176	4.966
55) Dibromomethane	(2)	6.771	174	271190	5.049
56) 1,4-Dioxane	(2)	6.778	88	144698	5.095
58) Bromodichloromethane	(2)	6.885	83	388079	5.069
59) cis-1,3-Dichloropropene	(2)	7.215	75	343677	5.092
60) 4-Methyl-2-Pentanone	(2)	7.329	43	372685	5.070
61) Toluene	(3)	7.465	91	745018	5.239
62) Octane	(3)	7.516	43	388829	5.257
63) trans-1,3-Dichloropropene	(3)	7.630	75	284059	5.067
65) Ethyl Methacrylate	(3)	7.673	69	328825	5.168
66) 1,1,2-Trichloroethane	(3)	7.773	97	252671	5.029
67) Tetrachloroethene	(3)	7.867	166	412344	5.182
68) 2-Hexanone	(3)	7.945	43	371877	5.227
69) Dibromochloromethane	(3)	8.067	127	316790	4.999
70) 1,2-Dibromoethane	(3)	8.160	107	402745	5.151
71)*Chlorobenzene-d5	(3)	8.497	117	1232550	10.000
72) Chlorobenzene	(3)	8.518	112	625513	5.139
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	304050	5.133
74) Ethylbenzene	(3)	8.583	91	1019716	5.362
75) m/p-Xylene	(3)	8.669	91	836116	5.415
76) o-Xylene	(3)	8.970	91	816452	5.350
78) Styrene	(3)	8.977	104	616897	5.335

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00032.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 14:32 jeb07445

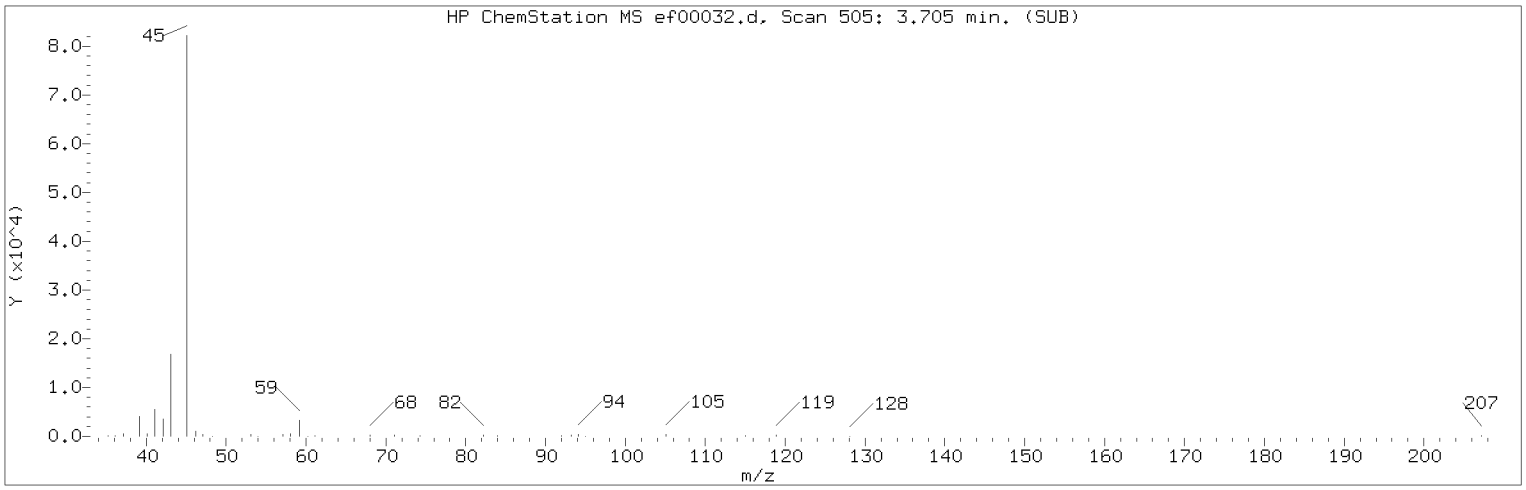
Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	405107	4.969
80) Cumene	(3)	9.235	105	1122887	5.160
82) 1,1,2,2-Tetrachloroethane	(3)	9.464	83	558887	5.222
81) Bromobenzene	(3)	9.493	156	404724	5.234
83) 1,2,3-Trichloropropane	(3)	9.507	110	179164	5.240
84) n-Propylbenzene	(3)	9.543	120	325182	5.199
85) 2-Chlorotoluene	(3)	9.621	126	294312	5.112
86) 4-Ethyltoluene	(3)	9.629	105	1142380M	5.427
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	947426M	5.408
88) Alpha Methyl Styrene	(3)	9.844	118	473377	5.152
89) tert-Butylbenzene	(3)	9.922	119	935792M	5.121
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	930307	5.379
91) sec-Butylbenzene	(3)	10.087	105	1371324	5.240
92) 1,3-Dichlorobenzene	(3)	10.187	146	674490	5.248
94) p-Isopropyltoluene	(3)	10.187	119	1163383	5.195
93) 1,4-Dichlorobenzene	(3)	10.252	146	692838	5.289
95) Benzyl Chloride	(3)	10.359	91	627502	5.296
97) n-Butylbenzene	(3)	10.503	91	1046513	5.200
96) 1,2-Dichlorobenzene	(3)	10.546	146	645467	5.277
98) Hexachloroethane	(3)	10.732	117	243859	5.129
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	342479	5.416
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	562323	5.364
101) Hexachlorobutadiene	(3)	11.871	225	461978	5.153
102) Naphthalene	(3)	11.957	128	1227703	5.296
64) 1,3-Dichloropropene (total)	(3)		75	627736	10.232
77) Xylene (total)	(3)		91	1652568	10.765

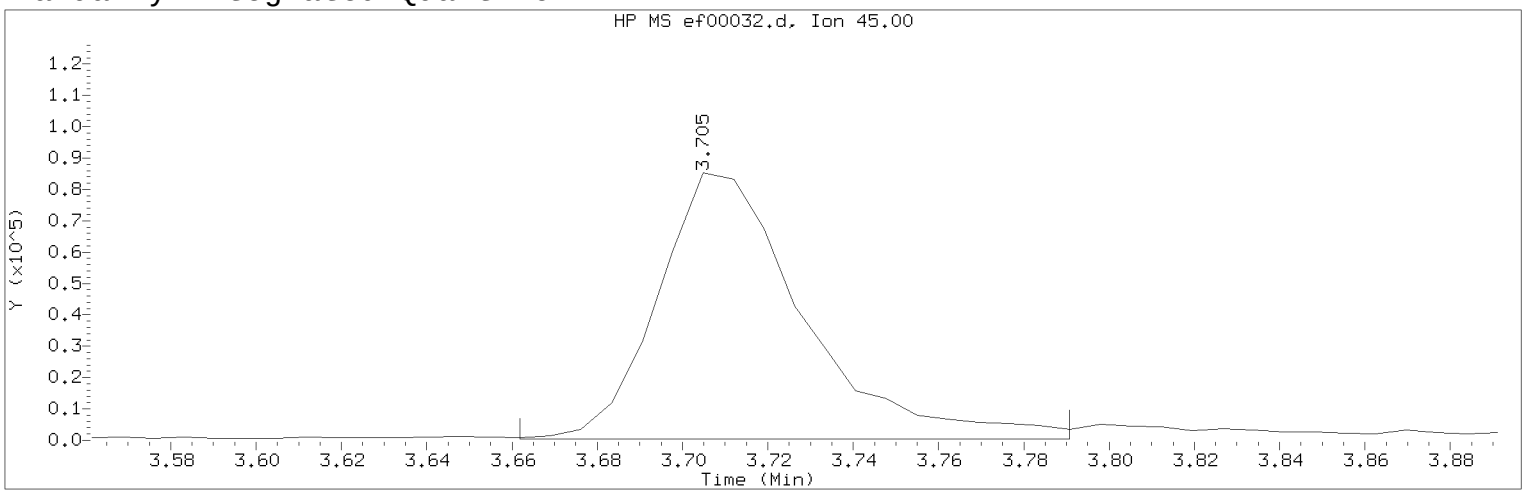
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00032.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 14:32 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

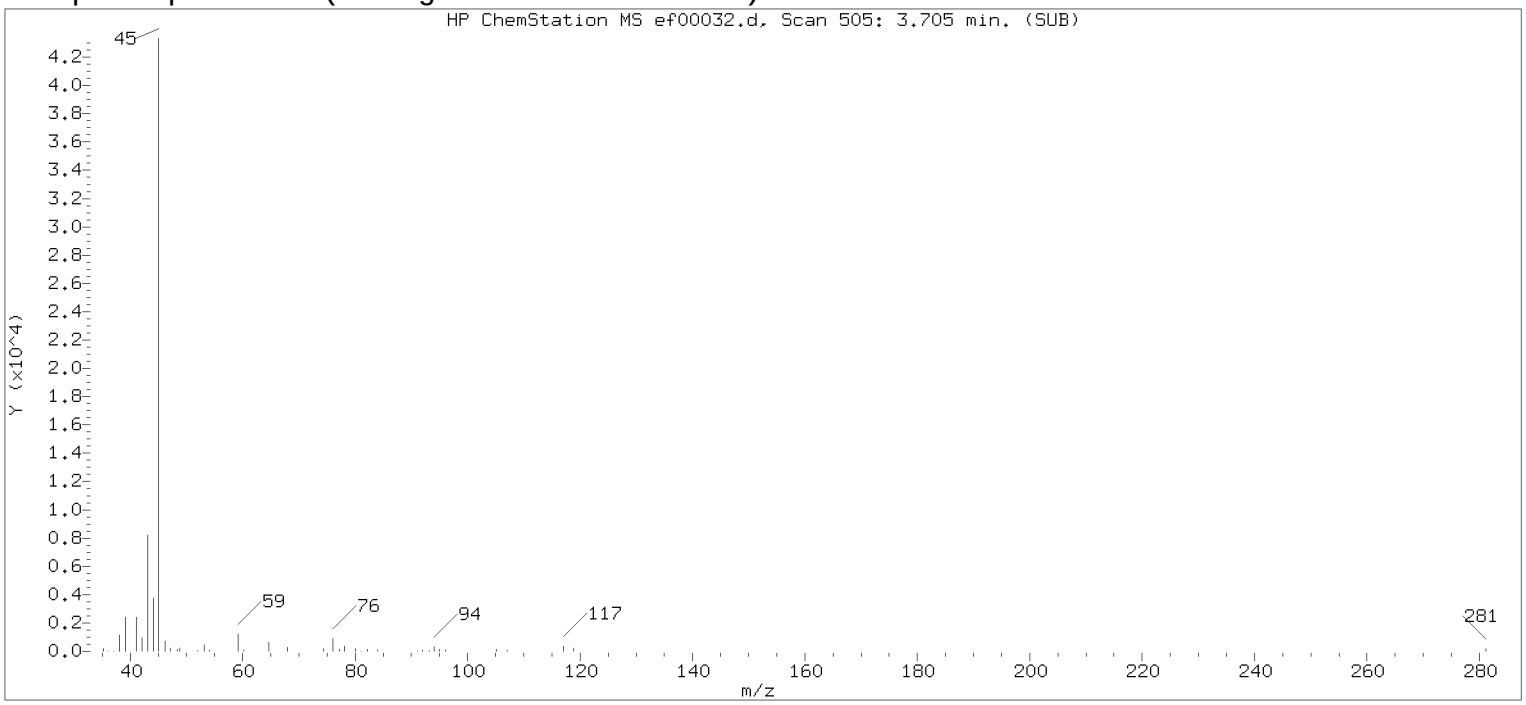
Compound Number : 22
Compound Name : Isopropanol
Scan Number : 505
Retention Time (minutes): 3.705
Quant Ion : 45.00
Area (flag) : 203421M
Concentration (ppb(v)) : 4.8753
Integration start scan : 498 Integration stop scan: 516
Y at integration start : 365 Y at integration end: 365

Reason for manual integration: improper integration

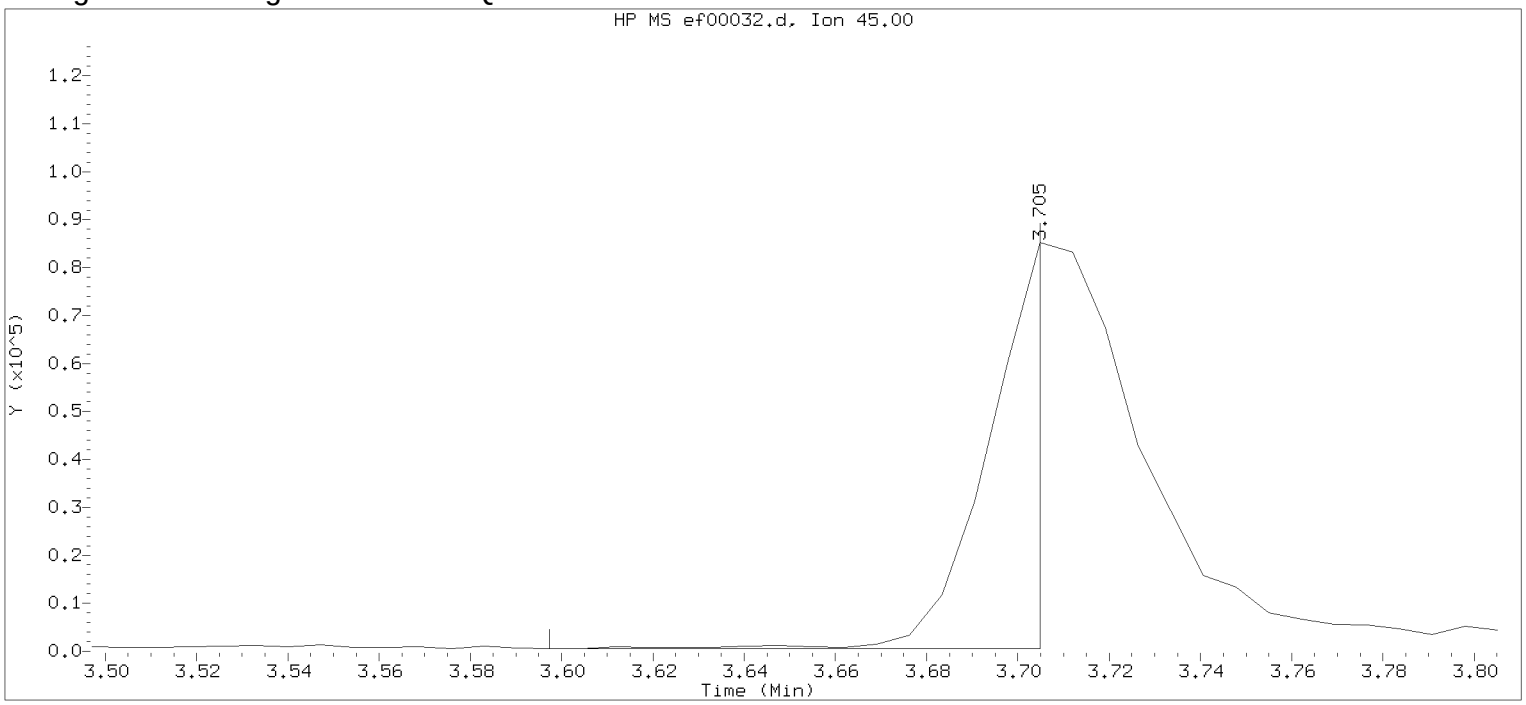
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00032.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:06 Analyst ID: jeb07445

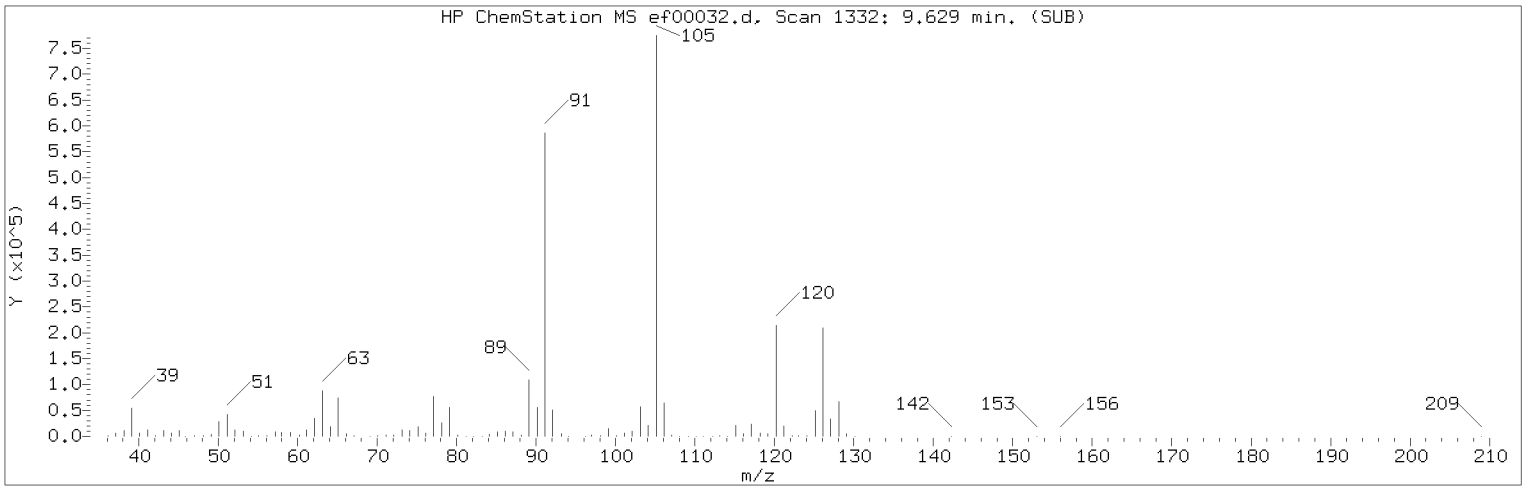
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 11:24 Unknown

Sample Name: VSTD005 Lab Sample ID: VSTD005

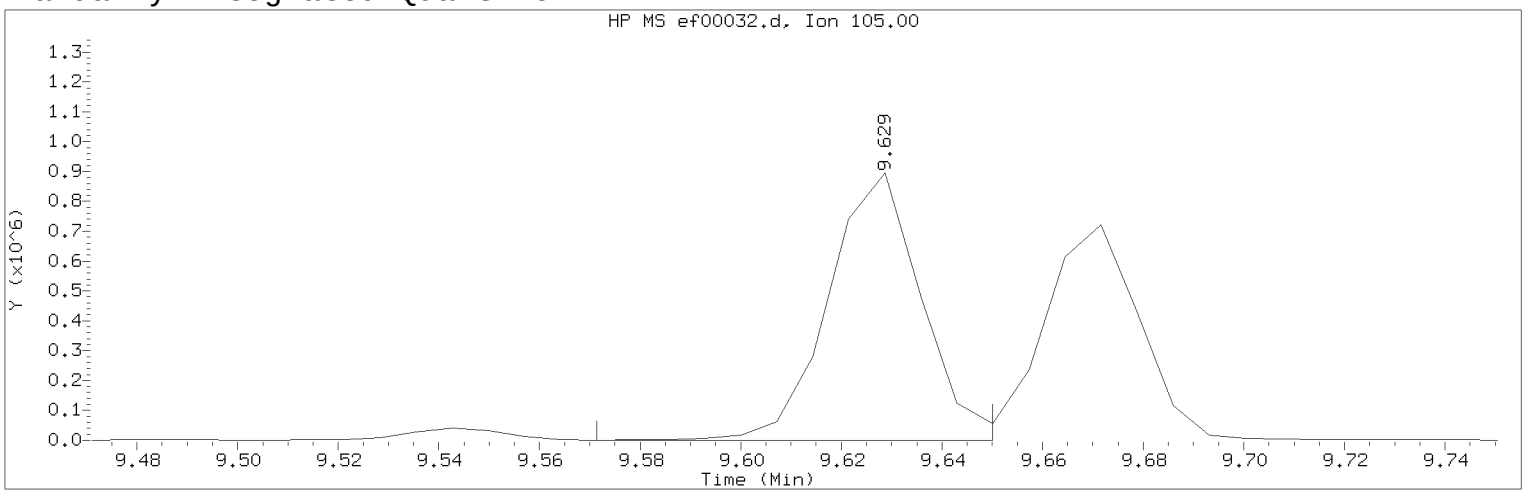
Compound Number : 22
Compound Name : Isopropanol
Scan Number : 505
Retention Time (minutes): 3.705
Quant Ion : 45.00
Area : 64847
Concentration (ppb(v)) : 1.5562
Integration start scan : 489 Integration stop scan: 504
Y at integration start : 545 Y at integration end: 545

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00032.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 14:32 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

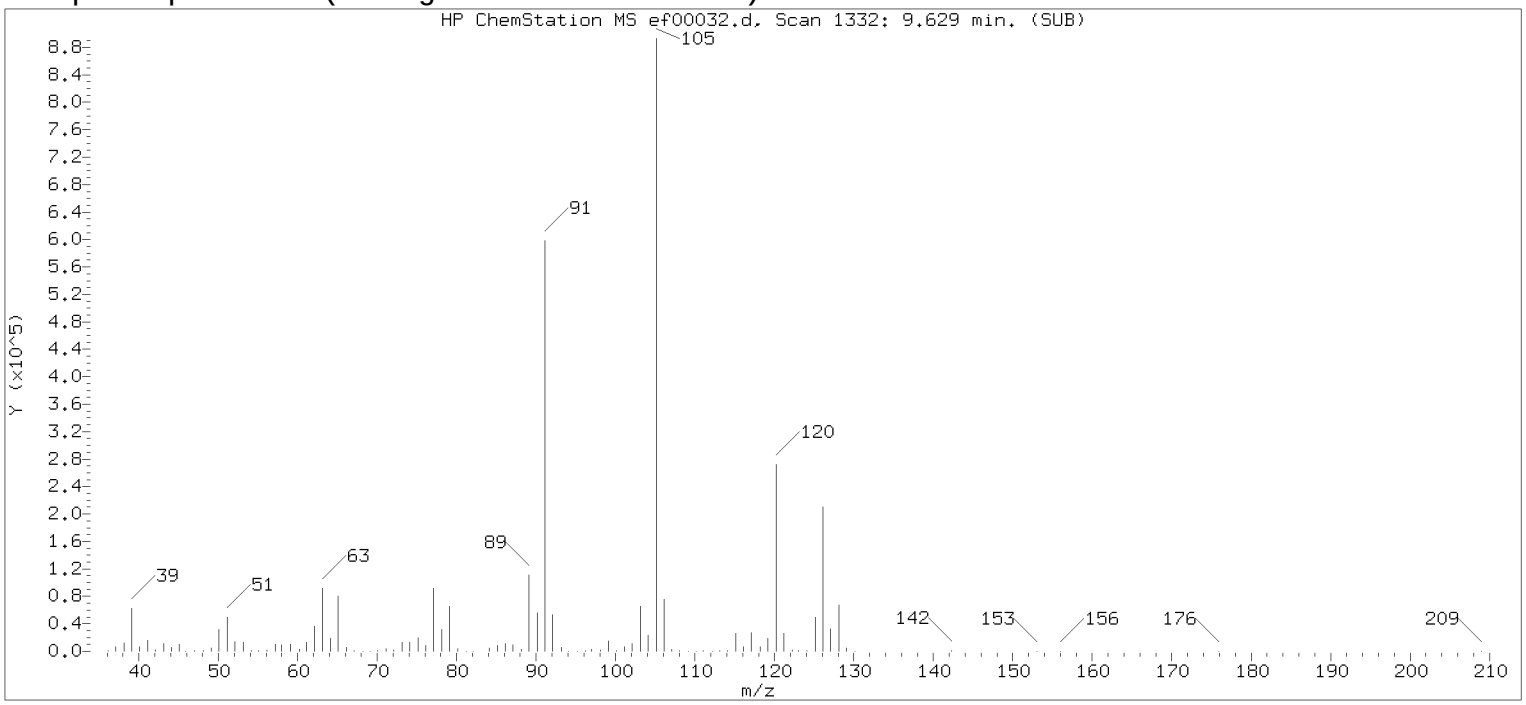
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 1142380M
Concentration (ppb(v)) : 5.4273
Integration start scan : 1323 Integration stop scan: 1334
Y at integration start : 748 Y at integration end: 748

Reason for manual integration: improper integration

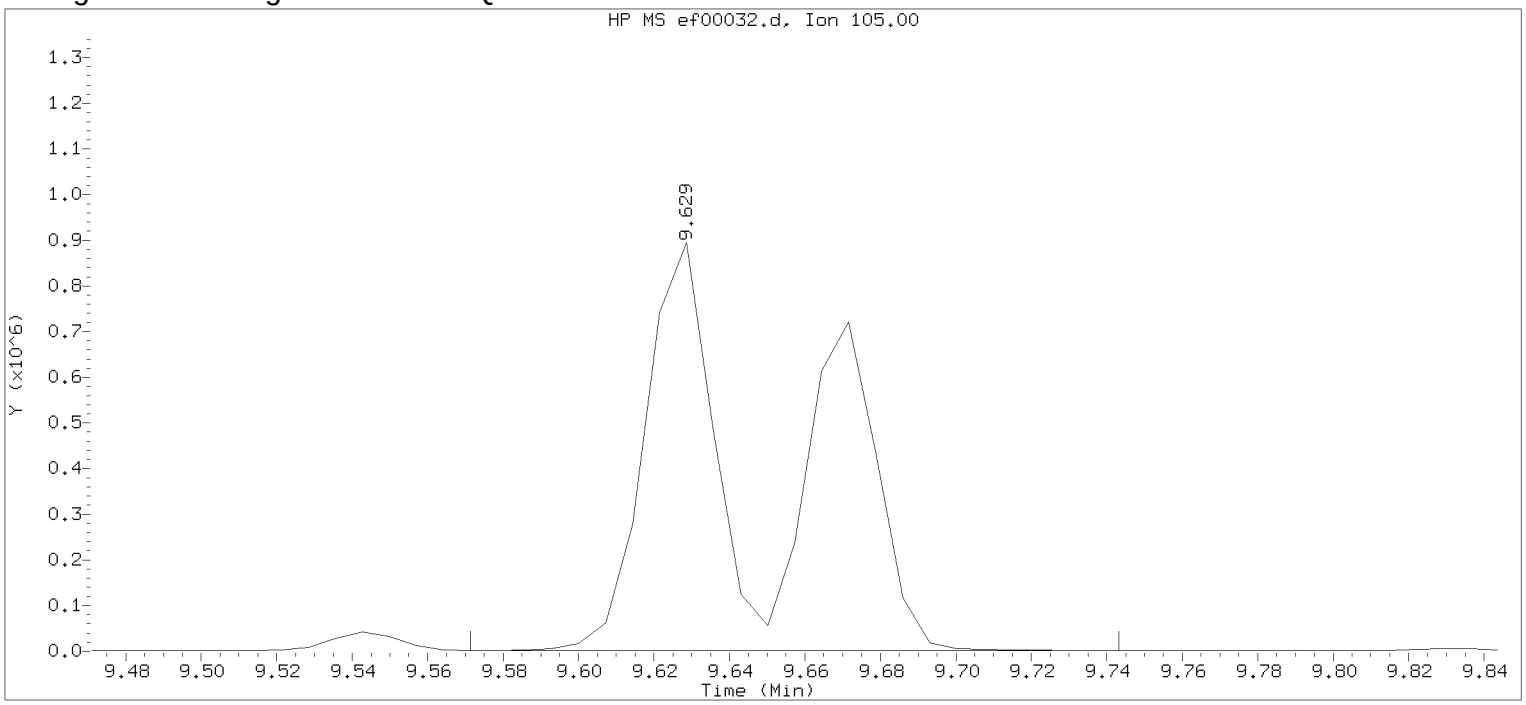
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00032.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:06 Analyst ID: jeb07445

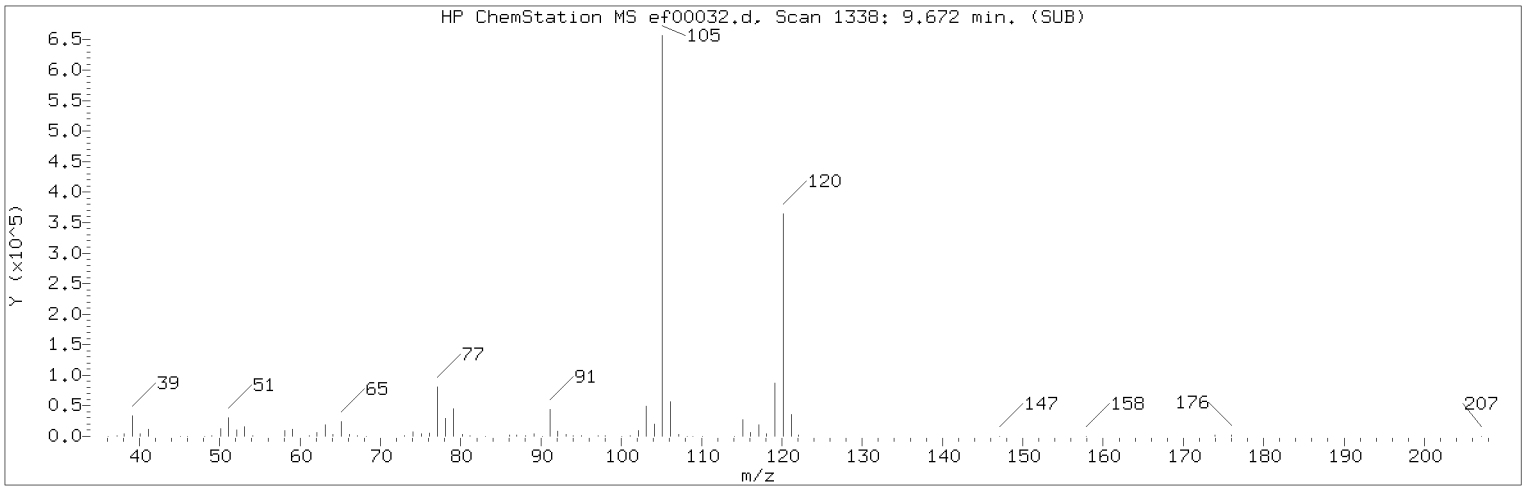
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 11:24 Unknown

Sample Name: VSTD005 Lab Sample ID: VSTD005

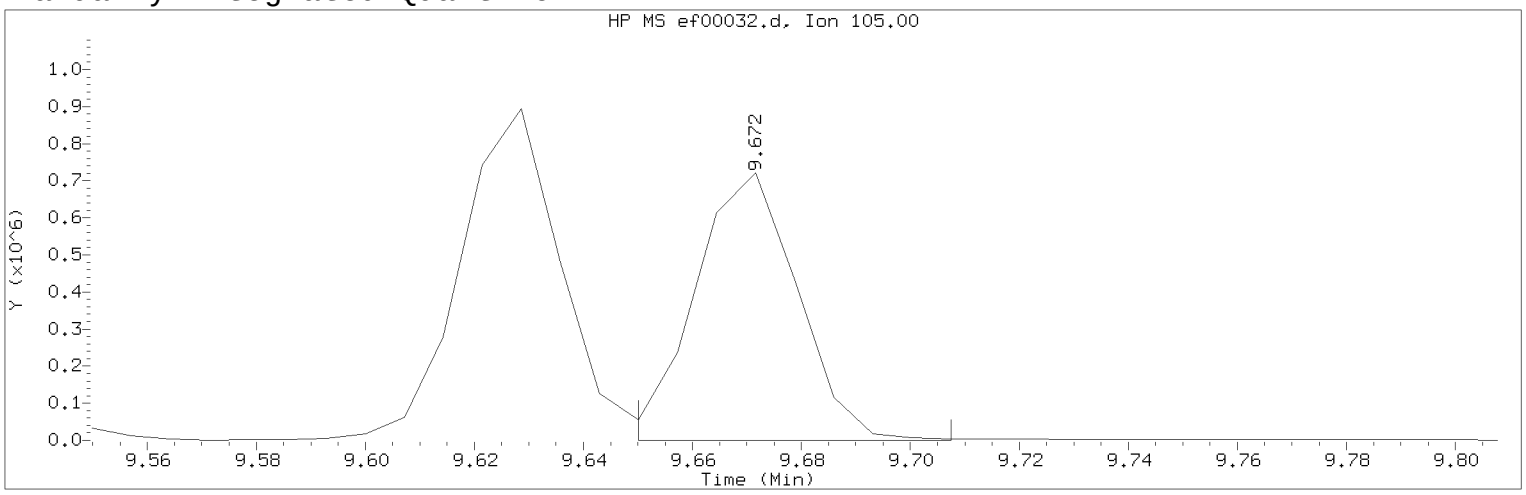
Compound Number	: 86		
Compound Name	: 4-Ethyltoluene		
Scan Number	: 1332		
Retention Time (minutes)	: 9.629		
Quant Ion	: 105.00		
Area	: 2066211		
Concentration (ppb(v))	: 10.1877		
Integration start scan	: 1323	Integration stop scan:	1347
Y at integration start	: 748	Y at integration end:	748

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00032.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 14:32 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

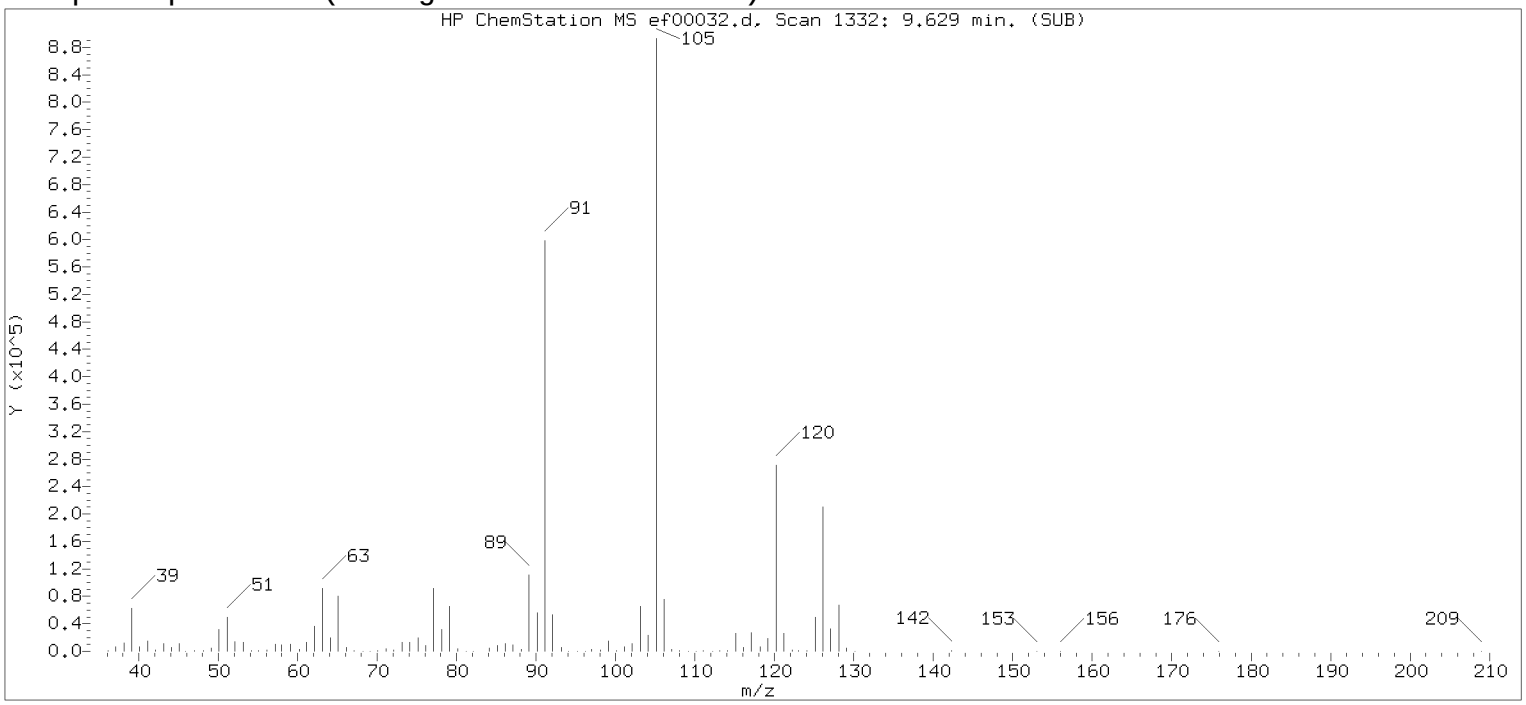
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 947426M
Concentration (ppb(v)) : 5.4083
Integration start scan : 1334 Integration stop scan: 1342
Y at integration start : 91 Y at integration end: 91

Reason for manual integration: improper integration

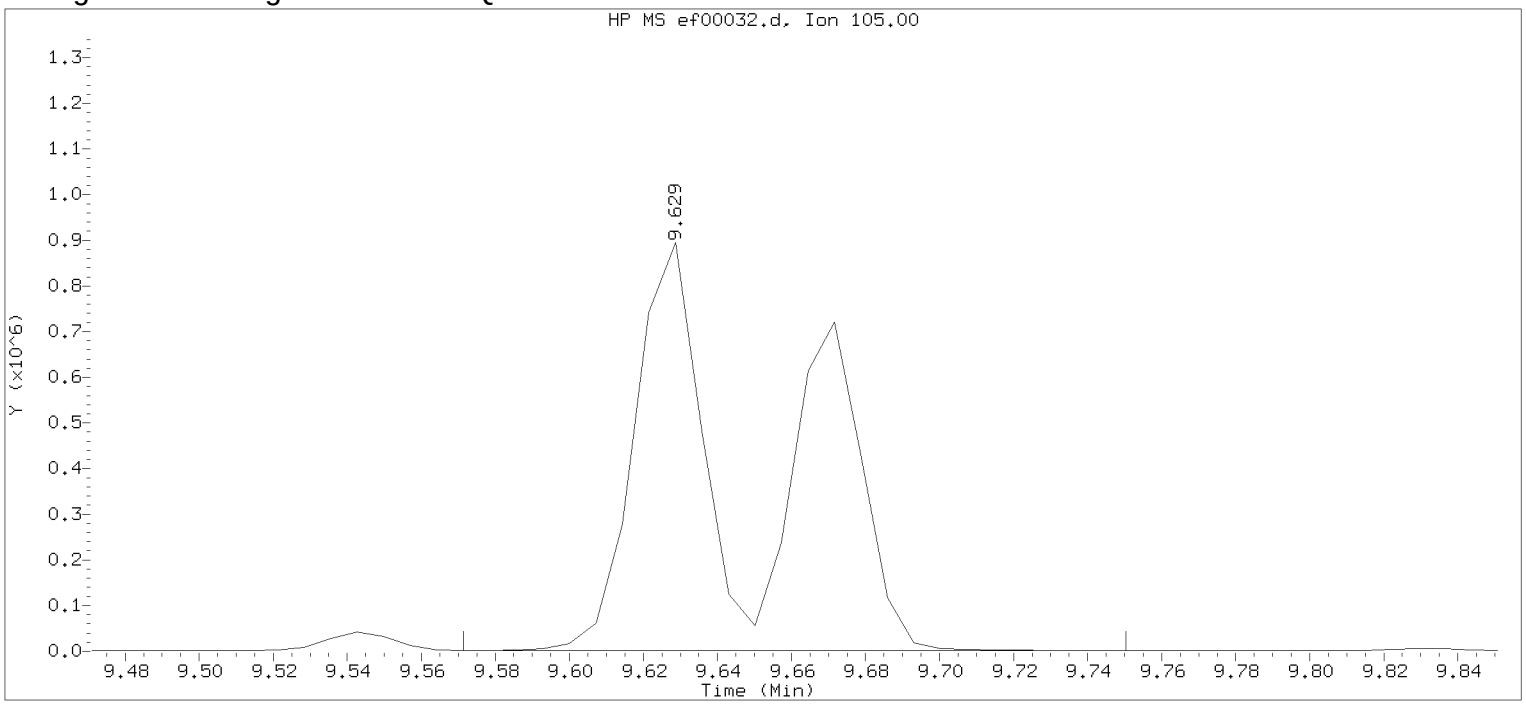
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00032.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:06 Analyst ID: jeb07445

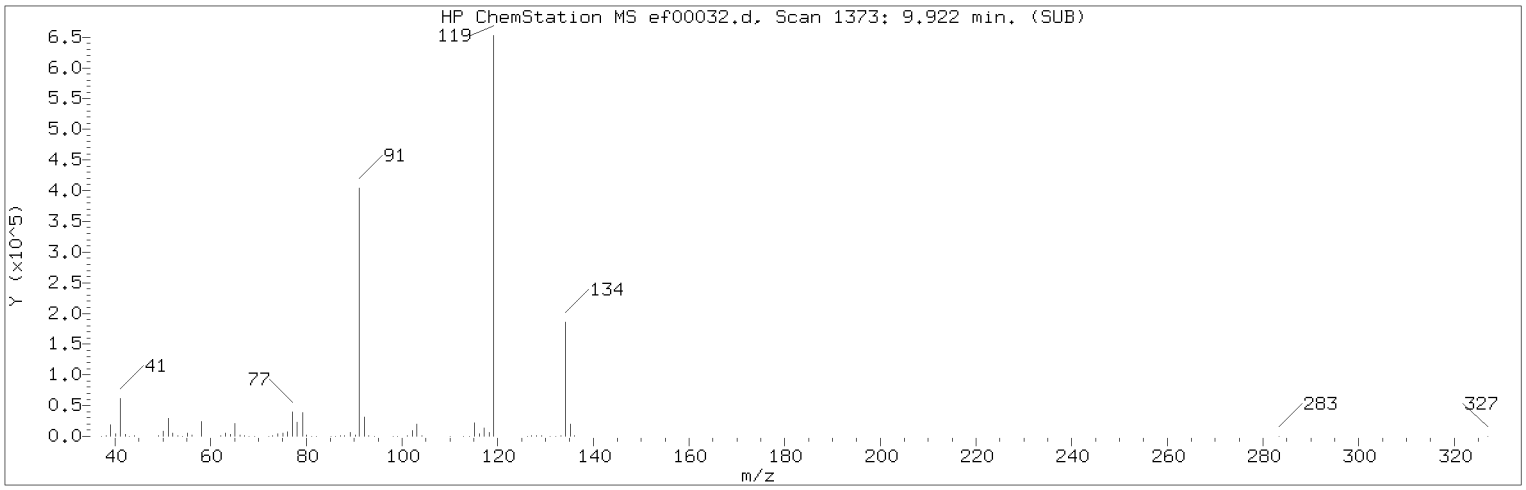
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 11:24 Unknown

Sample Name: VSTD005 Lab Sample ID: VSTD005

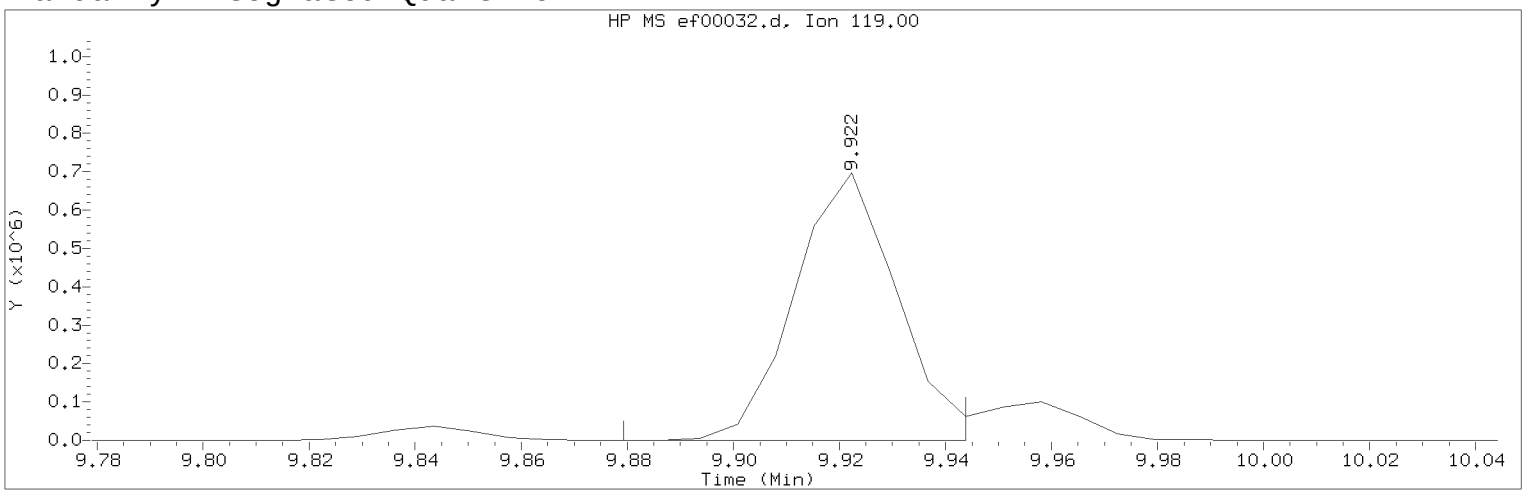
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 2065382
Concentration (ppb(v)) : 12.2659
Integration start scan : 1323 Integration stop scan: 1348
Y at integration start : 852 Y at integration end: 852

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature userGLE02jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00032.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 14:32 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

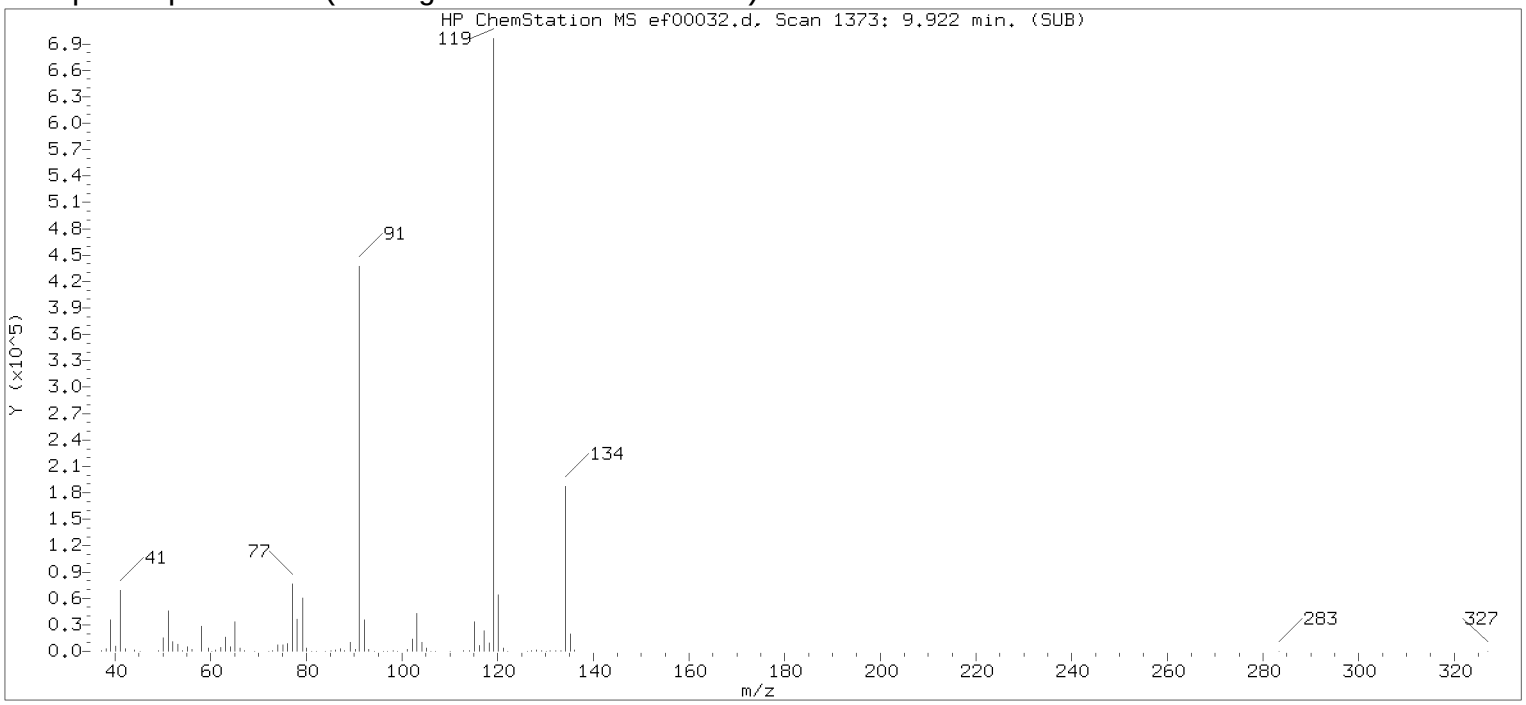
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 935792M
Concentration (ppb(v)) : 5.1209
Integration start scan : 1366 Integration stop scan: 1375
Y at integration start : 177 Y at integration end: 177

Reason for manual integration: improper integration

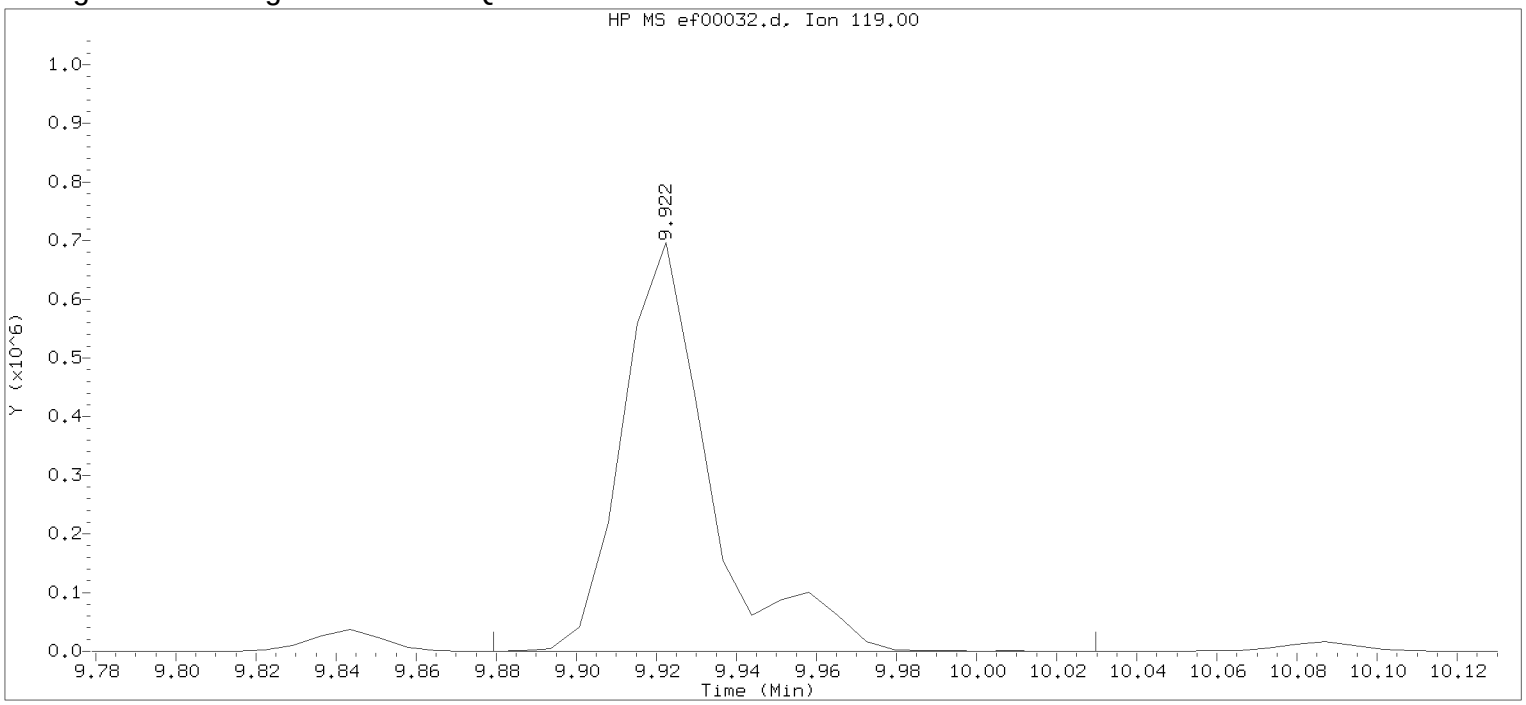
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



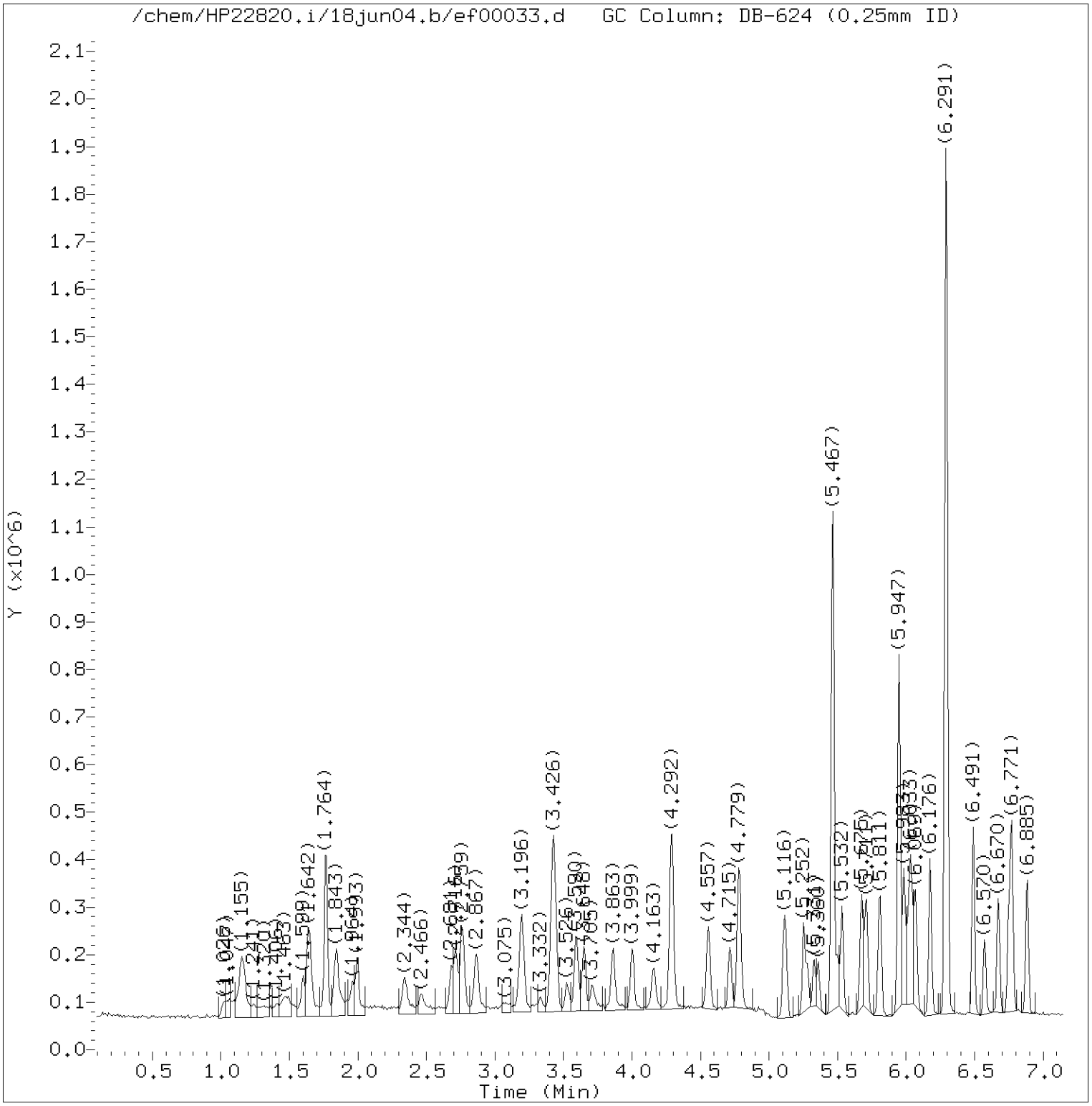
Data File: /chem/HP22820.i/18jun04.b/ef00032.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:06 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 11:24 Unknown

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 1051796
Concentration (ppb(v)) : 6.7856
Integration start scan : 1366 Integration stop scan: 1387
Y at integration start : 177 Y at integration end: 177

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user GLE02jeb07445



Total Ion Chromatogram (TIC)

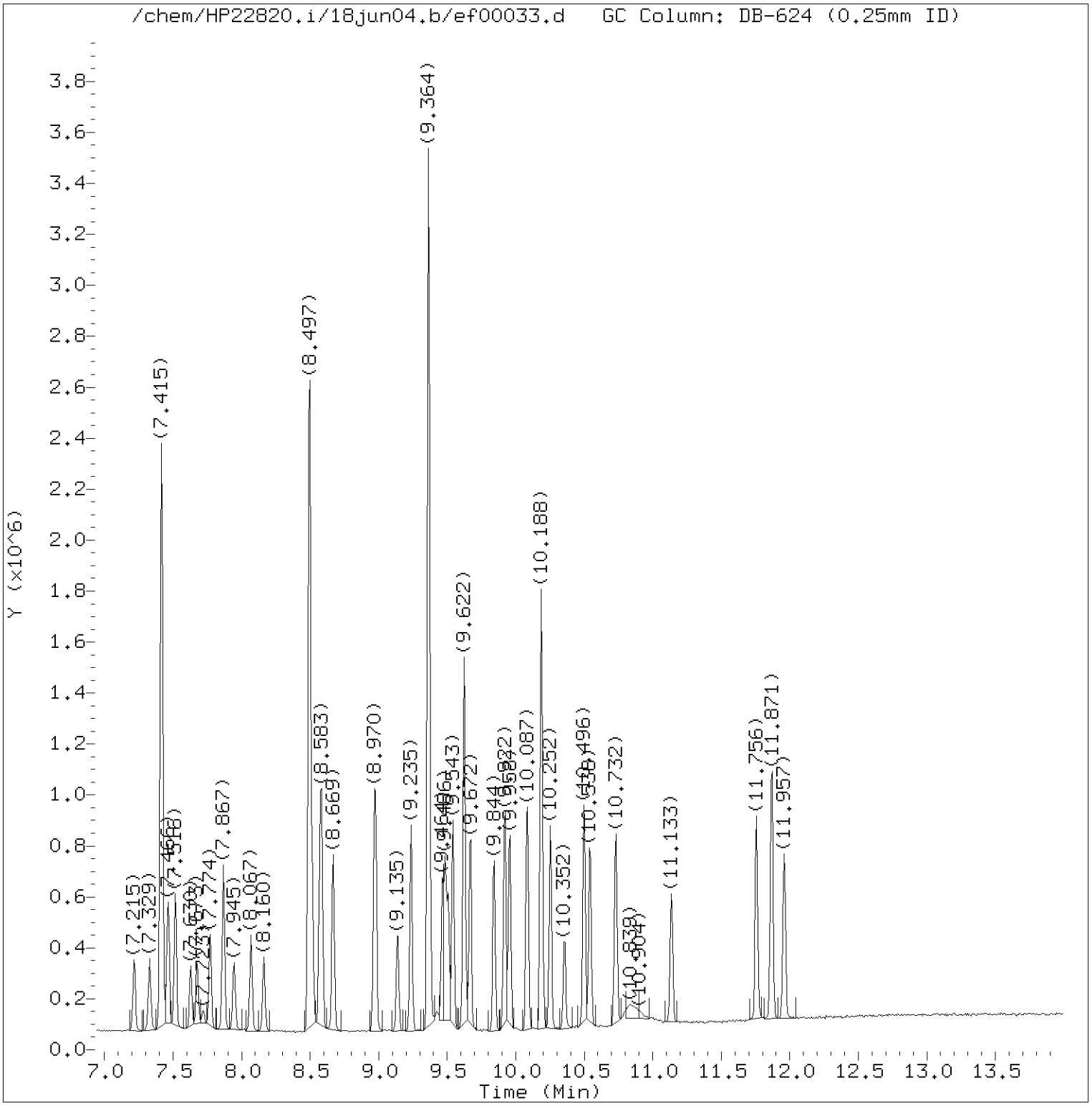
Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.599	41	41886	1.949
2) Dichlorodifluoromethane	(1)	1.635	85	160241	1.923
3) Chlorodifluoromethane	(1)	1.649	51	84937	1.924
4) Freon 114	(1)	1.764	85	164758	1.933
5) Chloromethane	(1)	1.835	50	49331	1.958
6) Vinyl Chloride	(1)	1.964	62	60428	1.954
7) 1,3-Butadiene	(1)	1.993	54	44505	1.983
8) Bromomethane	(1)	2.337	94	59491	1.870
9) Chloroethane	(1)	2.466	64	35223	2.015
10) Bromoethene	(1)	2.681	106	66527	1.969
11) Dichlorofluoromethane	(1)	2.716	67	127765	1.895
12) Trichlorofluoromethane	(1)	2.759	101	169900	1.924
13) Pentane	(1)	2.867	43	93159	1.965
14) Ethanol	(1)	3.067	45	18920M	1.855
15) Freon123a	(1)	3.189	67	128444	2.191
16) Acrolein	(1)	3.332	56	21571	1.786
17) 1,1-Dichloroethene	(1)	3.418	61	95417	1.946
18) Freon 113	(1)	3.433	103	98698	1.996
19) Acetone	(1)	3.526	43	81968	2.011
20) Methyl Iodide	(1)	3.590	142	199708	2.107
21) Carbon Disulfide	(1)	3.648	76	178831	1.948
22) Isopropanol	(1)	3.712	45	80556	2.155
24) 3-Chloropropene	(1)	3.863	76	30769	2.139
23) Acetonitrile	(1)	3.870	40	42704M	2.158
25) Methylene Chloride	(1)	3.999	84	61378	2.199
26) tert-Butyl Alcohol	(1)	4.156	59	121435	2.137
28) trans-1,2-Dichloroethene	(1)	4.285	61	87554	1.975
27) Acrylonitrile	(1)	4.292	53	48001	1.932
29) Methyl t-Butyl Ether	(1)	4.292	73	185845	1.964
30) Hexane	(1)	4.557	57	99280	2.039
31) 1,1-Dichloroethane	(1)	4.715	63	113645	1.967
32) Vinyl Acetate	(1)	4.779	86	18177	2.152
33) Di-Isopropyl Ether	(1)	4.779	45	189905	1.974
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	184268	2.007
35) cis-1,2-Dichloroethene	(1)	5.252	61	83220	1.944
37) 2-Butanone	(1)	5.281	72	34585	1.941
38) Ethyl Acetate	(1)	5.324	70	16751	1.906
39) Methyl Acrylate	(1)	5.360	55	103762	1.921

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	346670	10.000
41) Tetrahydrofuran	(1)	5.496	42	63731	2.020
42) Chloroform	(1)	5.532	83	141439	1.952
43) 1,1,1-Trichloroethane	(1)	5.675	97	142891	1.947
44) Cyclohexane	(1)	5.711	56	102471	2.030
45) Carbon Tetrachloride	(1)	5.811	117	139639	1.938
46) Benzene	(2)	5.983	78	225301	2.001
47) 1,2-Dichloroethane	(2)	6.011	62	89515	1.956
48) Isooctane	(2)	6.033	57	302934	1.944
49) Tert-Amyl Methyl Ether	(2)	6.069	73	186036	1.981
50) Heptane	(2)	6.176	43	108204	2.031
51)*1,4-Difluorobenzene	(2)	6.291	114	1309255	10.000
52) Trichloroethene	(2)	6.491	130	105529	1.887
53) Ethyl Acrylate	(2)	6.570	55	137073	1.924
36) 1,2-Dichloroethene (total)	(1)		61	170774	3.919
54) 1,2-Dichloropropane	(2)	6.678	63	78564	1.993
57) Methyl Methacrylate	(2)	6.749	69	78248	1.985
55) Dibromomethane	(2)	6.771	174	101925	1.883
56) 1,4-Dioxane	(2)	6.778	88	55328	1.933
58) Bromodichloromethane	(2)	6.885	83	149306	1.935
59) cis-1,3-Dichloropropene	(2)	7.215	75	132897	1.954
60) 4-Methyl-2-Pentanone	(2)	7.329	43	145589	1.965
61) Toluene	(3)	7.466	91	299712	2.073
62) Octane	(3)	7.516	43	158772	2.111
63) trans-1,3-Dichloropropene	(3)	7.630	75	111439	1.955
65) Ethyl Methacrylate	(3)	7.673	69	124549	1.925
66) 1,1,2-Trichloroethane	(3)	7.774	97	103449	2.025
67) Tetrachloroethene	(3)	7.867	166	164399	2.032
68) 2-Hexanone	(3)	7.945	43	146492	2.025
69) Dibromochloromethane	(3)	8.067	127	125509	1.947
70) 1,2-Dibromoethane	(3)	8.160	107	159581	2.007
71)*Chlorobenzene-d5	(3)	8.497	117	1253482	10.000
72) Chlorobenzene	(3)	8.519	112	251093	2.029
73) 1,1,1,2-Tetrachloroethane	(3)	8.576	131	117193	1.945
74) Ethylbenzene	(3)	8.583	91	402740	2.082
75) m/p-Xylene	(3)	8.669	91	333875	2.126
76) o-Xylene	(3)	8.970	91	324372	2.090
78) Styrene	(3)	8.977	104	233244	1.983

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

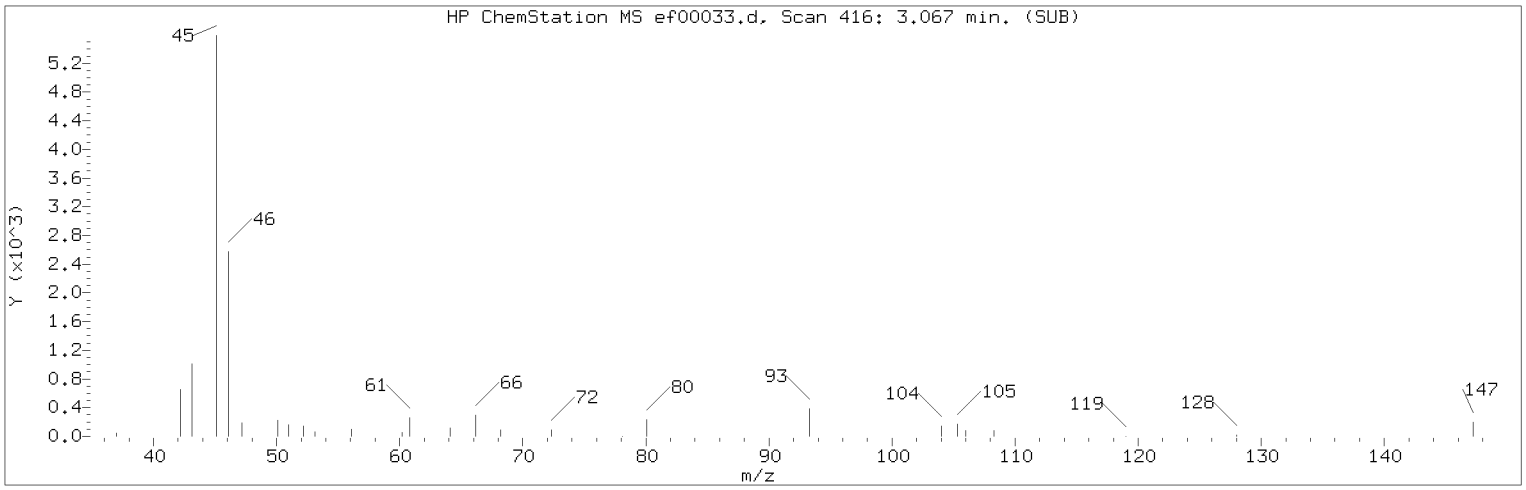
Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	156322	1.885
80) Cumene	(3)	9.235	105	446282	2.016
82) 1,1,2,2-Tetrachloroethane	(3)	9.464	83	222638	2.045
81) Bromobenzene	(3)	9.486	156	159294	2.026
83) 1,2,3-Trichloropropane	(3)	9.507	110	73054	2.101
84) n-Propylbenzene	(3)	9.543	120	131599	2.069
86) 4-Ethyltoluene	(3)	9.622	105	440581M	2.121
85) 2-Chlorotoluene	(3)	9.622	126	115157	1.967
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	372385M	2.090
88) Alpha Methyl Styrene	(3)	9.844	118	182404	1.952
89) tert-Butylbenzene	(3)	9.922	119	403168M	2.131
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	367628	2.090
91) sec-Butylbenzene	(3)	10.087	105	539292	2.026
92) 1,3-Dichlorobenzene	(3)	10.188	146	270335	2.068
94) p-Isopropyltoluene	(3)	10.188	119	456839	2.006
93) 1,4-Dichlorobenzene	(3)	10.252	146	277868	2.086
95) Benzyl Chloride	(3)	10.352	91	223005	1.851
97) n-Butylbenzene	(3)	10.496	91	413882	2.022
96) 1,2-Dichlorobenzene	(3)	10.546	146	257868	2.073
98) Hexachloroethane	(3)	10.732	117	90852	1.879
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	128111	1.992
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	226607	2.125
101) Hexachlorobutadiene	(3)	11.871	225	184736	2.026
102) Naphthalene	(3)	11.957	128	487871	2.069
64) 1,3-Dichloropropene (total)	(3)		75	244336	3.916
77) Xylene (total)	(3)		91	658247	4.216

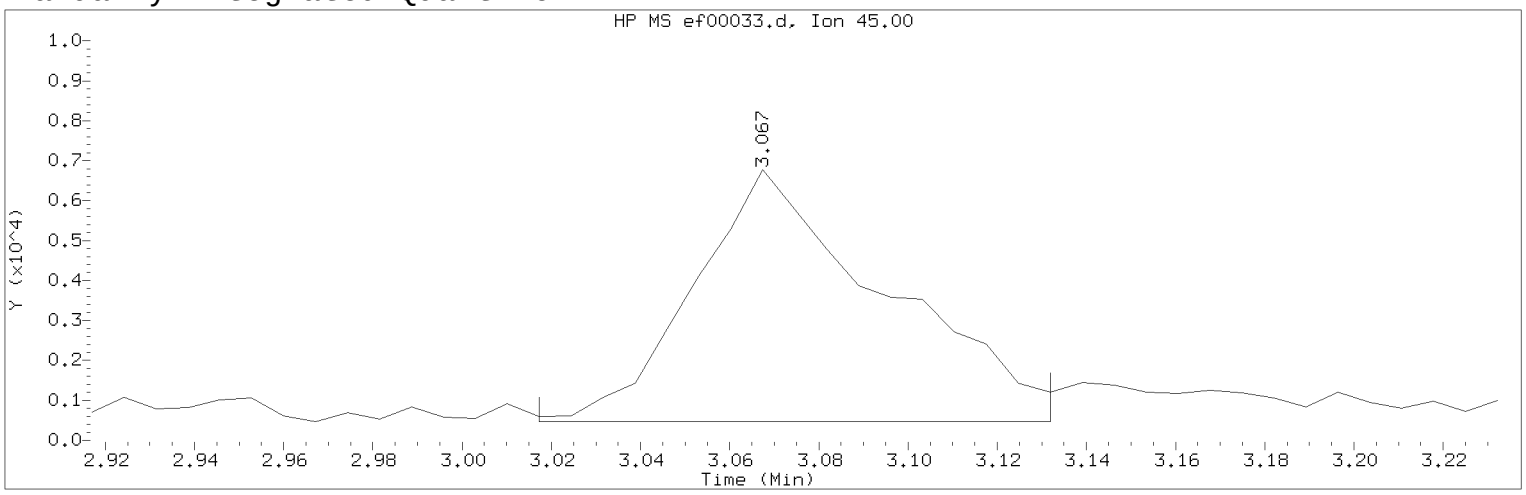
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

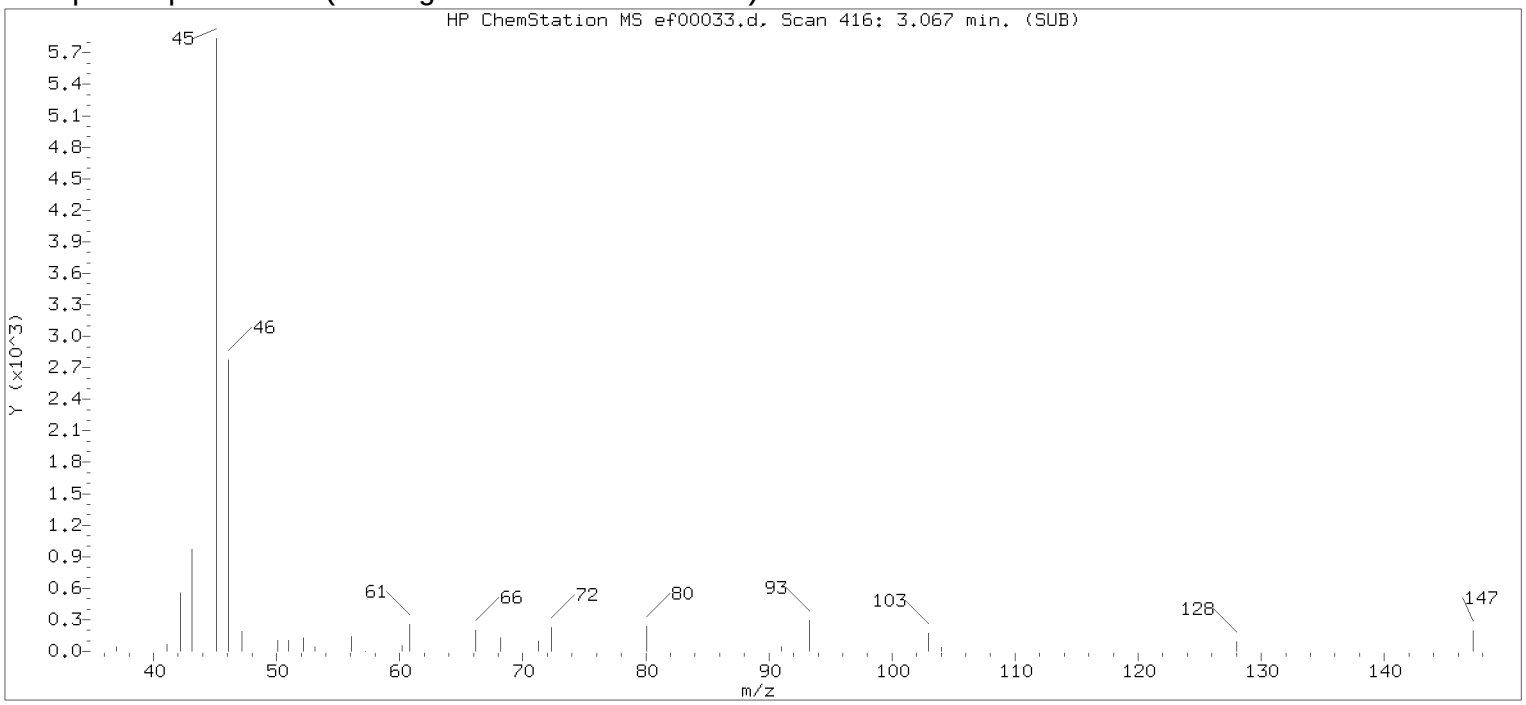
Compound Number : 14
Compound Name : Ethanol
Scan Number : 416
Retention Time (minutes): 3.067
Quant Ion : 45.00
Area (flag) : 18920M
Concentration (ppb(v)) : 1.8551
Integration start scan : 408 Integration stop scan: 424
Y at integration start : 469 Y at integration end: 469

Reason for manual integration: improper integration

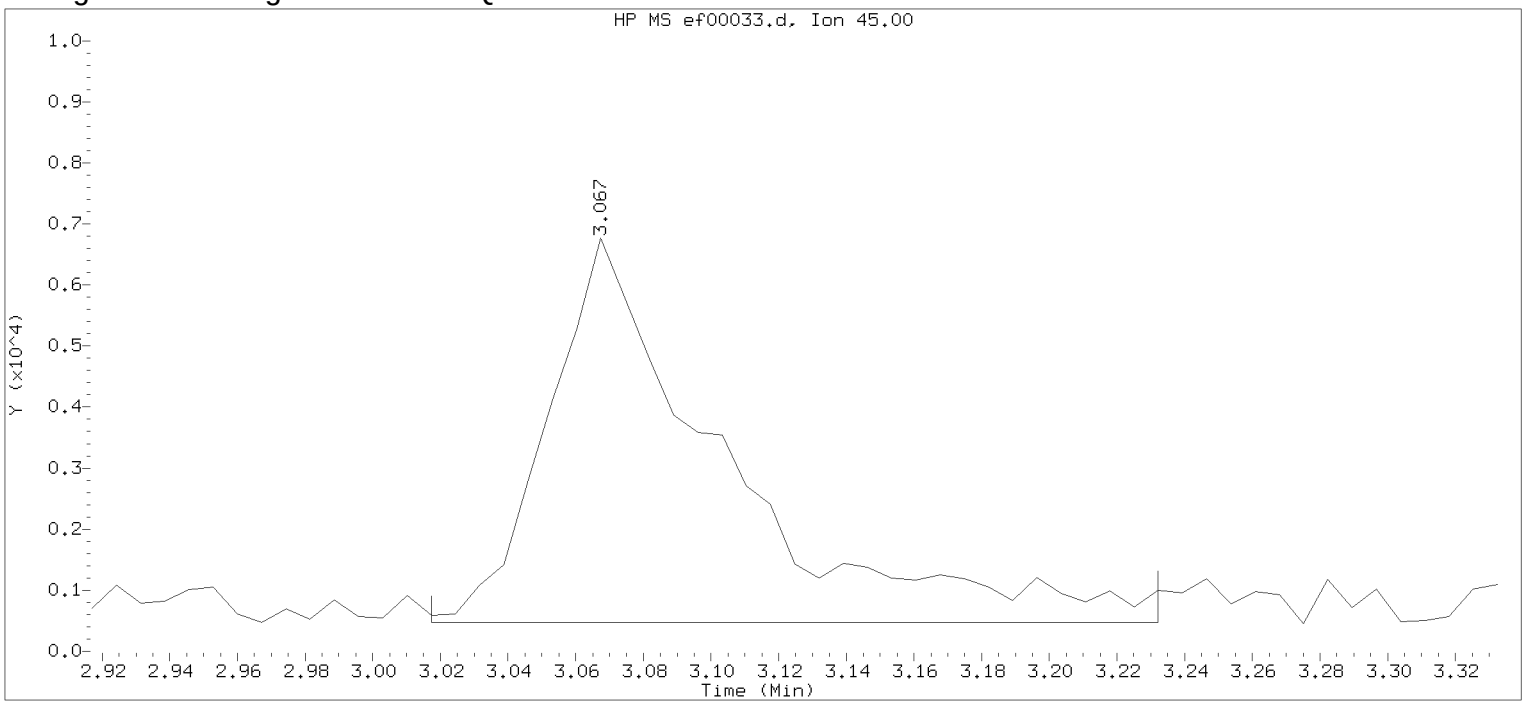
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

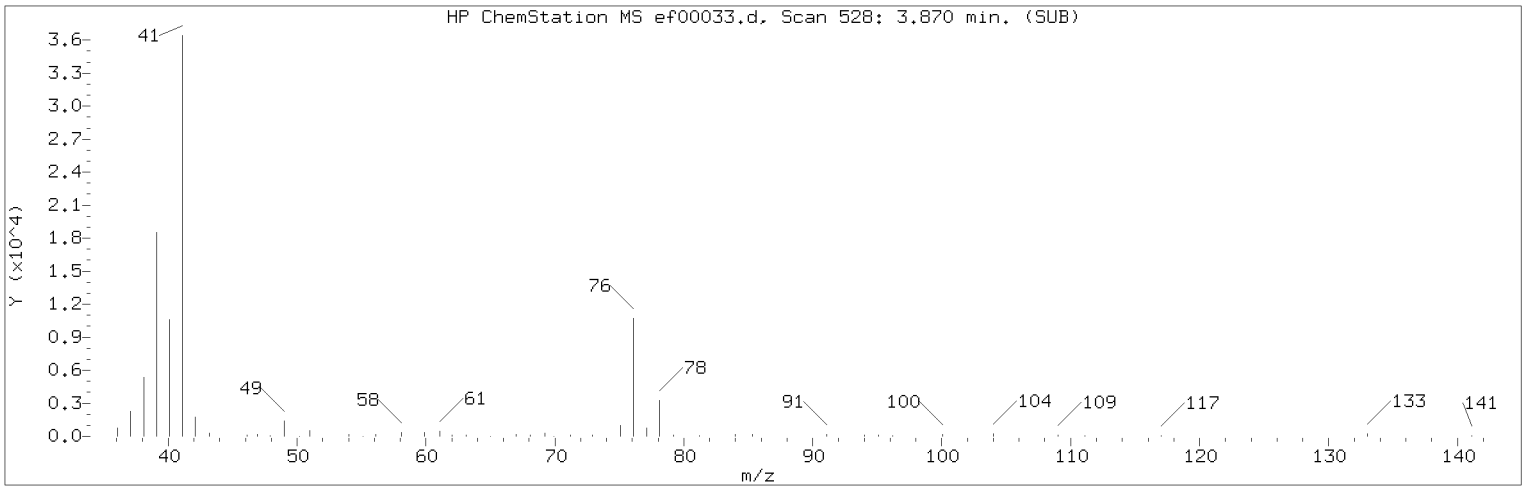
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 11:50 Unknown

Sample Name: VSTD002 Lab Sample ID: VSTD002

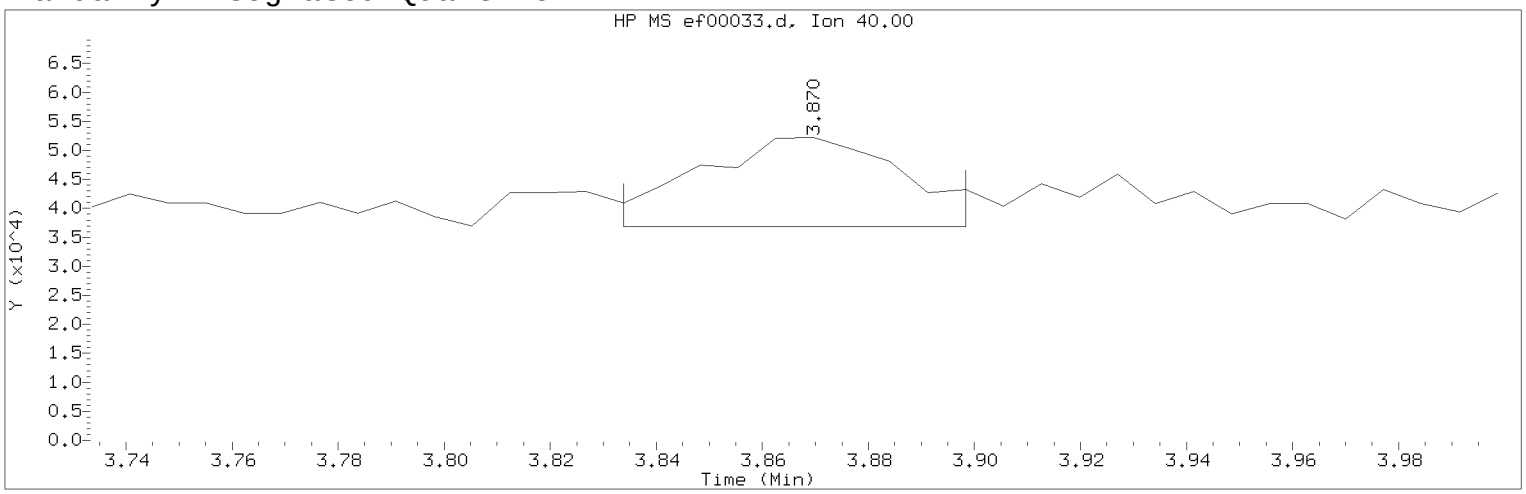
Compound Number : 14
Compound Name : Ethanol
Scan Number : 416
Retention Time (minutes): 3.067
Quant Ion : 45.00
Area : 22480
Concentration (ppb(v)) : 2.0634
Integration start scan : 408 Integration stop scan: 438
Y at integration start : 469 Y at integration end: 469

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

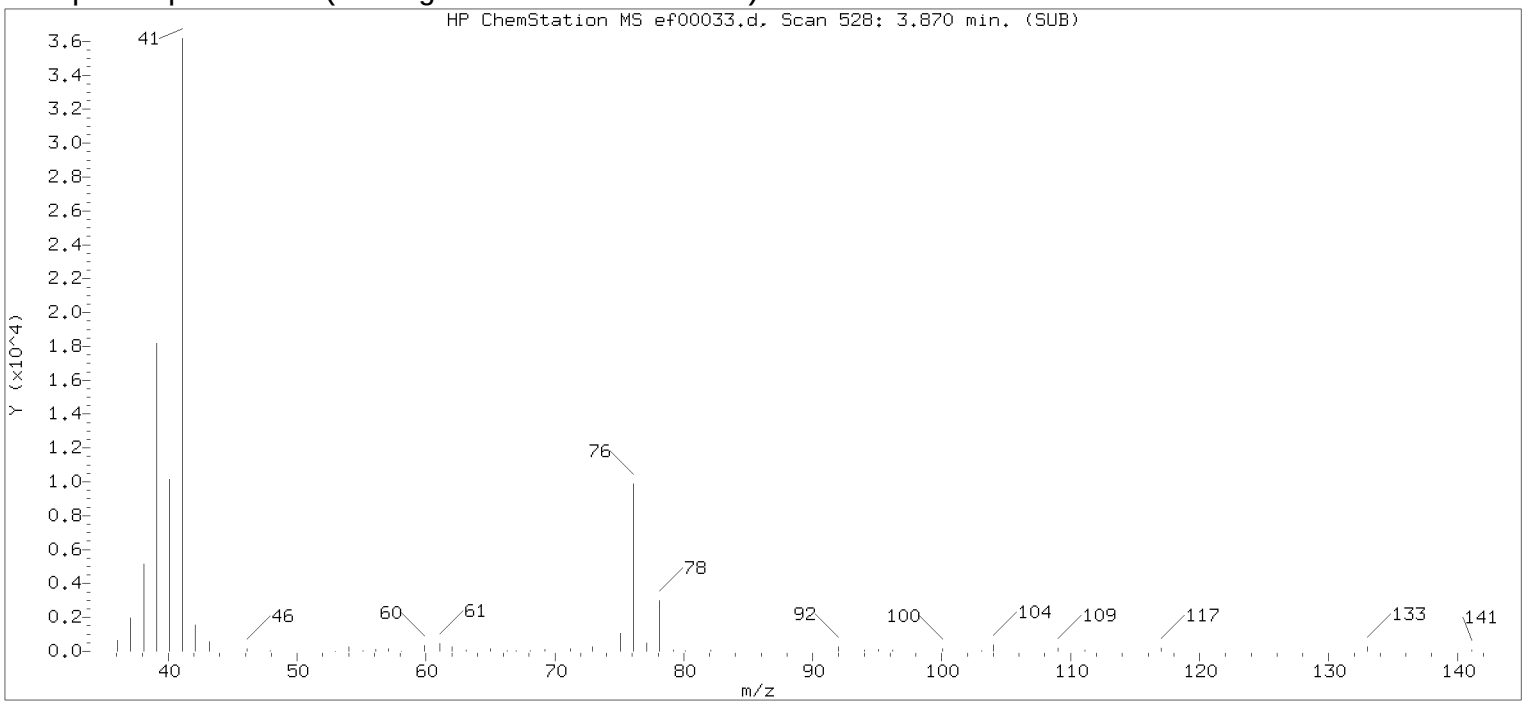
Compound Number : 23
Compound Name : Acetonitrile
Scan Number : 528
Retention Time (minutes): 3.870
Quant Ion : 40.00
Area (flag) : 42704M
Concentration (ppb(v)) : 2.1584
Integration start scan : 522 Integration stop scan: 531
Y at integration start : 36871 Y at integration end: 36871

Reason for manual integration: improper integration

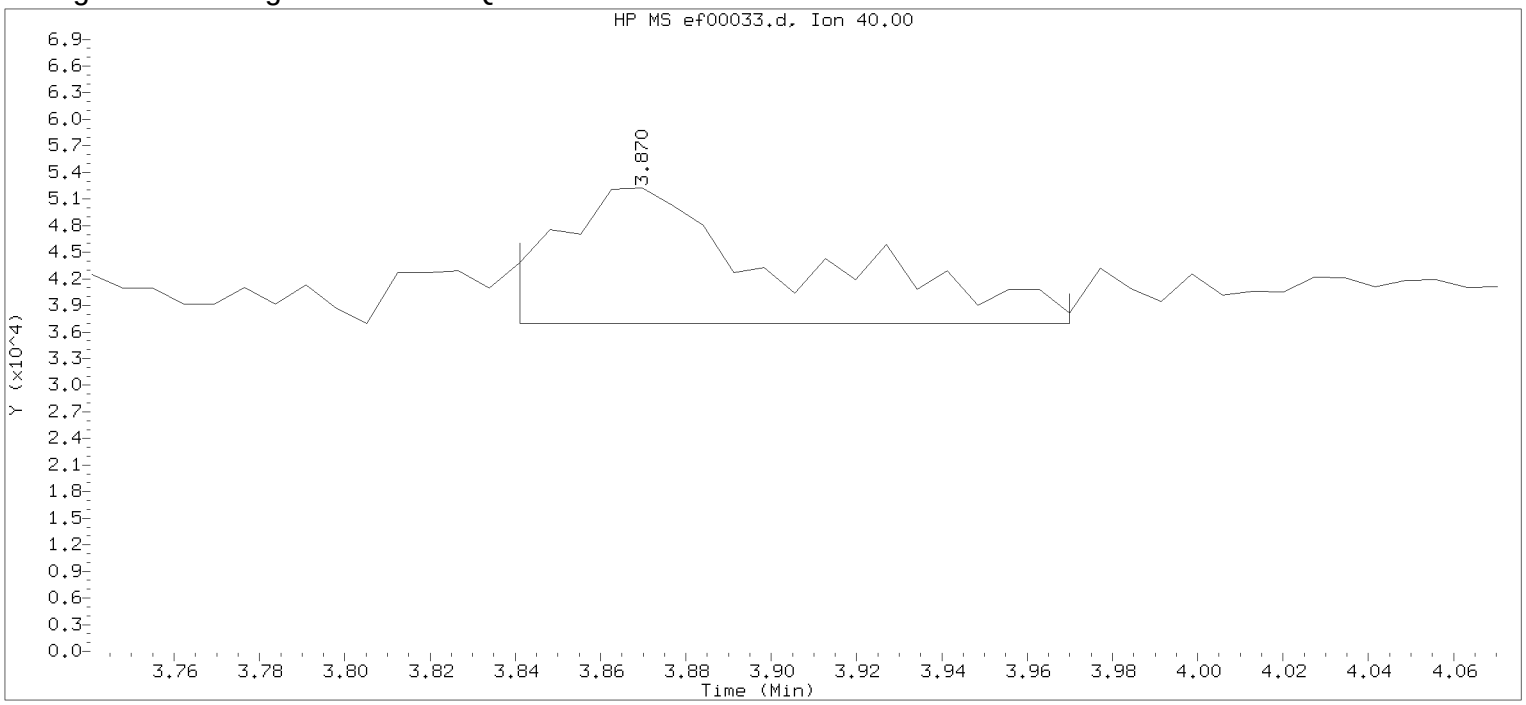
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

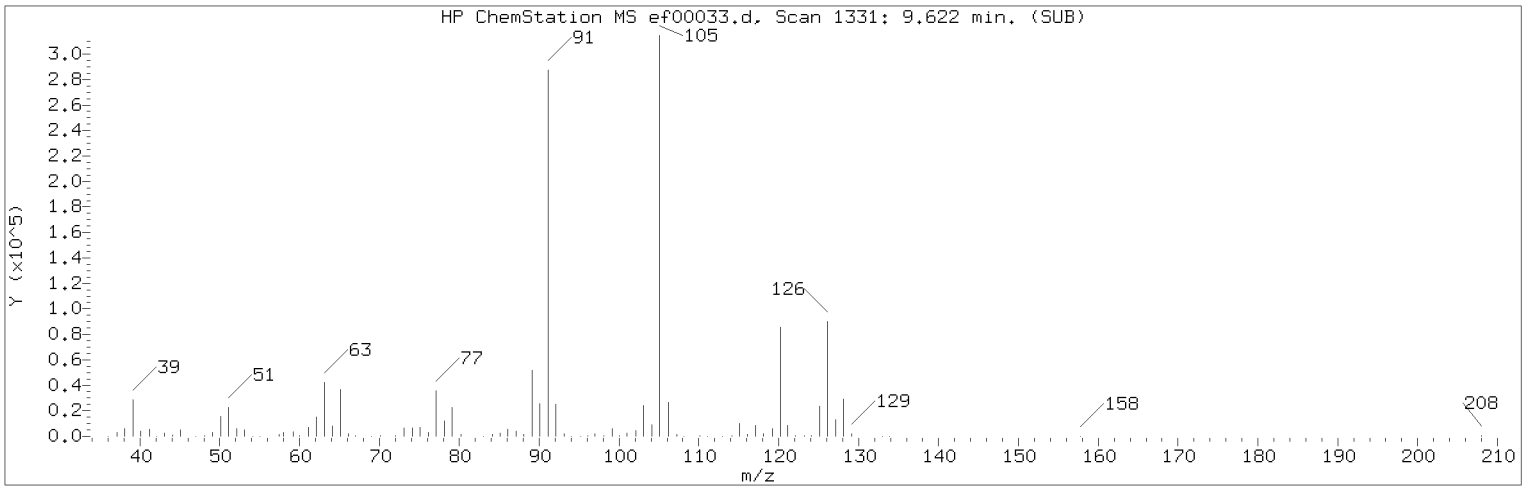
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 11:50 Unknown

Sample Name: VSTD002 Lab Sample ID: VSTD002

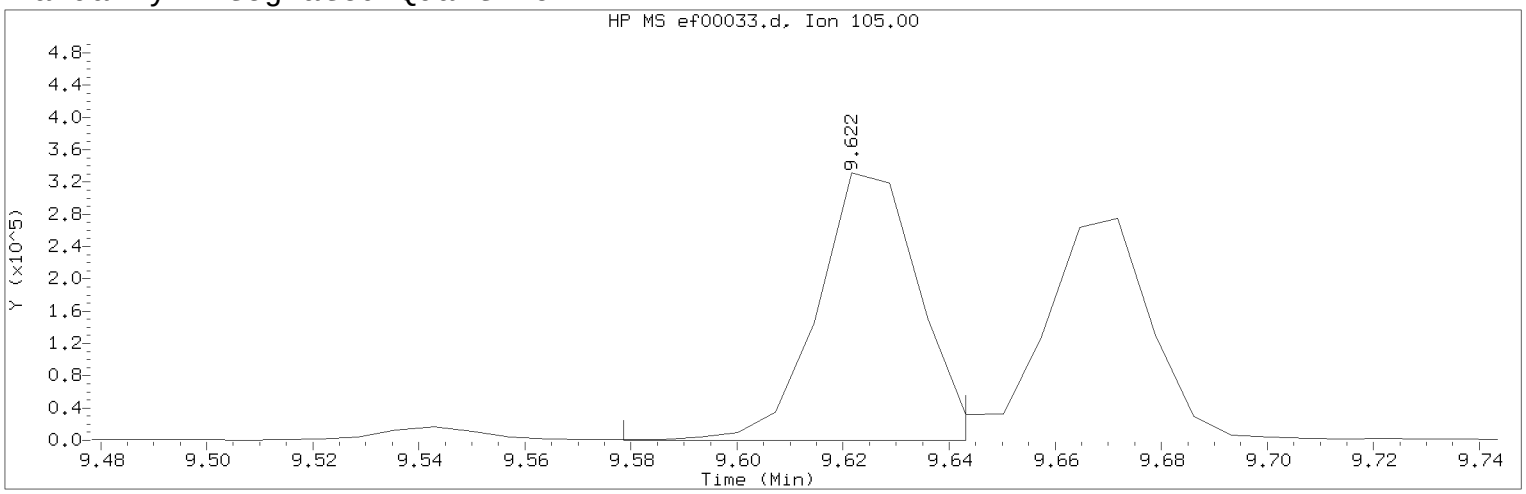
Compound Number : 23
Compound Name : Acetonitrile
Scan Number : 528
Retention Time (minutes): 3.870
Quant Ion : 40.00
Area : 58117
Concentration (ppb(v)) : 2.2376
Integration start scan : 523 Integration stop scan: 541
Y at integration start : 36992 Y at integration end: 36992

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

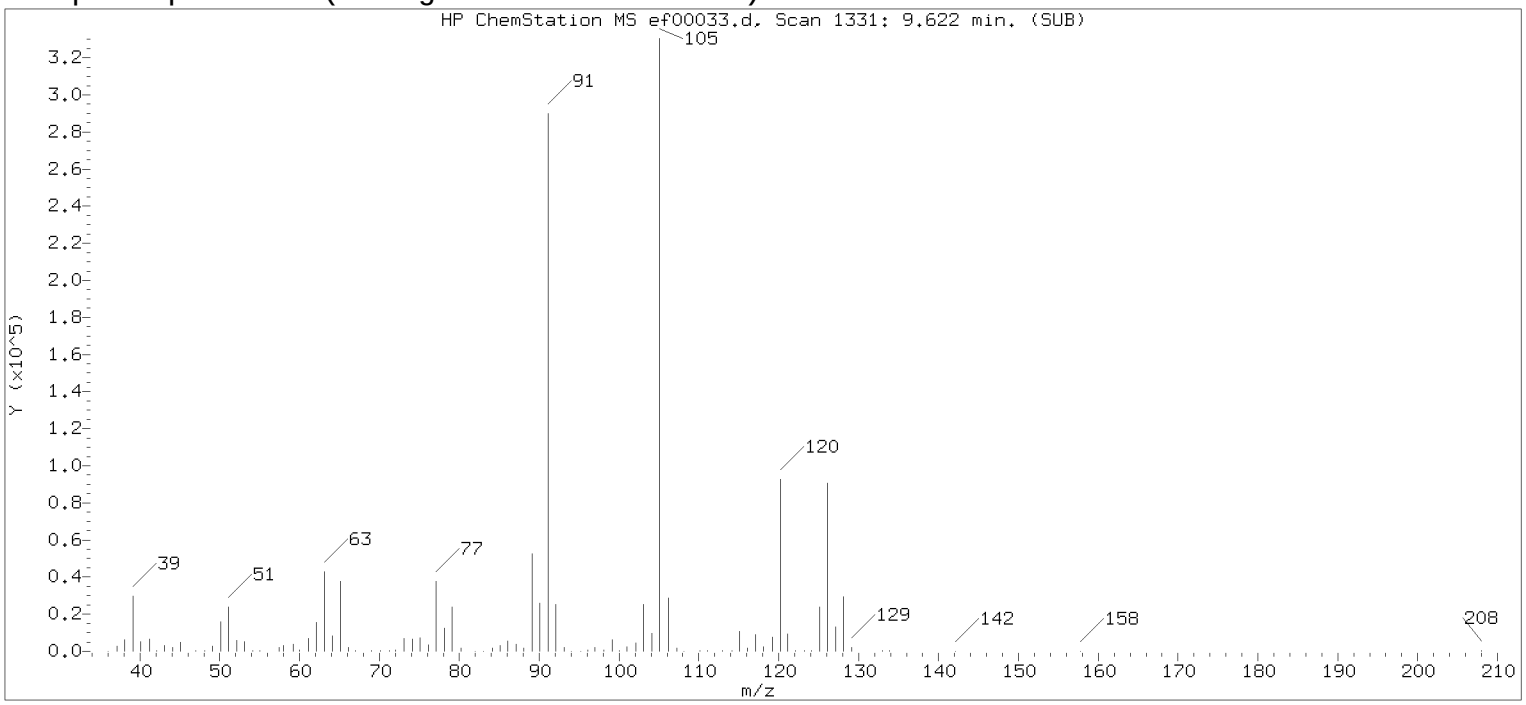
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1331
Retention Time (minutes): 9.622
Quant Ion : 105.00
Area (flag) : 440581M
Concentration (ppb(v)) : 2.1215
Integration start scan : 1324 Integration stop scan: 1333
Y at integration start : 246 Y at integration end: 246

Reason for manual integration: improper integration

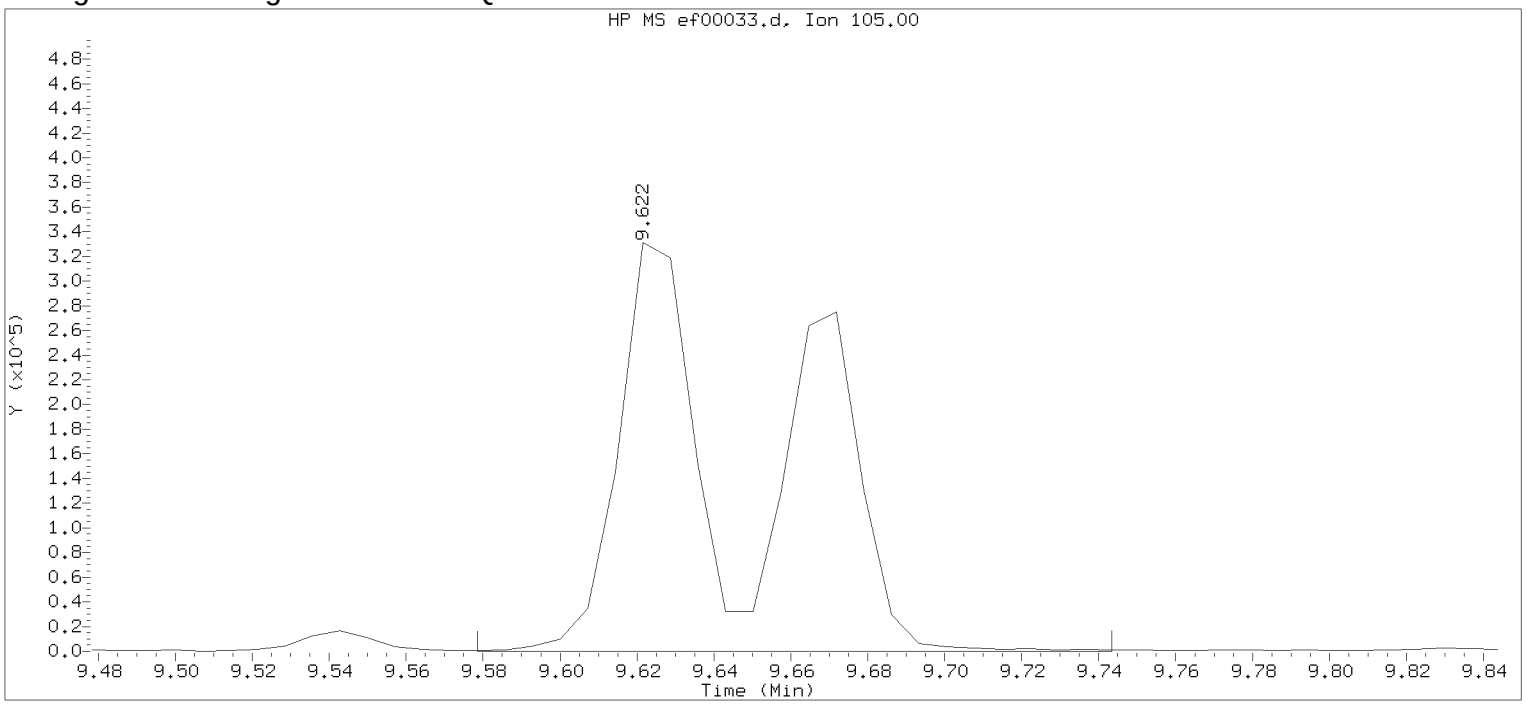
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

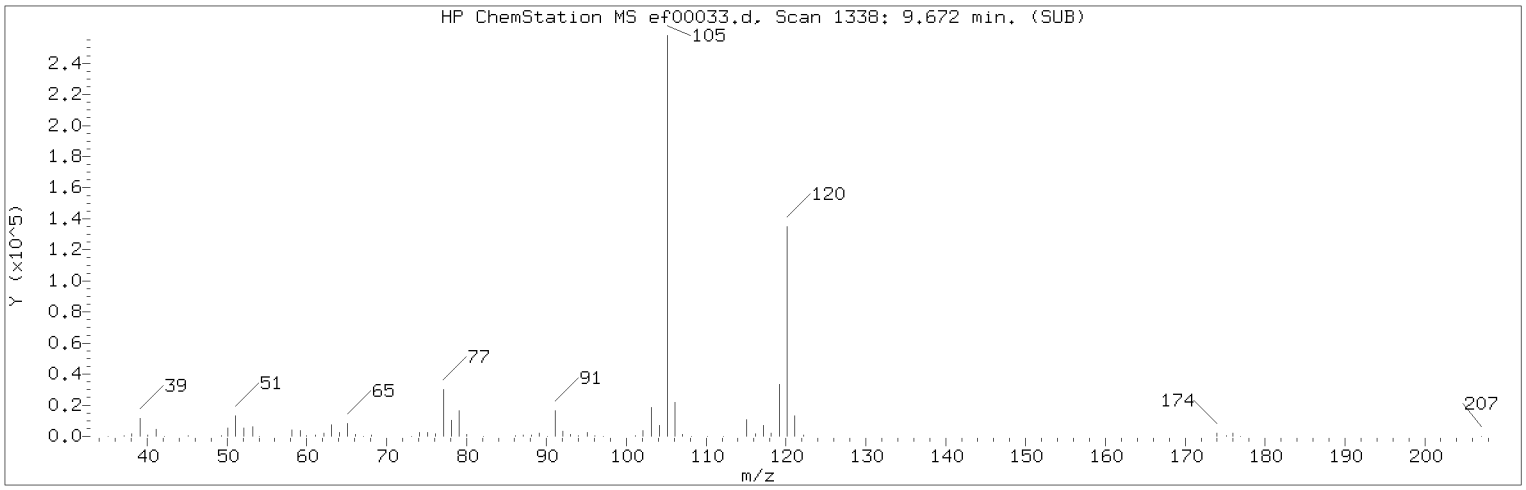
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 11:50 Unknown

Sample Name: VSTD002 Lab Sample ID: VSTD002

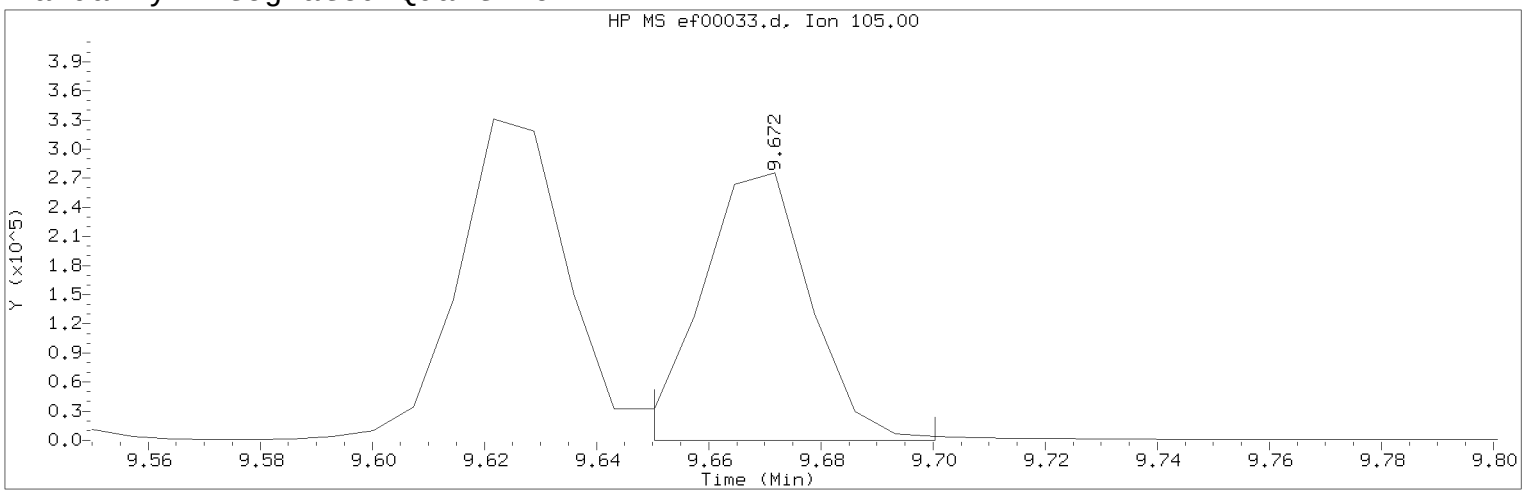
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1331
Retention Time (minutes): 9.622
Quant Ion : 105.00
Area : 816436
Concentration (ppb(v)) : 3.9583
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 246 Y at integration end: 246

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature userGUID:jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

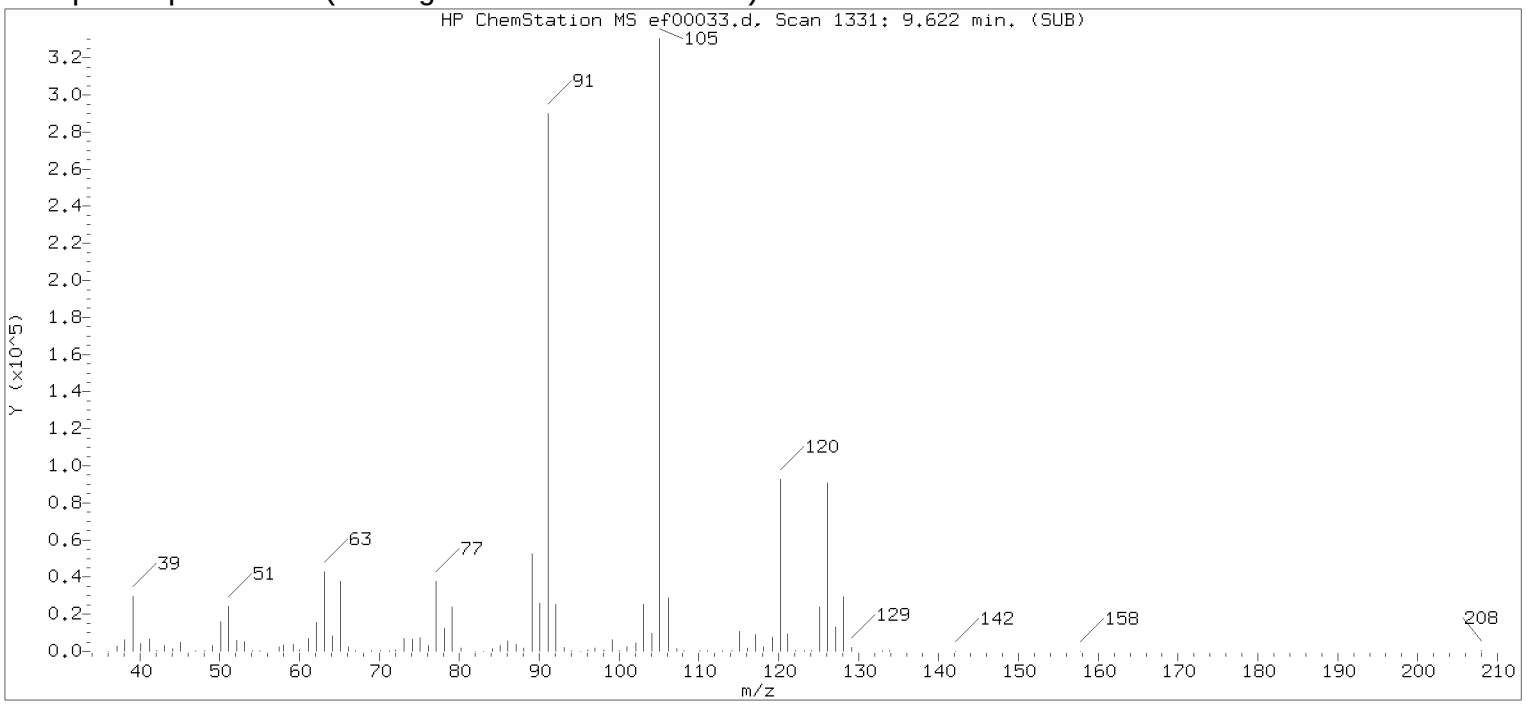
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 372385M
Concentration (ppb(v)) : 2.0902
Integration start scan : 1334 Integration stop scan: 1341
Y at integration start : 256 Y at integration end: 256

Reason for manual integration: improper integration

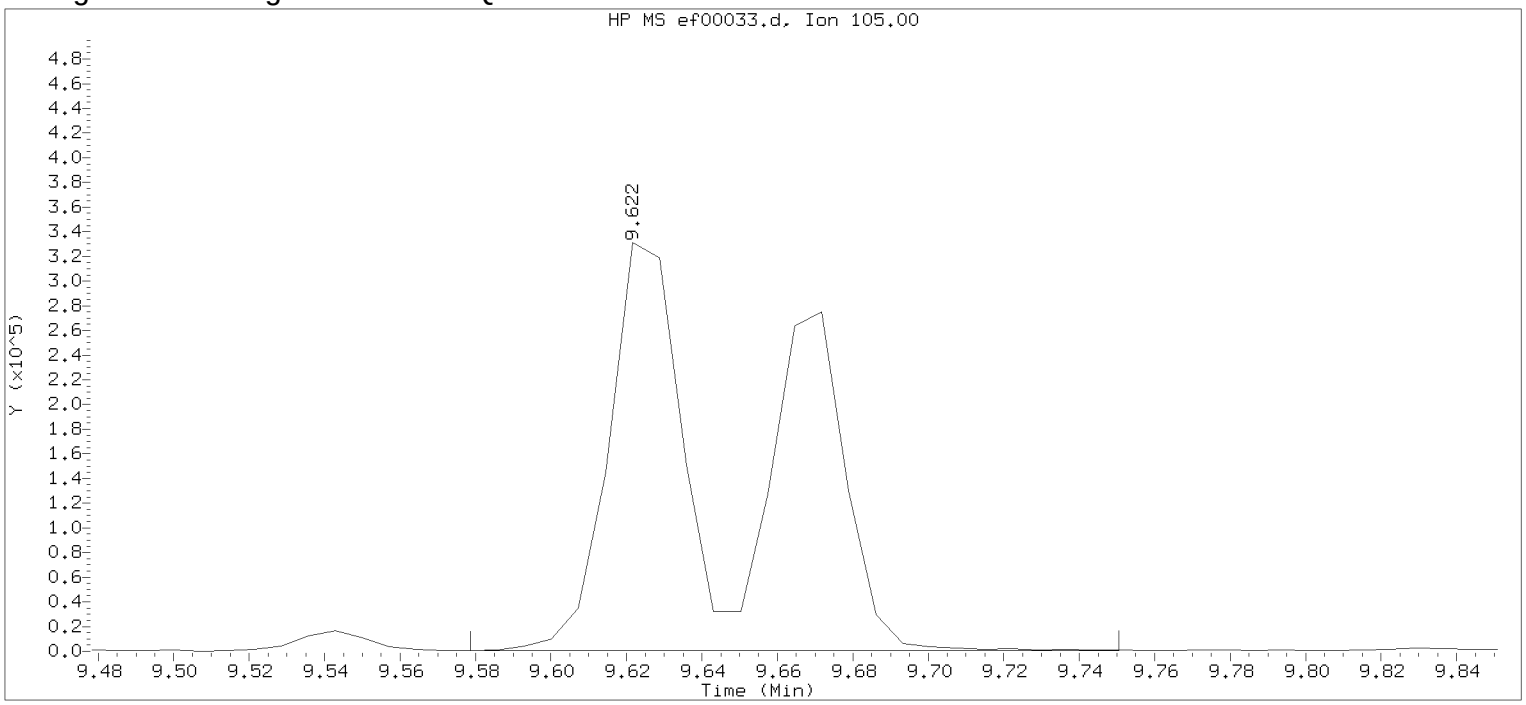
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

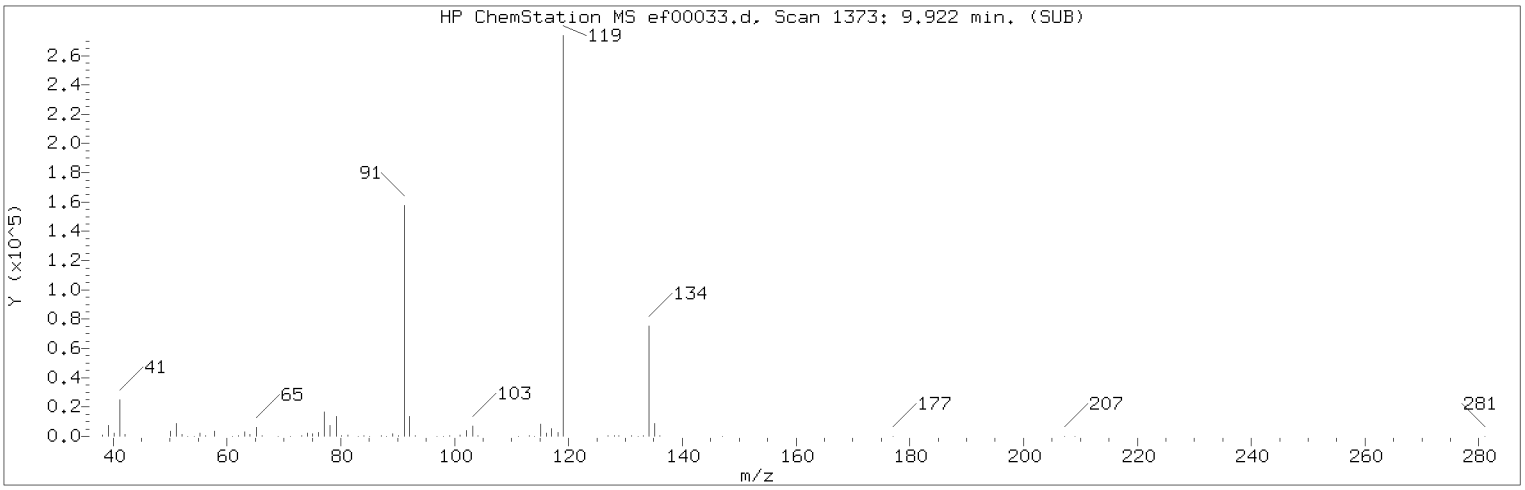
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 11:50 Unknown

Sample Name: VSTD002 Lab Sample ID: VSTD002

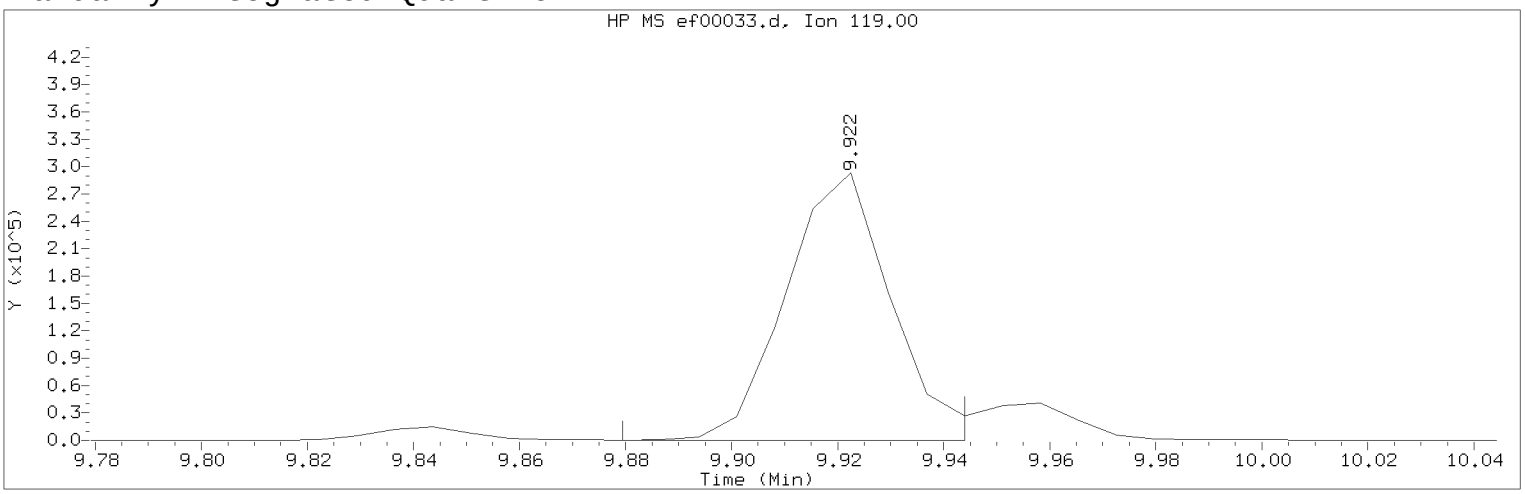
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1331
Retention Time (minutes): 9.622
Quant Ion : 105.00
Area : 814294
Concentration (ppb(v)) : 4.7552
Integration start scan : 1324 Integration stop scan: 1348
Y at integration start : 482 Y at integration end: 482

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature userGLE02jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

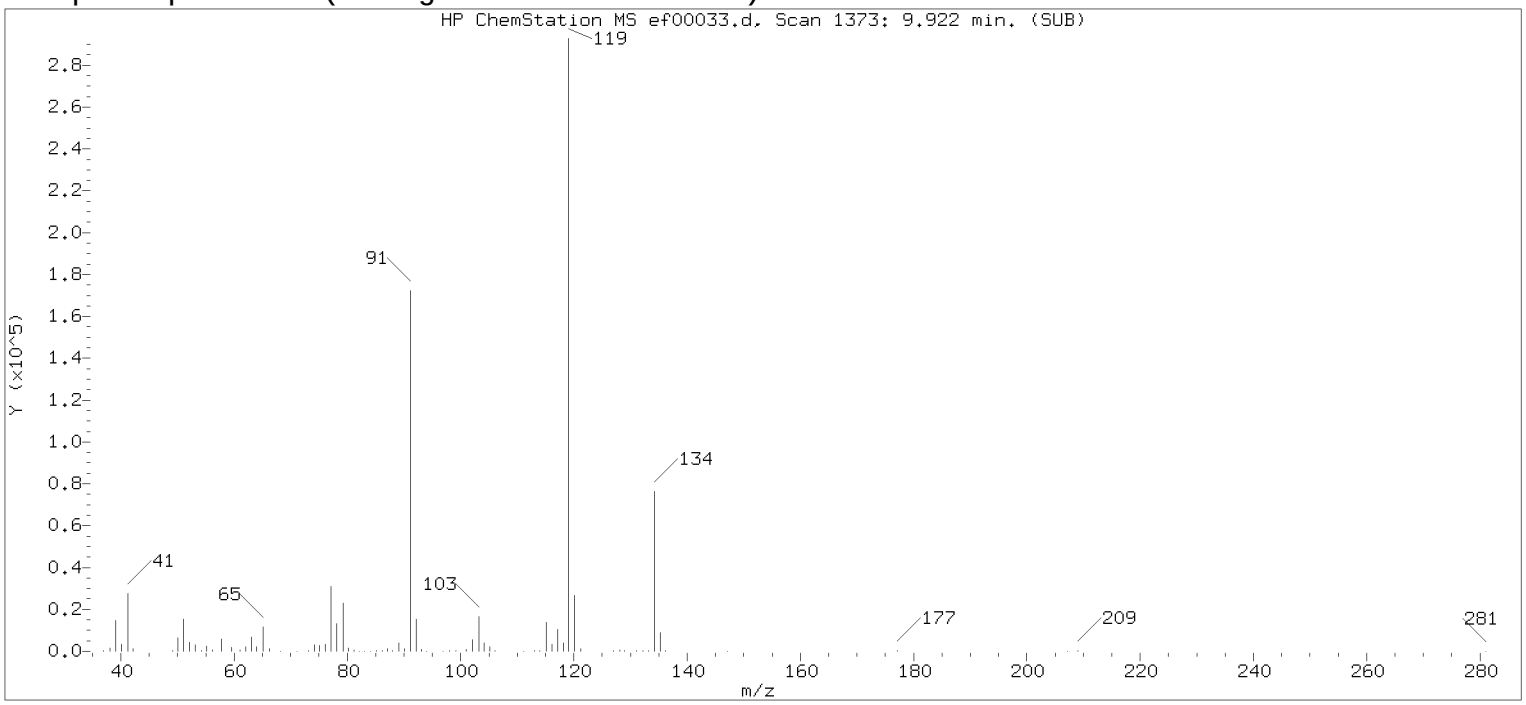
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 403168M
Concentration (ppb(v)) : 2.1314
Integration start scan : 1366 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

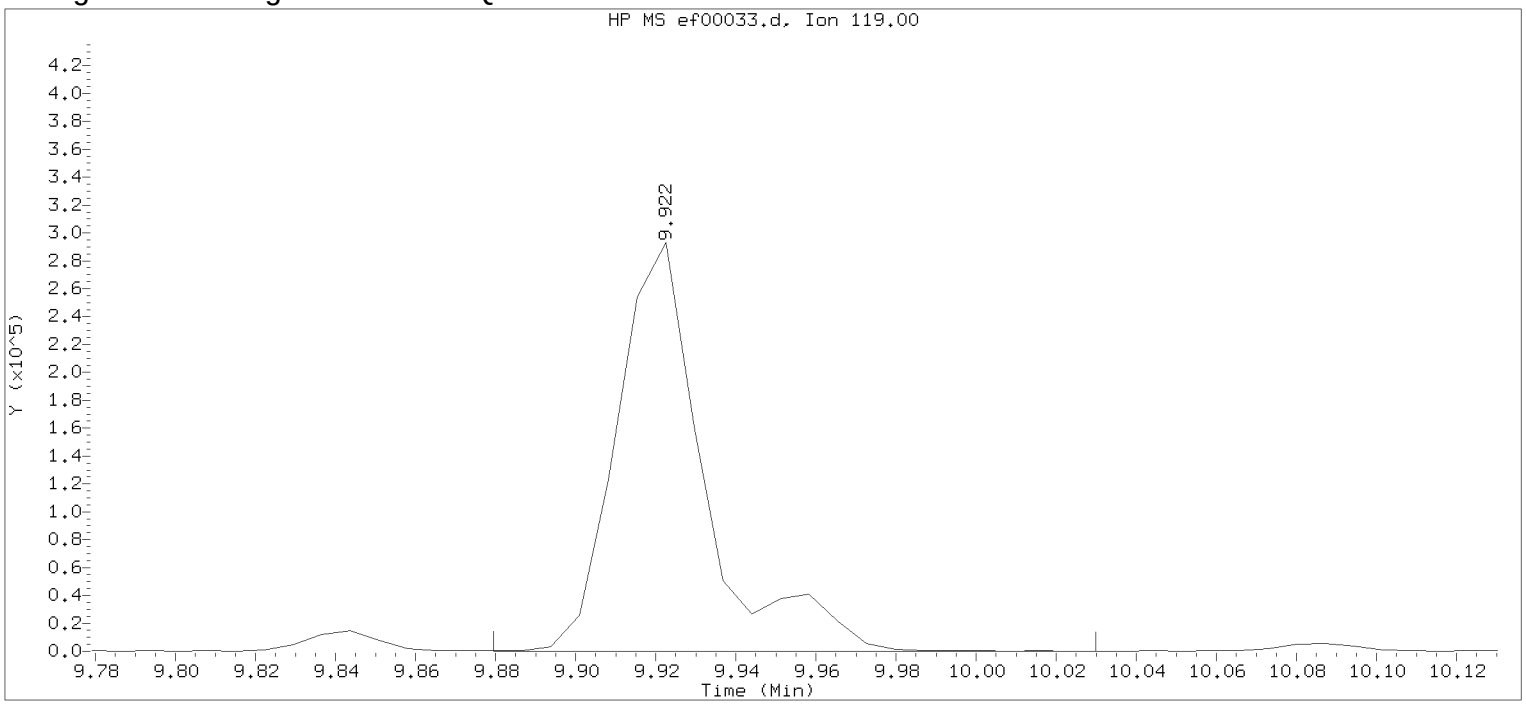
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



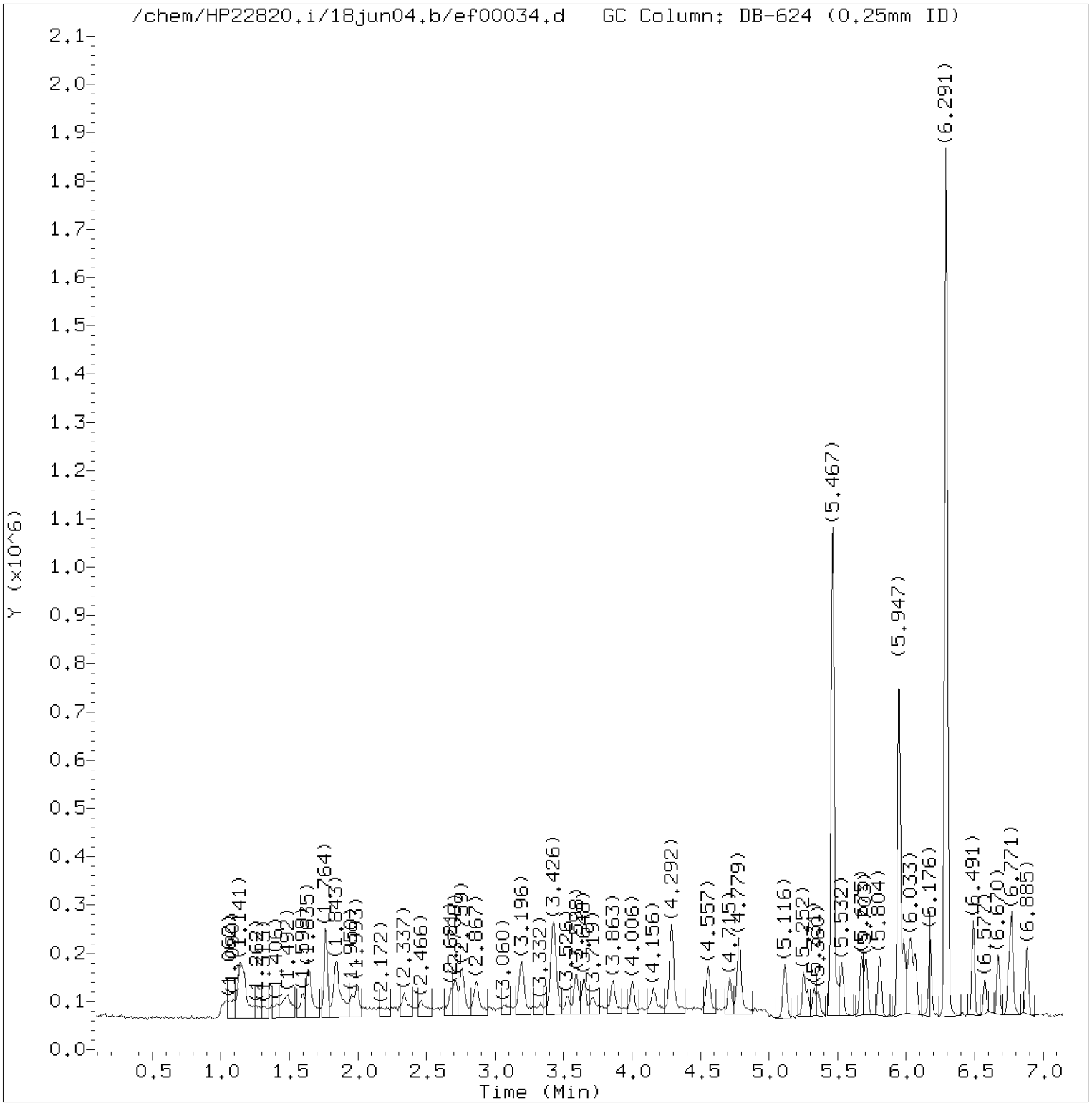
Data File: /chem/HP22820.i/18jun04.b/ef00033.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:31 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 11:50 Unknown

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compound Number	: 89		
Compound Name	: tert-Butylbenzene		
Scan Number	: 1373		
Retention Time (minutes)	: 9.922		
Quant Ion	: 119.00		
Area	: 450449		
Concentration (ppb(v))	: 2.8575		
Integration start scan	: 1366	Integration stop scan:	1387
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user GLE02jeb07445



Total Ion Chromatogram (TIC)

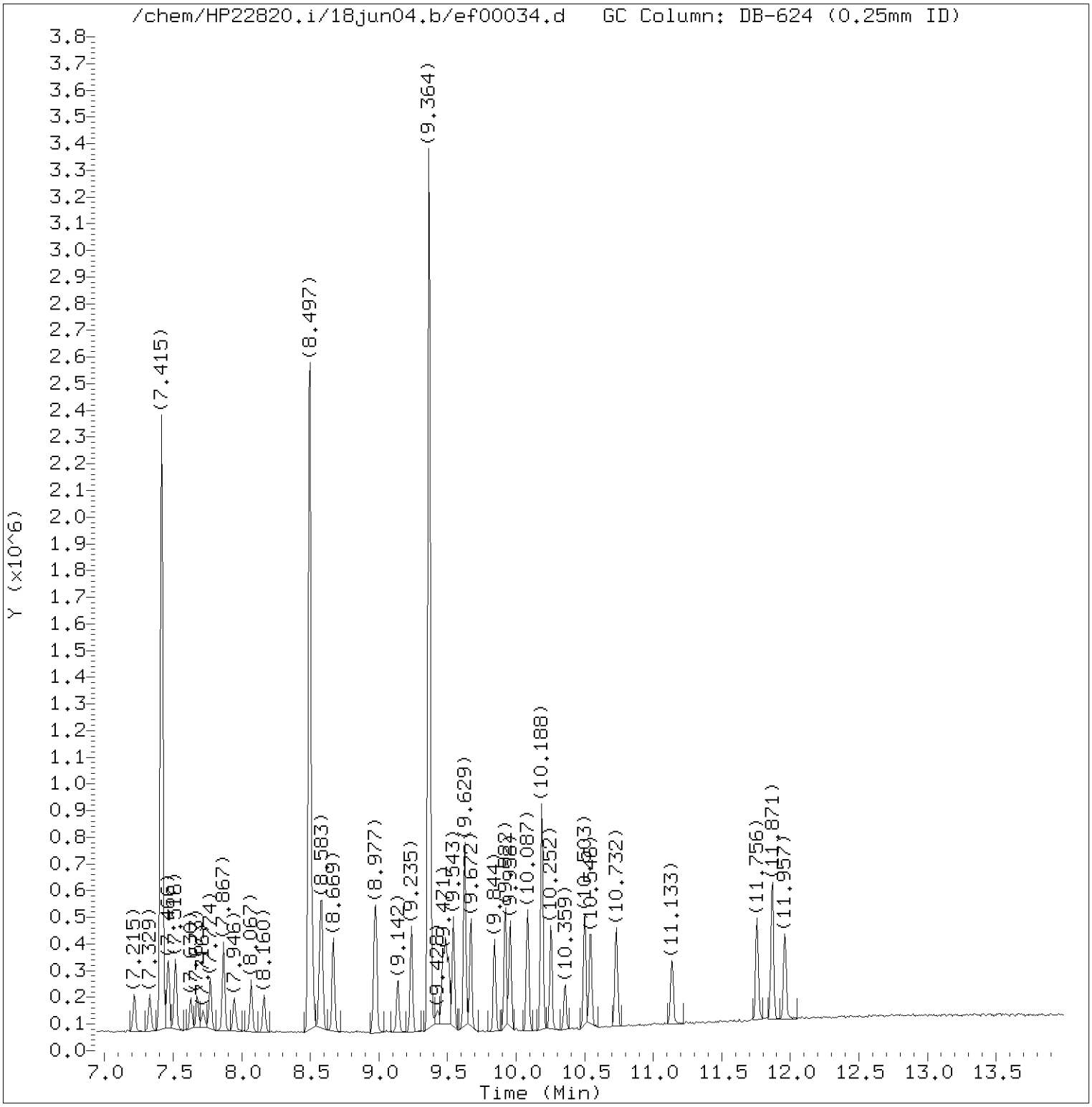
Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.599	41	22136	1.059
2) Dichlorodifluoromethane	(1)	1.635	85	76015	0.938
3) Chlorodifluoromethane	(1)	1.649	51	41574	0.968
4) Freon 114	(1)	1.764	85	80871	0.975
5) Chloromethane	(1)	1.835	50	25888	1.056
6) Vinyl Chloride	(1)	1.964	62	27763	0.923
7) 1,3-Butadiene	(1)	2.000	54	20766	0.951
8) Bromomethane	(1)	2.344	94	25558	0.826
9) Chloroethane	(1)	2.466	64	16026	0.942
10) Bromoethene	(1)	2.674	106	31230	0.950
11) Dichlorofluoromethane	(1)	2.716	67	63068	0.961
12) Trichlorofluoromethane	(1)	2.759	101	84964	0.989
13) Pentane	(1)	2.867	43	47387	1.027
14) Ethanol	(1)	3.067	45	9047M	0.912
15) Freon123a	(1)	3.189	67	64753	1.136
16) Acrolein	(1)	3.340	56	12026	1.024
17) 1,1-Dichloroethene	(1)	3.418	61	44391	0.931
18) Freon 113	(1)	3.433	103	49595	1.031
19) Acetone	(1)	3.533	43	37991	0.958
20) Methyl Iodide	(1)	3.590	142	96006	1.041
21) Carbon Disulfide	(1)	3.648	76	84991	0.952
22) Isopropanol	(1)	3.712	45	39825	1.095
23) Acetonitrile	(1)	3.863	40	28327M	1.472
24) 3-Chloropropene	(1)	3.863	76	15691	1.121
25) Methylene Chloride	(1)	3.999	84	29449	1.084
26) tert-Butyl Alcohol	(1)	4.156	59	58699	1.062
28) trans-1,2-Dichloroethene	(1)	4.285	61	39296	0.911
27) Acrylonitrile	(1)	4.292	53	21662	0.896
29) Methyl t-Butyl Ether	(1)	4.292	73	95991	1.043
30) Hexane	(1)	4.557	57	48474	1.023
31) 1,1-Dichloroethane	(1)	4.715	63	54933	0.977
32) Vinyl Acetate	(1)	4.779	86	9005	1.096
33) Di-Isopropyl Ether	(1)	4.779	45	93903	1.003
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	87348	0.978
35) cis-1,2-Dichloroethene	(1)	5.252	61	39044	0.938
37) 2-Butanone	(1)	5.281	72	17953	1.036
38) Ethyl Acetate	(1)	5.324	70	10290	1.203
39) Methyl Acrylate	(1)	5.360	55	54791	1.043

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	337271	10.000
41) Tetrahydrofuran	(1)	5.503	42	30142	0.982
42) Chloroform	(1)	5.532	83	69171	0.981
43) 1,1,1-Trichloroethane	(1)	5.675	97	72488	1.015
44) Cyclohexane	(1)	5.711	56	50276	1.024
45) Carbon Tetrachloride	(1)	5.804	117	69262	0.988
46) Benzene	(2)	5.983	78	113560	1.046
47) 1,2-Dichloroethane	(2)	6.011	62	45374	1.028
48) Isooctane	(2)	6.033	57	148400	0.988
49) Tert-Amyl Methyl Ether	(2)	6.069	73	91056	1.006
50) Heptane	(2)	6.176	43	54122	1.054
51)*1,4-Difluorobenzene	(2)	6.291	114	1262174	10.000
52) Trichloroethene	(2)	6.491	130	56255	1.043
53) Ethyl Acrylate	(2)	6.577	55	69811	1.016
36) 1,2-Dichloroethene (total)	(1)		61	78340	1.849
54) 1,2-Dichloropropane	(2)	6.678	63	41703	1.098
57) Methyl Methacrylate	(2)	6.749	69	39225	1.032
55) Dibromomethane	(2)	6.771	174	53423	1.024
56) 1,4-Dioxane	(2)	6.778	88	29040	1.052
58) Bromodichloromethane	(2)	6.885	83	77508	1.042
59) cis-1,3-Dichloropropene	(2)	7.215	75	65837	1.004
60) 4-Methyl-2-Pentanone	(2)	7.329	43	75941	1.063
61) Toluene	(3)	7.466	91	149791	1.065
62) Octane	(3)	7.516	43	81311	1.111
63) trans-1,3-Dichloropropene	(3)	7.630	75	55353	0.998
65) Ethyl Methacrylate	(3)	7.673	69	61542	0.978
66) 1,1,2-Trichloroethane	(3)	7.774	97	56357	1.134
67) Tetrachloroethene	(3)	7.867	166	82995	1.054
68) 2-Hexanone	(3)	7.946	43	73923	1.050
69) Dibromochloromethane	(3)	8.067	127	64161	1.024
70) 1,2-Dibromoethane	(3)	8.160	107	80176	1.037
71)*Chlorobenzene-d5	(3)	8.497	117	1219205	10.000
72) Chlorobenzene	(3)	8.511	112	131204	1.090
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	57725	0.985
74) Ethylbenzene	(3)	8.583	91	206120	1.096
75) m/p-Xylene	(3)	8.669	91	166572	1.091
76) o-Xylene	(3)	8.970	91	167068	1.107
78) Styrene	(3)	8.977	104	118037	1.032

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

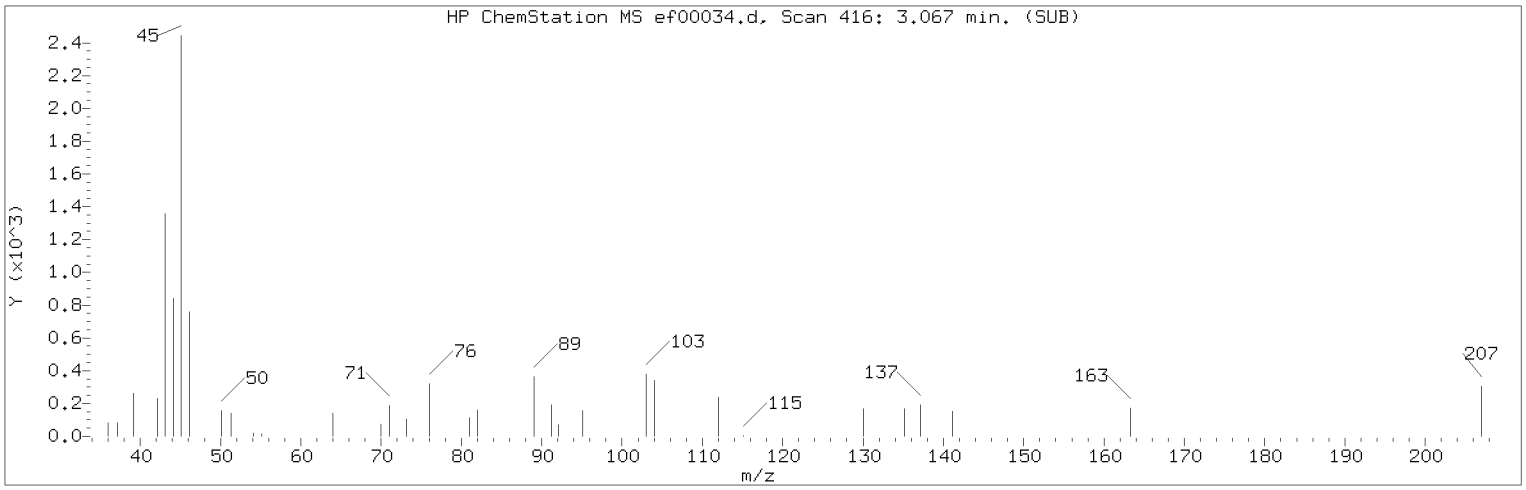
Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	77433	0.960
80) Cumene	(3)	9.235	105	226067	1.050
82) 1,1,2,2-Tetrachloroethane	(3)	9.464	83	117071	1.106
81) Bromobenzene	(3)	9.486	156	80551	1.053
83) 1,2,3-Trichloropropane	(3)	9.507	110	37096	1.097
84) n-Propylbenzene	(3)	9.543	120	67333	1.088
85) 2-Chlorotoluene	(3)	9.622	126	61262	1.076
86) 4-Ethyltoluene	(3)	9.629	105	222701M	1.102
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	194970M	1.125
88) Alpha Methyl Styrene	(3)	9.844	118	93203	1.025
89) tert-Butylbenzene	(3)	9.922	119	204398M	1.111
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	188165	1.100
91) sec-Butylbenzene	(3)	10.087	105	278310	1.075
92) 1,3-Dichlorobenzene	(3)	10.188	146	139599	1.098
94) p-Isopropyltoluene	(3)	10.188	119	232769	1.051
93) 1,4-Dichlorobenzene	(3)	10.252	146	143029	1.104
95) Benzyl Chloride	(3)	10.359	91	108121	0.922
97) n-Butylbenzene	(3)	10.503	91	206651	1.038
96) 1,2-Dichlorobenzene	(3)	10.546	146	137957	1.140
98) Hexachloroethane	(3)	10.732	117	43998	0.935
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	62817	1.004
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	113079	1.090
101) Hexachlorobutadiene	(3)	11.871	225	97805	1.103
102) Naphthalene	(3)	11.957	128	243925	1.064
64) 1,3-Dichloropropene (total)	(3)		75	121190	1.997
77) Xylene (total)	(3)		91	333640	2.197

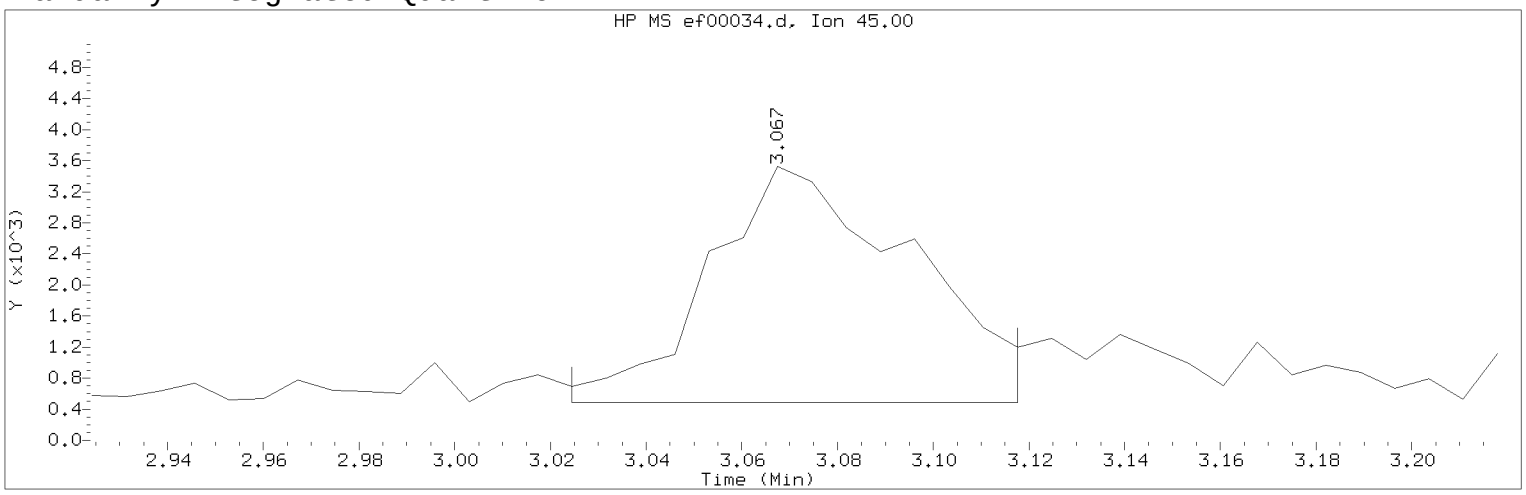
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

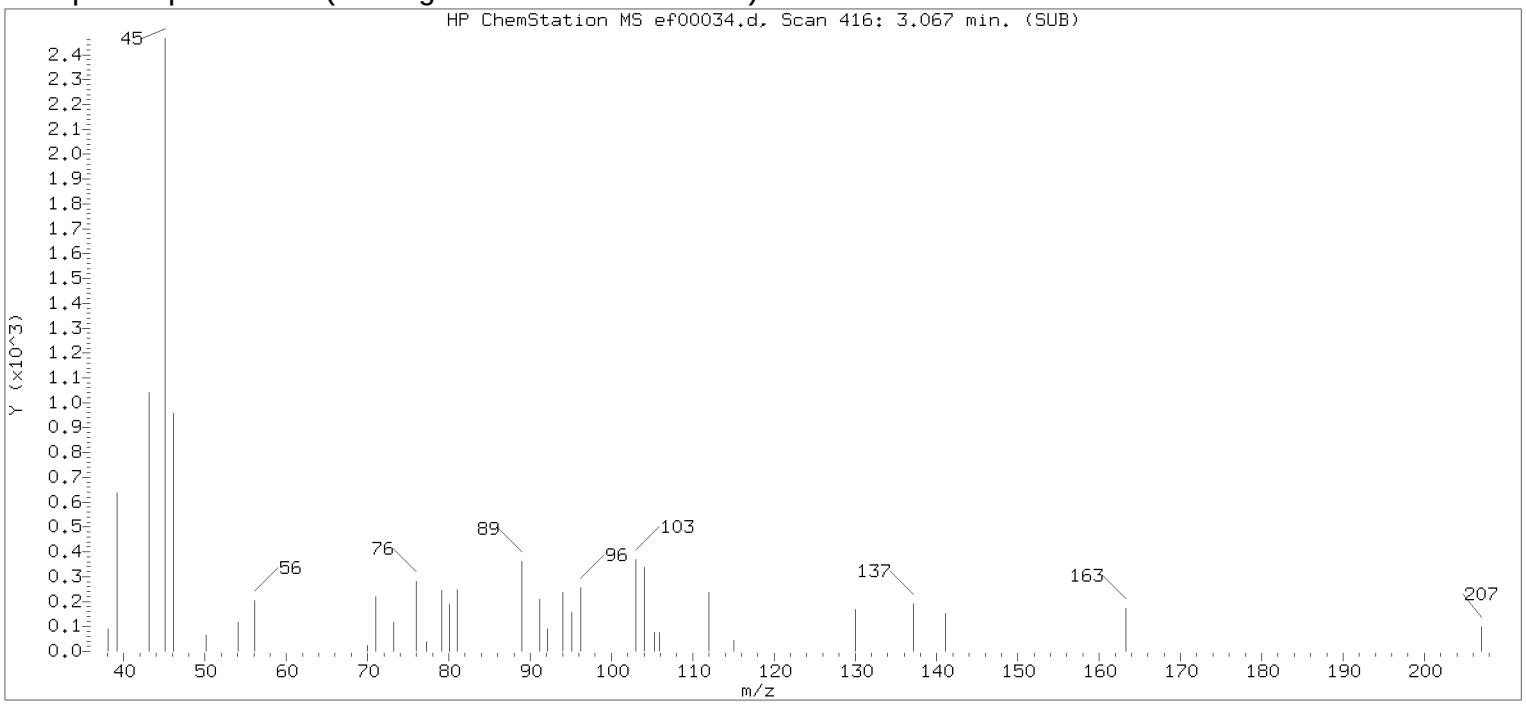
Compound Number : 14
Compound Name : Ethanol
Scan Number : 416
Retention Time (minutes): 3.067
Quant Ion : 45.00
Area (flag) : 9047M
Concentration (ppb(v)) : 0.9118
Integration start scan : 409 Integration stop scan: 422
Y at integration start : 488 Y at integration end: 488

Reason for manual integration: improper integration

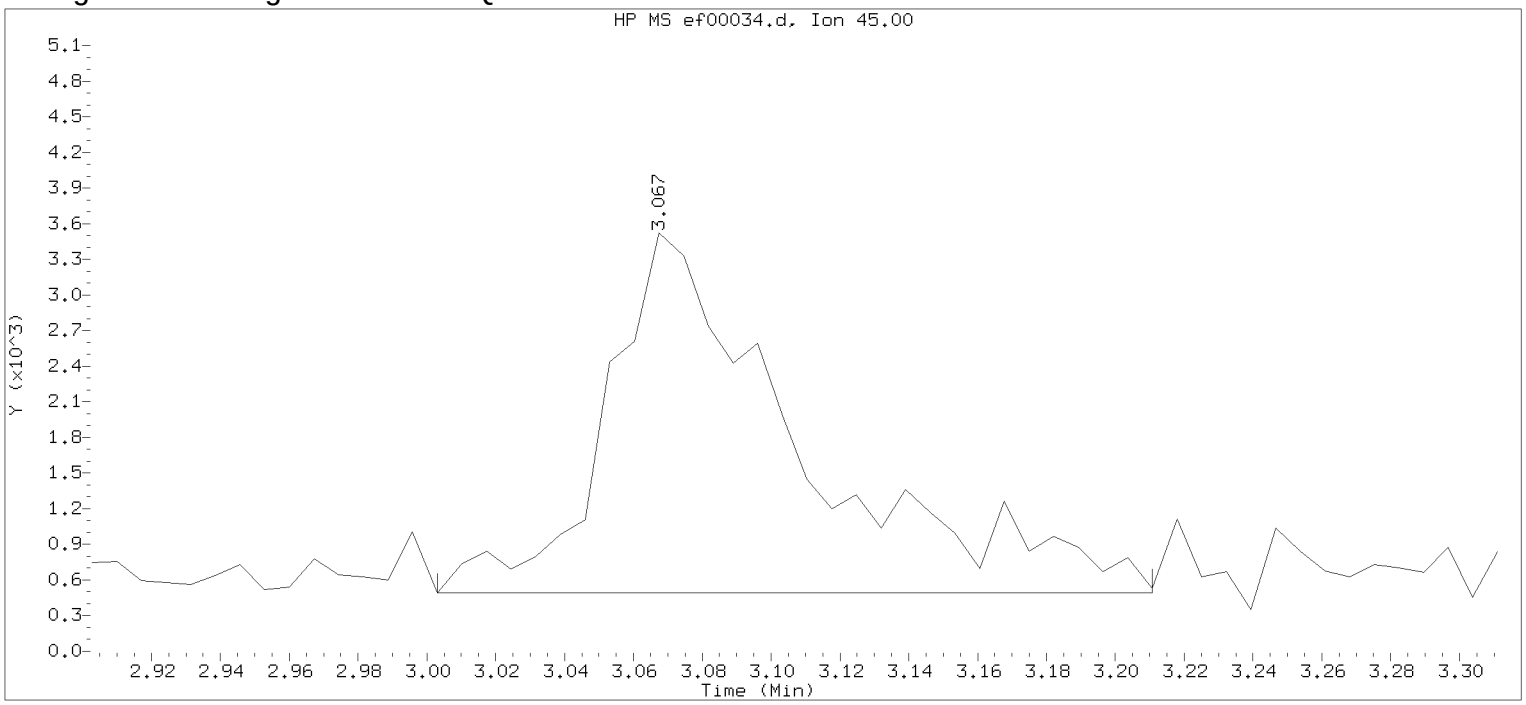
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

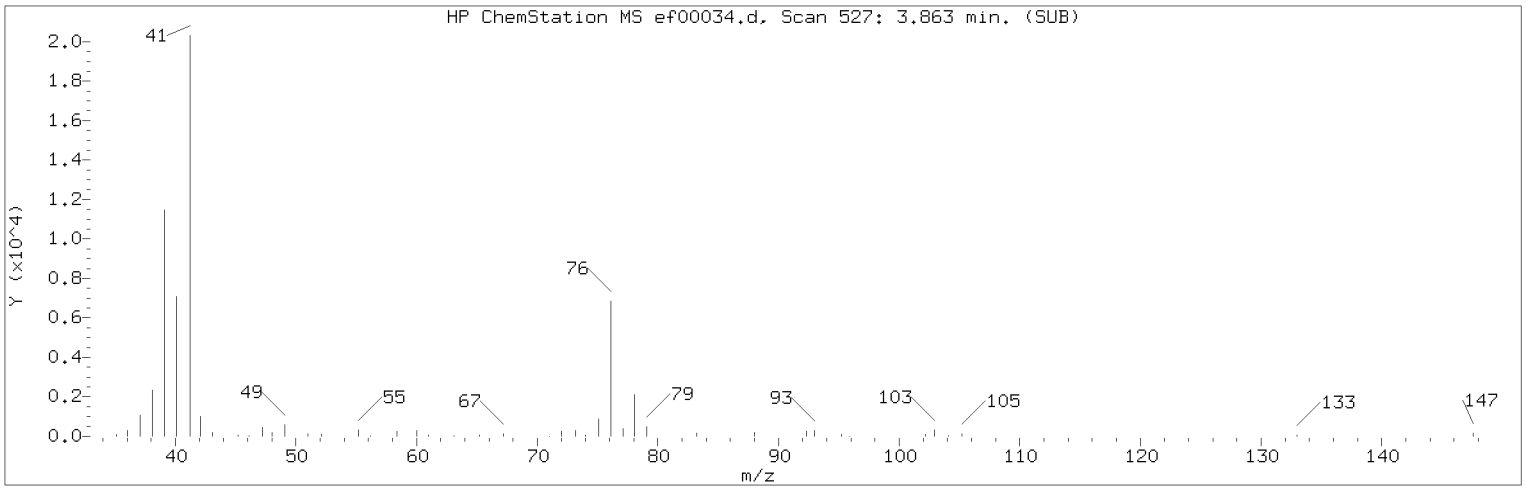
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 12:14 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

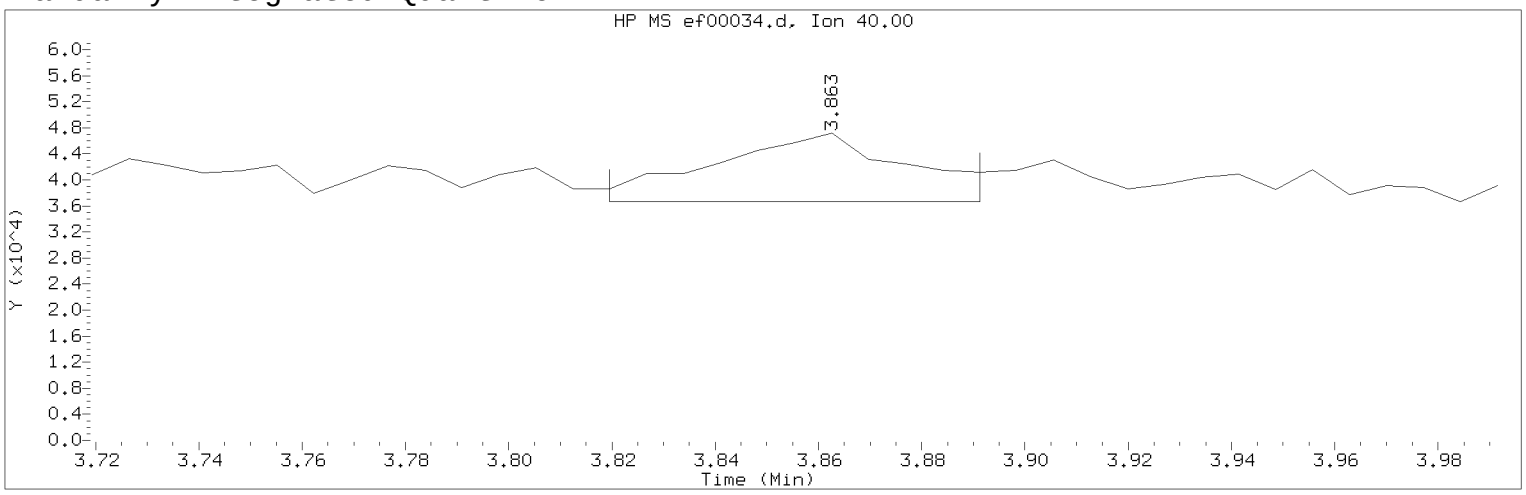
Compound Number : 14
Compound Name : Ethanol
Scan Number : 416
Retention Time (minutes): 3.067
Quant Ion : 45.00
Area : 11871
Concentration (ppb(v)) : 1.1201
Integration start scan : 406 Integration stop scan: 435
Y at integration start : 494 Y at integration end: 494

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

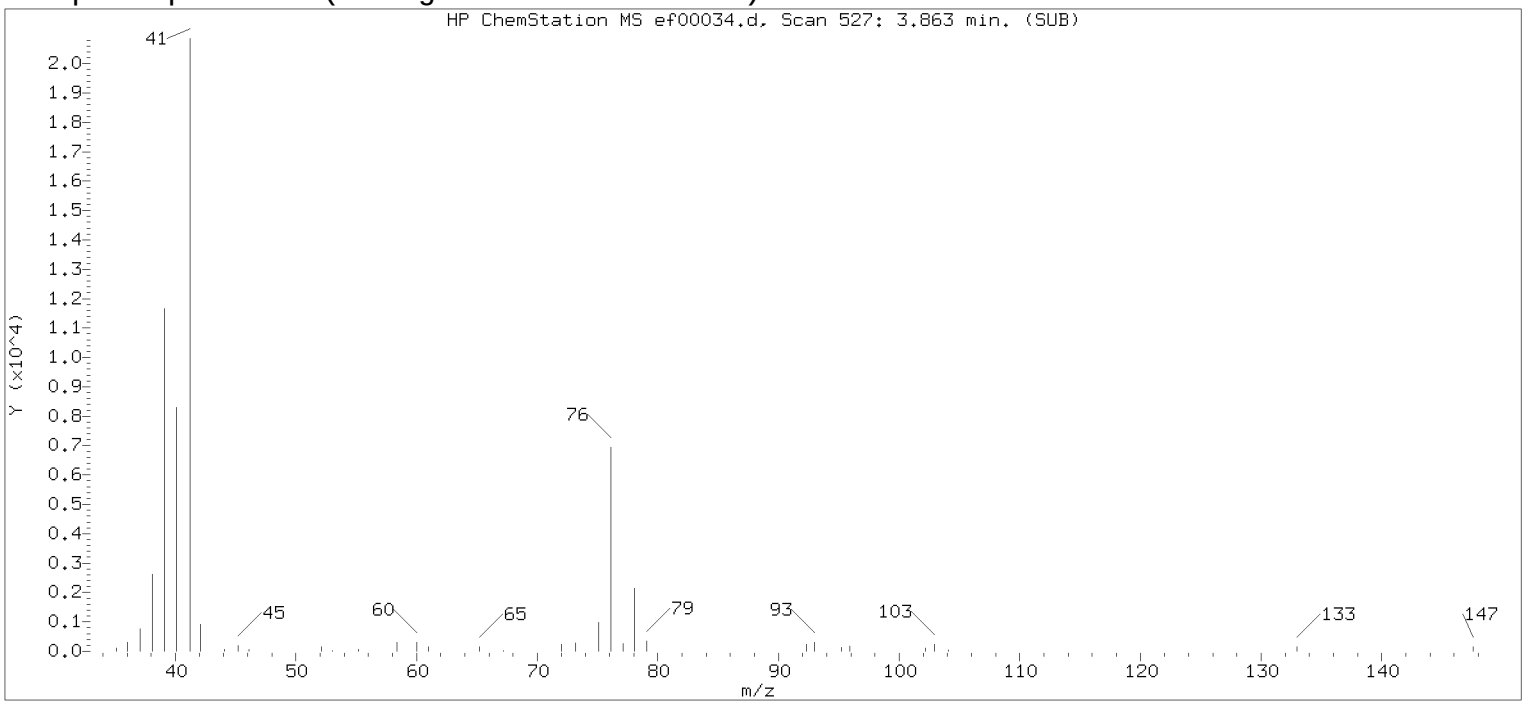
Compound Number : 23
Compound Name : Acetonitrile
Scan Number : 527
Retention Time (minutes): 3.863
Quant Ion : 40.00
Area (flag) : 28327M
Concentration (ppb(v)) : 1.4716
Integration start scan : 520 Integration stop scan: 530
Y at integration start : 36640 Y at integration end: 36640

Reason for manual integration: improper integration

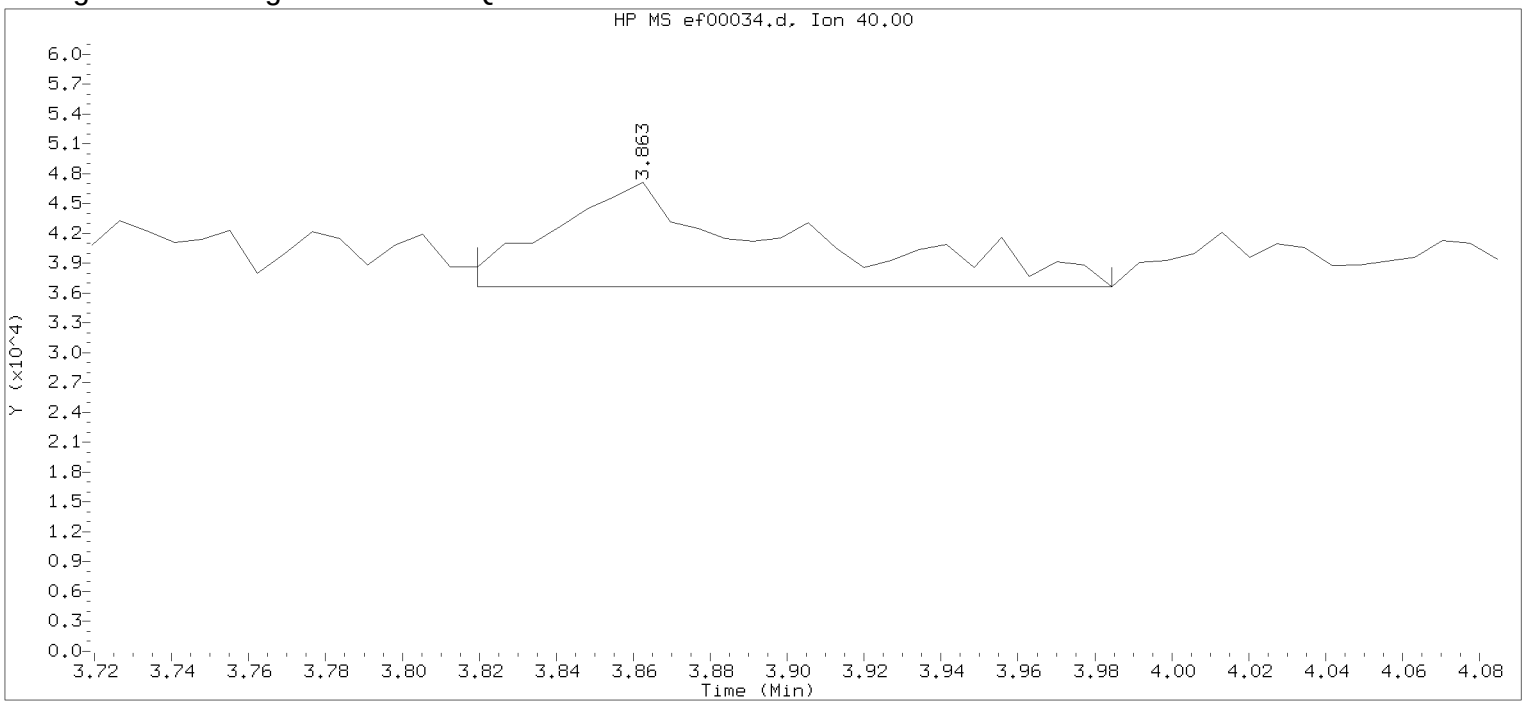
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

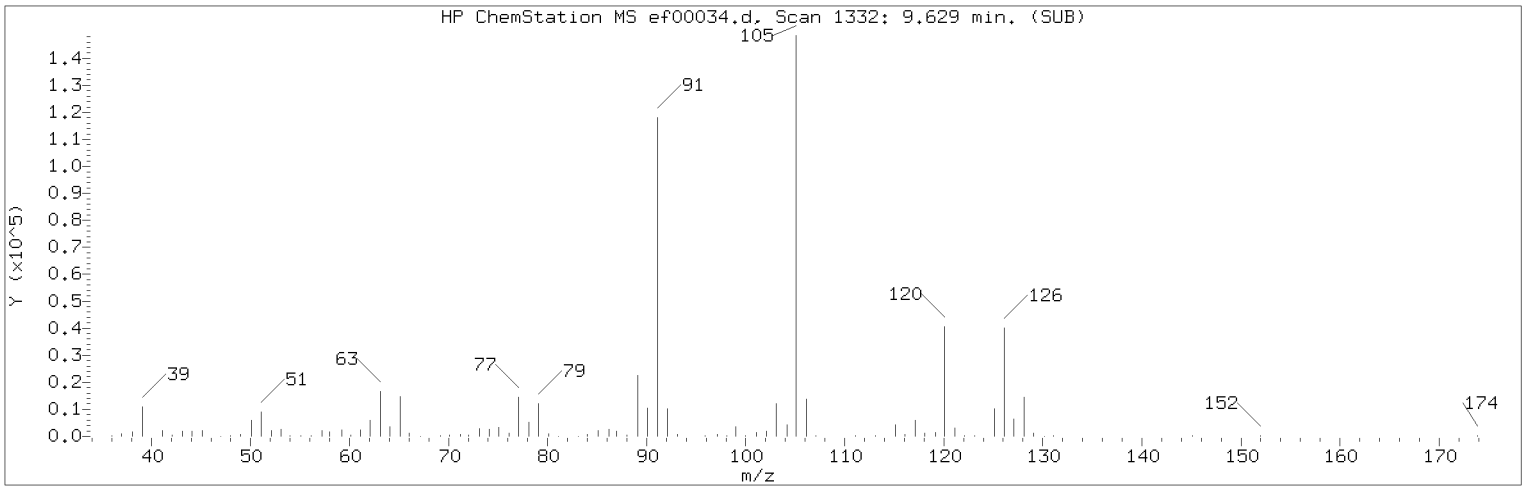
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 12:14 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

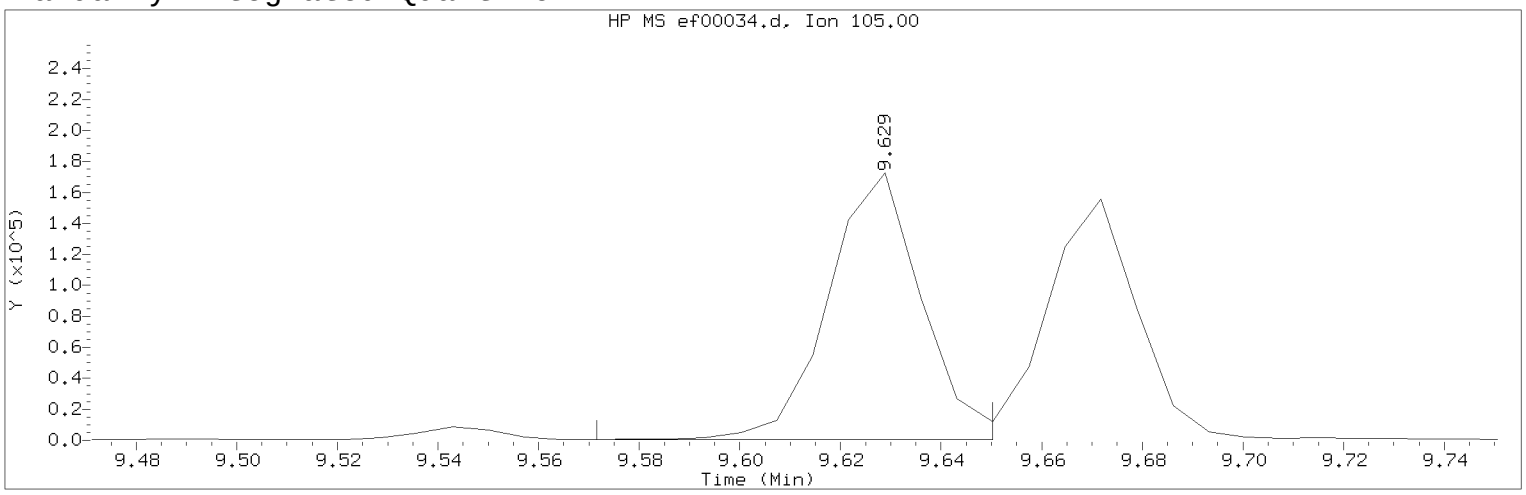
Compound Number : 23
Compound Name : Acetonitrile
Scan Number : 527
Retention Time (minutes): 3.863
Quant Ion : 40.00
Area : 45242
Concentration (ppb(v)) : 1.7905
Integration start scan : 520 Integration stop scan: 543
Y at integration start : 36640 Y at integration end: 36640

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

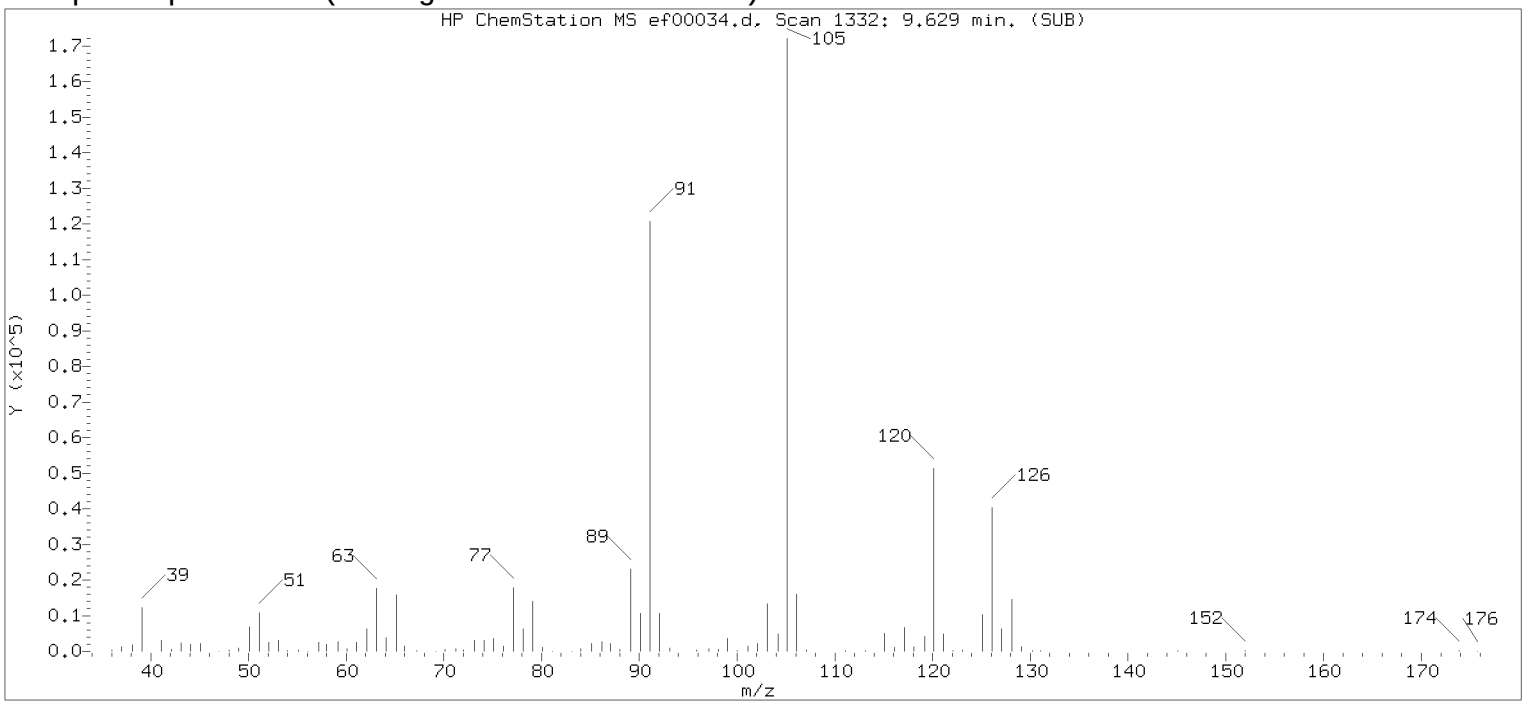
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 222701M
Concentration (ppb(v)) : 1.1025
Integration start scan : 1323 Integration stop scan: 1334
Y at integration start : 270 Y at integration end: 270

Reason for manual integration: improper integration

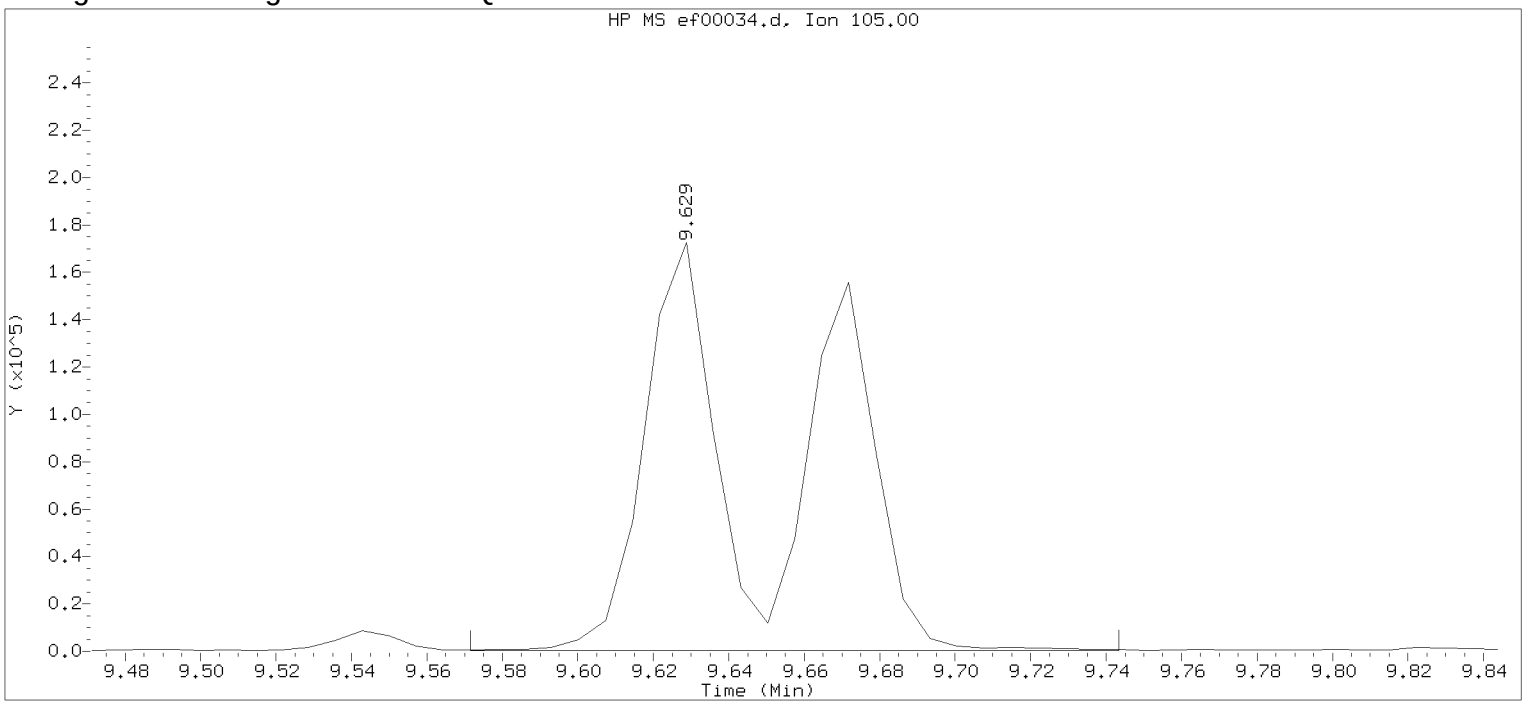
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

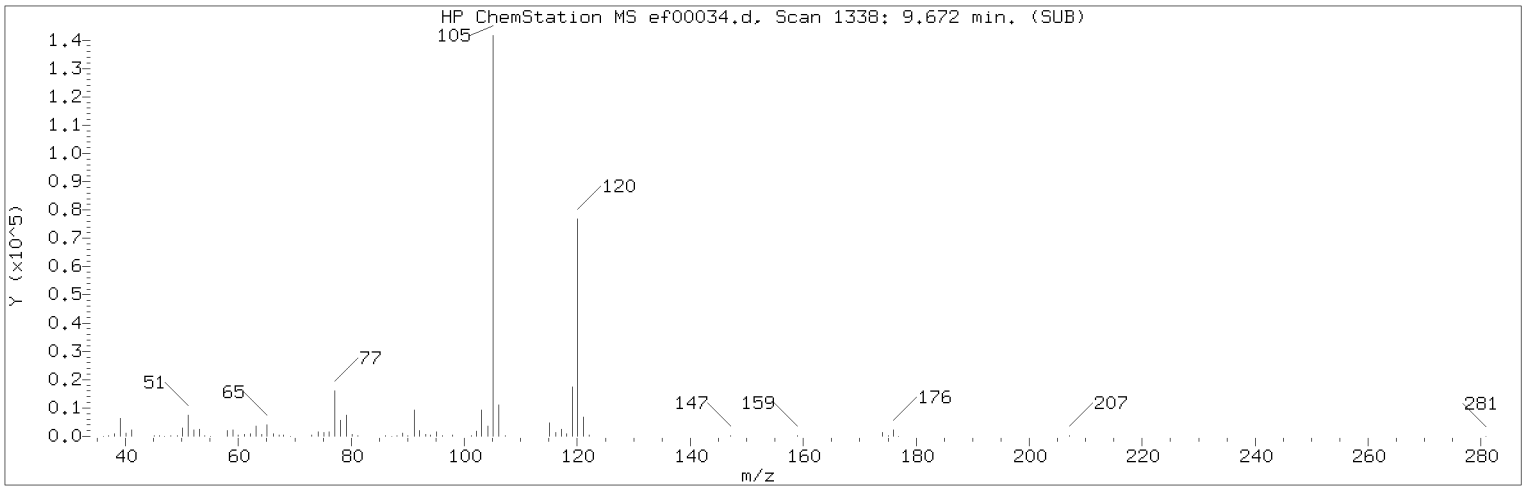
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 12:14 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

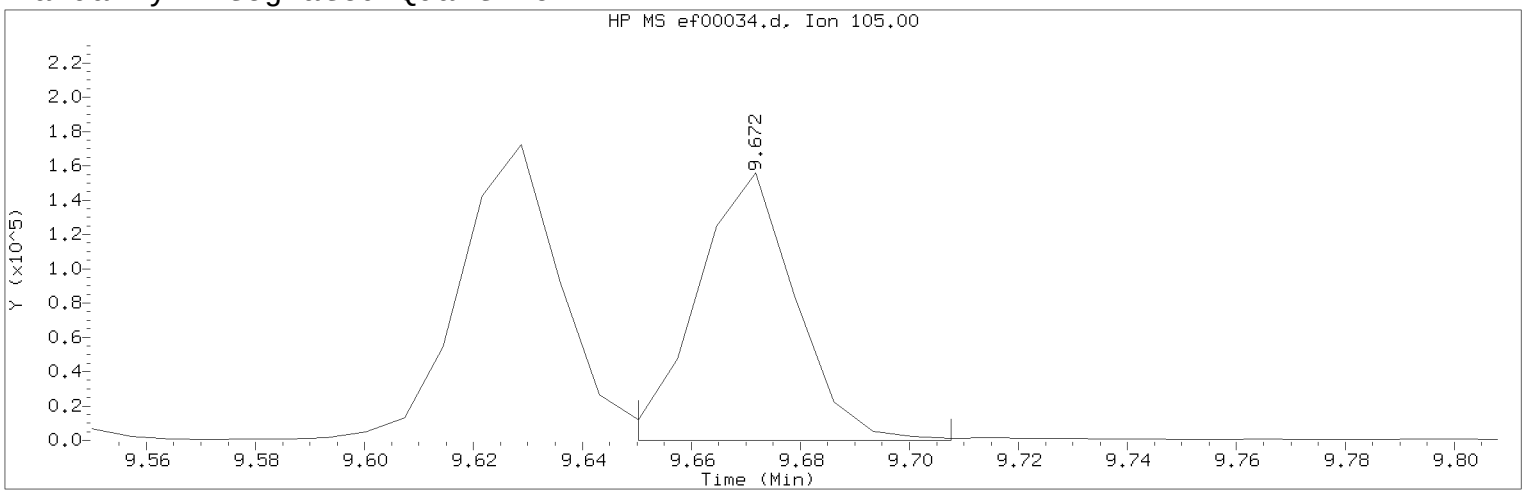
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 413903
Concentration (ppb(v)) : 2.0631
Integration start scan : 1323 Integration stop scan: 1347
Y at integration start : 270 Y at integration end: 270

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

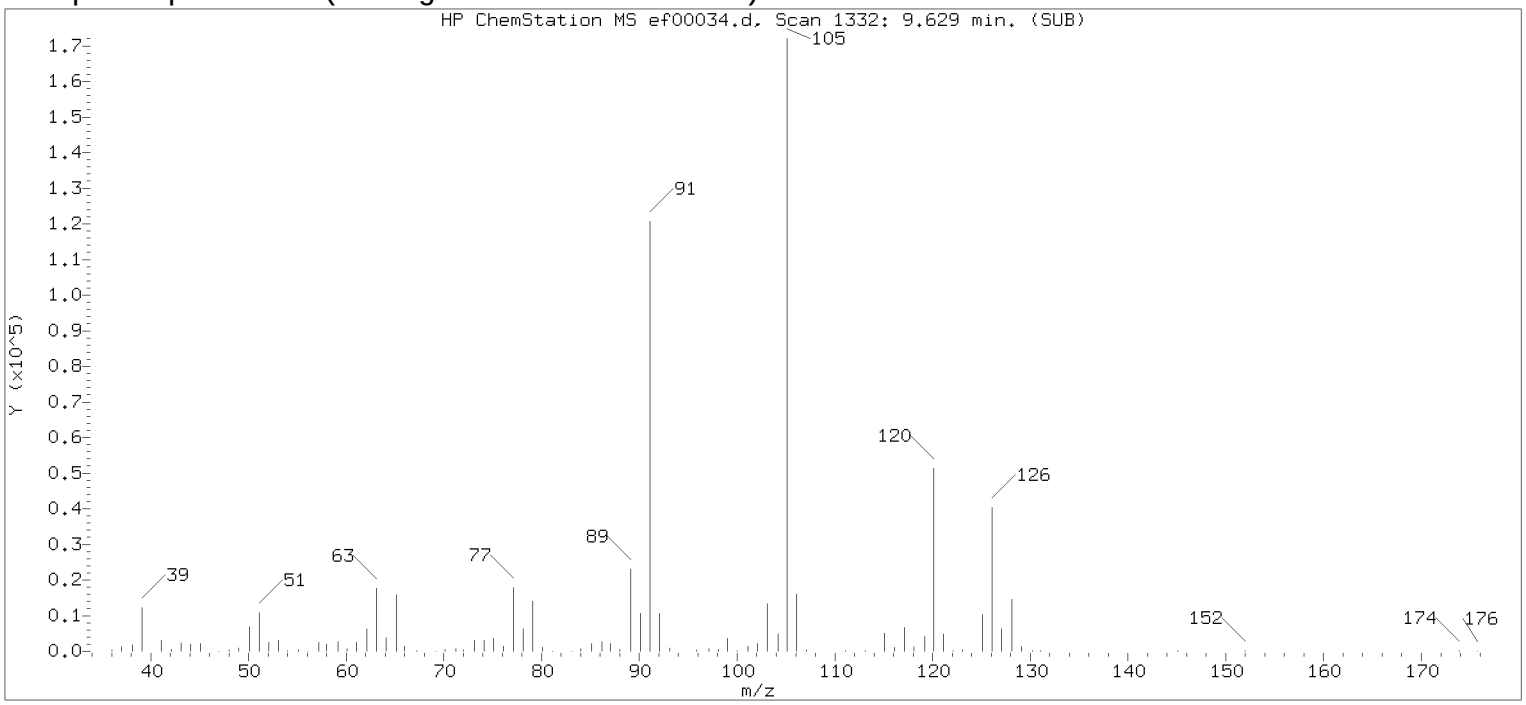
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 194970M
Concentration (ppb(v)) : 1.1252
Integration start scan : 1334 Integration stop scan: 1342
Y at integration start : 148 Y at integration end: 148

Reason for manual integration: improper integration

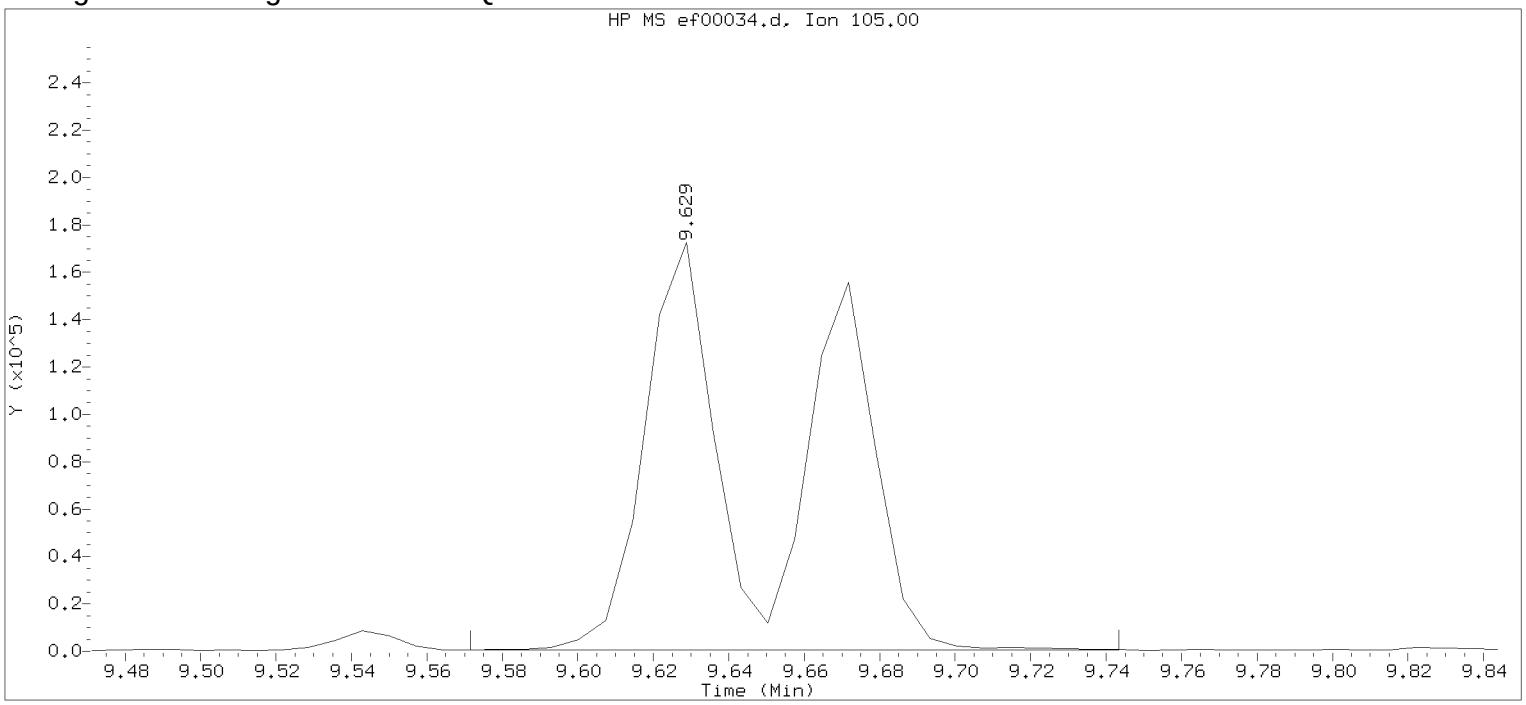
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

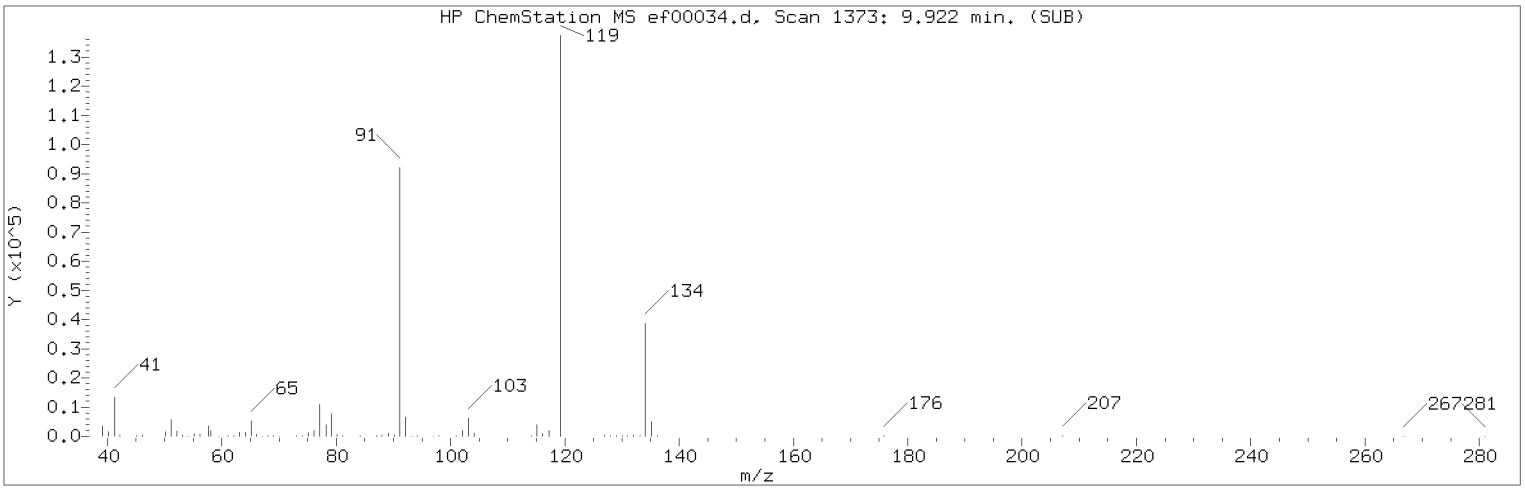
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 12:14 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

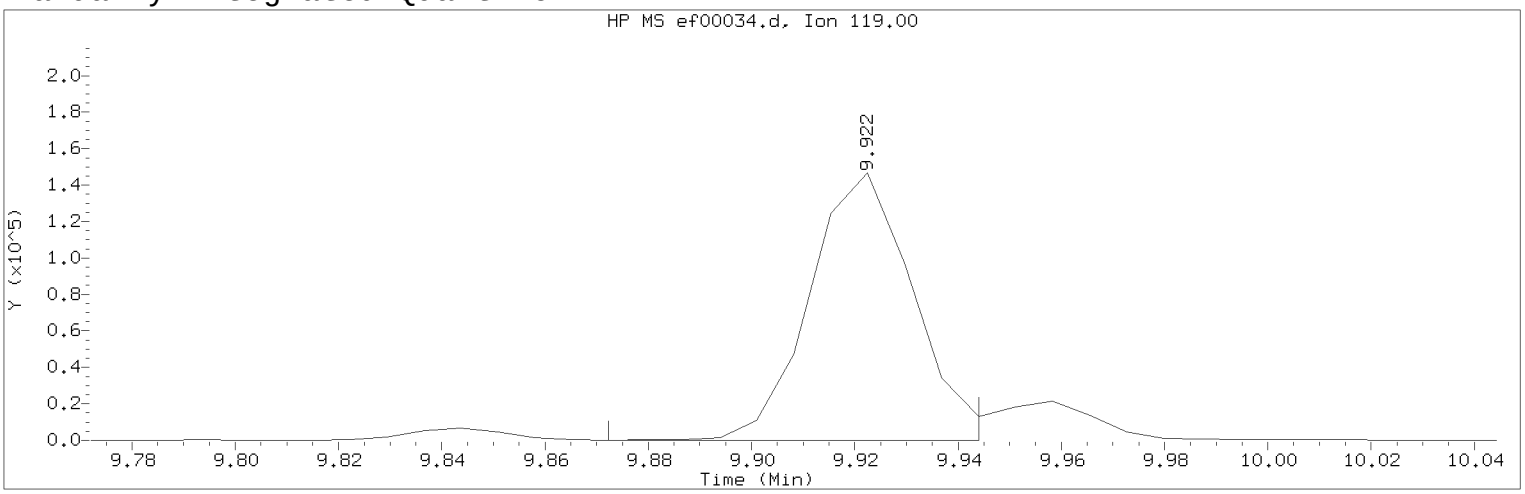
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 412110
Concentration (ppb(v)) : 2.4742
Integration start scan : 1323 Integration stop scan: 1347
Y at integration start : 446 Y at integration end: 446

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature userGLE02jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

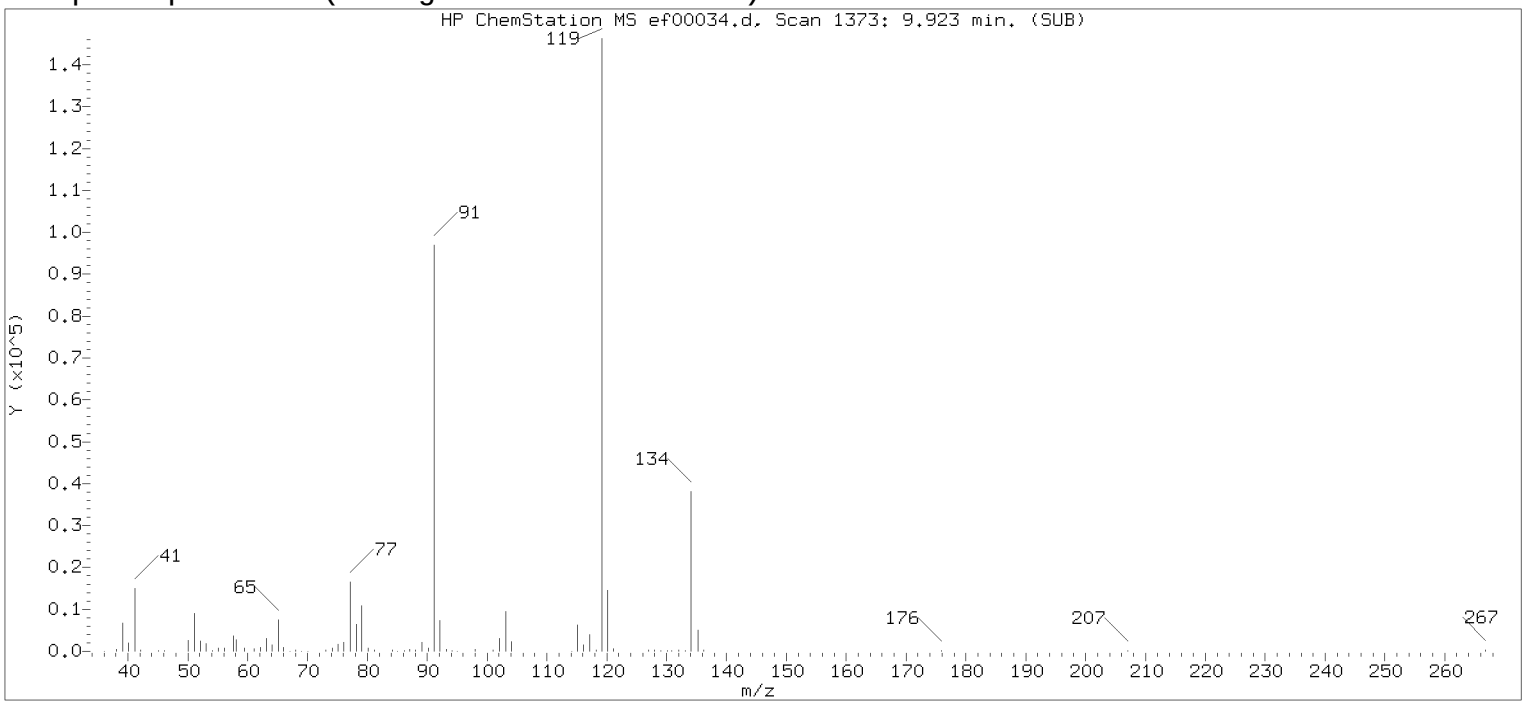
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 204398M
Concentration (ppb(v)) : 1.1109
Integration start scan : 1365 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

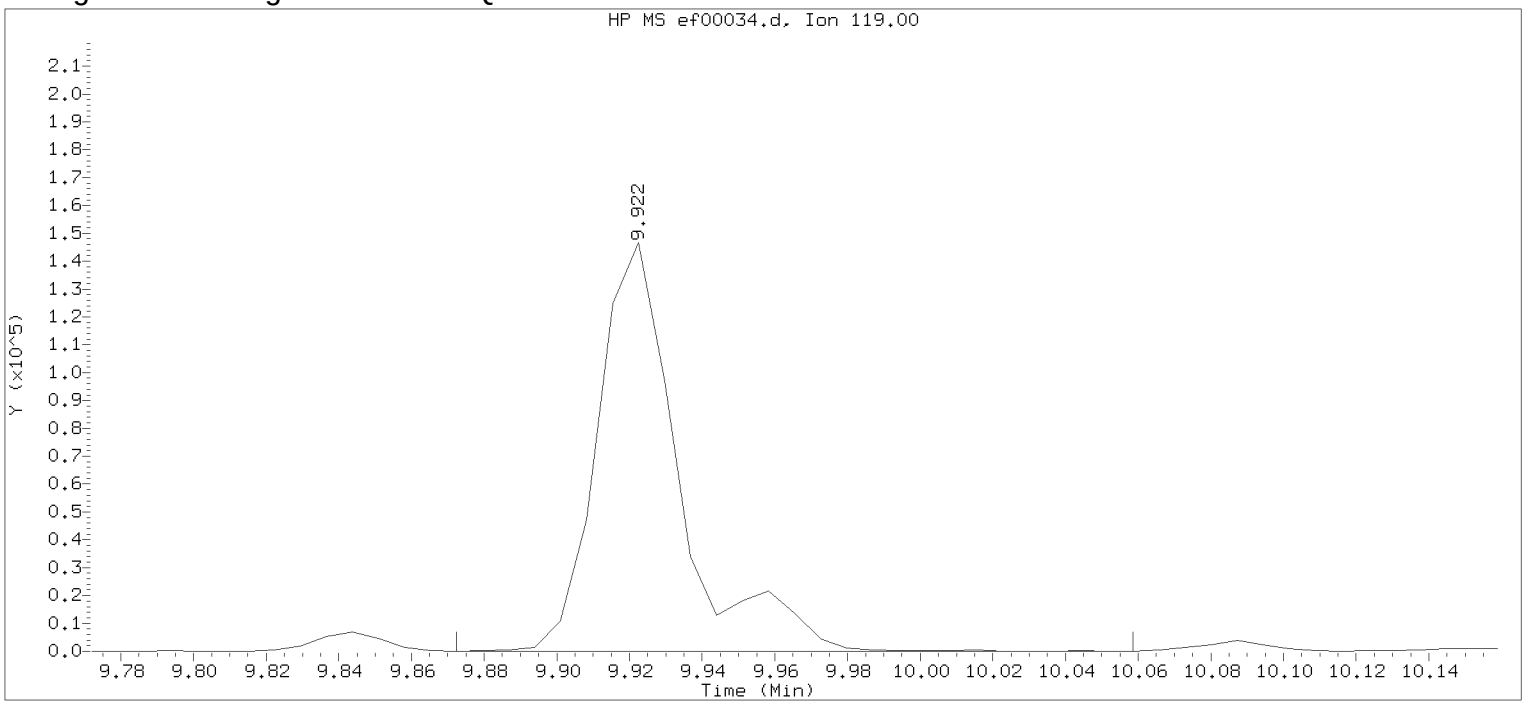
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



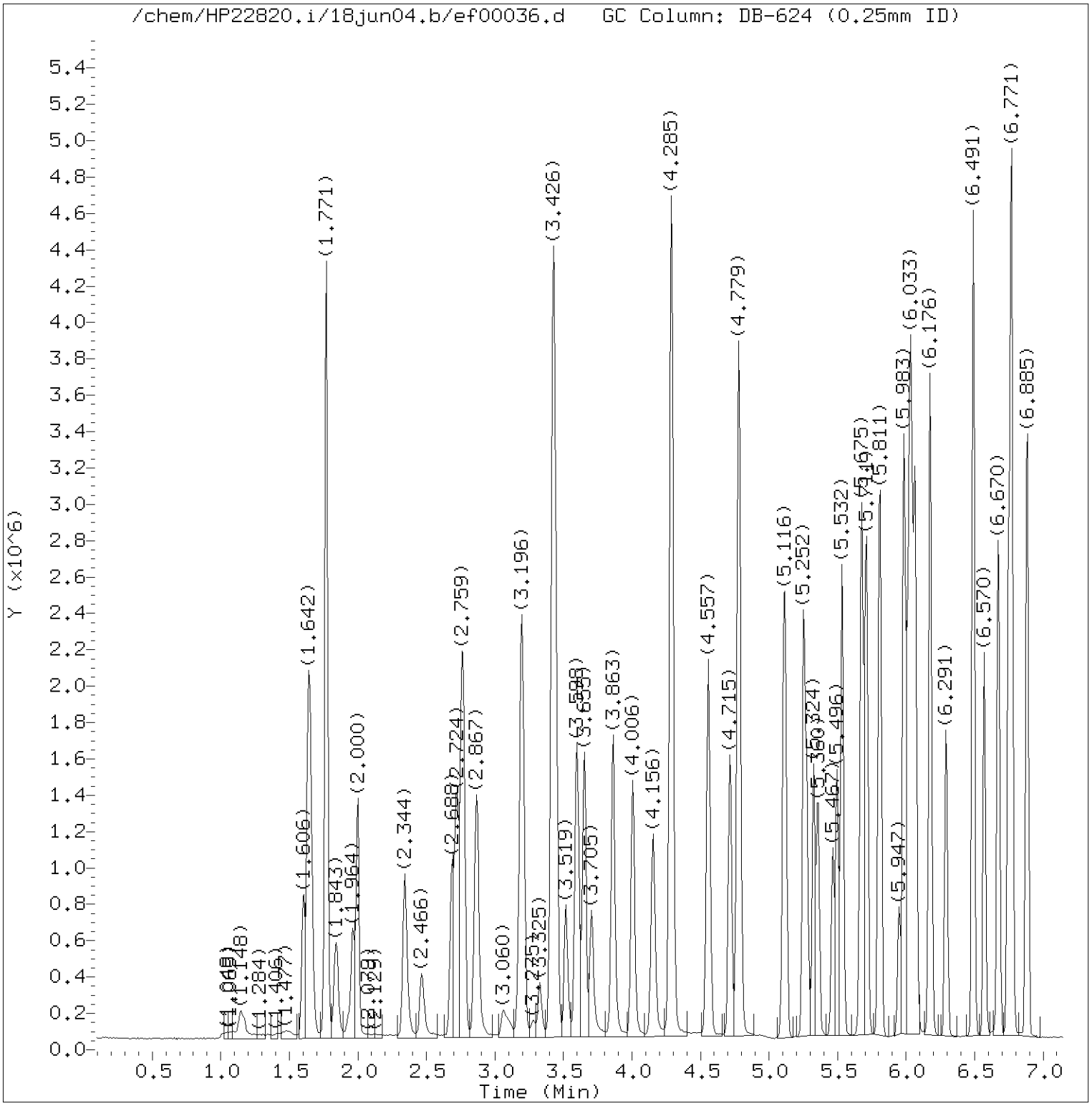
Data File: /chem/HP22820.i/18jun04.b/ef00034.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 11:56 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 12:14 Unknown

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 230716
Concentration (ppb(v)) : 1.5047
Integration start scan : 1365 Integration stop scan: 1391
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

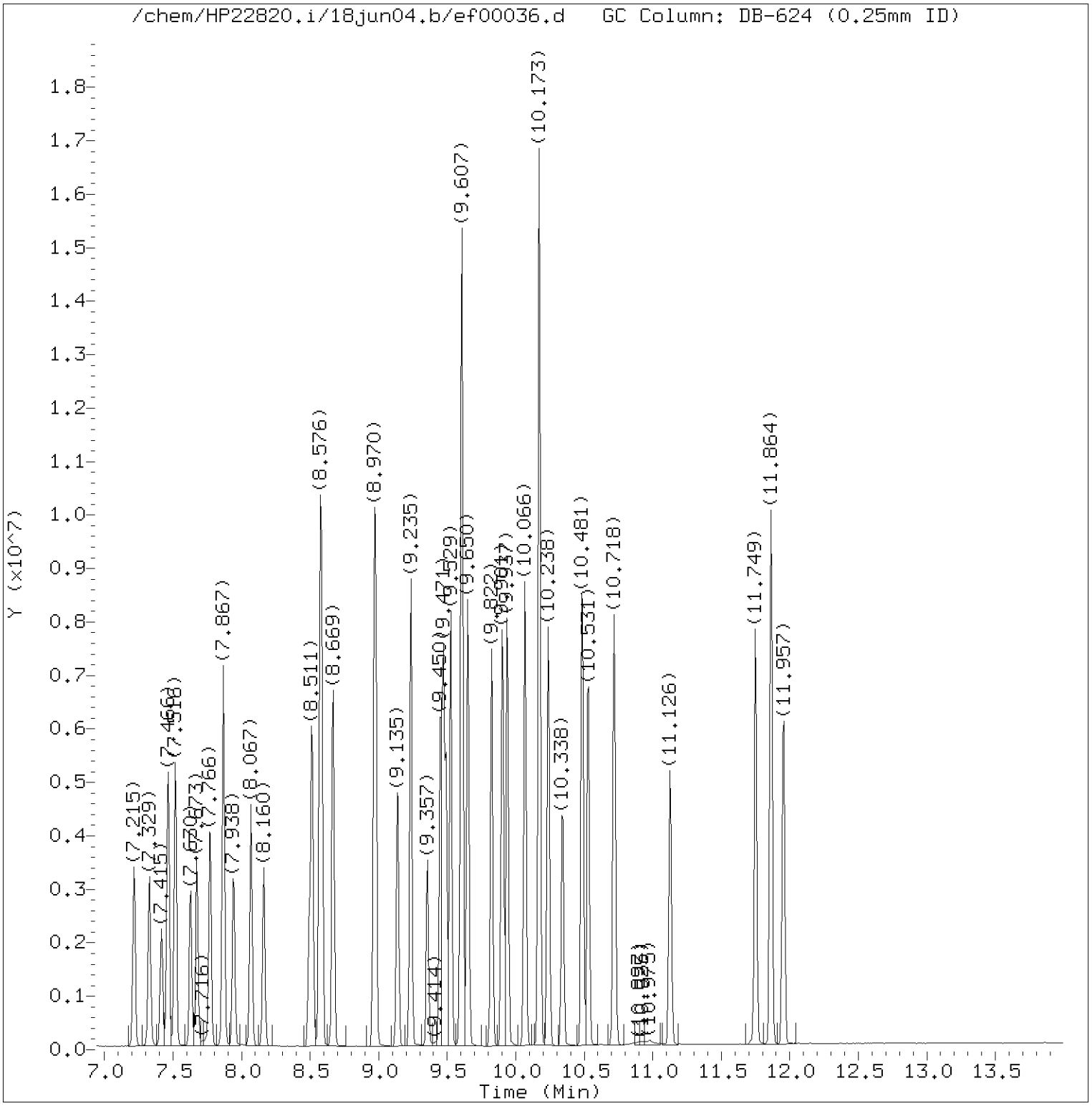
Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00036.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 12:47 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00036.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 12:47 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00036.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 12:47 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.606	41	479026	23.714
2) Dichlorodifluoromethane	(1)	1.642	85	1974302	25.215
3) Chlorodifluoromethane	(1)	1.656	51	1033023	24.898
4) Freon 114	(1)	1.771	85	2004377	25.018
5) Chloromethane	(1)	1.843	50	575116	24.284
6) Vinyl Chloride	(1)	1.964	62	723667	24.896
7) 1,3-Butadiene	(1)	2.000	54	517009	24.513
8) Bromomethane	(1)	2.344	94	756367	25.302
9) Chloroethane	(1)	2.466	64	398211	24.238
10) Bromoethene	(1)	2.688	106	789433	24.858
11) Dichlorofluoromethane	(1)	2.724	67	1570180	24.780
12) Trichlorofluoromethane	(1)	2.767	101	2051270	24.717
13) Pentane	(1)	2.867	43	1061611	23.823
14) Ethanol	(1)	3.060	45	239187	24.955
15) Freon123a	(1)	3.196	67	1478321	26.837
16) Acrolein	(1)	3.325	56	278586	24.545
17) 1,1-Dichloroethene	(1)	3.418	61	1143129	24.812
18) Freon 113	(1)	3.433	103	1127590	24.269
19) Acetone	(1)	3.519	43	934144	24.390
20) Methyl Iodide	(1)	3.598	142	2209634	24.801
21) Carbon Disulfide	(1)	3.655	76	2128248	24.666
22) Isopropanol	(1)	3.705	45	972733	27.695
23) Acetonitrile	(1)	3.863	40	368744	19.832
24) 3-Chloropropene	(1)	3.863	76	354178	26.198
25) Methylene Chloride	(1)	4.006	84	709516	27.043
26) tert-Butyl Alcohol	(1)	4.156	59	1454157	27.236
28) trans-1,2-Dichloroethene	(1)	4.285	61	1026691	24.640
29) Methyl t-Butyl Ether	(1)	4.285	73	2103346	23.656
27) Acrylonitrile	(1)	4.292	53	584091	25.020
30) Hexane	(1)	4.557	57	1081713	23.640
31) 1,1-Dichloroethane	(1)	4.715	63	1320619	24.324
32) Vinyl Acetate	(1)	4.779	86	213953	26.952
33) Di-Isopropyl Ether	(1)	4.779	45	2182420	24.133
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	2093610	24.261
35) cis-1,2-Dichloroethene	(1)	5.252	61	998048	24.812
37) 2-Butanone	(1)	5.274	72	395359	23.614
38) Ethyl Acetate	(1)	5.324	70	190616	23.073
39) Methyl Acrylate	(1)	5.360	55	1220405	24.042

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00036.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 12:47 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	325792	10.000
41) Tetrahydrofuran	(1)	5.496	42	717170	24.187
42) Chloroform	(1)	5.532	83	1651798	24.254
43) 1,1,1-Trichloroethane	(1)	5.675	97	1677864	24.322
44) Cyclohexane	(1)	5.711	56	1135212	23.925
45) Carbon Tetrachloride	(1)	5.811	117	1673228	24.706
46) Benzene	(2)	5.983	78	2459076	23.876
47) 1,2-Dichloroethane	(2)	6.011	62	1020773	24.384
48) Isooctane	(2)	6.033	57	3539824	24.831
49) Tert-Amyl Methyl Ether	(2)	6.069	73	2083162	24.249
50) Heptane	(2)	6.176	43	1169463	24.004
51)*1,4-Difluorobenzene	(2)	6.291	114	1197569	10.000
52) Trichloroethene	(2)	6.491	130	1251662	24.463
53) Ethyl Acrylate	(2)	6.570	55	1586584	24.340
36) 1,2-Dichloroethene (total)	(1)		61	2024739	49.452
54) 1,2-Dichloropropane	(2)	6.670	63	855050	23.716
57) Methyl Methacrylate	(2)	6.749	69	868008	24.076
56) 1,4-Dioxane	(2)	6.771	88	634112	24.220
55) Dibromomethane	(2)	6.771	174	1220553	24.649
58) Bromodichloromethane	(2)	6.885	83	1718291	24.346
59) cis-1,3-Dichloropropene	(2)	7.215	75	1509280	24.255
60) 4-Methyl-2-Pentanone	(2)	7.329	43	1627745	24.018
61) Toluene	(3)	7.466	91	3093568	23.525
62) Octane	(3)	7.516	43	1576173	23.044
63) trans-1,3-Dichloropropene	(3)	7.630	75	1269186	24.479
65) Ethyl Methacrylate	(3)	7.673	69	1464308	24.887
66) 1,1,2-Trichloroethane	(3)	7.774	97	1091166	23.485
67) Tetrachloroethene	(3)	7.867	166	1768895	24.038
68) 2-Hexanone	(3)	7.938	43	1555188	23.639
69) Dibromochloromethane	(3)	8.067	127	1446187	24.677
70) 1,2-Dibromoethane	(3)	8.160	107	1739680	24.061
71)*Chlorobenzene-d5	(3)	8.497	117	1139855	10.000
72) Chlorobenzene	(3)	8.511	112	2682878	23.836
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	1341890	24.494
74) Ethylbenzene	(3)	8.583	91	4031276	22.920
75) m/p-Xylene	(3)	8.669	91	3154872	22.095
76) o-Xylene	(3)	8.970	91	3163063	22.410
78) Styrene	(3)	8.977	104	2552311	23.867

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00036.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 12:47 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	1909732	25.328
80) Cumene	(3)	9.235	105	4559589	22.655
82) 1,1,2,2-Tetrachloroethane	(3)	9.450	83	2303020	23.267
81) Bromobenzene	(3)	9.471	156	1720941	24.065
83) 1,2,3-Trichloropropane	(3)	9.493	110	719880	22.767
84) n-Propylbenzene	(3)	9.529	120	1345547	23.261
86) 4-Ethyltoluene	(3)	9.607	105	4531807A	23.281
85) 2-Chlorotoluene	(3)	9.607	126	1227820	23.060
87) 1,3,5-Trimethylbenzene	(3)	9.650	105	3660625	22.596
88) Alpha Methyl Styrene	(3)	9.822	118	1962272	23.092
89) tert-Butylbenzene	(3)	9.901	119	3511653M	20.779
90) 1,2,4-Trimethylbenzene	(3)	9.937	105	3649863	22.821
91) sec-Butylbenzene	(3)	10.066	105	5217754	21.559
92) 1,3-Dichlorobenzene	(3)	10.173	146	2727292	22.946
94) p-Isopropyltoluene	(3)	10.173	119	4584222	22.134
93) 1,4-Dichlorobenzene	(3)	10.238	146	2759926	22.782
95) Benzyl Chloride	(3)	10.338	91	2668176	24.350
97) n-Butylbenzene	(3)	10.481	91	4118569	22.130
96) 1,2-Dichlorobenzene	(3)	10.531	146	2532566	22.388
98) Hexachloroethane	(3)	10.718	117	1168501	26.574
99) 1,2-Dibromo-3-chloropropane	(3)	11.126	157	1322367	22.613
100) 1,2,4-Trichlorobenzene	(3)	11.749	180	2108468	21.748
101) Hexachlorobutadiene	(3)	11.864	225	1773518	21.391
102) Naphthalene	(3)	11.957	128	4349917	20.291
64) 1,3-Dichloropropene (total)	(3)		75	2778466	48.970
77) Xylene (total)	(3)		91	6317935	44.504

M = Compound was manually integrated.
A = User selected an alternate hit.

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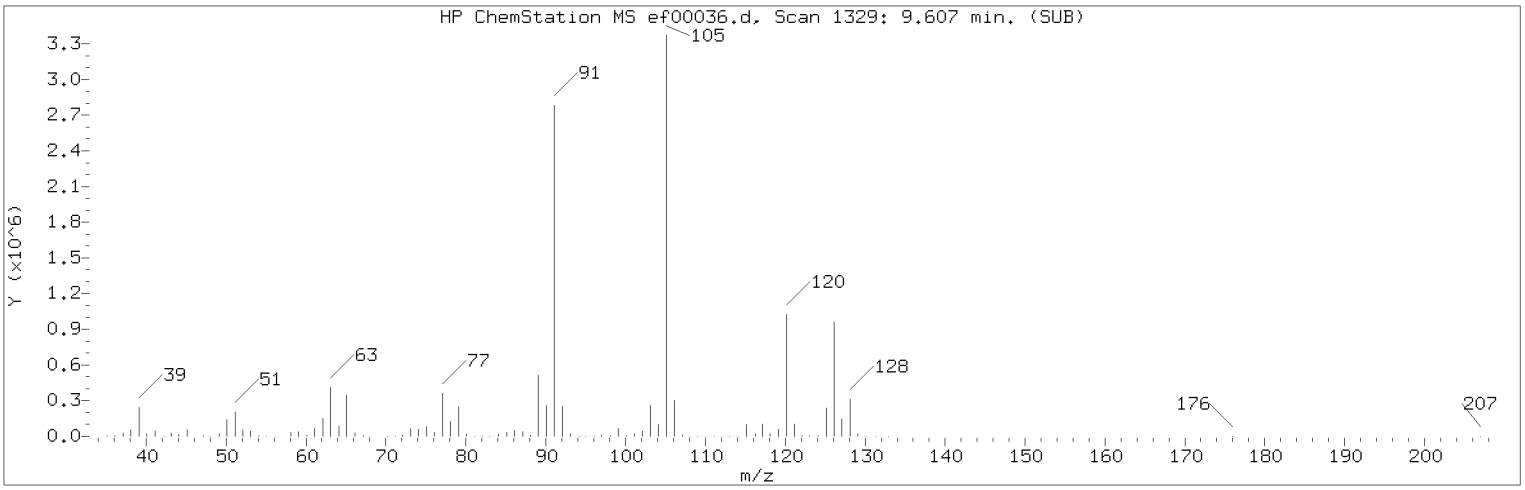
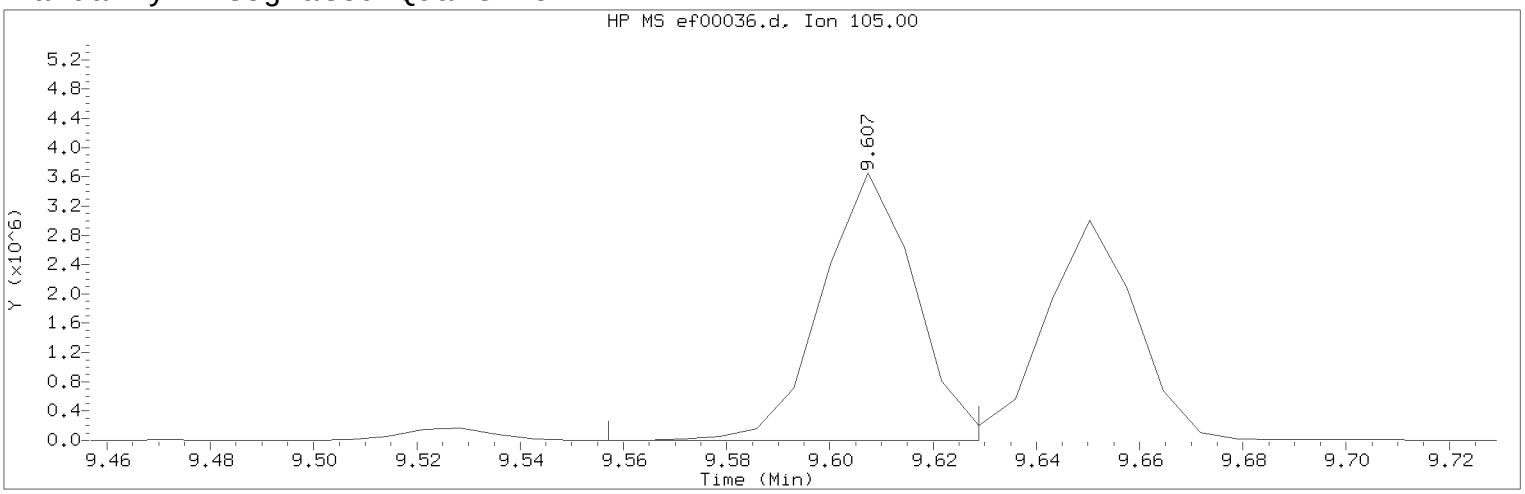
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00036.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 12:47 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

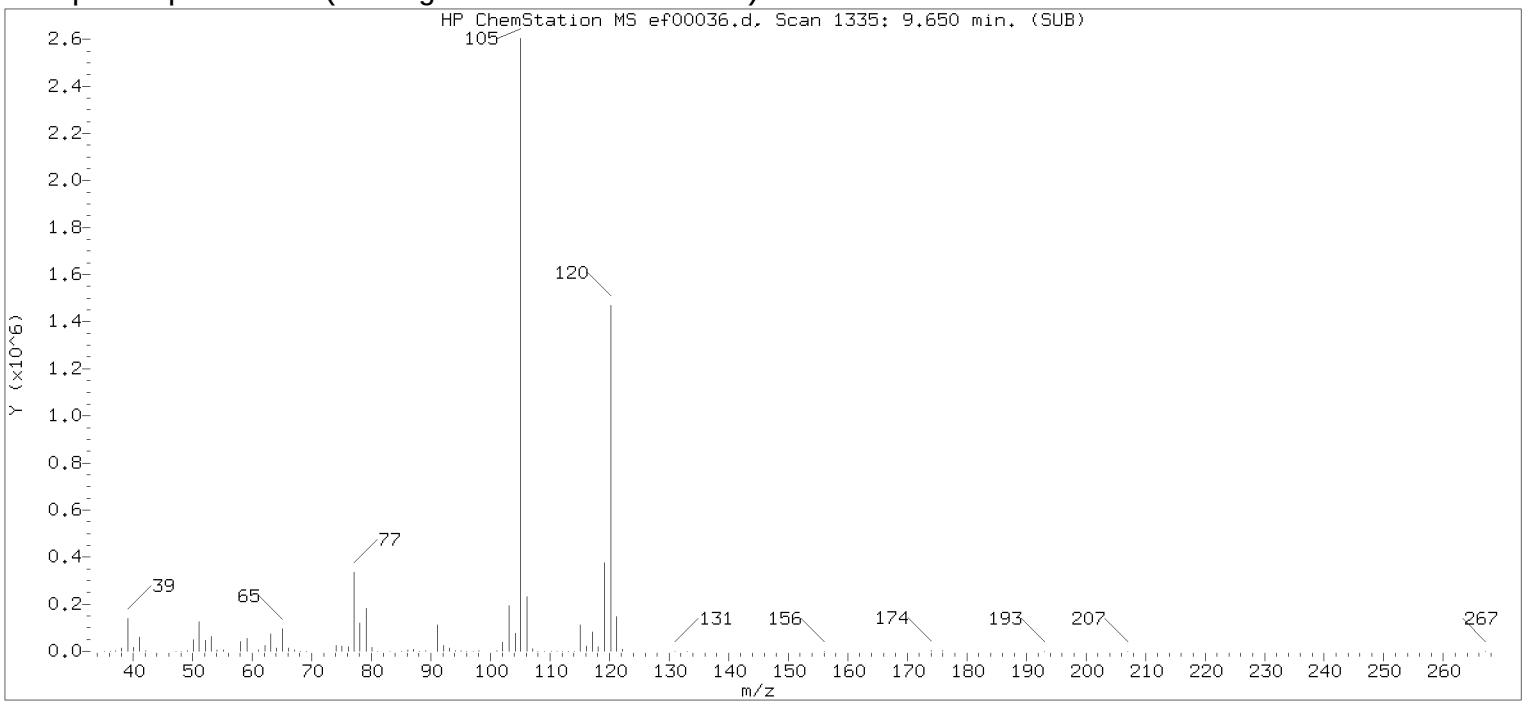
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1329
Retention Time (minutes): 9.607
Quant Ion : 105.00
Area (flag) : 4531807A
Concentration (ppb(v)) : 23.2811
Integration start scan : 1321 Integration stop scan: 1331
Y at integration start : 886 Y at integration end: 886

Reason for manual integration: improper integration

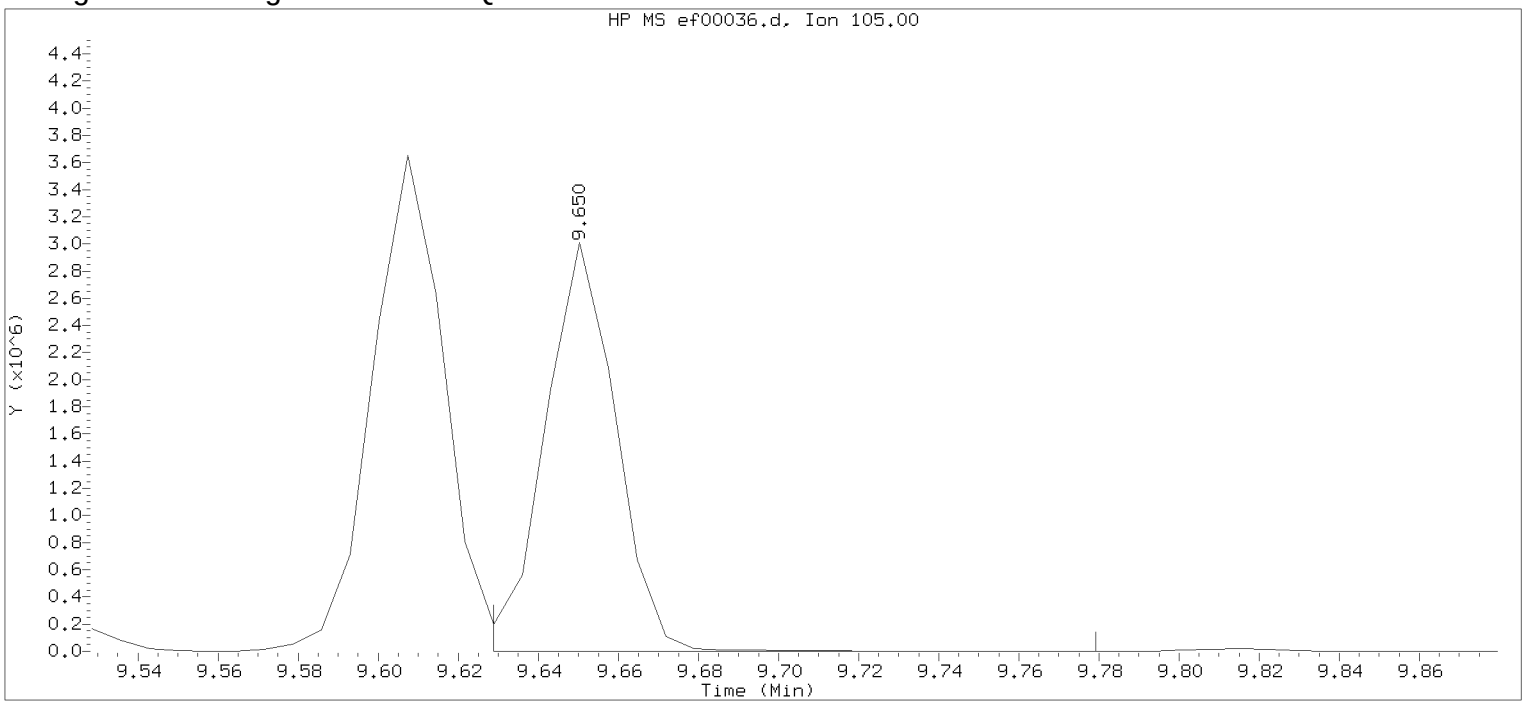
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00036.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 12:47 Analyst ID: jeb07445

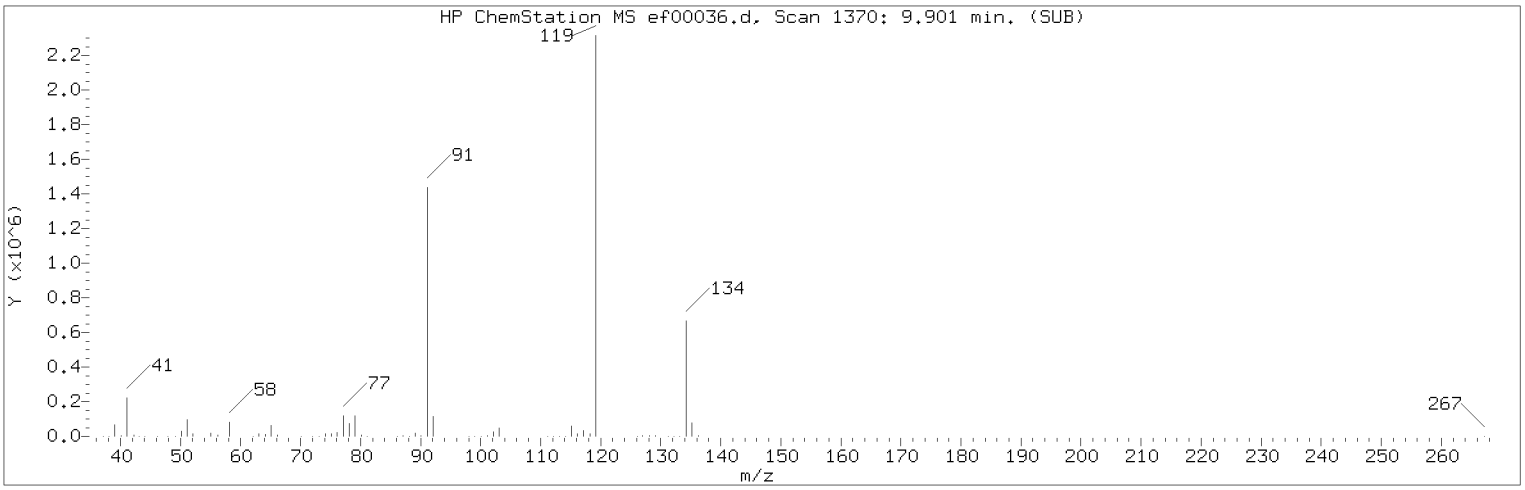
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 13:05 Unknown

Sample Name: VSTD025 Lab Sample ID: VSTD025

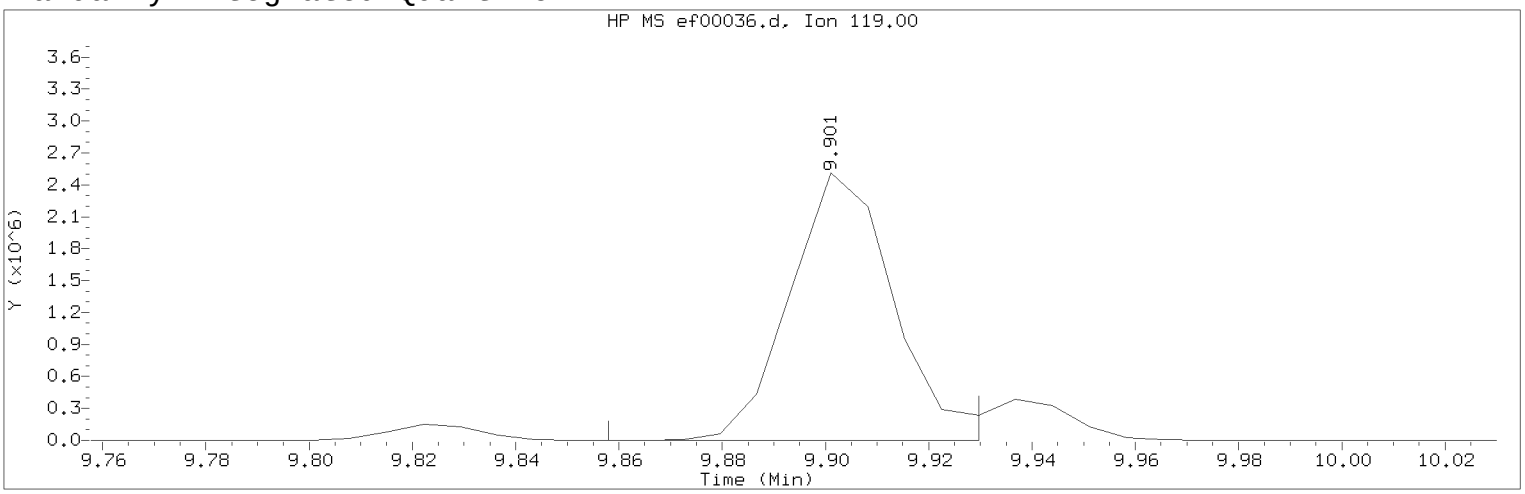
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1335
Retention Time (minutes): 9.650
Quant Ion : 105.00
Area : 3660996
Concentration (ppb(v)) : 19.5189
Integration start scan : 1331 Integration stop scan: 1352
Y at integration start : 886 Y at integration end: 886

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user GLE02jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00036.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 12:47 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

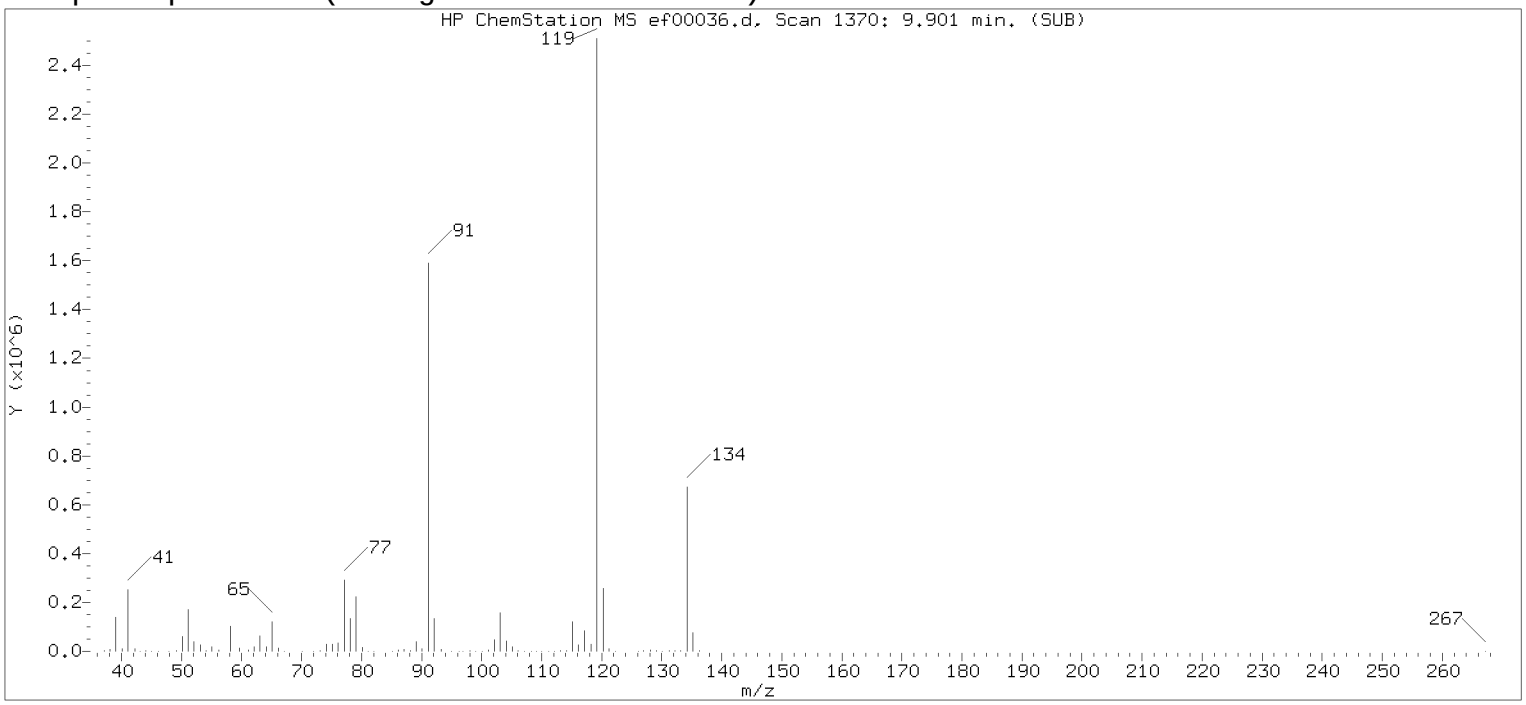
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1370
Retention Time (minutes): 9.901
Quant Ion : 119.00
Area (flag) : 3511653M
Concentration (ppb(v)) : 20.7795
Integration start scan : 1363 Integration stop scan: 1373
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

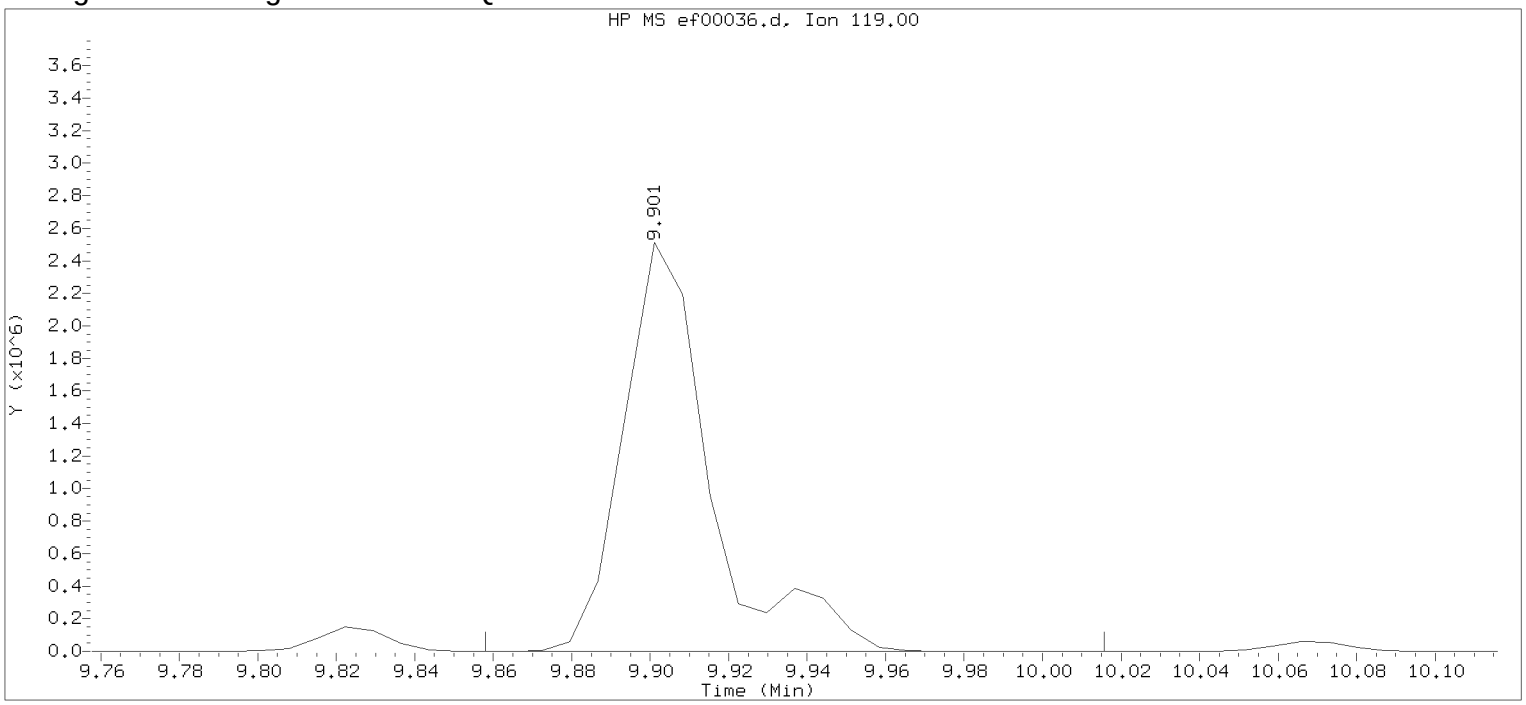
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00036.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 12:47 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 13:05 Unknown

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1370
Retention Time (minutes): 9.901
Quant Ion : 119.00
Area : 3888648
Concentration (ppb(v)) : 27.1274
Integration start scan : 1363 Integration stop scan: 1385
Y at integration start : 0 Y at integration end: 0

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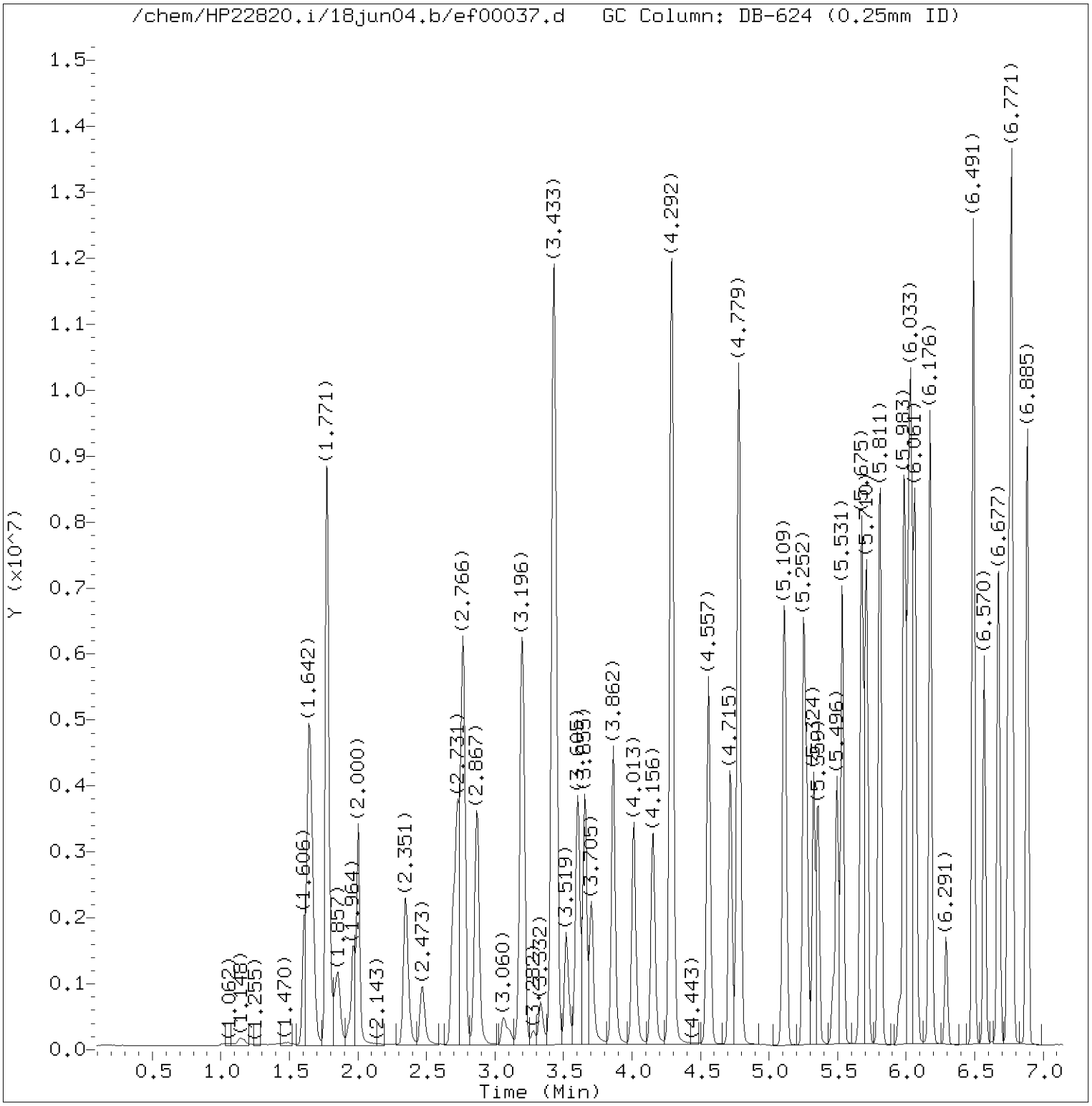
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

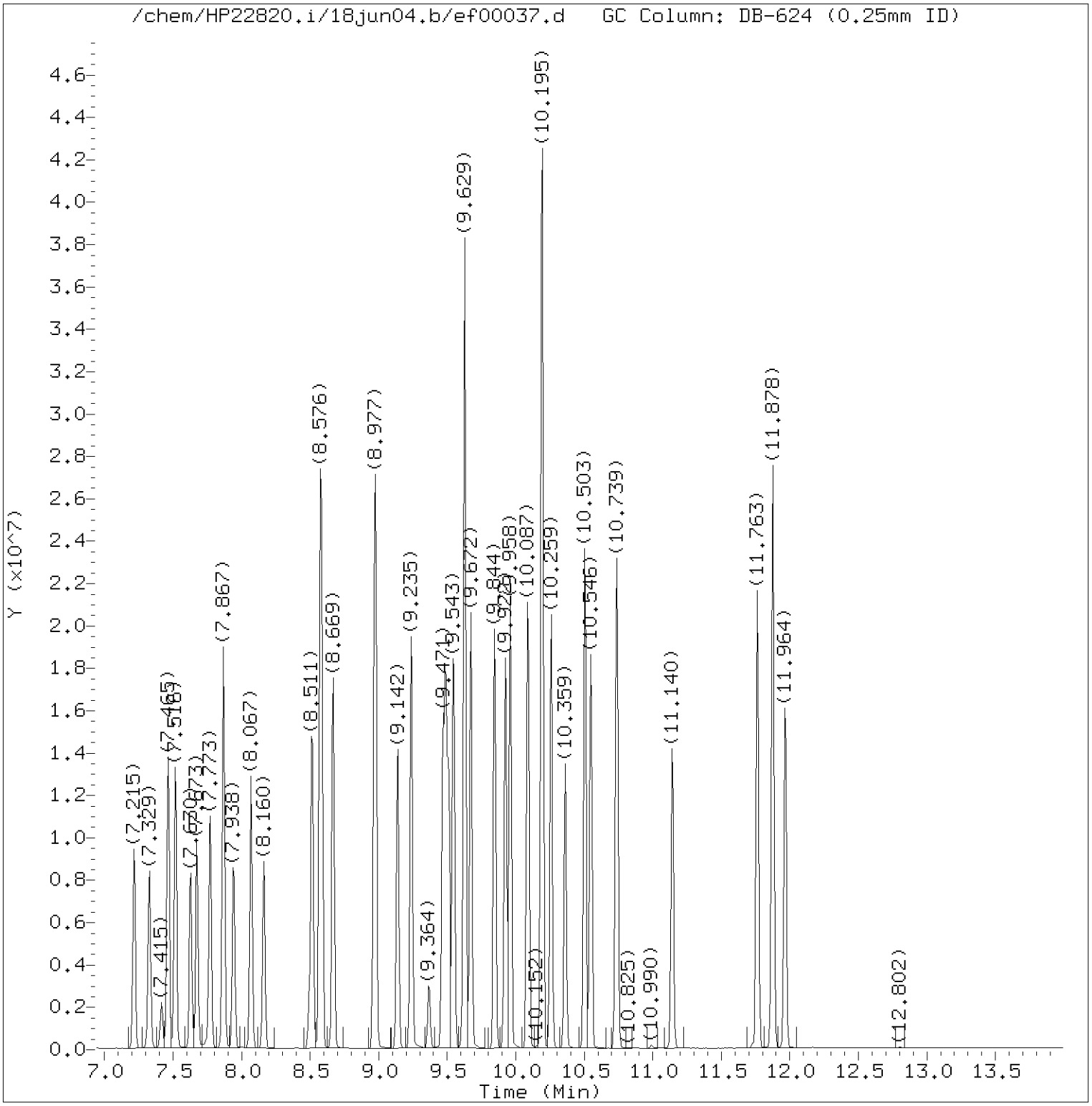
Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00037.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 13:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00037.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 13:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00037.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 13:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.606	41	1330384	69.040
2) Dichlorodifluoromethane	(1)	1.642	85	5441147	72.847
3) Chlorodifluoromethane	(1)	1.663	51	2830908	71.525
4) Freon 114	(1)	1.771	85	5334625	69.799
5) Chloromethane	(1)	1.857	50	1533326	67.870
6) Vinyl Chloride	(1)	1.964	62	1974139	71.196
7) 1,3-Butadiene	(1)	2.000	54	1412530	70.206
8) Bromomethane	(1)	2.351	94	2111002	74.027
9) Chloroethane	(1)	2.473	64	1095814	69.919
10) Bromoethene	(1)	2.695	106	2177316	71.870
11) Dichlorofluoromethane	(1)	2.731	67	4310406	71.311
12) Trichlorofluoromethane	(1)	2.766	101	5581061	70.496
13) Pentane	(1)	2.867	43	2900353	68.228
14) Ethanol	(1)	3.060	45	676713	74.012
15) Freon123a	(1)	3.196	67	3989147	75.916
16) Acrolein	(1)	3.332	56	777758	71.834
17) 1,1-Dichloroethene	(1)	3.425	61	3118019	70.945
18) Freon 113	(1)	3.433	103	3049728	68.810
19) Acetone	(1)	3.519	43	2526503	69.151
20) Methyl Iodide	(1)	3.605	142	5685953	66.902
21) Carbon Disulfide	(1)	3.655	76	5737169	69.704
22) Isopropanol	(1)	3.705	45	2816177	84.053
23) Acetonitrile	(1)	3.862	40	976286	55.042
24) 3-Chloropropene	(1)	3.862	76	997182	77.323
25) Methylene Chloride	(1)	4.013	84	1930346	77.128
26) tert-Butyl Alcohol	(1)	4.156	59	4165028	81.776
28) trans-1,2-Dichloroethene	(1)	4.285	61	2781217	69.972
29) Methyl t-Butyl Ether	(1)	4.285	73	5658880	66.716
27) Acrylonitrile	(1)	4.292	53	1572028	70.592
30) Hexane	(1)	4.557	57	2938628	67.322
31) 1,1-Dichloroethane	(1)	4.715	63	3605741	69.621
32) Vinyl Acetate	(1)	4.779	86	630690	83.284
33) Di-Isopropyl Ether	(1)	4.779	45	5800932	67.244
34) Ethyl Tert-Butyl Ether	(1)	5.109	59	5673879	68.924
35) cis-1,2-Dichloroethene	(1)	5.252	61	2711027	70.652
37) 2-Butanone	(1)	5.281	72	1100714	68.917
38) Ethyl Acetate	(1)	5.324	70	523773	66.462
39) Methyl Acrylate	(1)	5.359	55	3363233	69.456

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on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00037.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 13:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	310785	10.000
41) Tetrahydrofuran	(1)	5.496	42	1935243	68.418
42) Chloroform	(1)	5.531	83	4515532	69.504
43) 1,1,1-Trichloroethane	(1)	5.675	97	4568384	69.420
44) Cyclohexane	(1)	5.710	56	2992269	66.108
45) Carbon Tetrachloride	(1)	5.811	117	4686253	72.536
46) Benzene	(2)	5.983	78	6585627	67.498
47) 1,2-Dichloroethane	(2)	6.011	62	2752625	69.411
48) Isooctane	(2)	6.033	57	9272439	68.661
49) Tert-Amyl Methyl Ether	(2)	6.061	73	5601317	68.830
50) Heptane	(2)	6.176	43	3084780	66.839
51)*1,4-Difluorobenzene	(2)	6.291	114	1134459	10.000
52) Trichloroethene	(2)	6.491	130	3432582	70.819
53) Ethyl Acrylate	(2)	6.570	55	4404561	71.331
36) 1,2-Dichloroethene (total)	(1)		61	5492244	140.624
54) 1,2-Dichloropropane	(2)	6.677	63	2298858	67.310
57) Methyl Methacrylate	(2)	6.749	69	2405998	70.449
56) 1,4-Dioxane	(2)	6.771	88	1721138	69.397
55) Dibromomethane	(2)	6.771	174	3375291	71.955
58) Bromodichloromethane	(2)	6.885	83	4700117	70.299
59) cis-1,3-Dichloropropene	(2)	7.215	75	4172255	70.780
60) 4-Methyl-2-Pentanone	(2)	7.329	43	4286615	66.768
61) Toluene	(3)	7.465	91	7986127	61.692
62) Octane	(3)	7.516	43	4053633	60.204
63) trans-1,3-Dichloropropene	(3)	7.630	75	3528199	69.127
65) Ethyl Methacrylate	(3)	7.673	69	4044381	69.826
66) 1,1,2-Trichloroethane	(3)	7.773	97	2880669	62.981
67) Tetrachloroethene	(3)	7.867	166	4741656	65.457
68) 2-Hexanone	(3)	7.938	43	4124033	63.677
69) Dibromochloromethane	(3)	8.067	127	4080697	70.734
70) 1,2-Dibromoethane	(3)	8.160	107	4689021	65.879
71)*Chlorobenzene-d5	(3)	8.497	117	1122091	10.000
72) Chlorobenzene	(3)	8.518	112	7010547	63.271
73) 1,1,1,2-Tetrachloroethane	(3)	8.576	131	3821332	70.857
74) Ethylbenzene	(3)	8.583	91	10000475	57.759
75) m/p-Xylene	(3)	8.669	91	8103024	57.648
76) o-Xylene	(3)	8.970	91	8154885	58.692
78) Styrene	(3)	8.977	104	6688928	63.540

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00037.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 13:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

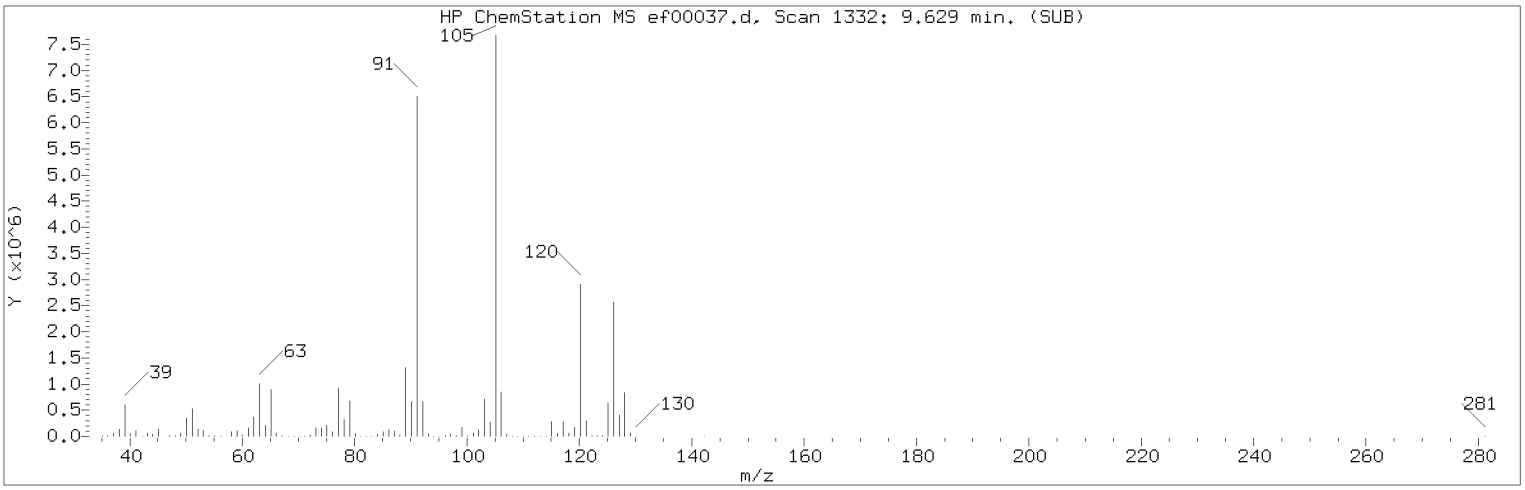
Sample Name: VSTD070 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	5533749	74.554
80) Cumene	(3)	9.235	105	10868348	54.857
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	5906090	60.613
81) Bromobenzene	(3)	9.493	156	4463649	63.405
83) 1,2,3-Trichloropropane	(3)	9.514	110	1901705	61.096
84) n-Propylbenzene	(3)	9.550	120	3516866	61.760
86) 4-Ethyltoluene	(3)	9.629	105	11071989M	57.780
85) 2-Chlorotoluene	(3)	9.629	126	3268116	62.352
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	9123214M	57.206
88) Alpha Methyl Styrene	(3)	9.844	118	5321412	63.615
89) tert-Butylbenzene	(3)	9.922	119	8560199M	51.455
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	9079478	57.668
91) sec-Butylbenzene	(3)	10.087	105	12346394	51.821
92) 1,3-Dichlorobenzene	(3)	10.195	146	7201070	61.544
94) p-Isopropyltoluene	(3)	10.195	119	11248408	55.172
93) 1,4-Dichlorobenzene	(3)	10.259	146	7111539	59.633
95) Benzyl Chloride	(3)	10.359	91	7722859	71.594
97) n-Butylbenzene	(3)	10.503	91	10165550	55.486
96) 1,2-Dichlorobenzene	(3)	10.546	146	6635216	59.585
98) Hexachloroethane	(3)	10.739	117	3685391	85.140
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	3728186	64.762
100) 1,2,4-Trichlorobenzene	(3)	11.763	180	5747986	60.226
101) Hexachlorobutadiene	(3)	11.878	225	4901373	60.052
102) Naphthalene	(3)	11.964	128	10964534	51.955
64) 1,3-Dichloropropene (total)	(3)		75	7700454	137.868
77) Xylene (total)	(3)		91	16257909	116.334

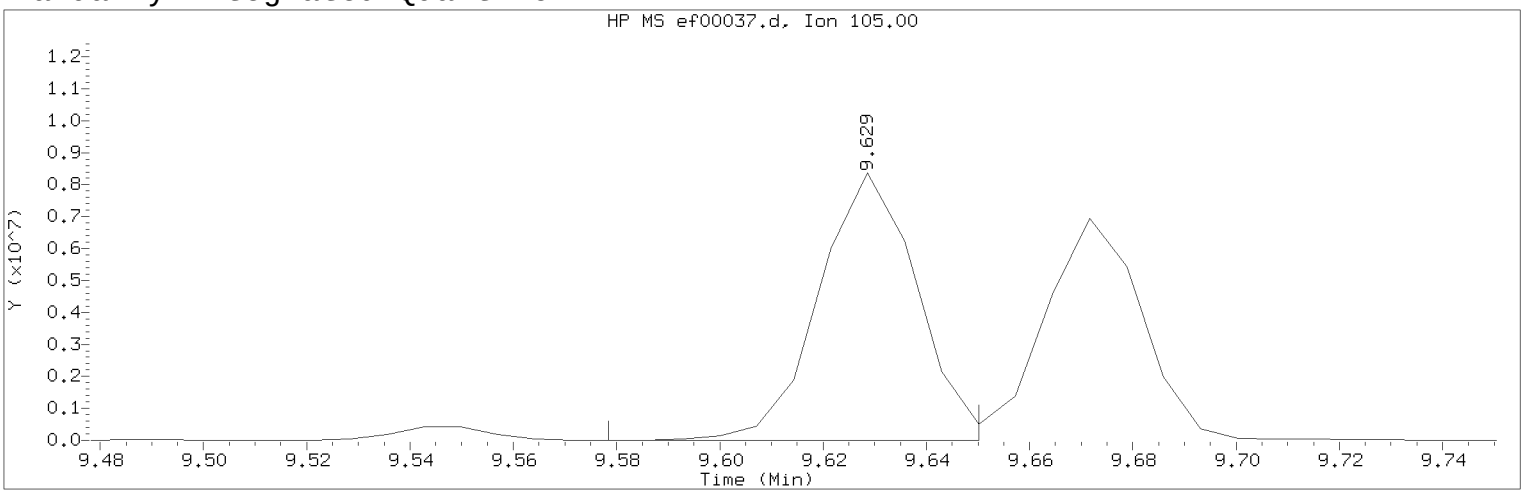
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00037.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 13:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

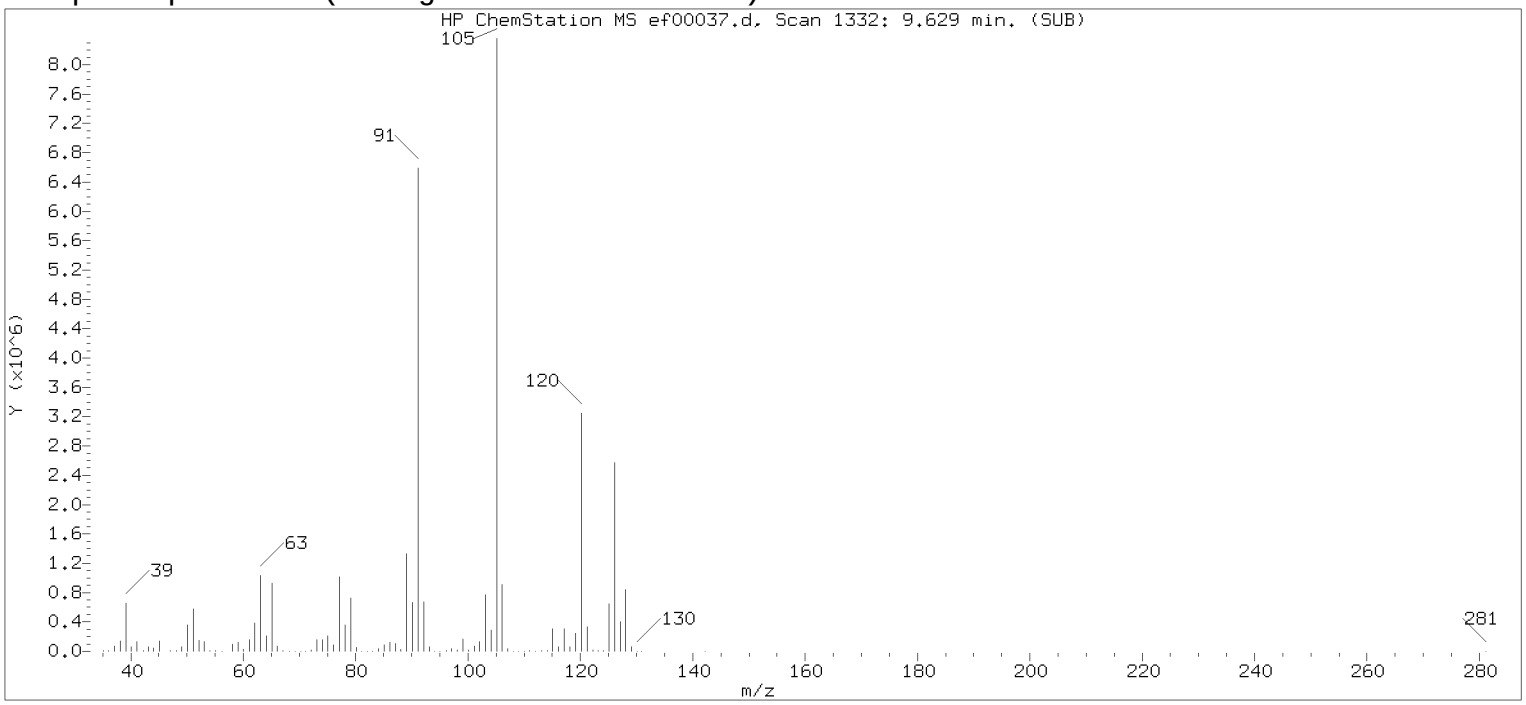
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 11071989M
Concentration (ppb(v)) : 57.7802
Integration start scan : 1324 Integration stop scan: 1334
Y at integration start : 1057 Y at integration end: 1057

Reason for manual integration: improper integration

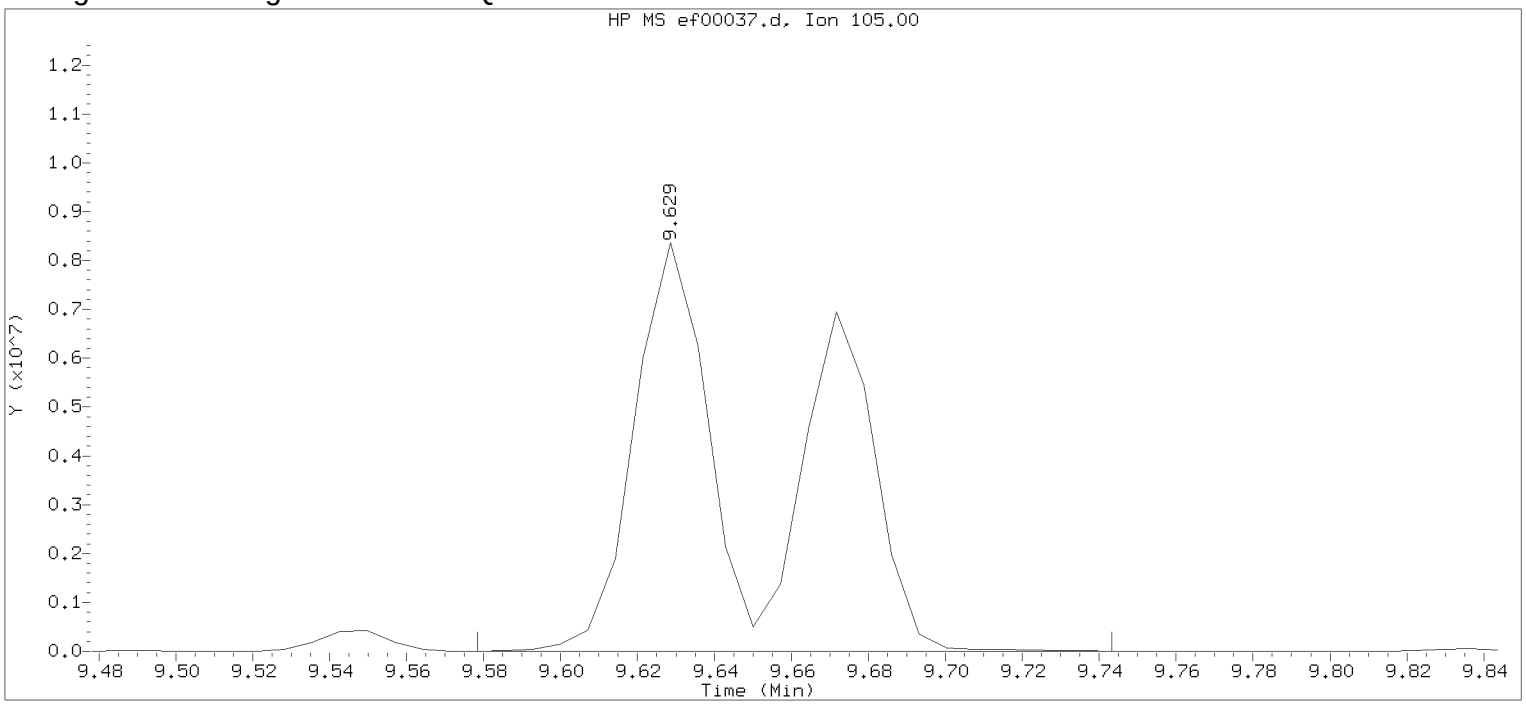
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00037.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 13:24 Analyst ID: jeb07445

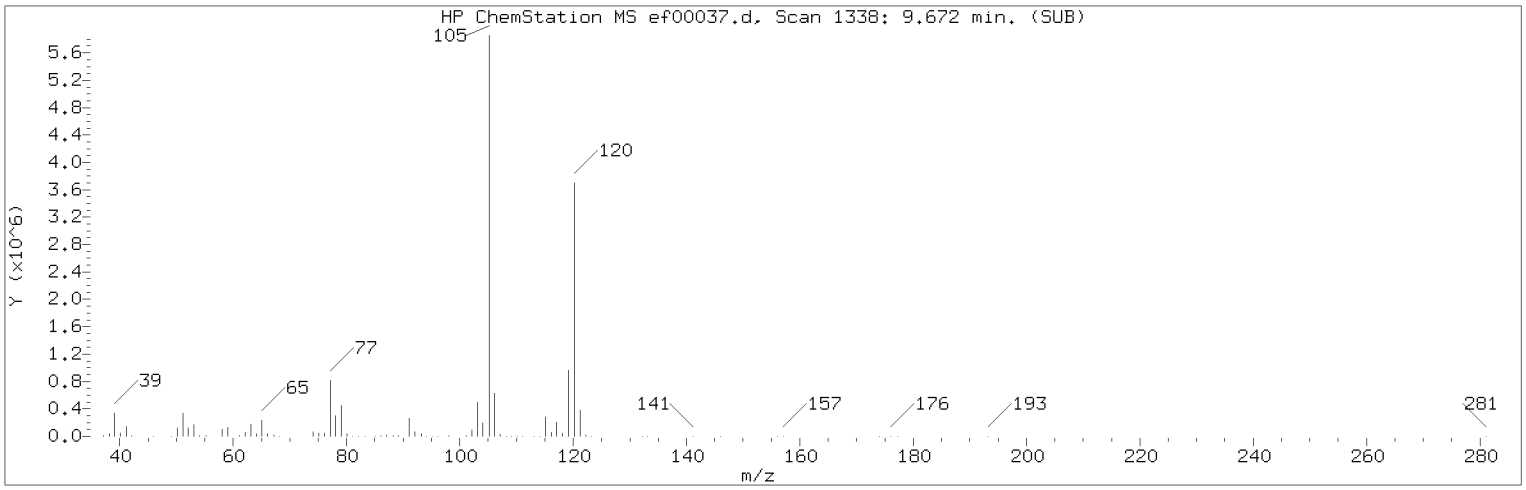
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 13:43 Unknown

Sample Name: VSTD070 Lab Sample ID: VSTD070

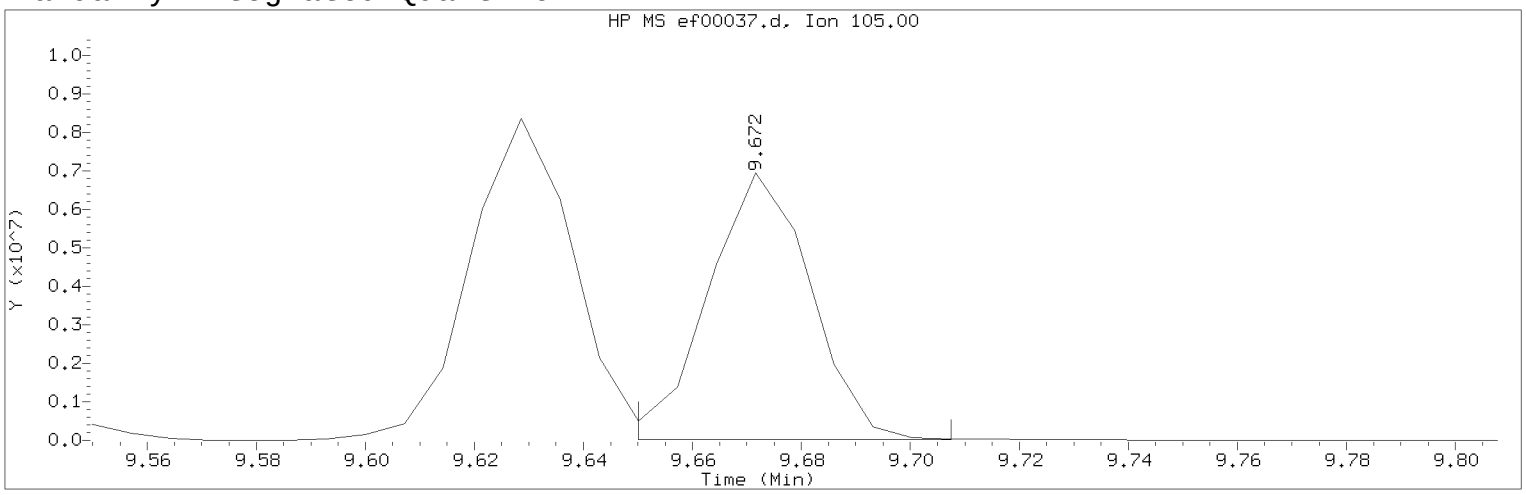
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 20042845
Concentration (ppb(v)) : 108.5520
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 1057 Y at integration end: 1057

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature userGLE02jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00037.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 13:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

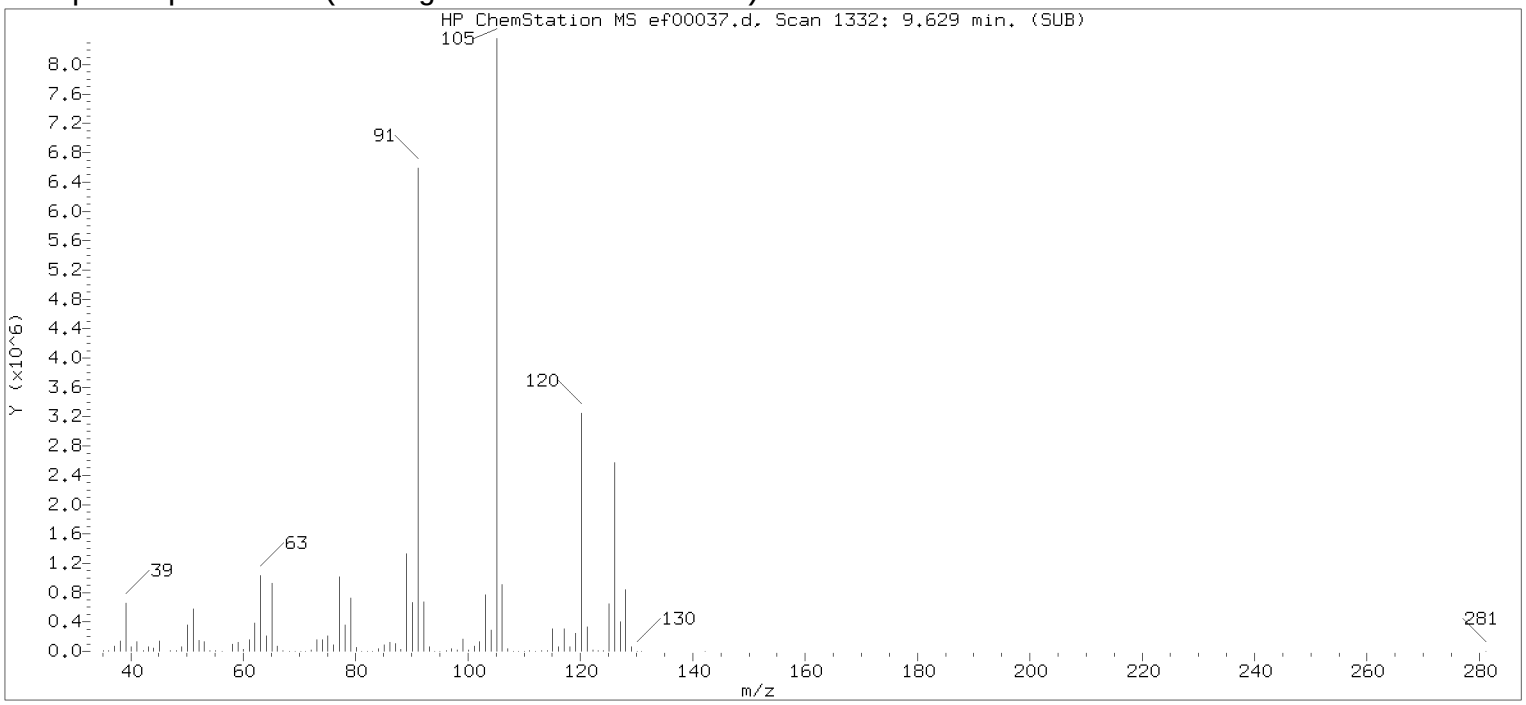
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 9123214M
Concentration (ppb(v)) : 57.2058
Integration start scan : 1334 Integration stop scan: 1342
Y at integration start : 8957 Y at integration end: 8957

Reason for manual integration: improper integration

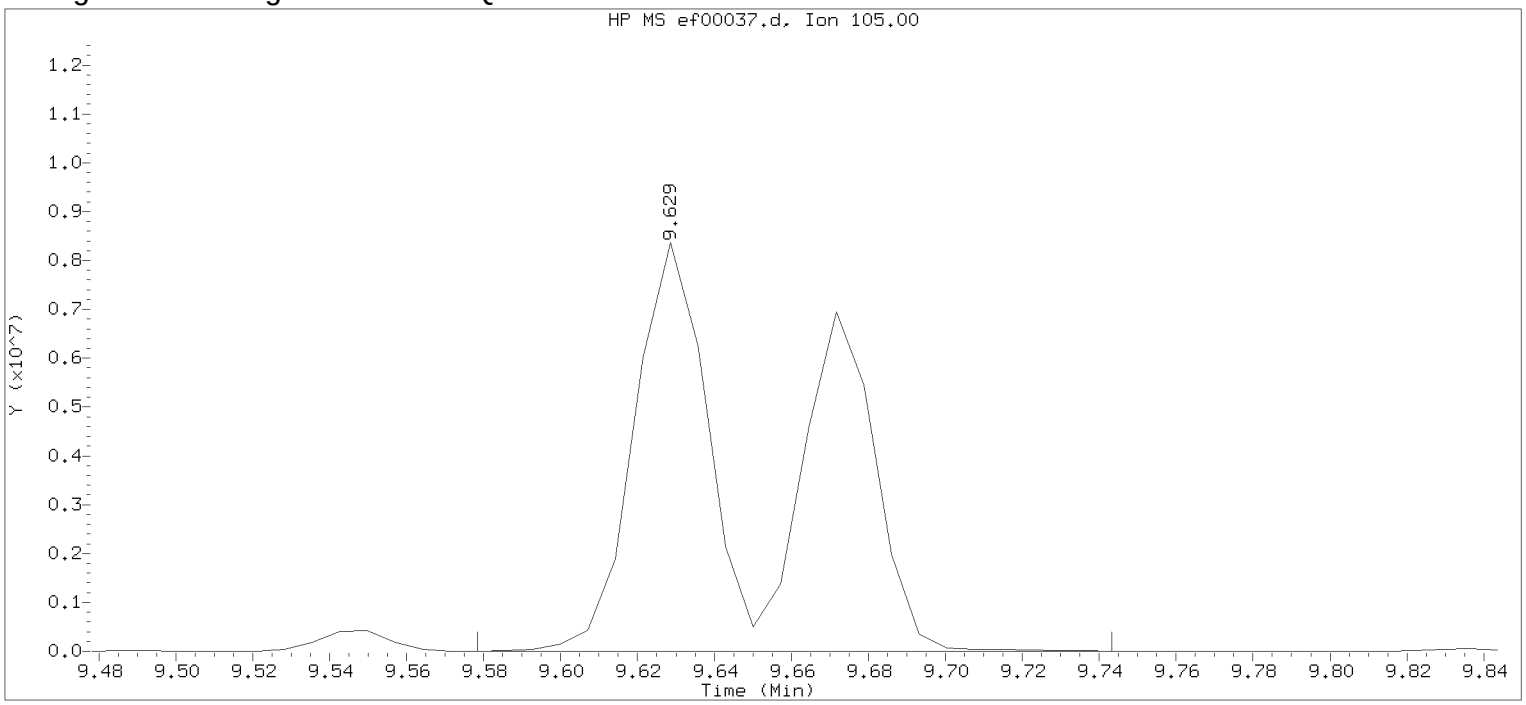
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00037.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 13:24 Analyst ID: jeb07445

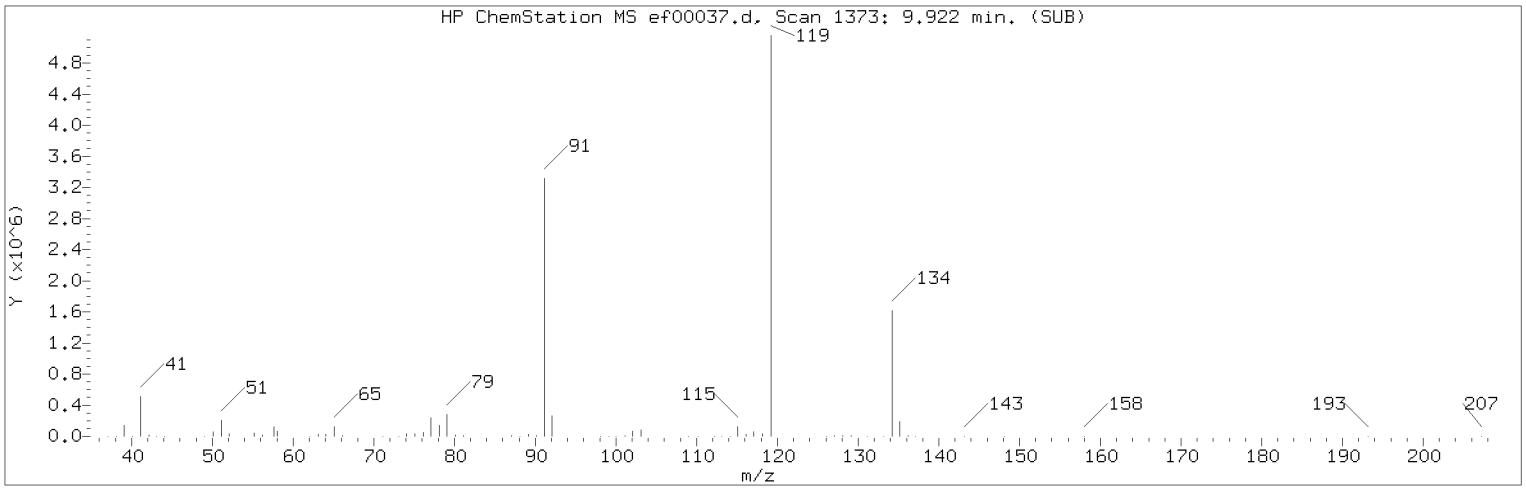
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 13:43 Unknown

Sample Name: VSTD070 Lab Sample ID: VSTD070

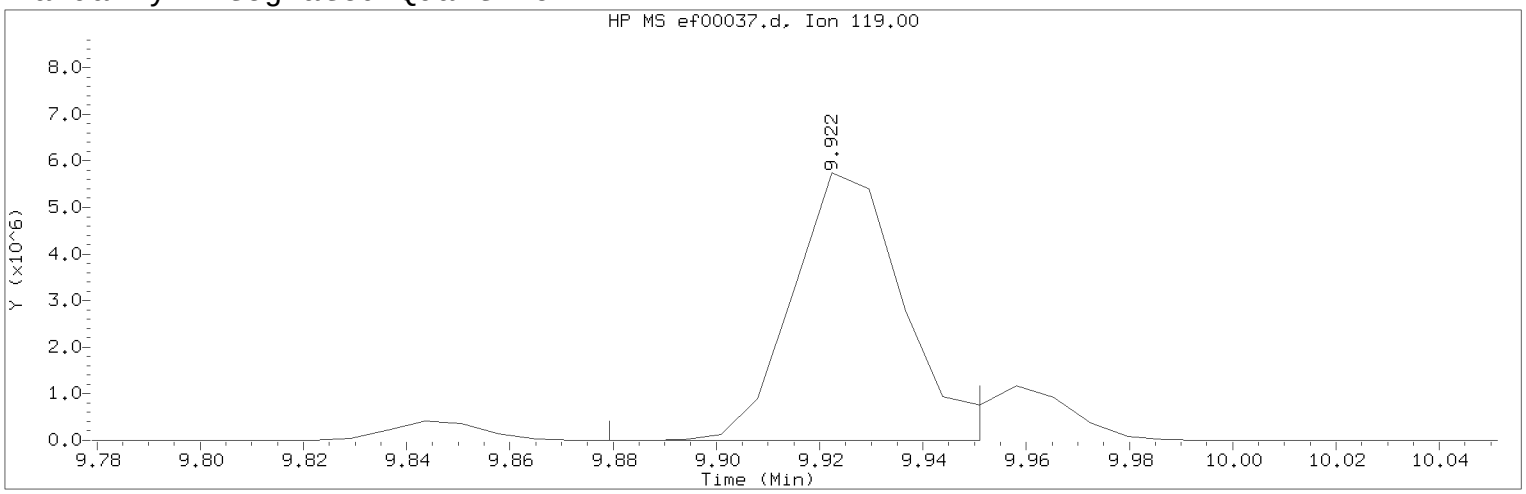
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 20032489
Concentration (ppb(v)) : 130.6809
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 2217 Y at integration end: 2217

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature userGLE02jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00037.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 13:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:30
Date, time and analyst ID of latest file update: 04-Jun-2018 14:30 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

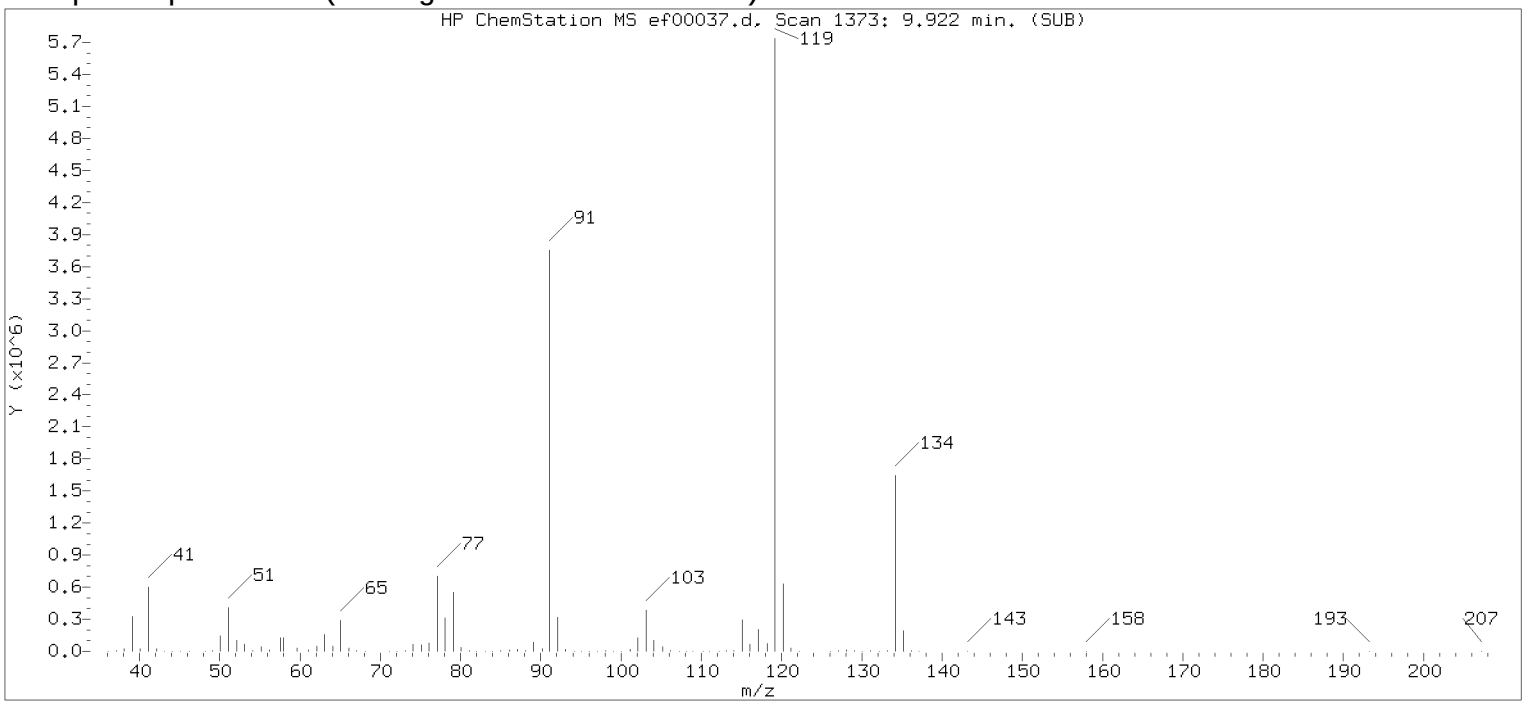
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 8560199M
Concentration (ppb(v)) : 51.4551
Integration start scan : 1366 Integration stop scan: 1376
Y at integration start : 492 Y at integration end: 492

Reason for manual integration: improper integration

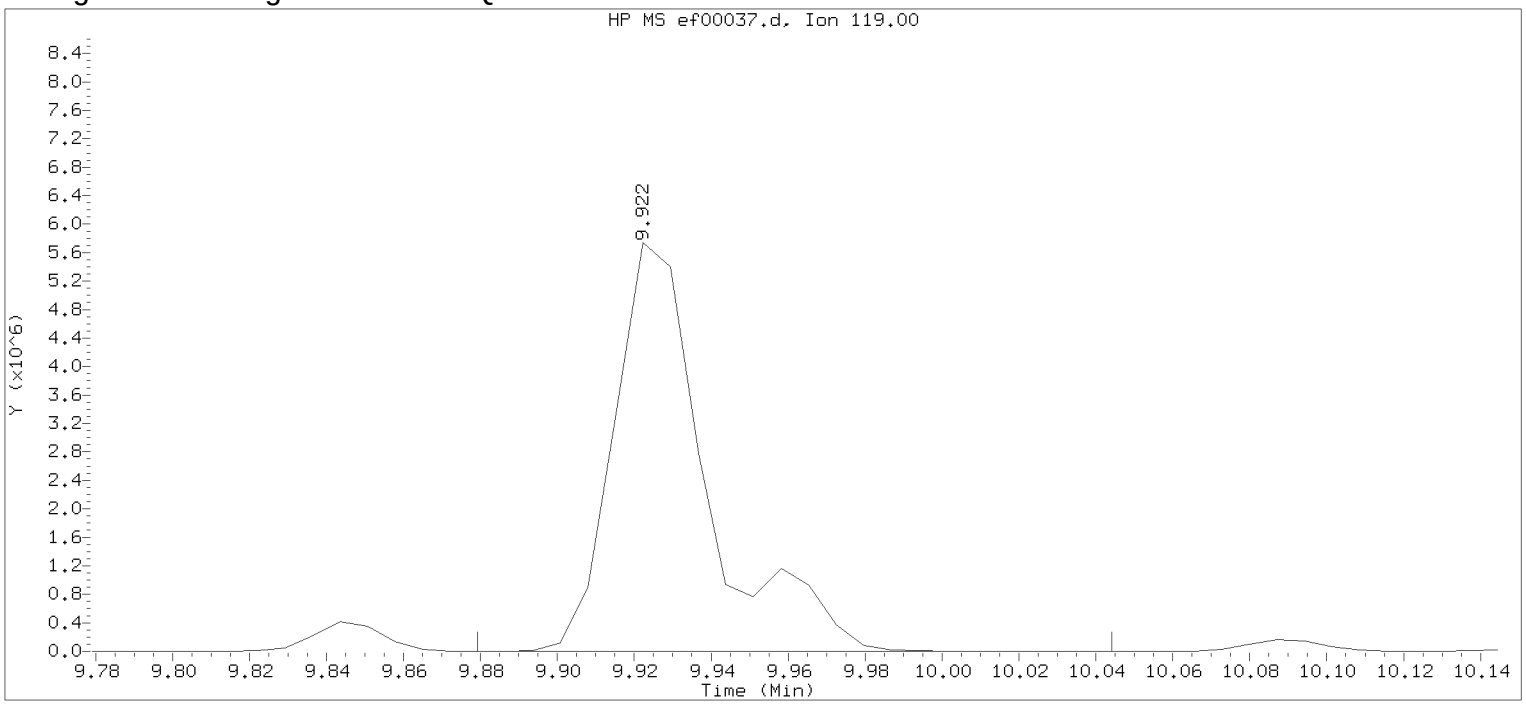
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



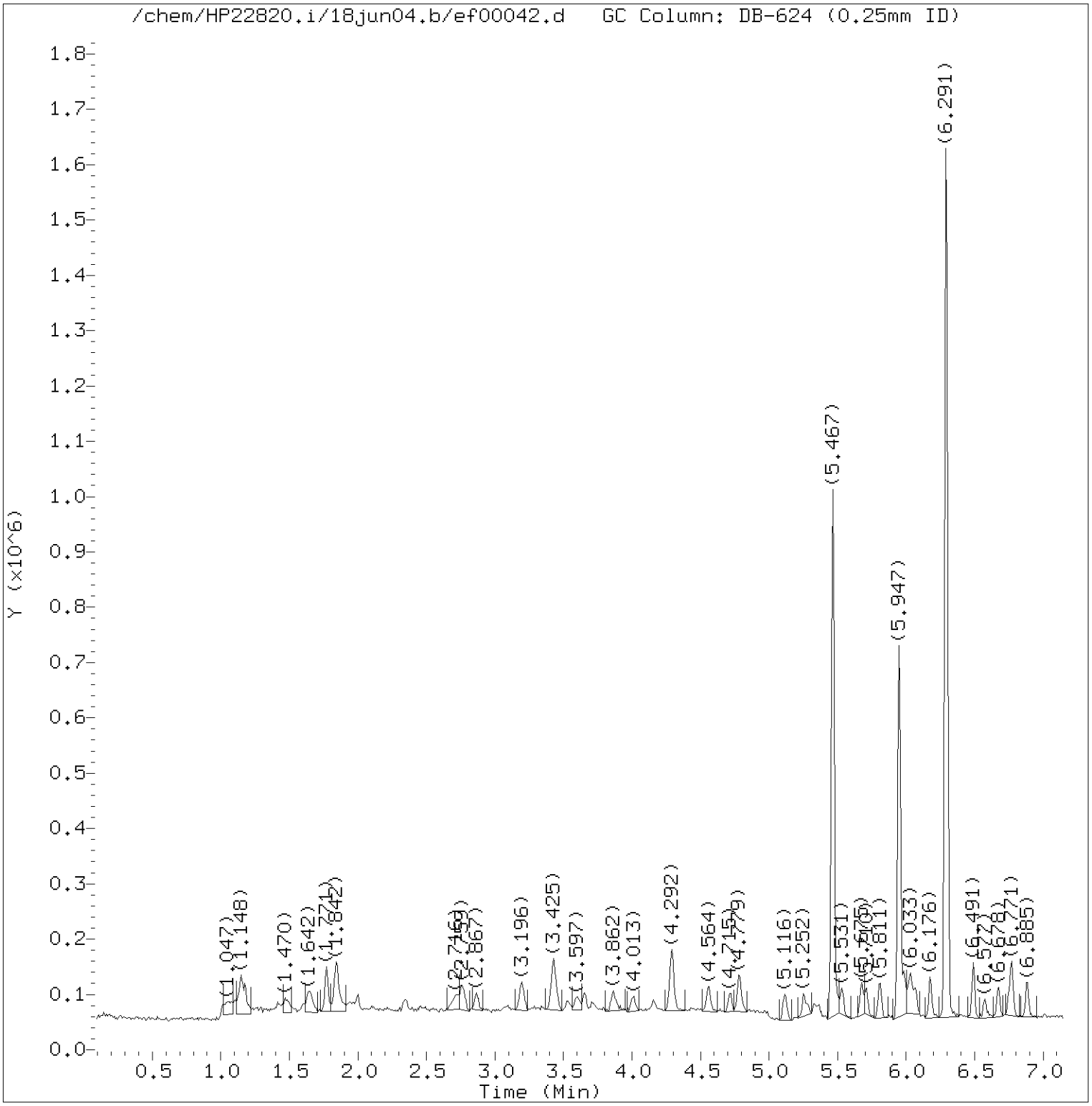
Data File: /chem/HP22820.i/18jun04.b/ef00037.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 13:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 28-MAY-2018 12:20
Date, time and analyst ID of latest file update: 04-Jun-2018 13:43 Unknown

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 9663606
Concentration (ppb(v)) : 68.4811
Integration start scan : 1366 Integration stop scan: 1389
Y at integration start : 492 Y at integration end: 492

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

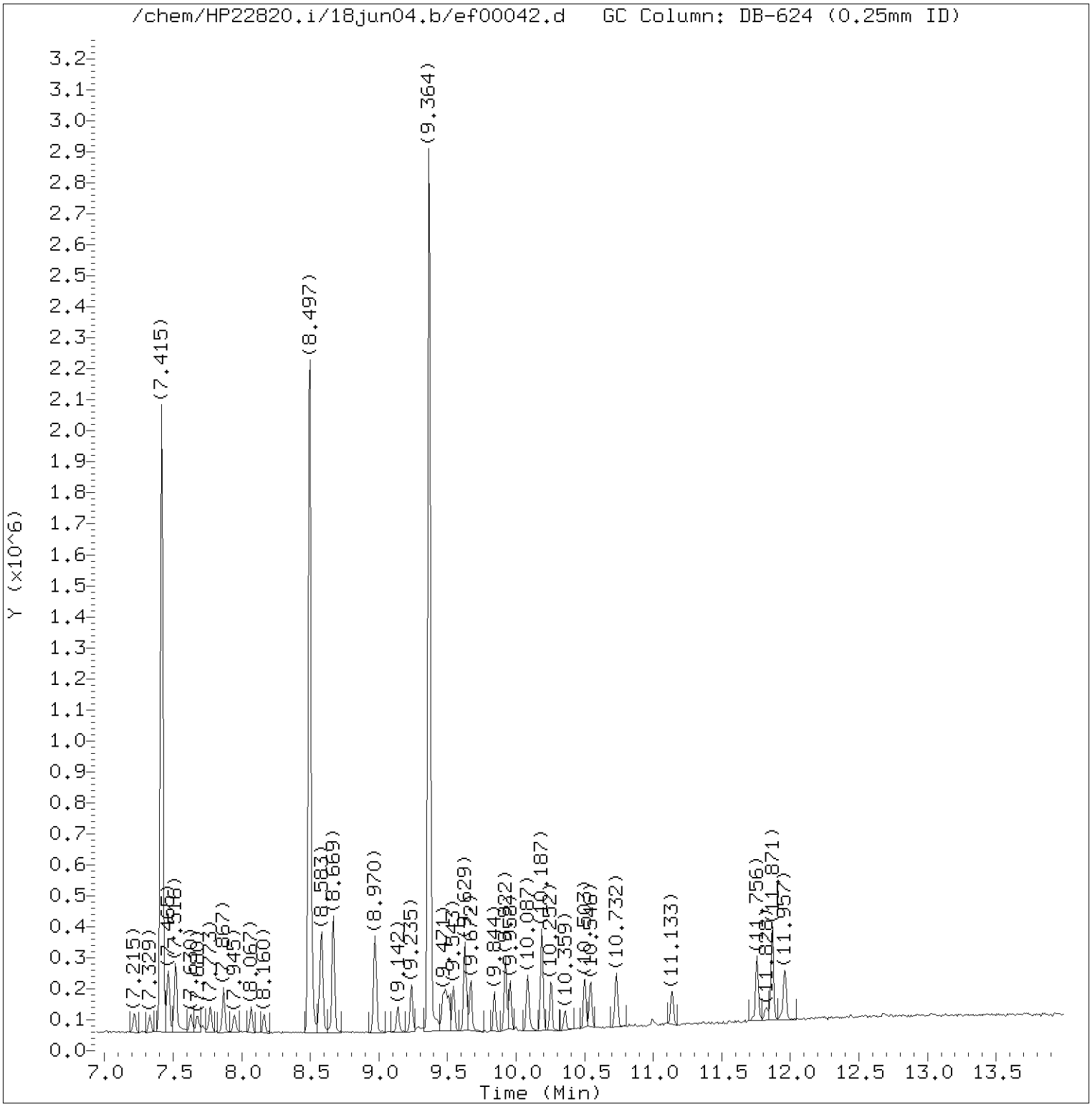
Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00042.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:45 jbs01304

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

Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00042.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:45 jbs01304

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

Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00042.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:45 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.599	41	10491	0.552
2) Dichlorodifluoromethane	(1)	1.642	85	38571	0.523
3) Chlorodifluoromethane	(1)	1.663	51	20699	0.530
4) Freon 114	(1)	1.771	85	40716	0.540
5) Chloromethane	(1)	1.850	50	13255	0.595
6) Vinyl Chloride	(1)	1.964	62	14098	0.515
7) 1,3-Butadiene	(1)	2.000	54	10838	0.546
8) Bromomethane	(1)	2.344	94	17568	0.624
9) Chloroethane	(1)	2.466	64	9353	0.605
10) Bromoethene	(1)	2.681	106	14122	0.473
11) Dichlorofluoromethane	(1)	2.731	67	33493	0.562
12) Trichlorofluoromethane	(1)	2.766	101	41790	0.535
13) Pentane	(1)	2.860	43	23025	0.549
14) Ethanol	(1)	3.082	45	12908	1.431
15) Freon123a	(1)	3.196	67	33779	0.652
16) Acrolein	(1)	3.340	56	7099	0.665
17) 1,1-Dichloroethene	(1)	3.418	61	24443	0.564
18) Freon 113	(1)	3.433	103	24813	0.567
19) Acetone	(1)	3.533	43	29319	0.813
20) Methyl Iodide	(1)	3.605	142	40247	0.480
21) Carbon Disulfide	(1)	3.655	76	43854	0.540
22) Isopropanol	(1)	3.712	45	23094	0.621
24) 3-Chloropropene	(1)	3.862	76	8494	0.668
23) Acetonitrile	(1)	3.891	40	18136M	1.036
25) Methylene Chloride	(1)	4.006	84	15637	0.633
26) tert-Butyl Alcohol	(1)	4.156	59	25914	0.516
28) trans-1,2-Dichloroethene	(1)	4.285	61	21872	0.558
29) Methyl t-Butyl Ether	(1)	4.292	73	64019	0.765
27) Acrylonitrile	(1)	4.299	53	15933	0.725
30) Hexane	(1)	4.557	57	23895	0.555
31) 1,1-Dichloroethane	(1)	4.715	63	28566	0.559
32) Vinyl Acetate	(1)	4.786	86	3663	0.490
33) Di-Isopropyl Ether	(1)	4.786	45	40750	0.479
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	33452	0.412
35) cis-1,2-Dichloroethene	(1)	5.252	61	20366	0.538
37) 2-Butanone	(1)	5.281	72	8999	0.571
38) Ethyl Acetate	(1)	5.331	70	5637	0.725
39) Methyl Acrylate	(1)	5.359	55	24382	0.510

M = Compound was manually integrated.

Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00042.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:45 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	306598	10.000
41) Tetrahydrofuran	(1)	5.503	42	16038	0.575
42) Chloroform	(1)	5.531	83	34195	0.534
43) 1,1,1-Trichloroethane	(1)	5.675	97	33062	0.509
44) Cyclohexane	(1)	5.710	56	24610	0.551
45) Carbon Tetrachloride	(1)	5.804	117	31833	0.499
46) Benzene	(2)	5.983	78	59138	0.617
47) 1,2-Dichloroethane	(2)	6.011	62	22160	0.569
48) Isooctane	(2)	6.033	57	73455	0.554
49) Tert-Amyl Methyl Ether	(2)	6.076	73	35782	0.448
50) Heptane	(2)	6.176	43	26194	0.578
51)*1,4-Difluorobenzene	(2)	6.291	114	1114233	10.000
52) Trichloroethene	(2)	6.491	130	26748	0.562
53) Ethyl Acrylate	(2)	6.577	55	31243	0.515
36) 1,2-Dichloroethene (total)	(1)		61	42238	1.096
54) 1,2-Dichloropropane	(2)	6.670	63	18068	0.539
57) Methyl Methacrylate	(2)	6.749	69	18907	0.564
55) Dibromomethane	(2)	6.771	174	24716	0.536
56) 1,4-Dioxane	(2)	6.778	88	13812	0.567
58) Bromodichloromethane	(2)	6.885	83	34562	0.526
59) cis-1,3-Dichloropropene	(2)	7.215	75	26220	0.453
60) 4-Methyl-2-Pentanone	(2)	7.329	43	28706	0.455
61) Toluene	(3)	7.465	91	108328	0.878
62) Octane	(3)	7.516	43	65392	1.018
63) trans-1,3-Dichloropropene	(3)	7.630	75	22444	0.461
65) Ethyl Methacrylate	(3)	7.680	69	26590	0.481
66) 1,1,2-Trichloroethane	(3)	7.773	97	22488	0.516
67) Tetrachloroethene	(3)	7.867	166	34871	0.505
68) 2-Hexanone	(3)	7.945	43	30652	0.496
69) Dibromochloromethane	(3)	8.067	127	25711	0.467
70) 1,2-Dibromoethane	(3)	8.160	107	32297	0.476
71)*Chlorobenzene-d5	(3)	8.497	117	1070009	10.000
72) Chlorobenzene	(3)	8.518	112	51375	0.486
73) 1,1,1,2-Tetrachloroethane	(3)	8.576	131	23945	0.466
74) Ethylbenzene	(3)	8.583	91	149283	0.904
75) m/p-Xylene	(3)	8.669	91	179032	1.336
76) o-Xylene	(3)	8.970	91	129687	0.979
78) Styrene	(3)	8.977	104	44109	0.439

* = Compound is an internal standard.

Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00042.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:45 jbs01304

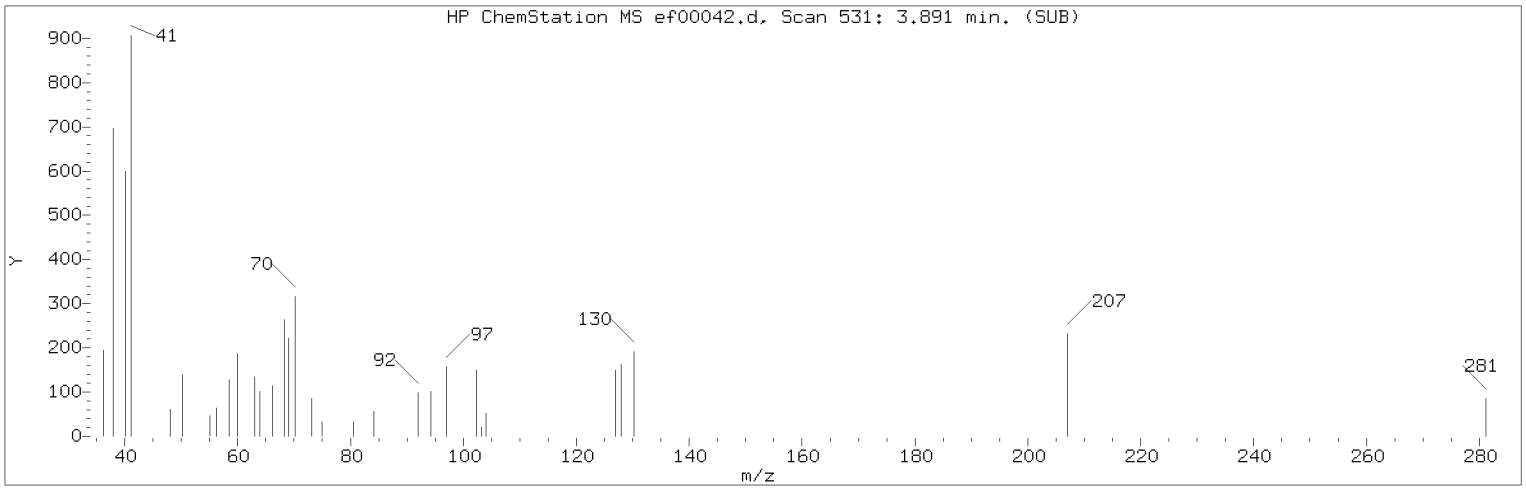
Sample Name: mdlv0.5 Lab Sample ID: mdlv0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	32861	0.464
80) Cumene	(3)	9.235	105	91306	0.483
83) 1,2,3-Trichloropropane	(3)	9.421	110	15630	0.527
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	46344	0.499
81) Bromobenzene	(3)	9.485	156	32612	0.486
84) n-Propylbenzene	(3)	9.543	120	23955	0.441
85) 2-Chlorotoluene	(3)	9.622	126	22801	0.456
86) 4-Ethyltoluene	(3)	9.629	105	78748M	0.431
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	73013M	0.480
88) Alpha Methyl Styrene	(3)	9.844	118	31626	0.396
89) tert-Butylbenzene	(3)	9.922	119	105356M	0.664
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	70979	0.473
91) sec-Butylbenzene	(3)	10.087	105	109854	0.484
92) 1,3-Dichlorobenzene	(3)	10.187	146	54793	0.491
94) p-Isopropyltoluene	(3)	10.187	119	87867	0.452
93) 1,4-Dichlorobenzene	(3)	10.252	146	57790	0.508
95) Benzyl Chloride	(3)	10.359	91	42118	0.409
97) n-Butylbenzene	(3)	10.503	91	80037	0.458
96) 1,2-Dichlorobenzene	(3)	10.546	146	54650	0.515
98) Hexachloroethane	(3)	10.732	117	21692	0.526
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	28265	0.515
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	61931	0.680
101) Hexachlorobutadiene	(3)	11.871	225	54684	0.703
102) Naphthalene	(3)	11.964	128	142592	0.709
64) 1,3-Dichloropropene (total)	(3)		75	48664	0.914
77) Xylene (total)	(3)		91	308719	2.315

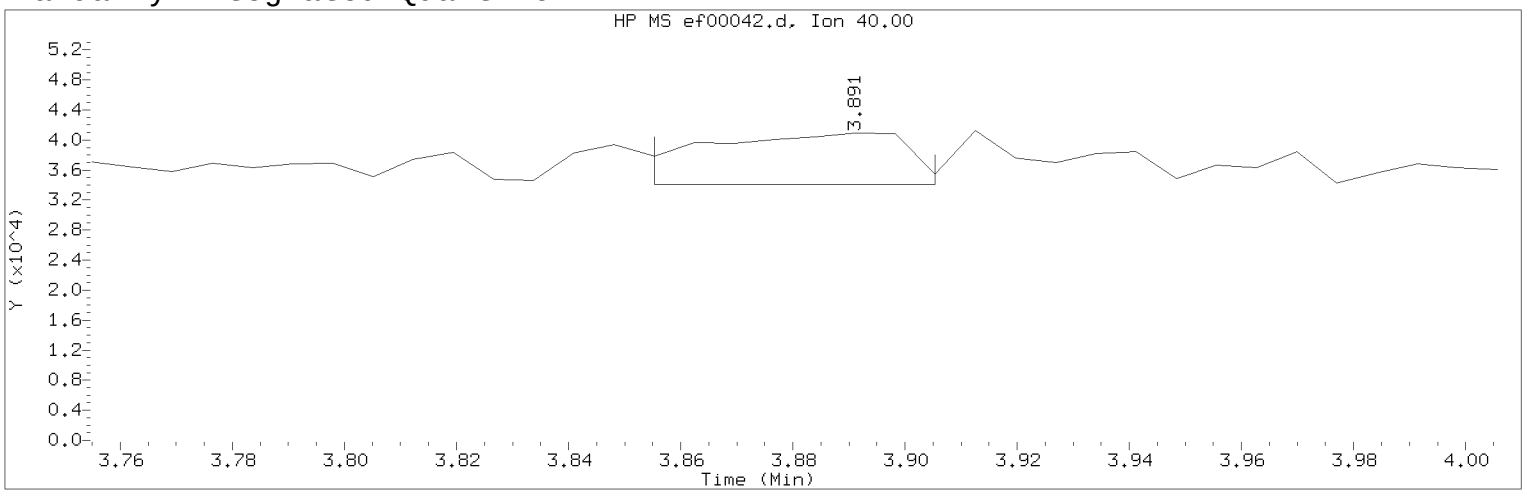
M = Compound was manually integrated.

Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00042.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:45 jbs01304

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

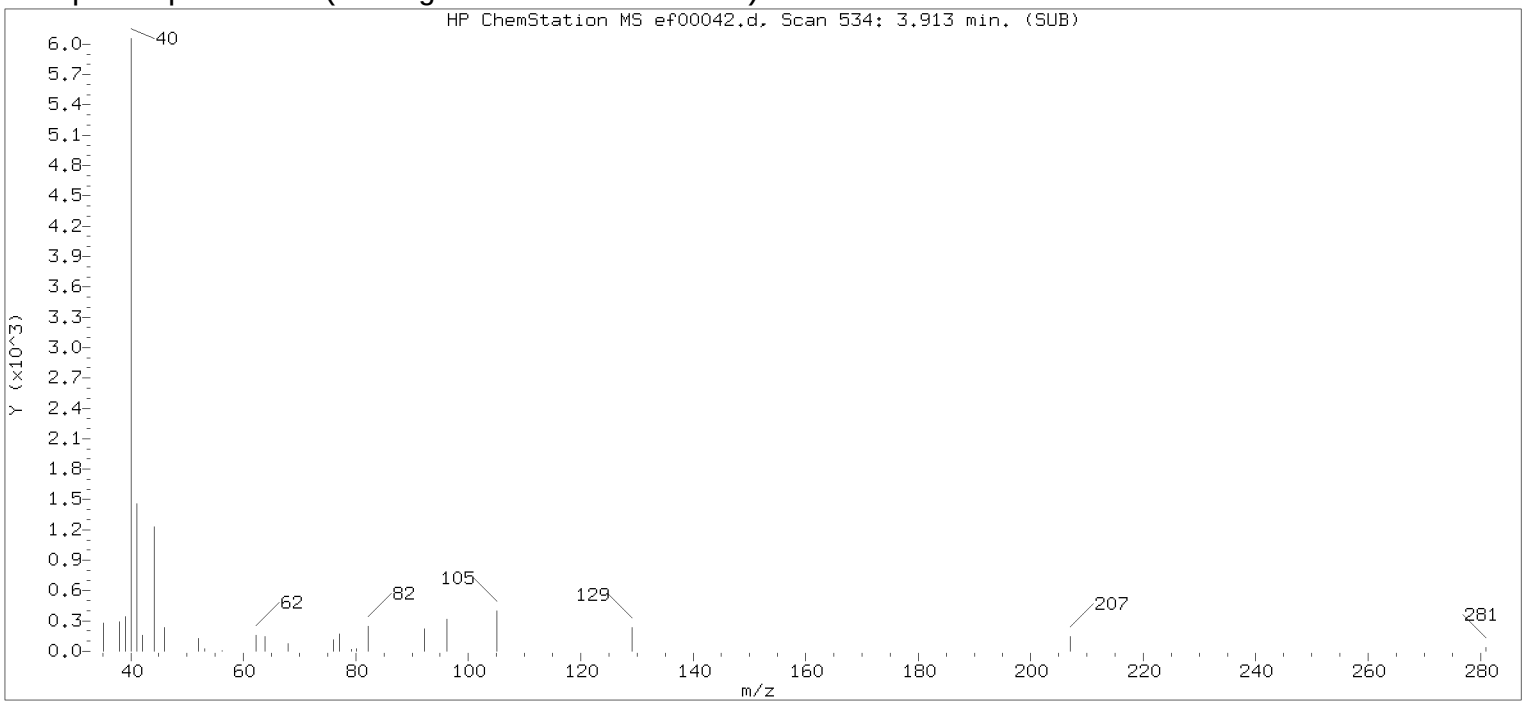
Compound Number : 23
Compound Name : Acetonitrile
Scan Number : 531
Retention Time (minutes): 3.891
Quant Ion : 40.00
Area (flag) : 18136M
Concentration (ppb(v)) : 1.0365
Integration start scan : 525 Integration stop scan: 532
Y at integration start : 34068 Y at integration end: 34068

Reason for manual integration: improper integration

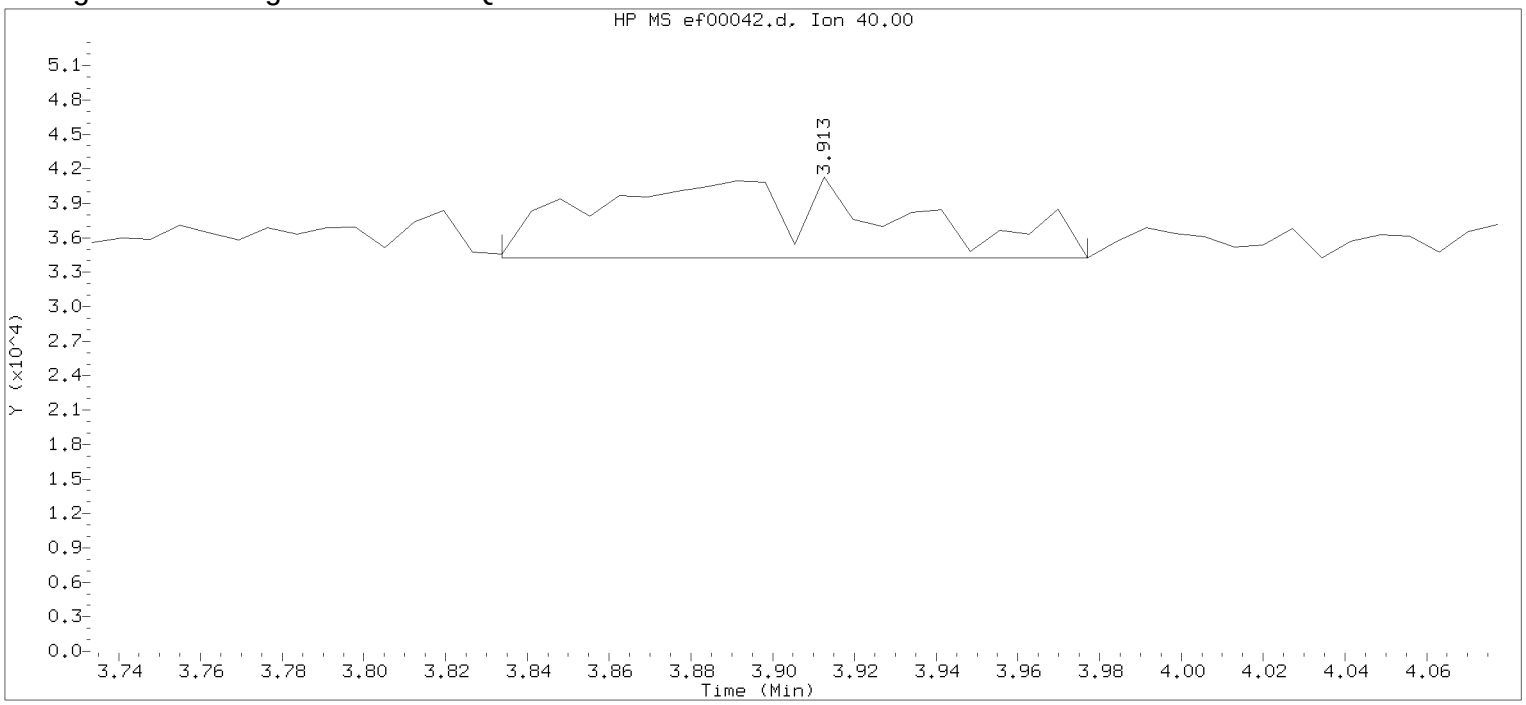
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:47.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00042.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:31 Unknown

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

Compound Number : 23
Compound Name : Acetonitrile
Scan Number : 534
Retention Time (minutes): 3.913
Quant Ion : 40.00
Area : 34525
Concentration (ppb(v)) : 1.9731
Integration start scan : 522 Integration stop scan: 542
Y at integration start : 34264 Y at integration end: 34264

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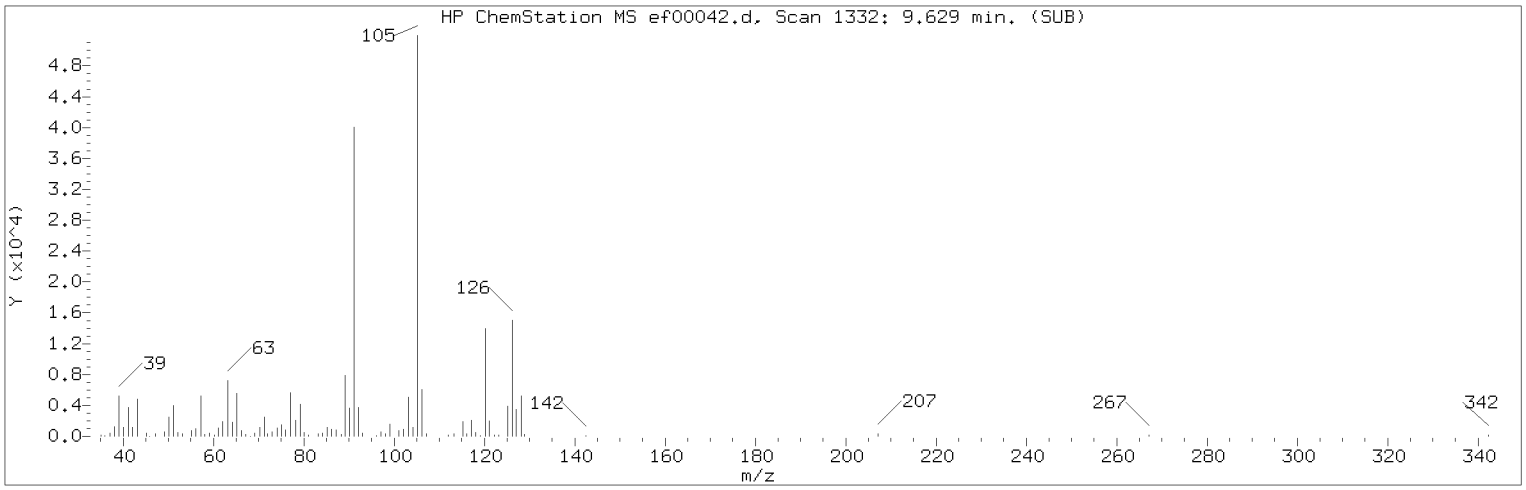
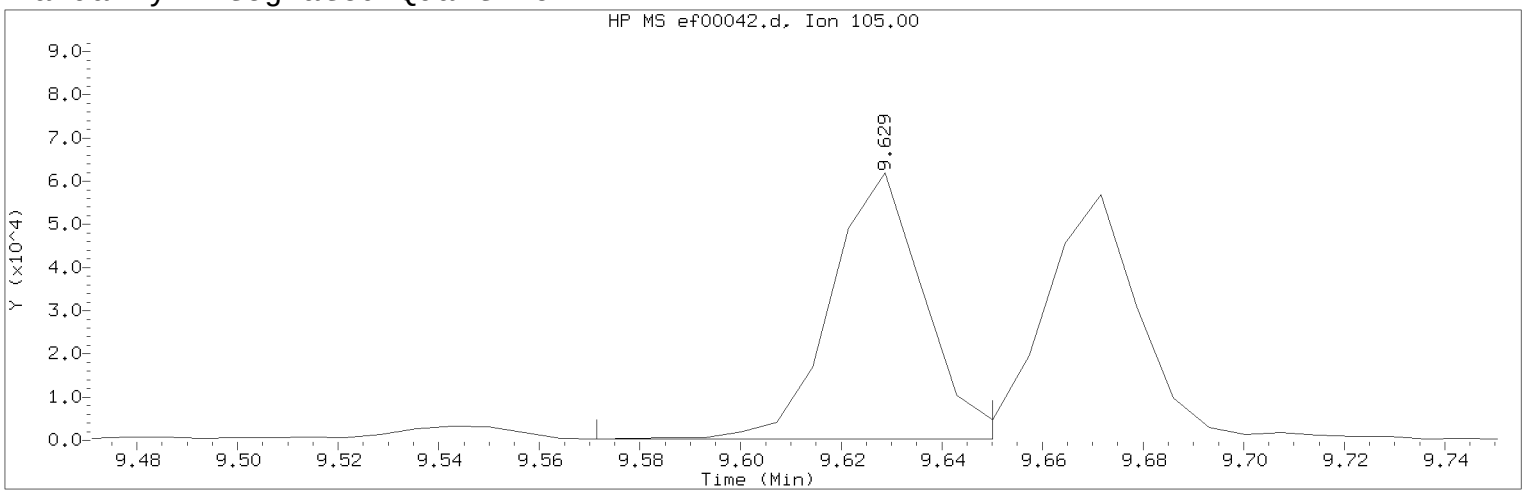
Target 3.5 esignature user ID: jbs1375

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00042.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:45 jbs01304

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

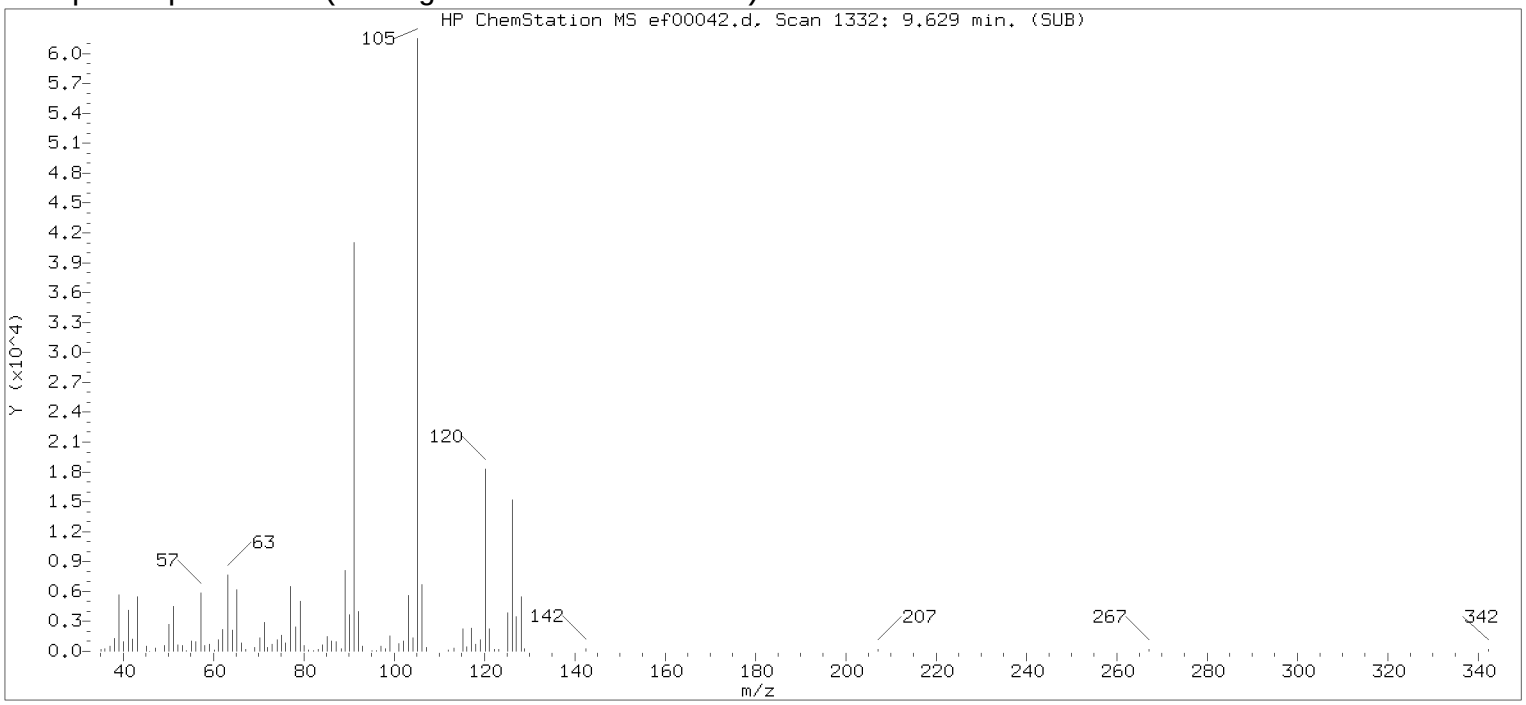
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 78748M
Concentration (ppb(v)) : 0.4310
Integration start scan : 1323 Integration stop scan: 1334
Y at integration start : 337 Y at integration end: 337

Reason for manual integration: improper integration

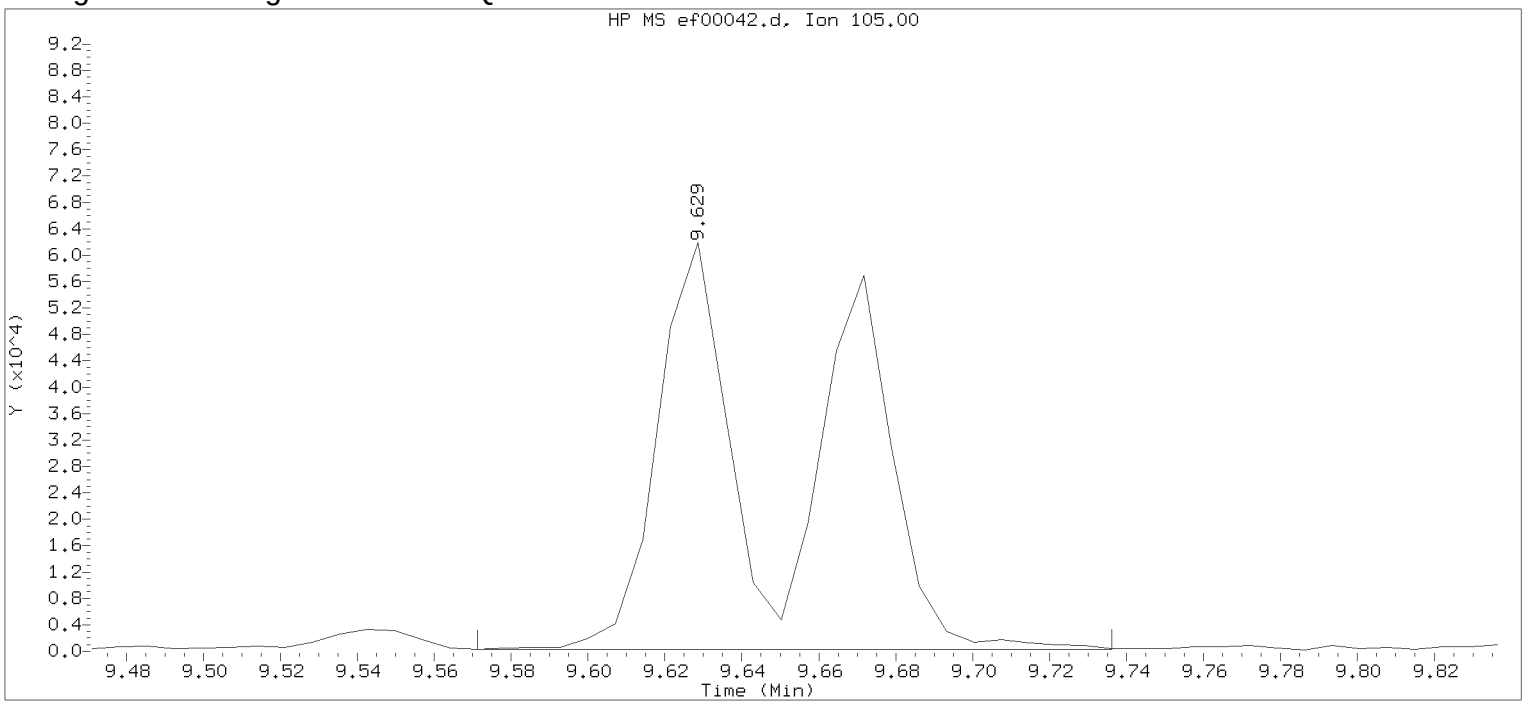
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:47.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00042.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:31 Unknown

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

Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 151108
Concentration (ppb(v)) : 0.8270
Integration start scan : 1323 Integration stop scan: 1346
Y at integration start : 337 Y at integration end: 337

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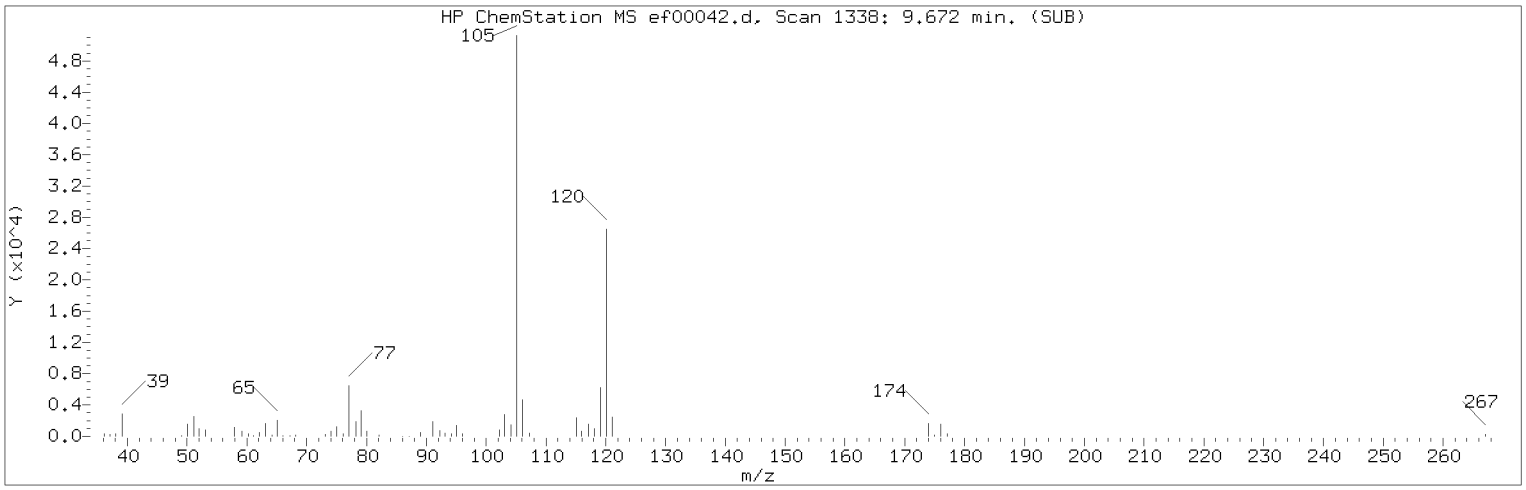
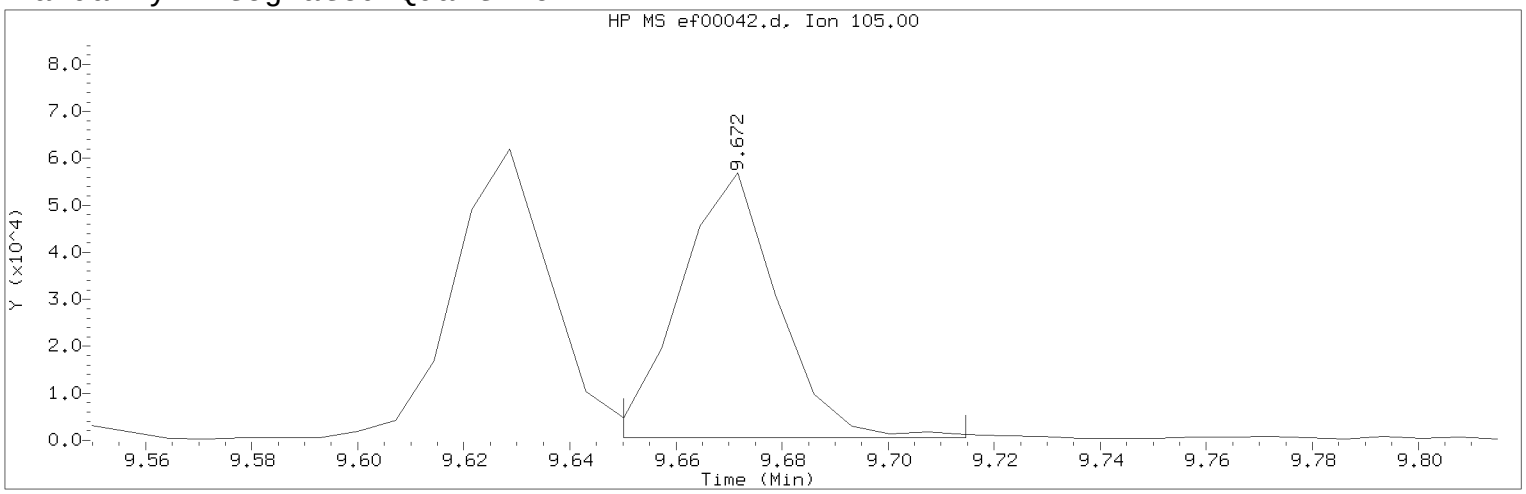
Target 3.5 esignature user ID: jbsmith

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00042.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:45 jbs01304

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

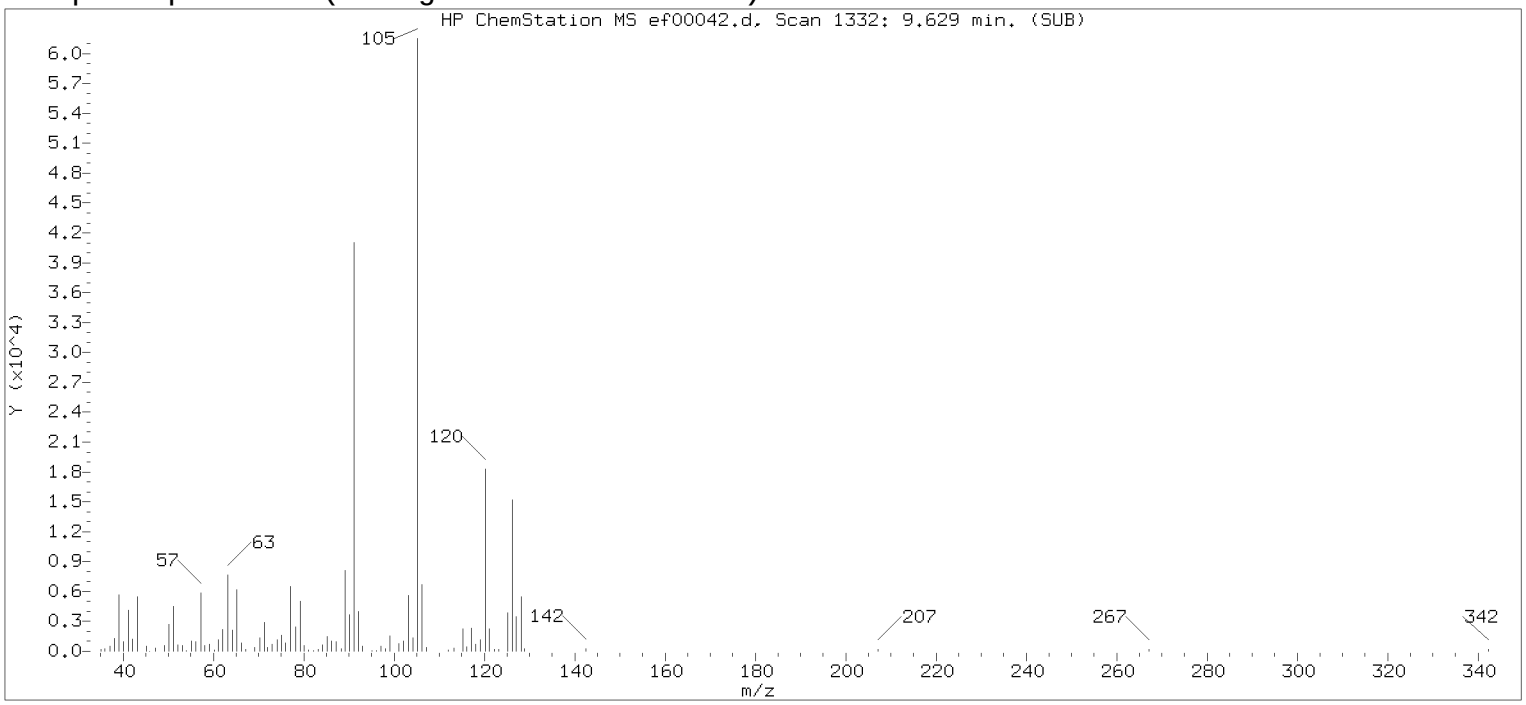
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 73013M
Concentration (ppb(v)) : 0.4801
Integration start scan : 1334 Integration stop scan: 1343
Y at integration start : 511 Y at integration end: 511

Reason for manual integration: improper integration

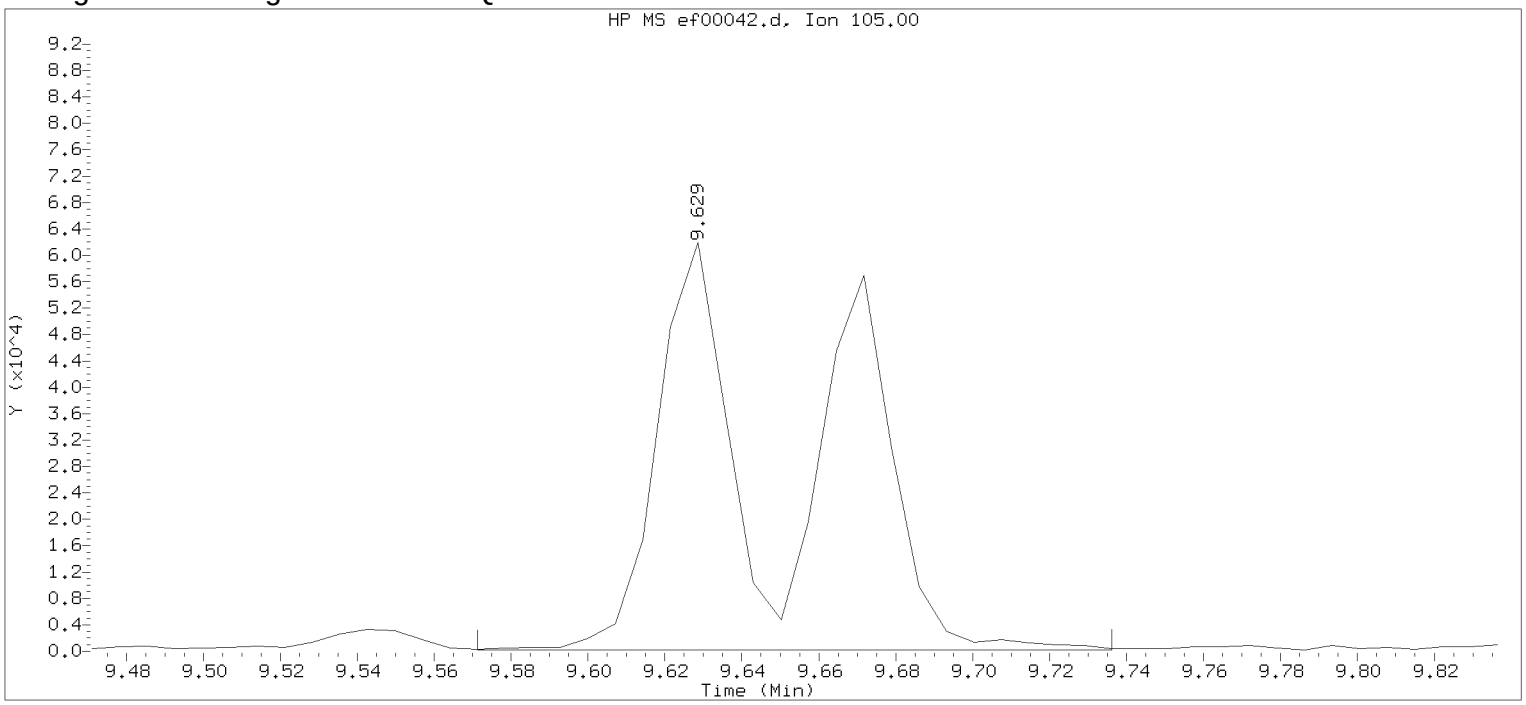
Analyst responsible for change: Digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:47.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00042.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:31 Unknown

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

Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 152127
Concentration (ppb(v)) : 1.0003
Integration start scan : 1323 Integration stop scan: 1346
Y at integration start : 233 Y at integration end: 233

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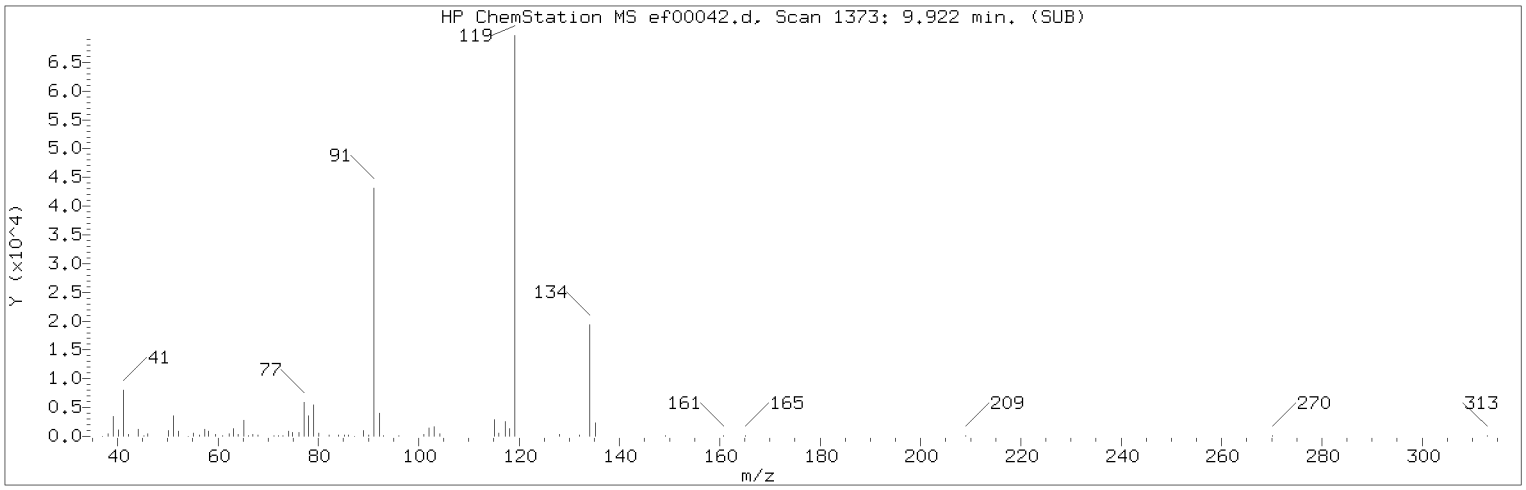
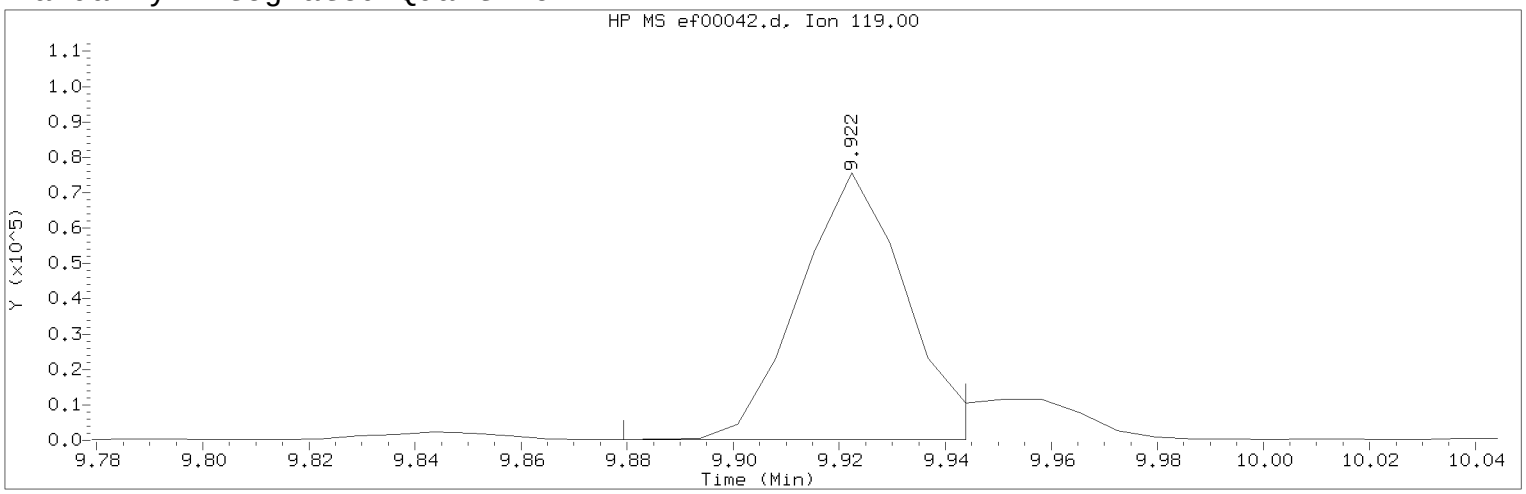
Target 3.5 esignature user ID: jbsmith

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00042.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:45 jbs01304

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

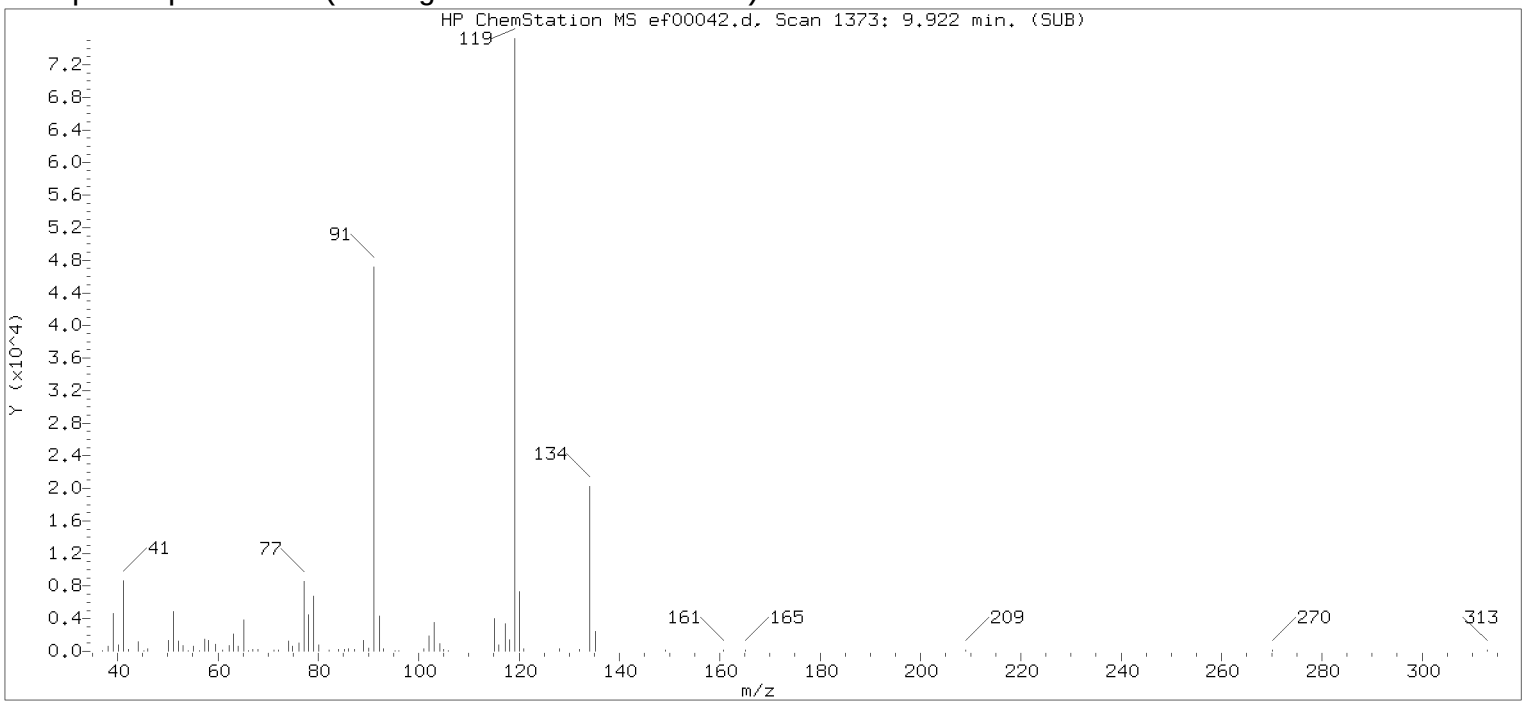
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 105356M
Concentration (ppb(v)) : 0.6641
Integration start scan : 1366 Integration stop scan: 1375
Y at integration start : 184 Y at integration end: 184

Reason for manual integration: improper integration

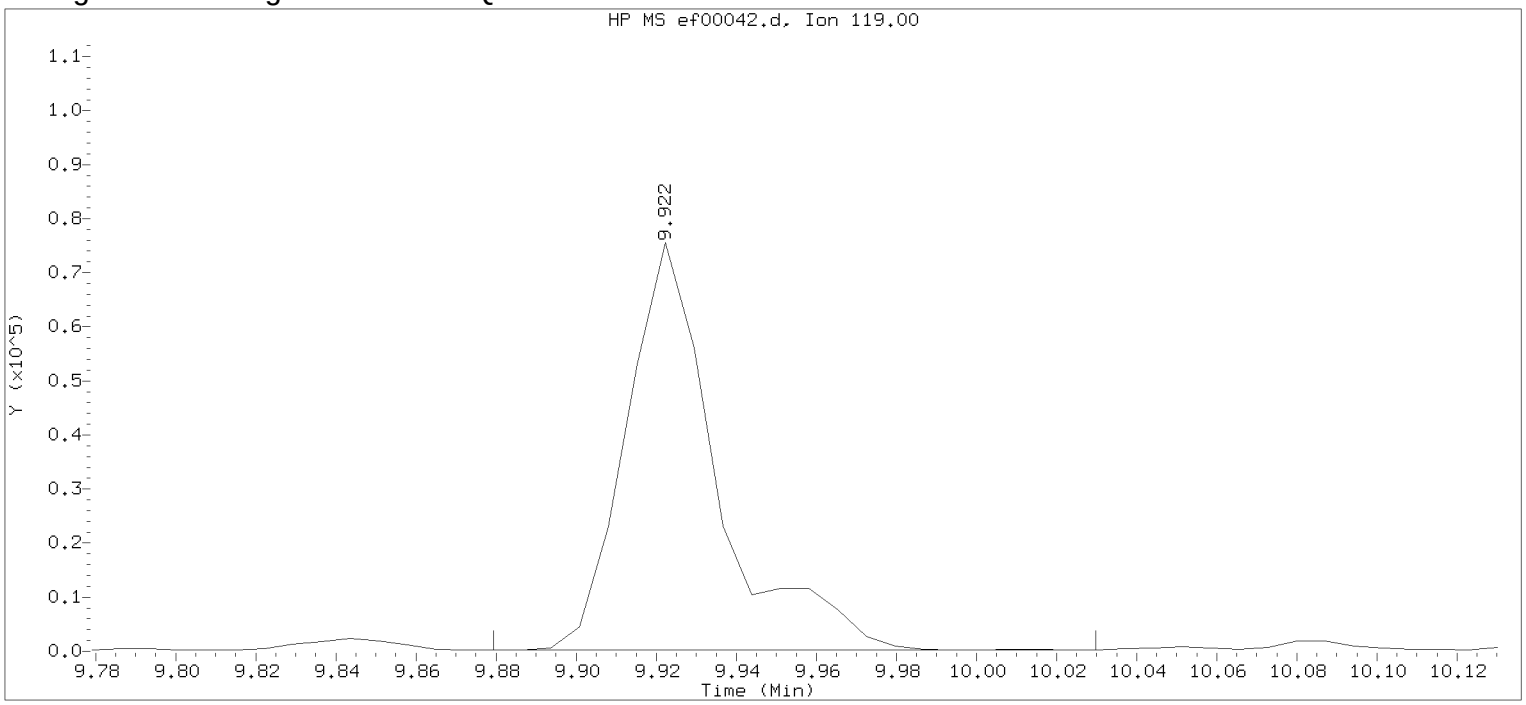
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:47.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00042.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:31 Unknown

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

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 120171
Concentration (ppb(v)) : 0.7575
Integration start scan : 1366 Integration stop scan: 1387
Y at integration start : 184 Y at integration end: 184

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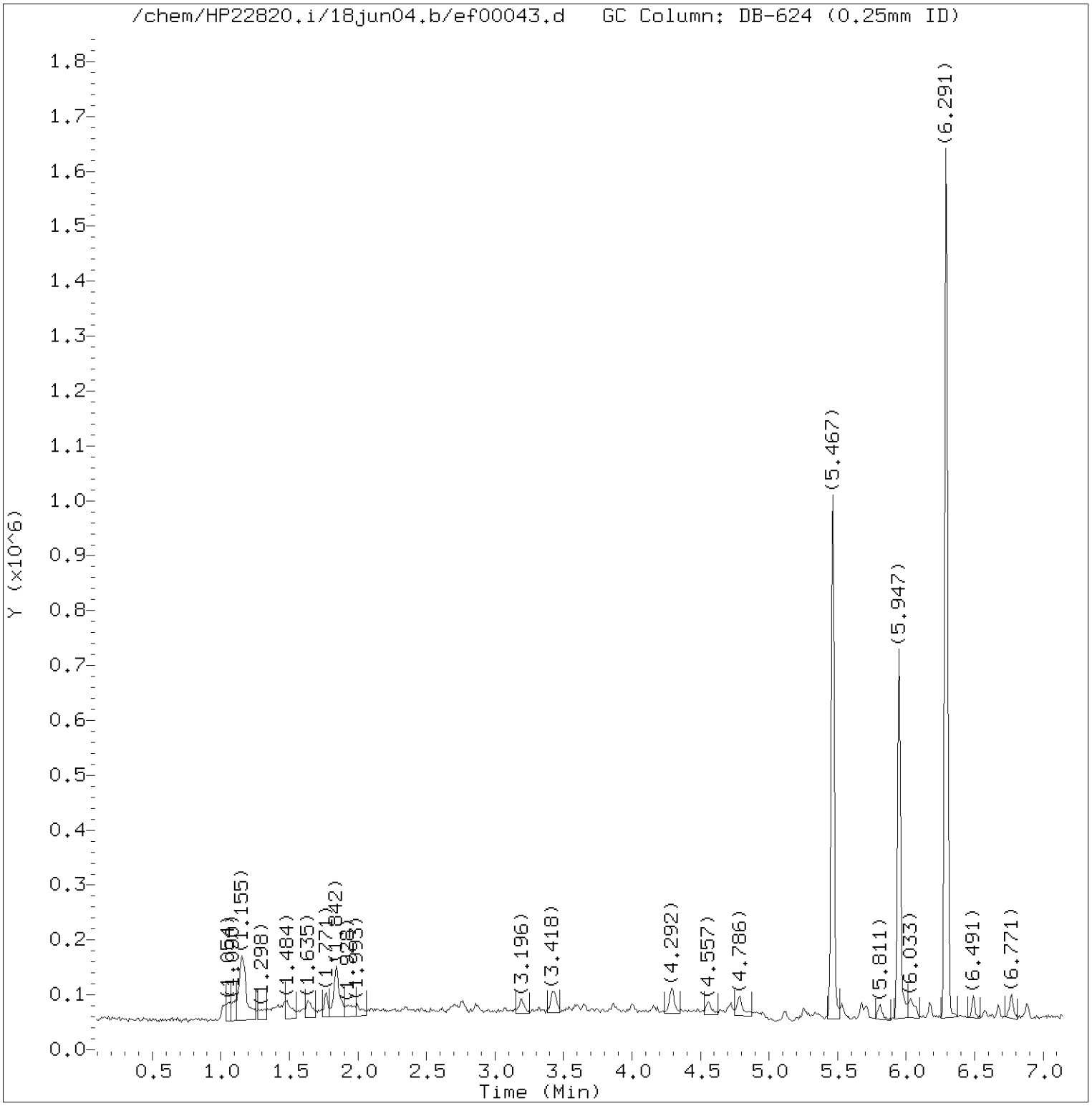
Target 3.5 esignature user: JBS02 Page 384 of 970



Total Ion Chromatogram (TIC)

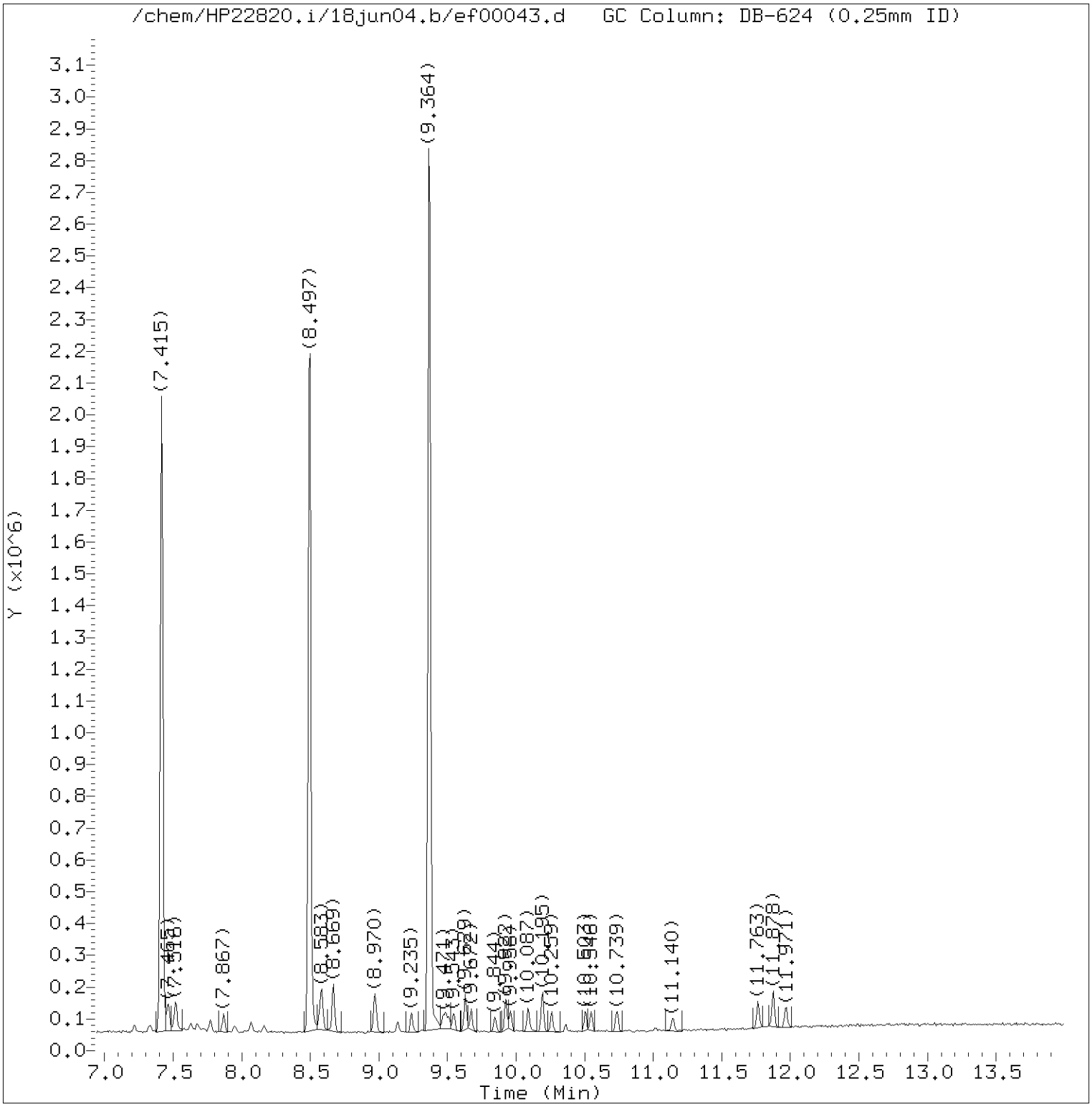
Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00043.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:40 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:46 jbs01304

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

Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00043.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:40 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:46 jbs01304

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

Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00043.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:40 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:46 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.606	41	5486	0.290
2) Dichlorodifluoromethane	(1)	1.635	85	15689	0.214
3) Chlorodifluoromethane	(1)	1.656	51	9408	0.242
4) Freon 114	(1)	1.771	85	14917	0.199
5) Chloromethane	(1)	1.835	50	6514	0.293
6) Vinyl Chloride	(1)	1.964	62	6058	0.222
7) 1,3-Butadiene	(1)	1.993	54	5598	0.283
8) Bromomethane	(1)	2.351	94	6615	0.236
9) Chloroethane	(1)	2.458	64	3636M	0.236
10) Bromoethene	(1)	2.680	106	6253	0.210
11) Dichlorofluoromethane	(1)	2.716	67	14034	0.236
12) Trichlorofluoromethane	(1)	2.766	101	16985	0.218
13) Pentane	(1)	2.860	43	10298	0.247
14) Ethanol	(1)	3.060	45	6262	0.697
15) Freon123a	(1)	3.189	67	15047	0.291
16) Acrolein	(1)	3.311	56	3058	0.287
17) 1,1-Dichloroethene	(1)	3.418	61	9522	0.220
18) Freon 113	(1)	3.440	103	10694	0.246
19) Acetone	(1)	3.533	43	15150	0.422
20) Methyl Iodide	(1)	3.597	142	19556	0.234
21) Carbon Disulfide	(1)	3.648	76	16686	0.206
22) Isopropanol	(1)	3.719	45	8816	0.238
24) 3-Chloropropene	(1)	3.862	76	4524	0.357
23) Acetonitrile	(1)	3.884	40	15140	0.869
25) Methylene Chloride	(1)	4.006	84	6112	0.248
26) tert-Butyl Alcohol	(1)	4.163	59	10322	0.206
28) trans-1,2-Dichloroethene	(1)	4.285	61	8499	0.218
29) Methyl t-Butyl Ether	(1)	4.292	73	24282	0.291
27) Acrylonitrile	(1)	4.299	53	6856	0.313
30) Hexane	(1)	4.557	57	10796	0.252
31) 1,1-Dichloroethane	(1)	4.722	63	12549	0.247
32) Vinyl Acetate	(1)	4.786	86	1676	0.225
33) Di-Isopropyl Ether	(1)	4.786	45	17585	0.207
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	13907	0.172
37) 2-Butanone	(1)	5.130	72	4393	0.280
35) cis-1,2-Dichloroethene	(1)	5.252	61	8750	0.232
38) Ethyl Acetate	(1)	5.331	70	2958	0.382
39) Methyl Acrylate	(1)	5.367	55	11153	0.234

M = Compound was manually integrated.

Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00043.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:40 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:46 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	305420	10.000
41) Tetrahydrofuran	(1)	5.503	42	7602	0.273
42) Chloroform	(1)	5.531	83	14792	0.232
43) 1,1,1-Trichloroethane	(1)	5.675	97	13752	0.213
44) Cyclohexane	(1)	5.703	56	12453	0.280
45) Carbon Tetrachloride	(1)	5.811	117	13155	0.207
46) Benzene	(2)	5.983	78	24402	0.256
47) 1,2-Dichloroethane	(2)	6.011	62	9443	0.244
48) Isooctane	(2)	6.033	57	29107	0.221
49) Tert-Amyl Methyl Ether	(2)	6.069	73	15654	0.197
50) Heptane	(2)	6.176	43	11126	0.247
51)*1,4-Difluorobenzene	(2)	6.291	114	1106698	10.000
52) Trichloroethene	(2)	6.491	130	10545	0.223
53) Ethyl Acrylate	(2)	6.577	55	13165	0.219
36) 1,2-Dichloroethene (total)	(1)		61	17249	0.450
54) 1,2-Dichloropropane	(2)	6.670	63	6681	0.201
57) Methyl Methacrylate	(2)	6.749	69	6757	0.203
55) Dibromomethane	(2)	6.771	174	10318	0.225
56) 1,4-Dioxane	(2)	6.785	88	6133	0.253
58) Bromodichloromethane	(2)	6.885	83	13652	0.209
59) cis-1,3-Dichloropropene	(2)	7.215	75	11336	0.197
60) 4-Methyl-2-Pentanone	(2)	7.329	43	12972	0.207
61) Toluene	(3)	7.465	91	41455	0.335
62) Octane	(3)	7.516	43	26611	0.414
63) trans-1,3-Dichloropropene	(3)	7.630	75	9641	0.198
65) Ethyl Methacrylate	(3)	7.673	69	10412	0.188
66) 1,1,2-Trichloroethane	(3)	7.773	97	9334	0.214
67) Tetrachloroethene	(3)	7.867	166	13951	0.202
68) 2-Hexanone	(3)	7.945	43	12970	0.210
69) Dibromochloromethane	(3)	8.067	127	10116	0.184
70) 1,2-Dibromoethane	(3)	8.160	107	13384	0.197
71)*Chlorobenzene-d5	(3)	8.497	117	1071520	10.000
72) Chlorobenzene	(3)	8.518	112	20154	0.190
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	9702	0.188
74) Ethylbenzene	(3)	8.583	91	58817	0.356
75) m/p-Xylene	(3)	8.669	91	75033	0.559
76) o-Xylene	(3)	8.970	91	50096	0.378
78) Styrene	(3)	8.984	104	17760	0.177

* = Compound is an internal standard.

Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00043.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:40 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:46 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.134	173	13184	0.186
80) Cumene	(3)	9.235	105	36620	0.194
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	18991	0.204
81) Bromobenzene	(3)	9.493	156	12535	0.186
83) 1,2,3-Trichloropropane	(3)	9.507	110	6110	0.206
84) n-Propylbenzene	(3)	9.550	120	9842	0.181
86) 4-Ethyltoluene	(3)	9.629	105	31285M	0.171
85) 2-Chlorotoluene	(3)	9.629	126	8954	0.179
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	30455M	0.200
88) Alpha Methyl Styrene	(3)	9.851	118	12973	0.162
89) tert-Butylbenzene	(3)	9.922	119	50135M	0.316
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	29225	0.194
91) sec-Butylbenzene	(3)	10.087	105	46769	0.206
92) 1,3-Dichlorobenzene	(3)	10.195	146	21508	0.192
94) p-Isopropyltoluene	(3)	10.195	119	33891	0.174
93) 1,4-Dichlorobenzene	(3)	10.259	146	23470	0.206
95) Benzyl Chloride	(3)	10.359	91	17042	0.165
97) n-Butylbenzene	(3)	10.503	91	32764	0.187
96) 1,2-Dichlorobenzene	(3)	10.546	146	22887	0.215
98) Hexachloroethane	(3)	10.739	117	7470	0.181
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	10084	0.183
100) 1,2,4-Trichlorobenzene	(3)	11.763	180	22694	0.249
101) Hexachlorobutadiene	(3)	11.878	225	20751	0.266
102) Naphthalene	(3)	11.971	128	51274	0.254
64) 1,3-Dichloropropene (total)	(3)		75	20977	0.395
77) Xylene (total)	(3)		91	125129	0.937

M = Compound was manually integrated.

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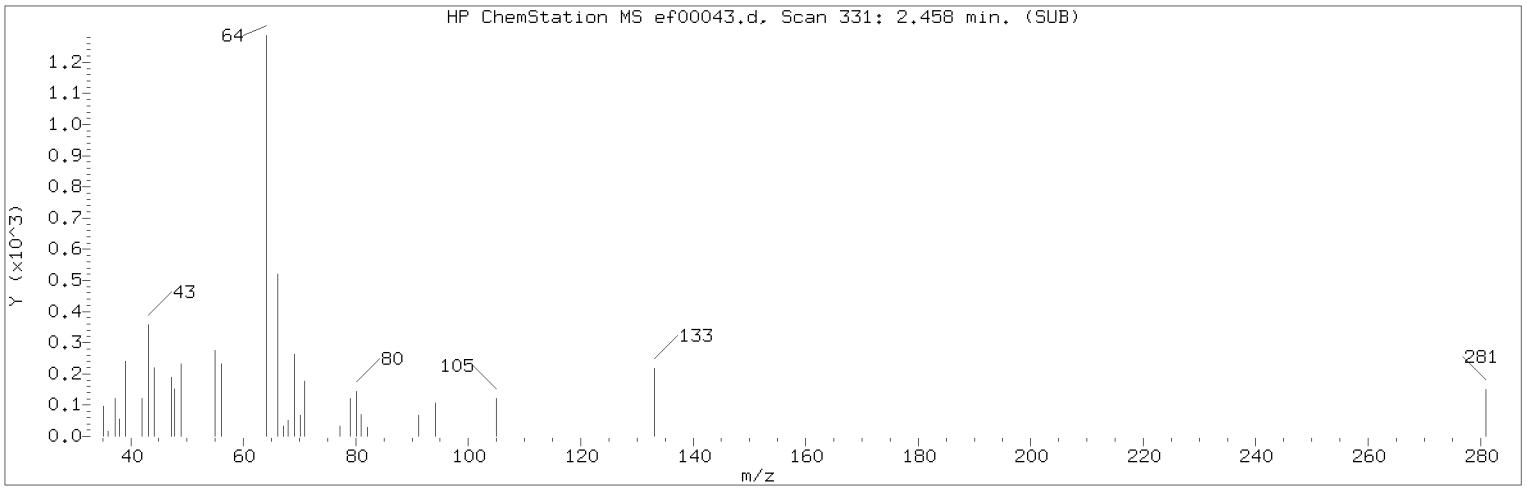
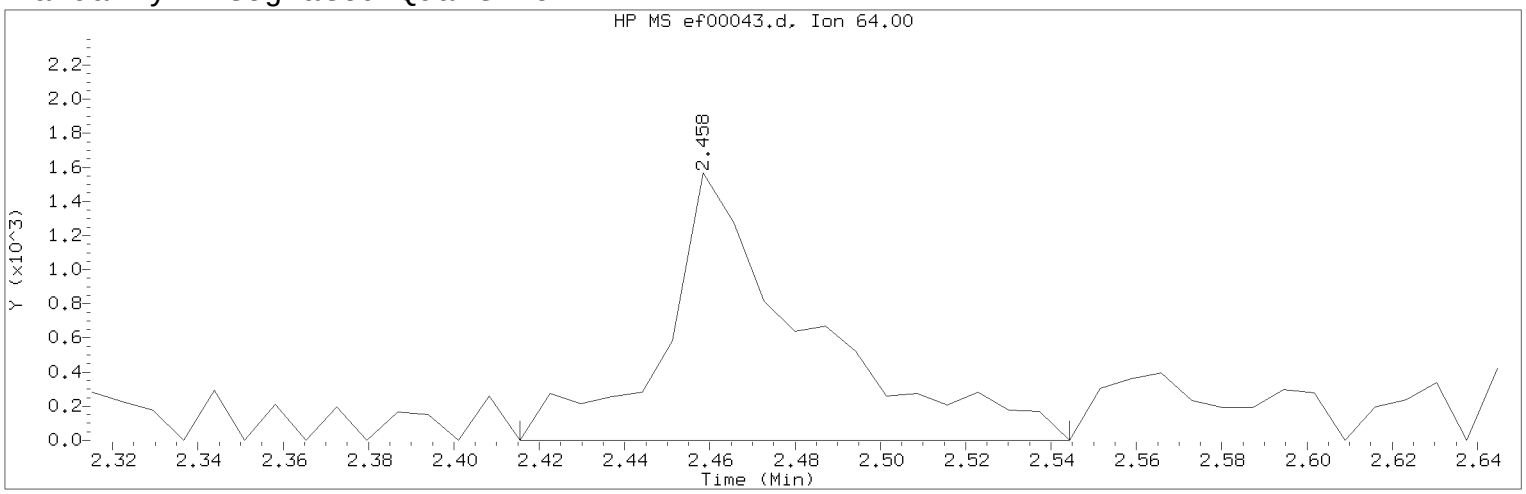
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00043.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:40 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:46 jbs01304

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

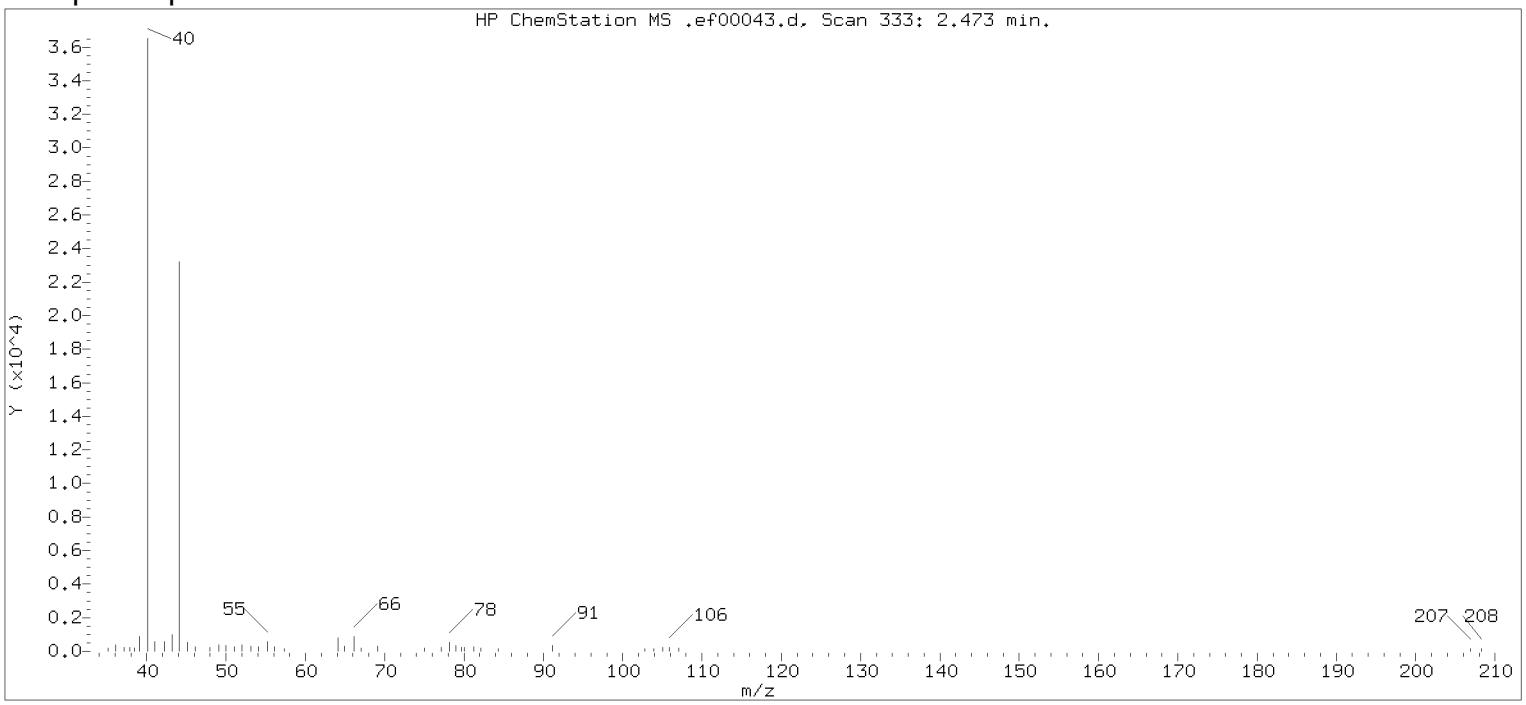
Compound Number : 9
Compound Name : Chloroethane
Scan Number : 331
Retention Time (minutes): 2.458
Quant Ion : 64.00
Area (flag) : 3636M
Concentration (ppb(v)) : 0.2361
Integration start scan : 324 Integration stop scan: 342
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

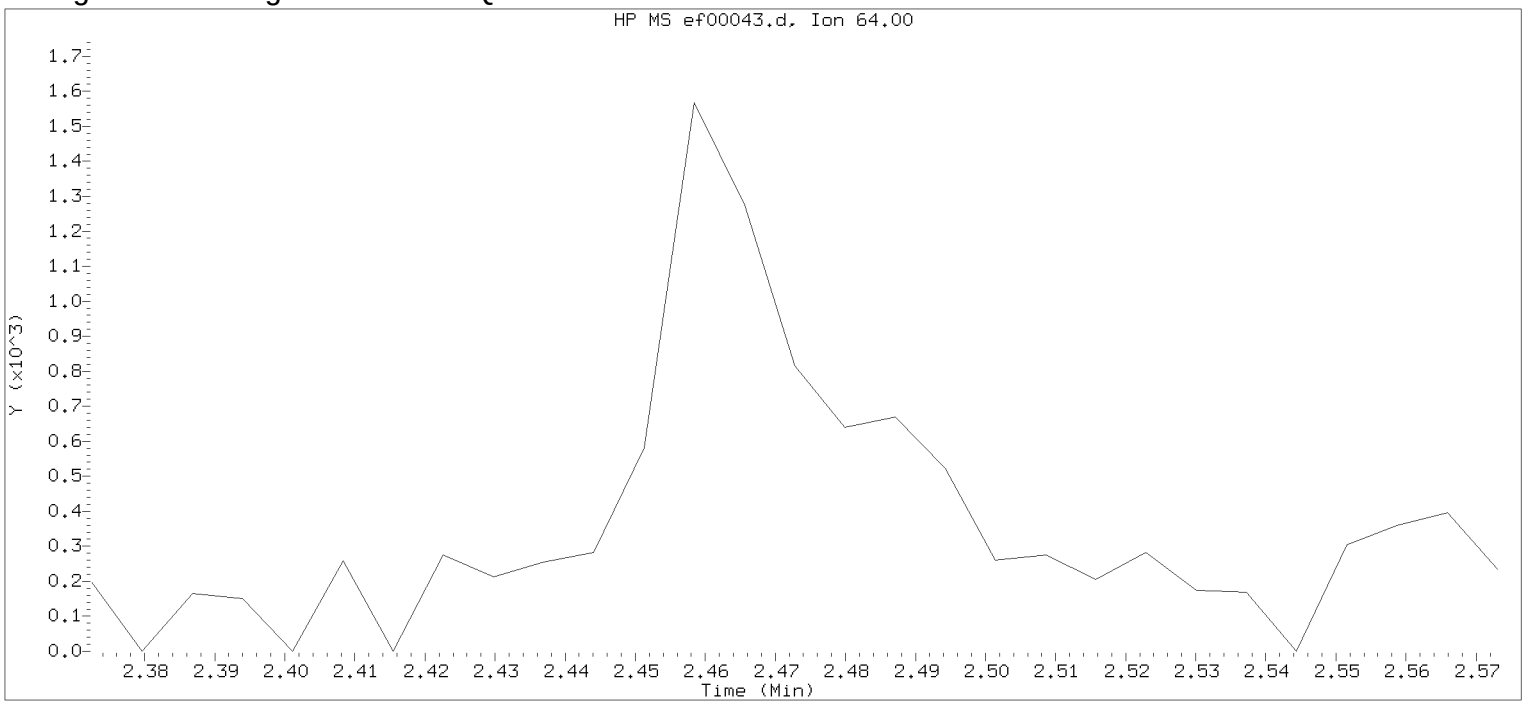
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:47.
PARALLAX ID: jbs01304

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00043.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:40 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:59 Unknown

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

Compound Number : 9
Compound Name : Chloroethane
Expected RT (minutes) : 2.473
Quant Ion : 64.00

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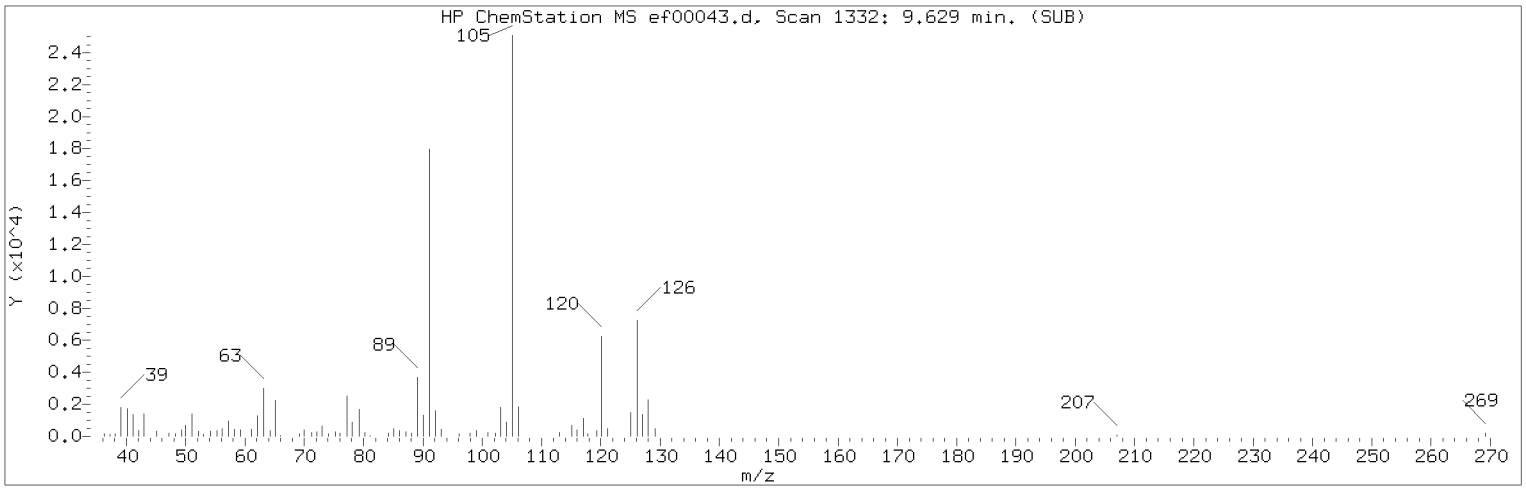
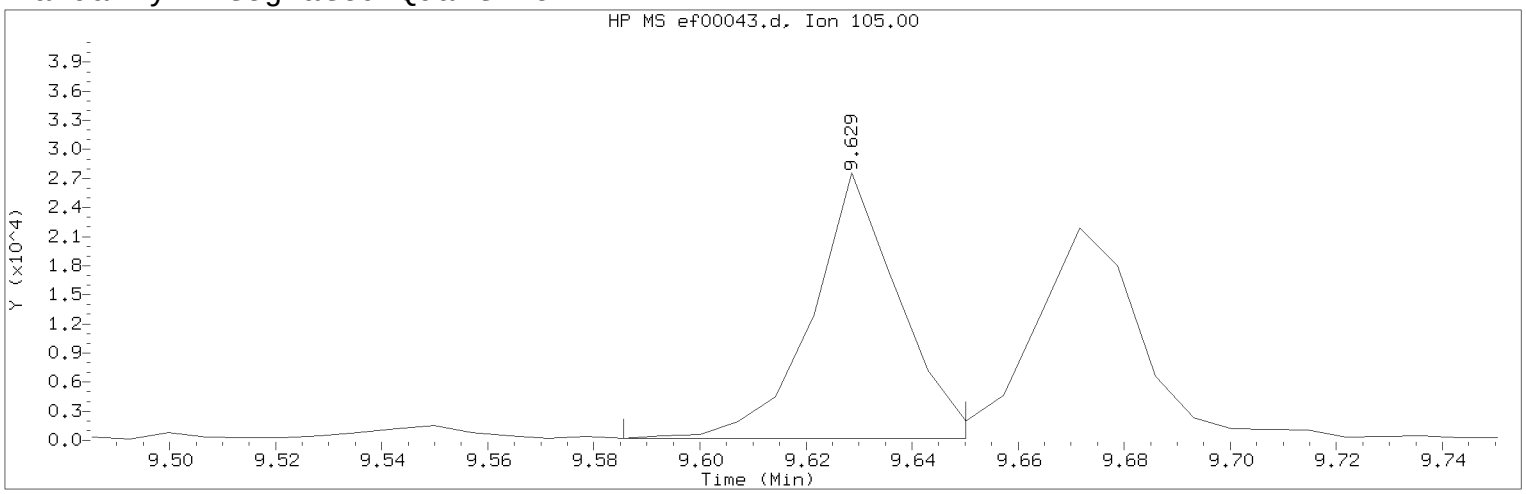
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00043.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:40 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:46 jbs01304

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

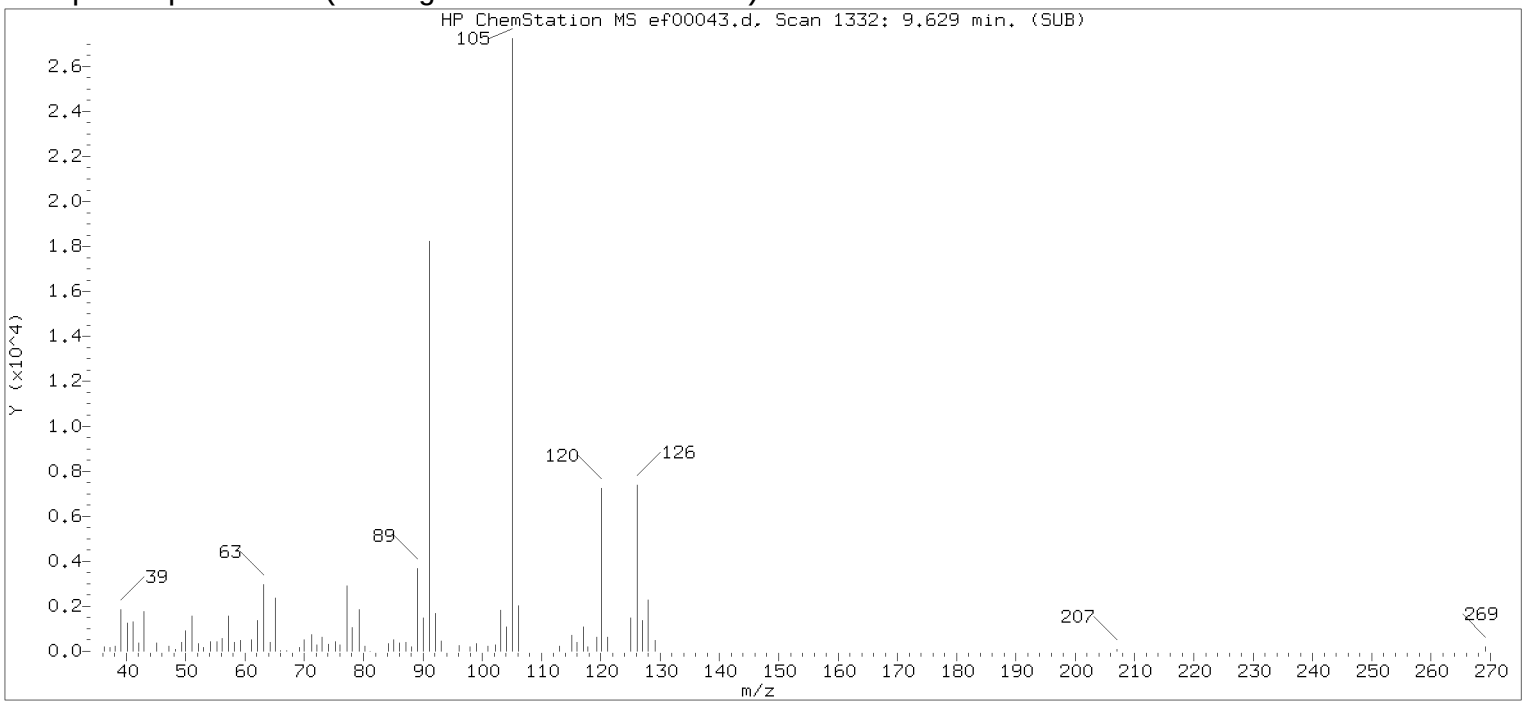
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 31285M
Concentration (ppb(v)) : 0.1710
Integration start scan : 1325 Integration stop scan: 1334
Y at integration start : 173 Y at integration end: 173

Reason for manual integration: improper integration

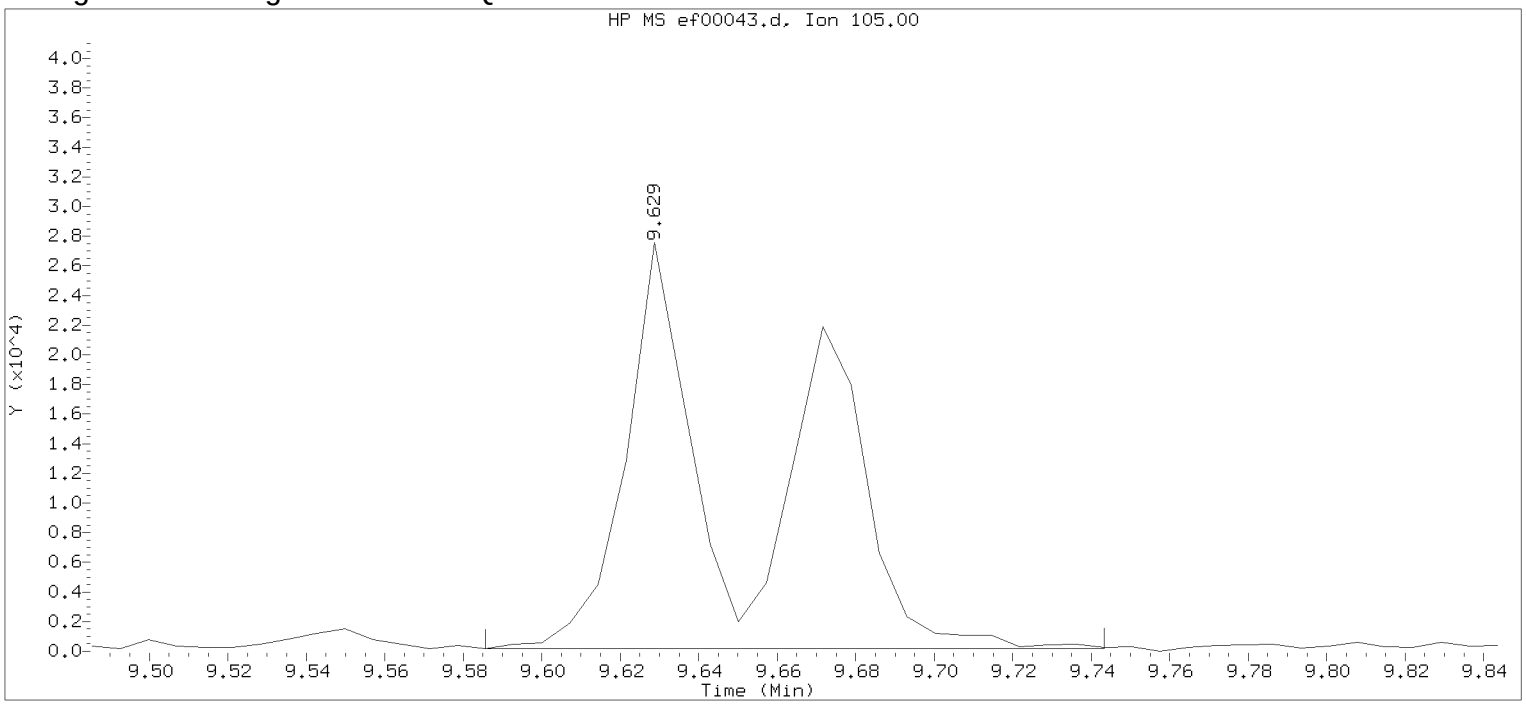
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:47.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00043.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:40 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:59 Unknown

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

Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 60994
Concentration (ppb(v)) : 0.3333
Integration start scan : 1325 Integration stop scan: 1347
Y at integration start : 173 Y at integration end: 173

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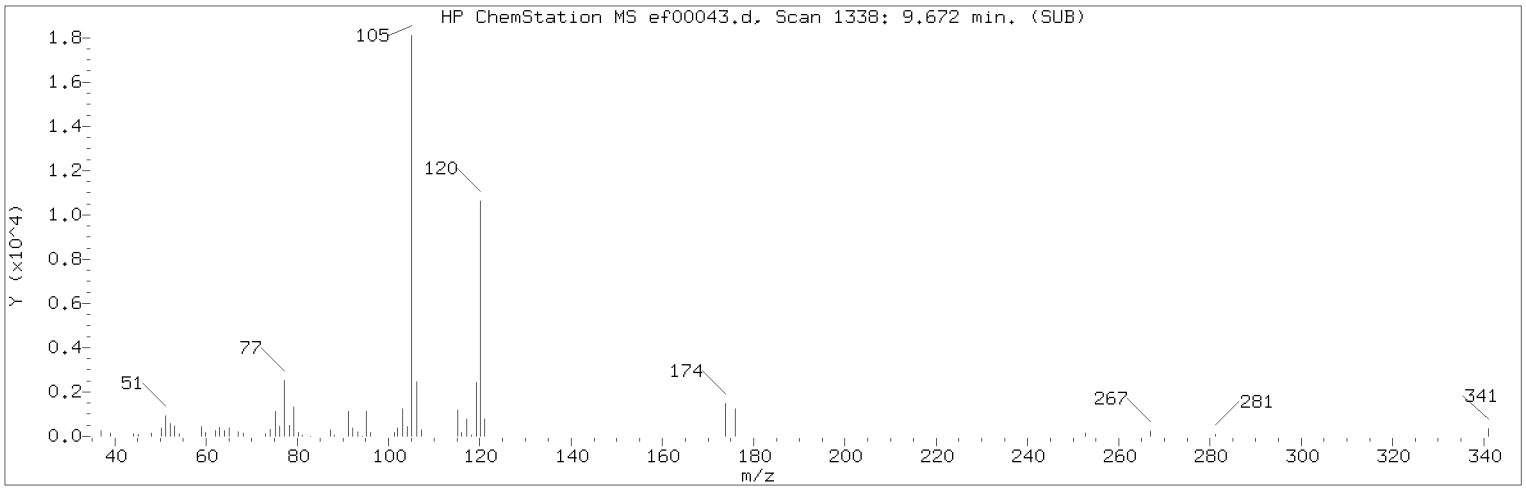
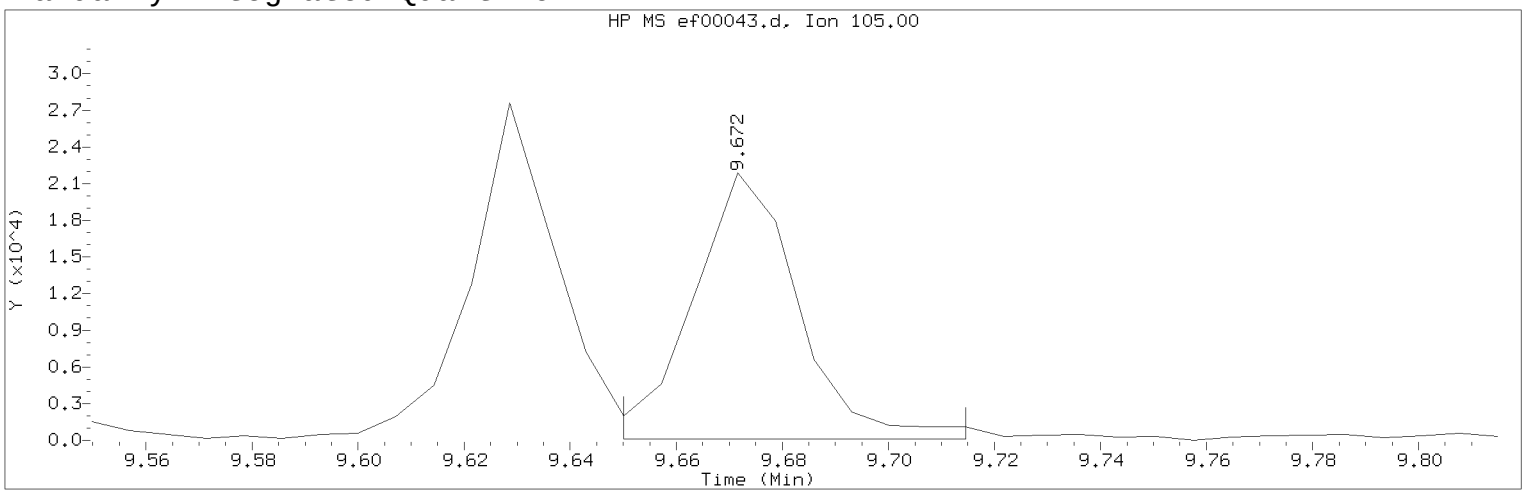
Target 3.5 esignature user GLP02 jbs01394

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00043.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:40 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:46 jbs01304

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

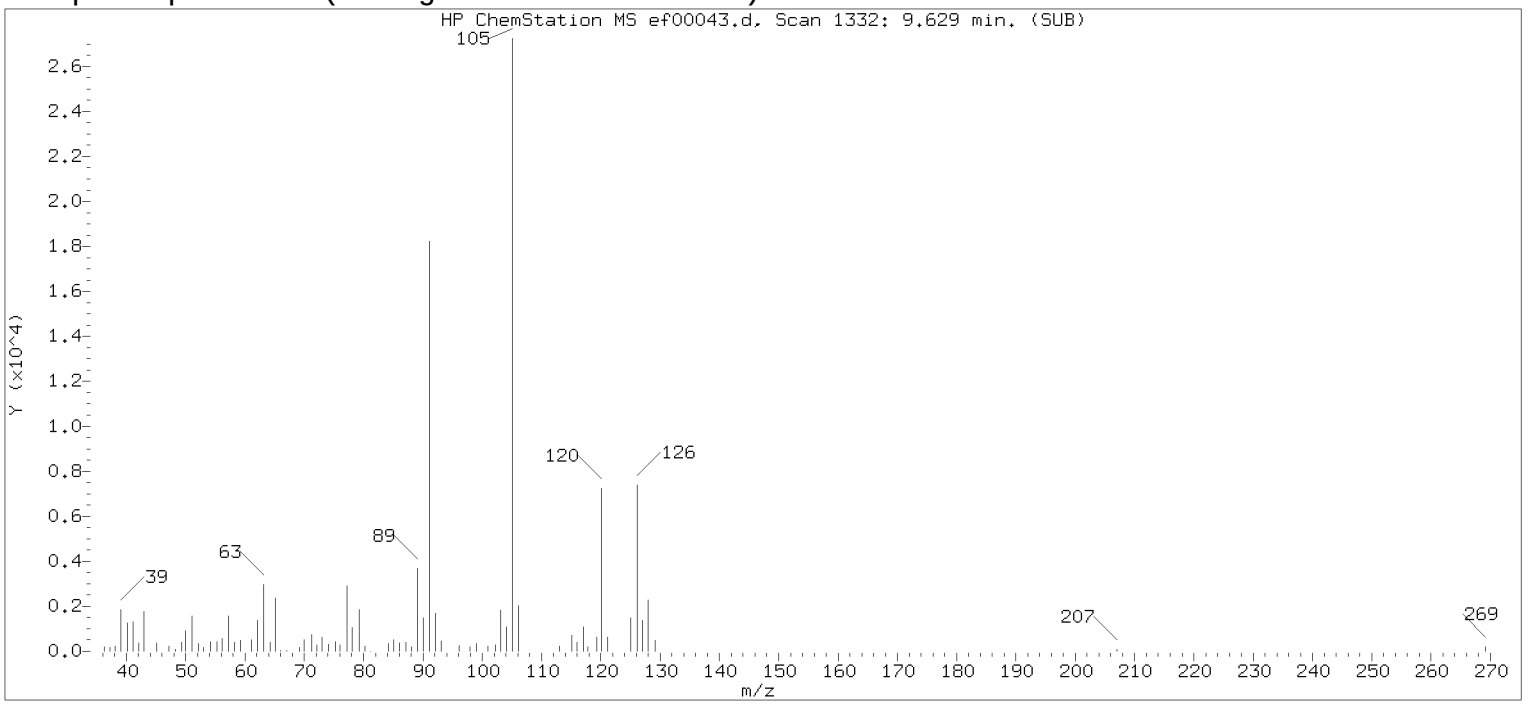
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 30455M
Concentration (ppb(v)) : 0.2000
Integration start scan : 1334 Integration stop scan: 1343
Y at integration start : 109 Y at integration end: 109

Reason for manual integration: improper integration

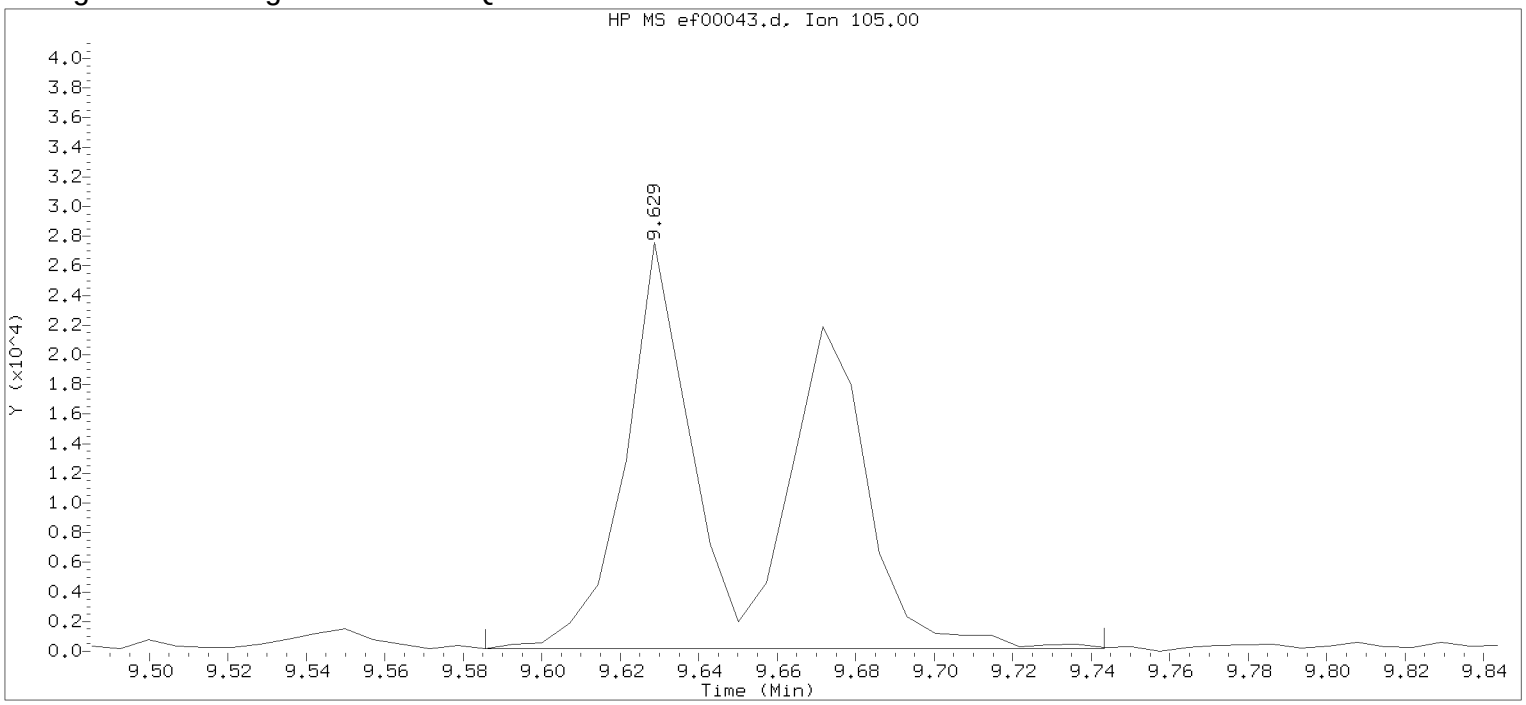
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:47.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00043.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:40 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:59 Unknown

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

Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 60994
Concentration (ppb(v)) : 0.4005
Integration start scan : 1325 Integration stop scan: 1347
Y at integration start : 173 Y at integration end: 173

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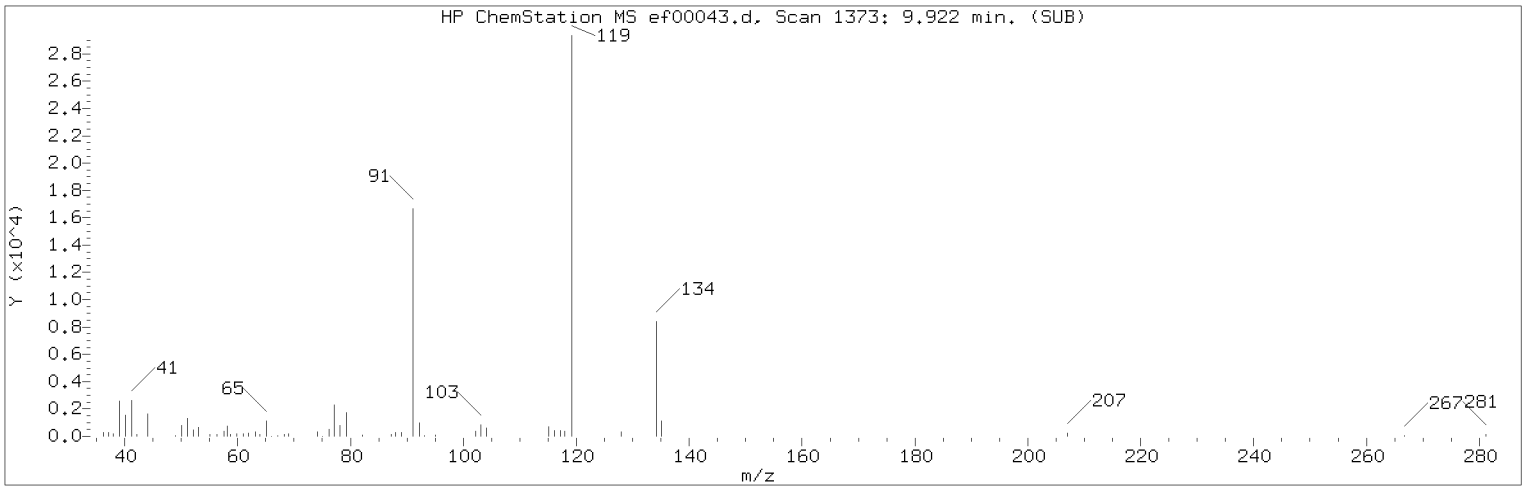
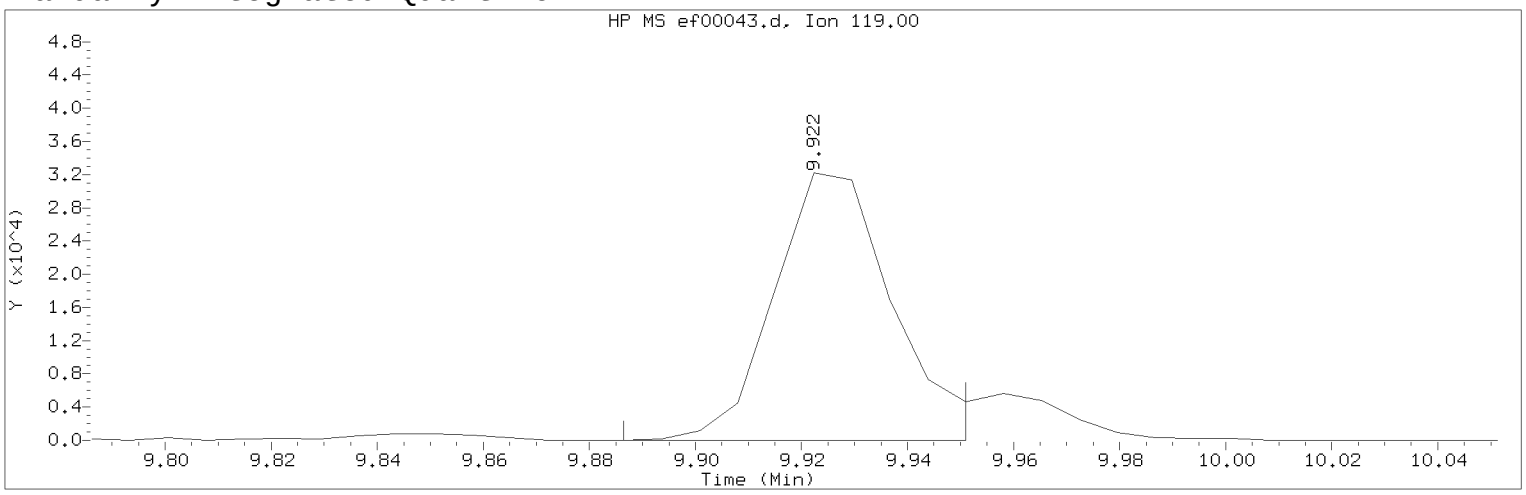
Target 3.5 esignature user GLE02jbs01392

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00043.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:40 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 05-Jun-2018 12:46 jbs01304

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

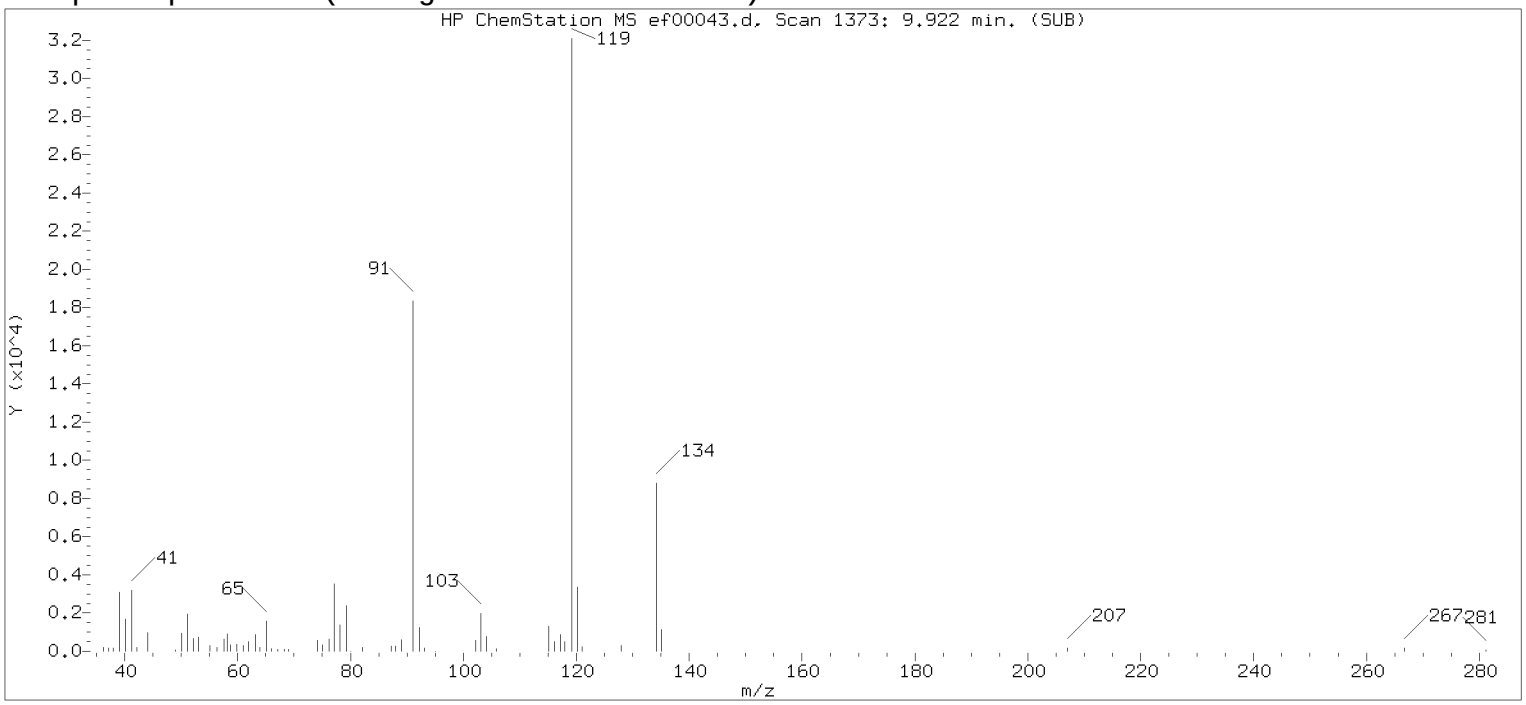
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 50135M
Concentration (ppb(v)) : 0.3156
Integration start scan : 1367 Integration stop scan: 1376
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

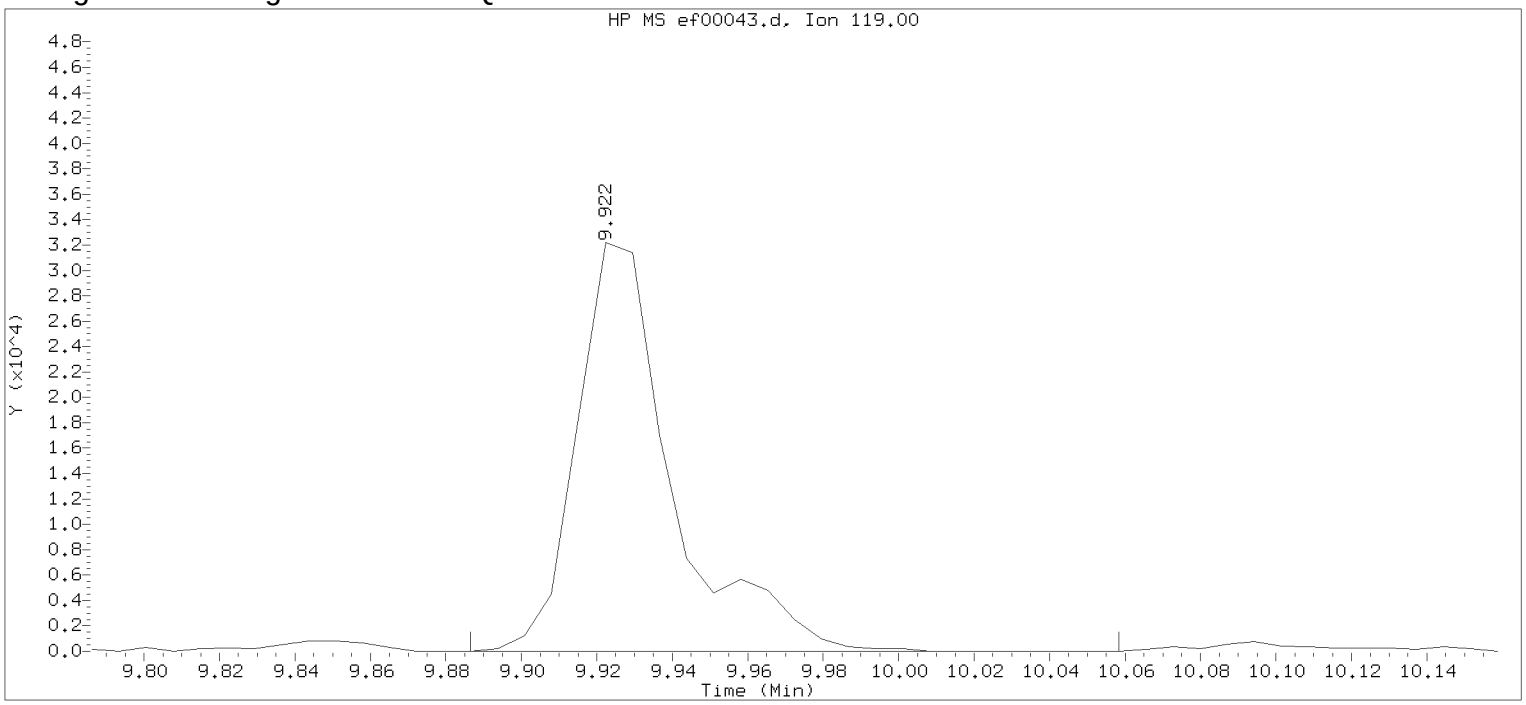
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:47.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



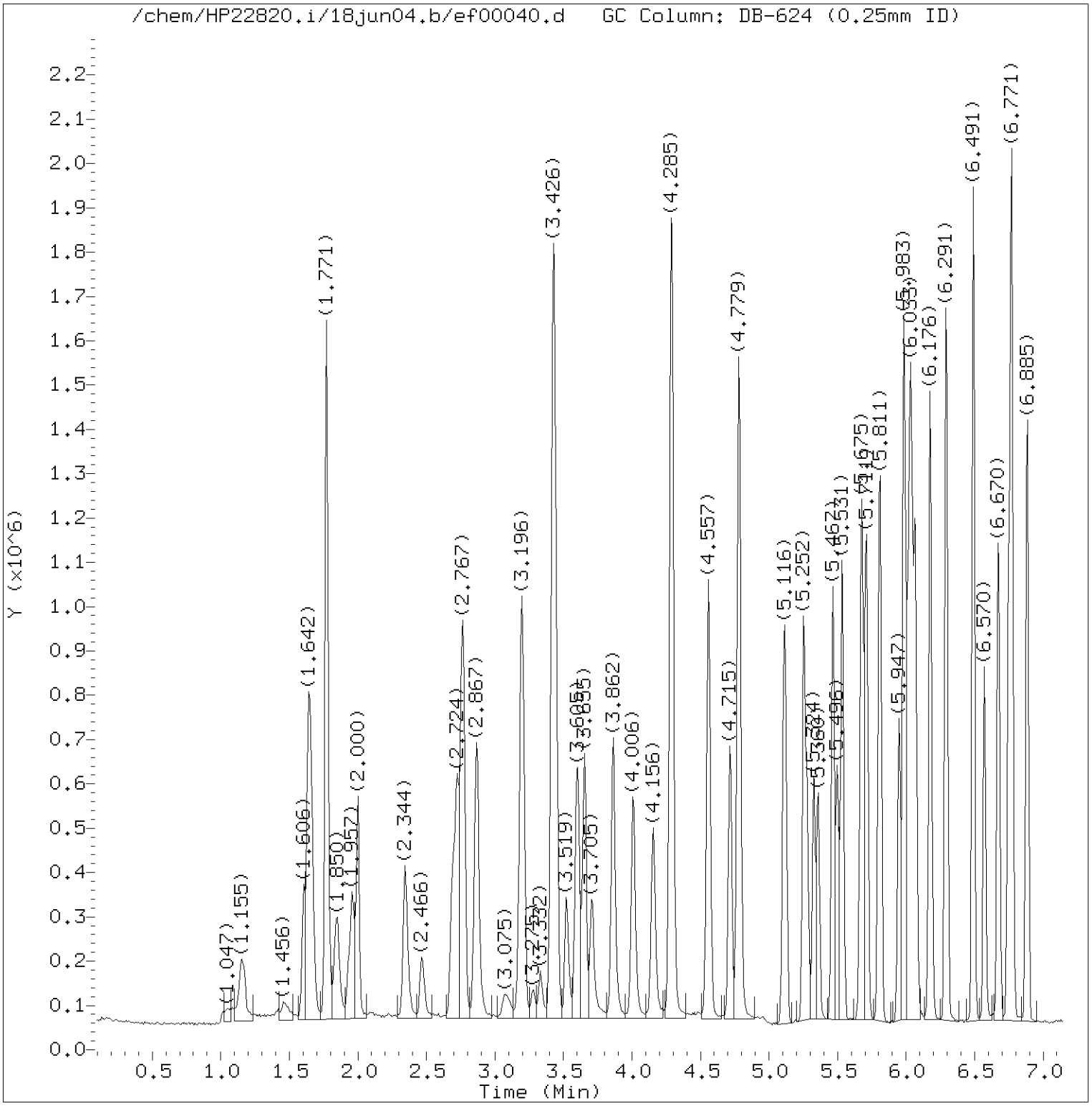
Data File: /chem/HP22820.i/18jun04.b/ef00043.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 16:40 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 16:59 Unknown

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

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 56415
Concentration (ppb(v)) : 0.3551
Integration start scan : 1367 Integration stop scan: 1391
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:46.
Target 3.5 esignature user ID: jbs01394



Total Ion Chromatogram (TIC)

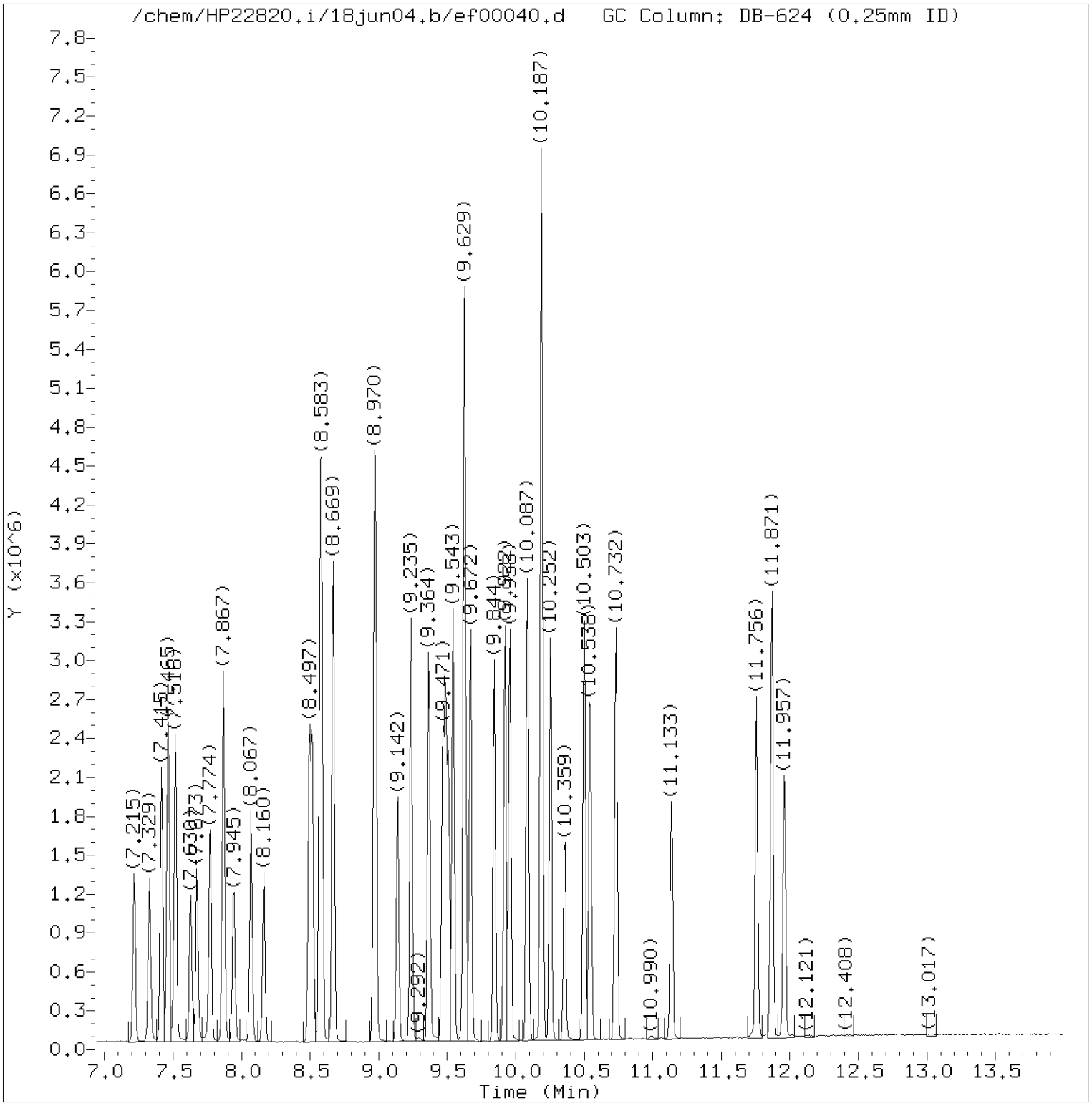
Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00040.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 15:05 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 16:04 jeb07445

Sample Name: LCSE01 Lab Sample ID: LCSE01

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00040.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 15:05 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 16:04 jeb07445

Sample Name: LCSE01 Lab Sample ID: LCSE01

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00040.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 15:05 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 16:04 jeb07445

Sample Name: LCSE01 Lab Sample ID: LCSE01

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.606	41	187073	9.578
2) Dichlorodifluoromethane	(1)	1.642	85	784649	10.364
3) Chlorodifluoromethane	(1)	1.663	51	428071	10.670
4) Freon 114	(1)	1.771	85	799907	10.325
5) Chloromethane	(1)	1.850	50	234120	10.224
6) Vinyl Chloride	(1)	1.964	62	290544	10.337
7) 1,3-Butadiene	(1)	2.000	54	197926	9.705
8) Bromomethane	(1)	2.344	94	304807	10.545
9) Chloroethane	(1)	2.466	64	155866	9.811
10) Bromoethene	(1)	2.688	106	317433	10.337
11) Dichlorofluoromethane	(1)	2.724	67	648119	10.578
12) Trichlorofluoromethane	(1)	2.767	101	832626	10.376
13) Pentane	(1)	2.867	43	491376	11.404
14) Ethanol	(1)	3.067	45	89295	9.635
15) Freon123a	(1)	3.196	67	603431	11.329
16) Acrolein	(1)	3.332	56	107163	9.765
17) 1,1-Dichloroethene	(1)	3.418	61	463379	10.402
18) Freon 113	(1)	3.433	103	451135	10.042
19) Acetone	(1)	3.519	43	376535	10.167
20) Methyl Iodide	(1)	3.605	142	856071	9.937
21) Carbon Disulfide	(1)	3.655	76	818465	9.810
22) Isopropanol	(1)	3.705	45	389852	10.208
24) 3-Chloropropene	(1)	3.862	76	156694	11.987
23) Acetonitrile	(1)	3.870	40	161288	8.971
25) Methylene Chloride	(1)	4.006	84	281886	11.111
26) tert-Butyl Alcohol	(1)	4.156	59	555402	10.758
28) trans-1,2-Dichloroethene	(1)	4.285	61	408093	10.129
27) Acrylonitrile	(1)	4.292	53	229270	10.157
29) Methyl t-Butyl Ether	(1)	4.292	73	888812	10.338
30) Hexane	(1)	4.557	57	513598	11.608
31) 1,1-Dichloroethane	(1)	4.715	63	532588	10.145
32) Vinyl Acetate	(1)	4.779	86	84837	11.052
33) Di-Isopropyl Ether	(1)	4.779	45	847406	9.691
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	752460	9.018
35) cis-1,2-Dichloroethene	(1)	5.252	61	387602	9.965
37) 2-Butanone	(1)	5.281	72	158729	9.805
38) Ethyl Acetate	(1)	5.331	70	69511	8.702
39) Methyl Acrylate	(1)	5.360	55	470498	9.586

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00040.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 15:05 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 16:04 jeb07445

Sample Name: LCSE01 Lab Sample ID: LCSE01

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	315023	10.000
41) Tetrahydrofuran	(1)	5.496	42	284231	9.913
42) Chloroform	(1)	5.531	83	665435	10.105
43) 1,1,1-Trichloroethane	(1)	5.675	97	675179	10.122
44) Cyclohexane	(1)	5.711	56	445231	9.704
45) Carbon Tetrachloride	(1)	5.811	117	680792	10.396
46) Benzene	(2)	5.983	78	1180166	11.779
47) 1,2-Dichloroethane	(2)	6.011	62	422211	10.367
48) Isooctane	(2)	6.033	57	1355179	9.772
49) Tert-Amyl Methyl Ether	(2)	6.069	73	748686	8.959
50) Heptane	(2)	6.176	43	457700	9.657
51)*1,4-Difluorobenzene	(2)	6.291	114	1165010	10.000
52) Trichloroethene	(2)	6.491	130	513276	10.312
53) Ethyl Acrylate	(2)	6.570	55	618918	9.760
36) 1,2-Dichloroethene (total)	(1)		61	795695	20.094
54) 1,2-Dichloropropane	(2)	6.670	63	339430	9.678
57) Methyl Methacrylate	(2)	6.749	69	327288	9.332
56) 1,4-Dioxane	(2)	6.771	88	247714	9.726
55) Dibromomethane	(2)	6.771	174	495149	10.279
58) Bromodichloromethane	(2)	6.885	83	684520	9.970
59) cis-1,3-Dichloropropene	(2)	7.215	75	581850	9.612
60) 4-Methyl-2-Pentanone	(2)	7.329	43	632839	9.599
61) Toluene	(3)	7.465	91	1467853	11.543
62) Octane	(3)	7.516	43	700143	10.586
63) trans-1,3-Dichloropropene	(3)	7.630	75	485506	9.684
65) Ethyl Methacrylate	(3)	7.673	69	554877	9.752
66) 1,1,2-Trichloroethane	(3)	7.774	97	433902	9.657
67) Tetrachloroethene	(3)	7.867	166	711723	10.002
68) 2-Hexanone	(3)	7.945	43	586071	9.212
69) Dibromochloromethane	(3)	8.067	127	573748	10.124
70) 1,2-Dibromoethane	(3)	8.160	107	688247	9.844
71)*Chlorobenzene-d5	(3)	8.497	117	1102247	10.000
72) Chlorobenzene	(3)	8.518	112	1050045	9.647
73) 1,1,1,2-Tetrachloroethane	(3)	8.576	131	533315	10.067
74) Ethylbenzene	(3)	8.583	91	1883812	11.076
75) m/p-Xylene	(3)	8.669	91	1741808	12.615
76) o-Xylene	(3)	8.970	91	1525127	11.174
78) Styrene	(3)	8.977	104	1030265	9.963

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00040.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 15:05 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 16:04 jeb07445

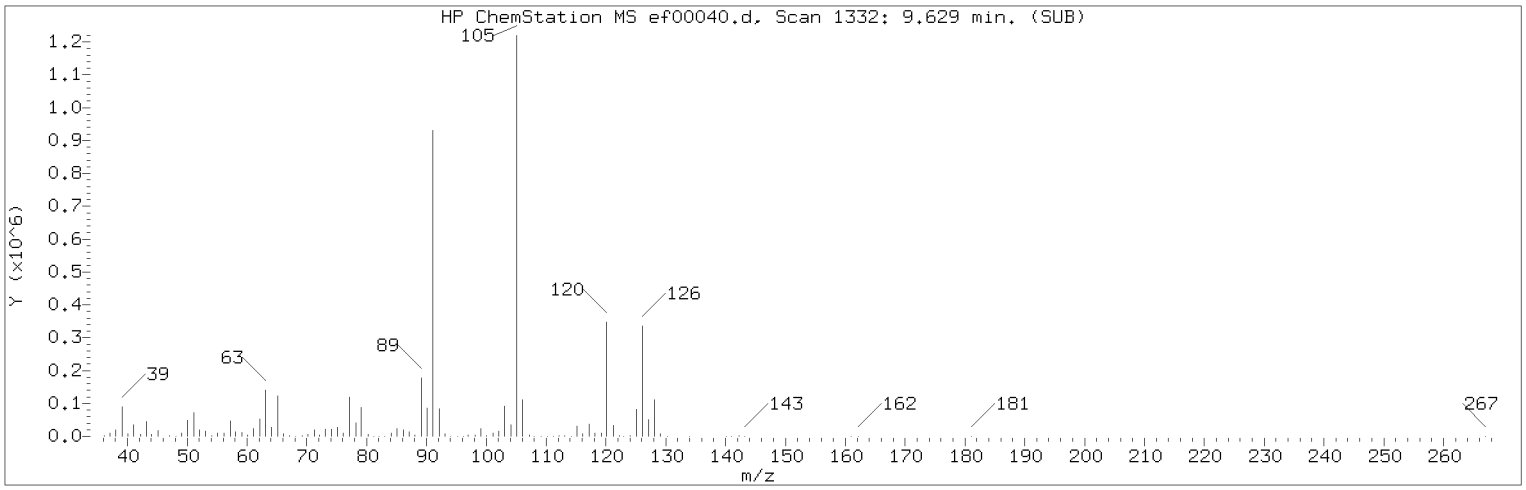
Sample Name: LCSE01 Lab Sample ID: LCSE01

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	749958	10.286
80) Cumene	(3)	9.235	105	1820516	9.354
82) 1,1,2,2-Tetrachloroethane	(3)	9.464	83	897162	9.373
81) Bromobenzene	(3)	9.485	156	672756	9.728
83) 1,2,3-Trichloropropane	(3)	9.507	110	302860	9.905
84) n-Propylbenzene	(3)	9.543	120	521912	9.330
85) 2-Chlorotoluene	(3)	9.622	126	486418	9.447
86) 4-Ethyltoluene	(3)	9.629	105	1820291M	9.670
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	1464573M	9.349
88) Alpha Methyl Styrene	(3)	9.844	118	735159	8.947
89) tert-Butylbenzene	(3)	9.922	119	1374803M	8.413
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	1456198	9.416
91) sec-Butylbenzene	(3)	10.087	105	2076481	8.872
92) 1,3-Dichlorobenzene	(3)	10.187	146	1078310	9.382
94) p-Isopropyltoluene	(3)	10.187	119	1794067	8.958
93) 1,4-Dichlorobenzene	(3)	10.252	146	1096756	9.362
95) Benzyl Chloride	(3)	10.359	91	956484	9.027
97) n-Butylbenzene	(3)	10.503	91	1544510	8.582
96) 1,2-Dichlorobenzene	(3)	10.546	146	1000462	9.146
98) Hexachloroethane	(3)	10.732	117	423196	9.953
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	491456	8.691
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	716846	7.646
101) Hexachlorobutadiene	(3)	11.871	225	622551	7.765
102) Naphthalene	(3)	11.957	128	1463694	7.061
64) 1,3-Dichloropropene (total)	(3)		75	1067356	19.296
77) Xylene (total)	(3)		91	3266935	23.789

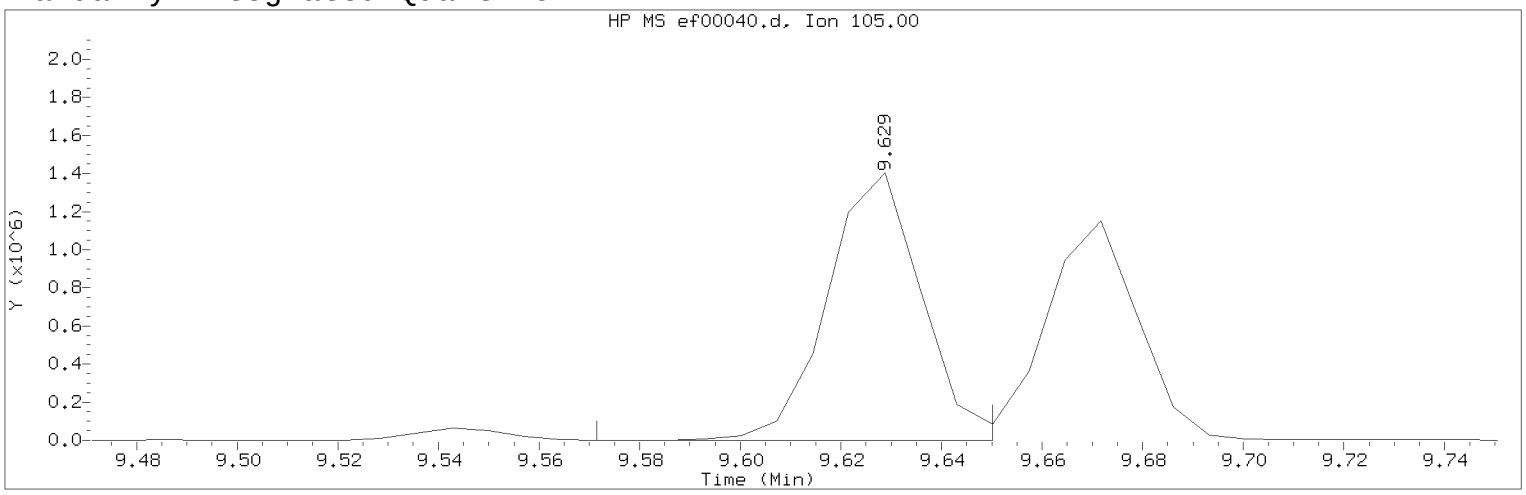
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00040.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 15:05 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 16:04 jeb07445

Sample Name: LCSE01 Lab Sample ID: LCSE01

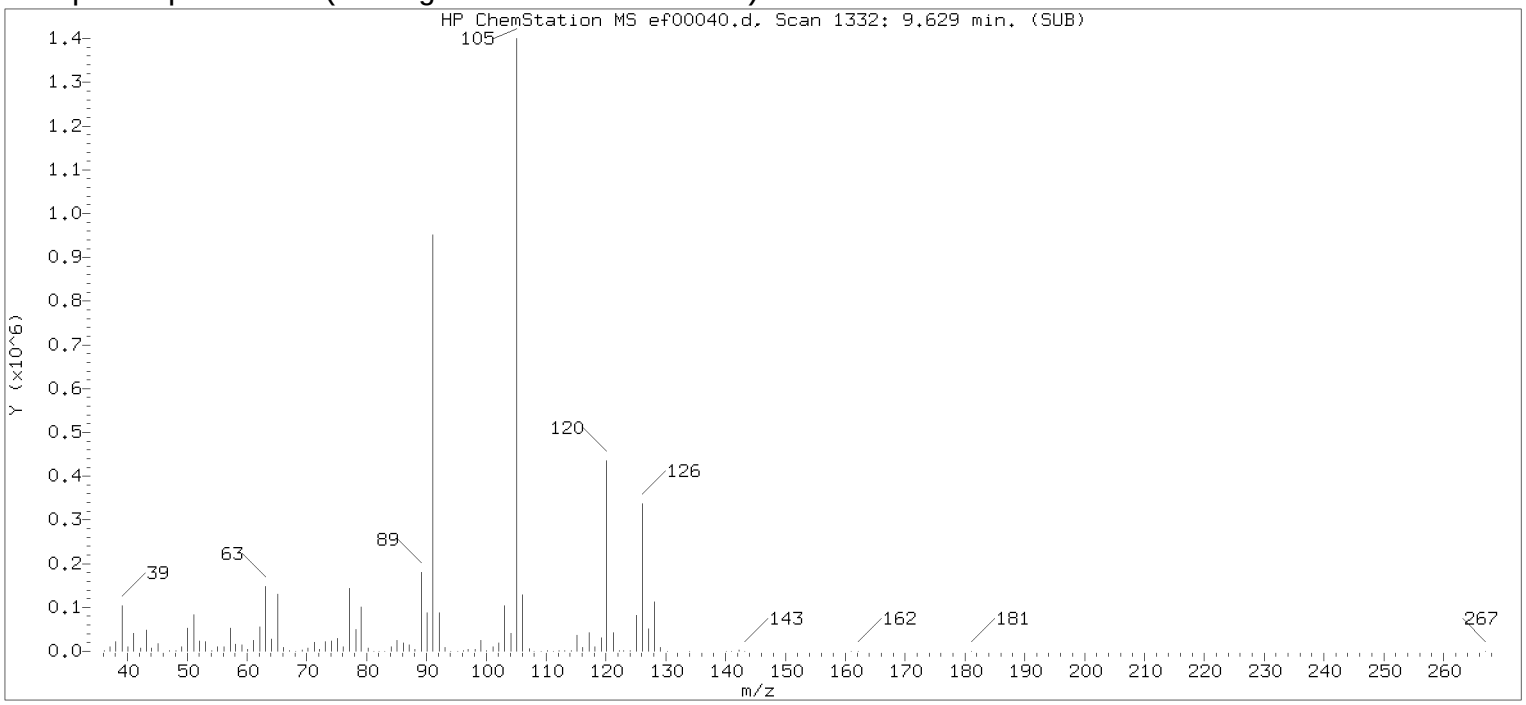
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 1820291M
Concentration (ppb(v)) : 9.6704
Integration start scan : 1323 Integration stop scan: 1334
Y at integration start : 497 Y at integration end: 497

Reason for manual integration: improper integration

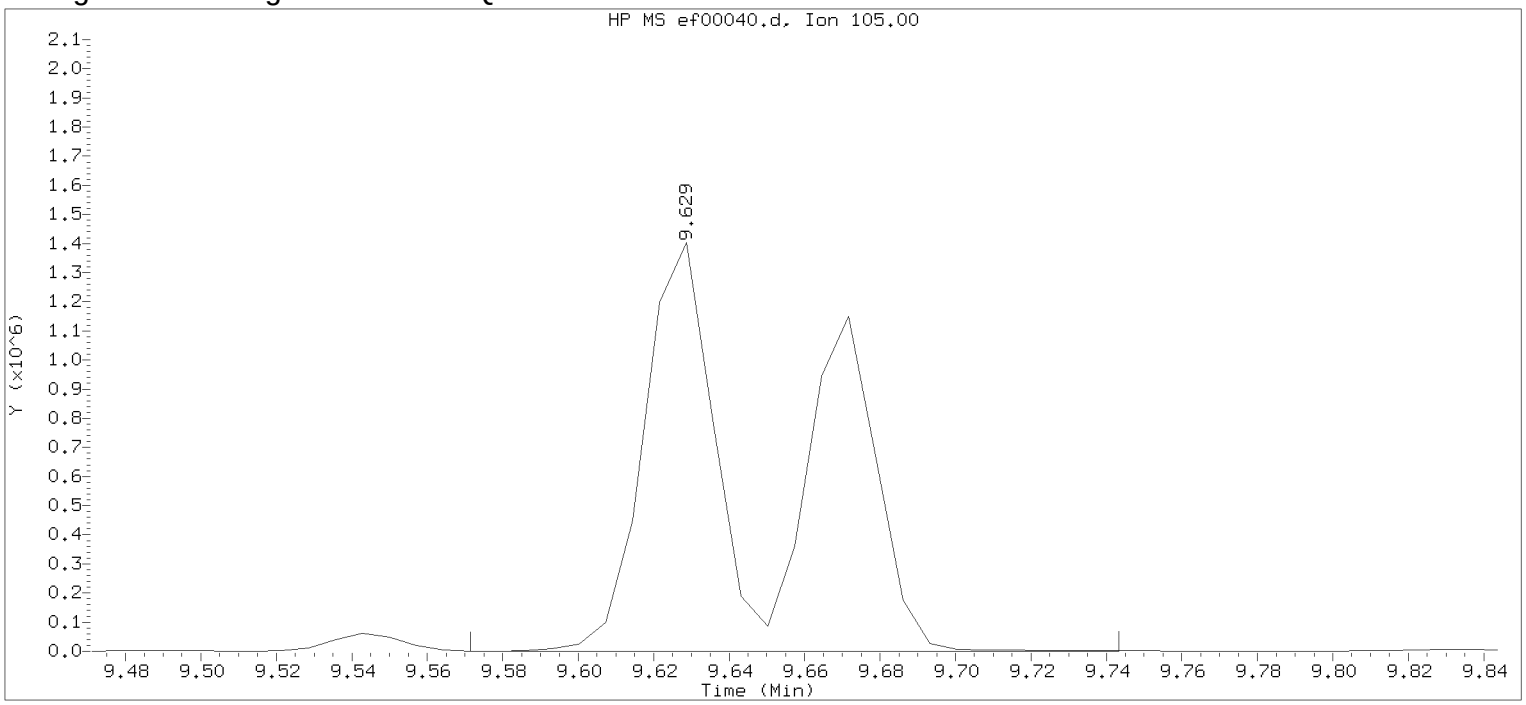
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00040.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 15:05 Analyst ID: jeb07445

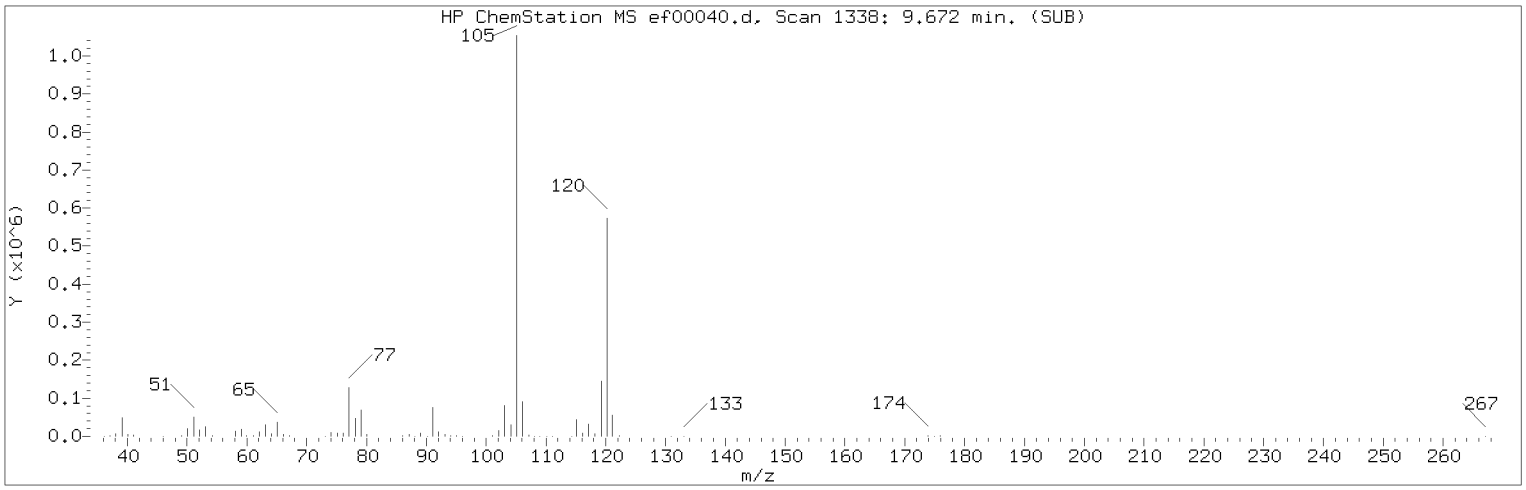
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 15:23 Unknown

Sample Name: LCSE01 Lab Sample ID: LCSE01

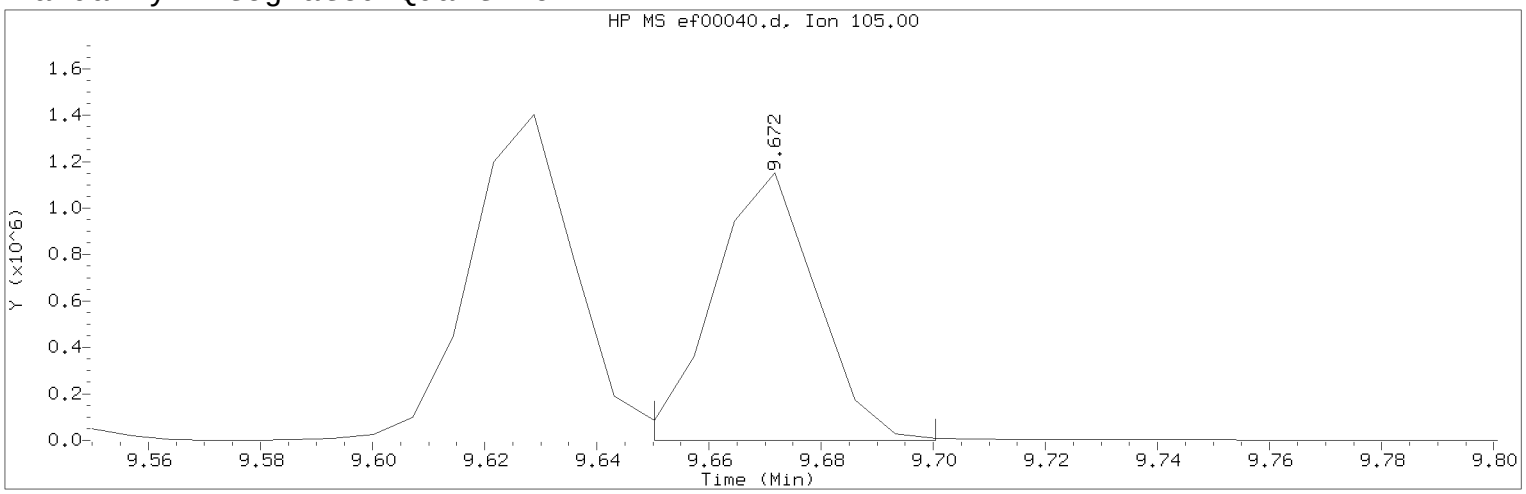
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 3255820
Concentration (ppb(v)) : 17.2967
Integration start scan : 1323 Integration stop scan: 1347
Y at integration start : 497 Y at integration end: 497

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature userGLE02jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00040.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 15:05 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 16:04 jeb07445

Sample Name: LCSE01 Lab Sample ID: LCSE01

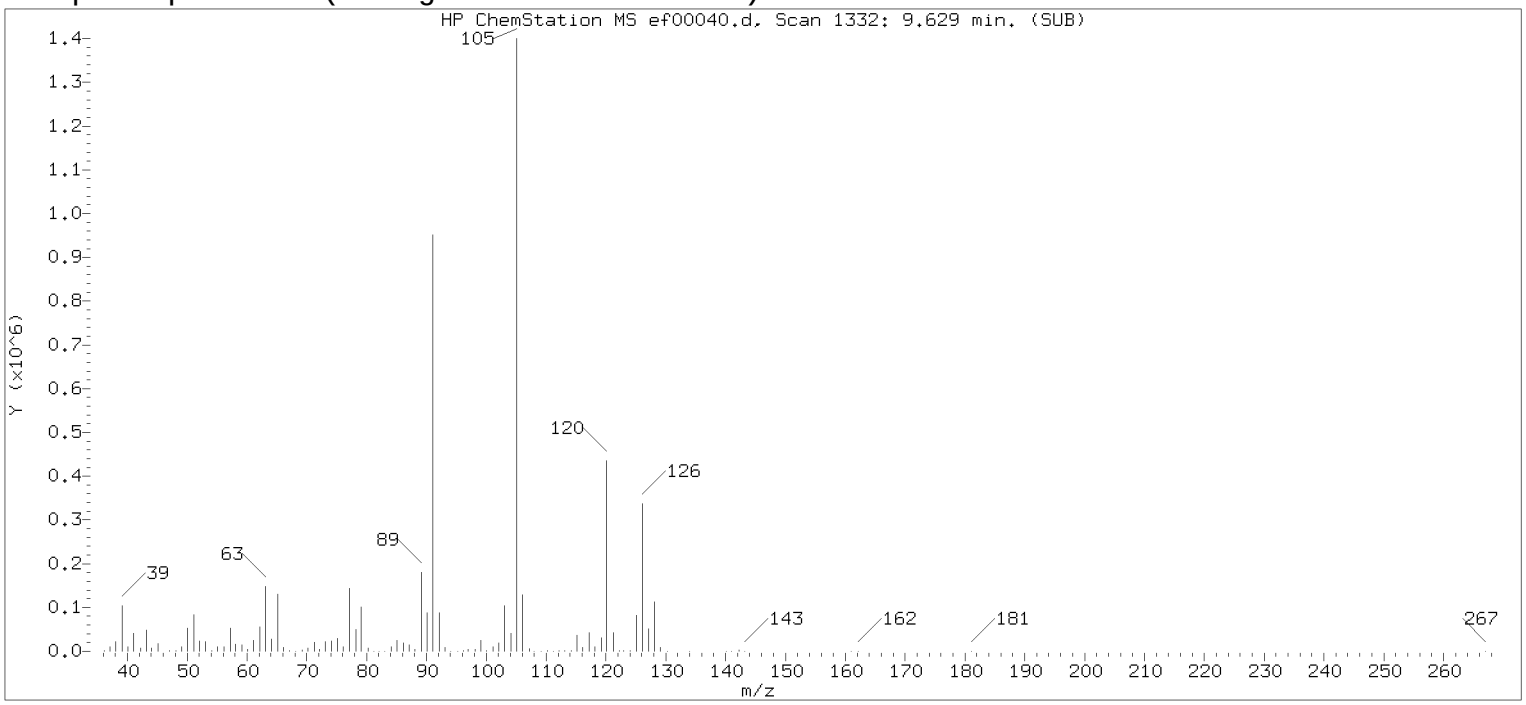
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 1464573M
Concentration (ppb(v)) : 9.3487
Integration start scan : 1334 Integration stop scan: 1341
Y at integration start : 878 Y at integration end: 878

Reason for manual integration: improper integration

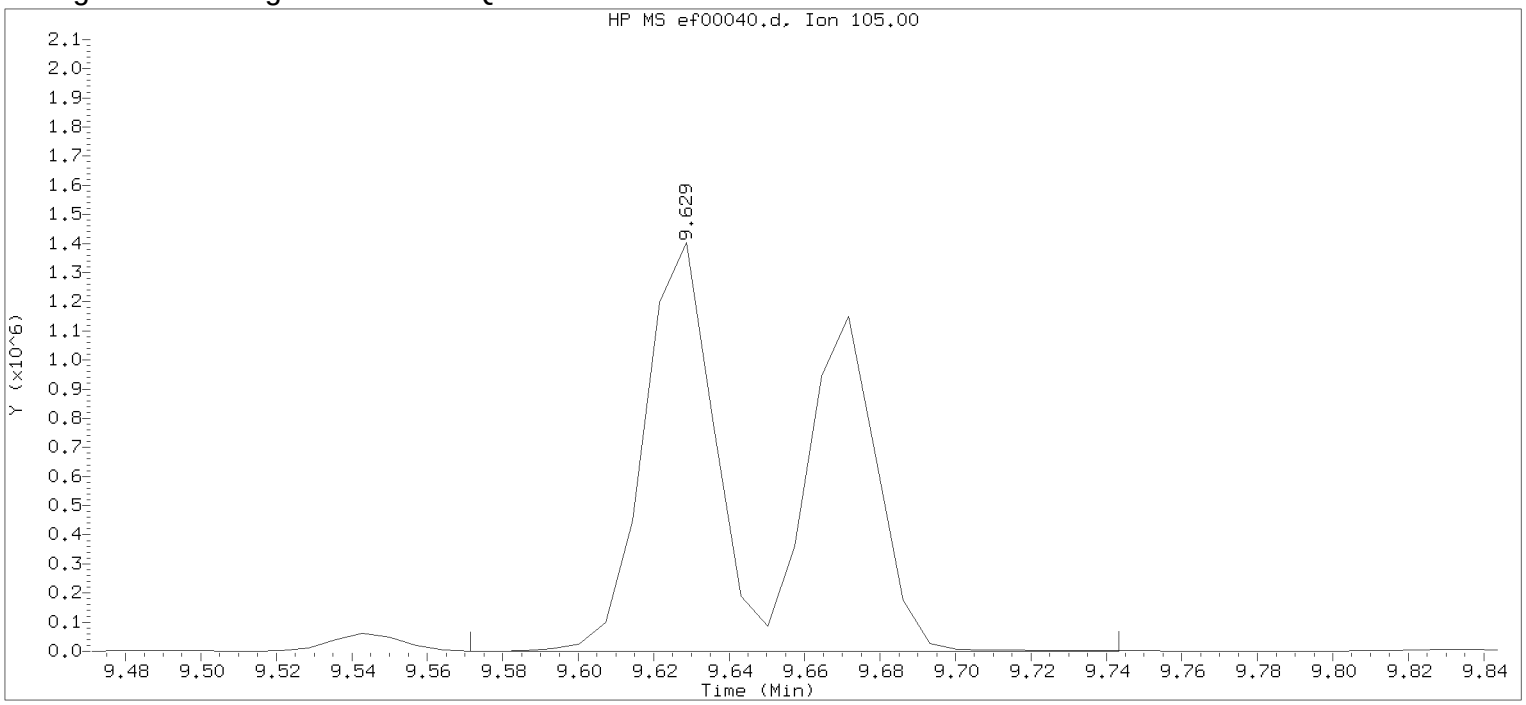
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00040.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 15:05 Analyst ID: jeb07445

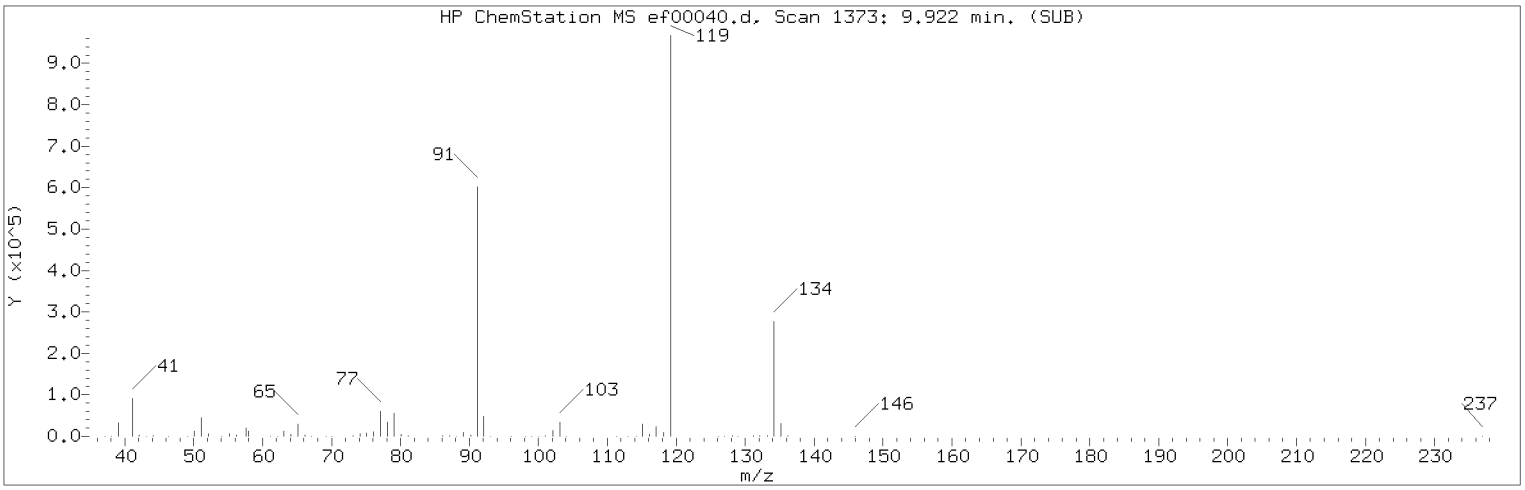
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 15:23 Unknown

Sample Name: LCSE01 Lab Sample ID: LCSE01

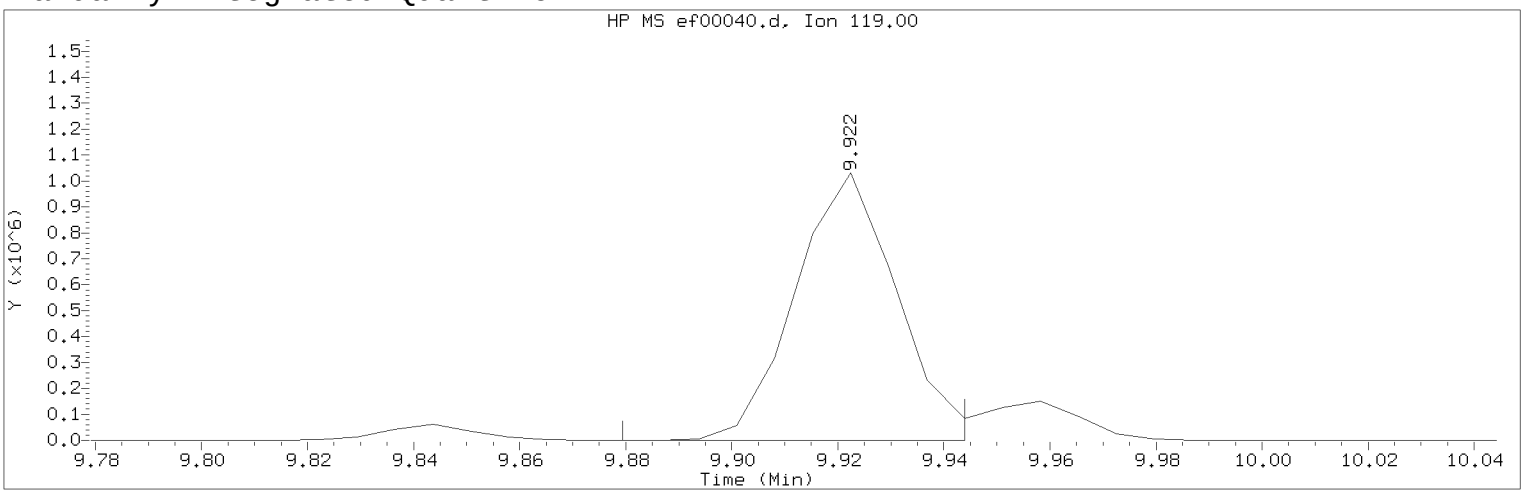
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 3252272
Concentration (ppb(v)) : 20.7600
Integration start scan : 1323 Integration stop scan: 1347
Y at integration start : 841 Y at integration end: 841

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature userGLE02jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00040.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 15:05 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 16:04 jeb07445

Sample Name: LCSE01 Lab Sample ID: LCSE01

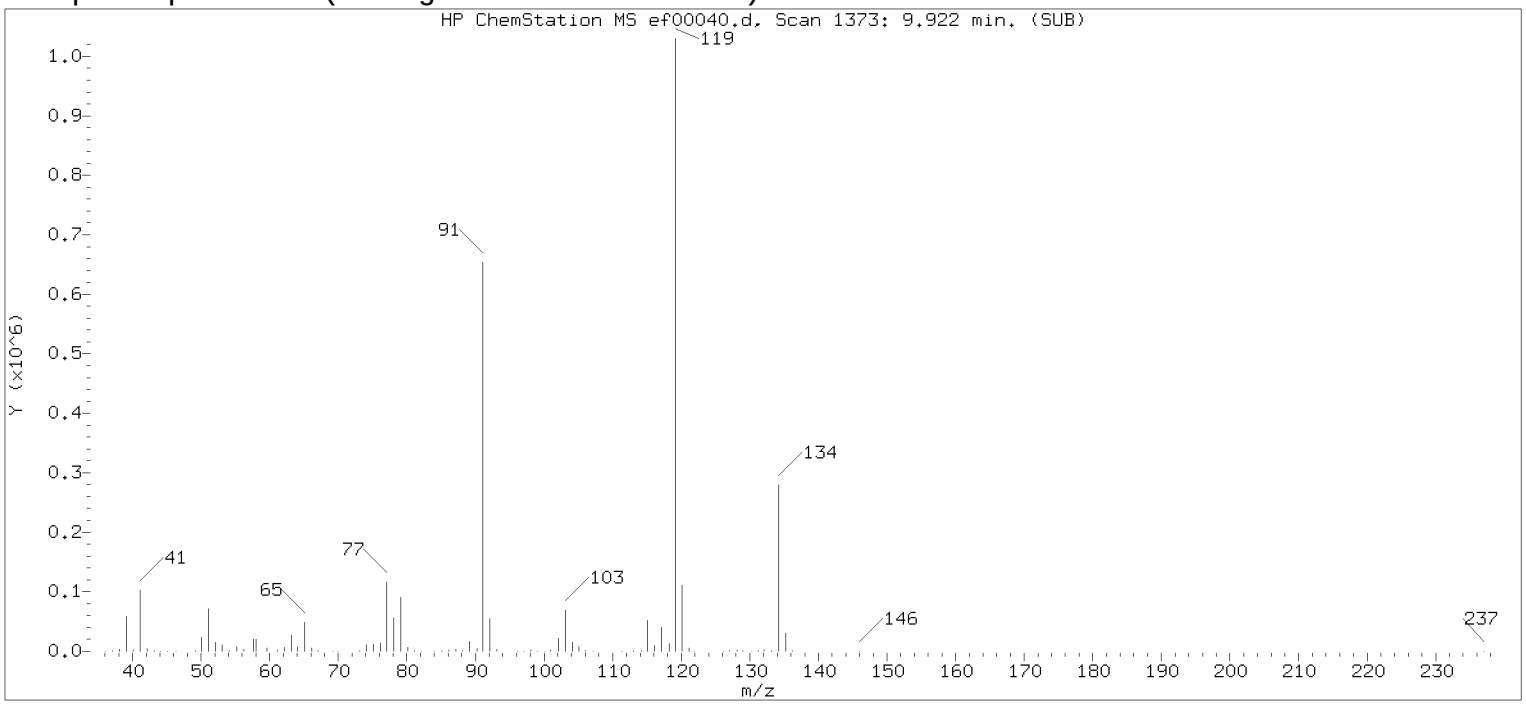
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 1374803M
Concentration (ppb(v)) : 8.4127
Integration start scan : 1366 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

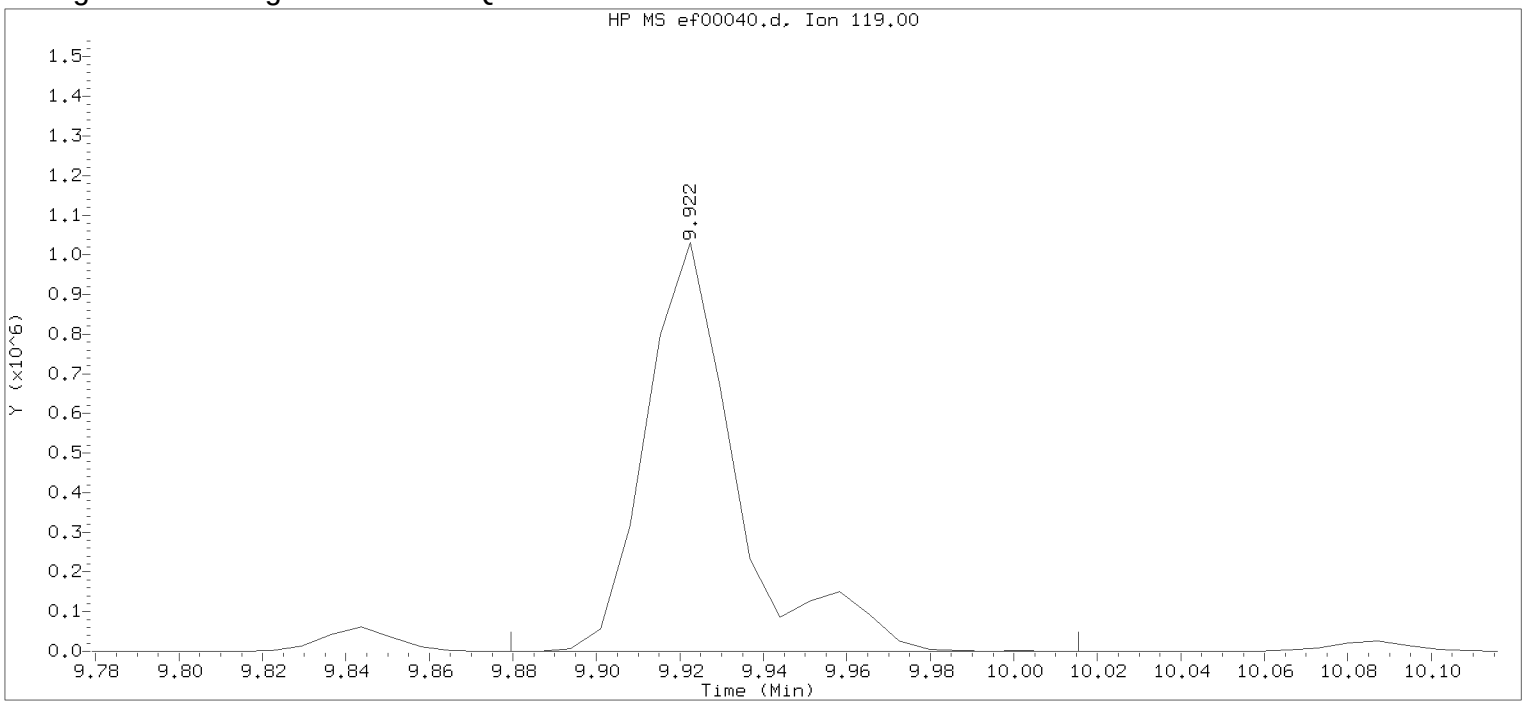
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



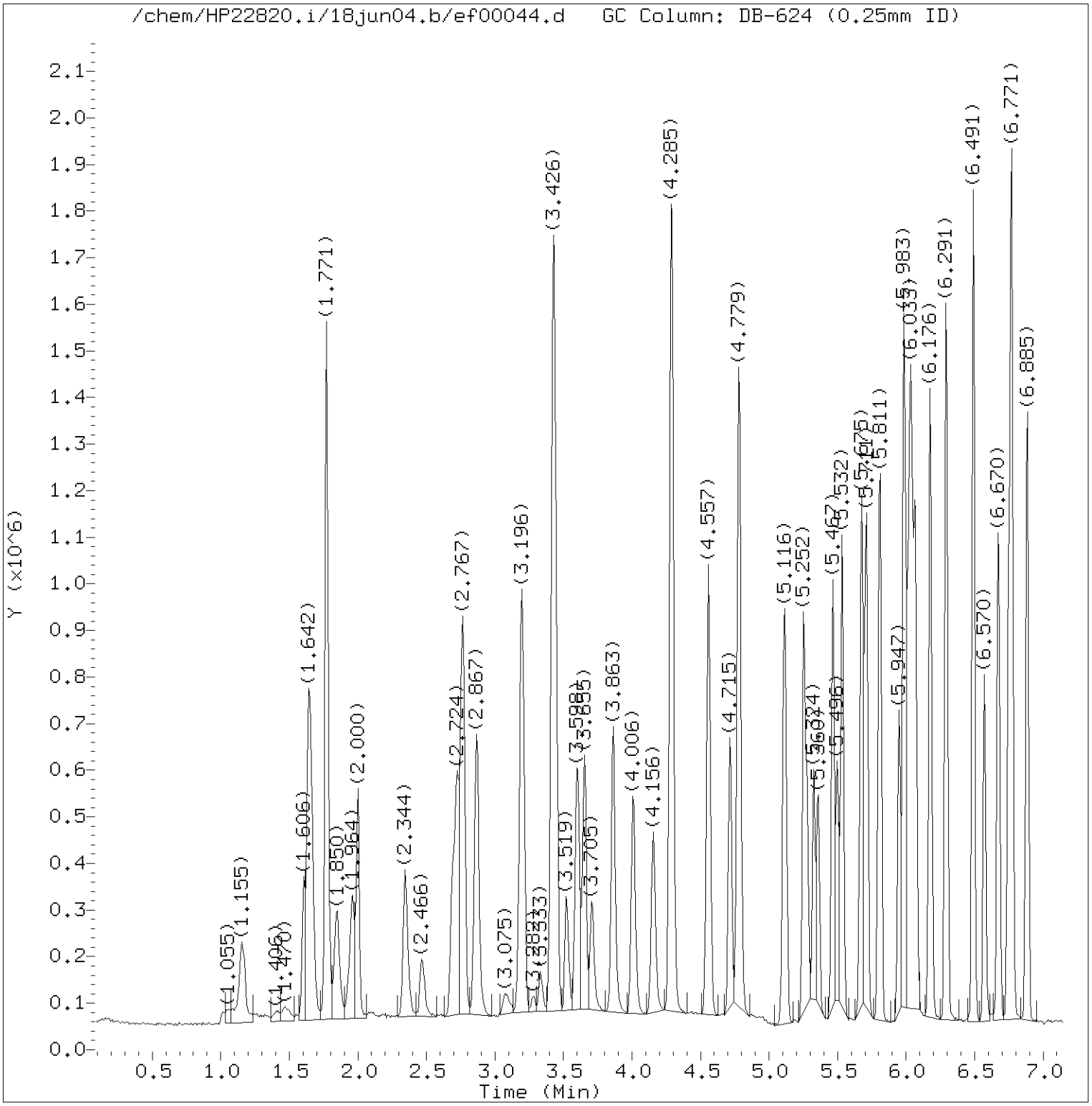
Data File: /chem/HP22820.i/18jun04.b/ef00040.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 15:05 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 14:31
Date, time and analyst ID of latest file update: 04-Jun-2018 15:23 Unknown

Sample Name: LCSE01 Lab Sample ID: LCSE01

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 1548637
Concentration (ppb(v)) : 9.4764
Integration start scan : 1366 Integration stop scan: 1385
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/04/2018 at 16:06.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

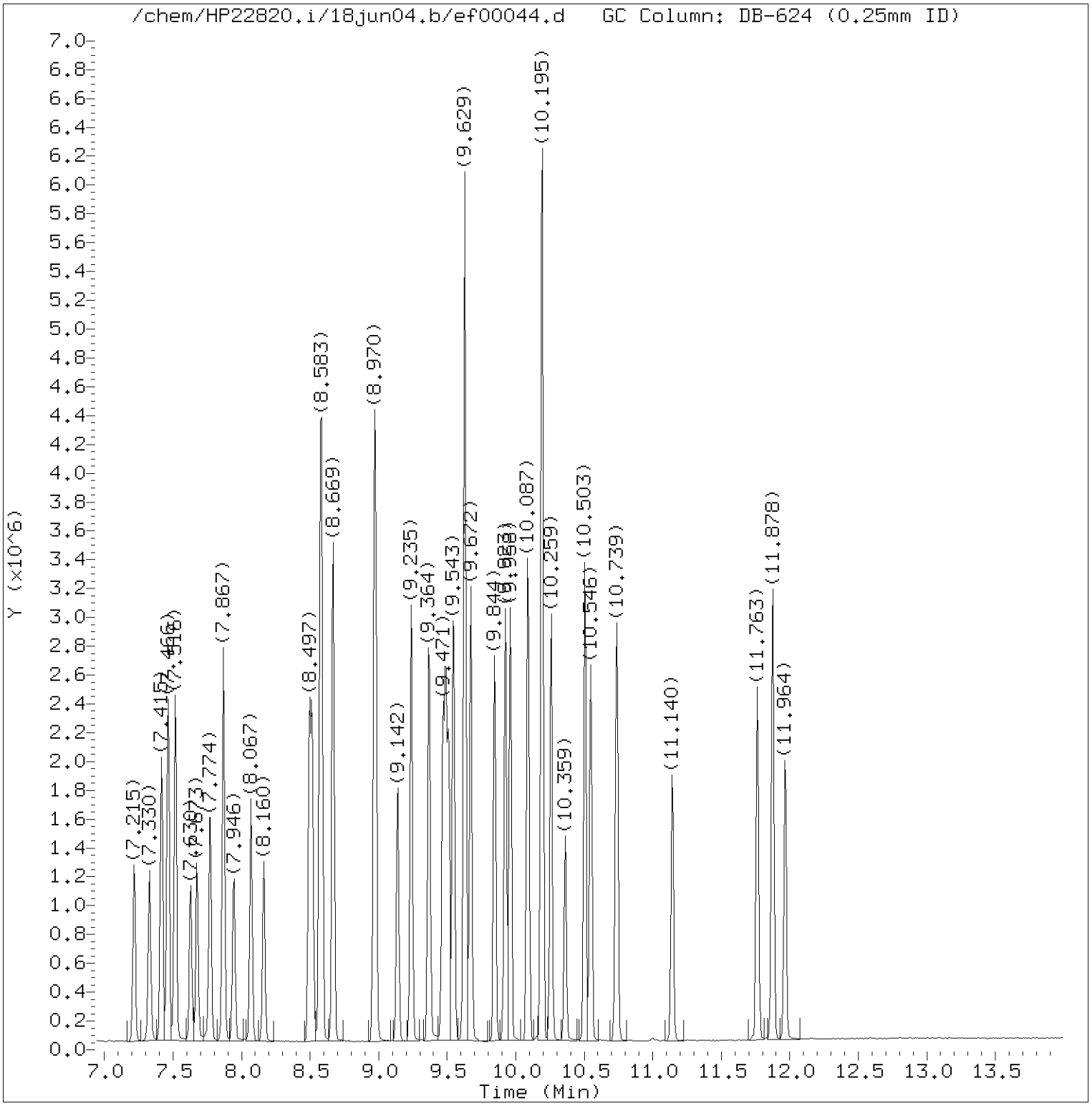
Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00044.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 17:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 17:56 jeb07445

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 17:57.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00044.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 17:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 17:56 jeb07445

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 17:57.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00044.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 17:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 17:56 jeb07445

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.606	41	180050	9.762
2) Dichlorodifluoromethane	(1)	1.642	85	749408	10.482
3) Chlorodifluoromethane	(1)	1.664	51	415735	10.974
4) Freon 114	(1)	1.771	85	756496	10.341
5) Chloromethane	(1)	1.850	50	229396	10.608
6) Vinyl Chloride	(1)	1.964	62	276038	10.400
7) 1,3-Butadiene	(1)	2.000	54	188606	9.793
8) Bromomethane	(1)	2.344	94	283993	10.404
9) Chloroethane	(1)	2.466	64	153243	10.215
10) Bromoethene	(1)	2.688	106	299305	10.321
11) Dichlorofluoromethane	(1)	2.724	67	622440	10.758
12) Trichlorofluoromethane	(1)	2.767	101	792806	10.462
13) Pentane	(1)	2.867	43	469407	11.536
14) Ethanol	(1)	3.075	45	83511	9.542
15) Freon123a	(1)	3.196	67	573918	11.410
16) Acrolein	(1)	3.333	56	105002	10.132
17) 1,1-Dichloroethene	(1)	3.418	61	444812	10.574
18) Freon 113	(1)	3.433	103	423552M	9.984
19) Acetone	(1)	3.519	43	367494	10.508
20) Methyl Iodide	(1)	3.605	142	815745	10.027
21) Carbon Disulfide	(1)	3.655	76	781341	9.917
22) Isopropanol	(1)	3.705	45	356027	9.872
24) 3-Chloropropene	(1)	3.863	76	144316	11.691
23) Acetonitrile	(1)	3.870	40	156313	9.207
25) Methylene Chloride	(1)	4.006	84	267674	11.173
26) tert-Butyl Alcohol	(1)	4.156	59	514551	10.555
28) trans-1,2-Dichloroethene	(1)	4.285	61	392231	10.309
27) Acrylonitrile	(1)	4.292	53	216925	10.177
29) Methyl t-Butyl Ether	(1)	4.292	73	853560	10.513
30) Hexane	(1)	4.557	57	491943	11.774
31) 1,1-Dichloroethane	(1)	4.715	63	509309	10.274
32) Vinyl Acetate	(1)	4.779	86	76555	10.561
33) Di-Isopropyl Ether	(1)	4.779	45	827532	10.022
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	739753	9.388
35) cis-1,2-Dichloroethene	(1)	5.252	61	371332	10.110
37) 2-Butanone	(1)	5.281	72	148000	9.681
38) Ethyl Acetate	(1)	5.324	70	70019	9.282
39) Methyl Acrylate	(1)	5.360	55	455490	9.827

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 17:57.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00044.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 17:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 17:56 jeb07445

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	297481	10.000
41) Tetrahydrofuran	(1)	5.496	42	269608	9.958
42) Chloroform	(1)	5.532	83	638742	10.271
43) 1,1,1-Trichloroethane	(1)	5.675	97	631507	10.025
44) Cyclohexane	(1)	5.711	56	423350	9.771
45) Carbon Tetrachloride	(1)	5.811	117	637175	10.304
46) Benzene	(2)	5.983	78	1125232	12.131
47) 1,2-Dichloroethane	(2)	6.011	62	407652	10.812
48) Isooctane	(2)	6.033	57	1299876	10.124
49) Tert-Amyl Methyl Ether	(2)	6.069	73	728829	9.420
50) Heptane	(2)	6.176	43	439835	10.024
51)*1,4-Difluorobenzene	(2)	6.291	114	1078550	10.000
52) Trichloroethene	(2)	6.491	130	474317	10.293
53) Ethyl Acrylate	(2)	6.570	55	579146	9.865
36) 1,2-Dichloroethene (total)	(1)		61	763563	20.419
54) 1,2-Dichloropropane	(2)	6.670	63	320098	9.858
57) Methyl Methacrylate	(2)	6.749	69	306303	9.434
56) 1,4-Dioxane	(2)	6.771	88	229889	9.750
55) Dibromomethane	(2)	6.771	174	459835	10.311
58) Bromodichloromethane	(2)	6.885	83	652588	10.267
59) cis-1,3-Dichloropropene	(2)	7.215	75	542166	9.674
60) 4-Methyl-2-Pentanone	(2)	7.330	43	608744	9.973
61) Toluene	(3)	7.466	91	1412877	11.851
62) Octane	(3)	7.516	43	696949	11.240
63) trans-1,3-Dichloropropene	(3)	7.630	75	451507	9.606
65) Ethyl Methacrylate	(3)	7.673	69	514125	9.639
66) 1,1,2-Trichloroethane	(3)	7.774	97	416432	9.886
67) Tetrachloroethene	(3)	7.867	166	661646	9.918
68) 2-Hexanone	(3)	7.946	43	572481	9.598
69) Dibromochloromethane	(3)	8.067	127	539509	10.155
70) 1,2-Dibromoethane	(3)	8.160	107	651891	9.945
71)*Chlorobenzene-d5	(3)	8.497	117	1033360	10.000
72) Chlorobenzene	(3)	8.511	112	982184	9.625
73) 1,1,1,2-Tetrachloroethane	(3)	8.576	131	507471	10.218
74) Ethylbenzene	(3)	8.583	91	1794971	11.257
75) m/p-Xylene	(3)	8.669	91	1633018	12.616
76) o-Xylene	(3)	8.970	91	1459662	11.407
78) Styrene	(3)	8.977	104	971810	10.024

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 17:57.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun04.b/ef00044.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 17:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 17:56 jeb07445

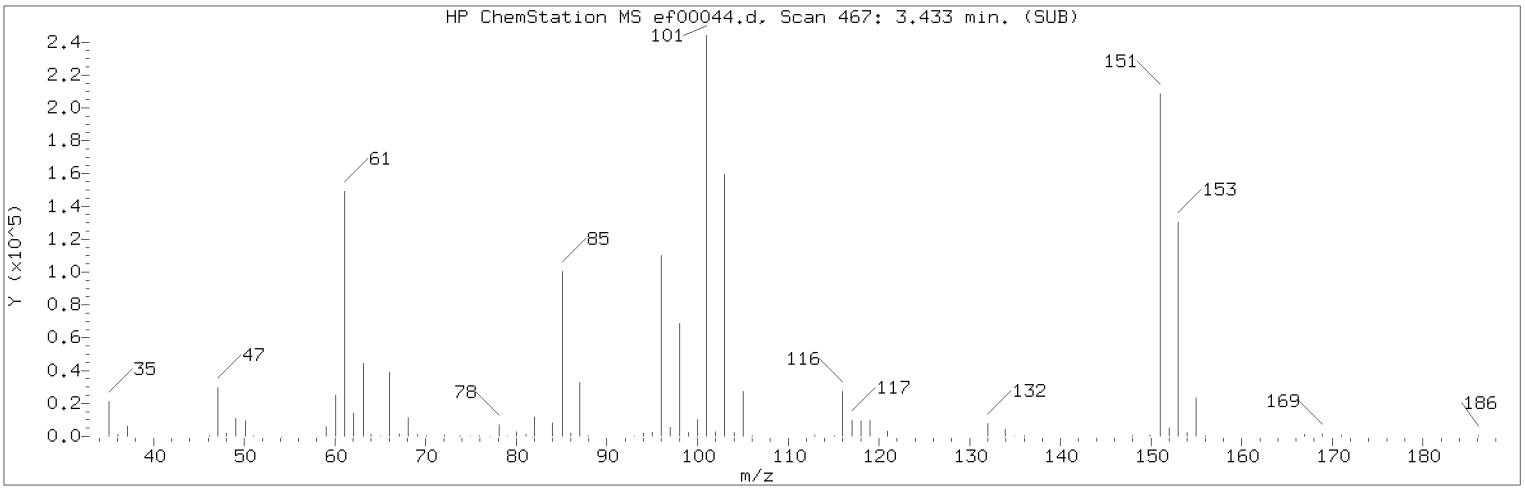
Sample Name: LCSDE01 Lab Sample ID: LCSDE01

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	698318	10.216
80) Cumene	(3)	9.235	105	1698063	9.307
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	871375	9.711
81) Bromobenzene	(3)	9.493	156	623840	9.622
83) 1,2,3-Trichloropropane	(3)	9.514	110	280520	9.786
84) n-Propylbenzene	(3)	9.550	120	480235	9.158
86) 4-Ethyltoluene	(3)	9.629	105	1683438M	9.540
85) 2-Chlorotoluene	(3)	9.629	126	458263	9.494
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	1398298M	9.521
88) Alpha Methyl Styrene	(3)	9.844	118	695121	9.023
89) tert-Butylbenzene	(3)	9.923	119	1334581M	8.711
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	1372568	9.466
91) sec-Butylbenzene	(3)	10.087	105	1957520	8.922
92) 1,3-Dichlorobenzene	(3)	10.195	146	1025324	9.515
94) p-Isopropyltoluene	(3)	10.195	119	1678586	8.940
93) 1,4-Dichlorobenzene	(3)	10.259	146	1025637	9.339
95) Benzyl Chloride	(3)	10.359	91	841491	8.471
97) n-Butylbenzene	(3)	10.503	91	1469519	8.710
96) 1,2-Dichlorobenzene	(3)	10.546	146	932731	9.095
98) Hexachloroethane	(3)	10.739	117	392411	9.844
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	447044	8.432
100) 1,2,4-Trichlorobenzene	(3)	11.763	180	663908	7.554
101) Hexachlorobutadiene	(3)	11.878	225	570579	7.591
102) Naphthalene	(3)	11.964	128	1340388	6.897
64) 1,3-Dichloropropene (total)	(3)		75	993673	19.280
77) Xylene (total)	(3)		91	3092680	24.023

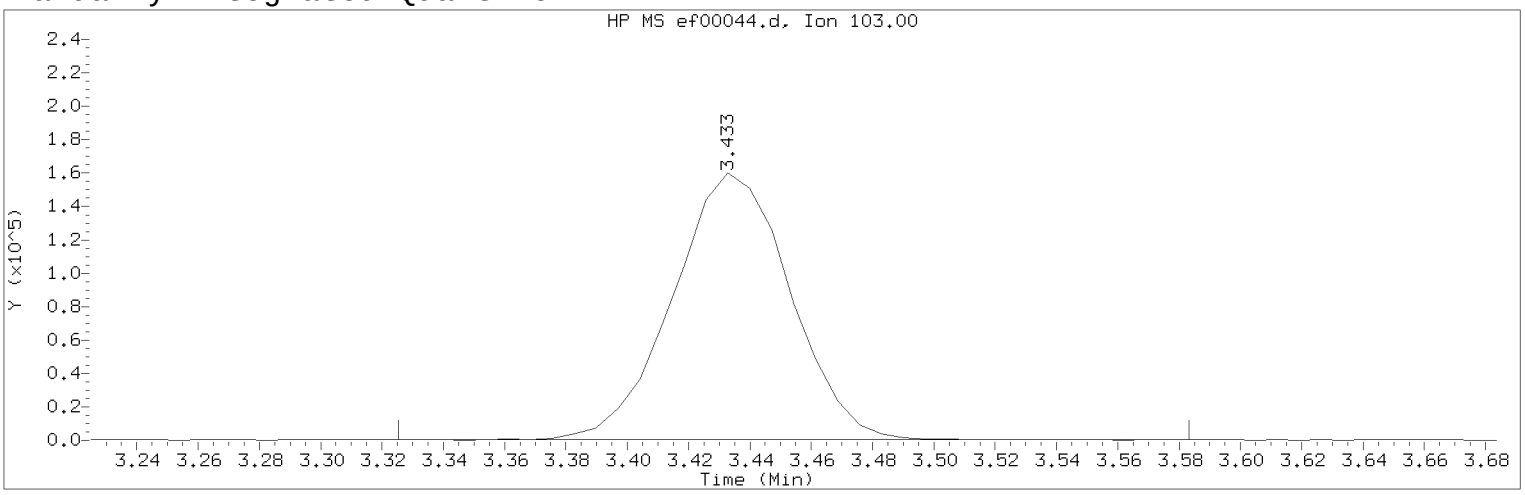
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/04/2018 at 17:57.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00044.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 17:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 17:56 jeb07445

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

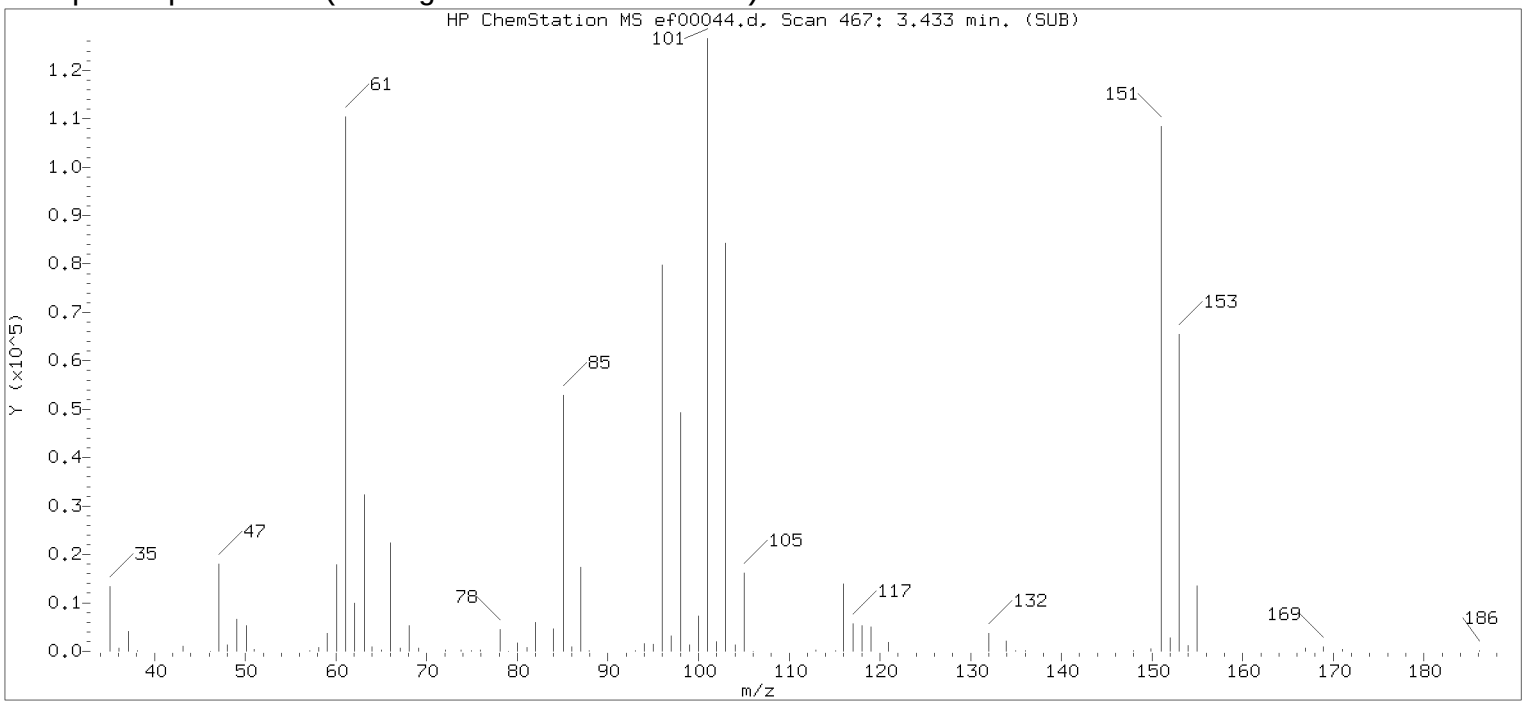
Compound Number : 18
Compound Name : Freon 113
Scan Number : 467
Retention Time (minutes): 3.433
Quant Ion : 103.00
Area (flag) : 423552M
Concentration (ppb(v)) : 9.9838
Integration start scan : 451 Integration stop scan: 487
Y at integration start : 486 Y at integration end: 259

Reason for manual integration: improper integration

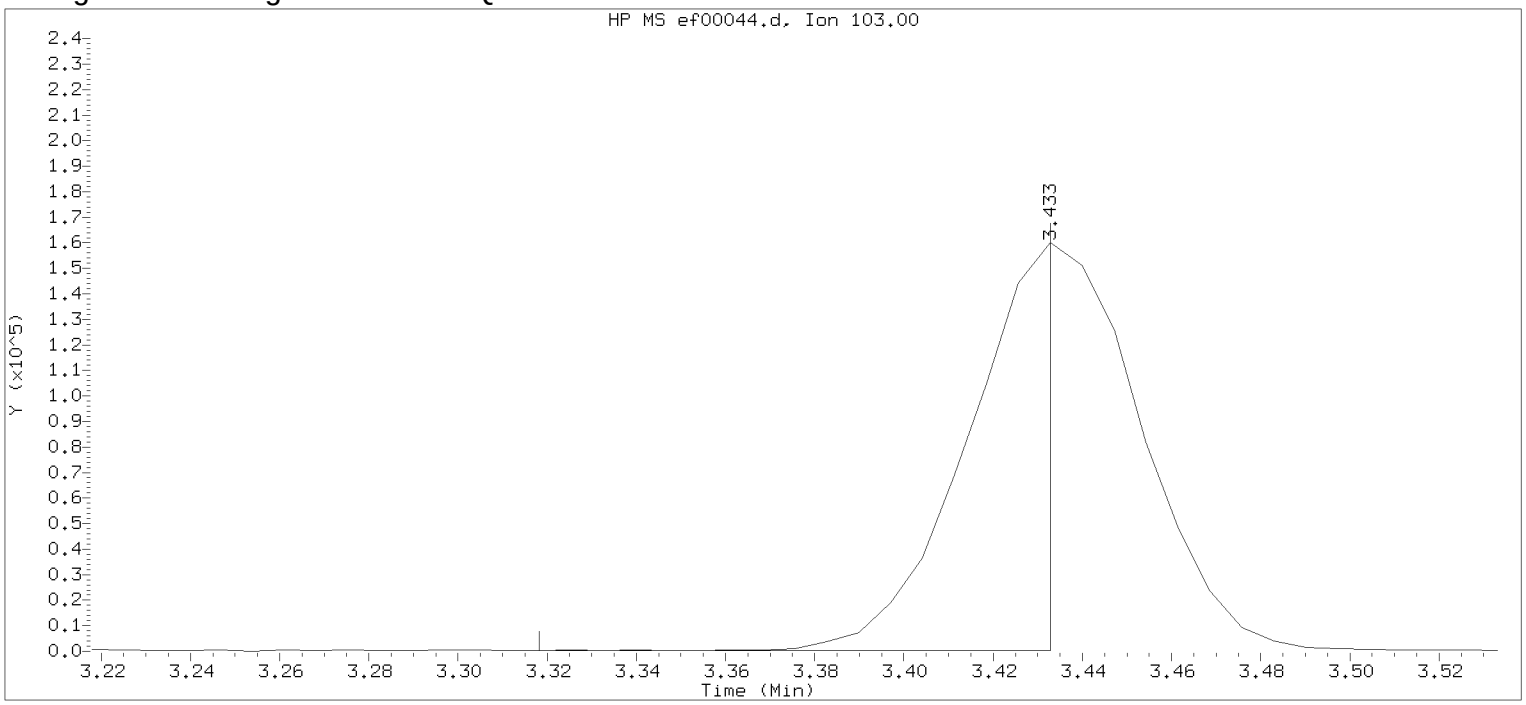
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 17:57.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00044.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 17:24 Analyst ID: jeb07445

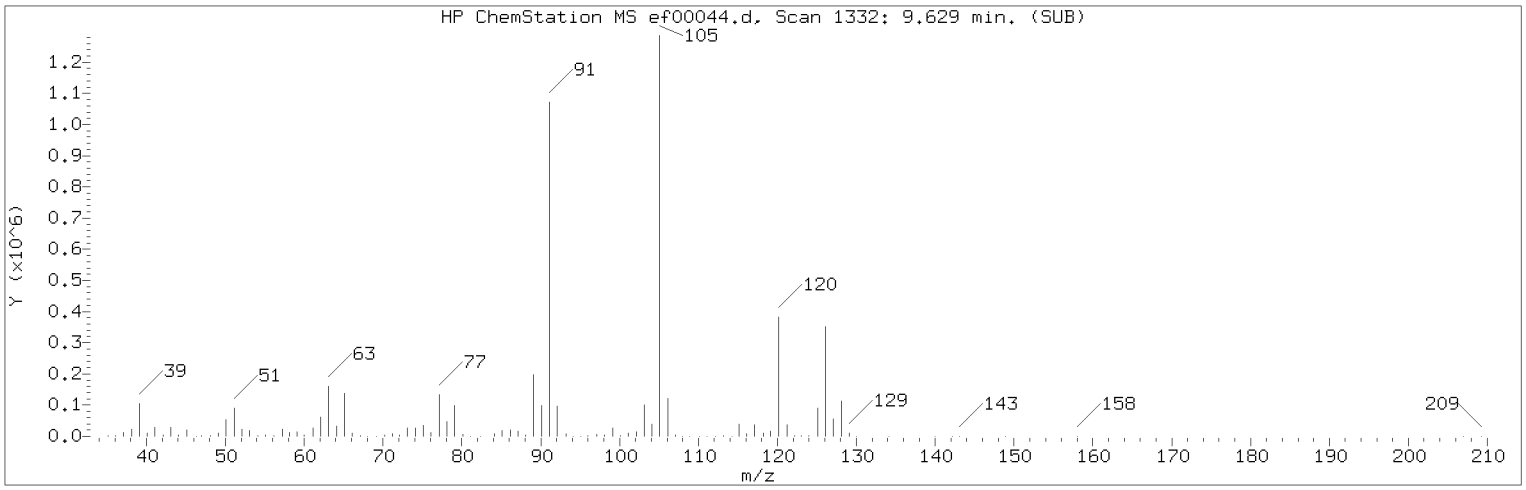
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 17:43 Unknown

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

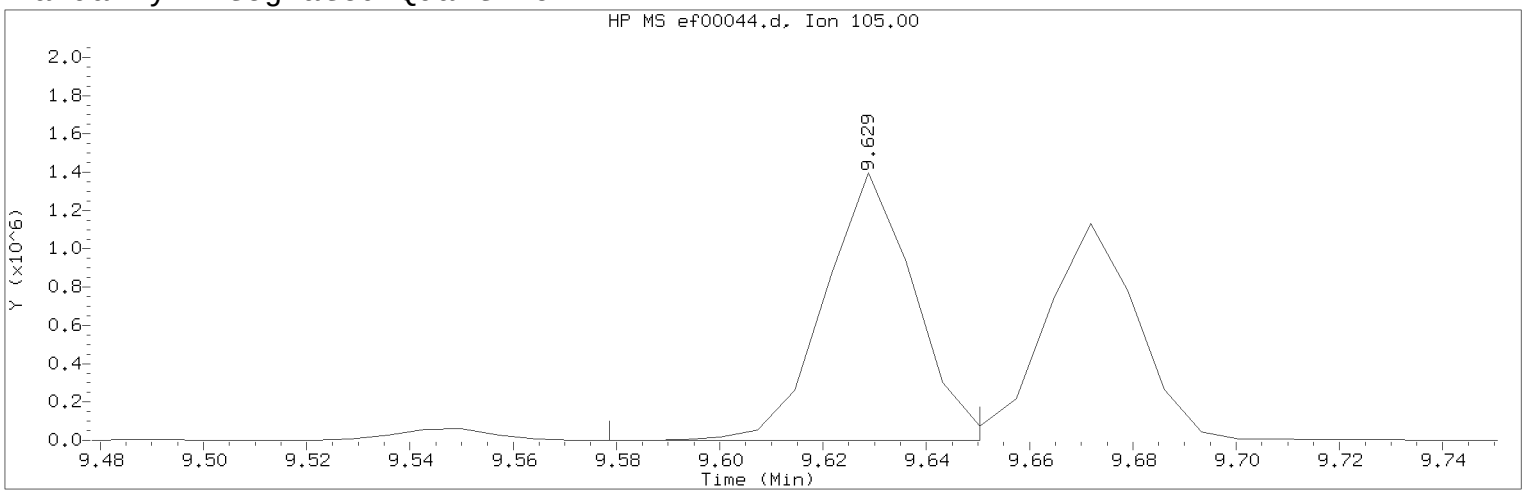
Compound Number : 18
Compound Name : Freon 113
Scan Number : 467
Retention Time (minutes): 3.433
Quant Ion : 103.00
Area : 199984
Concentration (ppb(v)) : 4.7139
Integration start scan : 450 Integration stop scan: 466
Y at integration start : 168 Y at integration end: 168

Digitally signed by Jacob E. Bailey on 06/04/2018 at 17:57.
Target 3.5 esignature userGLE02jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00044.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 17:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 17:56 jeb07445

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

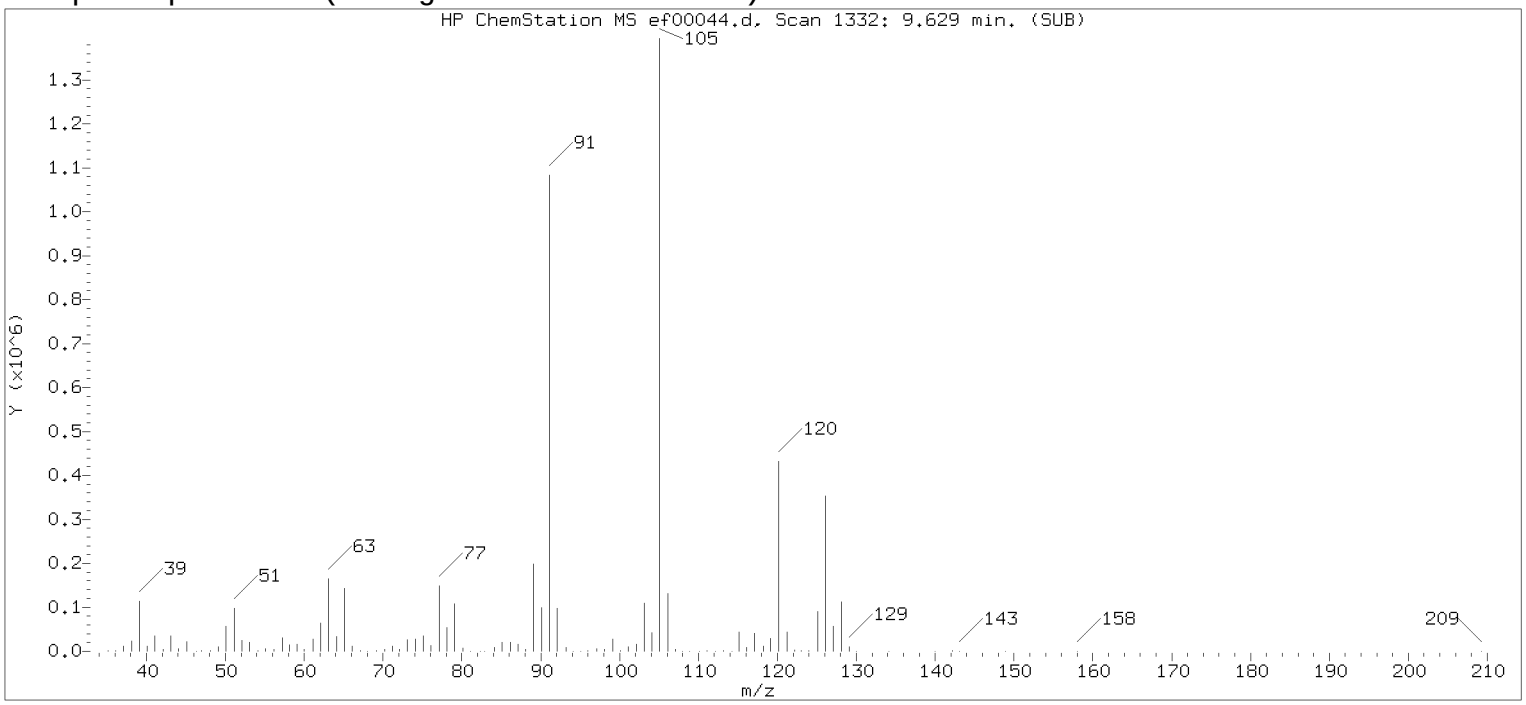
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 1683438M
Concentration (ppb(v)) : 9.5395
Integration start scan : 1324 Integration stop scan: 1334
Y at integration start : 366 Y at integration end: 366

Reason for manual integration: improper integration

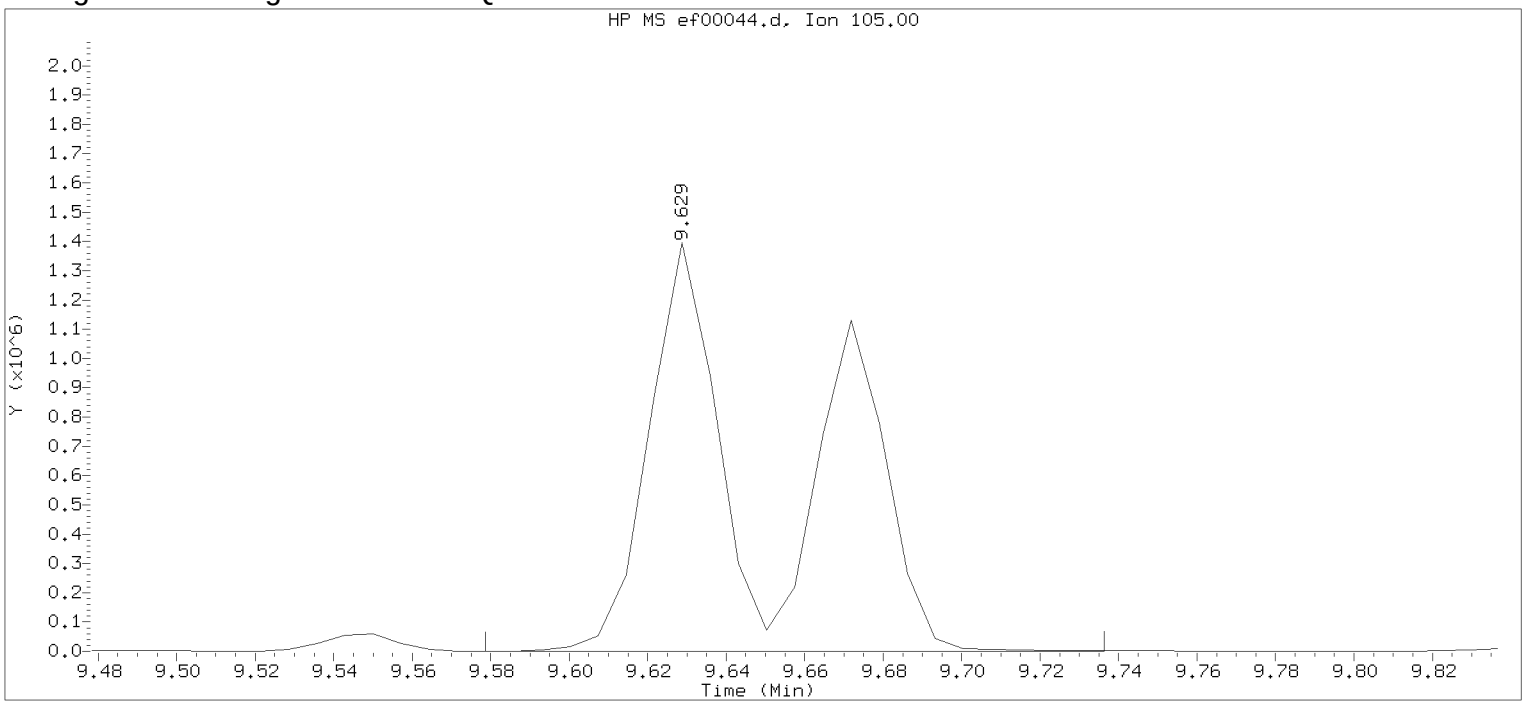
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 17:57.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00044.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 17:24 Analyst ID: jeb07445

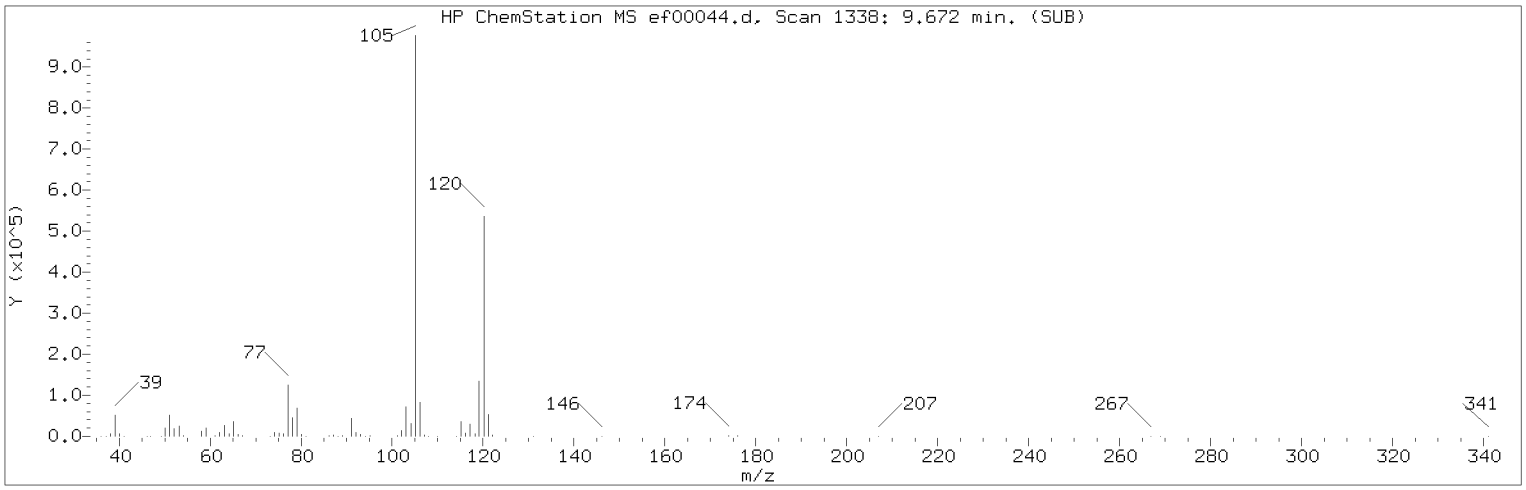
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 17:43 Unknown

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

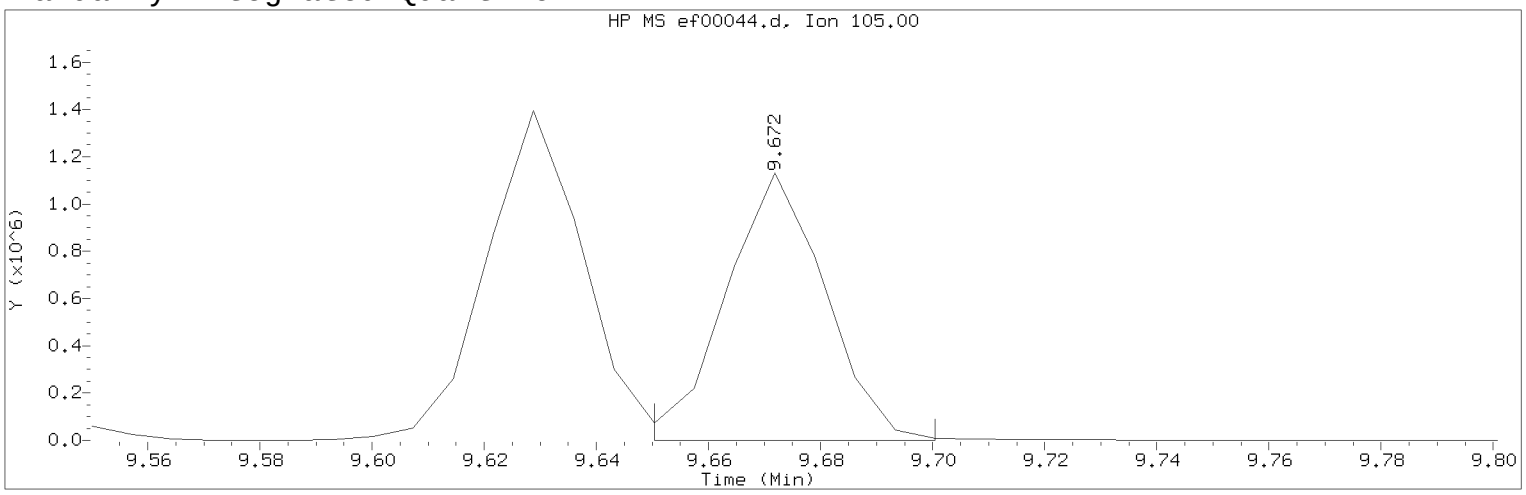
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 3057500
Concentration (ppb(v)) : 17.3259
Integration start scan : 1324 Integration stop scan: 1346
Y at integration start : 366 Y at integration end: 366

Digitally signed by Jacob E. Bailey on 06/04/2018 at 17:57.
Target 3.5 esignature userGLE02jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00044.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 17:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 17:56 jeb07445

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

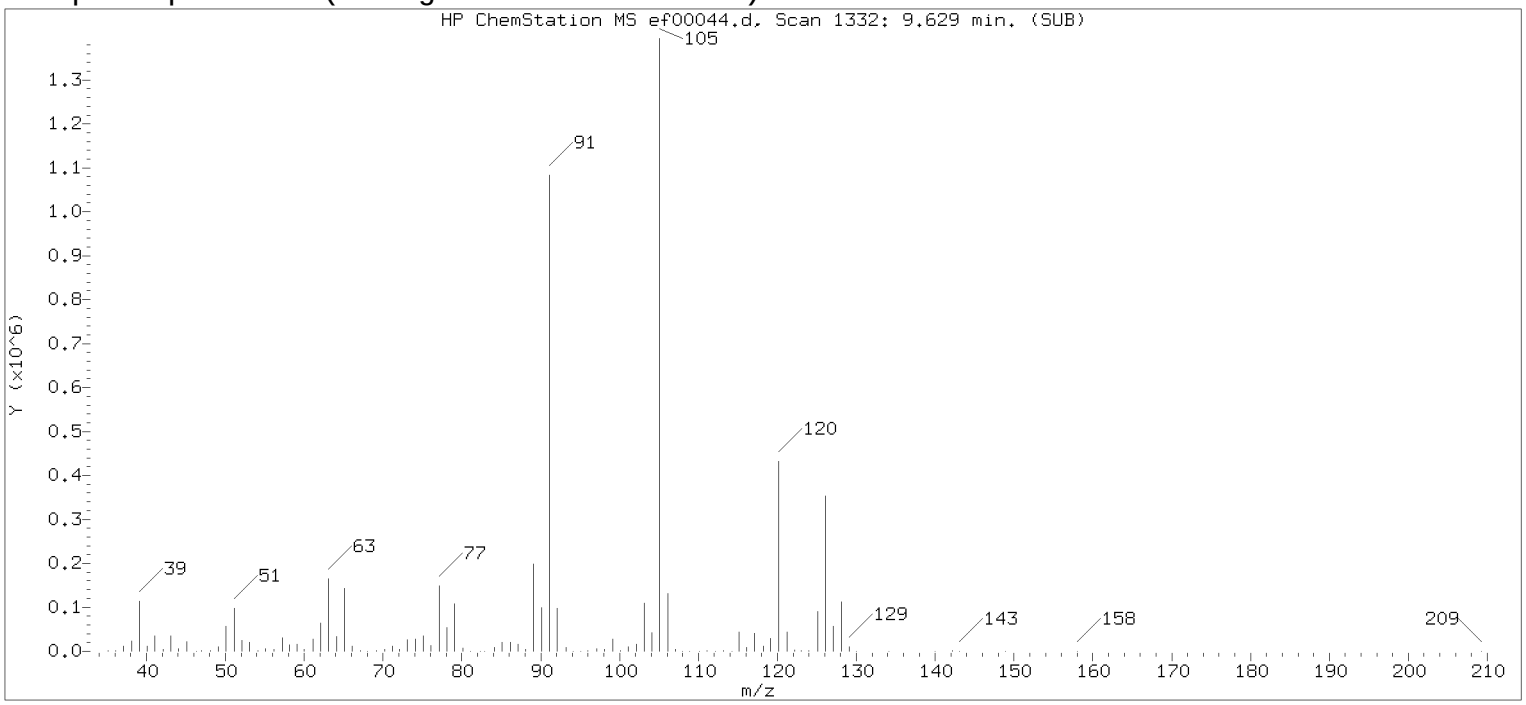
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 1398298M
Concentration (ppb(v)) : 9.5207
Integration start scan : 1334 Integration stop scan: 1341
Y at integration start : 569 Y at integration end: 569

Reason for manual integration: improper integration

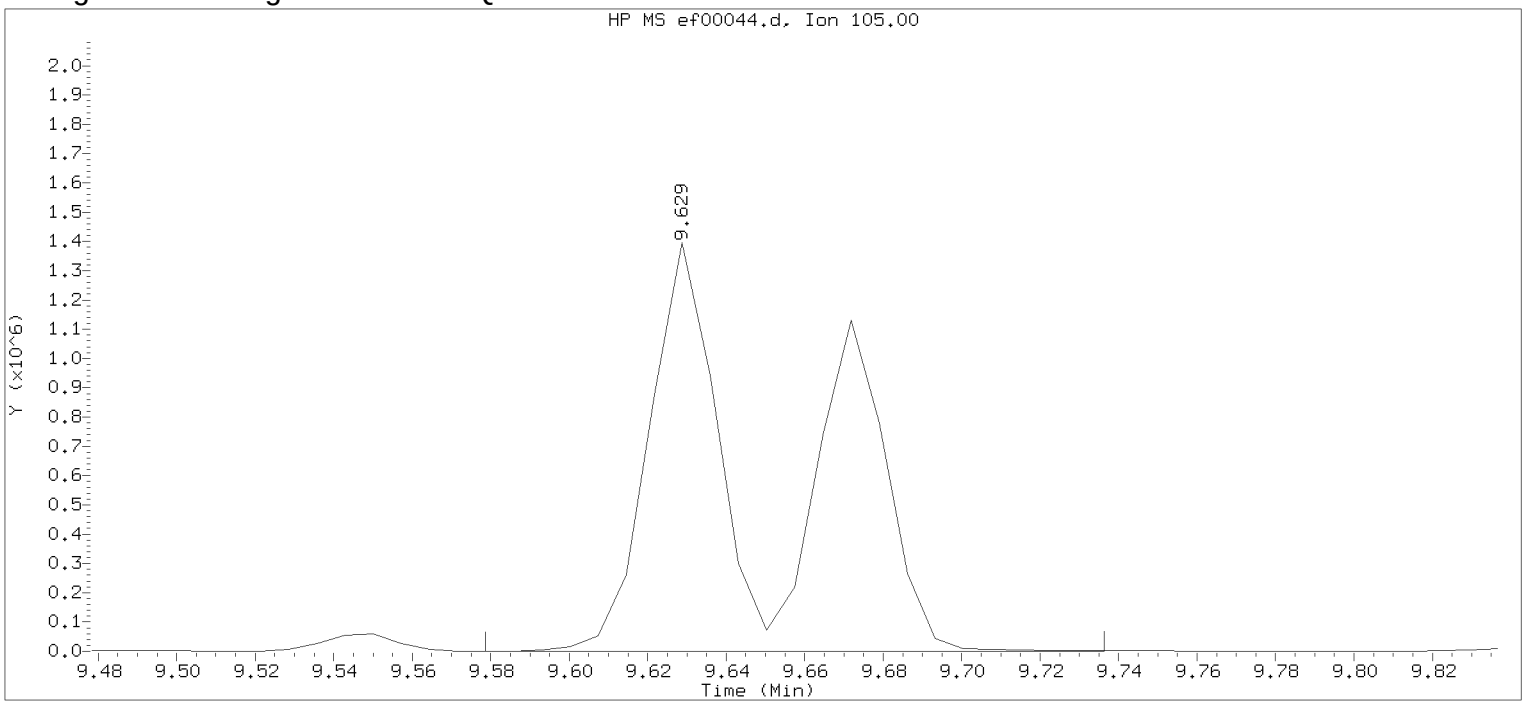
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 17:57.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00044.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 17:24 Analyst ID: jeb07445

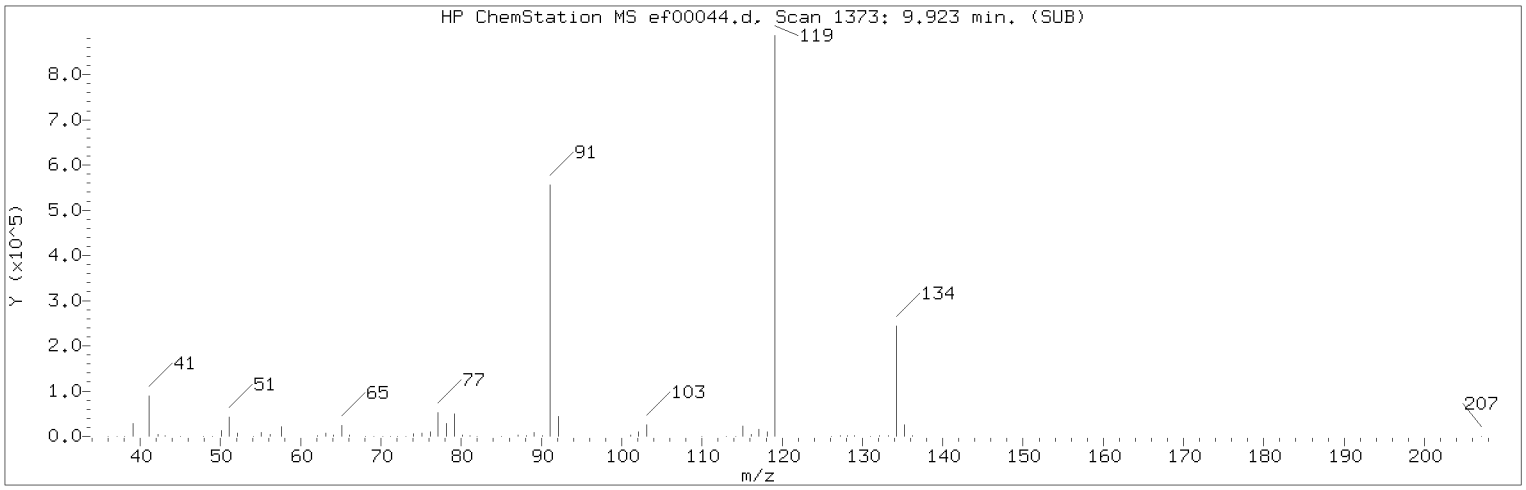
Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 17:43 Unknown

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

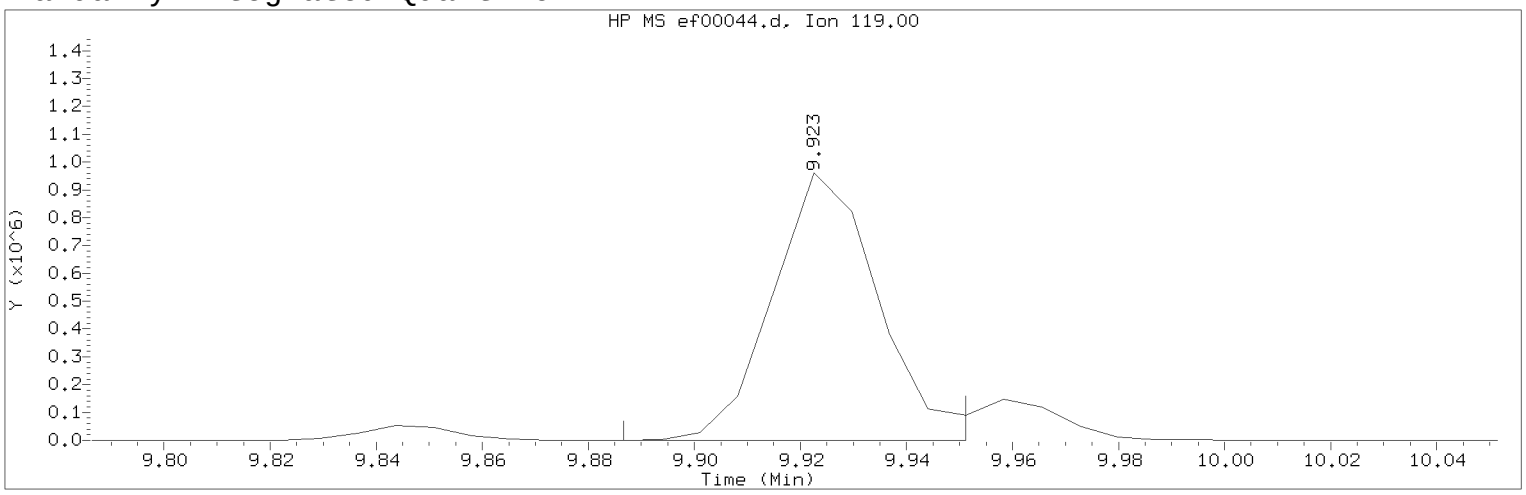
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 3054957
Concentration (ppb(v)) : 20.8005
Integration start scan : 1324 Integration stop scan: 1346
Y at integration start : 617 Y at integration end: 617

Digitally signed by Jacob E. Bailey on 06/04/2018 at 17:57.
Target 3.5 esignature user: JEB07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00044.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 17:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 17:56 jeb07445

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

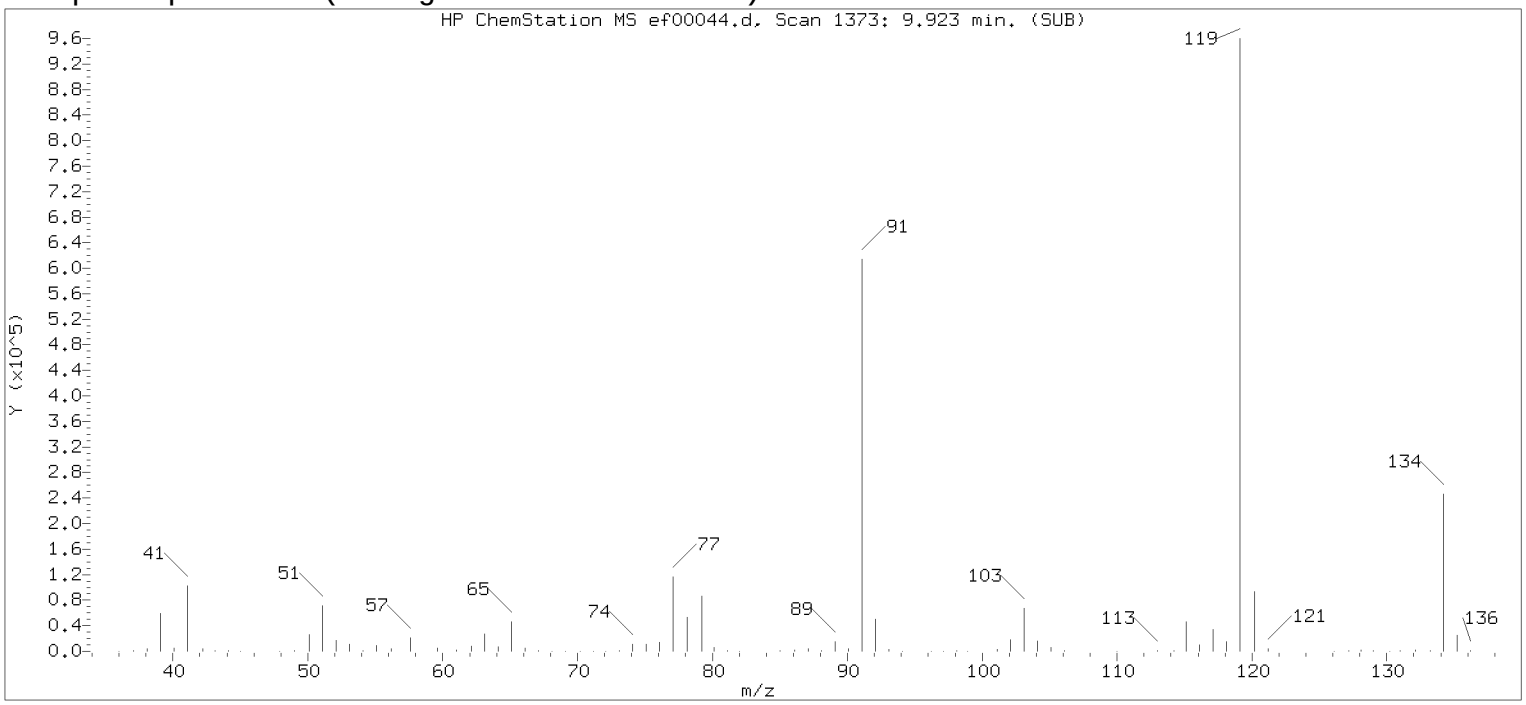
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.923
Quant Ion : 119.00
Area (flag) : 1334581M
Concentration (ppb(v)) : 8.7110
Integration start scan : 1367 Integration stop scan: 1376
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

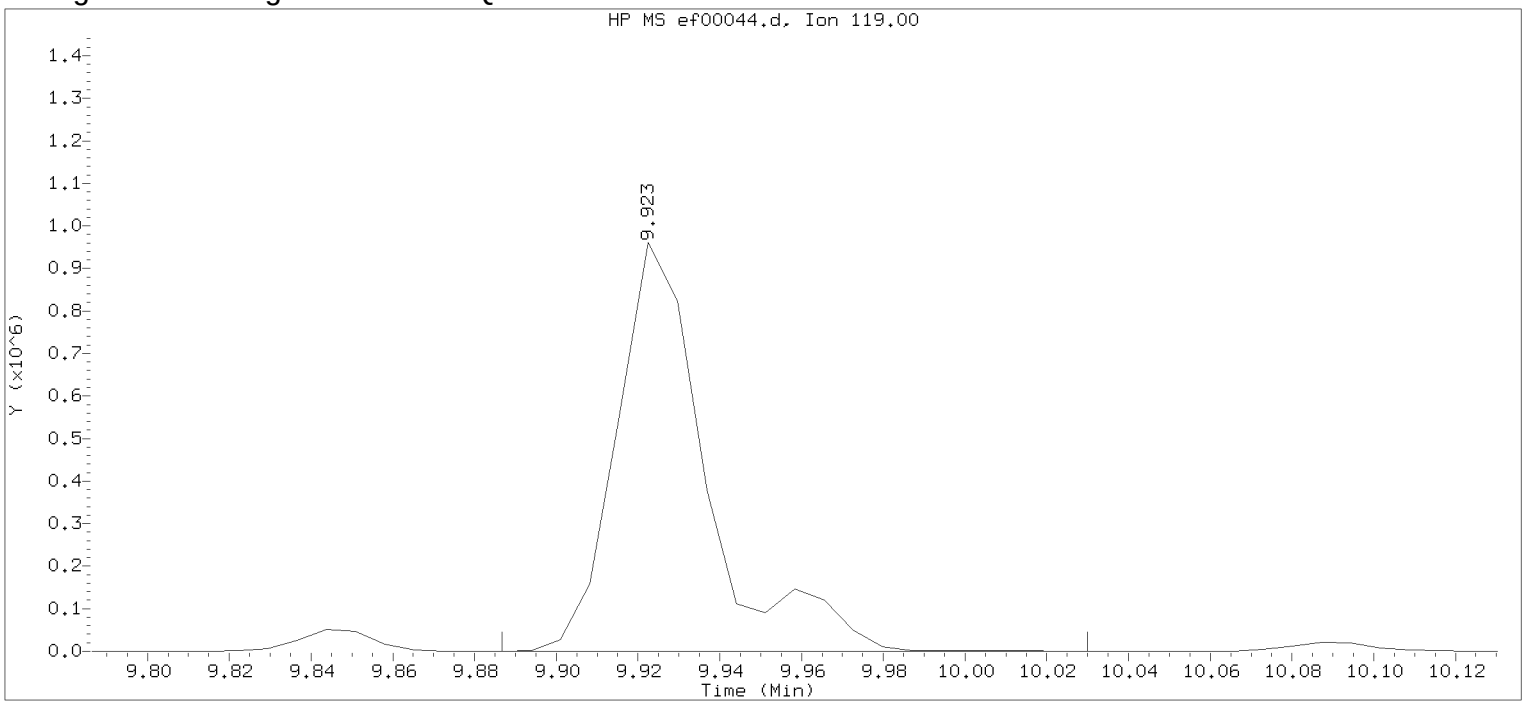
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/04/2018 at 17:57.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/05/2018 at 12:42.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun04.b/ef00044.d Instrument ID: HP22820.i
Injection date and time: 04-JUN-2018 17:24 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun04.b/to-15.m Sublist used: all
Calibration date and time: 04-JUN-2018 16:25
Date, time and analyst ID of latest file update: 04-Jun-2018 17:43 Unknown

Sample Name: LCSDE01 Lab Sample ID: LCSDE01

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.923
Quant Ion : 119.00
Area : 1478379
Concentration (ppb(v)) : 9.6496
Integration start scan : 1367 Integration stop scan: 1387
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/04/2018 at 17:57.
Target 3.5 esignature user: JEB07445

Lancaster Laboratories
Volatiles in Air
Runlog for Agilent GC/MS System HP22820 **HP #05**

Data Directory Path is - D:\data\18jun05\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
jeb07445	EF00070.D	50NGBFB	06/05/2018	12:14		
jeb07445	EF00071.D	VSTD010	06/05/2018	13:01		
jeb07445	EF00072.D	VSTD010	06/05/2018	14:29		
jeb07445	EF00073.D	VBLKE02	06/05/2018	15:21	E1815630AA	
jeb07445	EF00074.D	VBLKE02	06/05/2018	16:05	E1815630AA	
jeb07445	EF00075.D	LCSE02	06/05/2018	16:39	E1815630AA	
jeb07445	EF00076.D	LCSDE02	06/05/2018	17:13	E1815630AA	
jeb07445	EF00077.D	fc1	06/05/2018	18:10	E1815630AA	
jeb07445	EF00078.D	fc2	06/05/2018	18:44	E1815630AA	
jeb07445	EF00079.D	cc820	06/05/2018	19:41	E1815630AA	
jeb07445	EF00080.D	cc1352	06/05/2018	20:14	E1815630AA	
jeb07445	EF00081.D	cc1374	06/05/2018	20:48	E1815630AA	

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKE02
Canister ID:	N/A	Lab File ID:	ef00074.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/05/2018
Injection Volume:	200 cc	Analyzed Time:	16:05
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
115-07-1	Propene	0.50	U
75-71-8	Dichlorodifluoromethane	0.20	U
75-45-6	Chlorodifluoromethane	0.20	U
76-14-2	Freon 114	0.20	U
74-87-3	Chloromethane	0.20	U
75-01-4	Vinyl Chloride	0.20	U
106-99-0	1,3-Butadiene	0.40	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.20	U
593-60-2	Bromoethene	0.40	U
75-43-4	Dichlorofluoromethane	0.20	U
75-69-4	Trichlorofluoromethane	0.20	U
109-66-0	Pentane	0.50	U
64-17-5	Ethanol	0.50	U
107-02-8	Acrolein	1.0	U
75-35-4	1,1-Dichloroethene	0.20	U
76-13-1	Freon 113	0.50	U
67-64-1	Acetone	0.50	U
74-88-4	Methyl Iodide	0.20	U
75-15-0	Carbon Disulfide	0.50	U
67-63-0	Isopropanol	0.50	U
75-05-8	Acetonitrile	0.50	U
107-05-1	3-Chloropropene	0.20	U
75-09-2	Methylene Chloride	0.20	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKE02
Canister ID:	N/A	Lab File ID:	ef00074.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/05/2018
Injection Volume:	200 cc	Analyzed Time:	16:05
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-65-0	tert-Butyl Alcohol	0.50	U
107-13-1	Acrylonitrile	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.20	U
1634-04-4	Methyl t-Butyl Ether	0.20	U
110-54-3	Hexane	0.20	U
75-34-3	1,1-Dichloroethane	0.20	U
108-05-4	Vinyl Acetate	1.0	U
108-20-3	Di-Isopropyl Ether	0.20	U
637-92-3	Ethyl Tert-Butyl Ether	0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	U
540-59-0	1,2-Dichloroethene (total)	0.20	U
78-93-3	2-Butanone	0.50	U
141-78-6	Ethyl Acetate	0.50	U
96-33-3	Methyl Acrylate	0.20	U
109-99-9	Tetrahydrofuran	0.50	U
67-66-3	Chloroform	0.20	U
71-55-6	1,1,1-Trichloroethane	0.20	U
110-82-7	Cyclohexane	0.20	U
56-23-5	Carbon Tetrachloride	0.20	U
71-43-2	Benzene	0.20	U
107-06-2	1,2-Dichloroethane	0.20	U
540-84-1	Isooctane	0.20	U
994-05-8	Tert-Amyl Methyl Ether	0.20	U
142-82-5	Heptane	0.50	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKE02
Canister ID:	N/A	Lab File ID:	ef00074.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/05/2018
Injection Volume:	200 cc	Analyzed Time:	16:05
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
79-01-6	Trichloroethene	0.20	U
140-88-5	Ethyl Acrylate	0.20	U
78-87-5	1,2-Dichloropropane	0.20	U
74-95-3	Dibromomethane	0.20	U
123-91-1	1,4-Dioxane	0.50	U
80-62-6	Methyl Methacrylate	0.20	U
75-27-4	Bromodichloromethane	0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	U
108-10-1	4-Methyl-2-Pentanone	0.50	U
108-88-3	Toluene	0.20	U
111-65-9	Octane	0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	U
542-75-6	1,3-Dichloropropene (total)	0.20	U
97-63-2	Ethyl Methacrylate	0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	U
127-18-4	Tetrachloroethene	0.20	U
591-78-6	2-Hexanone	0.50	U
124-48-1	Dibromochloromethane	0.20	U
106-93-4	1,2-Dibromoethane	0.20	U
108-90-7	Chlorobenzene	0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	U
100-41-4	Ethylbenzene	0.20	U
179601-23-1	m/p-Xylene	0.20	U
95-47-6	o-Xylene	0.20	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKE02
Canister ID:	N/A	Lab File ID:	ef00074.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/05/2018
Injection Volume:	200 cc	Analyzed Time:	16:05
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
1330-20-7	Xylene (total)	0.20	U
100-42-5	Styrene	0.20	U
75-25-2	Bromoform	0.20	U
98-82-8	Cumene	0.20	U
108-86-1	Bromobenzene	0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U
96-18-4	1,2,3-Trichloropropane	0.20	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.20	U
622-96-8	4-Ethyltoluene	0.20	U
108-67-8	1,3,5-Trimethylbenzene	0.20	U
98-83-9	Alpha Methyl Styrene	0.20	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.20	U
135-98-8	sec-Butylbenzene	0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	U
99-87-6	p-Isopropyltoluene	0.20	U
100-44-7	Benzyl Chloride	0.50	U
95-50-1	1,2-Dichlorobenzene	0.20	U
104-51-8	n-Butylbenzene	0.20	U
67-72-1	Hexachloroethane	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKE02
Canister ID:	N/A	Lab File ID:	ef00074.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	06/05/2018
Injection Volume:	200 cc	Analyzed Time:	16:05
Instrument ID:	22820	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
87-68-3	Hexachlorobutadiene	0.40	U
91-20-3	Naphthalene	0.40	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 LCS File ID: ef00075.d LCSD File ID: ef00076.d

Batch: E1815630AA LCS Injected: 06/05/2018 LCSD Injected: 06/05/2018

Method: EPA TO-15 LCS Client ID: LCSE02 LCSD Client ID: LCSDE02

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	10.00	13.24	13.07	132 *	131 *	78-126	1	25	NO
Dichlorodifluoromethane	10.00	12.08	11.88	121	119	74-133	2	25	YES
Chlorodifluoromethane	10.00	14.28	14.01	143 *	140 *	70-138	2	25	NO
Freon 114	10.00	11.97	11.82	120	118	66-126	1	25	YES
Chloromethane	10.00	14.29	13.72	143 *	137	65-140	4	25	NO
Vinyl Chloride	10.00	12.65	12.58	126	126	75-130	1	25	YES
1,3-Butadiene	10.00	11.93	12.03	119	120	72-122	1	25	YES
Bromomethane	10.00	11.75	11.65	117	116	71-133	1	25	YES
Chloroethane	10.00	12.15	12.36	122	124	76-129	2	25	YES
Bromoethene	10.00	10.77	10.81	108	108	77-123	0	25	YES
Dichlorofluoromethane	10.00	13.07	12.89	131	129	75-137	1	25	YES
Trichlorofluoromethane	10.00	11.77	11.46	118	115	73-132	3	25	YES
Pentane	10.00	15.09	14.82	151 *	148 *	69-125	2	25	NO
Ethanol	10.00	10.90	11.27	109	113	56-149	3	25	YES
Acrolein	10.00	12.06	12.06	121	121	54-132	0	25	YES
1,1-Dichloroethene	10.00	12.37	12.37	124	124	70-129	0	25	YES
Freon 113	10.00	11.15	11.01	111	110	66-119	1	25	YES
Acetone	10.00	13.34	13.10	133	131	71-136	2	25	YES
Methyl Iodide	10.00	9.70	9.80	97	98	72-127	1	25	YES
Carbon Disulfide	10.00	11.77	11.61	118	116	72-128	1	25	YES
Isopropanol	10.00	10.64	10.98	106	110	69-160	3	25	YES
Acetonitrile	10.00	11.38	12.04	114	120	56-136	6	25	YES
3-Chloropropene	10.00	12.82	13.06	128	131	67-141	2	25	YES
Methylene Chloride	10.00	12.90	12.69	129 *	127	69-128	2	25	NO
tert-Butyl Alcohol	10.00	9.76	10.09	98	101	71-154	3	25	YES
Acrylonitrile	10.00	13.18	12.89	132	129	68-135	2	25	YES
trans-1,2-Dichloroethene	10.00	12.29	12.18	123	122	77-128	1	25	YES
Methyl t-Butyl Ether	10.00	11.26	11.20	113	112	71-119	1	25	YES
Hexane	10.00	14.04	13.82	140 *	138 *	70-118	2	25	NO
1,1-Dichloroethane	10.00	12.24	12.09	122	121	74-129	1	25	YES
Vinyl Acetate	10.00	9.61	9.75	96	97	75-161	1	25	YES
Di-Isopropyl Ether	10.00	12.32	12.42	123 *	124 *	71-122	1	25	NO
Ethyl Tert-Butyl Ether	10.00	9.92	9.77	99	98	68-121	1	25	YES
cis-1,2-Dichloroethene	10.00	12.00	11.95	120	119	76-126	0	25	YES
2-Butanone	10.00	10.95	10.91	109	109	75-126	0	25	YES
Ethyl Acetate	10.00	9.28	9.61	93	96	73-124	4	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 LCS File ID: ef00075.d LCSD File ID: ef00076.d

Batch: E1815630AA LCS Injected: 06/05/2018 LCSD Injected: 06/05/2018

Method: EPA TO-15 LCS Client ID: LCSE02 LCSD Client ID: LCSDE02

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	10.00	11.16	11.25	112	112	75-125	1	25	YES
Tetrahydrofuran	10.00	12.93	12.89	129*	129*	67-127	0	25	NO
Chloroform	10.00	11.78	11.50	118	115	75-127	2	25	YES
1,1,1-Trichloroethane	10.00	10.59	10.65	106	106	74-122	1	25	YES
Cyclohexane	10.00	11.82	11.72	118	117	70-118	1	25	YES
Carbon Tetrachloride	10.00	10.63	10.55	106	105	72-127	1	25	YES
Benzene	10.00	13.84	13.52	138*	135*	76-123	2	25	NO
1,2-Dichloroethane	10.00	12.88	12.53	129	125	72-138	3	25	YES
Isooctane	10.00	12.13	11.96	121	120	74-127	1	25	YES
Tert-Amyl Methyl Ether	10.00	9.78	9.79	98	98	78-124	0	25	YES
Heptane	10.00	12.72	12.24	127*	122	74-122	4	25	NO
Trichloroethene	10.00	10.48	10.37	105	104	76-118	1	25	YES
Ethyl Acrylate	10.00	10.56	10.47	106	105	71-126	1	25	YES
1,2-Dichloropropane	10.00	11.82	11.69	118	117	75-127	1	25	YES
Dibromomethane	10.00	9.95	9.66	99	97	76-124	3	25	YES
1,4-Dioxane	10.00	10.76	10.67	108	107	76-124	1	25	YES
Methyl Methacrylate	10.00	10.06	10.28	101	103	73-117	2	25	YES
Bromodichloromethane	10.00	11.59	11.36	116	114	75-134	2	25	YES
cis-1,3-Dichloropropene	10.00	10.34	10.11	103	101	51-120	2	25	YES
4-Methyl-2-Pentanone	10.00	12.25	12.10	122	121	79-131	1	25	YES
Toluene	10.00	12.68	12.50	127*	125*	78-119	1	25	NO
Octane	10.00	14.18	14.02	142*	140*	73-122	1	25	NO
trans-1,3-Dichloropropene	10.00	9.58	9.52	96	95	76-131	1	25	YES
Ethyl Methacrylate	10.00	9.58	9.68	96	97	69-137	1	25	YES
1,1,2-Trichloroethane	10.00	10.84	10.70	108	107	76-127	1	25	YES
Tetrachloroethene	10.00	9.63	9.48	96	95	68-123	2	25	YES
2-Hexanone	10.00	11.50	11.61	115	116	74-134	1	25	YES
Dibromochloromethane	10.00	10.48	10.32	105	103	74-131	2	25	YES
1,2-Dibromoethane	10.00	10.50	10.41	105	104	73-121	1	25	YES
Chlorobenzene	10.00	10.00	9.93	100	99	76-117	1	25	YES
1,1,1,2-Tetrachloroethane	10.00	10.18	10.10	102	101	73-137	1	25	YES
Ethylbenzene	10.00	12.03	11.90	120*	119*	77-117	1	25	NO
m/p-Xylene	10.00	13.34	13.36	133*	134*	78-119	0	25	NO
o-Xylene	10.00	12.08	11.92	121	119	78-121	1	25	YES
Xylene (total)	20.00	25.43	25.29	127*	126*	79-120	1	25	NO
Styrene	10.00	10.20	10.17	102	102	77-143	0	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 22820 LCS File ID: ef00075.d LCSD File ID: ef00076.d

Batch: E1815630AA LCS Injected: 06/05/2018 LCSD Injected: 06/05/2018

Method: EPA TO-15 LCS Client ID: LCSE02 LCSD Client ID: LCSDE02

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	9.68	9.55	97	95	58-144	1	25	YES
Cumene	10.00	9.55	9.51	95	95	80-133	0	25	YES
Bromobenzene	10.00	9.20	9.08	92	91	74-118	1	25	YES
1,1,2,2-Tetrachloroethane	10.00	11.26	11.20	113	112	72-133	1	25	YES
1,2,3-Trichloropropane	10.00	10.53	10.54	105	105	71-127	0	25	YES
n-Propylbenzene	10.00	9.29	9.13	93	91	73-120	2	25	YES
2-Chlorotoluene	10.00	9.75	9.70	98	97	74-123	1	25	YES
4-Ethyltoluene	10.00	9.89	9.86	99	99	73-130	0	25	YES
1,3,5-Trimethylbenzene	10.00	10.05	9.74	101	97	72-130	3	25	YES
Alpha Methyl Styrene	10.00	8.98	8.70	90	87	71-138	3	25	YES
tert-Butylbenzene	10.00	8.57	8.73	86	87	78-138	2	25	YES
1,2,4-Trimethylbenzene	10.00	9.69	9.58	97	96	70-138	1	25	YES
sec-Butylbenzene	10.00	9.40	9.19	94	92	79-139	2	25	YES
1,3-Dichlorobenzene	10.00	9.39	9.29	94	93	75-129	1	25	YES
1,4-Dichlorobenzene	10.00	9.25	9.07	93	91	74-123	2	25	YES
p-Isopropyltoluene	10.00	8.99	8.87	90	89	75-145	1	25	YES
Benzyl Chloride	10.00	6.79	6.78	68	68	49-163	0	25	YES
1,2-Dichlorobenzene	10.00	9.03	8.91	90	89	71-126	1	25	YES
n-Butylbenzene	10.00	9.30	9.15	93	92	72-143	2	25	YES
Hexachloroethane	10.00	9.59	9.62	96	96	59-135	0	25	YES
1,2-Dibromo-3-chloropropane	10.00	7.87	7.65	79	77	52-156	3	25	YES
1,2,4-Trichlorobenzene	10.00	6.60	6.70	66	67	45-156	1	25	YES
Hexachlorobutadiene	10.00	6.58	6.67	66	67	49-154	1	25	YES
Naphthalene	10.00	6.42	6.45	64	65	39-152	1	25	YES

COMMENTS:

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FORM 04
VOLATILE ORGANICS IN AIR
METHOD BLANK SUMMARY

SDG No.:

Lab Sample ID: VBLKE02 Analyzed Date: 06/05/2018

Lab File ID: ef00074.d Analyzed Time: 16:05

Instrument ID: 22820

THIS BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS AND LCSD:

LAB SAMPLE ID	LAB FILE ID	CANISTER ID	DATE ANALYZED	TIME ANALYZED
LCSE02	ef00075.d	N/A	06/05/2018	16:39
LCSDE02	ef00076.d	N/A	06/05/2018	17:13
cc820	ef00079.d	820	06/05/2018	19:41
cc1352	ef00080.d	1352	06/05/2018	20:14
cc1374	ef00081.d	1374	06/05/2018	20:48

COMMENTS:

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

SDG No.:

Lab File ID: ef00070.d

BFB Injection Date: 06/05/2018

Instrument ID: 22820

BFB Injection Time: 12:14

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0% - 40.0% of mass 95	18.02
75	30.0% - 66.0% of mass 95	48.73
95	Base peak, 100% relative abundance	100.00
96	5.0% - 9.0% of mass 95	6.86
173	< 2.0% of mass 174	0.43 (0.55)
174	> 50.0% of mass 95	79.09
175	4.0% - 9.0% of mass 174	5.65 (7.15)
176	93.0% - 101.0% of mass 174	76.59 (96.84)
177	5.0% - 9.0% of mass 176	5.01 (6.54)

THIS CHECK APPLIES TO THE FOLLOWING:

LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD010	ef00072.d	06/05/2018	14:29
VBLKE02	ef00074.d	06/05/2018	16:05
LCSE02	ef00075.d	06/05/2018	16:39
LCSDE02	ef00076.d	06/05/2018	17:13
cc820	ef00079.d	06/05/2018	19:41
cc1352	ef00080.d	06/05/2018	20:14
cc1374	ef00081.d	06/05/2018	20:48

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: ef00072.d

Calibration Date: 06/05/2018

Instrument ID: 22820

Calibration Time: 14:29

Init. Calib. Date(s): 06/04/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
Propene	0.620	0.781	12.590	10	26
Dichlorodifluoromethane	2.403	2.873	11.955	10	20
Chlorodifluoromethane *	1.274	1.667	13.092	10	31 *
Freon 114	2.459	2.801	11.389	10	14
Chloromethane *	0.727	0.966	13.290	10	33 *
Vinyl Chloride	0.892	1.093	12.245	10	22
1,3-Butadiene	0.647	0.792	12.233	10	22
Bromomethane	0.918	1.120	12.202	10	22
Chloroethane	0.504	0.609	12.080	10	21
Bromoethene	0.975	1.013	10.387	10	4
Dichlorofluoromethane	1.945	2.365	12.162	10	22
Trichlorofluoromethane	2.547	2.938	11.535	10	15
Pentane	1.368	1.748	12.780	10	28
Ethanol	0.294	0.350	11.900	10	19
Freon123a	1.691	2.062	13.538	11.1	22
Acrolein	0.348	0.405	11.636	10	16
1,1-Dichloroethene	1.414	1.698	12.006	10	20
Freon 113	1.426	1.592	11.164	10	12
Acetone *	1.176	1.553	13.210	10	32 *
Methyl Iodide	2.735	2.384	8.718	10	-13
Carbon Disulfide	2.648	3.132	11.825	10	18
Isopropanol	1.212	1.353	11.165	10	12
Acetonitrile	0.571	0.641	11.229	10	12
3-Chloropropene	0.415	0.451	12.076	11.1	9
Methylene Chloride	0.805	0.934	12.870	11.1	16
tert-Butyl Alcohol	1.639	1.569	10.626	11.1	-4
Acrylonitrile	0.717	0.907	12.655	10	27
trans-1,2-Dichloroethene	1.279	1.577	12.332	10	23
Methyl t-Butyl Ether	2.729	2.866	10.502	10	5
Hexane	1.405	1.583	11.272	10	13
1,1-Dichloroethane	1.666	1.997	11.984	10	20
Vinyl Acetate	0.244	0.234	10.735	11.2	-4
Di-Isopropyl Ether	2.776	3.373	12.152	10	22
Ethyl Tert-Butyl Ether	2.649	2.790	10.533	10	5
cis-1,2-Dichloroethene	1.235	1.487	12.042	10	20
2-Butanone	0.514	0.557	10.829	10	8
Ethyl Acetate	0.254	0.259	10.218	10	2
Methyl Acrylate	1.558	1.748	11.221	10	12
Tetrahydrofuran	0.910	1.154	12.677	10	27

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: ef00072.d

Calibration Date: 06/05/2018

Instrument ID: 22820

Calibration Time: 14:29

Init. Calib. Date(s): 06/04/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
Chloroform	2.090	2.469	11.812	10	18
1,1,1-Trichloroethane	2.117	2.279	10.762	10	8
Cyclohexane	1.456	1.670	11.464	10	15
Carbon Tetrachloride	2.079	2.219	10.677	10	7
Benzene	0.860	0.990	11.510	10	15
1,2-Dichloroethane	0.350	0.434	12.413	10	24
Isooctane	1.190	1.430	12.010	10	20
Tert-Amyl Methyl Ether	0.717	0.743	10.356	10	4
Heptane	0.407	0.494	12.136	10	21
Trichloroethene	0.427	0.443	10.366	10	4
Ethyl Acrylate	0.544	0.595	10.937	10	9
1,2-Dichloropropane	0.301	0.355	11.782	10	18
Dibromomethane	0.413	0.408	9.869	10	-1
1,4-Dioxane	0.219	0.231	10.582	10	6
Methyl Methacrylate	0.301	0.312	10.378	10	4
Bromodichloromethane	0.589	0.691	11.722	10	17
cis-1,3-Dichloropropene	0.520	0.558	10.731	10	7
4-Methyl-2-Pentanone	0.566	0.686	12.118	10	21
Toluene	1.154	1.279	11.089	10	11
Octane	0.600	0.738	12.301	10	23
trans-1,3-Dichloropropene	0.455	0.484	10.635	10	6
Ethyl Methacrylate	0.516	0.541	10.490	10	5
1,1,2-Trichloroethane	0.408	0.450	11.032	10	10
Tetrachloroethene	0.646	0.642	9.945	10	-1
2-Hexanone	0.577	0.714	12.364	10	24
Dibromochloromethane	0.514	0.560	10.888	10	9
1,2-Dibromoethane	0.634	0.704	11.101	10	11
Chlorobenzene	0.987	1.043	10.559	10	6
1,1,1,2-Tetrachloroethane	0.481	0.512	10.662	10	7
Ethylbenzene	1.543	1.729	11.205	10	12
m/p-Xylene	1.253	1.384	11.052	10	11
o-Xylene	1.238	1.339	10.811	10	8
Styrene	0.938	0.999	10.653	10	7
Bromoform	0.661	0.689	10.418	10	4
Cumene	1.766	1.769	10.021	10	0
Bromobenzene	0.627	0.622	9.919	10	-1
1,1,2,2-Tetrachloroethane	0.868	1.030	11.865	10	19
1,2,3-Trichloropropane	0.277	0.312	11.240	10	12
n-Propylbenzene	0.507	0.515	10.139	10	1

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: ef00072.d

Calibration Date: 06/05/2018

Instrument ID: 22820

Calibration Time: 14:29

Init. Calib. Date(s): 06/04/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
2-Chlorotoluene	0.467	0.480	10.281	10	3
4-Ethyltoluene	1.708	1.869	10.944	10	9
1,3,5-Trimethylbenzene	1.421	1.509	10.620	10	6
Alpha Methyl Styrene	0.745	0.742	9.953	10	0
tert-Butylbenzene	1.483	1.412	9.525	10	-5
1,2,4-Trimethylbenzene	1.403	1.508	10.744	10	7
sec-Butylbenzene	2.123	2.188	10.307	10	3
1,3-Dichlorobenzene	1.043	1.088	10.434	10	4
1,4-Dichlorobenzene	1.063	1.100	10.351	10	4
p-Isopropyltoluene	1.817	1.856	10.214	10	2
Benzyl Chloride	0.961	0.848	8.826	10	-12
1,2-Dichlorobenzene	0.992	1.016	10.236	10	2
n-Butylbenzene	1.633	1.772	10.852	10	9
Hexachloroethane	0.386	0.426	11.045	10	10
1,2-Dibromo-3-chloropropane	0.513	0.523	10.191	10	2
1,2,4-Trichlorobenzene	0.851	0.796	9.357	10	-6
Hexachlorobutadiene	0.727	0.655	9.002	10	-10
Naphthalene	1.881	1.784	9.485	10	-5

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

Continuing Calibration
Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP22820.i/18jun04.b/ef00031.d
/chem/HP22820.i/18jun04.b/ef00032.d
/chem/HP22820.i/18jun04.b/ef00033.d
/chem/HP22820.i/18jun04.b/ef00034.d
/chem/HP22820.i/18jun04.b/ef00036.d
/chem/HP22820.i/18jun04.b/ef00037.d

** ICAL Area and RT are the average from the above standards.

Current Continuing Calibration Standard:

/chem/HP22820.i/18jun05.b/ef00072.d

Area Summary

File ID:

Internal Standard Name	ef00072.d	ICAL Area	Low Limit	High Limit	In Spec
Bromochloromethane	318052	334758	200855	468661	Yes
1,4-Difluorobenzene	1168038	1252722	751633	1753811	Yes
Chlorobenzene-d5	1104188	1203406	722044	1684768	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

RT Summary

File ID:

Internal Standard Name	ef00072.d	ICAL RT	In Spec
Bromochloromethane	5.467	5.467	Yes
1,4-Difluorobenzene	6.291	6.291	Yes
Chlorobenzene-d5	8.497	8.497	Yes

A "No" indicates the retention time is greater than 30 seconds from the RT of the referenced ICAL average.

Comments:_____

_____

Page 1 of 1

Report generated on 06/05/2018 at 14:54

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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: 06/05/2018

Lab File ID: ef00072.d Analyzed Time: 14:29

Instrument ID: 22820

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	R.T.	Area	R.T.	Area	R.T.
24 HOUR STANDARD	318052	5.47	1168038	6.29	1104188	8.50
UPPER LIMIT	445273	5.80	1635253	6.62	1545863	8.83
LOWER LIMIT	190831	5.14	700823	5.96	662513	8.17
LAB SAMPLE ID						
VBLKE02	306216	5.47	1134666	6.29	1097278	8.50
LCSE02	299832	5.47	1092749	6.29	1043540	8.50
LCSDE02	298556	5.47	1098665	6.29	1047497	8.50
cc820	286920	5.47	1057537	6.29	1030448	8.50
cc1352	278563	5.47	1002612	6.29	997814	8.50
cc1374	279870	5.47	1012711	6.29	975435	8.50

* = 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.

Data File: /chem/HP22820.i/18jun05.b/ef00070.d

Date : 05-JUN-2018 12:14

Client ID: 50NGBFB

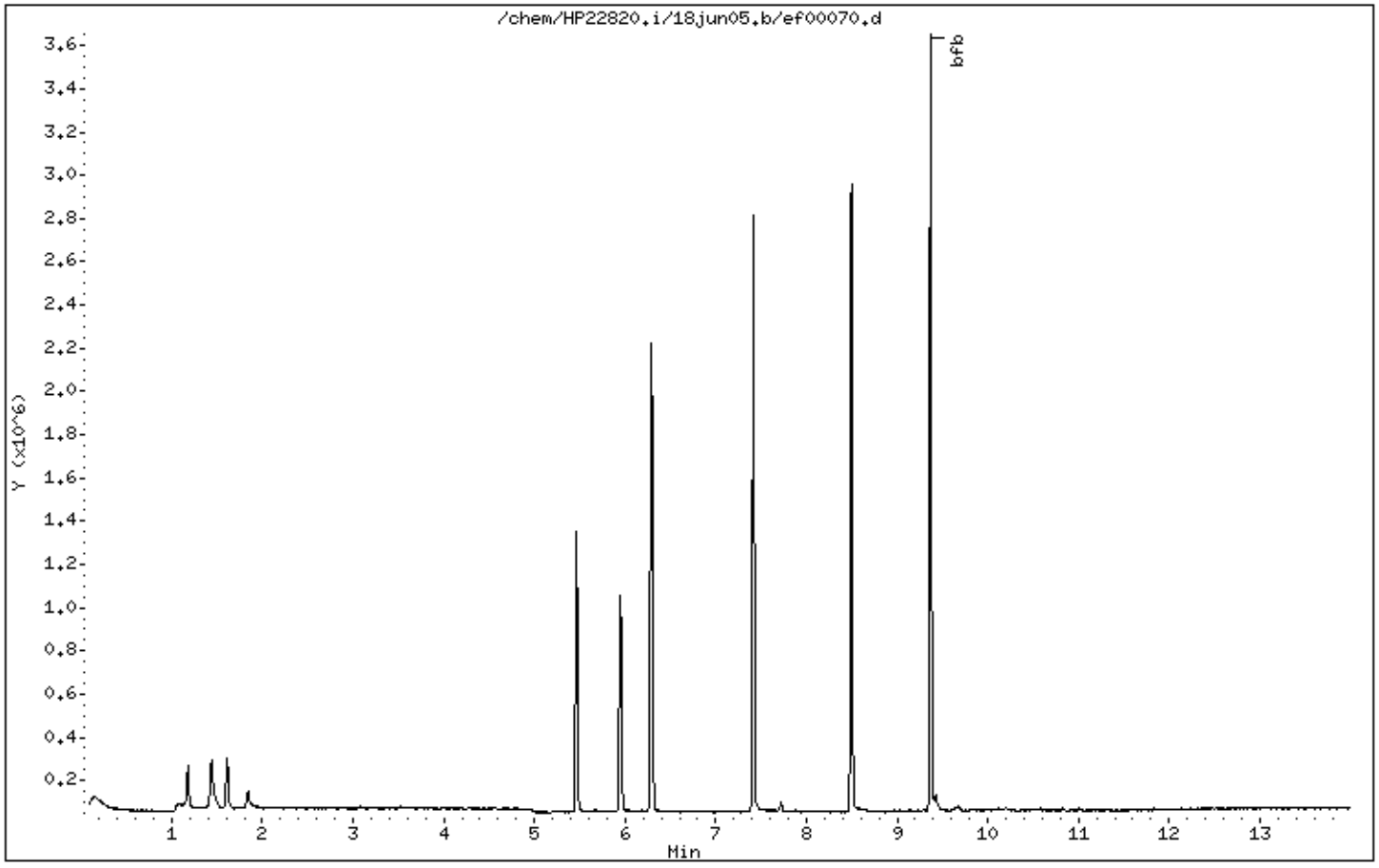
Instrument: HP22820.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25



Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:22.
Target 3.5 esignature user ID: jeb07445

Data File: /chem/HP22820.i/18jun05.b/ef00070.d

Date : 05-JUN-2018 12:14

Client ID: 50NGBFB

Instrument: HP22820.i

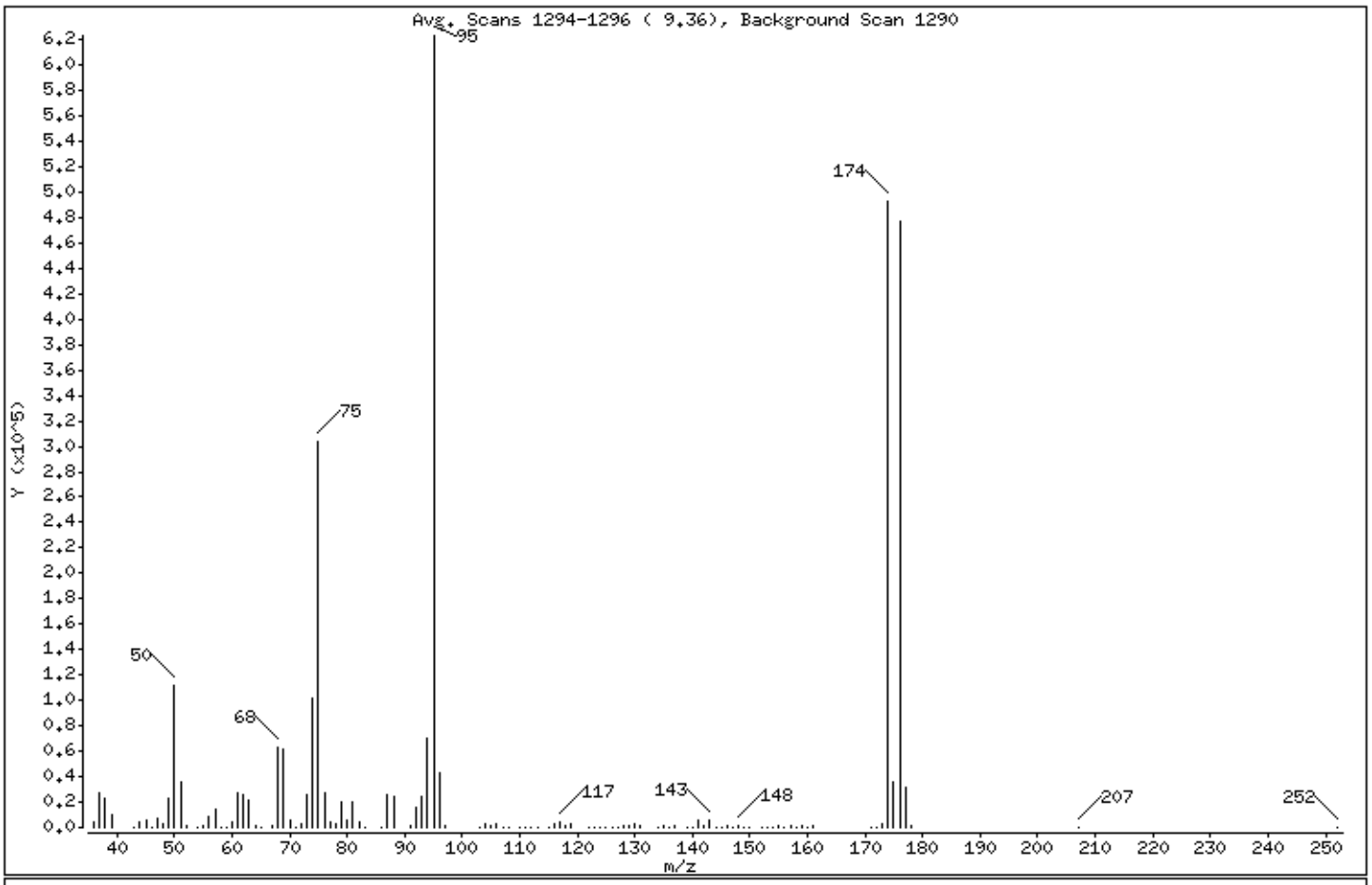
Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	18.02
75	30.00 - 66.00% of mass 95	48.73
96	5.00 - 9.00% of mass 95	6.86
173	Less than 2.00% of mass 174	0.43 (0.55)
174	50.00 - 120.00% of mass 95	79.09
175	4.00 - 9.00% of mass 174	5.65 (7.15)
176	93.00 - 101.00% of mass 174	76.59 (96.84)
177	5.00 - 9.00% of mass 176	5.01 (6.54)

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Target 3.5 esignature user ID: jeb07445

Date : 05-JUN-2018 12:14

Client ID: 50NGBFB Instrument: HP22820.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624 Column diameter: 0.25

Data File: ef00070.d
Spectrum: Avg. Scans 1294-1296 (9.36), Background Scan 1290
Location of Maximum: 95.00
Number of points: 114

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4501	70.00	5451	108.00	161	144.00	238
37.00	27376	71.00	239	110.00	574	145.00	634
38.00	23584	72.00	3047	111.00	694	146.00	772
39.00	9457	73.00	26144	112.00	458	147.00	332
43.00	456	74.00	101328	113.00	423	148.00	1448
44.00	3850	75.00	303616	115.00	626	149.00	476
45.00	5307	76.00	26672	116.00	2190	150.00	634
46.00	677	77.00	4188	117.00	4379	152.00	319
47.00	6625	78.00	2266	118.00	2113	153.00	560
48.00	3128	79.00	19368	119.00	3158	154.00	468
49.00	22520	80.00	5361	122.00	158	155.00	1303
50.00	112280	81.00	19952	123.00	208	156.00	151
51.00	35200	82.00	4282	124.00	387	157.00	904
52.00	1641	83.00	381	125.00	289	158.00	71
54.00	157	86.00	641	126.00	349	159.00	897
55.00	1159	87.00	26304	127.00	222	160.00	138
56.00	8112	88.00	24312	128.00	1950	161.00	753
57.00	14779	91.00	1949	129.00	1244	171.00	82
58.00	586	92.00	16007	130.00	2364	172.00	528
59.00	239	93.00	23856	131.00	775	173.00	2697
60.00	4871	94.00	70808	134.00	115	174.00	492800
61.00	26712	95.00	623104	135.00	916	175.00	35224
62.00	26232	96.00	42728	136.00	166	176.00	477248
63.00	20856	97.00	1515	137.00	1138	177.00	31216
64.00	1758	103.00	374	139.00	214	178.00	967
65.00	329	104.00	2516	140.00	447	207.00	72
67.00	1416	105.00	1176	141.00	5503	252.00	77
68.00	62416	106.00	2640	142.00	848		
69.00	61288	107.00	712	143.00	5948		

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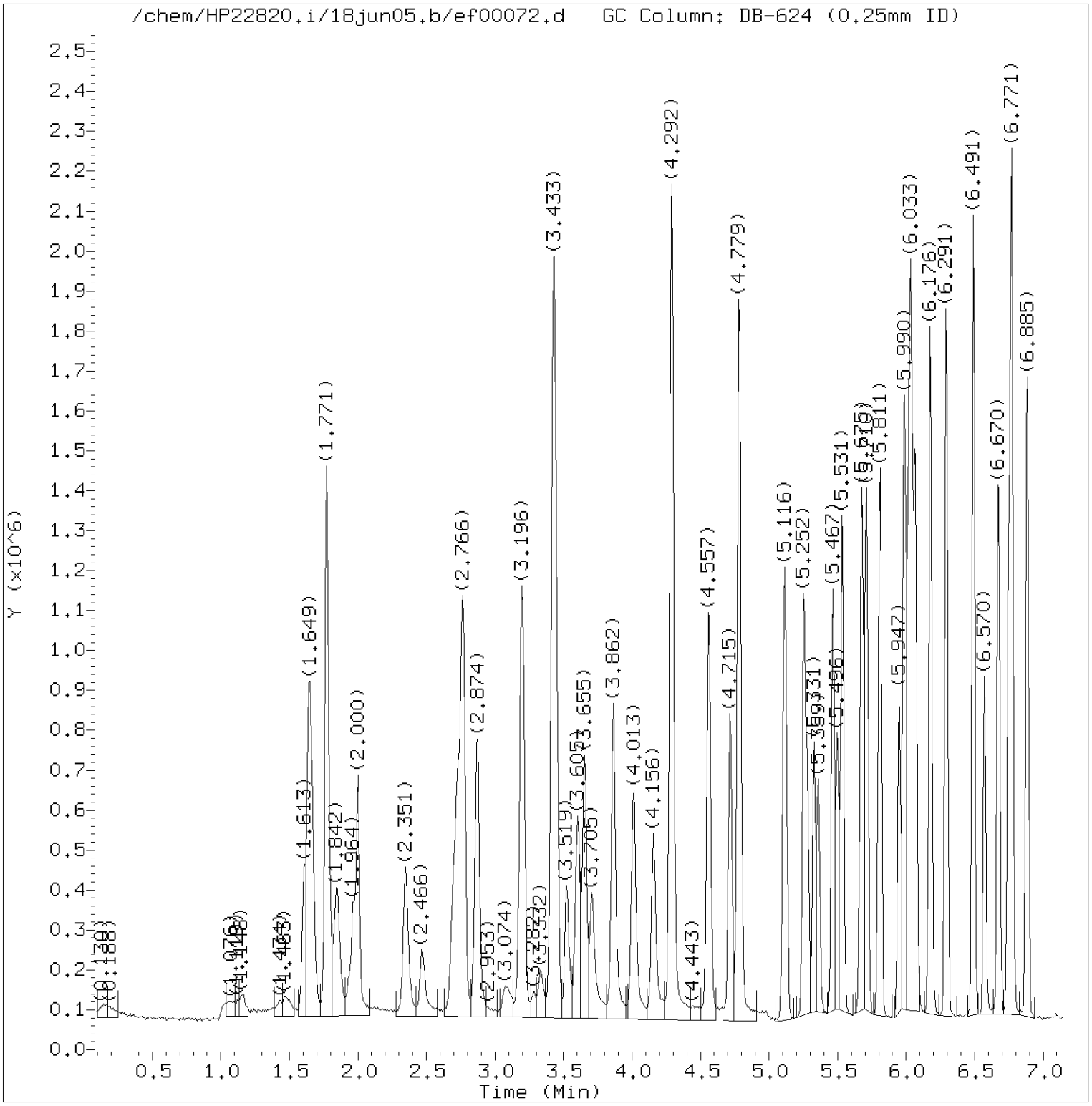
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

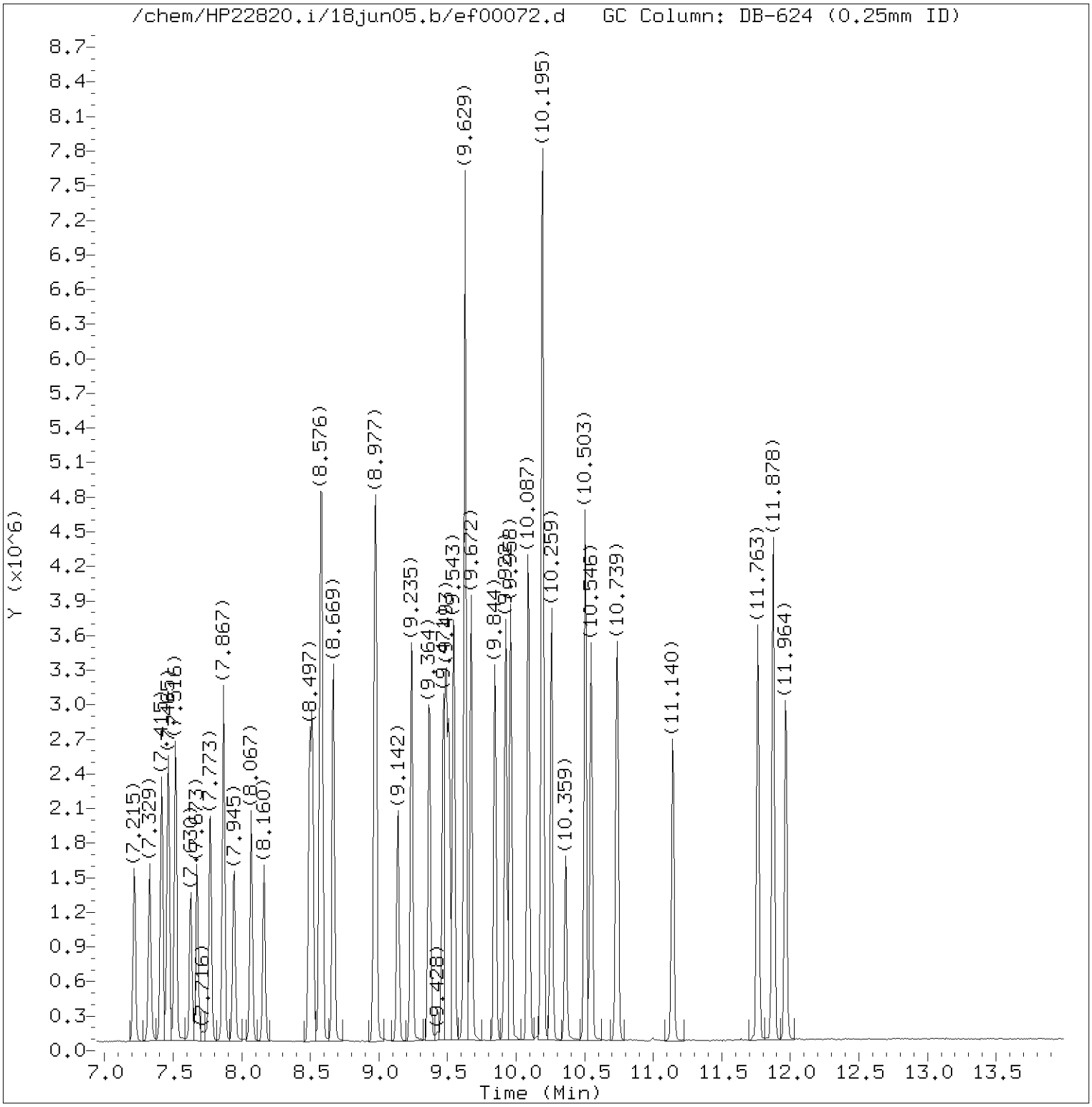
Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 14:56 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 14:56 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 14:56 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.606	41	248283	12.590
2) Dichlorodifluoromethane	(1)	1.642	85	913863	11.955
3) Chlorodifluoromethane	(1)	1.663	51	530281	13.092
4) Freon 114	(1)	1.771	85	890782	11.389
5) Chloromethane	(1)	1.857	50	307276	13.290
6) Vinyl Chloride	(1)	1.964	62	347481	12.245
7) 1,3-Butadiene	(1)	2.000	54	251880	12.233
8) Bromomethane	(1)	2.351	94	356087	12.202
9) Chloroethane	(1)	2.466	64	193748	12.080
10) Bromoethene	(1)	2.695	106	322038	10.387
11) Dichlorofluoromethane	(1)	2.731	67	752332	12.162
12) Trichlorofluoromethane	(1)	2.766	101	934595	11.535
13) Pentane	(1)	2.874	43	555967	12.780
14) Ethanol	(1)	3.067	45	111351M	11.900
15) Freon123a	(1)	3.196	67	728038	13.538
16) Acrolein	(1)	3.332	56	128932	11.636
17) 1,1-Dichloroethene	(1)	3.418	61	540018	12.006
18) Freon 113	(1)	3.433	103	506393	11.164
19) Acetone	(1)	3.519	43	493934	13.210
20) Methyl Iodide	(1)	3.605	142	758274	8.718
21) Carbon Disulfide	(1)	3.655	76	996062	11.825
22) Isopropanol	(1)	3.705	45	430470	11.165
24) 3-Chloropropene	(1)	3.862	76	159372	12.076
23) Acetonitrile	(1)	3.870	40	203828	11.229
25) Methylene Chloride	(1)	4.013	84	329641	12.870
26) tert-Butyl Alcohol	(1)	4.156	59	553849	10.626
28) trans-1,2-Dichloroethene	(1)	4.285	61	501626	12.332
27) Acrylonitrile	(1)	4.292	53	288410M	12.655
29) Methyl t-Butyl Ether	(1)	4.292	73	911594	10.502
30) Hexane	(1)	4.564	57	503530	11.272
31) 1,1-Dichloroethane	(1)	4.715	63	635166	11.984
32) Vinyl Acetate	(1)	4.779	86	83191	10.735
33) Di-Isopropyl Ether	(1)	4.779	45	1072792	12.152
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	887367	10.533
35) cis-1,2-Dichloroethene	(1)	5.252	61	472883	12.042
37) 2-Butanone	(1)	5.281	72	177001	10.829
38) Ethyl Acetate	(1)	5.324	70	82407	10.218
39) Methyl Acrylate	(1)	5.359	55	556032	11.221

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 14:56 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	318052	10.000
41) Tetrahydrofuran	(1)	5.496	42	366948	12.677
42) Chloroform	(1)	5.531	83	785366	11.812
43) 1,1,1-Trichloroethane	(1)	5.675	97	724804	10.762
44) Cyclohexane	(1)	5.710	56	531017	11.464
45) Carbon Tetrachloride	(1)	5.811	117	705903	10.677
46) Benzene	(2)	5.983	78	1156242	11.510
47) 1,2-Dichloroethane	(2)	6.011	62	506822	12.413
48) Isooctane	(2)	6.033	57	1669938	12.010
49) Tert-Amyl Methyl Ether	(2)	6.069	73	867731	10.356
50) Heptane	(2)	6.176	43	576698	12.136
51)*1,4-Difluorobenzene	(2)	6.291	114	1168038	10.000
52) Trichloroethene	(2)	6.491	130	517323	10.366
53) Ethyl Acrylate	(2)	6.570	55	695355	10.937
36) 1,2-Dichloroethene (total)	(1)		61	974509	24.374
54) 1,2-Dichloropropane	(2)	6.670	63	414292	11.782
57) Methyl Methacrylate	(2)	6.749	69	364940	10.378
55) Dibromomethane	(2)	6.771	174	476655	9.869
56) 1,4-Dioxane	(2)	6.778	88	270228	10.582
58) Bromodichloromethane	(2)	6.885	83	806930	11.722
59) cis-1,3-Dichloropropene	(2)	7.215	75	651293	10.731
60) 4-Methyl-2-Pentanone	(2)	7.329	43	801053	12.118
61) Toluene	(3)	7.465	91	1412550	11.089
62) Octane	(3)	7.516	43	815011	12.301
63) trans-1,3-Dichloropropene	(3)	7.630	75	534144	10.635
65) Ethyl Methacrylate	(3)	7.673	69	597870	10.490
66) 1,1,2-Trichloroethane	(3)	7.773	97	496513	11.032
67) Tetrachloroethene	(3)	7.867	166	708916	9.945
68) 2-Hexanone	(3)	7.945	43	787967	12.364
69) Dibromochloromethane	(3)	8.067	127	618134	10.888
70) 1,2-Dibromoethane	(3)	8.160	107	777535	11.101
71)*Chlorobenzene-d5	(3)	8.497	117	1104188	10.000
72) Chlorobenzene	(3)	8.518	112	1151338	10.559
73) 1,1,1,2-Tetrachloroethane	(3)	8.569	131	565847	10.662
74) Ethylbenzene	(3)	8.583	91	1909166	11.205
75) m/p-Xylene	(3)	8.669	91	1528738	11.052
76) o-Xylene	(3)	8.970	91	1478222	10.811
78) Styrene	(3)	8.977	104	1103577	10.653

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 14:56 jeb07445

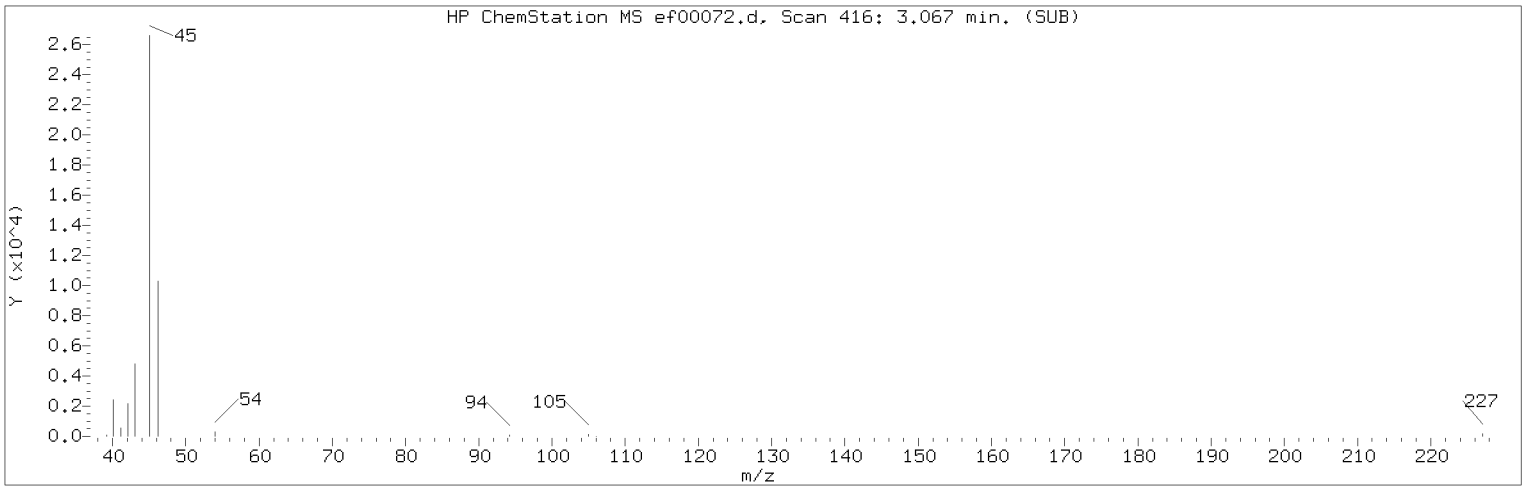
Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	760922	10.418
80) Cumene	(3)	9.235	105	1953699	10.021
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	1137664	11.865
81) Bromobenzene	(3)	9.493	156	687144	9.919
83) 1,2,3-Trichloropropane	(3)	9.514	110	344274	11.240
84) n-Propylbenzene	(3)	9.550	120	568155	10.139
86) 4-Ethyltoluene	(3)	9.629	105	2063744M	10.944
85) 2-Chlorotoluene	(3)	9.629	126	530280	10.281
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	1666626M	10.620
88) Alpha Methyl Styrene	(3)	9.844	118	819272	9.953
89) tert-Butylbenzene	(3)	9.922	119	1559303M	9.525
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	1664635	10.744
91) sec-Butylbenzene	(3)	10.087	105	2416370	10.307
92) 1,3-Dichlorobenzene	(3)	10.195	146	1201390	10.434
94) p-Isopropyltoluene	(3)	10.195	119	2049230	10.214
93) 1,4-Dichlorobenzene	(3)	10.259	146	1214758	10.351
95) Benzyl Chloride	(3)	10.359	91	936876	8.826
97) n-Butylbenzene	(3)	10.503	91	1956436	10.852
96) 1,2-Dichlorobenzene	(3)	10.546	146	1121693	10.236
98) Hexachloroethane	(3)	10.739	117	470448	11.045
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	577294	10.191
100) 1,2,4-Trichlorobenzene	(3)	11.763	180	878800	9.357
101) Hexachlorobutadiene	(3)	11.878	225	723049	9.002
102) Naphthalene	(3)	11.964	128	1969737	9.485
64) 1,3-Dichloropropene (total)	(3)		75	1185437	21.568
77) Xylene (total)	(3)		91	3006960	21.865

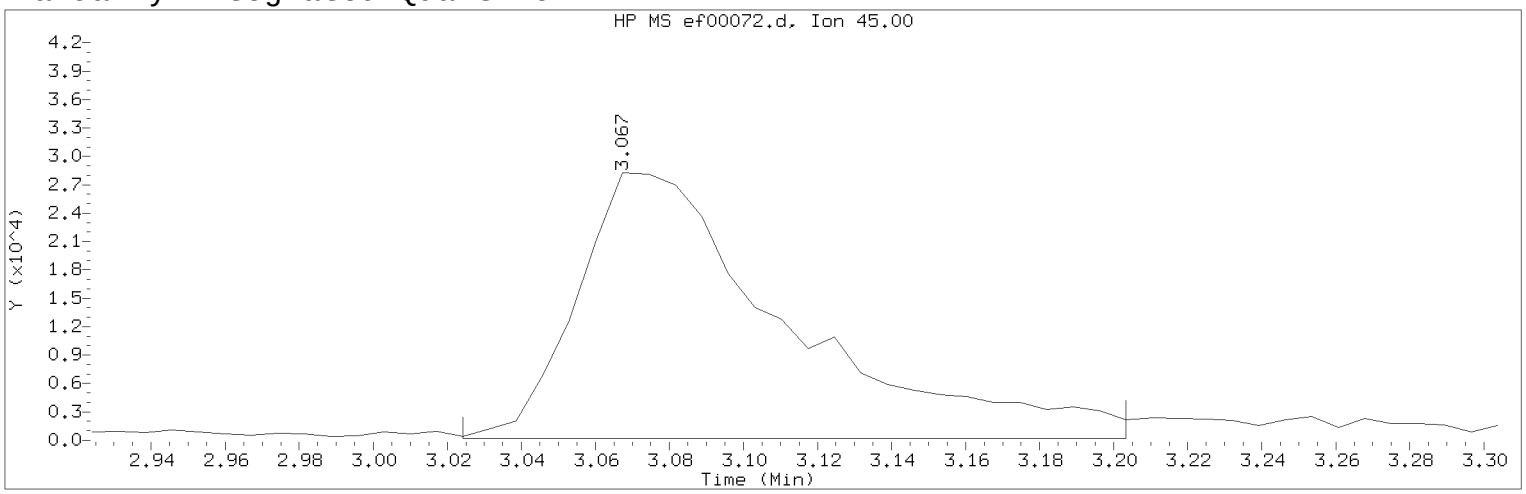
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 14:56 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

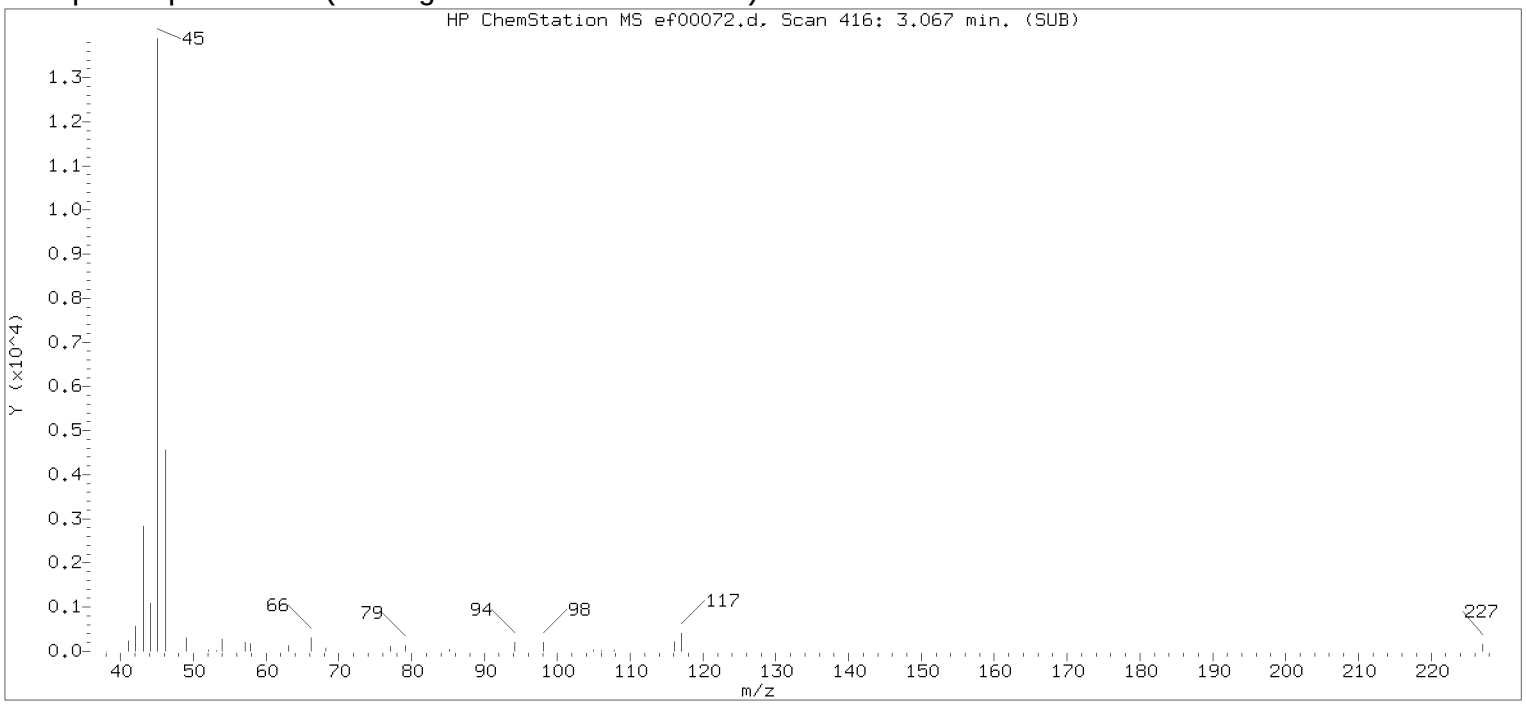
Compound Number : 14
Compound Name : Ethanol
Scan Number : 416
Retention Time (minutes): 3.067
Quant Ion : 45.00
Area (flag) : 111351M
Concentration (ppb(v)) : 11.9003
Integration start scan : 409 Integration stop scan: 434
Y at integration start : 191 Y at integration end: 191

Reason for manual integration: improper integration

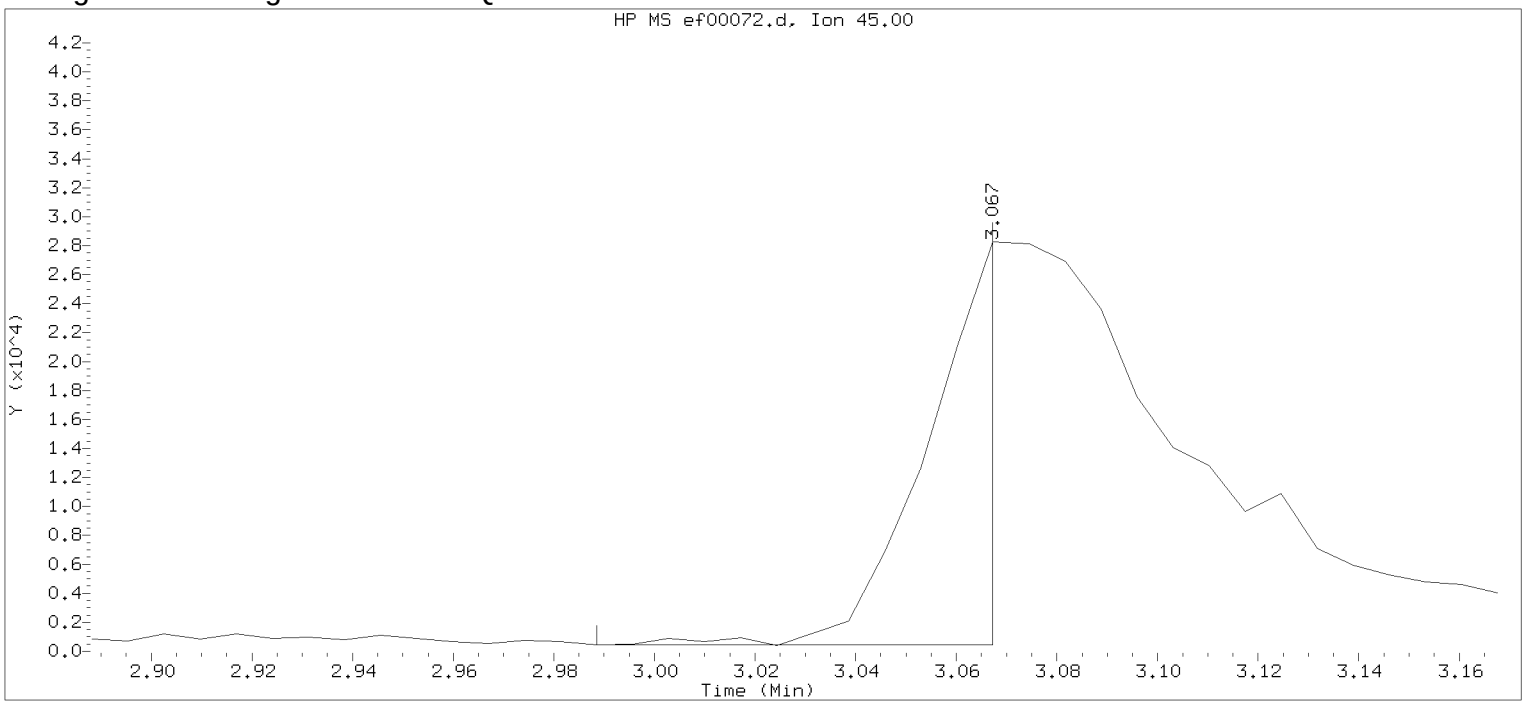
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

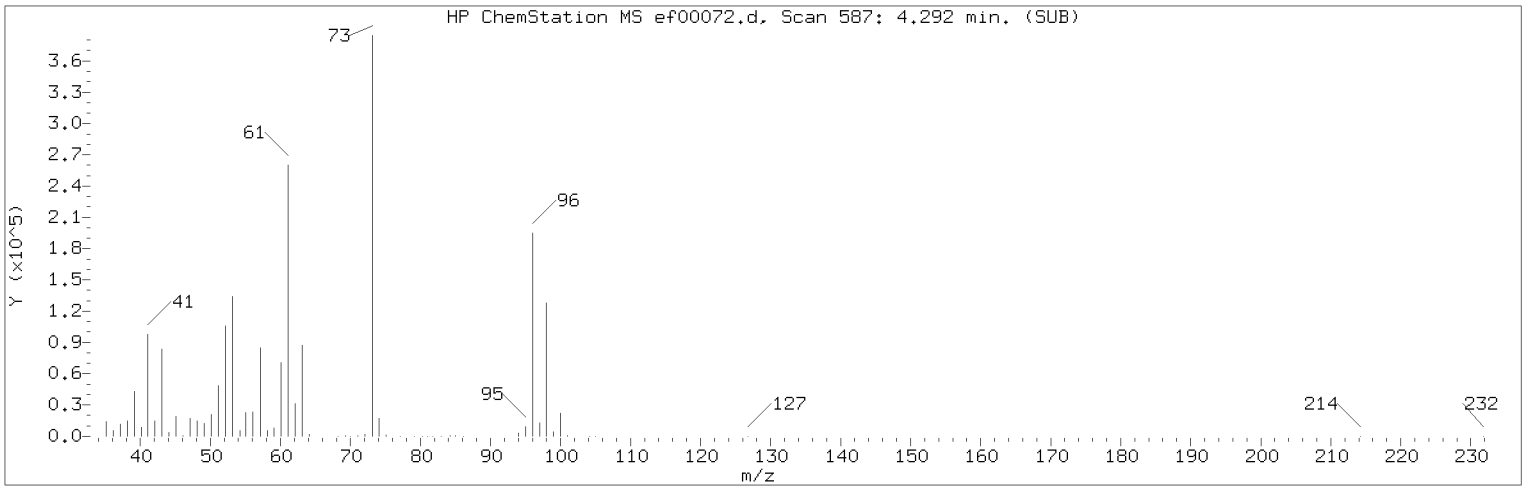
Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 13:27
Date, time and analyst ID of latest file update: 05-Jun-2018 14:48 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

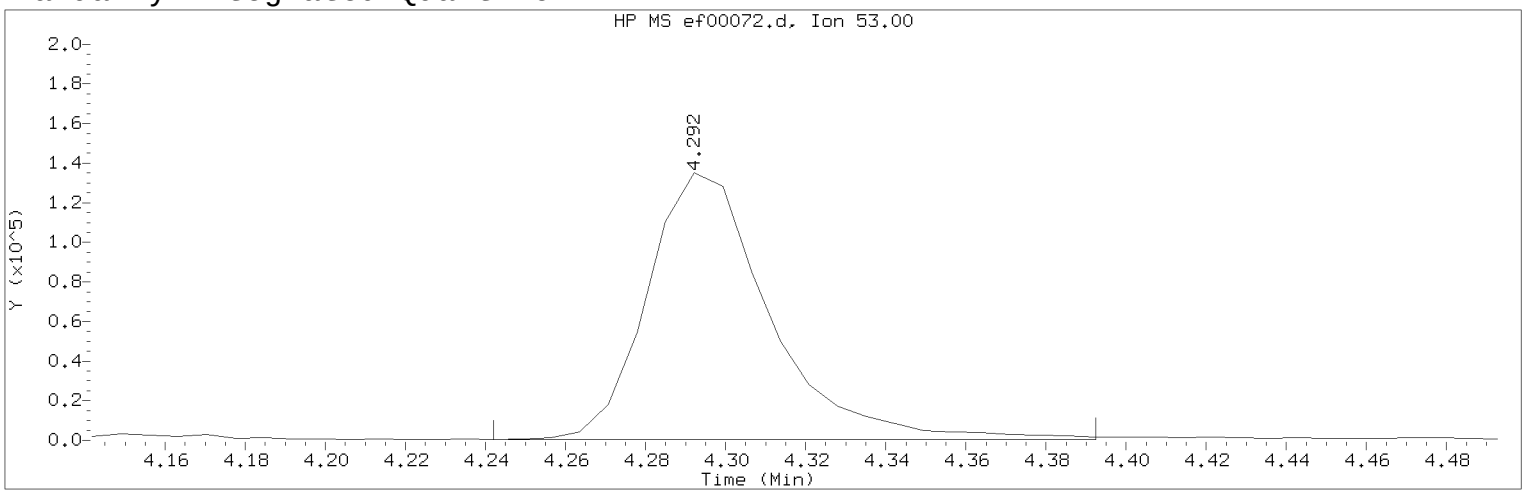
Compound Number : 14
Compound Name : Ethanol
Scan Number : 416
Retention Time (minutes): 3.067
Quant Ion : 45.00
Area : 24376
Concentration (ppb(v)) : 2.6052
Integration start scan : 404 Integration stop scan: 415
Y at integration start : 436 Y at integration end: 436

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 14:56 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

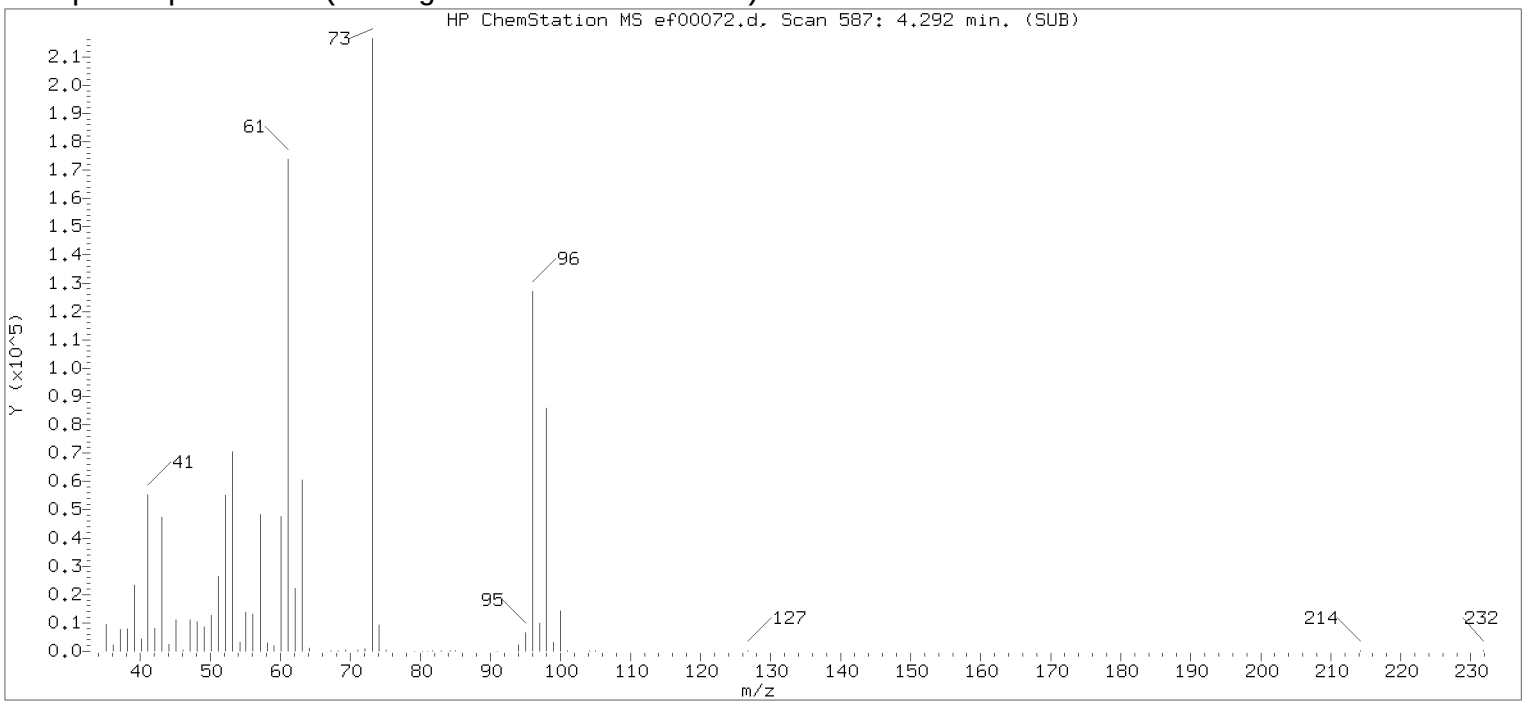
Compound Number : 27
Compound Name : Acrylonitrile
Scan Number : 587
Retention Time (minutes): 4.292
Quant Ion : 53.00
Area (flag) : 288410M
Concentration (ppb(v)) : 12.6551
Integration start scan : 579 Integration stop scan: 600
Y at integration start : 209 Y at integration end: 209

Reason for manual integration: improper integration

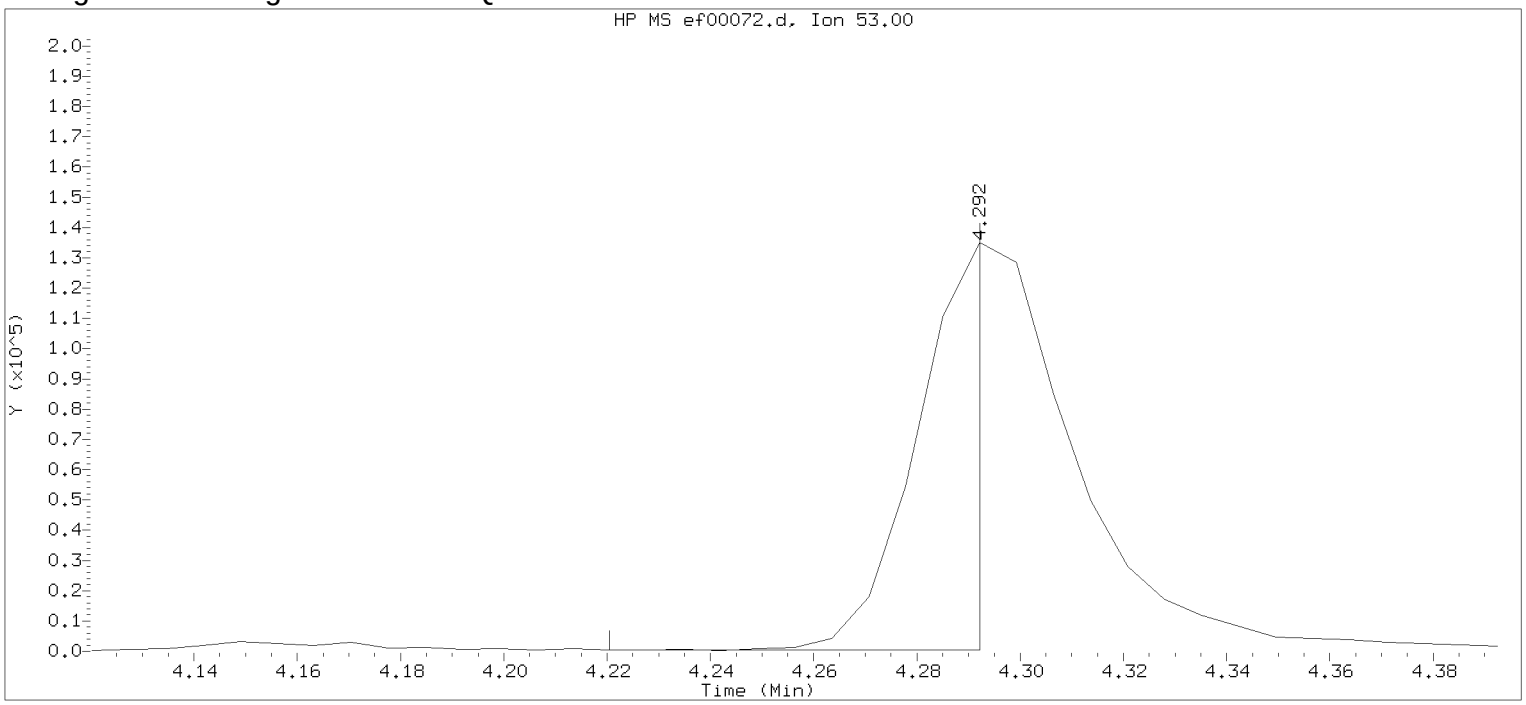
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

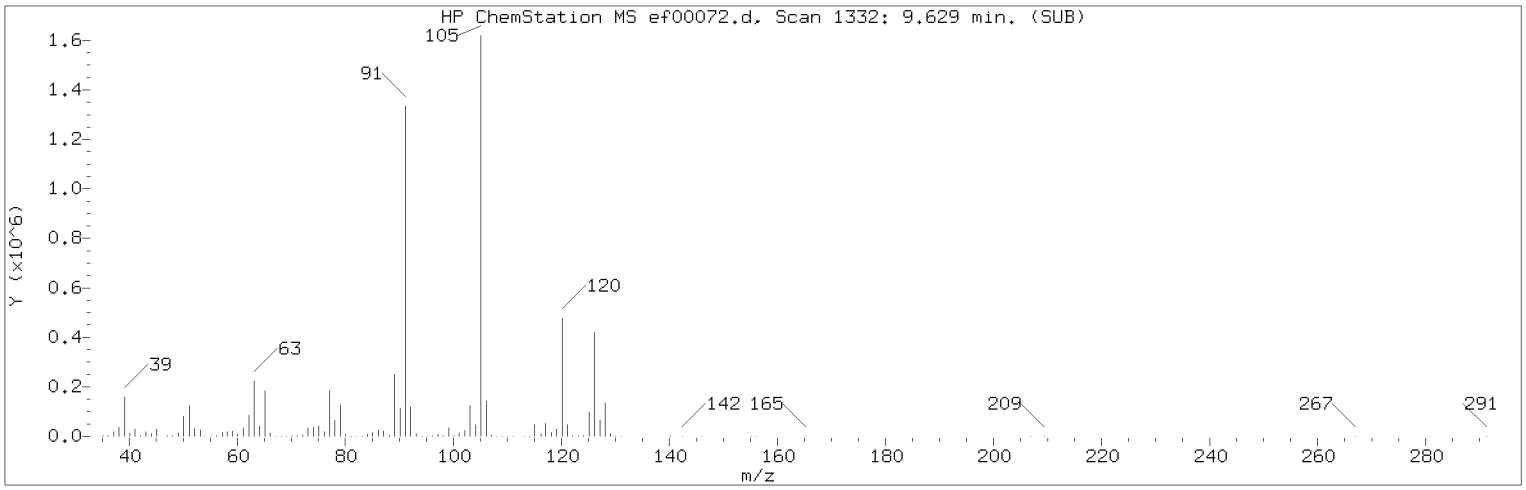
Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 13:27
Date, time and analyst ID of latest file update: 05-Jun-2018 14:48 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

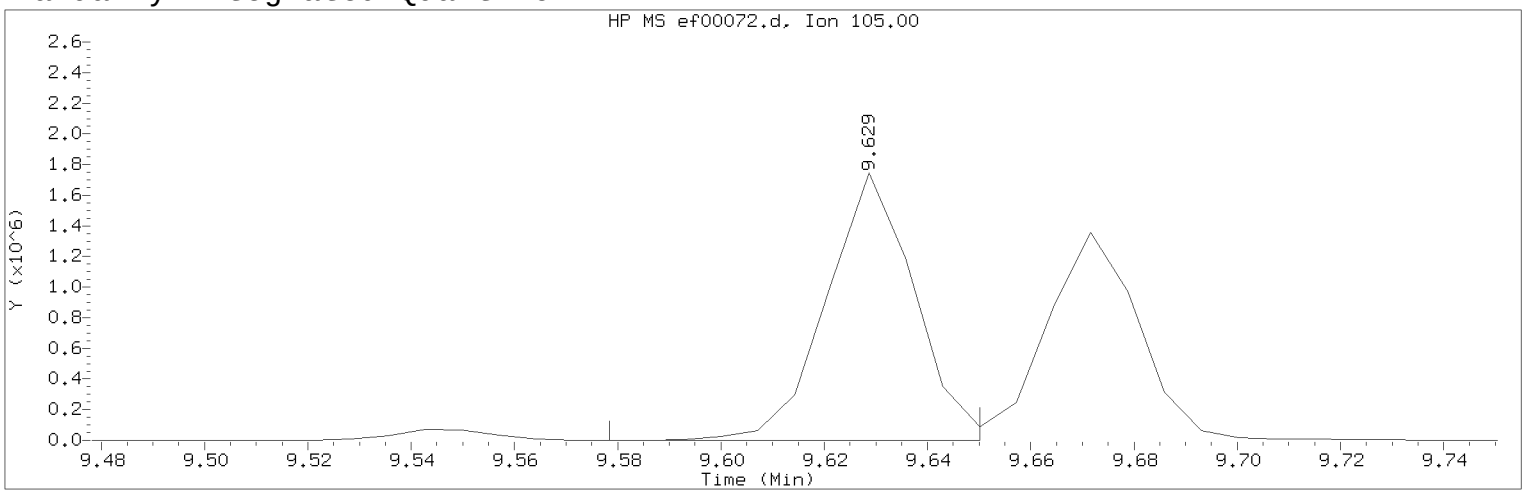
Compound Number : 27
Compound Name : Acrylonitrile
Scan Number : 587
Retention Time (minutes): 4.292
Quant Ion : 53.00
Area : 109482
Concentration (ppb(v)) : 4.8039
Integration start scan : 576 Integration stop scan: 586
Y at integration start : 356 Y at integration end: 356

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:21.
Target 3.5 esignature userGLE02jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 14:56 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

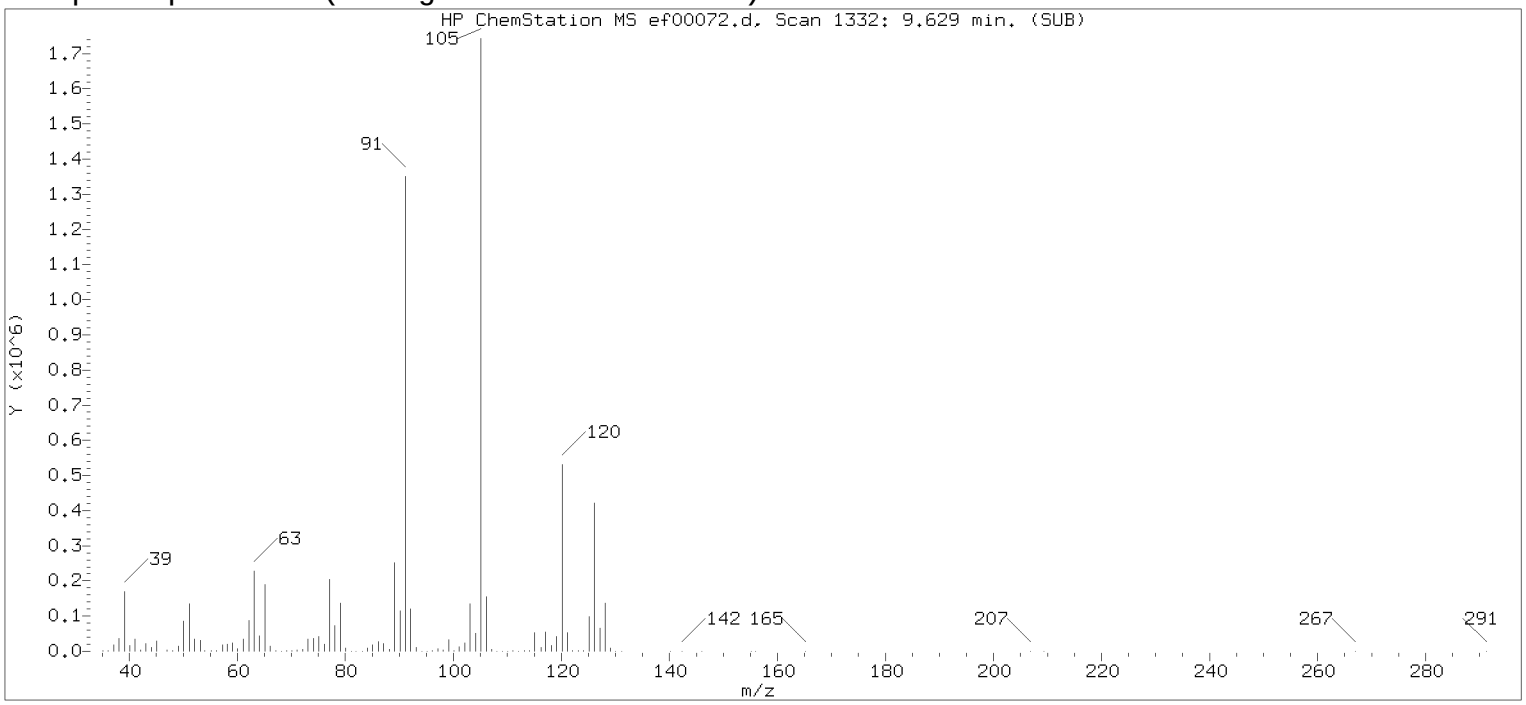
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 2063744M
Concentration (ppb(v)) : 10.9444
Integration start scan : 1324 Integration stop scan: 1334
Y at integration start : 254 Y at integration end: 254

Reason for manual integration: improper integration

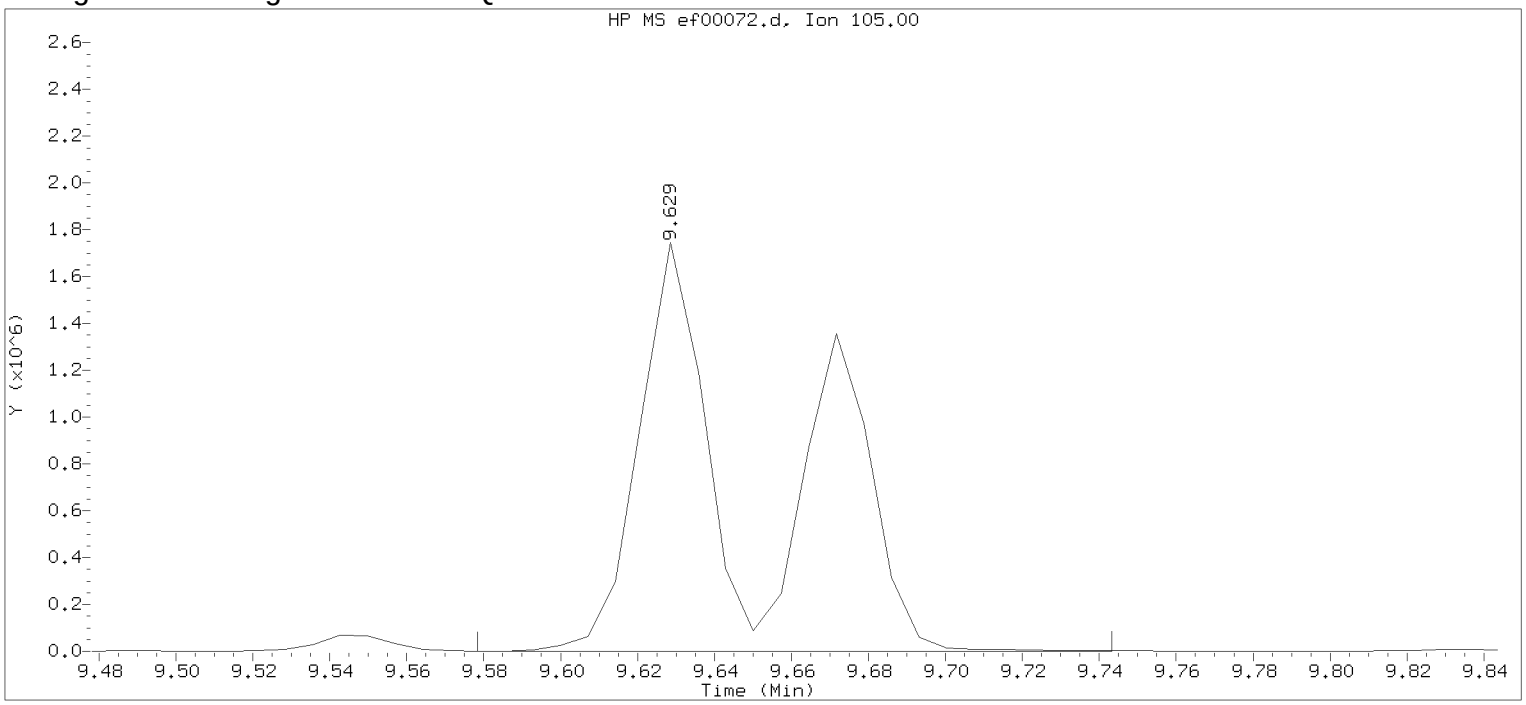
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

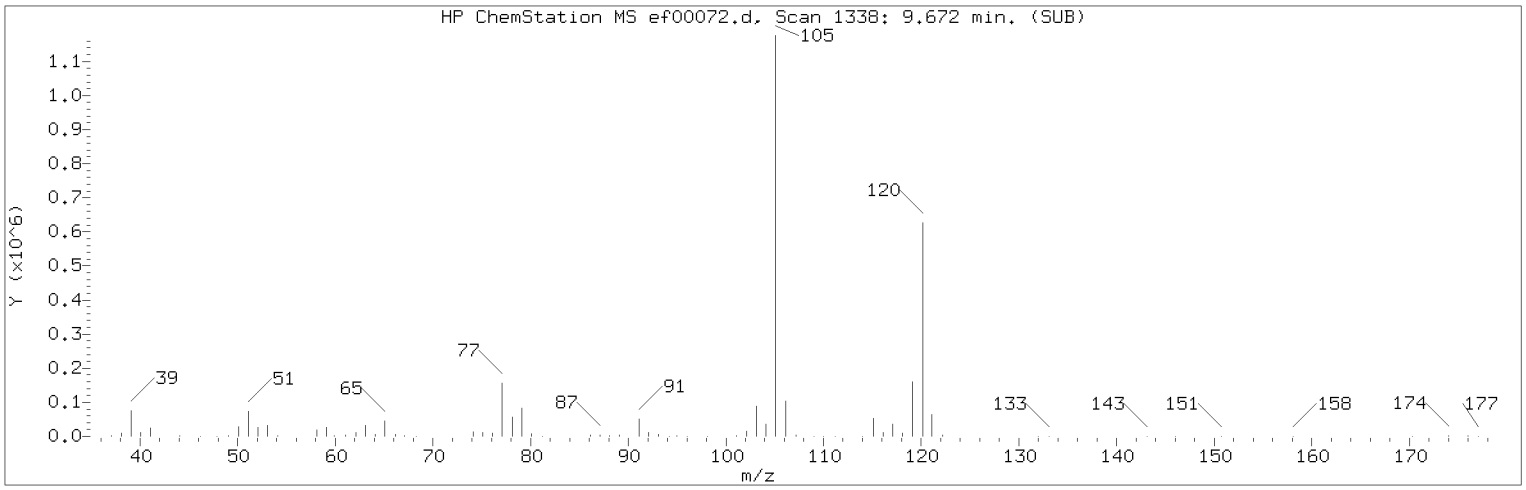
Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 13:27
Date, time and analyst ID of latest file update: 05-Jun-2018 14:48 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

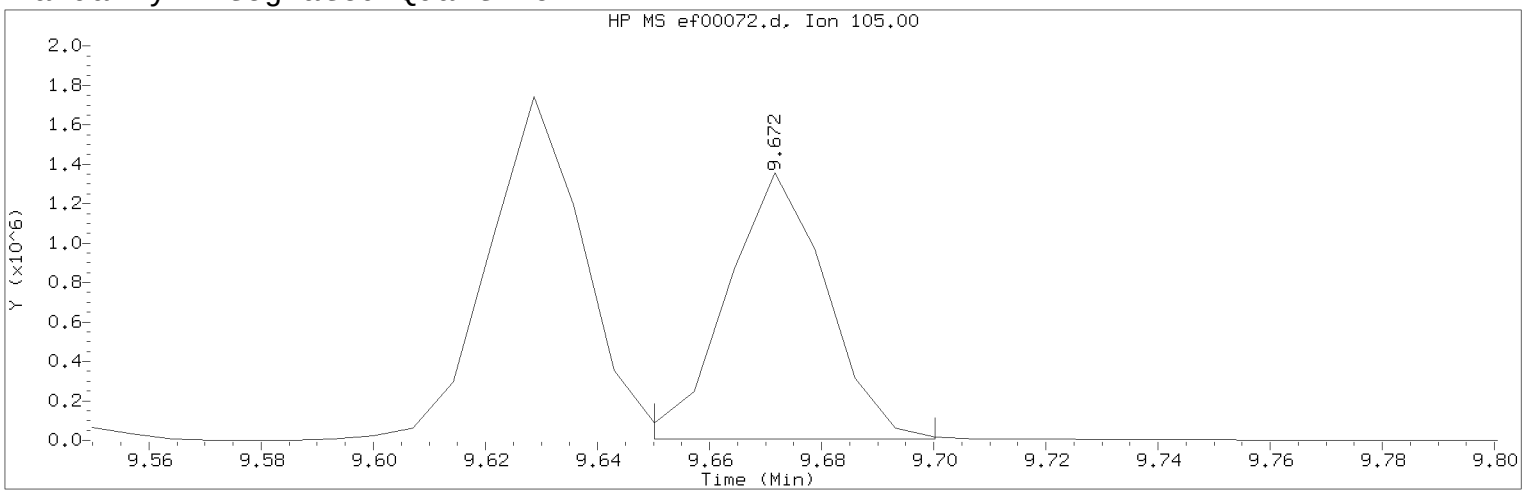
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 3724921
Concentration (ppb(v)) : 19.7540
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 254 Y at integration end: 254

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 14:56 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

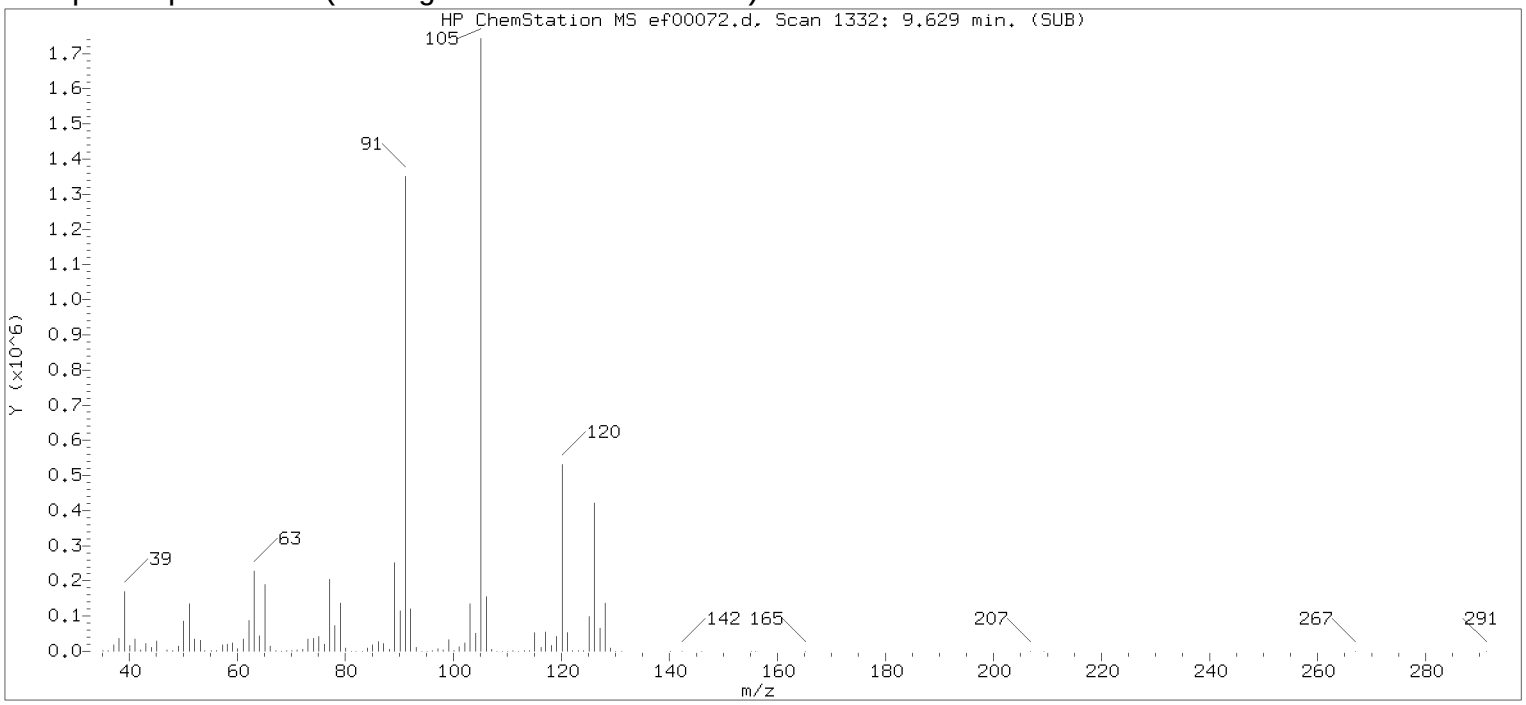
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 1666626M
Concentration (ppb(v)) : 10.6198
Integration start scan : 1334 Integration stop scan: 1341
Y at integration start : 6458 Y at integration end: 6458

Reason for manual integration: improper integration

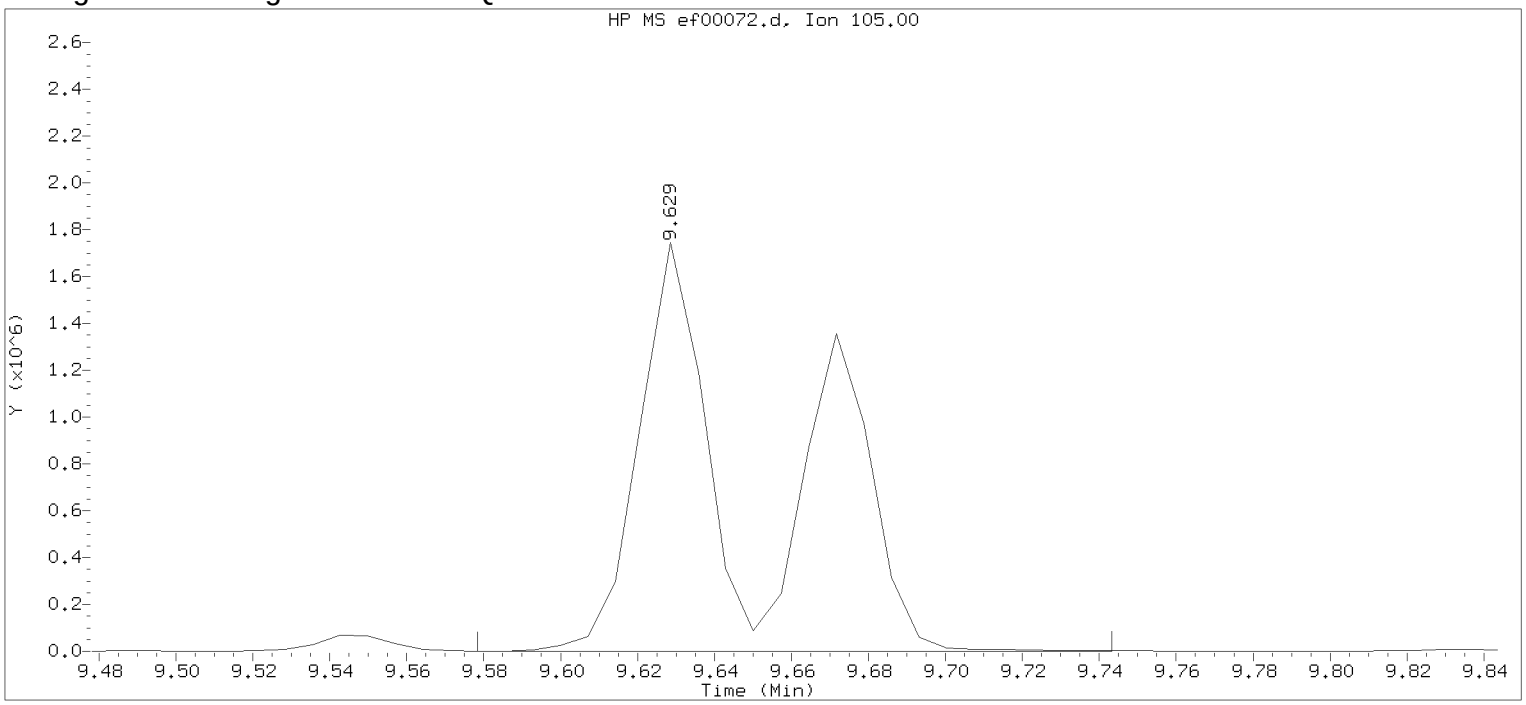
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

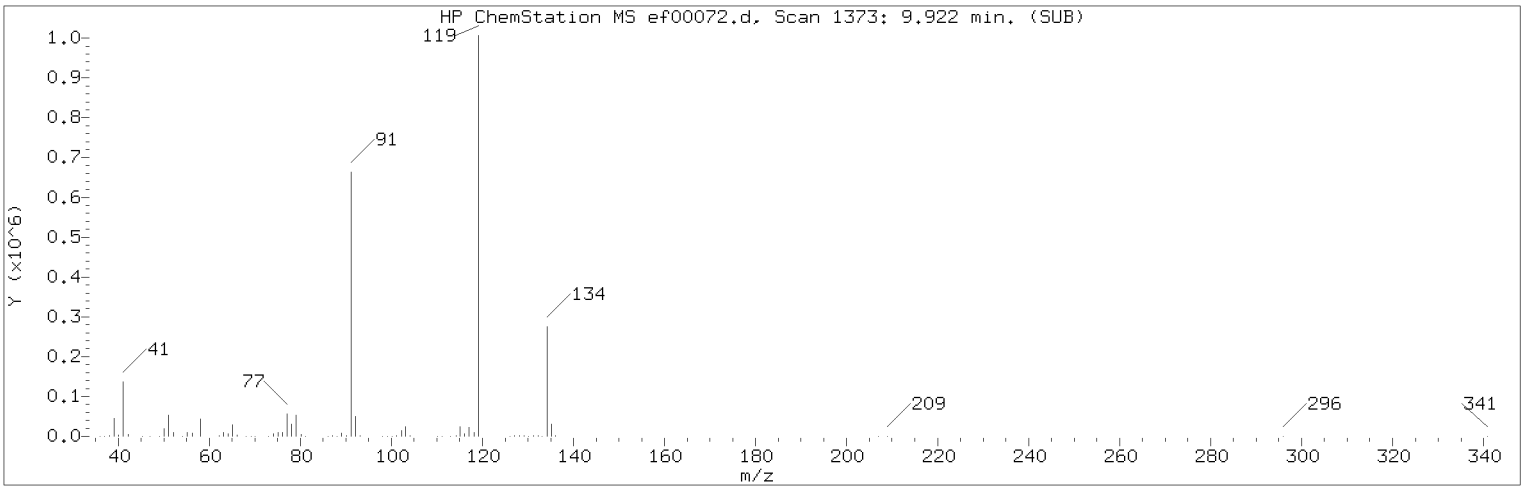
Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 13:27
Date, time and analyst ID of latest file update: 05-Jun-2018 14:48 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

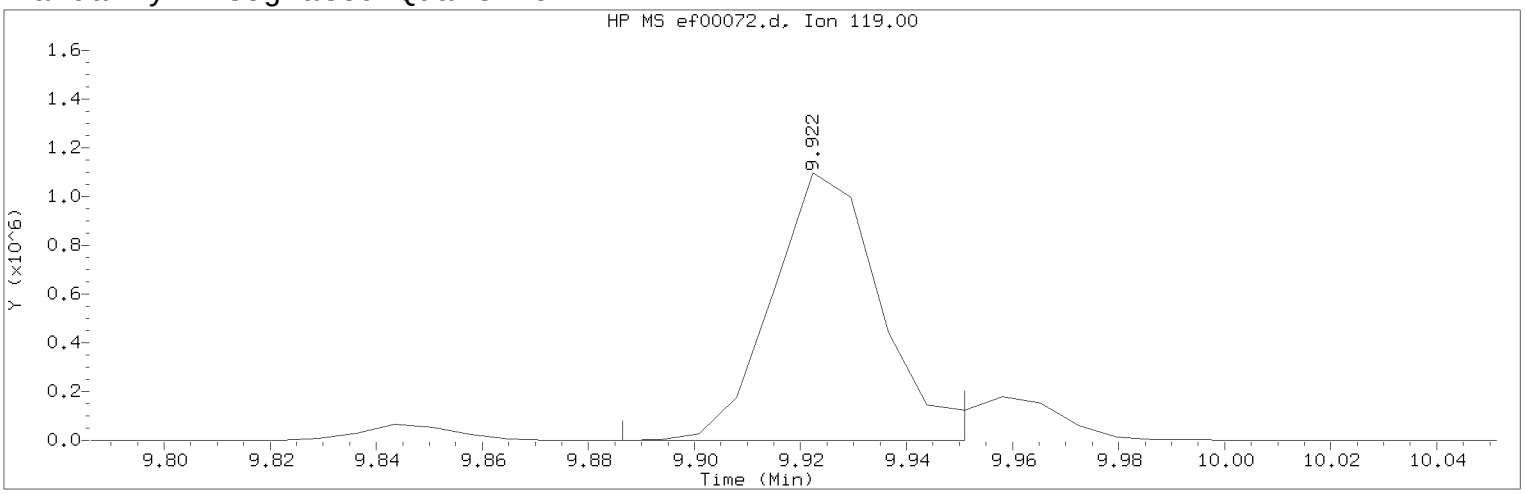
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 3724921
Concentration (ppb(v)) : 23.7353
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 254 Y at integration end: 254

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 14:56 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

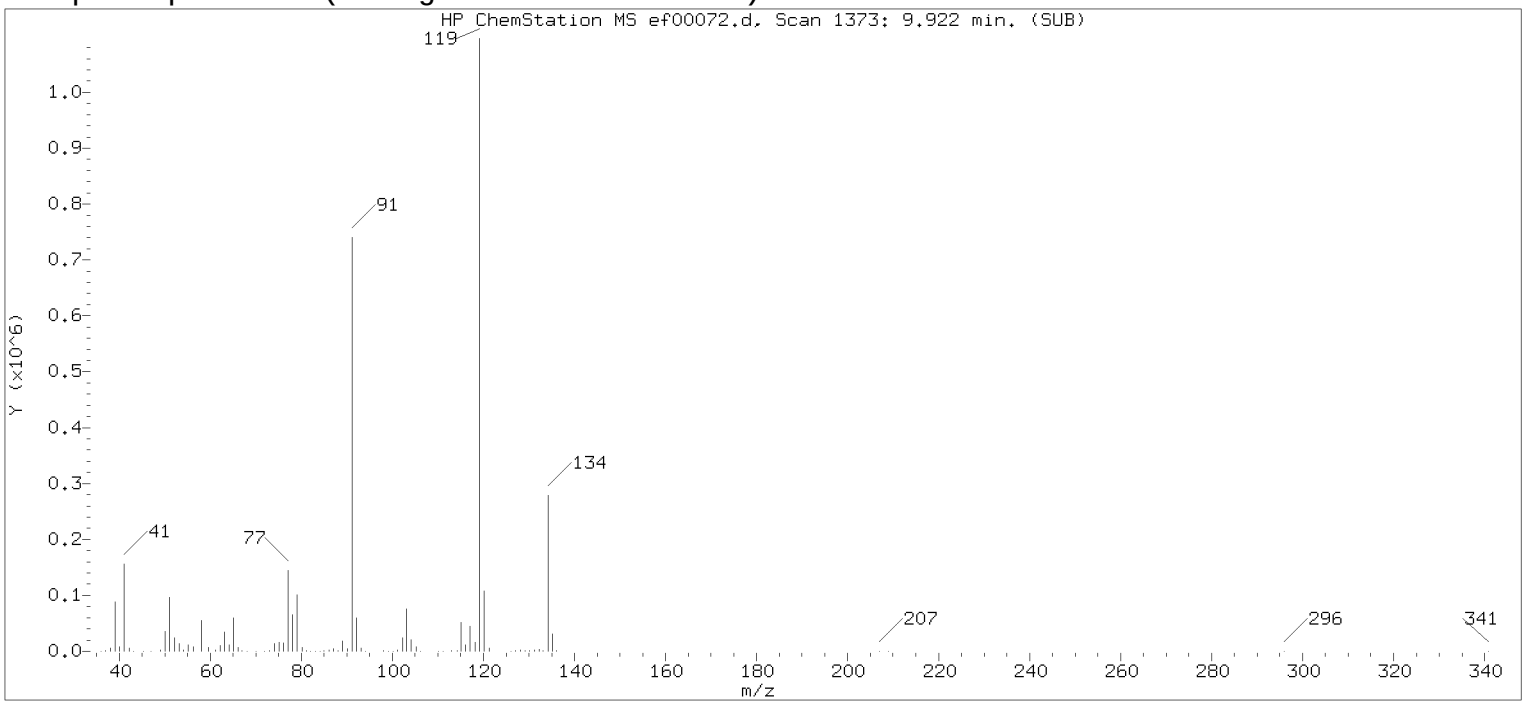
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 1559303M
Concentration (ppb(v)) : 9.5249
Integration start scan : 1367 Integration stop scan: 1376
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

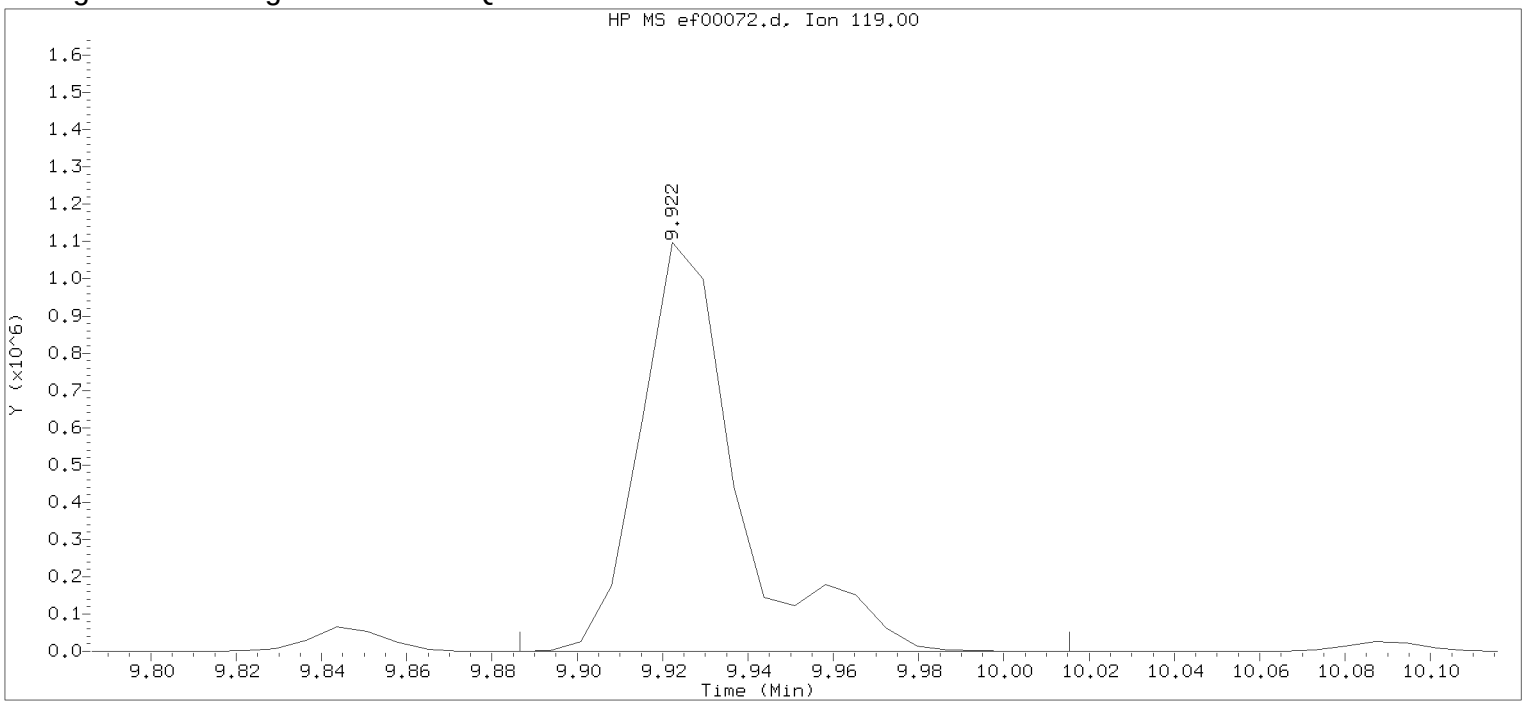
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00072.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 14:29 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 13:27
Date, time and analyst ID of latest file update: 05-Jun-2018 14:48 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 1736853
Concentration (ppb(v)) : 10.6095
Integration start scan : 1367 Integration stop scan: 1385
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun05.b/ef00074.d Injection date and time: **05-JUN-2018 16:05**
Data file Sample Info. Line: VBLKE02;200;E1815630AA;VBLKE02;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1815630AA**
Date, time and analyst ID of latest file update: 05-Jun-2018 16:33 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun05.b/ef00074.d**

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 05-JUN-2018 14:56
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun05.b/ef00072.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	5.467(0.000)	751	130	306216 (-4)	10.00		190832 - 445272
51) 1,4-Difluorobenzene	6.291(0.000)	866	114	1134666 (-3)	10.00		700823 - 1635253
71) Chlorobenzene-d5	8.497(0.000)	1174	117	1097278 (-1)	10.00		662513 - 1545863

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)			Not Detected					0.5	1
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)			Not Detected					0.2	1
7) 1,3-Butadiene	(1)			Not Detected					0.4	2
8) Bromomethane	(1)			Not Detected					0.5	1
9) Chloroethane	(1)			Not Detected					0.2	1
10) Bromoethene	(1)			Not Detected					0.4	2
11) Dichlorofluoromethane	(1)			Not Detected					0.2	1
12) Trichlorofluoromethane	(1)			Not Detected					0.2	1
13) Pentane	(1)			Not Detected					0.5	1
14) Ethanol	(1)			Not Detected					0.5	2
15) Freon123a	(1)			Not Detected					0.2	1
16) Acrolein	(1)			Not Detected					1	2
17) 1,1-Dichloroethene	(1)			Not Detected					0.2	1
18) Freon 113	(1)			Not Detected					0.5	2
19) Acetone	(1)			Not Detected					0.5	2
20) Methyl Iodide	(1)			Not Detected					0.2	1
21) Carbon Disulfide	(1)			Not Detected					0.5	1
22) Isopropanol	(1)			Not Detected					0.5	2
23) Acetonitrile	(1)			Not Detected					0.5	2
24) 3-Chloropropene	(1)			Not Detected					0.2	1
25) Methylene Chloride	(1)			Not Detected					0.2	1
26) tert-Butyl Alcohol	(1)			Not Detected					0.5	1
27) Acrylonitrile	(1)			Not Detected					0.5	2
28) trans-1,2-Dichloroethene	(1)			Not Detected					0.2	1
29) Methyl t-Butyl Ether	(1)			Not Detected					0.2	1
30) Hexane	(1)			Not Detected					0.2	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.2	1
32) Vinyl Acetate	(1)			Not Detected					1	1
33) Di-Isopropyl Ether	(1)			Not Detected					0.2	1
34) Ethyl Tert-Butyl Ether	(1)			Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.2	1
36) 1,2-Dichloroethene (total)	(1)			Not Detected					0.2	1
37) 2-Butanone	(1)			Not Detected					0.5	2
38) Ethyl Acetate	(1)			Not Detected					0.5	1
39) Methyl Acrylate	(1)			Not Detected					0.2	1
41) Tetrahydrofuran	(1)			Not Detected					0.5	1
42) Chloroform	(1)			Not Detected					0.2	1
43) 1,1,1-Trichloroethane	(1)			Not Detected					0.2	1
44) Cyclohexane	(1)			Not Detected					0.2	1

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:21. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun05.b/ef00074.d Injection date and time: **05-JUN-2018 16:05**
Data file Sample Info. Line: VBLKE02;200;E1815630AA;VBLKE02;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1815630AA**
Date, time and analyst ID of latest file update: 05-Jun-2018 16:33 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun05.b/ef00074.d**

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 05-JUN-2018 14:56
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun05.b/ef00072.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
45) Carbon Tetrachloride	(1)				Not Detected					0.2	1
46) Benzene	(2)				Not Detected					0.2	1
47) 1,2-Dichloroethane	(2)				Not Detected					0.2	1
48) Isooctane	(2)				Not Detected					0.2	1
49) Tert-Amyl Methyl Ether	(2)				Not Detected					0.2	1
50) Heptane	(2)				Not Detected					0.5	1
52) Trichloroethene	(2)				Not Detected					0.2	1
53) Ethyl Acrylate	(2)				Not Detected					0.2	1
54) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
55) Dibromomethane	(2)				Not Detected					0.2	1
56) 1,4-Dioxane	(2)				Not Detected					0.5	1
57) Methyl Methacrylate	(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)				Not Detected					0.2	1
62) Octane	(3)				Not Detected					0.2	1
63) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
64) 1,3-Dichloropropene (total)	(3)				Not Detected					0.2	1
65) Ethyl Methacrylate	(3)				Not Detected					0.2	1
66) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
67) Tetrachloroethene	(3)				Not Detected					0.2	1
68) 2-Hexanone	(3)				Not Detected					0.5	2
69) Dibromochloromethane	(3)				Not Detected					0.2	1
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)				Not Detected					0.2	1
75) m/p-Xylene	(3)				Not Detected					0.2	1
76) o-Xylene	(3)				Not Detected					0.2	1
77) Xylene (total)	(3)				Not Detected					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
84) n-Propylbenzene	(3)				Not Detected					0.5	1
85) 2-Chlorotoluene	(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
88) Alpha Methyl Styrene	(3)				Not Detected					0.2	1
89) tert-Butylbenzene	(3)				Not Detected					0.5	1
90) 1,2,4-Trimethylbenzene	(3)				Not Detected					0.2	1
91) sec-Butylbenzene	(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
94) p-Isopropyltoluene	(3)				Not Detected					0.2	1
95) Benzyl Chloride	(3)				Not Detected					0.5	1
96) 1,2-Dichlorobenzene	(3)				Not Detected					0.2	1
97) n-Butylbenzene	(3)				Not Detected					0.2	1
98) Hexachloroethane	(3)				Not Detected					0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)				Not Detected					0.2	1
100) 1,2,4-Trichlorobenzene	(3)				Not Detected					0.5	2

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Data file: /chem/HP22820.i/18jun05.b/ef00074.d Injection date and time: **05-JUN-2018 16:05**
Data file Sample Info. Line: VBLKE02;200;E1815630AA;VBLKE02;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1815630AA**
Date, time and analyst ID of latest file update: 05-Jun-2018 16:33 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun05.b/ef00074.d**

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 05-JUN-2018 14:56
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun05.b/ef00072.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
101) Hexachlorobutadiene	(3)				Not Detected					0.4	2
102) Naphthalene	(3)				Not Detected					0.4	1

Total number of targets = 99

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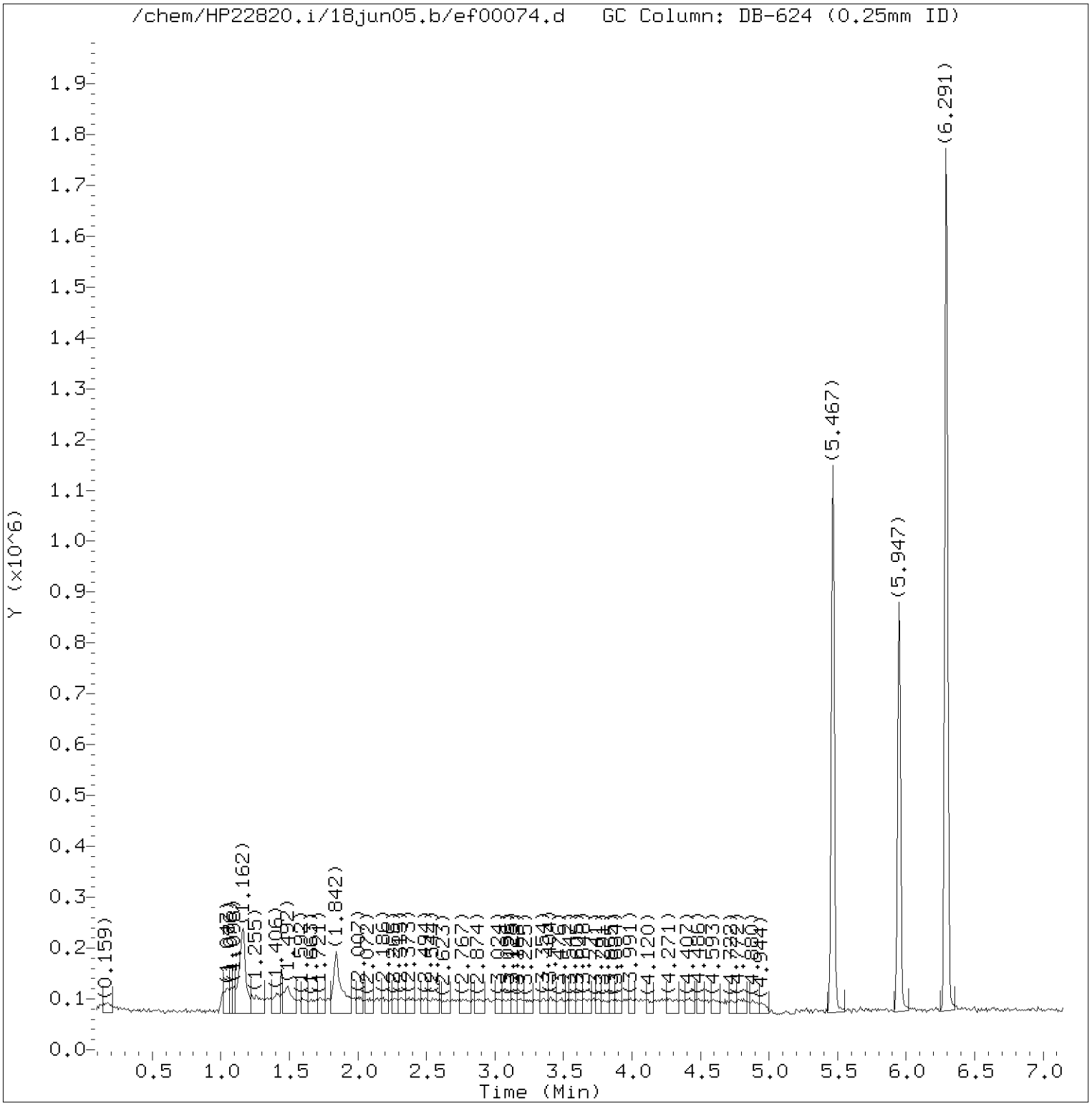
Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00074.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 16:05 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 16:33 jeb07445

Sample Name: VBLKE02 Lab Sample ID: VBLKE02

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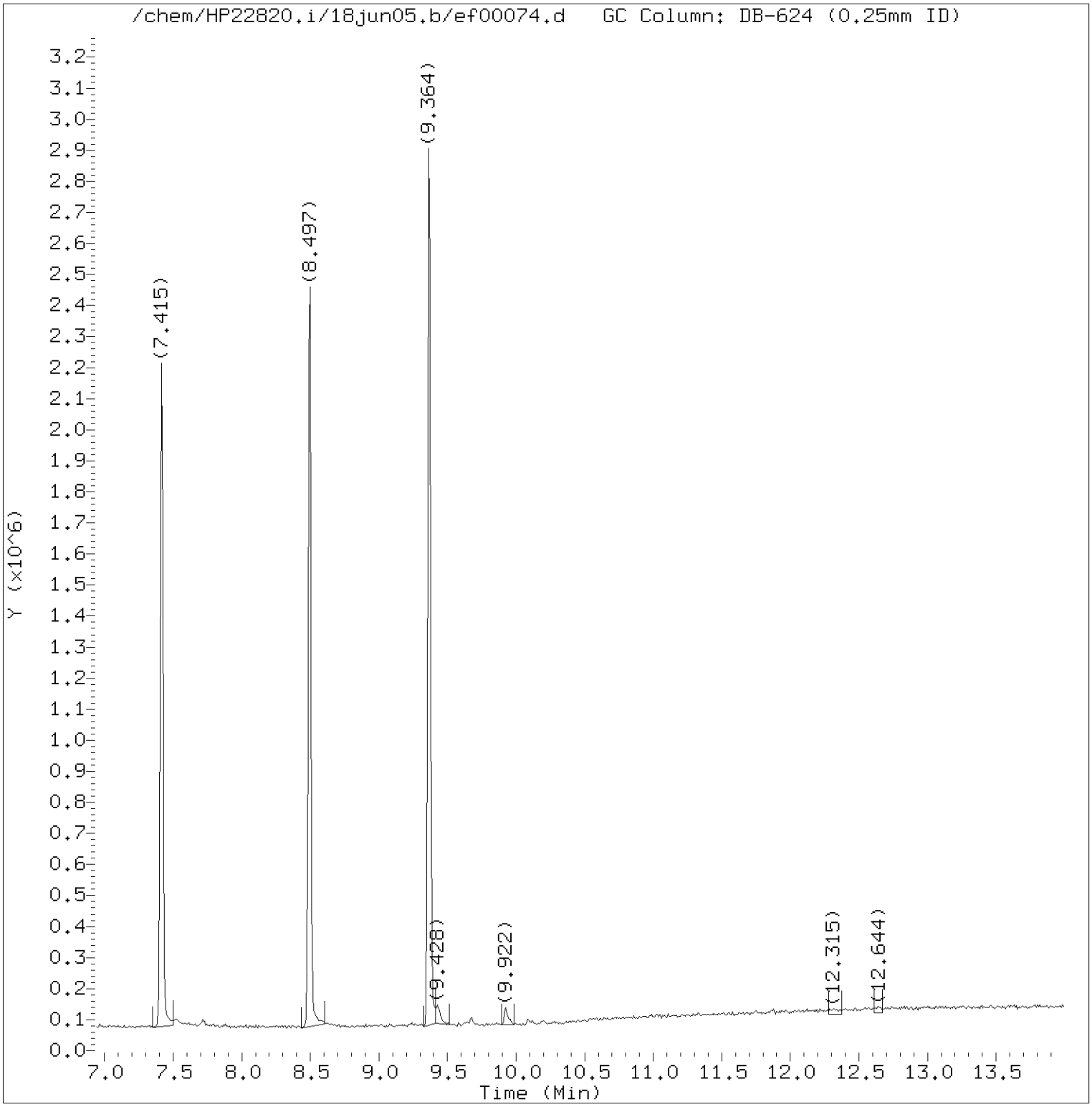
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00074.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 16:05 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 16:33 jeb07445

Sample Name: VBLKE02 Lab Sample ID: VBLKE02

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on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00074.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 16:05 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 16:33 jeb07445

Sample Name: VBLKE02 Lab Sample ID: VBLKE02

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	306216	10.000
51)*1,4-Difluorobenzene	(2)	6.291	114	1134666	10.000
71)*Chlorobenzene-d5	(3)	8.497	117	1097278	10.000

* = Compound is an internal standard.

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on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun05.b/ef00075.d Injection date and time: **05-JUN-2018 16:39**
Data file Sample Info. Line: LCSE02;200;E1815630AA;LCSE02;0;3;LCS; Instrument ID: **HP22820.i** Batch: **E1815630AA**
Date, time and analyst ID of latest file update: 05-Jun-2018 17:21 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun05.b/ef00074.d**

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 05-JUN-2018 14:56
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun05.b/ef00072.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	5.467(0.000)	751	130	299832 (-6)	10.00		190832 - 445272
51) 1,4-Difluorobenzene	6.291(0.000)	866	114	1092749 (-6)	10.00		700823 - 1635253
71) Chlorobenzene-d5	8.497(0.000)	1174	117	1043540 (-5)	10.00		662513 - 1545863

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)	1.606(-0.000)	41	246172	13.242	13.24			0.5	1
2) Dichlorodifluoromethane	(1)	1.642(-0.000)	85	870543	12.081	12.08			0.2	1
3) Chlorodifluoromethane	(1)	1.663(-0.000)	51	545232	14.279	14.28			0.2	1
4) Freon 114	(1)	1.771(-0.000)	85	882569	11.970	11.97			0.2	1
5) Chloromethane	(1)	1.850(0.001)	50	311528	14.293	14.29			0.2	1
6) Vinyl Chloride	(1)	1.964(-0.000)	62	338387	12.649	12.65			0.2	1
7) 1,3-Butadiene	(1)	2.000(-0.000)	54	231600	11.932	11.93			0.4	2
8) Bromomethane	(1)	2.344(0.001)	94	323191	11.747	11.75			0.5	1
9) Chloroethane	(1)	2.466(-0.000)	64	183781	12.155	12.15			0.2	1
10) Bromoethene	(1)	2.688(0.001)	106	314784	10.770	10.77			0.4	2
11) Dichlorofluoromethane	(1)	2.724(0.001)	67	762135	13.069	13.07			0.2	1
12) Trichlorofluoromethane	(1)	2.767(-0.000)	101	899014	11.771	11.77			0.2	1
13) Pentane	(1)	2.867(0.001)	43	618837	15.089	15.09			0.5	1
14) Ethanol	(1)	3.067(-0.000)	45	96112	10.896	10.90			0.5	2
15) Freon123a	(1)	3.196(-0.000)	67	707262	13.951	13.95			0.2	1
16) Acrolein	(1)	3.332(-0.000)	56	126002	12.063	12.06			1	2
17) 1,1-Dichloroethene	(1)	3.418(-0.000)	61	524508	12.370	12.37			0.2	1
18) Freon 113	(1)	3.440(-0.001)	103	476717	11.149	11.15			0.5	2
19) Acetone	(1)	3.526(-0.001)	43	470095	13.337	13.34			0.5	2
20) Methyl Iodide	(1)	3.598(0.001)	142	795039	9.696	9.70			0.2	1
21) Carbon Disulfide	(1)	3.655(-0.000)	76	934654	11.770	11.77			0.5	1
22) Isopropanol	(1)	3.705(-0.000)	45	386832	10.643	10.64			0.5	2
23) Acetonitrile	(1)	3.870(-0.000)	40	194704	11.378	11.38			0.5	2
24) 3-Chloropropene	(1)	3.862(-0.000)	76	159502	12.820	12.82			0.2	1
25) Methylene Chloride	(1)	4.013(-0.000)	84	311372	12.896	12.90			0.2	1
26) tert-Butyl Alcohol	(1)	4.156(-0.000)	59	479563	9.760	9.76			0.5	1
27) Acrylonitrile	(1)	4.292(-0.000)	53	283261	13.184	13.18			0.5	2
28) trans-1,2-Dichloroethene	(1)	4.285(-0.000)	61	471207	12.288	12.29			0.2	1
29) Methyl t-Butyl Ether	(1)	4.285(0.001)	73	921775	11.264	11.26			0.2	1
30) Hexane	(1)	4.557(0.001)	57	591058	14.035	14.04			0.2	1
31) 1,1-Dichloroethane	(1)	4.715(-0.000)	63	611530	12.239	12.24			0.2	1
32) Vinyl Acetate	(1)	4.779(-0.000)	86	70176	9.605	9.61			1	1
33) Di-Isopropyl Ether	(1)	4.779(-0.000)	45	1025067	12.317	12.32			0.2	1
34) Ethyl Tert-Butyl Ether	(1)	5.116(0.000)	59	787511	9.916	9.92			0.2	1
35) cis-1,2-Dichloroethene	(1)	5.252(0.000)	61	444209	11.999	12.00			0.2	1
36) 1,2-Dichloroethene (total)	(1)		61	915416	24.287	24.29			0.2	1
37) 2-Butanone	(1)	5.281(0.000)	72	168712	10.949	10.95			0.5	2
38) Ethyl Acetate	(1)	5.331(-0.001)	70	70552	9.279	9.28			0.5	1
39) Methyl Acrylate	(1)	5.360(0.000)	55	521485	11.163	11.16			0.2	1
41) Tetrahydrofuran	(1)	5.496(0.000)	42	352838	12.930	12.93			0.5	1
42) Chloroform	(1)	5.532(0.000)	83	738613	11.784	11.78			0.2	1
43) 1,1,1-Trichloroethane	(1)	5.675(0.000)	97	672280	10.589	10.59			0.2	1
44) Cyclohexane	(1)	5.711(0.000)	56	515958	11.815	11.82			0.2	1

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun05.b/ef00075.d Injection date and time: **05-JUN-2018 16:39**
Data file Sample Info. Line: LCSE02;200;E1815630AA;LCSE02;0;3;LCS; Instrument ID: **HP22820.i** Batch: **E1815630AA**
Date, time and analyst ID of latest file update: 05-Jun-2018 17:21 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun05.b/ef00074.d**

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 05-JUN-2018 14:56
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun05.b/ef00072.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
45) Carbon Tetrachloride	(1)	5.811(0.000)	117	662383	10.627	10.63			0.2	1
46) Benzene	(2)	5.983(0.000)	78	1300722	13.840	13.84			0.2	1
47) 1,2-Dichloroethane	(2)	6.011(0.000)	62	492097	12.882	12.88			0.2	1
48) Isooctane	(2)	6.033(0.000)	57	1577792	12.129	12.13			0.2	1
49) Tert-Amyl Methyl Ether	(2)	6.069(0.000)	73	766987	9.785	9.78			0.2	1
50) Heptane	(2)	6.176(0.000)	43	565261	12.715	12.72			0.5	1
52) Trichloroethene	(2)	6.491(0.000)	130	489497	10.484	10.48			0.2	1
53) Ethyl Acrylate	(2)	6.570(0.000)	55	628090	10.560	10.56			0.2	1
54) 1,2-Dichloropropane	(2)	6.670(0.000)	63	388830	11.819	11.82			0.2	1
55) Dibromomethane	(2)	6.771(0.000)	174	449512	9.949	9.95			0.2	1
56) 1,4-Dioxane	(2)	6.771(0.001)	88	256958	10.756	10.76			0.5	1
57) Methyl Methacrylate	(2)	6.749(0.000)	69	331020	10.062	10.06			0.2	1
58) Bromodichloromethane	(2)	6.885(0.000)	83	746418	11.590	11.59			0.2	1
59) cis-1,3-Dichloropropene	(2)	7.215(0.000)	75	587184	10.341	10.34			0.2	1
60) 4-Methyl-2-Pentanone	(2)	7.329(0.000)	43	757405	12.248	12.25			0.5	2
61) Toluene	(3)	7.466(-0.000)	91	1526093	12.676	12.68			0.2	1
62) Octane	(3)	7.516(-0.000)	43	887611	14.175	14.18			0.2	1
63) trans-1,3-Dichloropropene	(3)	7.630(-0.000)	75	454795	9.581	9.58			0.2	1
64) 1,3-Dichloropropene (total)	(3)		75	1041979	19.923	19.92			0.2	1
65) Ethyl Methacrylate	(3)	7.673(-0.000)	69	516275	9.584	9.58			0.2	1
66) 1,1,2-Trichloroethane	(3)	7.774(-0.000)	97	461022	10.838	10.84			0.2	1
67) Tetrachloroethene	(3)	7.867(-0.000)	166	648802	9.631	9.63			0.2	1
68) 2-Hexanone	(3)	7.945(0.000)	43	692896	11.504	11.50			0.5	2
69) Dibromochloromethane	(3)	8.067(-0.000)	127	562090	10.477	10.48			0.2	1
70) 1,2-Dibromoethane	(3)	8.160(-0.000)	107	694838	10.497	10.50			0.2	1
72) Chlorobenzene	(3)	8.518(0.000)	112	1030198	9.998	10.00			0.2	1
73) 1,1,1,2-Tetrachloroethane	(3)	8.576(-0.000)	131	510698	10.182	10.18			0.2	1
74) Ethylbenzene	(3)	8.583(0.000)	91	1936882	12.029	12.03			0.2	1
75) m/p-Xylene	(3)	8.669(0.000)	91	1744319	13.344	13.34			0.2	1
76) o-Xylene	(3)	8.970(0.000)	91	1561111	12.081	12.08			0.2	1
77) Xylene (total)	(3)		91	3305430	25.425	25.43			0.2	1
78) Styrene	(3)	8.977(0.000)	104	998532	10.199	10.20			0.2	1
79) Bromoform	(3)	9.142(0.000)	173	668494	9.684	9.68			0.2	1
80) Cumene	(3)	9.235(0.000)	105	1759409	9.549	9.55			0.2	1
81) Bromobenzene	(3)	9.486(0.000)	156	602359	9.200	9.20			0.2	1
82) 1,1,2,2-Tetrachloroethane	(3)	9.464(0.000)	83	1020496	11.261	11.26			0.2	1
83) 1,2,3-Trichloropropane	(3)	9.507(0.000)	110	304890	10.532	10.53			0.2	1
84) n-Propylbenzene	(3)	9.543(0.000)	120	492172	9.294	9.29			0.5	1
85) 2-Chlorotoluene	(3)	9.622(0.000)	126	475328	9.751	9.75			0.2	1
86) 4-Ethyltoluene	(3)	9.622(0.000)	105	1762709M	9.891	9.89			0.2	1
87) 1,3,5-Trimethylbenzene	(3)	9.665(0.000)	105	1490904M	10.052	10.05			0.2	1
88) Alpha Methyl Styrene	(3)	9.844(0.000)	118	698590	8.980	8.98			0.2	1
89) tert-Butylbenzene	(3)	9.922(0.000)	119	1325169M	8.565	8.57			0.5	1
90) 1,2,4-Trimethylbenzene	(3)	9.958(0.000)	105	1418401	9.687	9.69			0.2	1
91) sec-Butylbenzene	(3)	10.080(0.000)	105	2082057	9.397	9.40			0.2	1
92) 1,3-Dichlorobenzene	(3)	10.188(0.000)	146	1021405	9.387	9.39			0.2	1
93) 1,4-Dichlorobenzene	(3)	10.252(0.000)	146	1025990	9.251	9.25			0.2	1
94) p-Isopropyltoluene	(3)	10.188(0.000)	119	1704308	8.989	8.99			0.2	1
95) Benzyl Chloride	(3)	10.359(0.000)	91	681001	6.788	6.79			0.5	1
96) 1,2-Dichlorobenzene	(3)	10.538(0.000)	146	935312	9.031	9.03			0.2	1
97) n-Butylbenzene	(3)	10.496(0.000)	91	1584984	9.302	9.30			0.2	1
98) Hexachloroethane	(3)	10.732(0.000)	117	386042	9.590	9.59			0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)	11.133(0.000)	157	421282	7.869	7.87			0.2	1
100) 1,2,4-Trichlorobenzene	(3)	11.756(0.000)	180	585819	6.600	6.60			0.5	2

M = Compound was manually integrated.

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun05.b/ef00075.d Injection date and time: **05-JUN-2018 16:39**
Data file Sample Info. Line: LCSE02;200;E1815630AA;LCSE02;0;3;LCS; Instrument ID: **HP22820.i** Batch: **E1815630AA**
Date, time and analyst ID of latest file update: 05-Jun-2018 17:21 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun05.b/ef00074.d**

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 05-JUN-2018 14:56
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun05.b/ef00072.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
101) Hexachlorobutadiene	(3)	11.871(0.000)	225	499609	6.582	6.58			0.4	2
102) Naphthalene	(3)	11.957(0.000)	128	1259143	6.416	6.42			0.4	1

Total number of targets = 99

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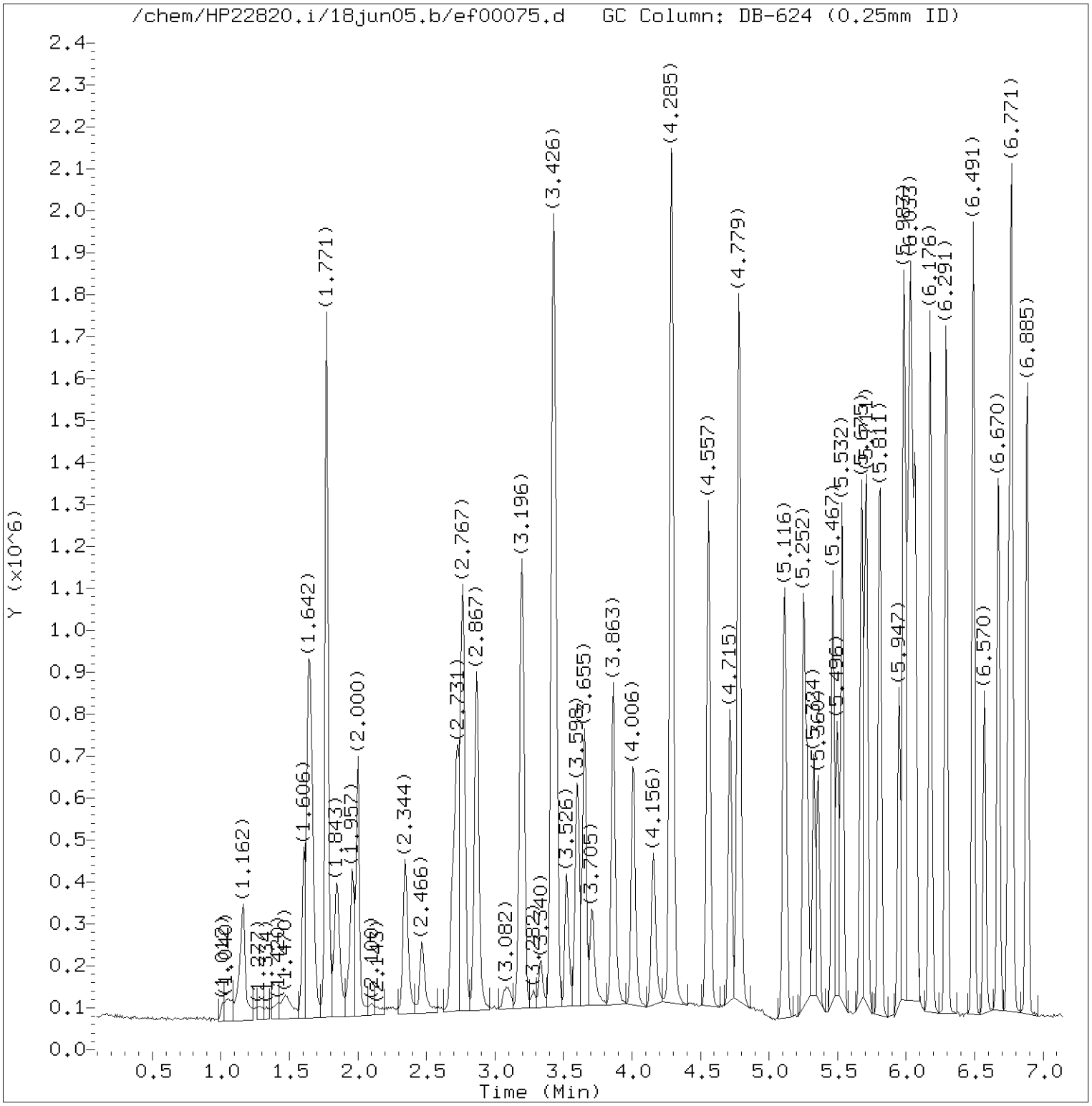
Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

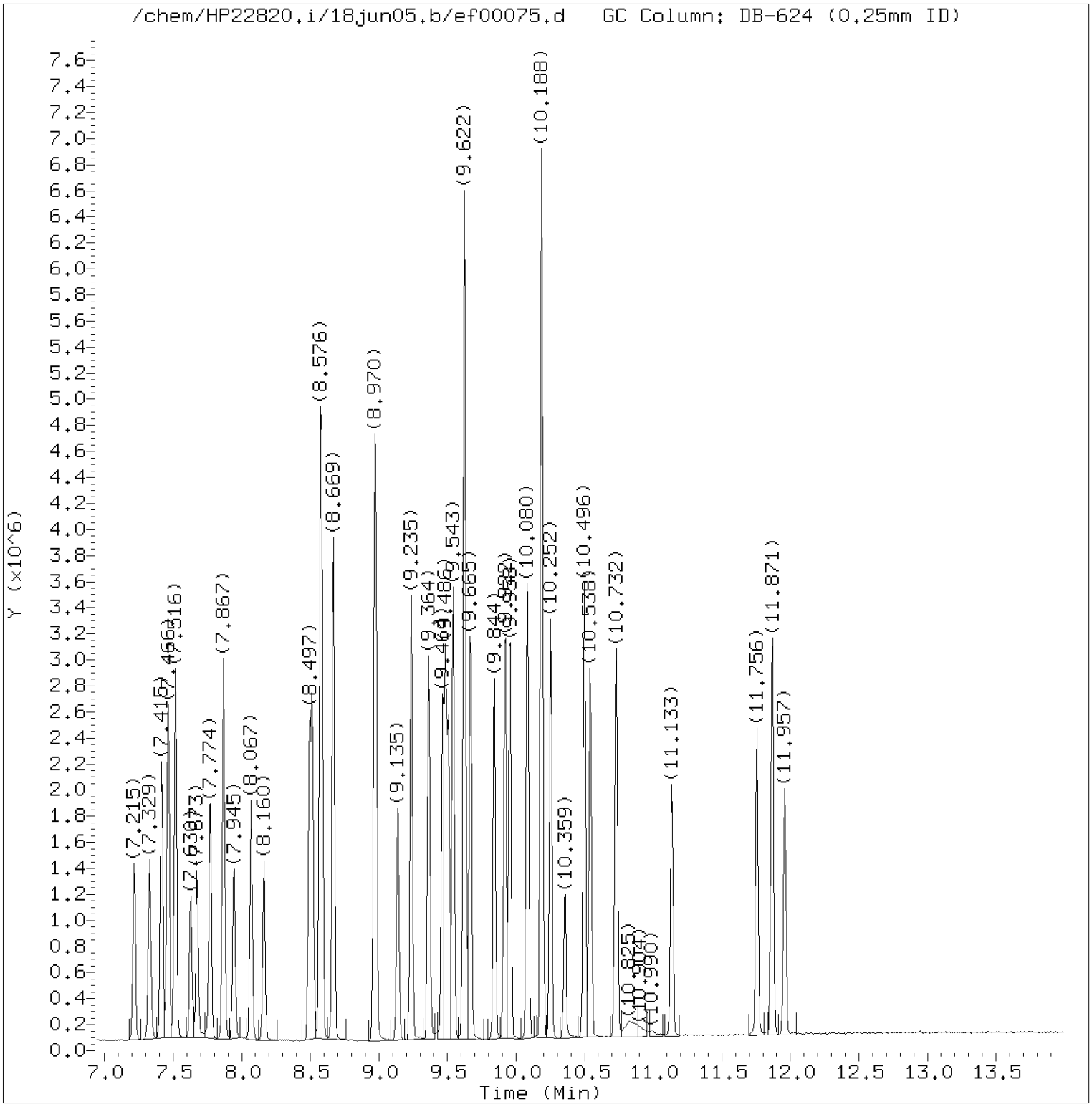
Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00075.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 16:39 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:21 jeb07445

Sample Name: LCSE02 Lab Sample ID: LCSE02

Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00075.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 16:39 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:21 jeb07445

Sample Name: LCSE02 Lab Sample ID: LCSE02

Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00075.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 16:39 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:21 jeb07445

Sample Name: LCSE02 Lab Sample ID: LCSE02

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.606	41	246172	13.242
2) Dichlorodifluoromethane	(1)	1.642	85	870543	12.081
3) Chlorodifluoromethane	(1)	1.663	51	545232	14.279
4) Freon 114	(1)	1.771	85	882569	11.970
5) Chloromethane	(1)	1.850	50	311528	14.293
6) Vinyl Chloride	(1)	1.964	62	338387	12.649
7) 1,3-Butadiene	(1)	2.000	54	231600	11.932
8) Bromomethane	(1)	2.344	94	323191	11.747
9) Chloroethane	(1)	2.466	64	183781	12.155
10) Bromoethene	(1)	2.688	106	314784	10.770
11) Dichlorofluoromethane	(1)	2.724	67	762135	13.069
12) Trichlorofluoromethane	(1)	2.767	101	899014	11.771
13) Pentane	(1)	2.867	43	618837	15.089
14) Ethanol	(1)	3.067	45	96112	10.896
15) Freon123a	(1)	3.196	67	707262	13.951
16) Acrolein	(1)	3.332	56	126002	12.063
17) 1,1-Dichloroethene	(1)	3.418	61	524508	12.370
18) Freon 113	(1)	3.440	103	476717	11.149
19) Acetone	(1)	3.526	43	470095	13.337
20) Methyl Iodide	(1)	3.598	142	795039	9.696
21) Carbon Disulfide	(1)	3.655	76	934654	11.770
22) Isopropanol	(1)	3.705	45	386832	10.643
24) 3-Chloropropene	(1)	3.863	76	159502	12.820
23) Acetonitrile	(1)	3.870	40	194704	11.378
25) Methylene Chloride	(1)	4.013	84	311372	12.896
26) tert-Butyl Alcohol	(1)	4.156	59	479563	9.760
28) trans-1,2-Dichloroethene	(1)	4.285	61	471207	12.288
29) Methyl t-Butyl Ether	(1)	4.285	73	921775	11.264
27) Acrylonitrile	(1)	4.292	53	283261	13.184
30) Hexane	(1)	4.557	57	591058	14.035
31) 1,1-Dichloroethane	(1)	4.715	63	611530	12.239
32) Vinyl Acetate	(1)	4.779	86	70176	9.605
33) Di-Isopropyl Ether	(1)	4.779	45	1025067	12.317
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	787511	9.916
35) cis-1,2-Dichloroethene	(1)	5.252	61	444209	11.999
37) 2-Butanone	(1)	5.281	72	168712	10.949
38) Ethyl Acetate	(1)	5.331	70	70552	9.279
39) Methyl Acrylate	(1)	5.360	55	521485	11.163

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on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00075.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 16:39 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:21 jeb07445

Sample Name: LCSE02 Lab Sample ID: LCSE02

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	299832	10.000
41) Tetrahydrofuran	(1)	5.496	42	352838	12.930
42) Chloroform	(1)	5.532	83	738613	11.784
43) 1,1,1-Trichloroethane	(1)	5.675	97	672280	10.589
44) Cyclohexane	(1)	5.711	56	515958	11.815
45) Carbon Tetrachloride	(1)	5.811	117	662383	10.627
46) Benzene	(2)	5.983	78	1300722	13.840
47) 1,2-Dichloroethane	(2)	6.011	62	492097	12.882
48) Isooctane	(2)	6.033	57	1577792	12.129
49) Tert-Amyl Methyl Ether	(2)	6.069	73	766987	9.785
50) Heptane	(2)	6.176	43	565261	12.715
51)*1,4-Difluorobenzene	(2)	6.291	114	1092749	10.000
52) Trichloroethene	(2)	6.491	130	489497	10.484
53) Ethyl Acrylate	(2)	6.570	55	628090	10.560
36) 1,2-Dichloroethene (total)	(1)		61	915416	24.287
54) 1,2-Dichloropropane	(2)	6.670	63	388830	11.819
57) Methyl Methacrylate	(2)	6.749	69	331020	10.062
56) 1,4-Dioxane	(2)	6.771	88	256958	10.756
55) Dibromomethane	(2)	6.771	174	449512	9.949
58) Bromodichloromethane	(2)	6.885	83	746418	11.590
59) cis-1,3-Dichloropropene	(2)	7.215	75	587184	10.341
60) 4-Methyl-2-Pentanone	(2)	7.329	43	757405	12.248
61) Toluene	(3)	7.466	91	1526093	12.676
62) Octane	(3)	7.516	43	887611	14.175
63) trans-1,3-Dichloropropene	(3)	7.630	75	454795	9.581
65) Ethyl Methacrylate	(3)	7.673	69	516275	9.584
66) 1,1,2-Trichloroethane	(3)	7.774	97	461022	10.838
67) Tetrachloroethene	(3)	7.867	166	648802	9.631
68) 2-Hexanone	(3)	7.945	43	692896	11.504
69) Dibromochloromethane	(3)	8.067	127	562090	10.477
70) 1,2-Dibromoethane	(3)	8.160	107	694838	10.497
71)*Chlorobenzene-d5	(3)	8.497	117	1043540	10.000
72) Chlorobenzene	(3)	8.519	112	1030198	9.998
73) 1,1,1,2-Tetrachloroethane	(3)	8.576	131	510698	10.182
74) Ethylbenzene	(3)	8.583	91	1936882	12.029
75) m/p-Xylene	(3)	8.669	91	1744319	13.344
76) o-Xylene	(3)	8.970	91	1561111	12.081
78) Styrene	(3)	8.977	104	998532	10.199

* = Compound is an internal standard.

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on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00075.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 16:39 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:21 jeb07445

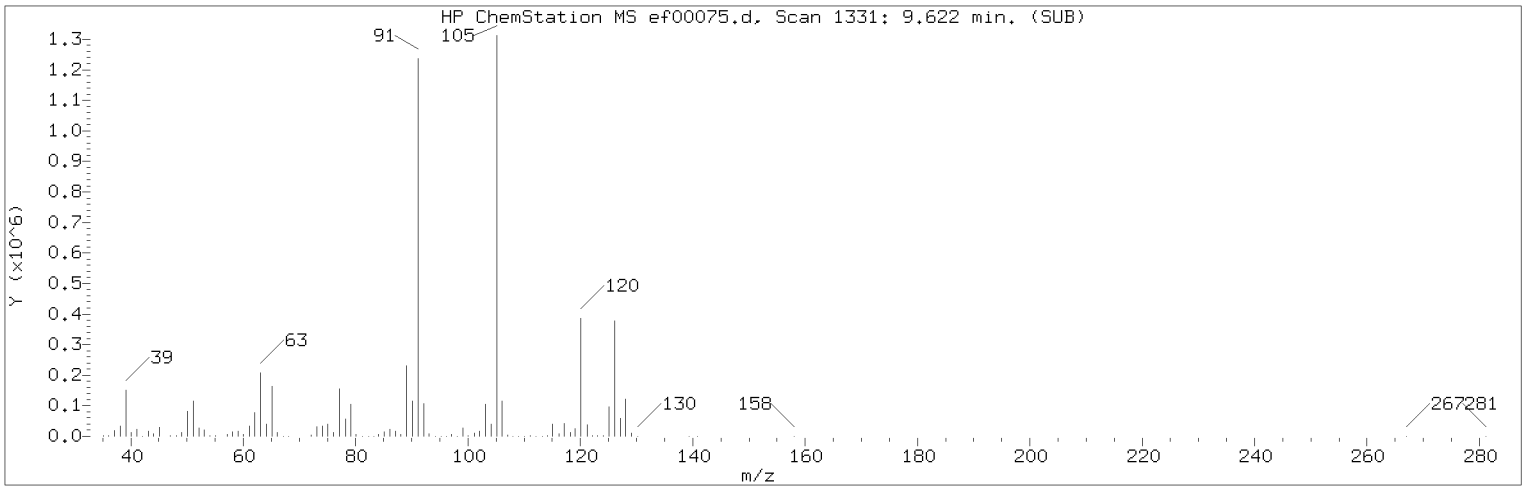
Sample Name: LCSE02 Lab Sample ID: LCSE02

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	668494	9.684
80) Cumene	(3)	9.235	105	1759409	9.549
82) 1,1,2,2-Tetrachloroethane	(3)	9.464	83	1020496	11.261
81) Bromobenzene	(3)	9.486	156	602359	9.200
83) 1,2,3-Trichloropropane	(3)	9.507	110	304890	10.532
84) n-Propylbenzene	(3)	9.543	120	492172	9.294
86) 4-Ethyltoluene	(3)	9.622	105	1762709M	9.891
85) 2-Chlorotoluene	(3)	9.622	126	475328	9.751
87) 1,3,5-Trimethylbenzene	(3)	9.665	105	1490904M	10.052
88) Alpha Methyl Styrene	(3)	9.844	118	698590	8.980
89) tert-Butylbenzene	(3)	9.922	119	1325169M	8.565
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	1418401	9.687
91) sec-Butylbenzene	(3)	10.080	105	2082057	9.397
92) 1,3-Dichlorobenzene	(3)	10.188	146	1021405	9.387
94) p-Isopropyltoluene	(3)	10.188	119	1704308	8.989
93) 1,4-Dichlorobenzene	(3)	10.252	146	1025990	9.251
95) Benzyl Chloride	(3)	10.359	91	681001	6.788
97) n-Butylbenzene	(3)	10.496	91	1584984	9.302
96) 1,2-Dichlorobenzene	(3)	10.538	146	935312	9.031
98) Hexachloroethane	(3)	10.732	117	386042	9.590
99) 1,2-Dibromo-3-chloropropane	(3)	11.133	157	421282	7.869
100) 1,2,4-Trichlorobenzene	(3)	11.756	180	585819	6.600
101) Hexachlorobutadiene	(3)	11.871	225	499609	6.582
102) Naphthalene	(3)	11.957	128	1259143	6.416
64) 1,3-Dichloropropene (total)	(3)		75	1041979	19.923
77) Xylene (total)	(3)		91	3305430	25.425

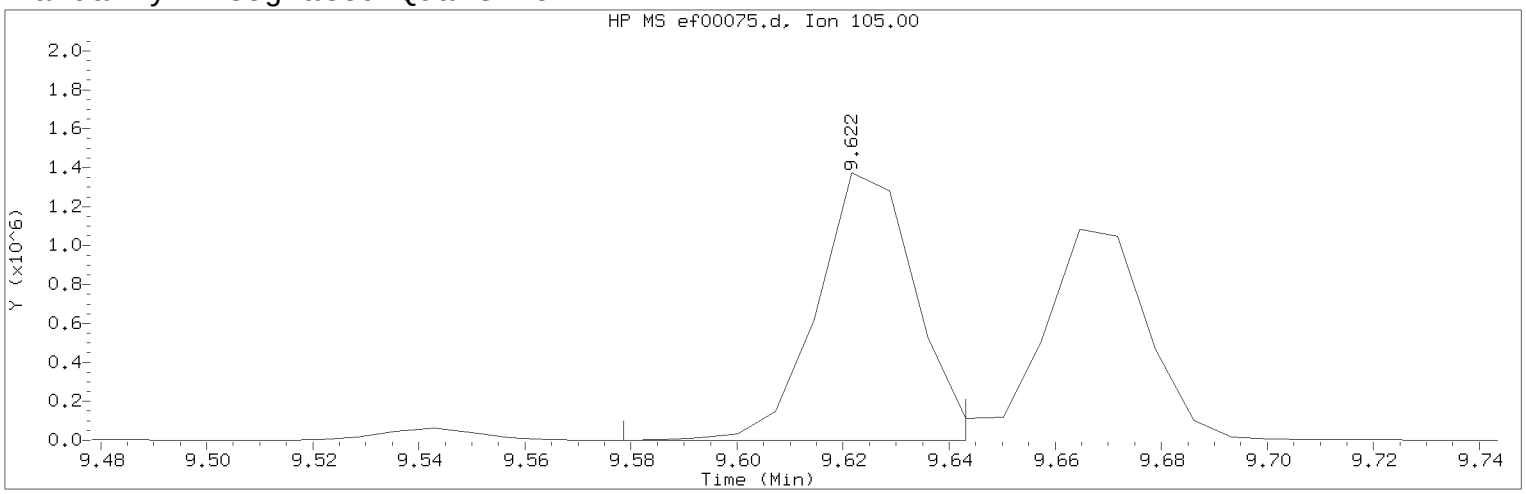
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00075.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 16:39 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:21 jeb07445

Sample Name: LCSE02 Lab Sample ID: LCSE02

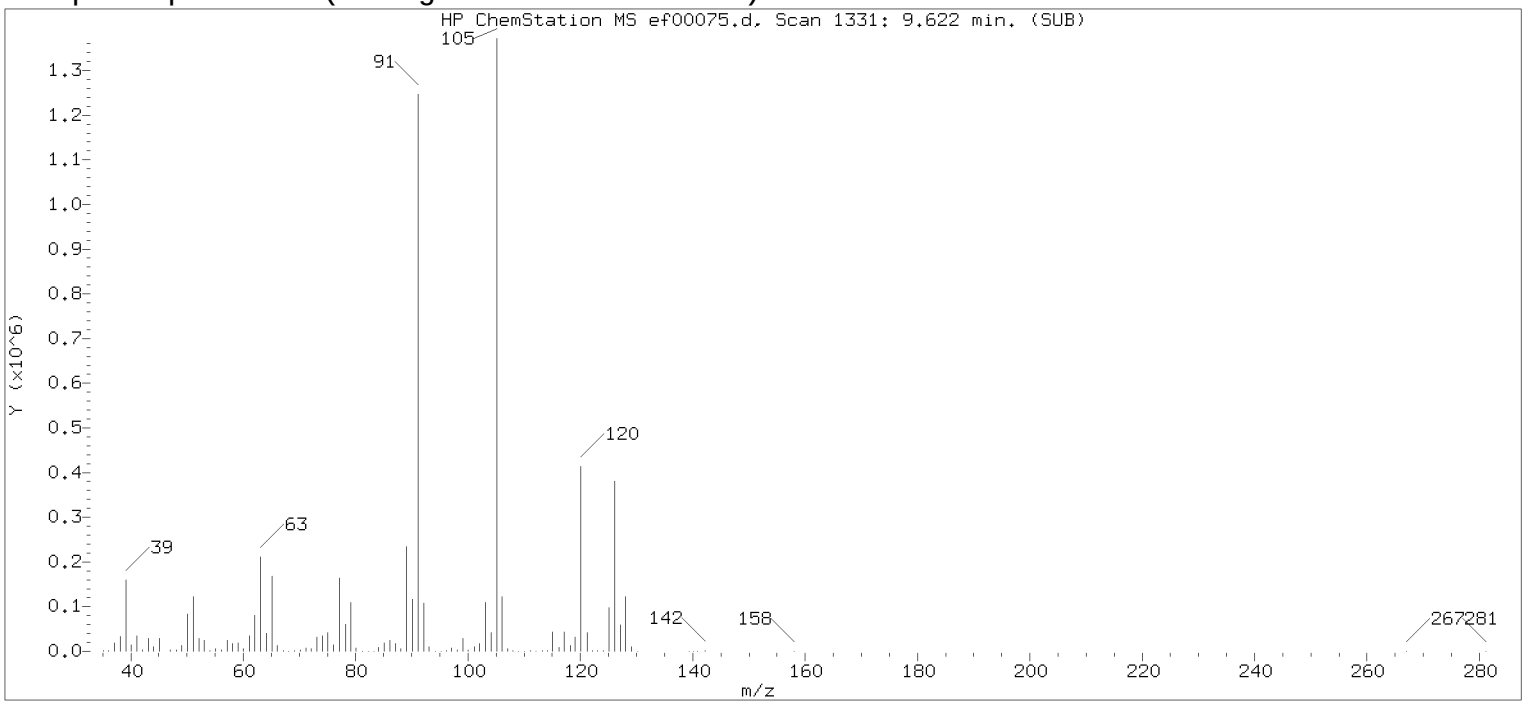
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1331
Retention Time (minutes): 9.622
Quant Ion : 105.00
Area (flag) : 1762709M
Concentration (ppb(v)) : 9.8913
Integration start scan : 1324 Integration stop scan: 1333
Y at integration start : 396 Y at integration end: 396

Reason for manual integration: improper integration

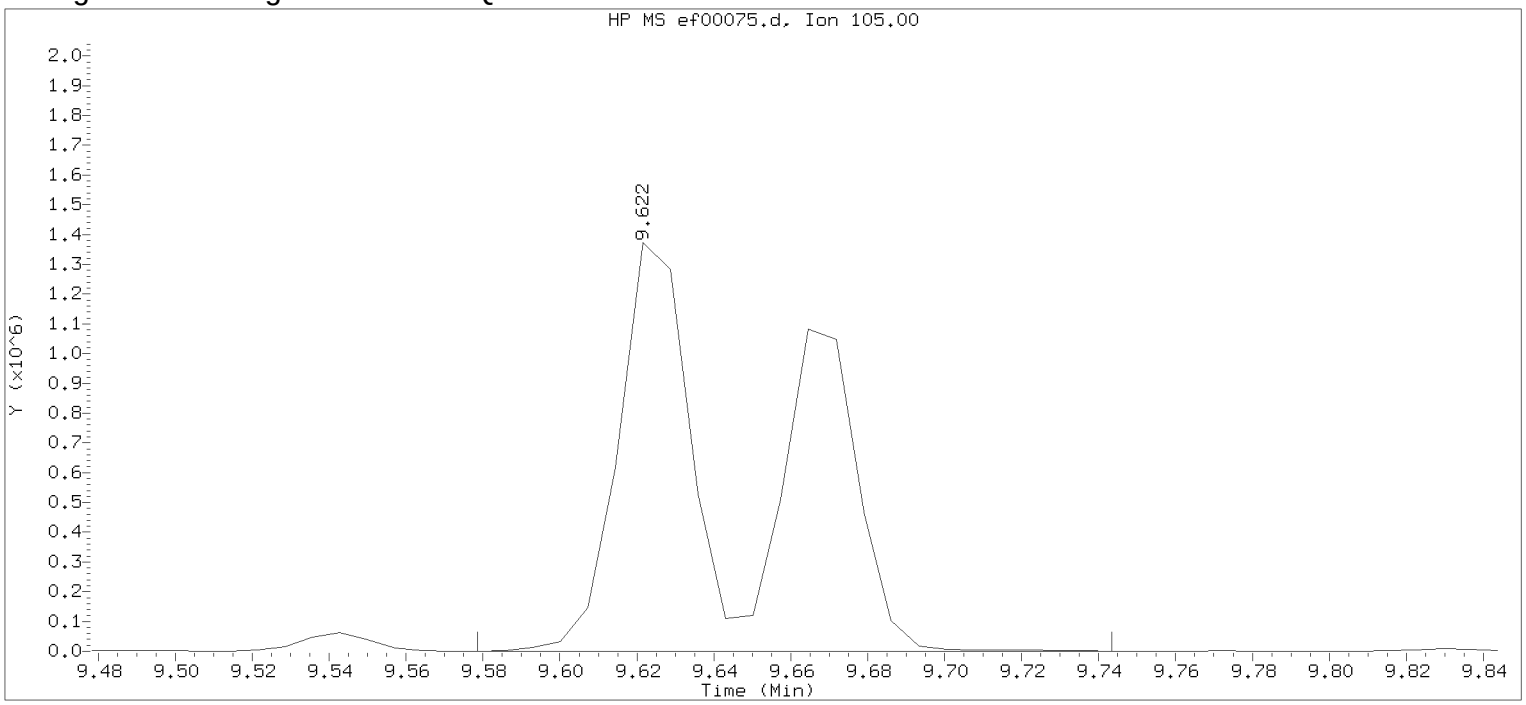
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



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Injection date and time: 05-JUN-2018 16:39 Analyst ID: jeb07445

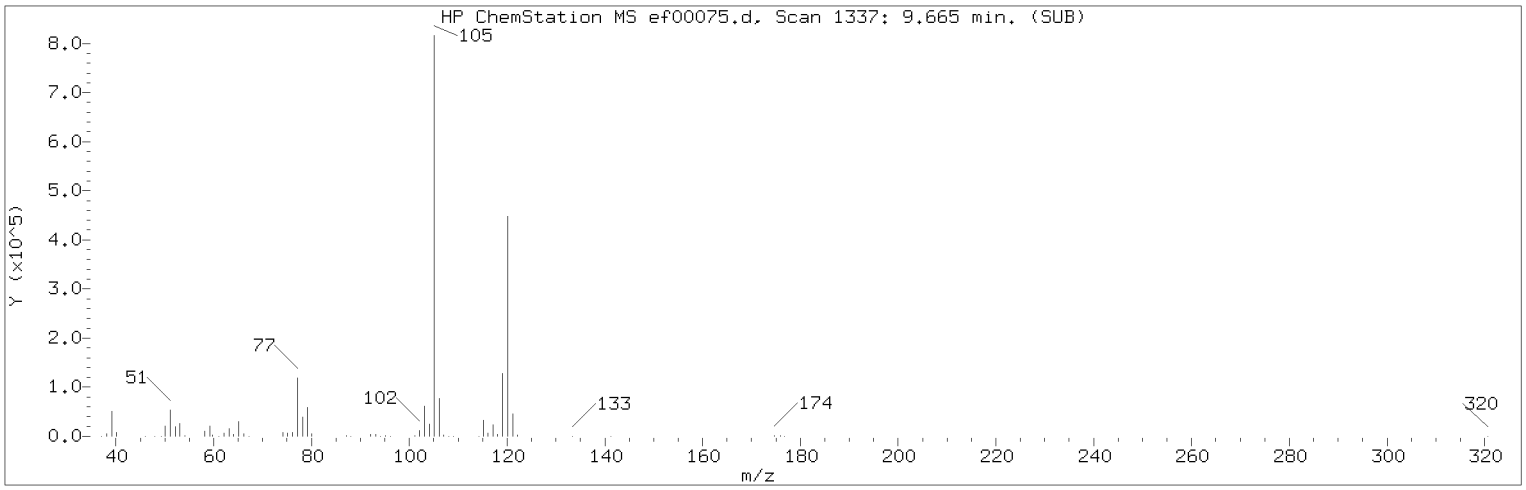
Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 16:57 Unknown

Sample Name: LCSE02 Lab Sample ID: LCSE02

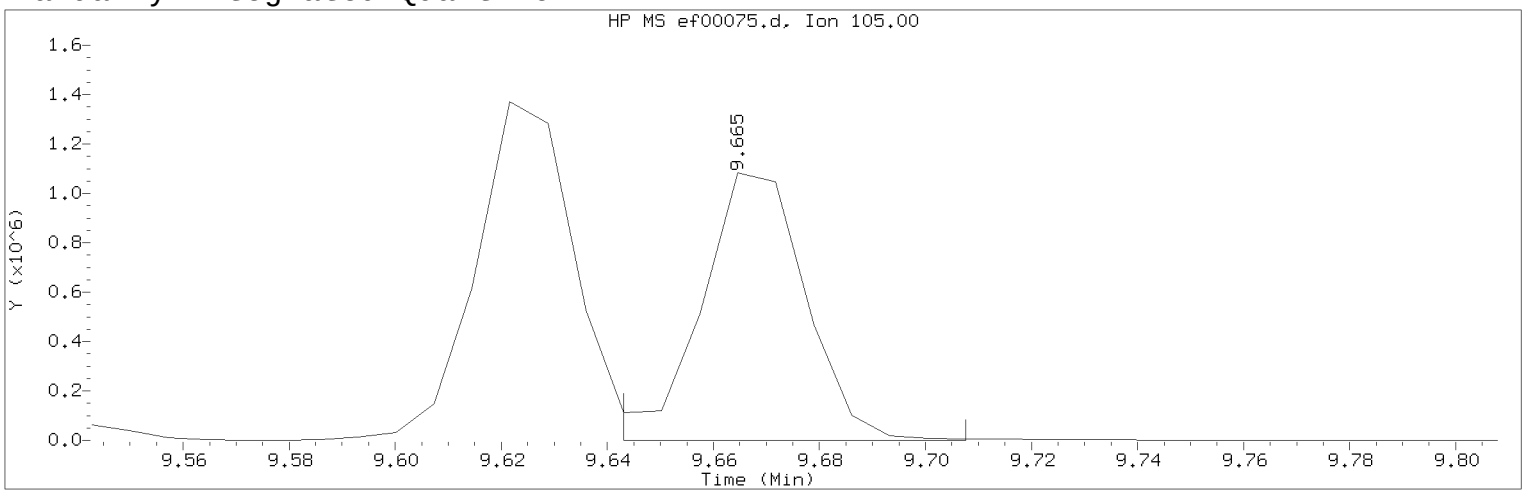
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1331
Retention Time (minutes): 9.622
Quant Ion : 105.00
Area : 3209088
Concentration (ppb(v)) : 18.0075
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 396 Y at integration end: 396

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:21.
Target 3.5 esignature user LE02 jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00075.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 16:39 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:21 jeb07445

Sample Name: LCSE02 Lab Sample ID: LCSE02

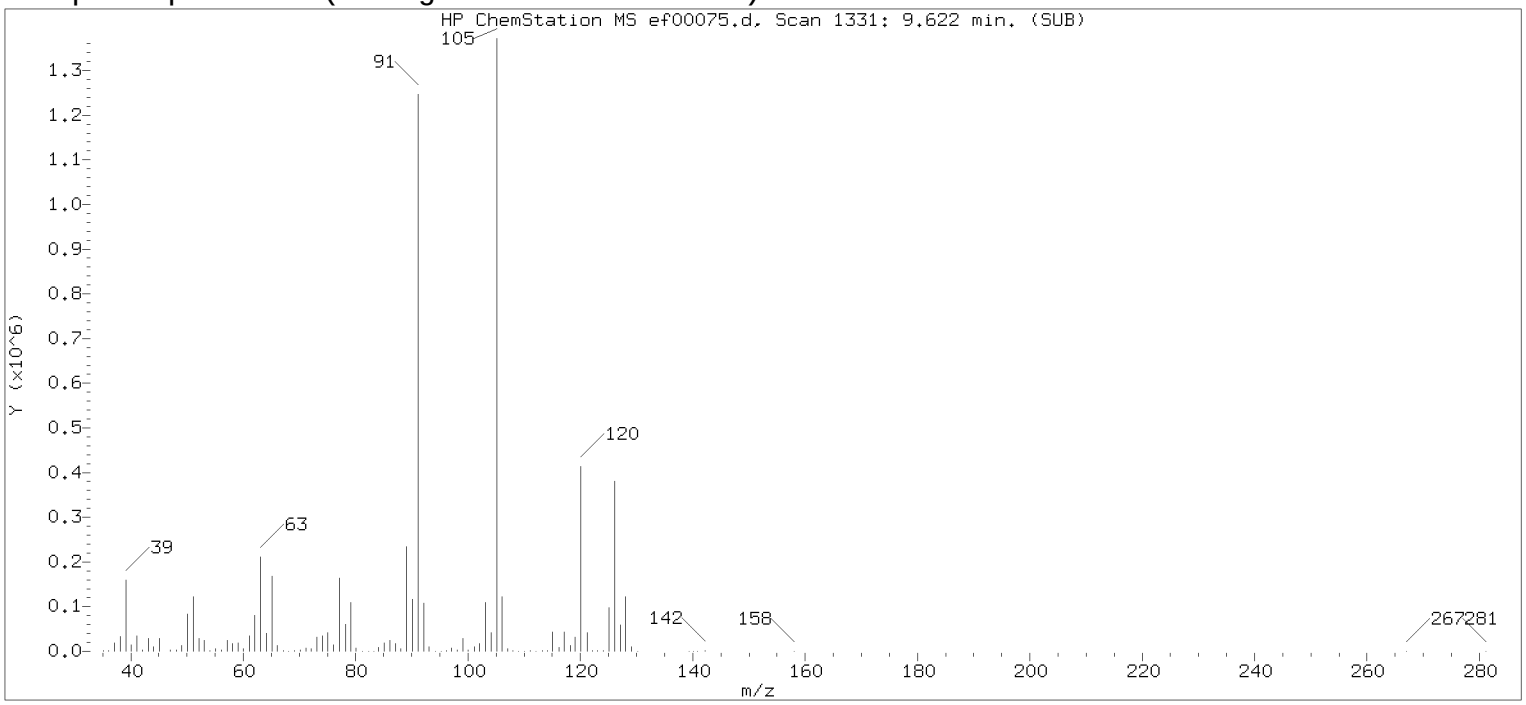
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1337
Retention Time (minutes): 9.665
Quant Ion : 105.00
Area (flag) : 1490904M
Concentration (ppb(v)) : 10.0522
Integration start scan : 1333 Integration stop scan: 1342
Y at integration start : 200 Y at integration end: 200

Reason for manual integration: improper integration

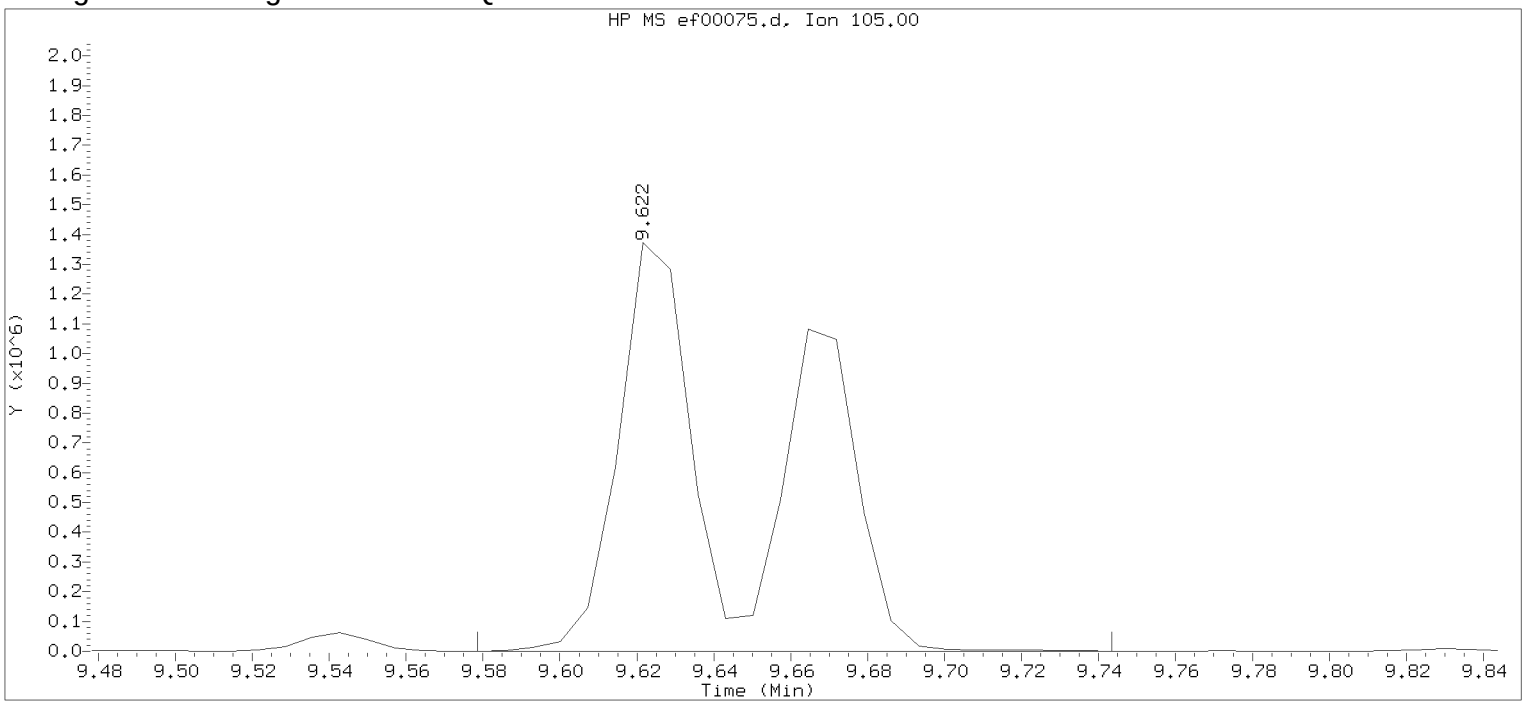
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00075.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 16:39 Analyst ID: jeb07445

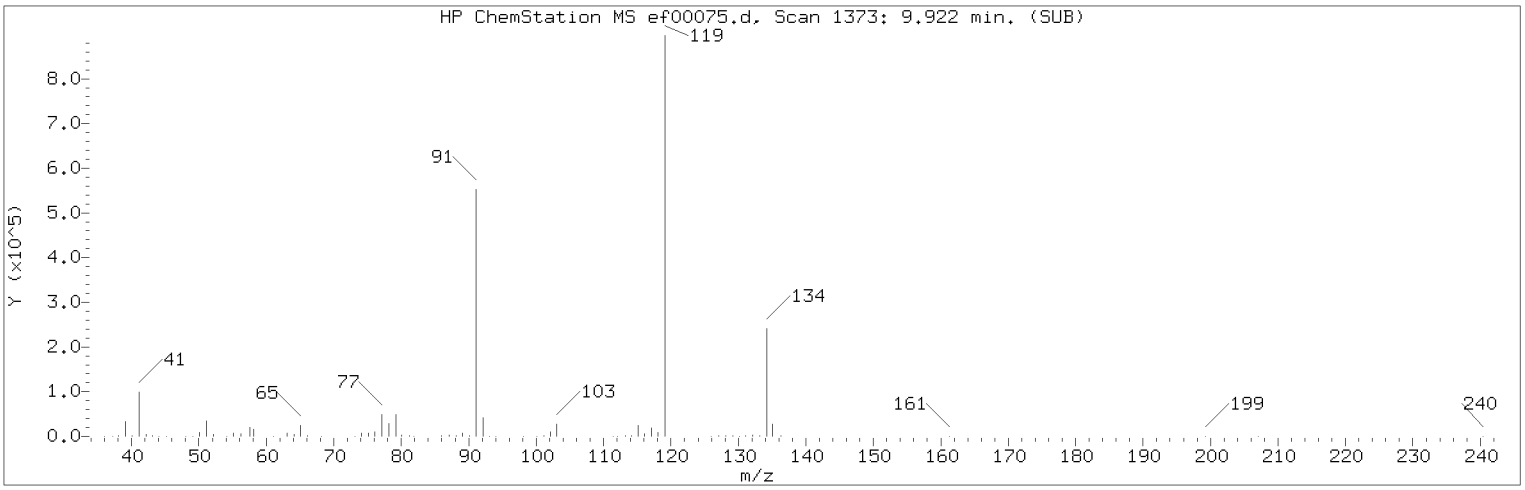
Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 16:57 Unknown

Sample Name: LCSE02 Lab Sample ID: LCSE02

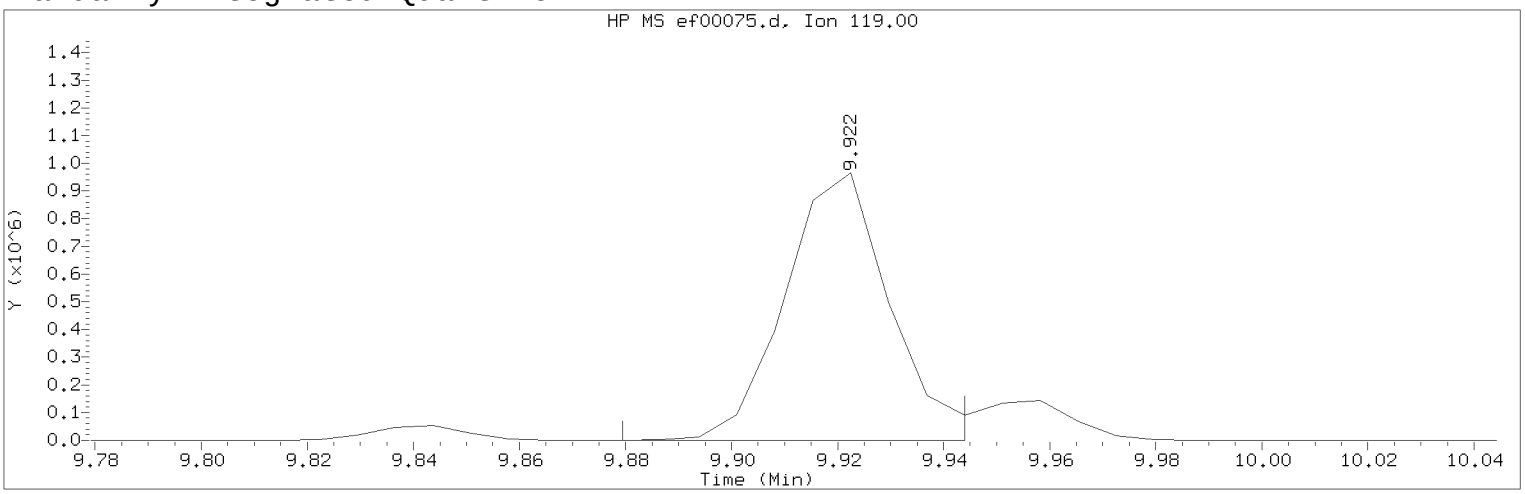
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1331
Retention Time (minutes): 9.622
Quant Ion : 105.00
Area : 3208722
Concentration (ppb(v)) : 21.6343
Integration start scan : 1324 Integration stop scan: 1347
Y at integration start : 433 Y at integration end: 433

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:21.
Target 3.5 esignature user: LE02jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00075.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 16:39 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:21 jeb07445

Sample Name: LCSE02 Lab Sample ID: LCSE02

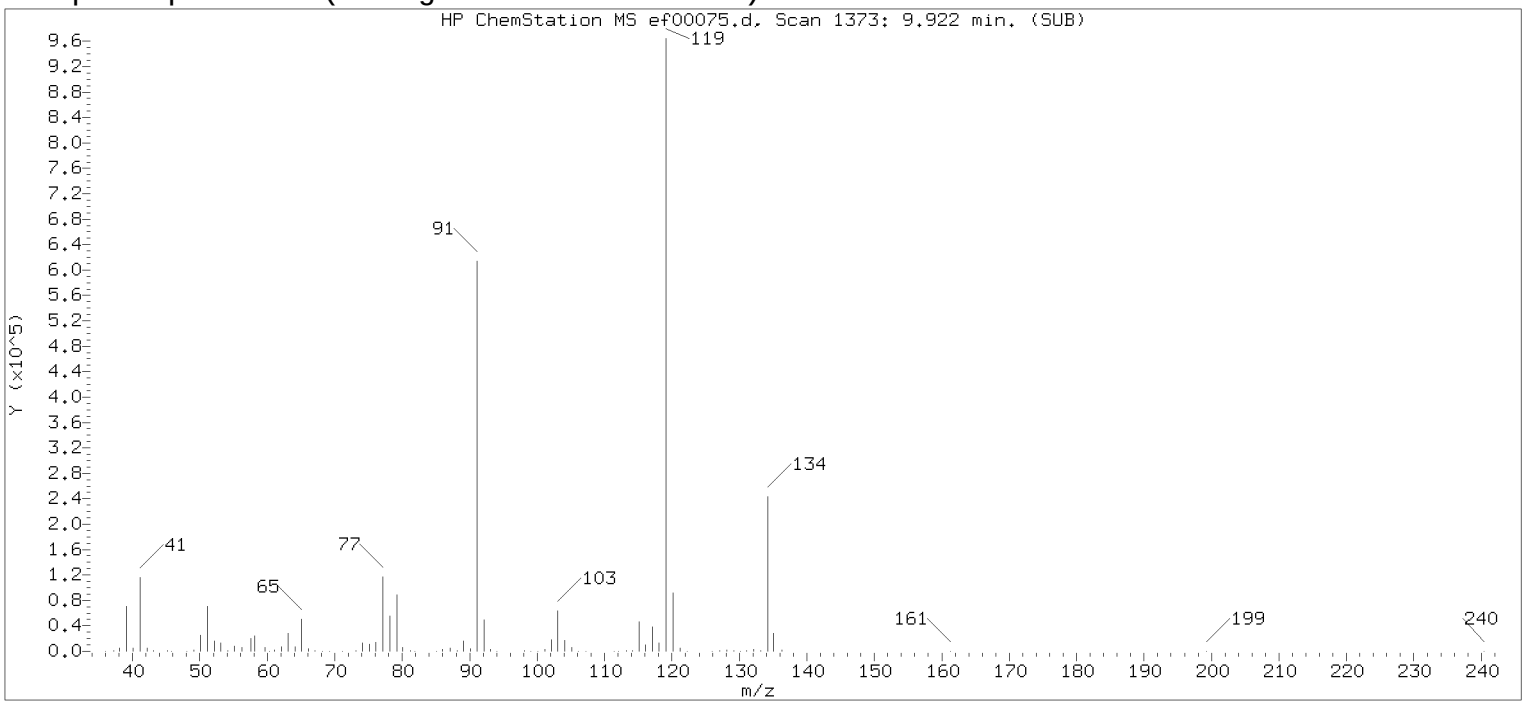
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 1325169M
Concentration (ppb(v)) : 8.5652
Integration start scan : 1366 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

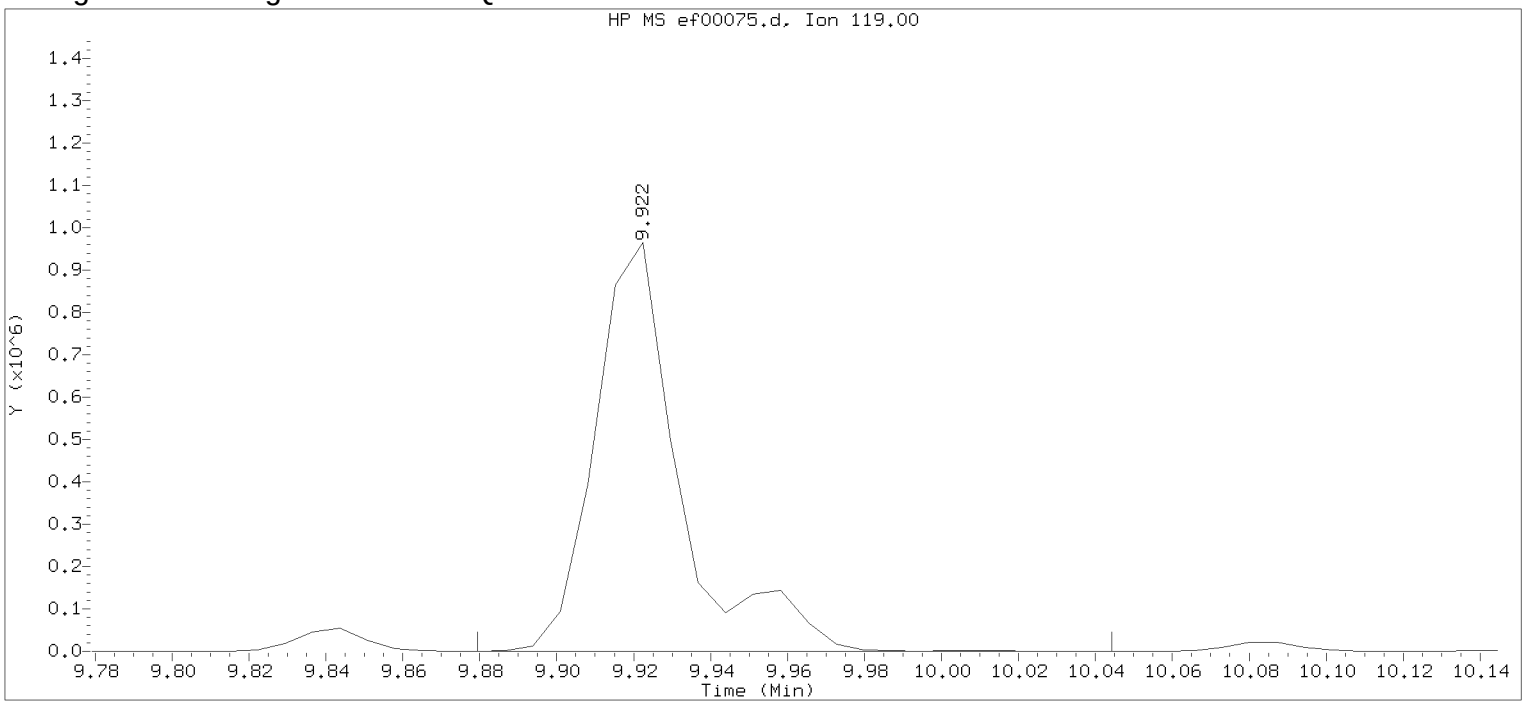
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00075.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 16:39 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 16:57 Unknown

Sample Name: LCSE02 Lab Sample ID: LCSE02

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 1484669
Concentration (ppb(v)) : 9.5961
Integration start scan : 1366 Integration stop scan: 1389
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:21.
Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun05.b/ef00076.d Injection date and time: **05-JUN-2018 17:13**
Data file Sample Info. Line: LCSDE02;200;E1815630AA;LCSDE02;0;3;LCSD; Instrument ID: **HP22820.i** Batch: **E1815630AA**
Date, time and analyst ID of latest file update: 05-Jun-2018 17:35 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun05.b/ef00074.d**

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 05-JUN-2018 14:56
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun05.b/ef00072.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	5.467(0.000)	751	130	298556 (-6)	10.00		190832 - 445272
51) 1,4-Difluorobenzene	6.291(0.000)	866	114	1098665 (-6)	10.00		700823 - 1635253
71) Chlorobenzene-d5	8.497(0.000)	1174	117	1047497 (-5)	10.00		662513 - 1545863

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)	1.606(-0.000)	41	241905	13.068	13.07			0.5	1
2) Dichlorodifluoromethane	(1)	1.642(-0.000)	85	852283	11.878	11.88			0.2	1
3) Chlorodifluoromethane	(1)	1.663(-0.000)	51	532697	14.010	14.01			0.2	1
4) Freon 114	(1)	1.771(-0.000)	85	867974	11.822	11.82			0.2	1
5) Chloromethane	(1)	1.850(0.001)	50	297667	13.715	13.72			0.2	1
6) Vinyl Chloride	(1)	1.964(-0.000)	62	334975	12.575	12.58			0.2	1
7) 1,3-Butadiene	(1)	2.000(-0.000)	54	232601	12.034	12.03			0.4	2
8) Bromomethane	(1)	2.344(0.001)	94	319103	11.648	11.65			0.5	1
9) Chloroethane	(1)	2.466(-0.000)	64	186133	12.363	12.36			0.2	1
10) Bromoethene	(1)	2.688(0.001)	106	314690	10.813	10.81			0.4	2
11) Dichlorofluoromethane	(1)	2.724(0.001)	67	748613	12.892	12.89			0.2	1
12) Trichlorofluoromethane	(1)	2.766(-0.000)	101	871523	11.459	11.46			0.2	1
13) Pentane	(1)	2.867(0.001)	43	605377	14.824	14.82			0.5	1
14) Ethanol	(1)	3.074(-0.001)	45	99027	11.274	11.27			0.5	2
15) Freon123a	(1)	3.196(-0.000)	67	710783	14.081	14.08			0.2	1
16) Acrolein	(1)	3.332(-0.000)	56	125449	12.061	12.06			1	2
17) 1,1-Dichloroethene	(1)	3.418(-0.000)	61	522253	12.370	12.37			0.2	1
18) Freon 113	(1)	3.433(-0.000)	103	468934	11.014	11.01			0.5	2
19) Acetone	(1)	3.519(-0.000)	43	459819	13.101	13.10			0.5	2
20) Methyl Iodide	(1)	3.604(-0.000)	142	800440	9.804	9.80			0.2	1
21) Carbon Disulfide	(1)	3.655(-0.000)	76	918387	11.615	11.61			0.5	1
22) Isopropanol	(1)	3.712(-0.001)	45	397304	10.977	10.98			0.5	2
23) Acetonitrile	(1)	3.870(-0.000)	40	205074	12.035	12.04			0.5	2
24) 3-Chloropropene	(1)	3.862(-0.000)	76	161818	13.061	13.06			0.2	1
25) Methylene Chloride	(1)	4.013(-0.000)	84	305050	12.688	12.69			0.2	1
26) tert-Butyl Alcohol	(1)	4.156(-0.000)	59	493887	10.094	10.09			0.5	1
27) Acrylonitrile	(1)	4.292(-0.000)	53	275787	12.891	12.89			0.5	2
28) trans-1,2-Dichloroethene	(1)	4.285(-0.000)	61	465053	12.179	12.18			0.2	1
29) Methyl t-Butyl Ether	(1)	4.292(-0.000)	73	912825	11.203	11.20			0.2	1
30) Hexane	(1)	4.557(0.001)	57	579527	13.820	13.82			0.2	1
31) 1,1-Dichloroethane	(1)	4.715(-0.000)	63	601346	12.087	12.09			0.2	1
32) Vinyl Acetate	(1)	4.779(-0.000)	86	70901	9.746	9.75			1	1
33) Di-Isopropyl Ether	(1)	4.779(-0.000)	45	1029206	12.419	12.42			0.2	1
34) Ethyl Tert-Butyl Ether	(1)	5.116(-0.000)	59	772816M	9.772	9.77			0.2	1
35) cis-1,2-Dichloroethene	(1)	5.252(-0.000)	61	440437	11.948	11.95			0.2	1
36) 1,2-Dichloroethene (total)	(1)		61	905490	24.128	24.13			0.2	1
37) 2-Butanone	(1)	5.281(-0.000)	72	167438	10.913	10.91			0.5	2
38) Ethyl Acetate	(1)	5.324(-0.000)	70	72756	9.610	9.61			0.5	1
39) Methyl Acrylate	(1)	5.360(0.000)	55	523220	11.248	11.25			0.2	1
41) Tetrahydrofuran	(1)	5.496(0.000)	42	350291	12.891	12.89			0.5	1
42) Chloroform	(1)	5.531(0.000)	83	717756	11.500	11.50			0.2	1
43) 1,1,1-Trichloroethane	(1)	5.675(0.000)	97	673211	10.649	10.65			0.2	1
44) Cyclohexane	(1)	5.710(0.000)	56	509805	11.724	11.72			0.2	1

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:35. Target 3.5 esignature user ID: jeb07445

Data file: /chem/HP22820.i/18jun05.b/ef00076.d Injection date and time: **05-JUN-2018 17:13**
Data file Sample Info. Line: LCSDE02;200;E1815630AA;LCSDE02;0;3;LCSD; Instrument ID: **HP22820.i** Batch: **E1815630AA**
Date, time and analyst ID of latest file update: 05-Jun-2018 17:35 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun05.b/ef00074.d**

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 05-JUN-2018 14:56
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun05.b/ef00072.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
45) Carbon Tetrachloride	(1)	5.804(0.001)	117	654522	10.546	10.55			0.2	1
46) Benzene	(2)	5.983(-0.000)	78	1277353	13.518	13.52			0.2	1
47) 1,2-Dichloroethane	(2)	6.011(-0.000)	62	481091	12.527	12.53			0.2	1
48) Isooctane	(2)	6.033(-0.000)	57	1564731	11.964	11.96			0.2	1
49) Tert-Amyl Methyl Ether	(2)	6.069(-0.000)	73	771735	9.792	9.79			0.2	1
50) Heptane	(2)	6.176(-0.000)	43	547011	12.238	12.24			0.5	1
52) Trichloroethene	(2)	6.491(0.000)	130	486722	10.369	10.37			0.2	1
53) Ethyl Acrylate	(2)	6.570(0.000)	55	625923	10.467	10.47			0.2	1
54) 1,2-Dichloropropane	(2)	6.678(-0.001)	63	386616	11.689	11.69			0.2	1
55) Dibromomethane	(2)	6.771(0.000)	174	438634	9.656	9.66			0.2	1
56) 1,4-Dioxane	(2)	6.771(0.001)	88	256337	10.672	10.67			0.5	1
57) Methyl Methacrylate	(2)	6.749(0.000)	69	339876	10.276	10.28			0.2	1
58) Bromodichloromethane	(2)	6.885(0.000)	83	735398	11.358	11.36			0.2	1
59) cis-1,3-Dichloropropene	(2)	7.215(0.000)	75	576887	10.105	10.11			0.2	1
60) 4-Methyl-2-Pentanone	(2)	7.329(0.000)	43	752637	12.105	12.10			0.5	2
61) Toluene	(3)	7.465(0.000)	91	1511105	12.504	12.50			0.2	1
62) Octane	(3)	7.516(-0.000)	43	881278	14.021	14.02			0.2	1
63) trans-1,3-Dichloropropene	(3)	7.630(0.000)	75	453484	9.518	9.52			0.2	1
64) 1,3-Dichloropropene (total)	(3)		75	1030371	19.623	19.62			0.2	1
65) Ethyl Methacrylate	(3)	7.673(-0.000)	69	523399	9.680	9.68			0.2	1
66) 1,1,2-Trichloroethane	(3)	7.773(-0.000)	97	456662	10.695	10.70			0.2	1
67) Tetrachloroethene	(3)	7.866(-0.000)	166	641004	9.479	9.48			0.2	1
68) 2-Hexanone	(3)	7.945(-0.000)	43	701690	11.606	11.61			0.5	2
69) Dibromochloromethane	(3)	8.067(-0.000)	127	555739	10.319	10.32			0.2	1
70) 1,2-Dibromoethane	(3)	8.160(-0.000)	107	692019	10.415	10.41			0.2	1
72) Chlorobenzene	(3)	8.518(0.000)	112	1026713	9.926	9.93			0.2	1
73) 1,1,1,2-Tetrachloroethane	(3)	8.576(-0.000)	131	508300	10.096	10.10			0.2	1
74) Ethylbenzene	(3)	8.583(0.000)	91	1923805	11.902	11.90			0.2	1
75) m/p-Xylene	(3)	8.669(0.000)	91	1753381	13.363	13.36			0.2	1
76) o-Xylene	(3)	8.970(0.000)	91	1546746	11.925	11.92			0.2	1
77) Xylene (total)	(3)		91	3300127	25.287	25.29			0.2	1
78) Styrene	(3)	8.977(0.000)	104	999815	10.174	10.17			0.2	1
79) Bromoform	(3)	9.142(0.000)	173	661562	9.548	9.55			0.2	1
80) Cumene	(3)	9.235(0.000)	105	1758637	9.509	9.51			0.2	1
81) Bromobenzene	(3)	9.492(0.000)	156	596955	9.083	9.08			0.2	1
82) 1,1,2,2-Tetrachloroethane	(3)	9.471(0.000)	83	1018605	11.198	11.20			0.2	1
83) 1,2,3-Trichloropropane	(3)	9.514(0.000)	110	306163	10.536	10.54			0.2	1
84) n-Propylbenzene	(3)	9.543(0.000)	120	485260	9.129	9.13			0.5	1
85) 2-Chlorotoluene	(3)	9.629(0.000)	126	474729	9.702	9.70			0.2	1
86) 4-Ethyltoluene	(3)	9.629(0.000)	105	1764196M	9.862	9.86			0.2	1
87) 1,3,5-Trimethylbenzene	(3)	9.672(0.000)	105	1450593M	9.743	9.74			0.2	1
88) Alpha Methyl Styrene	(3)	9.844(0.000)	118	679706	8.704	8.70			0.2	1
89) tert-Butylbenzene	(3)	9.922(0.000)	119	1355050M	8.725	8.73			0.5	1
90) 1,2,4-Trimethylbenzene	(3)	9.958(0.000)	105	1407946	9.579	9.58			0.2	1
91) sec-Butylbenzene	(3)	10.087(0.000)	105	2044417	9.192	9.19			0.2	1
92) 1,3-Dichlorobenzene	(3)	10.194(0.000)	146	1014569	9.289	9.29			0.2	1
93) 1,4-Dichlorobenzene	(3)	10.259(0.000)	146	1009746	9.070	9.07			0.2	1
94) p-Isopropyltoluene	(3)	10.194(0.000)	119	1688575	8.872	8.87			0.2	1
95) Benzyl Chloride	(3)	10.359(0.000)	91	682895	6.782	6.78			0.5	1
96) 1,2-Dichlorobenzene	(3)	10.546(0.000)	146	926079	8.908	8.91			0.2	1
97) n-Butylbenzene	(3)	10.502(0.000)	91	1565682	9.154	9.15			0.2	1
98) Hexachloroethane	(3)	10.739(0.000)	117	388530	9.615	9.62			0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)	11.140(0.000)	157	411328	7.654	7.65			0.2	1
100) 1,2,4-Trichlorobenzene	(3)	11.763(0.000)	180	596730	6.698	6.70			0.5	2

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:35. Target 3.5 esignature user ID: jeb07445

Data file: /chem/HP22820.i/18jun05.b/ef00076.d Injection date and time: **05-JUN-2018 17:13**
Data file Sample Info. Line: LCSDE02;200;E1815630AA;LCSDE02;0;3;LCSD; Instrument ID: **HP22820.i** Batch: **E1815630AA**
Date, time and analyst ID of latest file update: 05-Jun-2018 17:35 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun05.b/ef00074.d**

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 05-JUN-2018 14:56
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun05.b/ef00072.d**

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

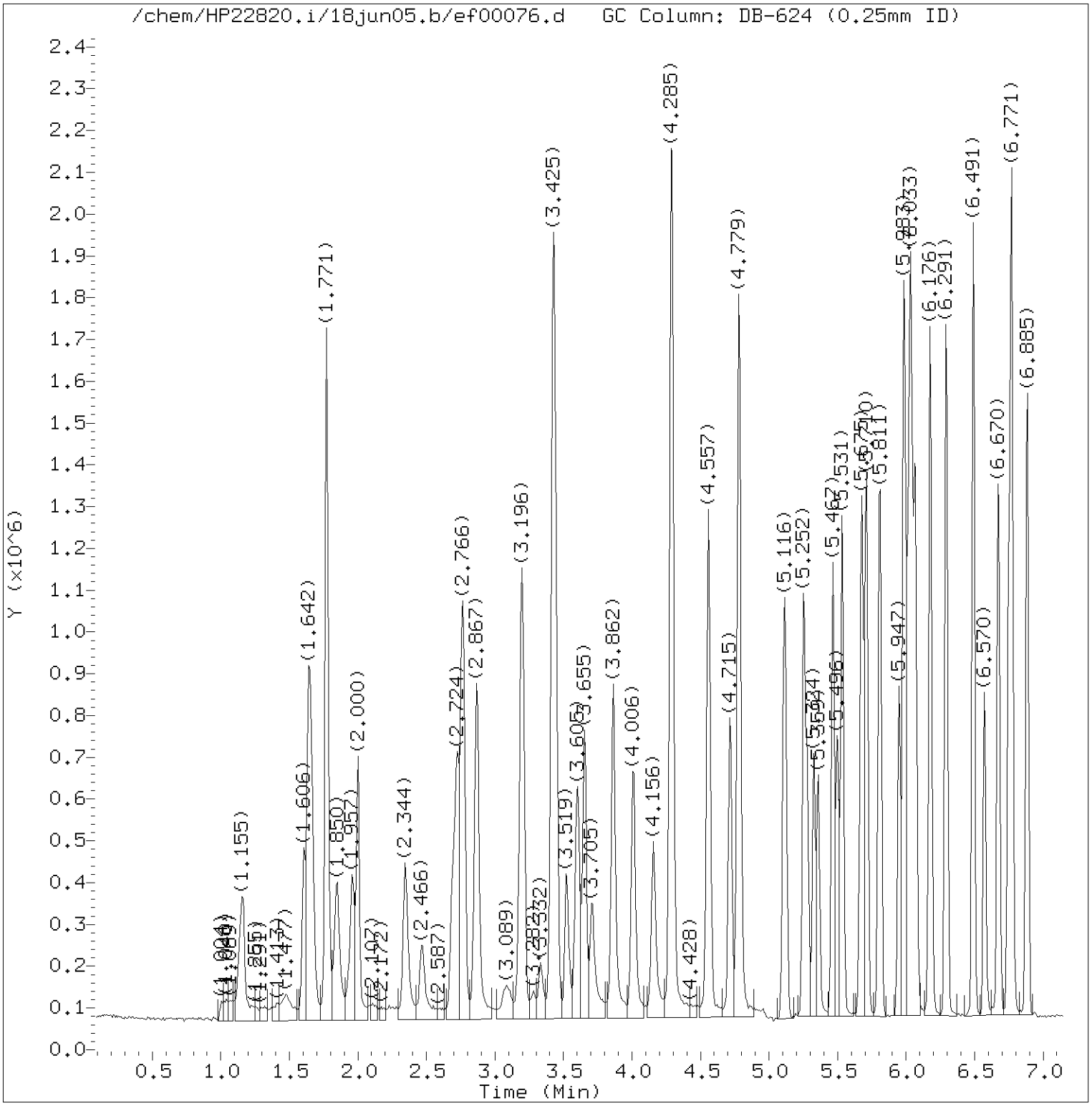
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
101) Hexachlorobutadiene	(3)	11.878(0.000)	225	507911	6.666	6.67			0.4	2
102) Naphthalene	(3)	11.964(0.000)	128	1271398	6.453	6.45			0.4	1

Total number of targets = 99

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:35. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

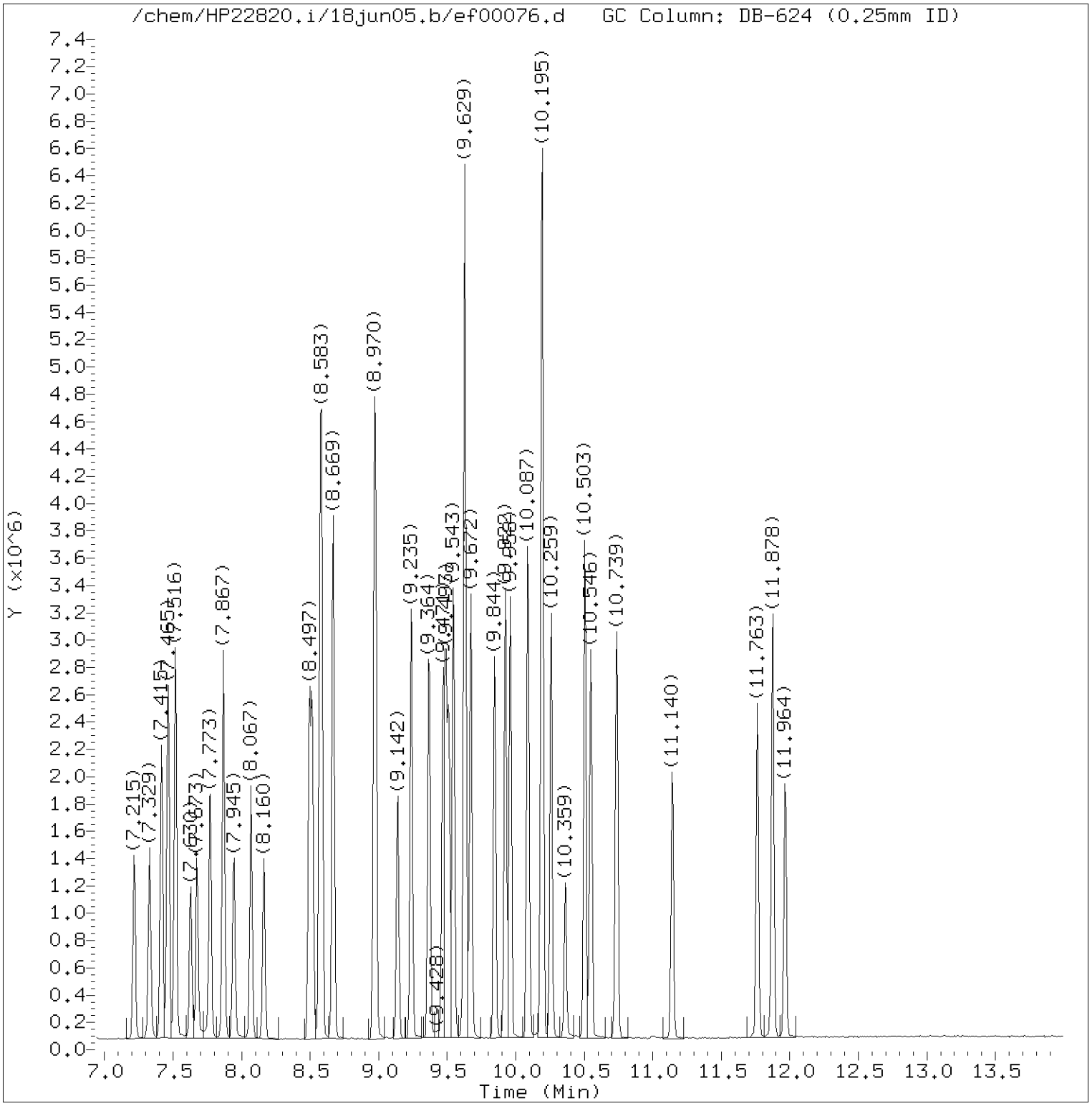
Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00076.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 17:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:35 jeb07445

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:35.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00076.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 17:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:35 jeb07445

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:35.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00076.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 17:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:35 jeb07445

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.606	41	241905	13.068
2) Dichlorodifluoromethane	(1)	1.642	85	852283	11.878
3) Chlorodifluoromethane	(1)	1.663	51	532697	14.010
4) Freon 114	(1)	1.771	85	867974	11.822
5) Chloromethane	(1)	1.850	50	297667	13.715
6) Vinyl Chloride	(1)	1.964	62	334975	12.575
7) 1,3-Butadiene	(1)	2.000	54	232601	12.034
8) Bromomethane	(1)	2.344	94	319103	11.648
9) Chloroethane	(1)	2.466	64	186133	12.363
10) Bromoethene	(1)	2.688	106	314690	10.813
11) Dichlorofluoromethane	(1)	2.724	67	748613	12.892
12) Trichlorofluoromethane	(1)	2.766	101	871523	11.459
13) Pentane	(1)	2.867	43	605377	14.824
14) Ethanol	(1)	3.075	45	99027	11.274
15) Freon123a	(1)	3.196	67	710783	14.081
16) Acrolein	(1)	3.332	56	125449	12.061
17) 1,1-Dichloroethene	(1)	3.418	61	522253	12.370
18) Freon 113	(1)	3.433	103	468934	11.014
19) Acetone	(1)	3.519	43	459819	13.101
20) Methyl Iodide	(1)	3.605	142	800440	9.804
21) Carbon Disulfide	(1)	3.655	76	918387	11.615
22) Isopropanol	(1)	3.712	45	397304	10.977
24) 3-Chloropropene	(1)	3.862	76	161818	13.061
23) Acetonitrile	(1)	3.870	40	205074	12.035
25) Methylene Chloride	(1)	4.013	84	305050	12.688
26) tert-Butyl Alcohol	(1)	4.156	59	493887	10.094
28) trans-1,2-Dichloroethene	(1)	4.285	61	465053	12.179
27) Acrylonitrile	(1)	4.292	53	275787	12.891
29) Methyl t-Butyl Ether	(1)	4.292	73	912825	11.203
30) Hexane	(1)	4.557	57	579527	13.820
31) 1,1-Dichloroethane	(1)	4.715	63	601346	12.087
32) Vinyl Acetate	(1)	4.779	86	70901	9.746
33) Di-Isopropyl Ether	(1)	4.779	45	1029206	12.419
34) Ethyl Tert-Butyl Ether	(1)	5.116	59	772816M	9.772
35) cis-1,2-Dichloroethene	(1)	5.252	61	440437	11.948
37) 2-Butanone	(1)	5.281	72	167438	10.913
38) Ethyl Acetate	(1)	5.324	70	72756	9.610
39) Methyl Acrylate	(1)	5.359	55	523220	11.248

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:35.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00076.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 17:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:35 jeb07445

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	298556	10.000
41) Tetrahydrofuran	(1)	5.496	42	350291	12.891
42) Chloroform	(1)	5.531	83	717756	11.500
43) 1,1,1-Trichloroethane	(1)	5.675	97	673211	10.649
44) Cyclohexane	(1)	5.710	56	509805	11.724
45) Carbon Tetrachloride	(1)	5.804	117	654522	10.546
46) Benzene	(2)	5.983	78	1277353	13.518
47) 1,2-Dichloroethane	(2)	6.011	62	481091	12.527
48) Isooctane	(2)	6.033	57	1564731	11.964
49) Tert-Amyl Methyl Ether	(2)	6.069	73	771735	9.792
50) Heptane	(2)	6.176	43	547011	12.238
51)*1,4-Difluorobenzene	(2)	6.291	114	1098665	10.000
52) Trichloroethene	(2)	6.491	130	486722	10.369
53) Ethyl Acrylate	(2)	6.570	55	625923	10.467
36) 1,2-Dichloroethene (total)	(1)		61	905490	24.128
54) 1,2-Dichloropropane	(2)	6.678	63	386616	11.689
57) Methyl Methacrylate	(2)	6.749	69	339876	10.276
56) 1,4-Dioxane	(2)	6.771	88	256337	10.672
55) Dibromomethane	(2)	6.771	174	438634	9.656
58) Bromodichloromethane	(2)	6.885	83	735398	11.358
59) cis-1,3-Dichloropropene	(2)	7.215	75	576887	10.105
60) 4-Methyl-2-Pentanone	(2)	7.329	43	752637	12.105
61) Toluene	(3)	7.465	91	1511105	12.504
62) Octane	(3)	7.516	43	881278	14.021
63) trans-1,3-Dichloropropene	(3)	7.630	75	453484	9.518
65) Ethyl Methacrylate	(3)	7.673	69	523399	9.680
66) 1,1,2-Trichloroethane	(3)	7.773	97	456662	10.695
67) Tetrachloroethene	(3)	7.867	166	641004	9.479
68) 2-Hexanone	(3)	7.945	43	701690	11.606
69) Dibromochloromethane	(3)	8.067	127	555739	10.319
70) 1,2-Dibromoethane	(3)	8.160	107	692019	10.415
71)*Chlorobenzene-d5	(3)	8.497	117	1047497	10.000
72) Chlorobenzene	(3)	8.518	112	1026713	9.926
73) 1,1,1,2-Tetrachloroethane	(3)	8.576	131	508300	10.096
74) Ethylbenzene	(3)	8.583	91	1923805	11.902
75) m/p-Xylene	(3)	8.669	91	1753381	13.363
76) o-Xylene	(3)	8.970	91	1546746	11.925
78) Styrene	(3)	8.977	104	999815	10.174

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:35.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00076.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 17:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:35 jeb07445

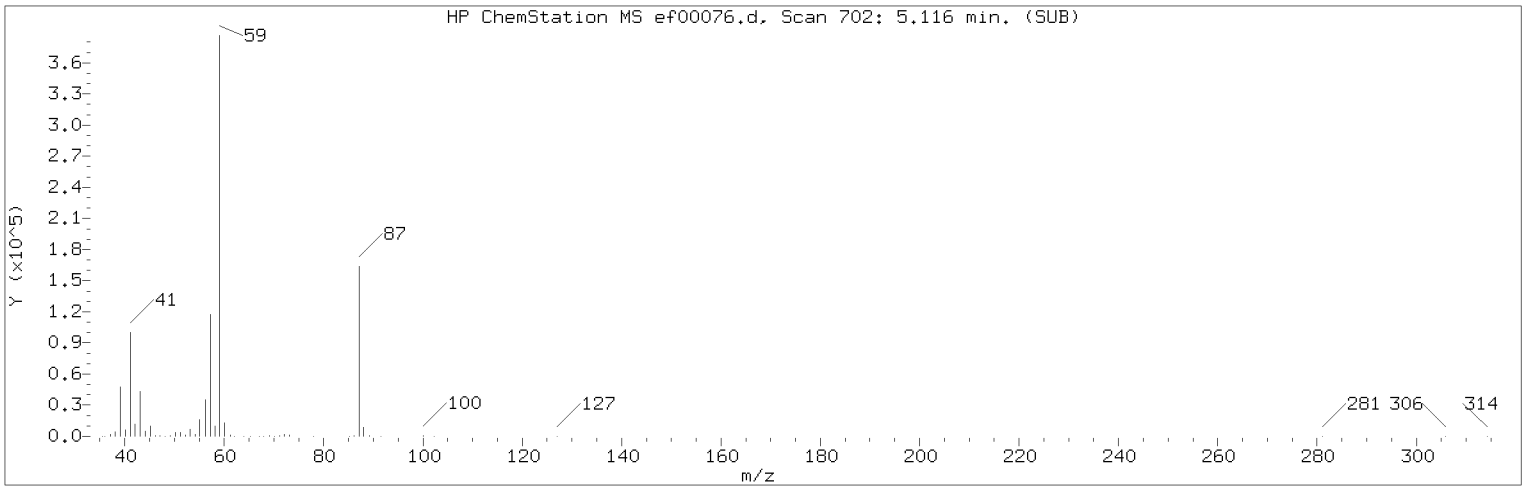
Sample Name: LCSDE02 Lab Sample ID: LCSDE02

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	9.142	173	661562	9.548
80) Cumene	(3)	9.235	105	1758637	9.509
82) 1,1,2,2-Tetrachloroethane	(3)	9.471	83	1018605	11.198
81) Bromobenzene	(3)	9.493	156	596955	9.083
83) 1,2,3-Trichloropropane	(3)	9.514	110	306163	10.536
84) n-Propylbenzene	(3)	9.543	120	485260	9.129
86) 4-Ethyltoluene	(3)	9.629	105	1764196M	9.862
85) 2-Chlorotoluene	(3)	9.629	126	474729	9.702
87) 1,3,5-Trimethylbenzene	(3)	9.672	105	1450593M	9.743
88) Alpha Methyl Styrene	(3)	9.844	118	679706	8.704
89) tert-Butylbenzene	(3)	9.922	119	1355050M	8.725
90) 1,2,4-Trimethylbenzene	(3)	9.958	105	1407946	9.579
91) sec-Butylbenzene	(3)	10.087	105	2044417	9.192
92) 1,3-Dichlorobenzene	(3)	10.195	146	1014569	9.289
94) p-Isopropyltoluene	(3)	10.195	119	1688575	8.872
93) 1,4-Dichlorobenzene	(3)	10.259	146	1009746	9.070
95) Benzyl Chloride	(3)	10.359	91	682895	6.782
97) n-Butylbenzene	(3)	10.503	91	1565682	9.154
96) 1,2-Dichlorobenzene	(3)	10.546	146	926079	8.908
98) Hexachloroethane	(3)	10.739	117	388530	9.615
99) 1,2-Dibromo-3-chloropropane	(3)	11.140	157	411328	7.654
100) 1,2,4-Trichlorobenzene	(3)	11.763	180	596730	6.698
101) Hexachlorobutadiene	(3)	11.878	225	507911	6.666
102) Naphthalene	(3)	11.964	128	1271398	6.453
64) 1,3-Dichloropropene (total)	(3)		75	1030371	19.623
77) Xylene (total)	(3)		91	3300127	25.287

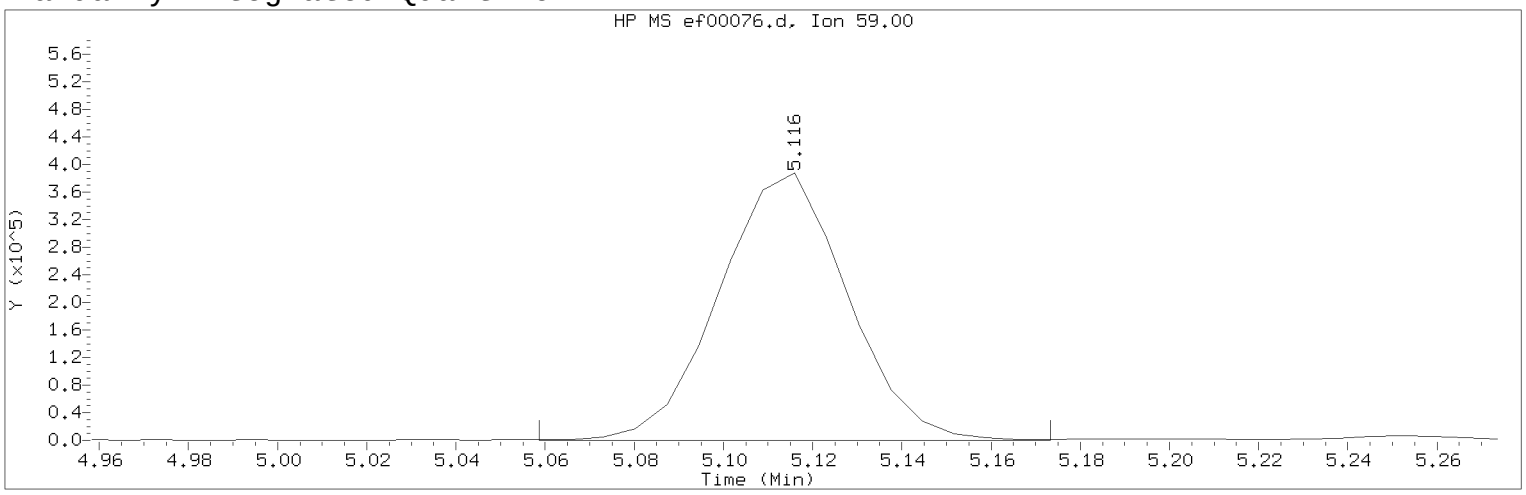
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:35.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00076.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 17:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:35 jeb07445

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

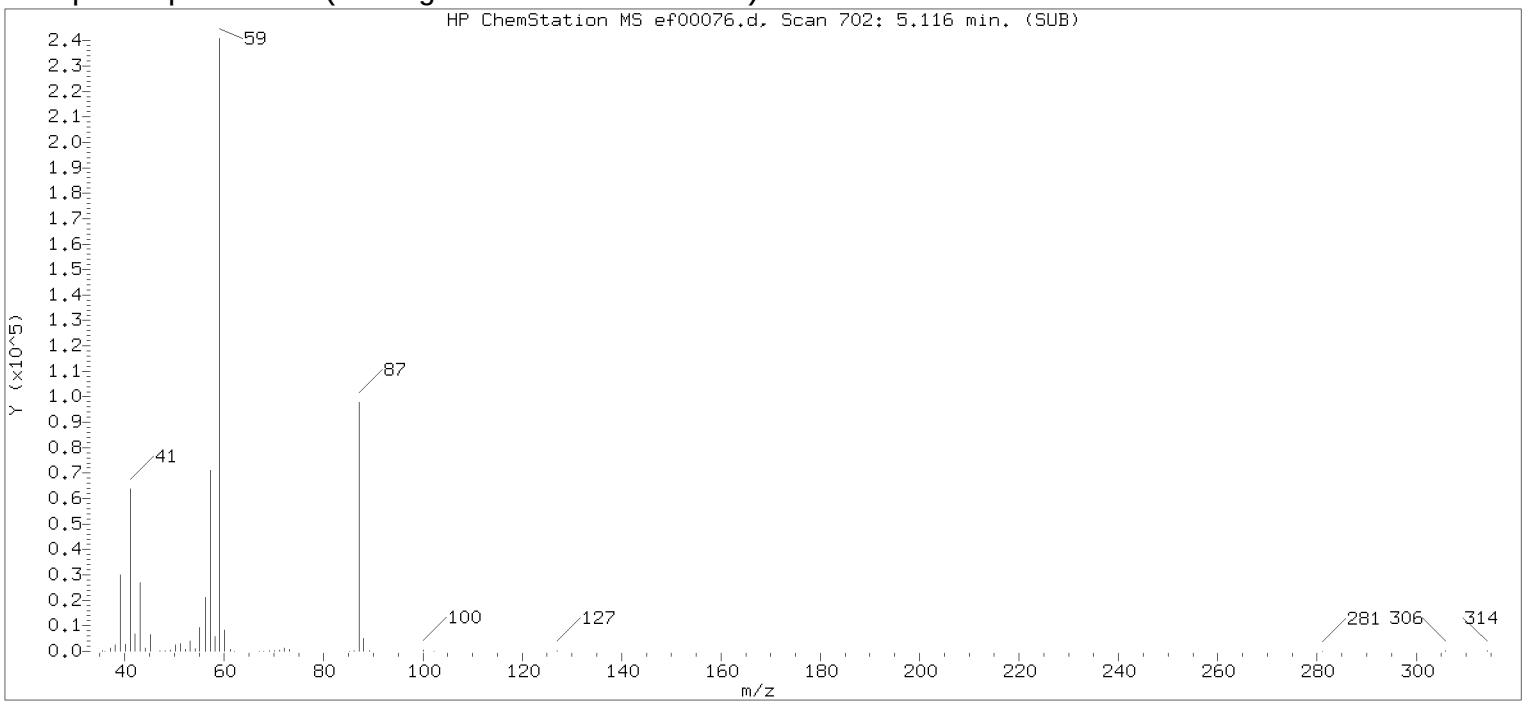
Compound Number : 34
Compound Name : Ethyl Tert-Butyl Ether
Scan Number : 702
Retention Time (minutes): 5.116
Quant Ion : 59.00
Area (flag) : 772816M
Concentration (ppb(v)) : 9.7724
Integration start scan : 693 Integration stop scan: 709
Y at integration start : 142 Y at integration end: 142

Reason for manual integration: improper integration

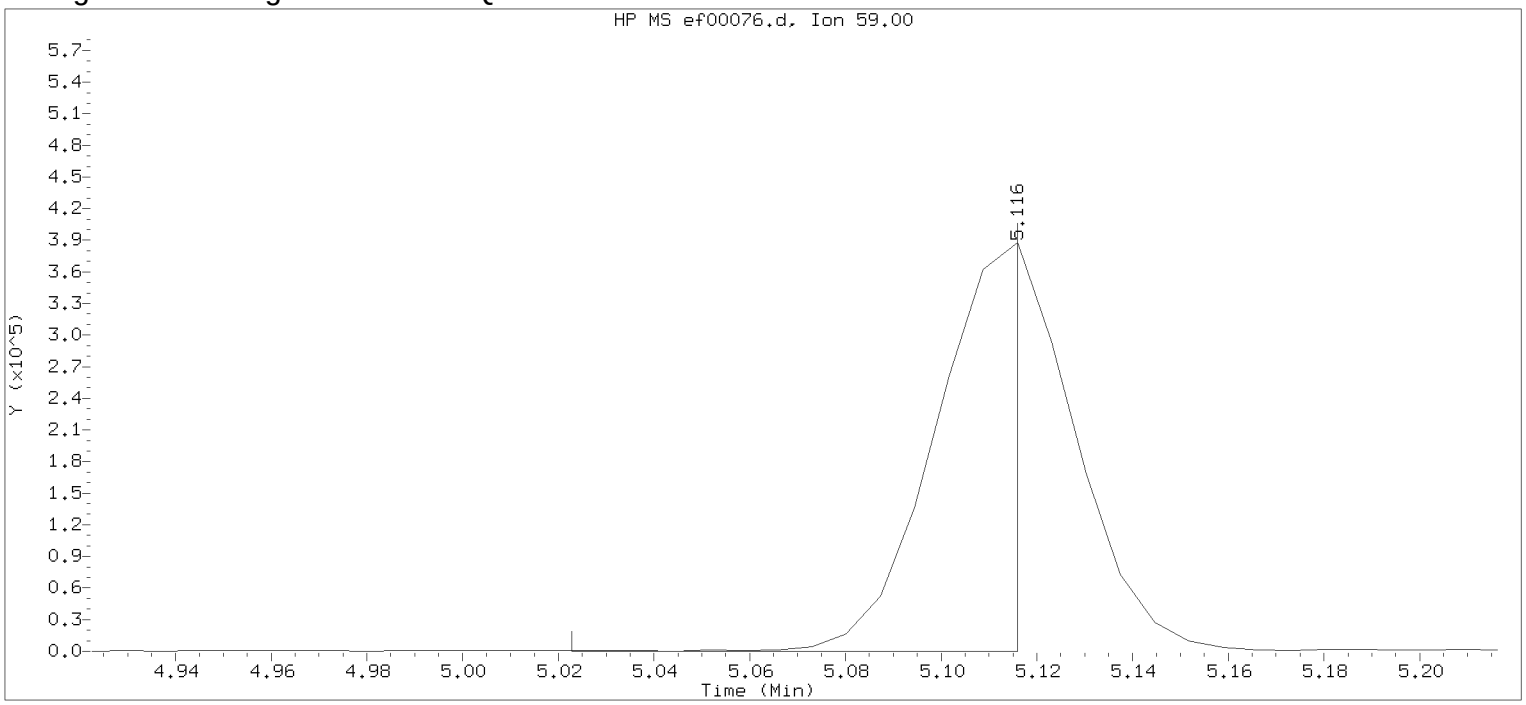
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:35.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00076.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 17:13 Analyst ID: jeb07445

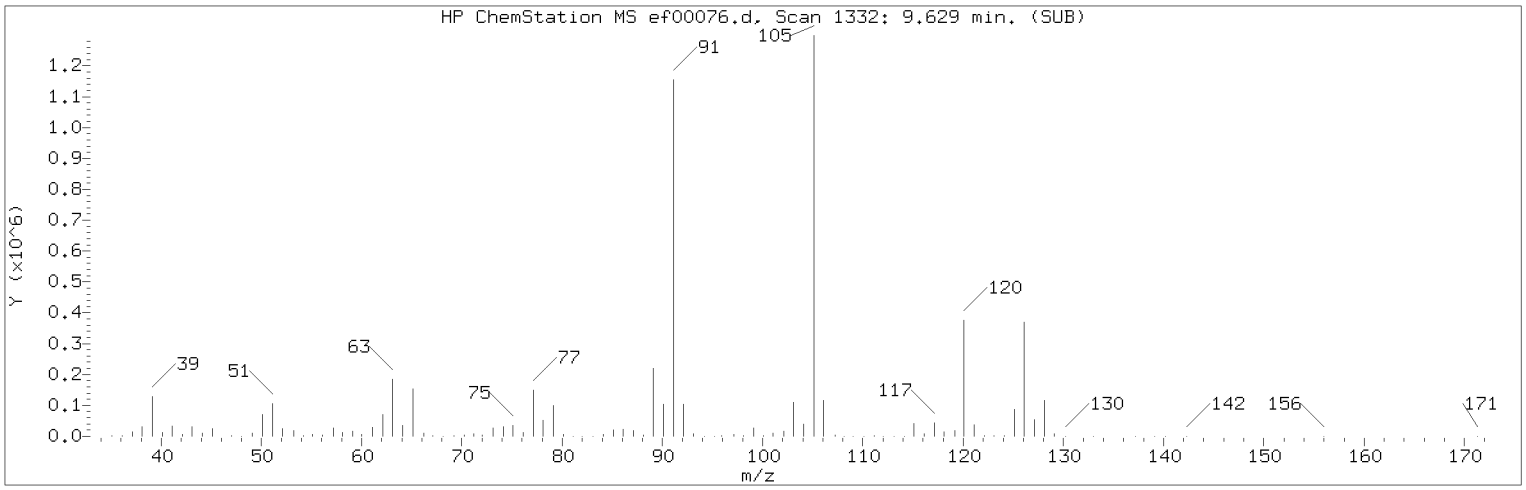
Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:32 Unknown

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

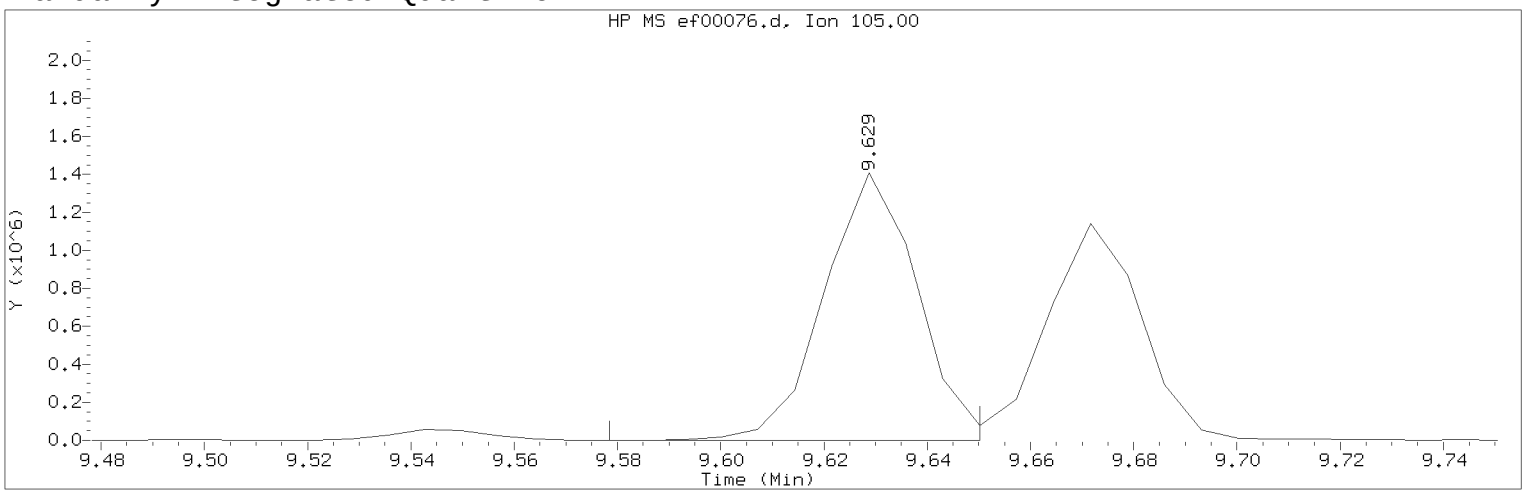
Compound Number : 34
Compound Name : Ethyl Tert-Butyl Ether
Scan Number : 702
Retention Time (minutes): 5.116
Quant Ion : 59.00
Area : 441563
Concentration (ppb(v)) : 5.5836
Integration start scan : 688 Integration stop scan: 701
Y at integration start : 297 Y at integration end: 297

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:35.
Target 3.5 esignature user=JEB07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00076.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 17:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:35 jeb07445

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

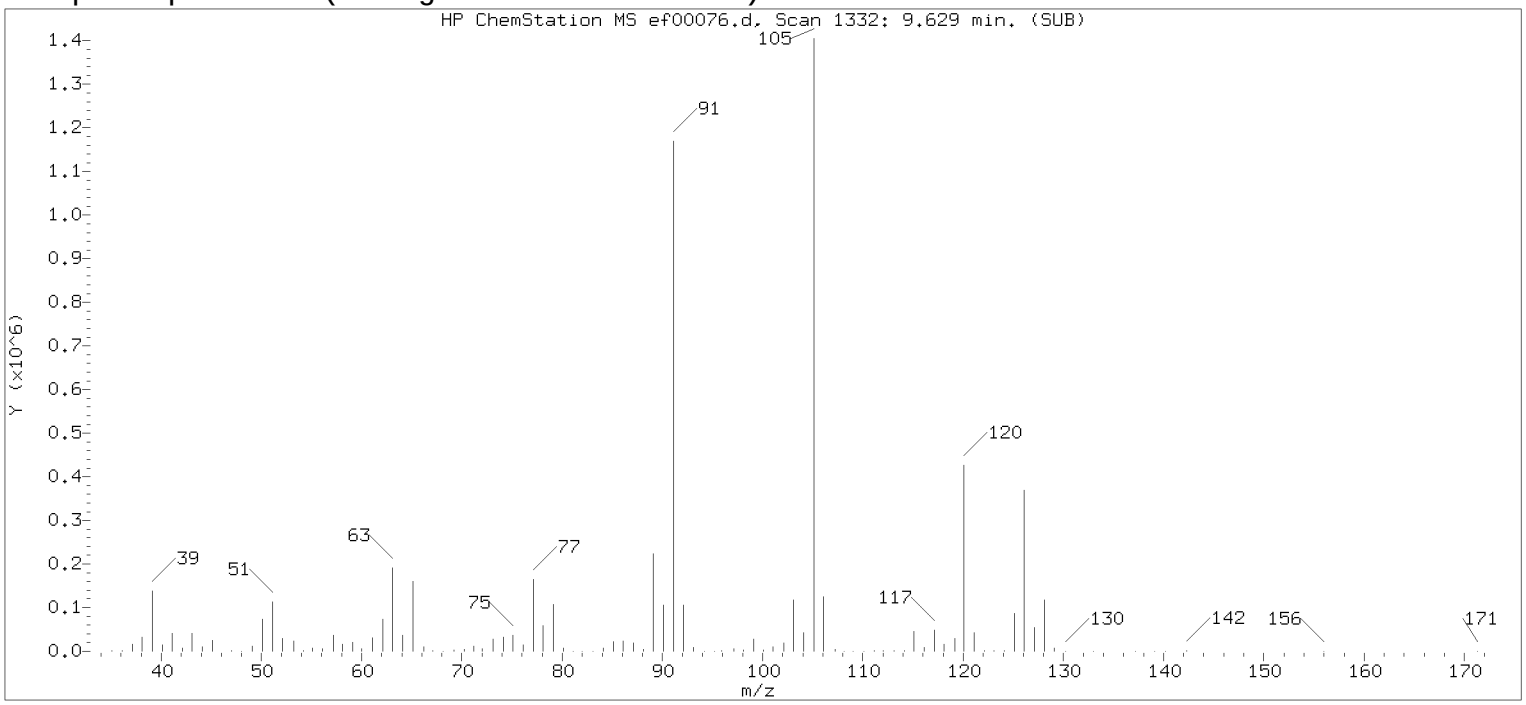
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area (flag) : 1764196M
Concentration (ppb(v)) : 9.8622
Integration start scan : 1324 Integration stop scan: 1334
Y at integration start : 599 Y at integration end: 599

Reason for manual integration: improper integration

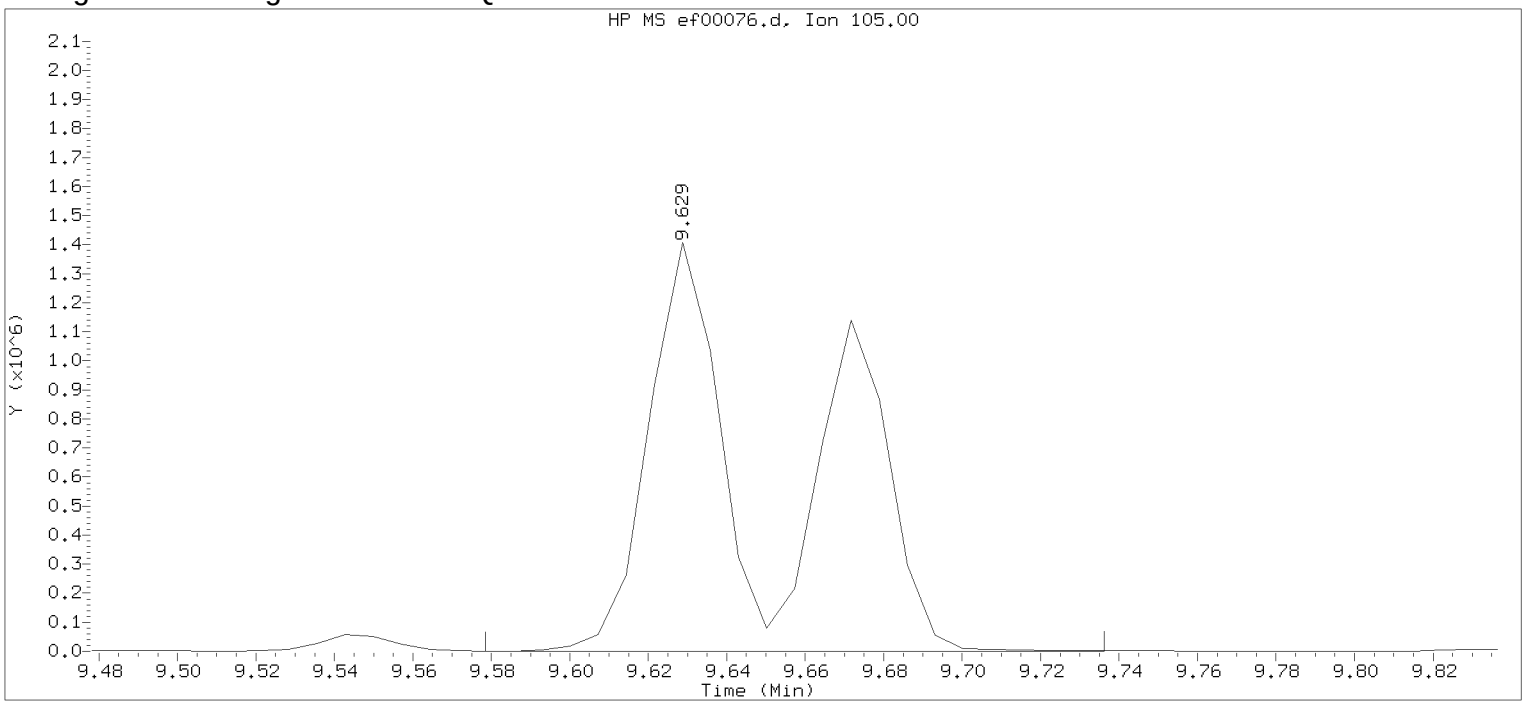
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:35.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00076.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 17:13 Analyst ID: jeb07445

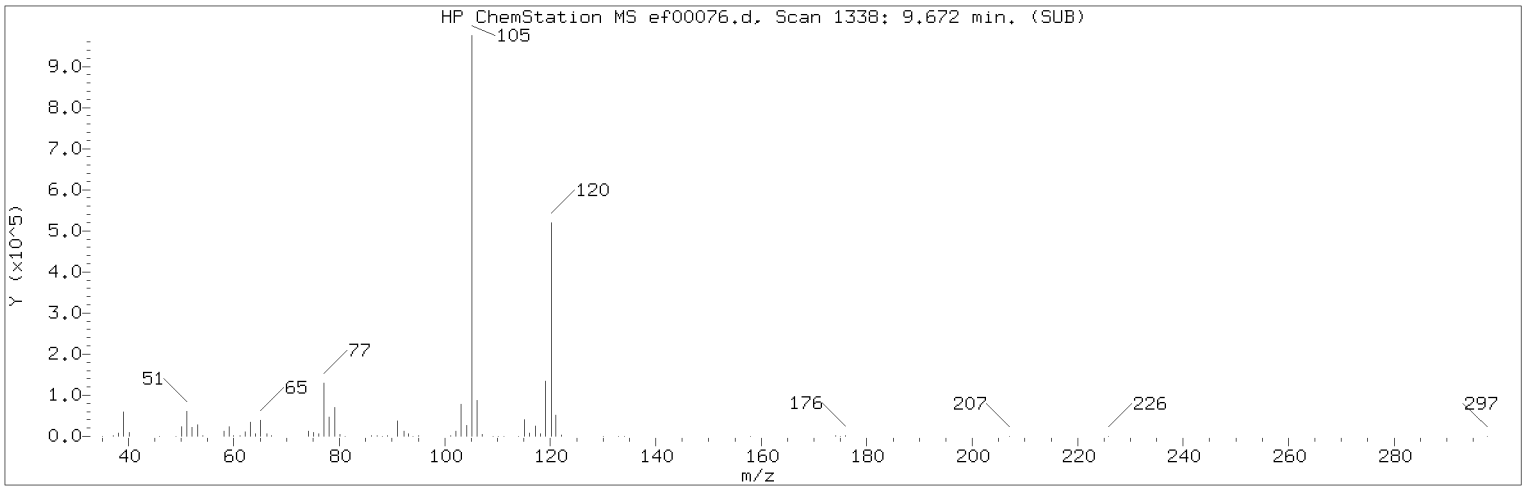
Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:32 Unknown

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

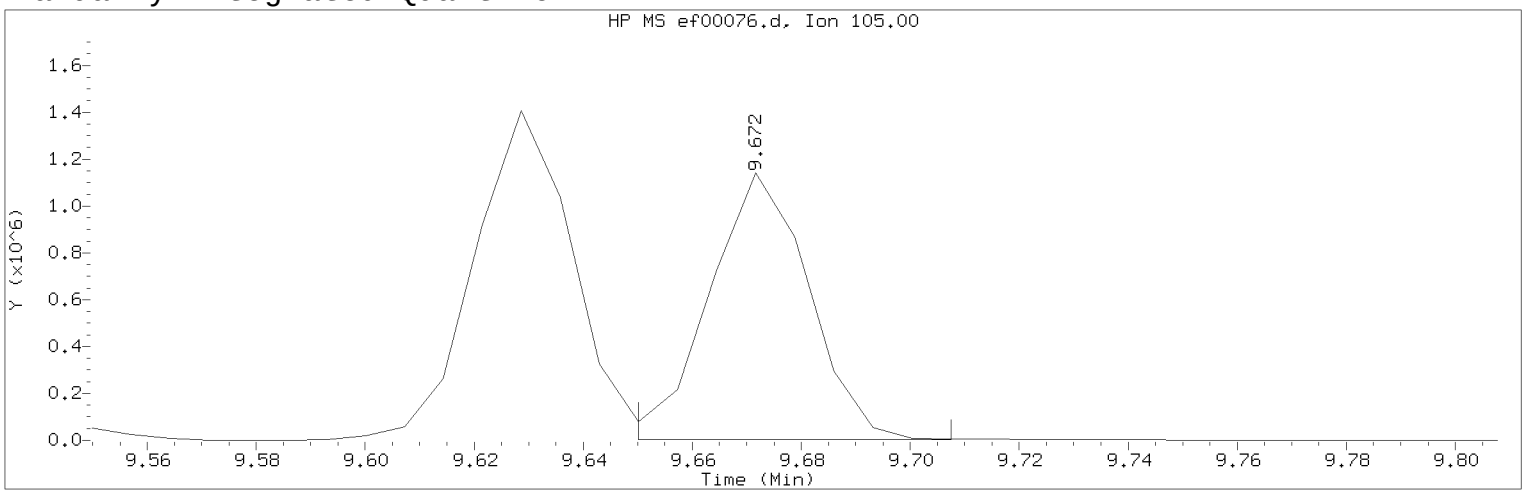
Compound Number : 86
Compound Name : 4-Ethyltoluene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 3191933
Concentration (ppb(v)) : 17.8436
Integration start scan : 1324 Integration stop scan: 1346
Y at integration start : 599 Y at integration end: 599

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:35.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00076.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 17:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:35 jeb07445

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

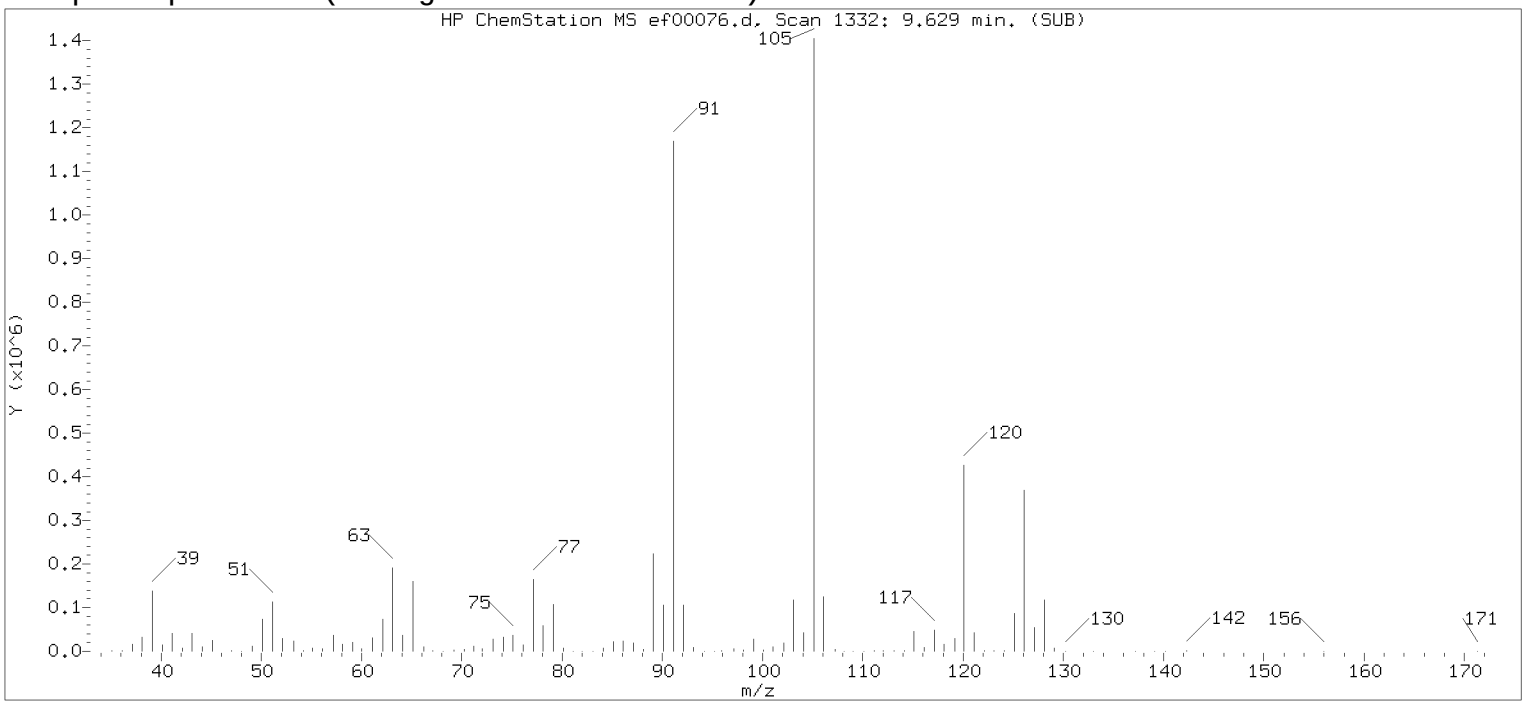
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1338
Retention Time (minutes): 9.672
Quant Ion : 105.00
Area (flag) : 1450593M
Concentration (ppb(v)) : 9.7435
Integration start scan : 1334 Integration stop scan: 1342
Y at integration start : 2274 Y at integration end: 2274

Reason for manual integration: improper integration

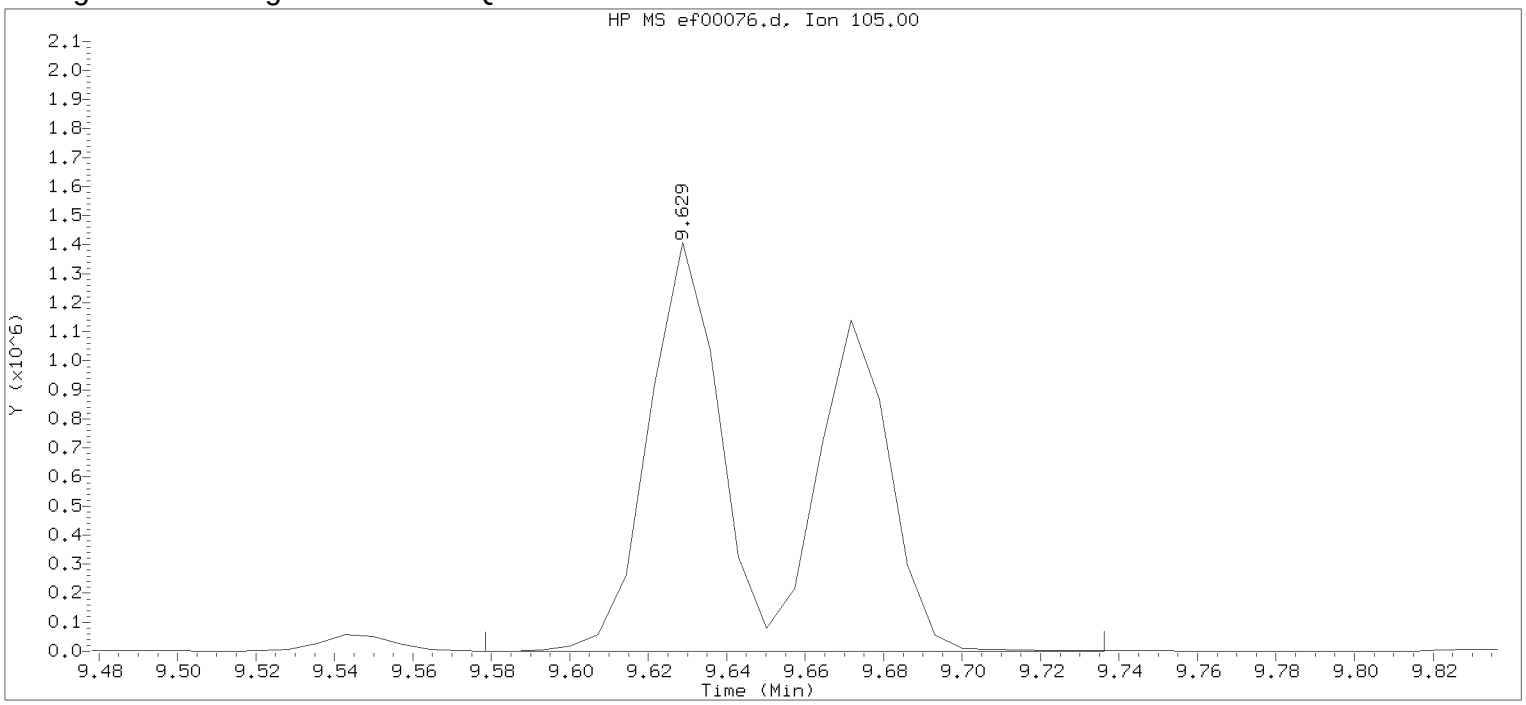
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:35.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00076.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 17:13 Analyst ID: jeb07445

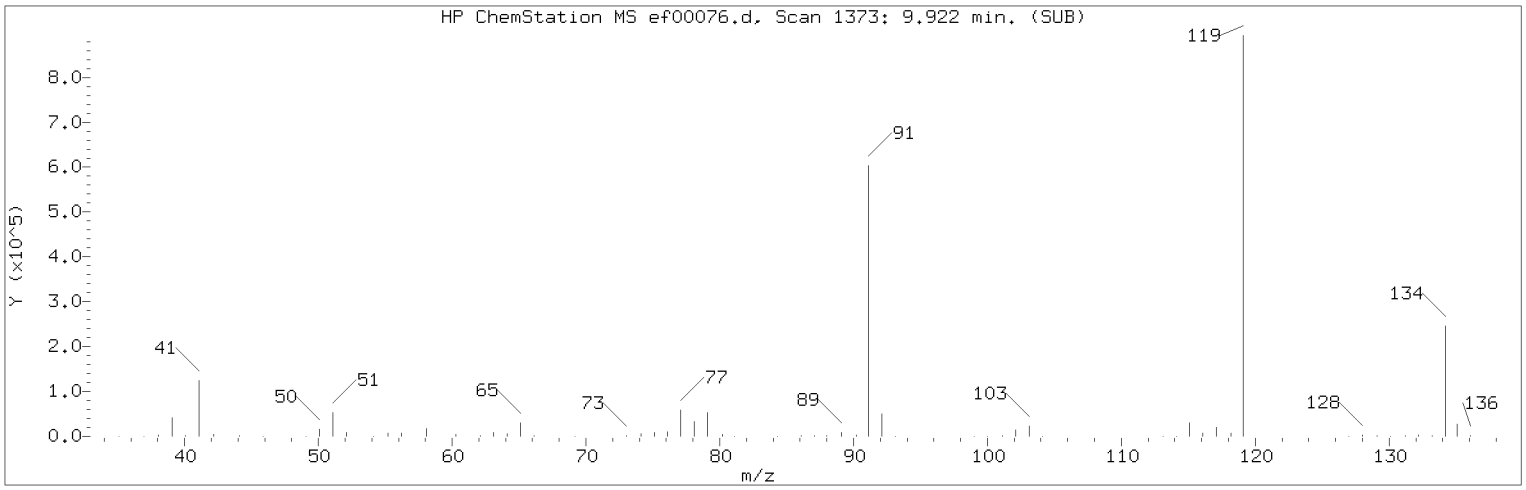
Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:32 Unknown

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

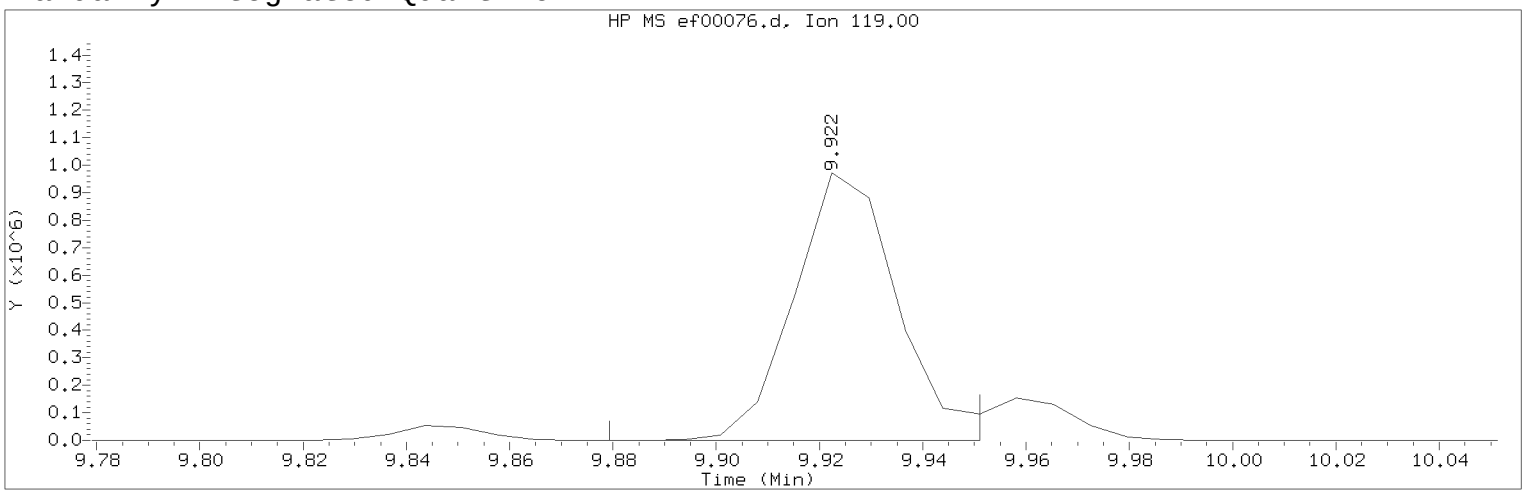
Compound Number : 87
Compound Name : 1,3,5-Trimethylbenzene
Scan Number : 1332
Retention Time (minutes): 9.629
Quant Ion : 105.00
Area : 3190997
Concentration (ppb(v)) : 21.4335
Integration start scan : 1324 Integration stop scan: 1346
Y at integration start : 698 Y at integration end: 698

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:35.
Target 3.5 esignature user LE02jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00076.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 17:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:35 jeb07445

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

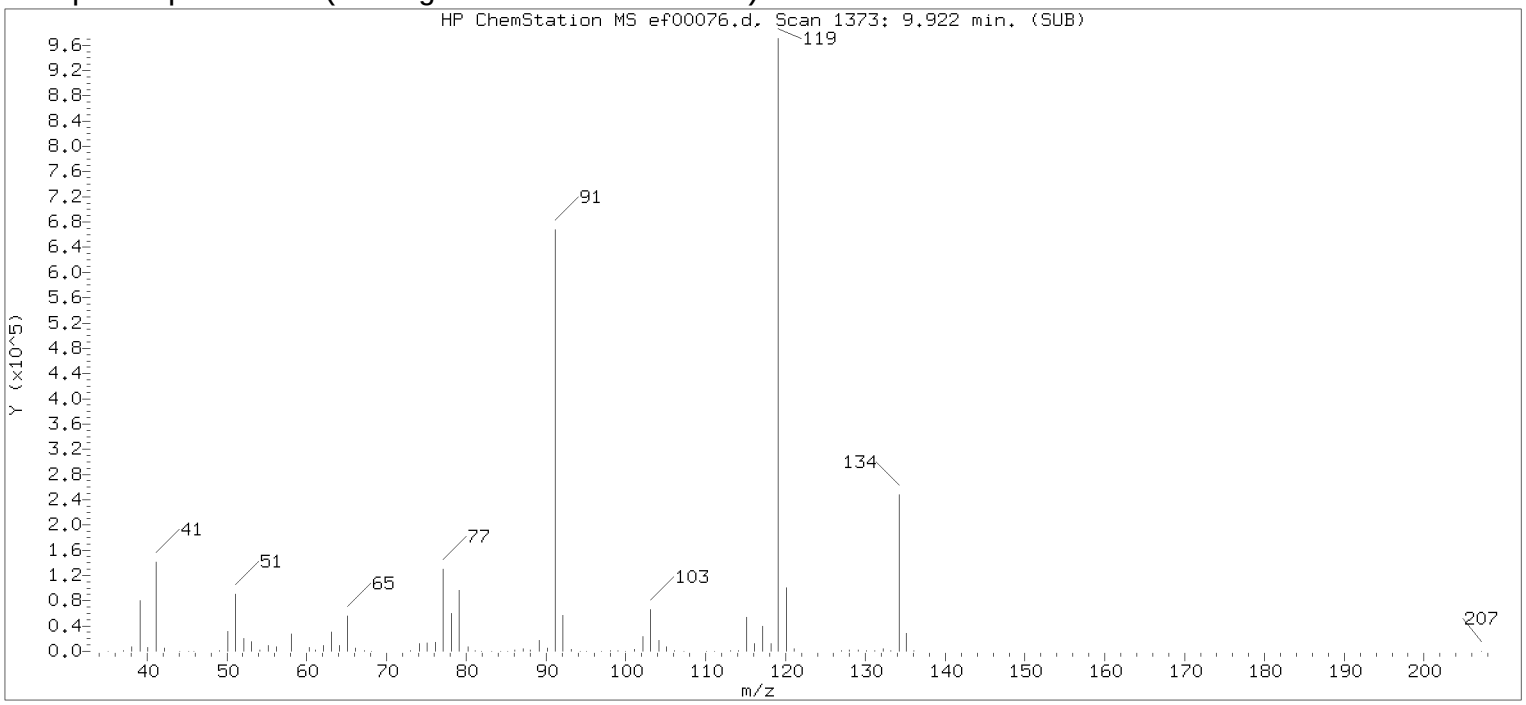
Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area (flag) : 1355050M
Concentration (ppb(v)) : 8.7252
Integration start scan : 1366 Integration stop scan: 1376
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

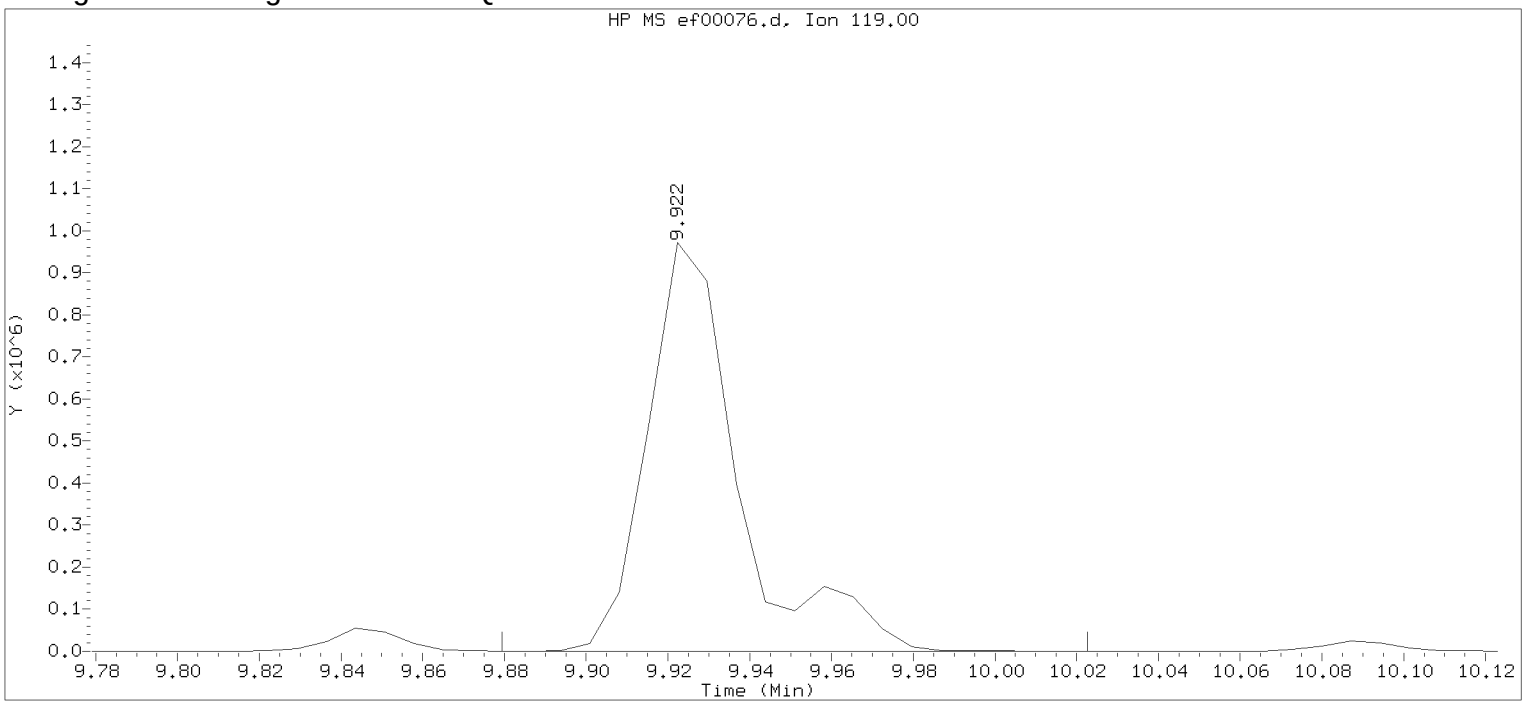
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 06/05/2018 at 17:35.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/15/2018 at 11:43.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP22820.i/18jun05.b/ef00076.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 17:13 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 05-Jun-2018 17:32 Unknown

Sample Name: LCSDE02 Lab Sample ID: LCSDE02

Compound Number : 89
Compound Name : tert-Butylbenzene
Scan Number : 1373
Retention Time (minutes): 9.922
Quant Ion : 119.00
Area : 1507082
Concentration (ppb(v)) : 9.7041
Integration start scan : 1366 Integration stop scan: 1386
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 06/05/2018 at 17:35.
Target 3.5 esignature user: LE02jeb07445

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

Data file: /chem/HP22820.i/18jun05.b/ef00081.d Injection date and time: **05-JUN-2018 20:48**
Data file Sample Info. Line: cc1374;200;E1815630AA;cc1374;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1815630AA**
Date, time and analyst ID of latest file update: 14-Aug-2018 18:18 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun05.b/ef00074.d**

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 05-JUN-2018 14:56
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun05.b/ef00072.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	5.467(0.000)	751	130	279870 (-12)	10.00		190832 - 445272
51) 1,4-Difluorobenzene	6.291(0.000)	866	114	1012711 (-13)	10.00		700823 - 1635253
71) Chlorobenzene-d5	8.497(0.000)	1174	117	975435 (-12)	10.00		662513 - 1545863

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)			Not Detected					0.5	1
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)			Not Detected					0.2	1
7) 1,3-Butadiene	(1)			Not Detected					0.4	2
8) Bromomethane	(1)			Not Detected					0.5	1
9) Chloroethane	(1)			Not Detected					0.2	1
10) Bromoethene	(1)			Not Detected					0.4	2
11) Dichlorofluoromethane	(1)			Not Detected					0.2	1
12) Trichlorofluoromethane	(1)			Not Detected					0.2	1
13) Pentane	(1)			Not Detected					0.5	1
14) Ethanol	(1)			Not Detected					0.5	2
15) Freon123a	(1)			Not Detected					0.2	1
16) Acrolein	(1)			Not Detected					1	2
17) 1,1-Dichloroethene	(1)			Not Detected					0.2	1
18) Freon 113	(1)			Not Detected					0.5	2
19) Acetone	(1)			Not Detected					0.5	2
20) Methyl Iodide	(1)			Not Detected					0.2	1
21) Carbon Disulfide	(1)			Not Detected					0.5	1
22) Isopropanol	(1)			Not Detected					0.5	2
23) Acetonitrile	(1)			Not Detected					0.5	2
24) 3-Chloropropene	(1)			Not Detected					0.2	1
25) Methylene Chloride	(1)			Not Detected					0.2	1
26) tert-Butyl Alcohol	(1)			Not Detected					0.5	1
27) Acrylonitrile	(1)			Not Detected					0.5	2
28) trans-1,2-Dichloroethene	(1)			Not Detected					0.2	1
29) Methyl t-Butyl Ether	(1)			Not Detected					0.2	1
30) Hexane	(1)			Not Detected					0.2	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.2	1
32) Vinyl Acetate	(1)			Not Detected					1	1
33) Di-Isopropyl Ether	(1)			Not Detected					0.2	1
34) Ethyl Tert-Butyl Ether	(1)			Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.2	1
36) 1,2-Dichloroethene (total)	(1)			Not Detected					0.2	1
37) 2-Butanone	(1)			Not Detected					0.5	2
38) Ethyl Acetate	(1)			Not Detected					0.5	1
39) Methyl Acrylate	(1)			Not Detected					0.2	1
41) Tetrahydrofuran	(1)			Not Detected					0.5	1
42) Chloroform	(1)			Not Detected					0.2	1
43) 1,1,1-Trichloroethane	(1)			Not Detected					0.2	1
44) Cyclohexane	(1)			Not Detected					0.2	1

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun05.b/ef00081.d Injection date and time: **05-JUN-2018 20:48**
Data file Sample Info. Line: cc1374;200;E1815630AA;cc1374;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1815630AA**
Date, time and analyst ID of latest file update: 14-Aug-2018 18:18 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun05.b/ef00074.d**

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 05-JUN-2018 14:56
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun05.b/ef00072.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
45) Carbon Tetrachloride	(1)				Not Detected					0.2	1
46) Benzene	(2)				Not Detected					0.2	1
47) 1,2-Dichloroethane	(2)				Not Detected					0.2	1
48) Isooctane	(2)				Not Detected					0.2	1
49) Tert-Amyl Methyl Ether	(2)				Not Detected					0.2	1
50) Heptane	(2)				Not Detected					0.5	1
52) Trichloroethene	(2)				Not Detected					0.2	1
53) Ethyl Acrylate	(2)				Not Detected					0.2	1
54) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
55) Dibromomethane	(2)				Not Detected					0.2	1
56) 1,4-Dioxane	(2)				Not Detected					0.5	1
57) Methyl Methacrylate	(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)				Not Detected					0.2	1
62) Octane	(3)				Not Detected					0.2	1
63) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
64) 1,3-Dichloropropene (total)	(3)				Not Detected					0.2	1
65) Ethyl Methacrylate	(3)				Not Detected					0.2	1
66) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
67) Tetrachloroethene	(3)				Not Detected					0.2	1
68) 2-Hexanone	(3)				Not Detected					0.5	2
69) Dibromochloromethane	(3)				Not Detected					0.2	1
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)				Not Detected					0.2	1
75) m/p-Xylene	(3)				Not Detected					0.2	1
76) o-Xylene	(3)				Not Detected					0.2	1
77) Xylene (total)	(3)				Not Detected					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
84) n-Propylbenzene	(3)				Not Detected					0.5	1
85) 2-Chlorotoluene	(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
88) Alpha Methyl Styrene	(3)				Not Detected					0.2	1
89) tert-Butylbenzene	(3)				Not Detected					0.5	1
90) 1,2,4-Trimethylbenzene	(3)				Not Detected					0.2	1
91) sec-Butylbenzene	(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
94) p-Isopropyltoluene	(3)				Not Detected					0.2	1
95) Benzyl Chloride	(3)				Not Detected					0.5	1
96) 1,2-Dichlorobenzene	(3)				Not Detected					0.2	1
97) n-Butylbenzene	(3)				Not Detected					0.2	1
98) Hexachloroethane	(3)				Not Detected					0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)				Not Detected					0.2	1
100) 1,2,4-Trichlorobenzene	(3)				Not Detected					0.5	2

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP22820.i/18jun05.b/ef00081.d Injection date and time: **05-JUN-2018 20:48**
Data file Sample Info. Line: cc1374;200;E1815630AA;cc1374;0;3;BLANK; Instrument ID: **HP22820.i** Batch: **E1815630AA**
Date, time and analyst ID of latest file update: 14-Aug-2018 18:18 jeb07445

Blank Data file reference: **/chem/HP22820.i/18jun05.b/ef00074.d**

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 05-JUN-2018 14:56
Mid Level Daily Calibration Standard Reference: **/chem/HP22820.i/18jun05.b/ef00072.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
101) Hexachlorobutadiene	(3)				Not Detected					0.4	2
102) Naphthalene	(3)				Not Detected					0.4	1

Total number of targets = 99

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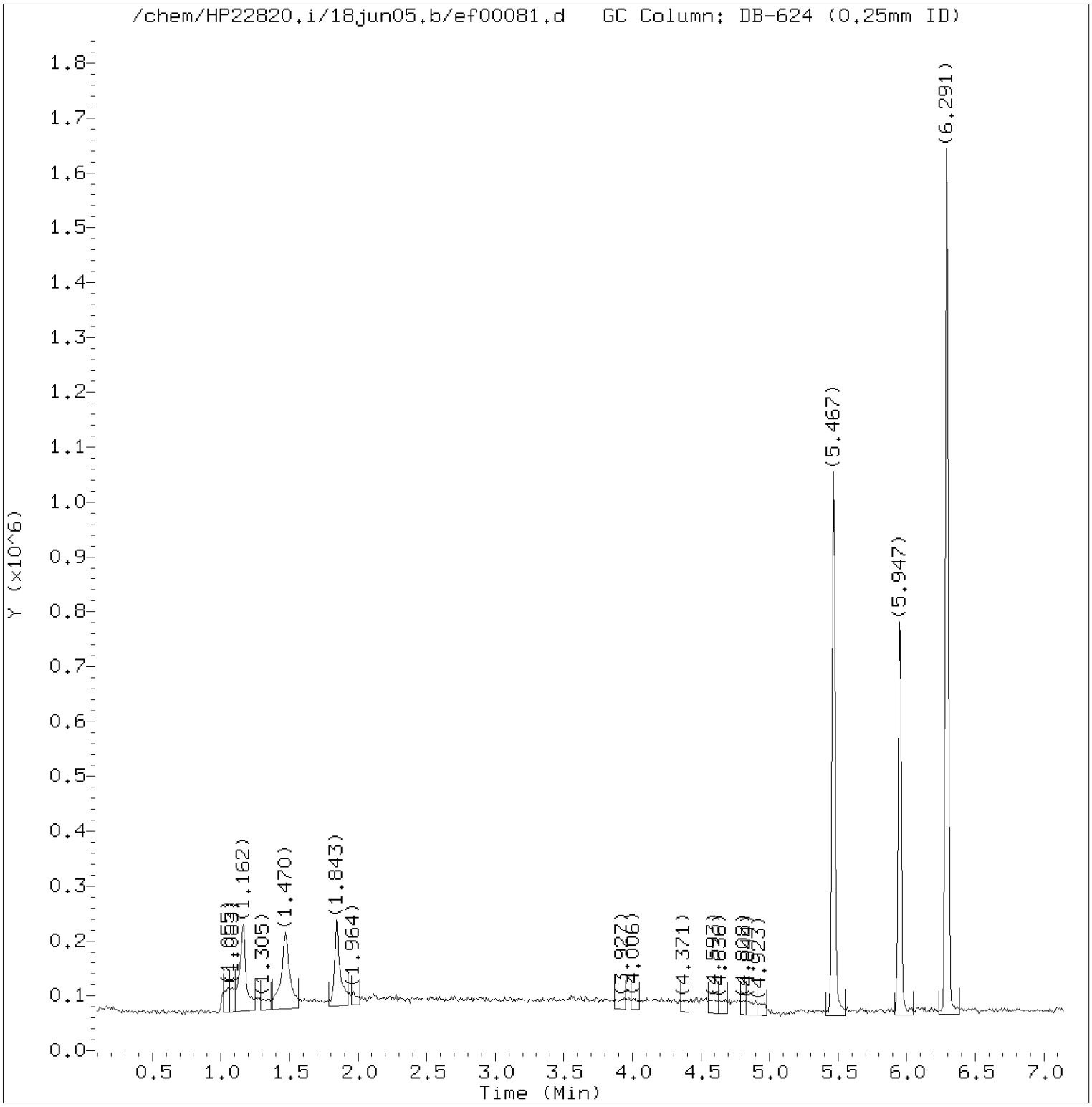
Secondary review performed and digitally signed by Jeffrey B. Smith on 10/04/2018 at 12:36. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

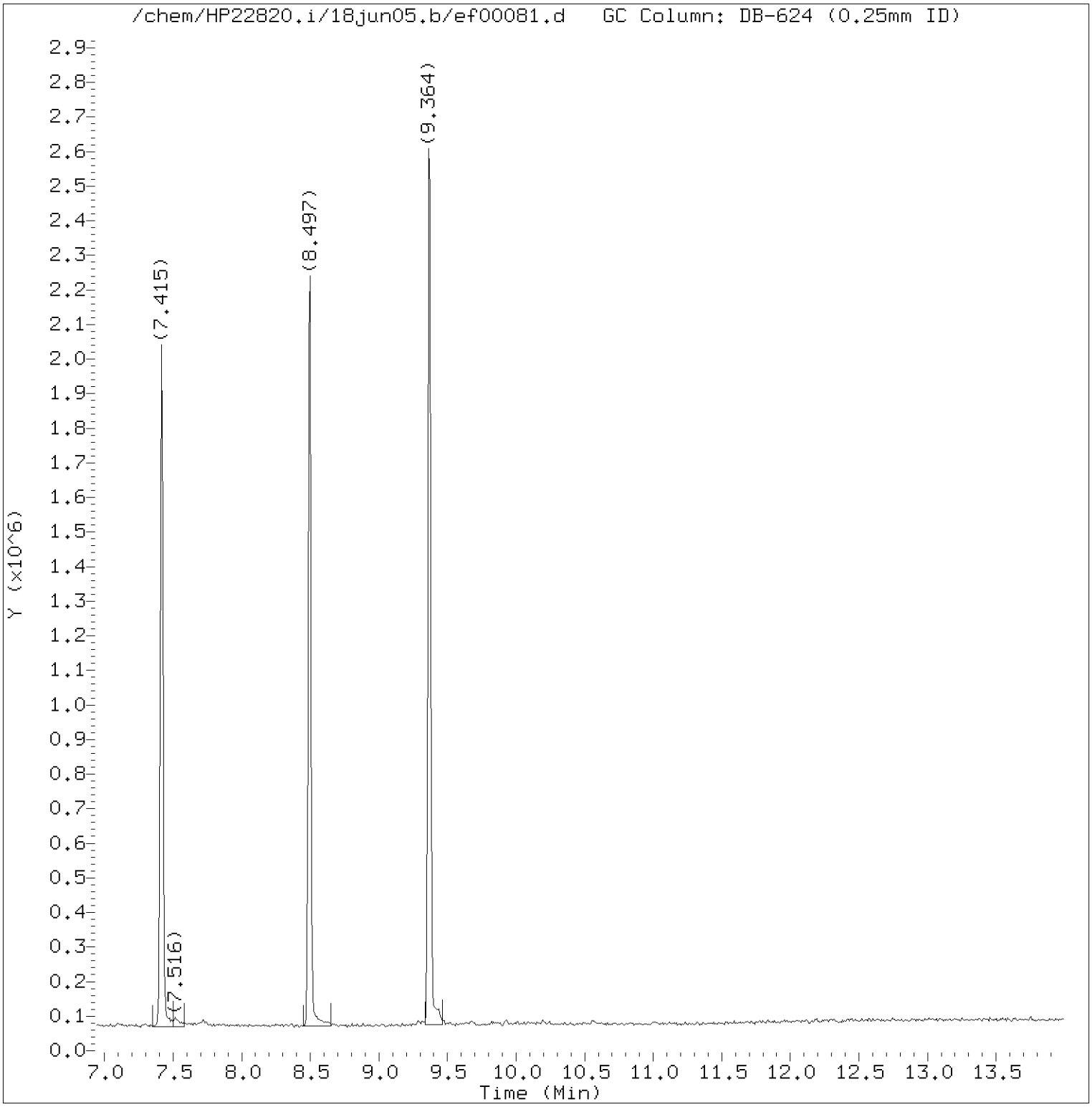
Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00081.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 20:48 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 14-Aug-2018 18:18 jeb07445

Sample Name: cc1374 Lab Sample ID: cc1374

Digitally signed by Jacob E. Bailey
on 08/14/2018 at 18:19.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00081.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 20:48 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 14-Aug-2018 18:18 jeb07445

Sample Name: cc1374 Lab Sample ID: cc1374

Digitally signed by Jacob E. Bailey
on 08/14/2018 at 18:19.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP22820.i/18jun05.b/ef00081.d Instrument ID: HP22820.i
Injection date and time: 05-JUN-2018 20:48 Analyst ID: jeb07445

Method used: /chem/HP22820.i/18jun05.b/to-15.m Sublist used: all
Calibration date and time: 05-JUN-2018 14:56
Date, time and analyst ID of latest file update: 14-Aug-2018 18:18 jeb07445

Sample Name: cc1374 Lab Sample ID: cc1374

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40)*Bromochloromethane	(1)	5.467	130	279870	10.000
51)*1,4-Difluorobenzene	(2)	6.291	114	1012711	10.000
71)*Chlorobenzene-d5	(3)	8.497	117	975435	10.000

* = Compound is an internal standard.

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on 08/14/2018 at 18:19.
Target 3.5 esignature user ID: jeb07445

Lancaster Laboratories
Volatiles in Air
Runlog for Agilent GC/MS System HP26379 **HP #06**

Data Directory Path is - D:\data\18apr27\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
ads07818	FD00610.D	50NGBFB	04/27/2018	09:41		
ads07818	FD00611.D	VSTD010	04/27/2018	10:37		
ads07818	FD00612.D	VSTD005	04/27/2018	11:07		
ads07818	FD00613.D	VSTD002	04/27/2018	11:38		
ads07818	FD00614.D	VSTD001	04/27/2018	12:08		
ads07818	FD00615.D	VSTD0.5	04/27/2018	12:39		
ads07818	FD00616.D	VSTD025	04/27/2018	13:10		
ads07818	FD00617.D	VSTD070	04/27/2018	13:40		
ads07818	FD00618.D	VBLKF30	04/27/2018	14:21	F1811730AA	
ads07818	FD00619.D	VBLKF30	04/27/2018	14:52	F1811730AA	
ads07818	FD00620.D	VBLKF30	04/27/2018	15:22	F1811730AA	
ads07818	FD00621.D	LCSF30	04/27/2018	15:59	F1811730AA	
ads07818	FD00622.D	LCSDF30	04/27/2018	16:30	F1811730AA	
ads07818	FD00623.D	mdlv0.5	04/27/2018	17:00	F1811730AA	
ads07818	FD00624.D	mdlv0.5	04/27/2018	17:31	F1811730AA	
ads07818	FD00625.D	LCSF30	04/27/2018	18:02	F1811730AA	
ads07818	FD00626.D	LCSDF30	04/27/2018	18:32	F1811730AA	
ads07818	FD00627.D	cc930	04/27/2018	19:33	F1811730AA	
ads07818	FD00628.D	cc1013	04/27/2018	20:03	F1811730AA	
ads07818	FD00629.D	cc1383	04/27/2018	20:34	F1811730AA	
ads07818	FD00630.D	cc1452	04/27/2018	21:05	F1811730AA	
ads07818	FD00631.D	cc1499	04/27/2018	21:35	F1811730AA	

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

SDG No.:

Lab File ID: fd00610.d

BFB Injection Date: 04/27/2018

Instrument ID: 26379

BFB Injection Time: 09:41

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0% - 40.0% of mass 95	24.99
75	30.0% - 66.0% of mass 95	50.97
95	Base peak, 100% relative abundance	100.00
96	5.0% - 9.0% of mass 95	6.78
173	< 2.0% of mass 174	0.63 (0.83)
174	> 50.0% of mass 95	75.69
175	4.0% - 9.0% of mass 174	5.25 (6.94)
176	93.0% - 101.0% of mass 174	72.18 (95.37)
177	5.0% - 9.0% of mass 176	4.47 (6.19)

THIS CHECK APPLIES TO THE FOLLOWING:

LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD010	fd00611.d	04/27/2018	10:37
VSTD005	fd00612.d	04/27/2018	11:07
VSTD002	fd00613.d	04/27/2018	11:38
VSTD001	fd00614.d	04/27/2018	12:08
VSTD025	fd00616.d	04/27/2018	13:10
VSTD070	fd00617.d	04/27/2018	13:40
VBLKF30	fd00620.d	04/27/2018	15:22
mdlv0.5	fd00623.d	04/27/2018	17:00
mdlv0.2	fd00624.d	04/27/2018	17:31
LCSF30	fd00625.d	04/27/2018	18:02
LCSDF30	fd00626.d	04/27/2018	18:32
cc930	fd00627.d	04/27/2018	19:33
cc1013	fd00628.d	04/27/2018	20:03
cc1383	fd00629.d	04/27/2018	20:34
cc1452	fd00630.d	04/27/2018	21:05
cc1499	fd00631.d	04/27/2018	21:35

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FORM 06
VOLATILE ORGANICS IN AIR
INITIAL CALIBRATION DATA

SDG No.:

Instrument ID: 26379 Calibration Start Date: 04/27/2018 Calibration End Date: 04/27/2018

Calibration Start Time: 10:37 Calibration End Time: 13:40

LAB FILE IDs:
RRF 1 = fd00614.d RRF 2 = fd00613.d RRF 5 = fd00612.d RRF 10 = fd00611.d RRF 25 = fd00616.d
RRF 70 = fd00617.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
Propene	0.956	1.193	1.266	1.175	1.185	1.365	1.190	11	AVG
Dichlorodifluoromethane	2.710	3.101	3.558	3.559	3.442	3.503	3.312	10	AVG
Chlorodifluoromethane	2.627	2.631	2.707	2.660	2.609	2.645	2.646	1	AVG
Freon 114	3.490	3.234	3.493	3.428	3.256	3.315	3.369	3	AVG
Chloromethane	1.477	1.494	1.500	1.416	1.401	1.369	1.443	4	AVG
Vinyl Chloride	0.674	0.866	0.881	0.859	0.833	0.902	0.836	10	AVG
1,3-Butadiene	0.758	0.746	0.755	0.787	0.694	0.788	0.755	5	AVG
Bromomethane	0.694	0.887	1.012	1.079	1.008	1.082	0.960	15	AVG
Chloroethane	0.541	0.646	0.703	0.689	0.674	0.733	0.664	10	AVG
Bromoethene	0.662	0.754	0.924	0.897	0.952	1.129	0.886	18	AVG
Dichlorofluoromethane	2.049	2.604	2.957	2.928	2.842	2.877	2.710	13	AVG
Trichlorofluoromethane	3.823	3.538	3.589	3.496	3.329	3.385	3.527	5	AVG
Pentane	2.039	2.087	2.428	2.321	2.644	2.927	2.408	14	AVG
Ethanol	0.501	0.483	0.521	0.473	0.494	0.626	0.516	11	AVG
Freon123a	2.942	2.679	2.589	2.500	2.434	2.462	2.601	7	AVG
Acrolein	0.275	0.387	0.420	0.428	0.467	0.585	0.427	24	AVG
1,1-Dichloroethene	1.380	1.663	1.962	1.899	1.993	2.296	1.866	17	AVG
Freon 113	2.357	2.074	1.909	1.879	1.783	1.759	1.960	11	AVG
Acetone	1.817	2.114	2.328	2.321	2.349	2.482	2.235	11	AVG
Methyl Iodide	1.826	2.251	2.583	2.179	2.581	2.558	2.330	13	AVG
Carbon Disulfide	2.042	2.502	2.919	3.075	3.110	3.343	2.832	17	AVG
Isopropanol	1.759	1.875	2.031	1.991	2.197	2.701	2.092	16	AVG
Acetonitrile	1.219	1.296	1.495	1.456	1.456	1.537	1.410	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.

SDG No.:

Instrument ID: 26379 Calibration Start Date: 04/27/2018 Calibration End Date: 04/27/2018

Calibration Start Time: 10:37 Calibration End Time: 13:40

LAB FILE IDs:
RRF 1 = fd00614.d RRF 2 = fd00613.d RRF 5 = fd00612.d RRF 10 = fd00611.d RRF 25 = fd00616.d
RRF 70 = fd00617.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
3-Chloropropene	1.364	1.318	1.684	1.566	1.877	2.170	1.663	19	AVG
Methylene Chloride	0.731	0.920	1.038	1.023	1.018	1.043	0.962	13	AVG
tert-Butyl Alcohol	2.228	2.235	2.461	2.352	2.540	2.903	2.453	10	AVG
Acrylonitrile	0.862	0.965	1.108	1.128	1.177	1.348	1.098	15	AVG
trans-1,2-Dichloroethene	1.447	1.620	1.851	1.817	1.869	2.131	1.789	13	AVG
Methyl t-Butyl Ether	2.495	2.593	2.889	2.959	3.279	3.502	2.953	13	AVG
Hexane	1.338	1.272	1.353	1.368	1.458	1.542	1.389	7	AVG
1,1-Dichloroethane	2.279	2.343	2.517	2.487	2.479	2.627	2.455	5	AVG
Vinyl Acetate	2.510	2.765	3.416	3.688	4.129	4.661	3.528	23	AVG
Di-Isopropyl Ether	3.730	3.611	3.966	3.913	4.617	5.412	4.208	16	AVG
Ethyl Tert-Butyl Ether	2.609	2.917	3.299	3.340	3.948	4.650	3.460	21	AVG
cis-1,2-Dichloroethene	1.276	1.455	1.677	1.644	1.721	2.036	1.635	16	AVG
2-Butanone	2.610	2.579	3.005	2.967	3.140	3.423	2.954	11	AVG
Ethyl Acetate	2.838	2.951	3.236	3.226	3.415	3.820	3.248	11	AVG
Methyl Acrylate	1.797	1.850	2.127	2.198	2.498	2.839	2.218	18	AVG
Tetrahydrofuran	1.219	1.319	1.542	1.601	1.745	1.964	1.565	17	AVG
Chloroform	2.567	2.644	2.930	2.863	2.803	2.869	2.779	5	AVG
1,1,1-Trichloroethane	3.086	3.051	3.066	2.949	2.947	2.962	3.010	2	AVG
Cyclohexane	1.604	1.712	1.814	1.790	2.177	2.541	1.940	18	AVG
Carbon Tetrachloride	3.184	2.936	2.992	2.946	2.931	2.967	2.993	3	AVG
Benzene	1.228	1.280	1.312	1.349	1.270	1.150	1.265	5	AVG
1,2-Dichloroethane	0.703	0.714	0.751	0.749	0.696	0.625	0.706	7	AVG
Isooctane	1.466	1.677	1.876	2.018	2.186	2.161	1.898	15	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: 26379 Calibration Start Date: 04/27/2018 Calibration End Date: 04/27/2018

Calibration Start Time: 10:37 Calibration End Time: 13:40

LAB FILE IDs:
RRF 1 = fd00614.d RRF 2 = fd00613.d RRF 5 = fd00612.d RRF 10 = fd00611.d RRF 25 = fd00616.d
RRF 70 = fd00617.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
Tert-Amyl Methyl Ether	0.754	0.837	0.907	0.966	1.042	1.049	0.926	13	AVG
Heptane	0.325	0.300	0.342	0.380	0.408	0.410	0.361	13	AVG
Trichloroethene	0.488	0.524	0.543	0.529	0.516	0.516	0.519	4	AVG
Ethyl Acrylate	0.899	0.801	0.839	0.885	0.979	1.030	0.906	9	AVG
1,2-Dichloropropane	0.626	0.564	0.570	0.578	0.558	0.494	0.565	7	AVG
Dibromomethane	0.517	0.522	0.545	0.556	0.516	0.480	0.523	5	AVG
1,4-Dioxane	0.220	0.220	0.250	0.263	0.289	0.289	0.255	12	AVG
Methyl Methacrylate	0.341	0.336	0.336	0.355	0.391	0.414	0.362	9	AVG
Bromodichloromethane	1.000	0.983	1.008	1.032	0.975	0.866	0.977	6	AVG
cis-1,3-Dichloropropene	0.646	0.653	0.631	0.680	0.721	0.711	0.674	5	AVG
4-Methyl-2-Pentanone	1.167	1.135	1.179	1.201	1.275	1.192	1.191	4	AVG
Toluene	1.404	1.333	1.328	1.369	1.445	1.323	1.367	4	AVG
Octane	0.943	0.953	1.040	1.151	1.375	1.241	1.117	15	AVG
trans-1,3-Dichloropropene	0.573	0.559	0.604	0.632	0.679	0.627	0.612	7	AVG
Ethyl Methacrylate	0.520	0.508	0.531	0.571	0.696	0.694	0.587	15	AVG
1,1,2-Trichloroethane	0.650	0.619	0.607	0.596	0.585	0.501	0.593	8	AVG
Tetrachloroethene	0.828	0.825	0.804	0.811	0.812	0.720	0.800	5	AVG
2-Hexanone	0.920	0.935	0.975	1.041	1.233	1.162	1.044	12	AVG
Dibromochloromethane	0.717	0.703	0.710	0.711	0.736	0.660	0.706	4	AVG
1,2-Dibromoethane	0.874	0.827	0.806	0.813	0.830	0.755	0.817	5	AVG
Chlorobenzene	1.325	1.271	1.219	1.226	1.289	1.108	1.240	6	AVG
1,1,1,2-Tetrachloroethane	0.782	0.762	0.726	0.709	0.713	0.604	0.716	9	AVG
Ethylbenzene	1.768	1.711	1.717	1.784	2.011	****	1.798	7	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.

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FORM 06
VOLATILE ORGANICS IN AIR
INITIAL CALIBRATION DATA

SDG No.:

Instrument ID: 26379 Calibration Start Date: 04/27/2018 Calibration End Date: 04/27/2018

Calibration Start Time: 10:37 Calibration End Time: 13:40

LAB FILE IDs:
RRF 1 = fd00614.d RRF 2 = fd00613.d RRF 5 = fd00612.d RRF 10 = fd00611.d RRF 25 = fd00616.d
RRF 70 = fd00617.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
m/p-Xylene	1.207	1.121	1.160	1.221	1.480	1.375	1.261	11	AVG
o-Xylene	1.108	0.997	1.044	1.129	1.433	1.369	1.180	15	AVG
Styrene	0.675	0.714	0.776	0.892	1.102	1.026	0.864	20	AVG
Bromoform	0.823	0.779	0.797	0.825	0.920	0.814	0.826	6	AVG
Cumene	1.400	1.386	1.495	1.654	2.059	****	1.599	17	AVG
Bromobenzene	0.651	0.636	0.688	0.715	0.771	0.665	0.687	7	AVG
1,1,2,2-Tetrachloroethane	1.427	1.283	1.243	1.196	1.234	1.015	1.233	11	AVG
1,2,3-Trichloropropane	0.427	0.418	0.386	0.376	0.390	0.335	0.389	8	AVG
n-Propylbenzene	0.408	0.425	0.473	0.506	0.622	0.574	0.501	17	AVG
2-Chlorotoluene	0.399	0.410	0.466	0.504	0.568	0.500	0.474	13	AVG
4-Ethyltoluene	1.366	1.363	1.578	1.762	2.149	****	1.644	20	AVG
1,3,5-Trimethylbenzene	1.094	1.162	1.419	1.597	1.868	****	1.428	22	AVG
Alpha Methyl Styrene	0.456	0.469	0.508	0.618	0.835	****	0.577	27	AVG
tert-Butylbenzene	0.960	1.034	1.285	1.477	1.731	****	1.297	24	AVG
1,2,4-Trimethylbenzene	1.008	1.071	1.336	1.493	1.799	****	1.342	24	AVG
sec-Butylbenzene	1.585	1.704	2.017	2.232	2.615	****	2.031	20	AVG
1,3-Dichlorobenzene	1.100	1.089	1.098	1.090	1.260	****	1.127	7	AVG
1,4-Dichlorobenzene	1.007	0.993	1.034	1.060	1.277	****	1.074	11	AVG
p-Isopropyltoluene	1.165	1.243	1.518	1.720	2.160	****	1.561	26	AVG
Benzyl Chloride	0.176	0.191	0.221	0.243	0.331	****	0.232	26	AVG
1,2-Dichlorobenzene	0.927	0.939	0.979	0.980	1.173	1.024	1.004	9	AVG
n-Butylbenzene	0.723	0.732	0.864	0.984	1.326	1.189	0.970	25	AVG
Hexachloroethane	0.561	0.544	0.565	0.600	0.708	0.625	0.601	10	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.

SDG No.:

Instrument ID: 26379 Calibration Start Date: 04/27/2018 Calibration End Date: 04/27/2018

Calibration Start Time: 10:37 Calibration End Time: 13:40

LAB FILE IDs:
RRF 1 = fd00614.d RRF 2 = fd00613.d RRF 5 = fd00612.d RRF 10 = fd00611.d RRF 25 = fd00616.d
RRF 70 = fd00617.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
1,2-Dibromo-3-chloropropane	0.369	0.360	0.385	0.397	0.560	****	0.414	20	AVG
1,2,4-Trichlorobenzene	0.496	0.484	0.516	0.511	0.715	0.738	0.577	20	AVG
Hexachlorobutadiene	0.662	0.602	0.574	0.547	0.661	0.643	0.615	8	AVG
Naphthalene	0.803	0.783	0.881	0.901	1.406	****	0.955	27	AVG

Average % RSD: 12

GLE02 Page 701 of 970

* 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.

Internal Standard
Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP26379.i/18apr27.b/fd00611.d VSTD010
/chem/HP26379.i/18apr27.b/fd00612.d VSTD005
/chem/HP26379.i/18apr27.b/fd00613.d VSTD002
/chem/HP26379.i/18apr27.b/fd00614.d VSTD001
/chem/HP26379.i/18apr27.b/fd00616.d VSTD025
/chem/HP26379.i/18apr27.b/fd00617.d VSTD070

Area Summary

Internal Standard Name	File ID: fd00611.d	fd00612.d	fd00613.d	fd00614.d	fd00616.d	fd00617.d	Avg. Area	%RSD	In Spec
Bromochloromethane	447940	433156	412464	391569	437312	430312	425459	5	Yes
1,4-Difluorobenzene	1270082	1260914	1141808	1095376	1324863	1490334	1263896	11	Yes
Chlorobenzene-d5	1332823	1302118	1193125	1153600	1308734	1505146	1299258	9	Yes

%RSD of internal standard area is flagged out of spec if greater than 30.

RT Summary

Internal Standard Name	File ID: fd00611.d	fd00612.d	fd00613.d	fd00614.d	fd00616.d	fd00617.d	Avg. RT
Bromochloromethane	11.101	11.101	11.108	11.101	11.101	11.122	11.105
1,4-Difluorobenzene	13.393	13.393	13.393	13.393	13.393	13.407	13.395
Chlorobenzene-d5	18.235	18.235	18.235	18.235	18.235	18.242	18.236

Comments:_____

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Report generated on 04/27/2018 at 14:27

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 LCS File ID: fd00625.d LCSD File ID: fd00626.d

Batch: F1811730AA LCS Injected: 04/27/2018 LCSD Injected: 04/27/2018

Method: EPA TO-15 LCS Client ID: LCSF30 LCSD Client ID: LCSDF30

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	10.00	9.97	10.62	100	106	78-126	6	25	YES
Dichlorodifluoromethane	10.00	10.71	11.05	107	111	74-133	3	25	YES
Chlorodifluoromethane	10.00	10.66	10.79	107	108	70-138	1	25	YES
Freon 114	10.00	10.42	10.54	104	105	66-126	1	25	YES
Chloromethane	10.00	10.25	10.43	103	104	65-140	2	25	YES
Vinyl Chloride	10.00	10.40	11.00	104	110	75-130	6	25	YES
1,3-Butadiene	10.00	9.48	10.03	95	100	72-122	6	25	YES
Bromomethane	10.00	10.87	11.33	109	113	71-133	4	25	YES
Chloroethane	10.00	11.09	11.14	111	111	76-129	0	25	YES
Bromoethene	10.00	10.92	11.58	109	116	77-123	6	25	YES
Dichlorofluoromethane	10.00	11.37	11.51	114	115	75-137	1	25	YES
Trichlorofluoromethane	10.00	9.99	10.15	100	101	73-132	2	25	YES
Pentane	10.00	9.69	10.54	97	105	69-125	8	25	YES
Ethanol	10.00	9.36	10.06	94	101	56-149	7	25	YES
Acrolein	10.00	11.07	11.81	111	118	54-132	7	25	YES
1,1-Dichloroethene	10.00	10.71	11.36	107	114	70-129	6	25	YES
Freon 113	10.00	9.64	9.50	96	95	66-119	1	25	YES
Acetone	10.00	10.69	11.21	107	112	71-136	5	25	YES
Methyl Iodide	10.00	10.57	11.15	106	111	72-127	5	25	YES
Carbon Disulfide	10.00	10.77	10.92	108	109	72-128	1	25	YES
Isopropanol	10.00	10.54	11.03	105	110	69-160	5	25	YES
Acetonitrile	10.00	10.32	10.44	103	104	56-136	1	25	YES
3-Chloropropene	10.00	13.03	13.74	130	137	67-141	5	25	YES
Methylene Chloride	10.00	12.06	12.40	121	124	69-128	3	25	YES
tert-Butyl Alcohol	10.00	11.31	11.54	113	115	71-154	2	25	YES
Acrylonitrile	10.00	10.75	10.99	107	110	68-135	2	25	YES
trans-1,2-Dichloroethene	10.00	10.52	11.15	105	111	77-128	6	25	YES
Methyl t-Butyl Ether	10.00	10.54	11.07	105	111	71-119	5	25	YES
Hexane	10.00	10.05	10.44	100	104	70-118	4	25	YES
1,1-Dichloroethane	10.00	10.54	10.73	105	107	74-129	2	25	YES
Vinyl Acetate	10.00	12.36	12.79	124	128	75-161	3	25	YES
Di-Isopropyl Ether	10.00	10.01	10.79	100	108	71-122	7	25	YES
Ethyl Tert-Butyl Ether	10.00	10.27	11.06	103	111	68-121	7	25	YES
cis-1,2-Dichloroethene	10.00	10.66	11.03	107	110	76-126	3	25	YES
2-Butanone	10.00	10.67	10.89	107	109	75-126	2	25	YES
Ethyl Acetate	10.00	10.11	10.54	101	105	73-124	4	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 LCS File ID: fd00625.d LCSD File ID: fd00626.d

Batch: F1811730AA LCS Injected: 04/27/2018 LCSD Injected: 04/27/2018

Method: EPA TO-15 LCS Client ID: LCSF30 LCSD Client ID: LCSDF30

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	10.00	10.51	10.62	105	106	75-125	1	25	YES
Tetrahydrofuran	10.00	10.77	11.34	108	113	67-127	5	25	YES
Chloroform	10.00	10.45	10.36	105	104	75-127	1	25	YES
1,1,1-Trichloroethane	10.00	10.09	10.10	101	101	74-122	0	25	YES
Cyclohexane	10.00	10.32	10.87	103	109	70-118	5	25	YES
Carbon Tetrachloride	10.00	10.07	9.97	101	100	72-127	1	25	YES
Benzene	10.00	10.54	10.63	105	106	76-123	1	25	YES
1,2-Dichloroethane	10.00	10.76	10.39	108	104	72-138	4	25	YES
Isooctane	10.00	10.83	11.00	108	110	74-127	1	25	YES
Tert-Amyl Methyl Ether	10.00	10.56	10.83	106	108	78-124	2	25	YES
Heptane	10.00	10.53	10.82	105	108	74-122	3	25	YES
Trichloroethene	10.00	10.34	10.33	103	103	76-118	0	25	YES
Ethyl Acrylate	10.00	10.30	9.71	103	97	71-126	6	25	YES
1,2-Dichloropropane	10.00	10.25	9.98	103	100	75-127	3	25	YES
Dibromomethane	10.00	10.61	10.12	106	101	76-124	5	25	YES
1,4-Dioxane	10.00	10.70	11.06	107	111	76-124	3	25	YES
Methyl Methacrylate	10.00	10.04	9.53	100	95	73-117	5	25	YES
Bromodichloromethane	10.00	10.30	9.61	103	96	75-134	7	25	YES
cis-1,3-Dichloropropene	10.00	10.53	10.14	105	101	51-120	4	25	YES
4-Methyl-2-Pentanone	10.00	10.50	10.03	105	100	79-131	5	25	YES
Toluene	10.00	10.12	10.48	101	105	78-119	3	25	YES
Octane	10.00	10.54	10.75	105	108	73-122	2	25	YES
trans-1,3-Dichloropropene	10.00	10.57	10.33	106	103	76-131	2	25	YES
Ethyl Methacrylate	10.00	9.97	9.91	100	99	69-137	1	25	YES
1,1,2-Trichloroethane	10.00	9.82	9.87	98	99	76-127	1	25	YES
Tetrachloroethene	10.00	10.08	10.27	101	103	68-123	2	25	YES
2-Hexanone	10.00	10.29	10.05	103	100	74-134	2	25	YES
Dibromochloromethane	10.00	9.99	9.30	100	93	74-131	7	25	YES
1,2-Dibromoethane	10.00	10.06	9.69	101	97	73-121	4	25	YES
Chlorobenzene	10.00	9.76	9.90	98	99	76-117	1	25	YES
1,1,1,2-Tetrachloroethane	10.00	9.93	9.52	99	95	73-137	4	25	YES
Ethylbenzene	10.00	10.15	10.42	102	104	77-117	3	25	YES
m/p-Xylene	10.00	9.96	10.58	100	106	78-119	6	25	YES
o-Xylene	10.00	10.07	10.52	101	105	78-121	4	25	YES
Xylene (total)	20.00	20.02	21.10	100	105	79-120	5	25	YES
Styrene	10.00	10.86	10.81	109	108	77-143	1	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 LCS File ID: fd00625.d LCSD File ID: fd00626.d

Batch: F1811730AA LCS Injected: 04/27/2018 LCSD Injected: 04/27/2018

Method: EPA TO-15 LCS Client ID: LCSF30 LCSD Client ID: LCSDF30

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	10.24	8.97	102	90	58-144	13	25	YES
Cumene	10.00	10.96	11.62	110	116	80-133	6	25	YES
Bromobenzene	10.00	10.55	10.68	105	107	74-118	1	25	YES
1,1,2,2-Tetrachloroethane	10.00	9.69	9.65	97	96	72-133	0	25	YES
1,2,3-Trichloropropane	10.00	9.93	9.80	99	98	71-127	1	25	YES
n-Propylbenzene	10.00	10.13	10.89	101	109	73-120	7	25	YES
2-Chlorotoluene	10.00	10.83	11.21	108	112	74-123	3	25	YES
4-Ethyltoluene	10.00	10.79	11.65	108	117	73-130	8	25	YES
1,3,5-Trimethylbenzene	10.00	11.40	12.13	114	121	72-130	6	25	YES
Alpha Methyl Styrene	10.00	11.32	11.14	113	111	71-138	2	25	YES
tert-Butylbenzene	10.00	12.14	12.74	121	127	78-138	5	25	YES
1,2,4-Trimethylbenzene	10.00	11.62	12.29	116	123	70-138	6	25	YES
sec-Butylbenzene	10.00	11.19	11.93	112	119	79-139	6	25	YES
1,3-Dichlorobenzene	10.00	9.84	10.20	98	102	75-129	4	25	YES
1,4-Dichlorobenzene	10.00	10.04	10.60	100	106	74-123	5	25	YES
p-Isopropyltoluene	10.00	11.30	12.07	113	121	75-145	7	25	YES
Benzyl Chloride	10.00	11.61	11.31	116	113	49-163	3	25	YES
1,2-Dichlorobenzene	10.00	9.74	10.24	97	102	71-126	5	25	YES
n-Butylbenzene	10.00	10.58	11.08	106	111	72-143	5	25	YES
Hexachloroethane	10.00	10.43	9.89	104	99	59-135	5	25	YES
1,2-Dibromo-3-chloropropane	10.00	9.92	10.09	99	101	52-156	2	25	YES
1,2,4-Trichlorobenzene	10.00	8.12	9.60	81	96	45-156	17	25	YES
Hexachlorobutadiene	10.00	8.06	8.78	81	88	49-154	9	25	YES
Naphthalene	10.00	9.09	11.07	91	111	39-152	20	25	YES

COMMENTS:

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Data File: /chem/HP26379.i/18apr27.b/fd00610.d

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Date : 27-APR-2018 09:41

Client ID: BFB

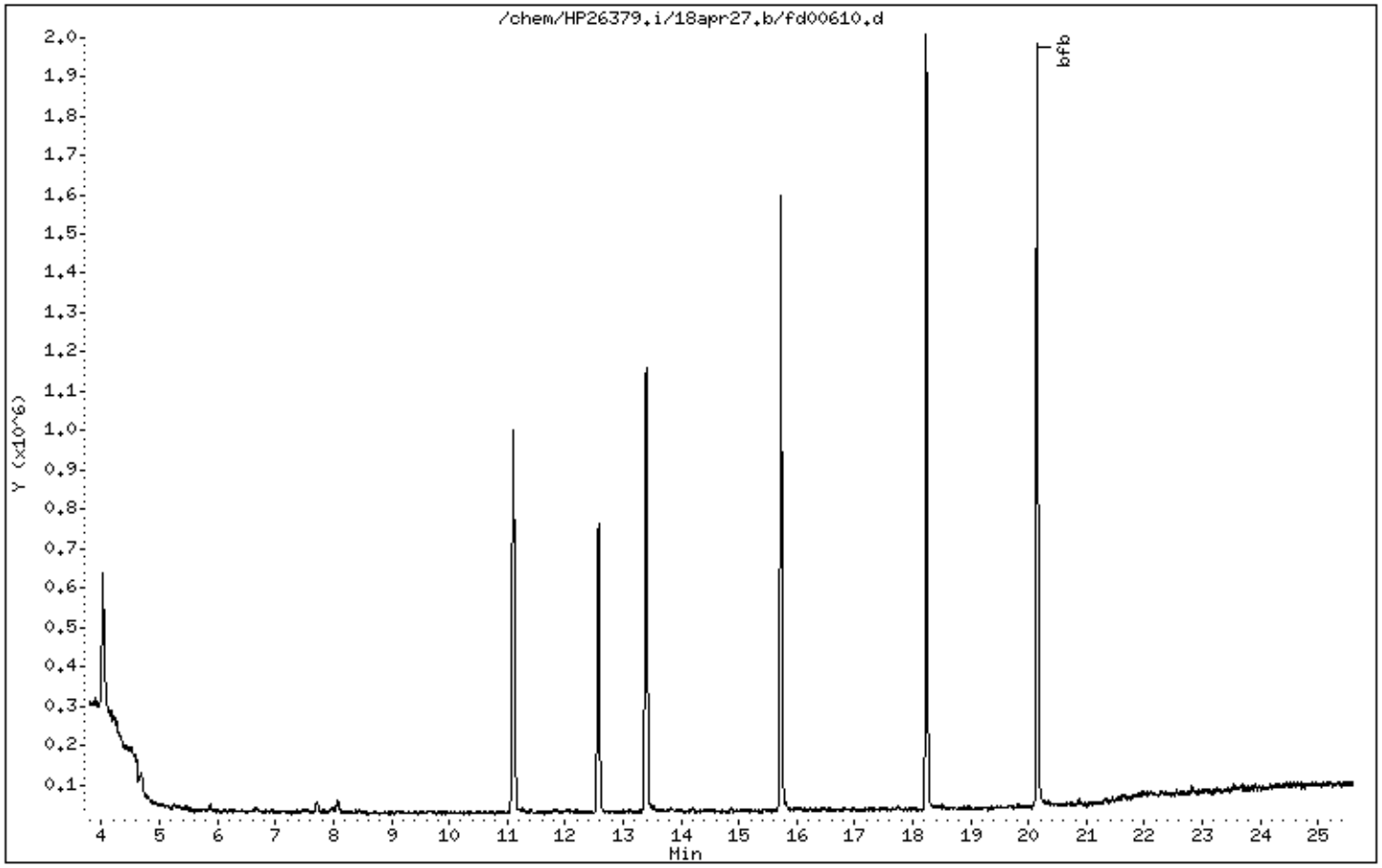
Instrument: HP26379.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: ads07818

Column phase: DB-624

Column diameter: 0.25



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Target 3.5 esignature user ID: jeb07445

Data File: /chem/HP26379.i/18apr27.b/fd00610.d

Date : 27-APR-2018 09:41

Client ID: BFB

Instrument: HP26379.i

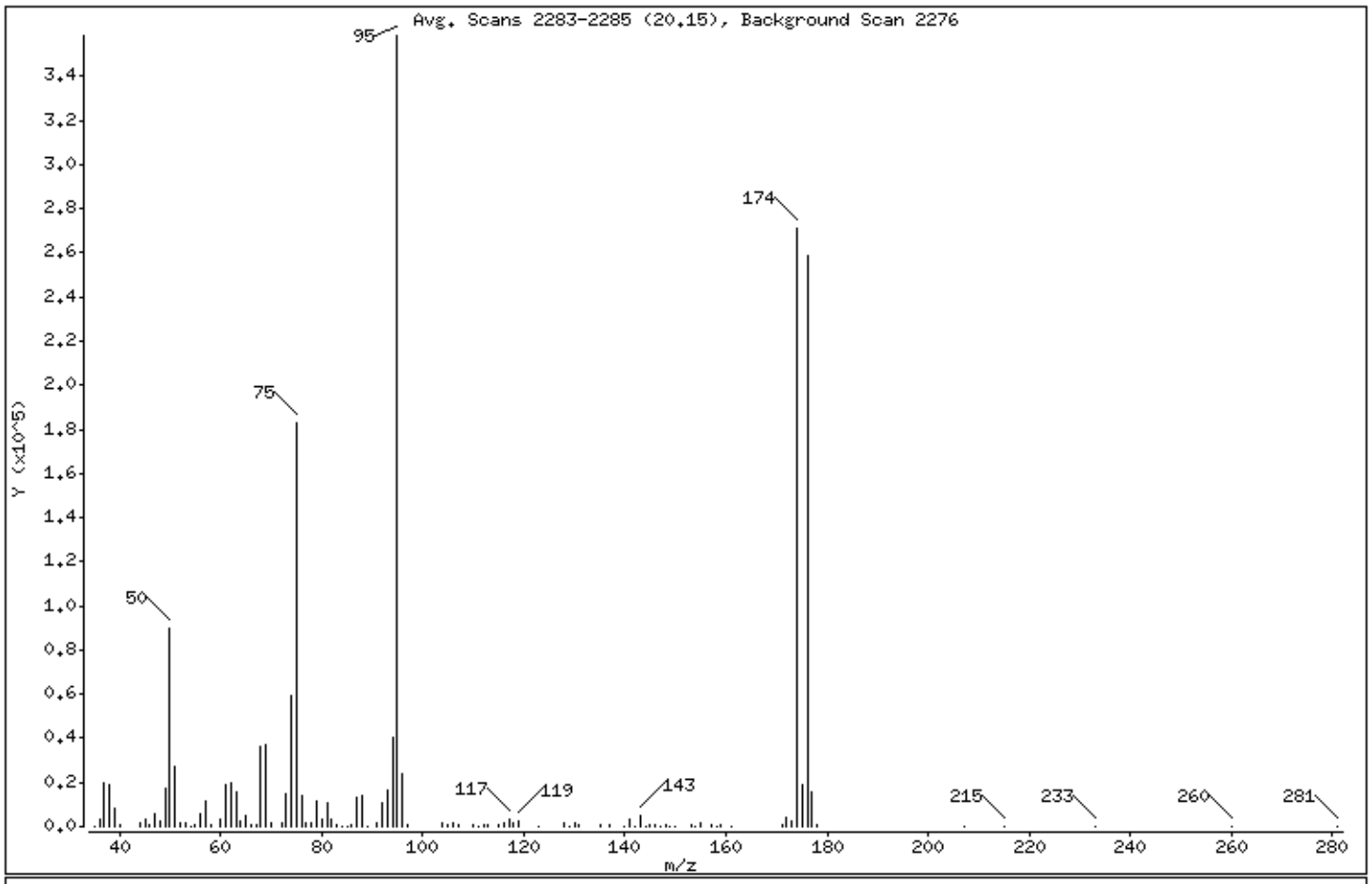
Sample Info: 50NGBFB;;;BFB;0;;;

Operator: ads07818

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	24.99
75	30.00 - 66.00% of mass 95	50.97
96	5.00 - 9.00% of mass 95	6.78
173	Less than 2.00% of mass 174	0.63 (0.83)
174	50.00 - 120.00% of mass 95	75.69
175	4.00 - 9.00% of mass 174	5.25 (6.94)
176	93.00 - 101.00% of mass 174	72.18 (95.37)
177	5.00 - 9.00% of mass 176	4.47 (6.19)

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Target 3.5 esignature user ID: jeb07445

Date : 27-APR-2018 09:41

Client ID: BFB Instrument: HP26379.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: ads07818

Column phase: DB-624 Column diameter: 0.25

Data File: fd00610.d
Spectrum: Avg. Scans 2283-2285 (20,15), Background Scan 2276
Location of Maximum: 95.00
Number of points: 108

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	169	67.00	1203	97.00	1106	147.00	282
36.00	2991	68.00	36288	104.00	1942	148.00	930
37.00	19808	69.00	37128	105.00	439	149.00	143
38.00	19344	70.00	1808	106.00	1611	150.00	409
39.00	8428	72.00	1715	107.00	479	153.00	439
40.00	819	73.00	14856	110.00	527	154.00	103
44.00	1637	74.00	58952	111.00	402	155.00	1361
45.00	3539	75.00	182720	112.00	602	157.00	724
46.00	839	76.00	14035	113.00	415	158.00	127
47.00	5458	77.00	2054	115.00	469	159.00	503
48.00	2378	78.00	1488	116.00	1244	161.00	385
49.00	17160	79.00	11604	117.00	3077	171.00	551
50.00	89584	80.00	3629	118.00	1449	172.00	4143
51.00	27328	81.00	10905	119.00	2173	173.00	2255
52.00	1906	82.00	2984	123.00	186	174.00	271296
53.00	1297	83.00	629	128.00	1732	175.00	18824
54.00	338	84.00	149	129.00	358	176.00	258752
55.00	665	85.00	145	130.00	1374	177.00	16019
56.00	5456	86.00	447	131.00	635	178.00	486
57.00	11286	87.00	13427	135.00	670	207.00	113
58.00	470	88.00	14153	137.00	1071	215.00	271
60.00	2937	89.00	244	140.00	265	233.00	125
61.00	18744	91.00	1331	141.00	3390	260.00	101
62.00	20080	92.00	10463	142.00	235	281.00	189
63.00	15755	93.00	16258	143.00	4956		
64.00	2803	94.00	40712	144.00	339		
65.00	5013	95.00	358464	145.00	1081		
66.00	498	96.00	24304	146.00	583		

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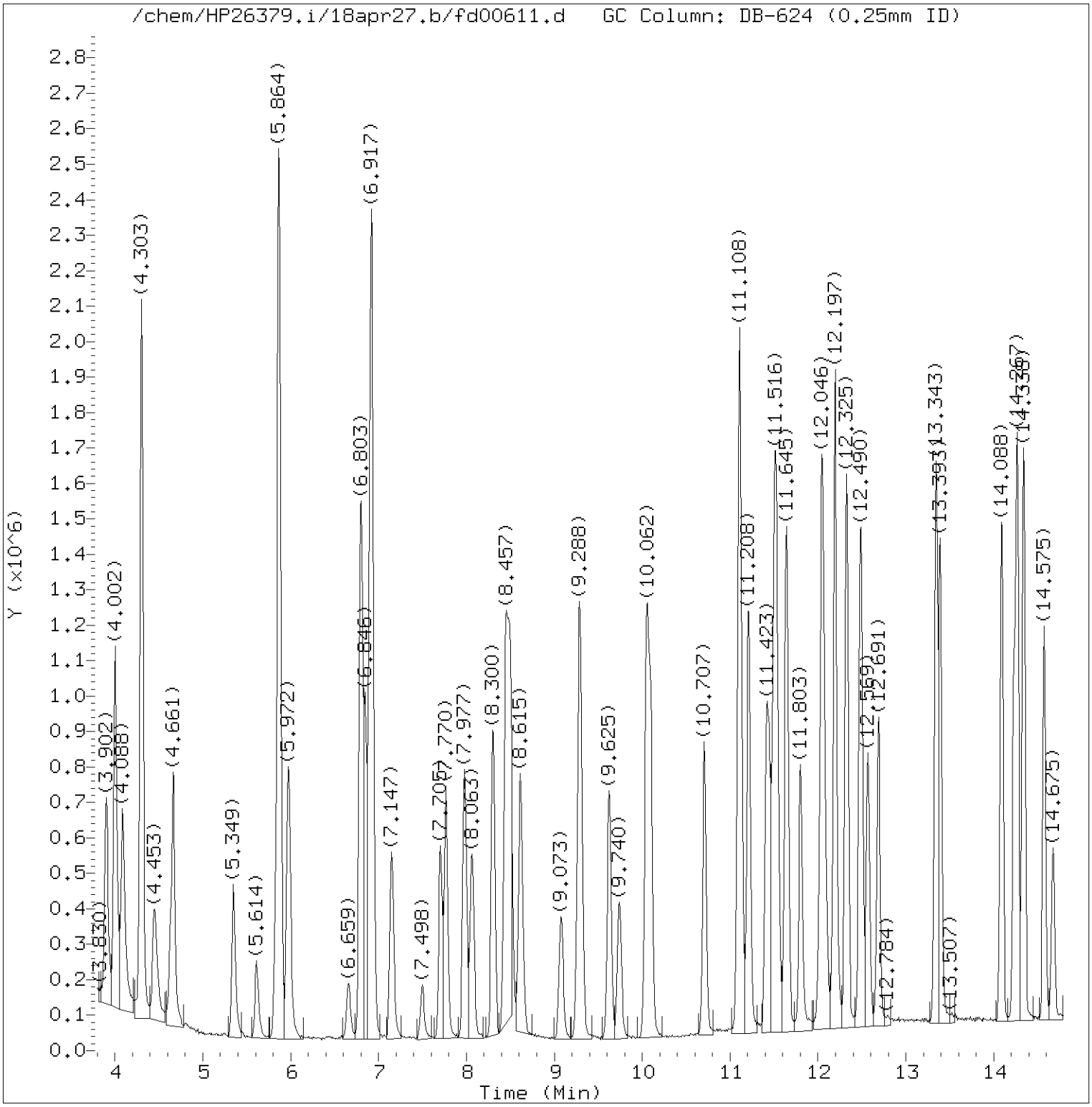
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

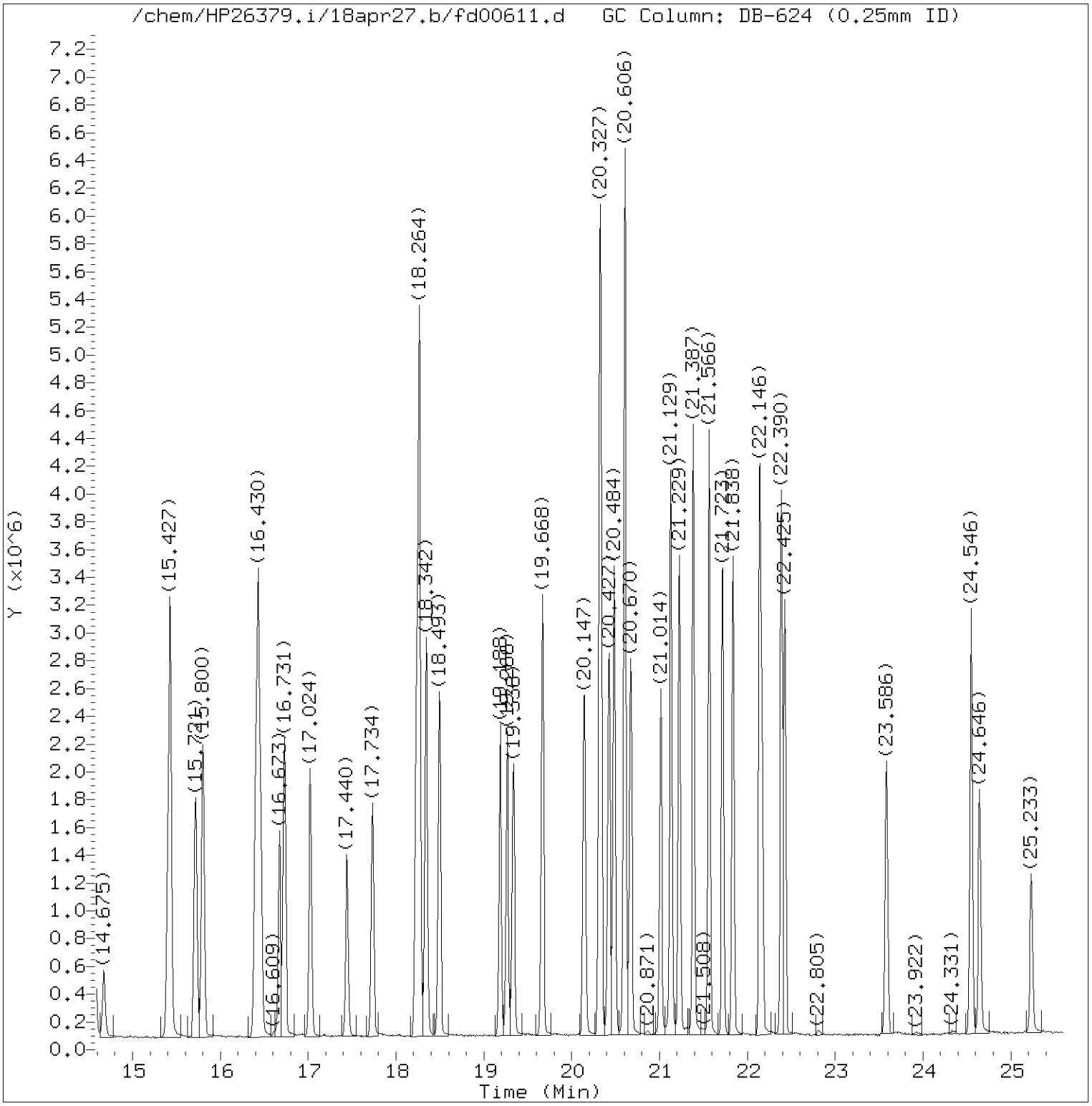
Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00611.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 10:37 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:37
Date, time and analyst ID of latest file update: 27-Apr-2018 14:37 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 04/27/2018 at 15:45.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00611.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 10:37 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:37
Date, time and analyst ID of latest file update: 27-Apr-2018 14:37 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 04/27/2018 at 15:45.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00611.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 10:37 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:37
Date, time and analyst ID of latest file update: 27-Apr-2018 14:37 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	526202	9.872
2) Dichlorodifluoromethane	(1)	4.002	85	1594410	10.746
3) Chlorodifluoromethane	(1)	4.088	51	1191598	10.052
4) Freon 114	(1)	4.303	85	1535556	10.174
5) Chloromethane	(1)	4.453	50	634442	9.816
6) Vinyl Chloride	(1)	4.632	62	384887	10.279
7) 1,3-Butadiene	(1)	4.668	54	352553	10.428
8) Bromomethane	(1)	5.349	94	483123	11.233
9) Chloroethane	(1)	5.614	64	308724	10.372
10) Bromoethene	(1)	5.829	106	401877	10.121
11) Pentane	(1)	5.864	43	1039799	9.641
12) Trichlorofluoromethane	(1)	5.872	101	1566124	9.914
13) Dichlorofluoromethane	(1)	5.972	67	1311527	10.806
14) Ethanol	(1)	6.659	45	211939	9.162
15) Freon123a	(1)	6.796	67	1242801	10.667
16) 1,1-Dichloroethene	(1)	6.846	61	850628	10.179
17) Freon 113	(1)	6.910	103	841495	9.585
18) Carbon Disulfide	(1)	6.932	76	1377312	10.858
19) Methyl Iodide	(1)	7.147	142	975848	9.351
20) Acrolein	(1)	7.498	56	191621	10.021
21) Isopropanol	(1)	7.705	45	891869	9.515
22) 3-Chloropropene	(1)	7.770	41	778607	10.450
23) Methylene Chloride	(1)	7.977	84	508753	11.801
24) Acetone	(1)	8.063	43	1039735	10.385
25) trans-1,2-Dichloroethene	(1)	8.307	61	813825	10.155
26) Hexane	(1)	8.450	56	612797	9.851
27) Methyl t-Butyl Ether	(1)	8.500	73	1325348	10.020
28) tert-Butyl Alcohol	(1)	8.615	59	1169544	10.643
29) Acetonitrile	(1)	9.073	41	652170	10.327
30) Di-Isopropyl Ether	(1)	9.288	45	1752652	9.298
31) 1,1-Dichloroethane	(1)	9.625	63	1114147	10.129
32) Acrylonitrile	(1)	9.740	53	505158	10.273
33) Ethyl Tert-Butyl Ether	(1)	10.055	59	1496007	9.652
34) Vinyl Acetate	(1)	10.098	43	1850041	11.706
35) cis-1,2-Dichloroethene	(1)	10.707	61	736517	10.058
36) 1,2-Dichloroethene (total)	(1)		61	1550342	20.213
37)*Bromochloromethane	(1)	11.101	130	447940	10.000
38) Cyclohexane	(1)	11.115	56	801621	9.227

* = Compound is an internal standard.

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on 04/27/2018 at 15:45.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00611.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 10:37 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:37
Date, time and analyst ID of latest file update: 27-Apr-2018 14:37 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	1282582	10.302
40) Ethyl Acetate	(1)	11.416	43	1445188	9.934
41) Methyl Acrylate	(1)	11.452	55	984728	9.910
42) Carbon Tetrachloride	(1)	11.509	117	1319774	9.844
43) Tetrahydrofuran	(1)	11.537	42	717039	10.230
44) 1,1,1-Trichloroethane	(1)	11.645	97	1321092	9.798
45) 2-Butanone	(1)	11.803	43	1329031	10.044
46) Isooctane	(2)	12.053	57	2563585	10.636
47) Heptane	(2)	12.197	71	483143	10.543
48) Benzene	(2)	12.325	78	1712949	10.663
49) Tert-Amyl Methyl Ether	(2)	12.490	73	1226633	10.431
50) 1,2-Dichloroethane	(2)	12.691	62	951710	10.608
51) Trichloroethene	(2)	13.343	130	671905	10.185
52)*1,4-Difluorobenzene	(2)	13.393	114	1270082	10.000
53) Dibromomethane	(2)	14.095	174	706275	10.640
54) Ethyl Acrylate	(2)	14.231	55	1124478	9.777
55) 1,2-Dichloropropane	(2)	14.267	63	734106	10.229
56) Bromodichloromethane	(2)	14.338	83	1310737	10.558
57) Methyl Methacrylate	(2)	14.575	69	450327	9.797
58) 1,4-Dioxane	(2)	14.675	88	334173	10.313
59) cis-1,3-Dichloropropene	(2)	15.406	75	864279	10.100
60) Octane	(3)	15.434	43	1534425	10.305
61) Toluene	(3)	15.800	91	1824787	10.016
62) 4-Methyl-2-Pentanone	(2)	16.401	43	1525969	10.085
63) Tetrachloroethene	(3)	16.430	166	1080333	10.134
64) trans-1,3-Dichloropropene	(3)	16.459	75	841799	10.314
65) 1,3-Dichloropropene (total)	(3)		75	1706078	20.195
66) Ethyl Methacrylate	(3)	16.673	69	760718	9.728
67) 1,1,2-Trichloroethane	(3)	16.731	97	794788	10.058
68) Dibromochloromethane	(3)	17.024	127	947527	10.067
69) 1,2-Dibromoethane	(3)	17.440	107	1083146	9.943
70) 2-Hexanone	(3)	17.734	43	1387423	9.970
71)*Chlorobenzene-d5	(3)	18.235	117	1332823	10.000
72) Chlorobenzene	(3)	18.256	112	1634626	9.892
73) Ethylbenzene	(3)	18.271	91	2377933	9.921
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	945539	9.906
75) m/p-Xylene	(3)	18.493	91	1627555	9.687
76) o-Xylene	(3)	19.188	91	1504632	9.567

* = 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/HP26379.i/18apr27.b/fd00611.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 10:37 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:37
Date, time and analyst ID of latest file update: 27-Apr-2018 14:37 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	3132187	19.257
78) Styrene	(3)	19.266	104	1188330	10.318
79) Bromoform	(3)	19.338	173	1100143	9.988
80) Cumene	(3)	19.668	105	2205082	10.348
81) n-Propylbenzene	(3)	20.319	120	674213	10.091
82) Bromobenzene	(3)	20.334	156	953178	10.403
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	1593495	9.698
84) 4-Ethyltoluene	(3)	20.484	105	2348956	10.722
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	2128945	11.185
85) 2-Chlorotoluene	(3)	20.606	126	671976	10.629
87) 1,2,3-Trichloropropane	(3)	20.670	110	501543	9.682
88) Alpha Methyl Styrene	(3)	21.014	118	824244	10.715
89) tert-Butylbenzene	(3)	21.129	119	1968279	11.383
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	1990118	11.130
91) sec-Butylbenzene	(3)	21.387	105	2974389	10.991
92) p-Isopropyltoluene	(3)	21.566	119	2292490	11.017
93) 1,3-Dichlorobenzene	(3)	21.723	146	1452525	9.668
94) 1,4-Dichlorobenzene	(3)	21.838	146	1413381	9.871
95) n-Butylbenzene	(3)	22.139	92	1310914	10.145
96) Benzyl Chloride	(3)	22.167	126	324424	10.470
97) Hexachloroethane	(3)	22.390	117	799800	9.992
98) 1,2-Dichlorobenzene	(3)	22.425	146	1306538	9.767
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	529402	9.591
100) Hexachlorobutadiene	(3)	24.546	225	729432	8.900
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	680569	8.856
102) Naphthalene	(3)	25.233	128	1200871	9.436

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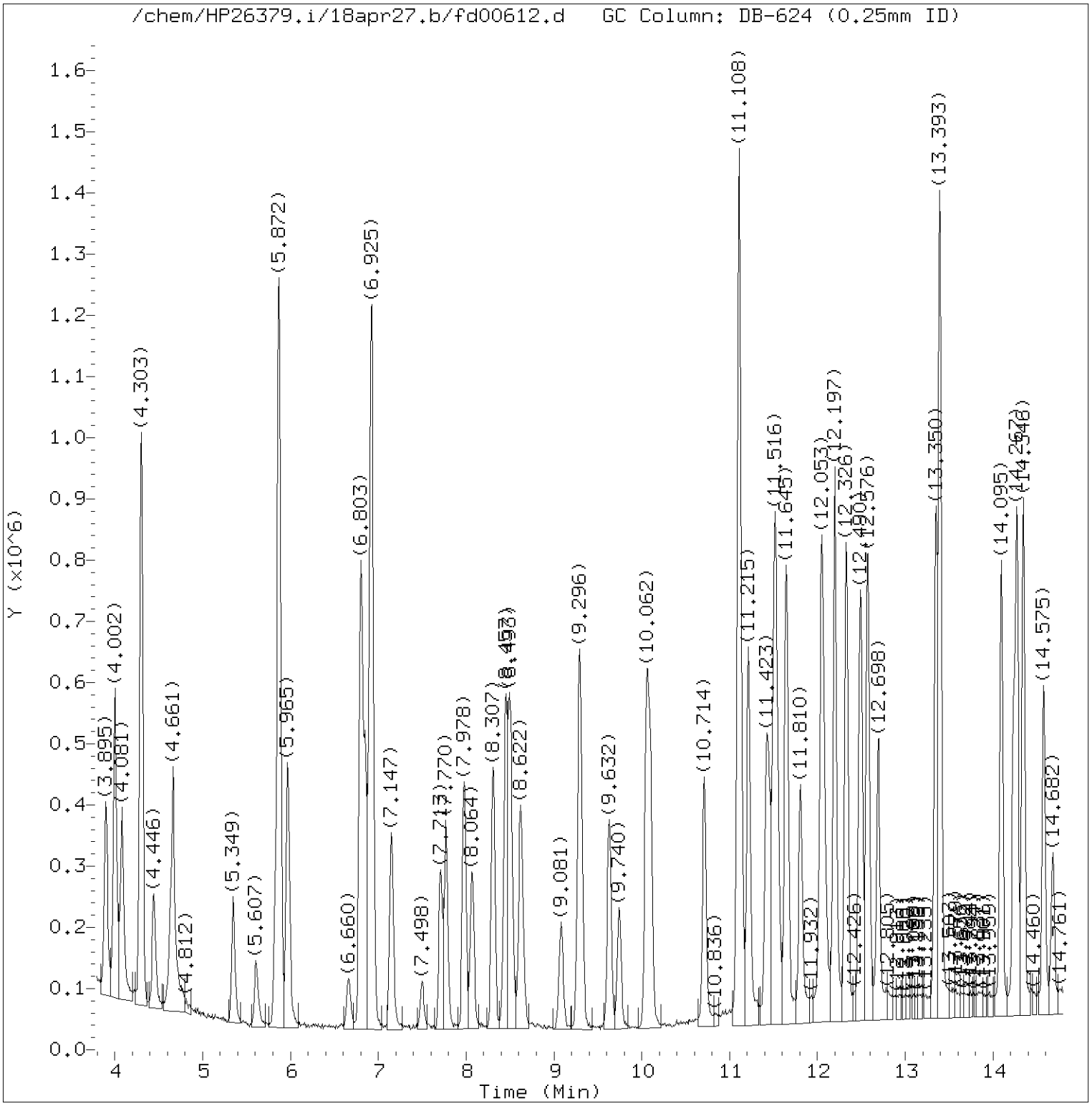
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00612.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 11:07 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 19:07
Date, time and analyst ID of latest file update: 27-Apr-2018 19:07 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

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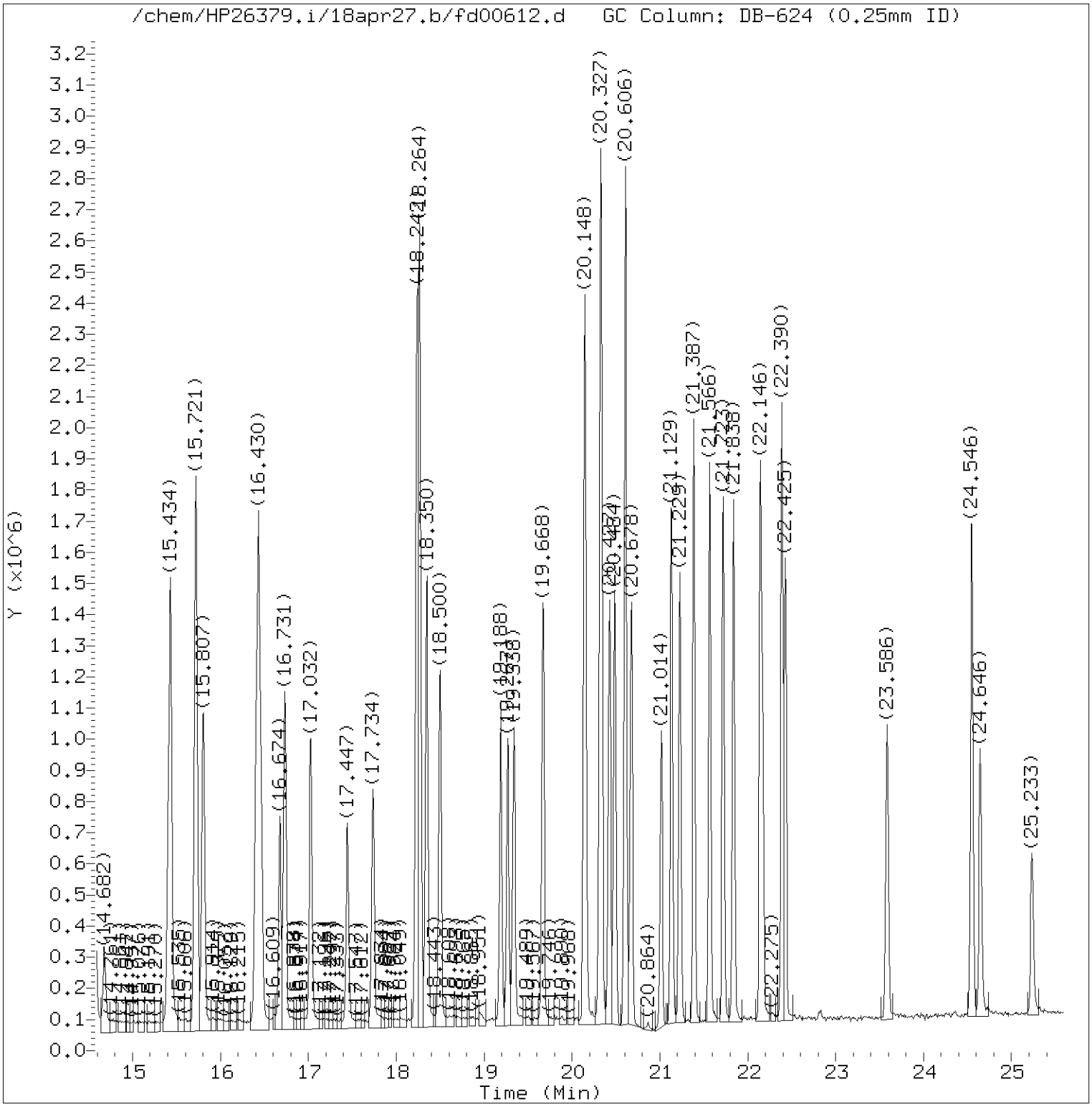
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00612.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 11:07 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 19:07
Date, time and analyst ID of latest file update: 27-Apr-2018 19:07 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

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Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00612.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 11:07 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 19:07
Date, time and analyst ID of latest file update: 27-Apr-2018 19:07 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.895	41	274186	5.320
2) Dichlorodifluoromethane	(1)	4.002	85	770614	5.371
3) Chlorodifluoromethane	(1)	4.081	51	586268	5.114
4) Freon 114	(1)	4.303	85	756525	5.184
5) Chloromethane	(1)	4.446	50	324964	5.199
6) Vinyl Chloride	(1)	4.632	62	190744	5.268
7) 1,3-Butadiene	(1)	4.668	54	163502	5.001
8) Bromomethane	(1)	5.349	94	219274	5.272
9) Chloroethane	(1)	5.607	64	152323	5.292
10) Bromoethene	(1)	5.829	106	200213	5.214
11) Pentane	(1)	5.872	43	525869	5.042
12) Trichlorofluoromethane	(1)	5.872	101	777328	5.089
13) Dichlorofluoromethane	(1)	5.965	67	640431	5.457
14) Ethanol	(1)	6.652	45	112803	5.043
15) Freon123a	(1)	6.803	67	622358	5.524
16) 1,1-Dichloroethene	(1)	6.853	61	424920	5.258
17) Freon 113	(1)	6.917	103	413390	4.869
18) Carbon Disulfide	(1)	6.932	76	632232	5.154
19) Methyl Iodide	(1)	7.147	142	559497	5.544
20) Acrolein	(1)	7.505	56	91004	4.921
21) Isopropanol	(1)	7.713	45	439878	4.853
22) 3-Chloropropene	(1)	7.770	41	404734	5.618
23) Methylene Chloride	(1)	7.985	84	249588	5.987
24) Acetone	(1)	8.064	43	504183	5.208
25) trans-1,2-Dichloroethene	(1)	8.307	61	400963	5.174
26) Hexane	(1)	8.450	56	293117	4.873
27) Methyl t-Butyl Ether	(1)	8.508	73	625748	4.892
28) tert-Butyl Alcohol	(1)	8.622	59	591735	5.568
29) Acetonitrile	(1)	9.081	41	323743	5.302
30) Di-Isopropyl Ether	(1)	9.296	45	858970	4.712
31) 1,1-Dichloroethane	(1)	9.632	63	545231	5.126
32) Acrylonitrile	(1)	9.740	53	239886	5.045
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	714435	4.767
34) Vinyl Acetate	(1)	10.105	43	828655	5.422
35) cis-1,2-Dichloroethene	(1)	10.714	61	363164	5.129
36) 1,2-Dichloroethene (total)	(1)		61	764127	10.302
37)*Bromochloromethane	(1)	11.101	130	433156	10.000
38) Cyclohexane	(1)	11.122	56	392883	4.676

* = Compound is an internal standard.

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on 04/27/2018 at 19:07.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00612.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 11:07 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 19:07
Date, time and analyst ID of latest file update: 27-Apr-2018 19:07 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	634467	5.270
40) Ethyl Acetate	(1)	11.423	43	700920	4.983
41) Methyl Acrylate	(1)	11.459	55	460650	4.794
42) Carbon Tetrachloride	(1)	11.509	117	647894	4.998
43) Tetrahydrofuran	(1)	11.545	42	333860	4.926
44) 1,1,1-Trichloroethane	(1)	11.652	97	663979	5.092
45) 2-Butanone	(1)	11.810	43	650852M	5.087
46) Isooctane	(2)	12.053	57	1183034	4.944
47) Heptane	(2)	12.197	71	215508	4.737
48) Benzene	(2)	12.333	78	827391	5.188
49) Tert-Amyl Methyl Ether	(2)	12.490	73	571669	4.897
50) 1,2-Dichloroethane	(2)	12.691	62	473705	5.318
51) Trichloroethene	(2)	13.343	130	342448	5.229
52)*1,4-Difluorobenzene	(2)	13.393	114	1260914	10.000
53) Dibromomethane	(2)	14.095	174	343406	5.211
54) Ethyl Acrylate	(2)	14.231	55	528816	4.632
55) 1,2-Dichloropropane	(2)	14.274	63	359371	5.044
56) Bromodichloromethane	(2)	14.346	83	635498	5.156
57) Methyl Methacrylate	(2)	14.575	69	211580	4.636
58) 1,4-Dioxane	(2)	14.682	88	157453	4.895
59) cis-1,3-Dichloropropene	(2)	15.406	75	397531	4.679
60) Octane	(3)	15.434	43	677114	4.655
61) Toluene	(3)	15.807	91	864560	4.858
62) 4-Methyl-2-Pentanone	(2)	16.401	43	743082	4.947
63) Tetrachloroethene	(3)	16.437	166	523506	5.026
64) trans-1,3-Dichloropropene	(3)	16.466	75	393399	4.934
65) 1,3-Dichloropropene (total)	(3)		75	790930	9.583
66) Ethyl Methacrylate	(3)	16.674	69	345449	4.522
67) 1,1,2-Trichloroethane	(3)	16.731	97	394958	5.116
68) Dibromochloromethane	(3)	17.024	127	462439	5.029
69) 1,2-Dibromoethane	(3)	17.447	107	524649	4.930
70) 2-Hexanone	(3)	17.734	43	634603	4.668
71)*Chlorobenzene-d5	(3)	18.235	117	1302118	10.000
72) Chlorobenzene	(3)	18.264	112	793838	4.917
73) Ethylbenzene	(3)	18.271	91	1117908	4.774
74) 1,1,1,2-Tetrachloroethane	(3)	18.350	131	472948	5.072
75) m/p-Xylene	(3)	18.500	91	755154	4.600
76) o-Xylene	(3)	19.188	91	679932	4.425

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

Digitally signed by Jacob E. Bailey
on 04/27/2018 at 19:07.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00612.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 11:07 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 19:07
Date, time and analyst ID of latest file update: 27-Apr-2018 19:07 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	1435086	9.031
78) Styrene	(3)	19.274	104	504945	4.488
79) Bromoform	(3)	19.338	173	519149	4.825
80) Cumene	(3)	19.668	105	973472	4.676
81) n-Propylbenzene	(3)	20.320	120	307830	4.716
82) Bromobenzene	(3)	20.334	156	448022	5.005
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	809399	5.042
84) 4-Ethyltoluene	(3)	20.484	105	1027465	4.801
85) 2-Chlorotoluene	(3)	20.606	126	303103	4.907
86) 1,3,5-Trimethylbenzene	(3)	20.613	105	924047	4.969
87) 1,2,3-Trichloropropane	(3)	20.678	110	251087	4.961
88) Alpha Methyl Styrene	(3)	21.014	118	330540	4.398
89) tert-Butylbenzene	(3)	21.136	119	836909	4.954
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	869996	4.980
91) sec-Butylbenzene	(3)	21.387	105	1313133	4.967
92) p-Isopropyltoluene	(3)	21.566	119	988621	4.863
93) 1,3-Dichlorobenzene	(3)	21.723	146	714823	4.870
94) 1,4-Dichlorobenzene	(3)	21.838	146	673112	4.812
95) n-Butylbenzene	(3)	22.146	92	562338	4.454
96) Benzyl Chloride	(3)	22.168	126	143872	4.753
97) Hexachloroethane	(3)	22.390	117	367793	4.703
98) 1,2-Dichlorobenzene	(3)	22.425	146	637453	4.878
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	250481	4.645
100) Hexachlorobutadiene	(3)	24.546	225	373714	4.667
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	335810	4.473
102) Naphthalene	(3)	25.233	128	573605	4.613

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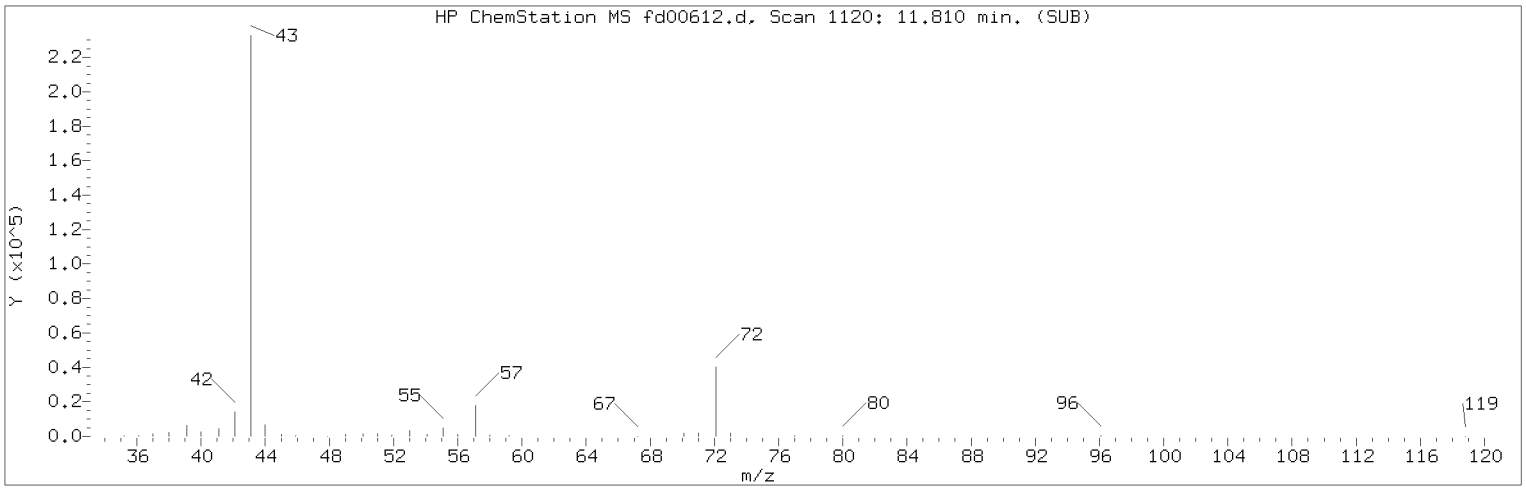
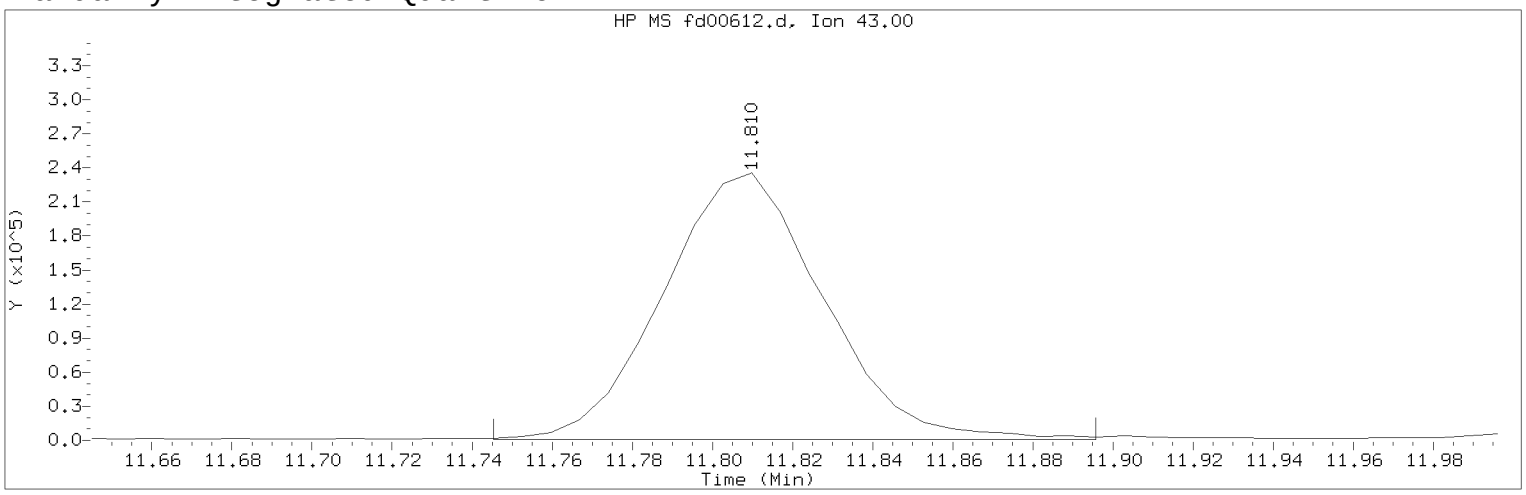
on 04/27/2018 at 19:07.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18apr27.b/fd00612.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 11:07 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 19:07
Date, time and analyst ID of latest file update: 27-Apr-2018 19:07 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

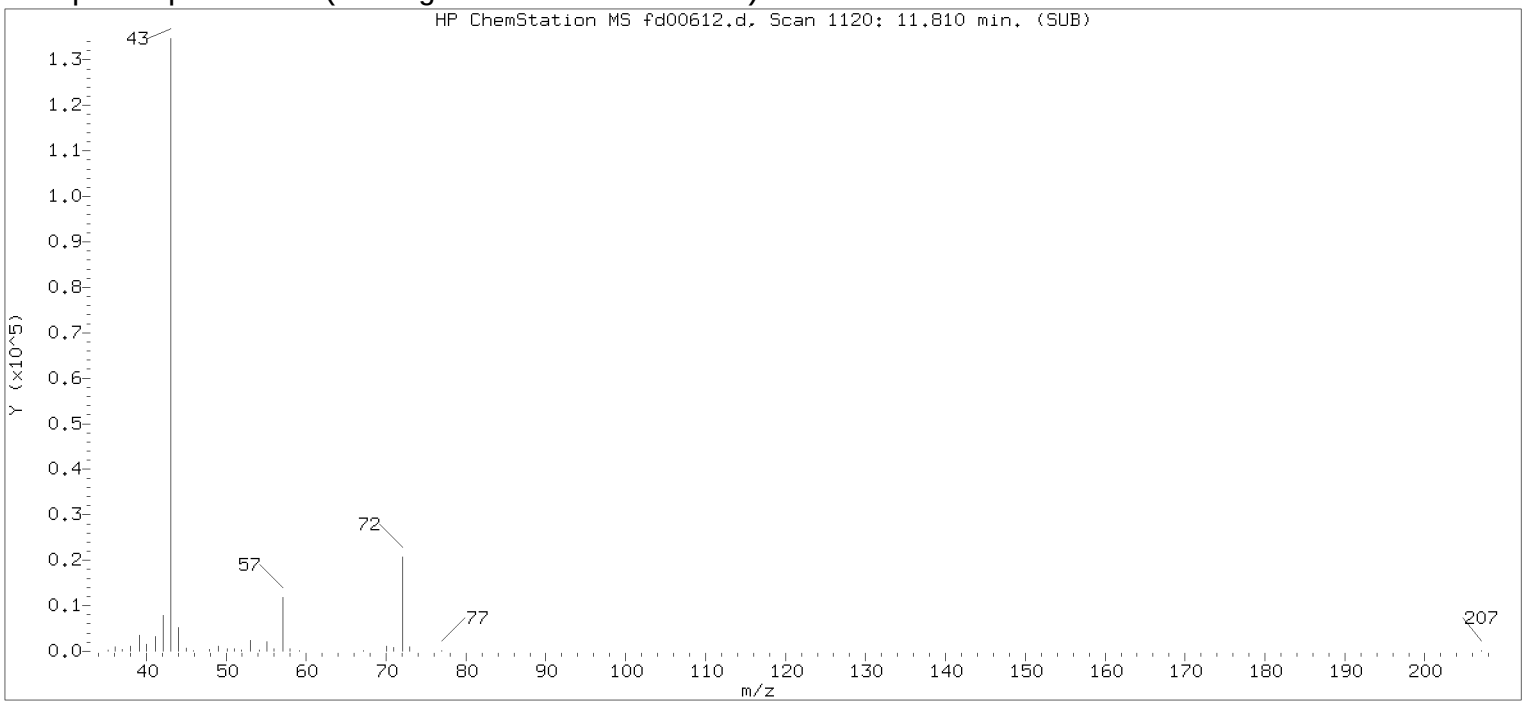
Compound Number : 45
Compound Name : 2-Butanone
Scan Number : 1120
Retention Time (minutes): 11.810
Quant Ion : 43.00
Area (flag) : 650852M
Concentration (ppb(v)) : 5.0866
Integration start scan : 1110 Integration stop scan: 1131
Y at integration start : 761 Y at integration end: 761

Reason for manual integration: improper integration

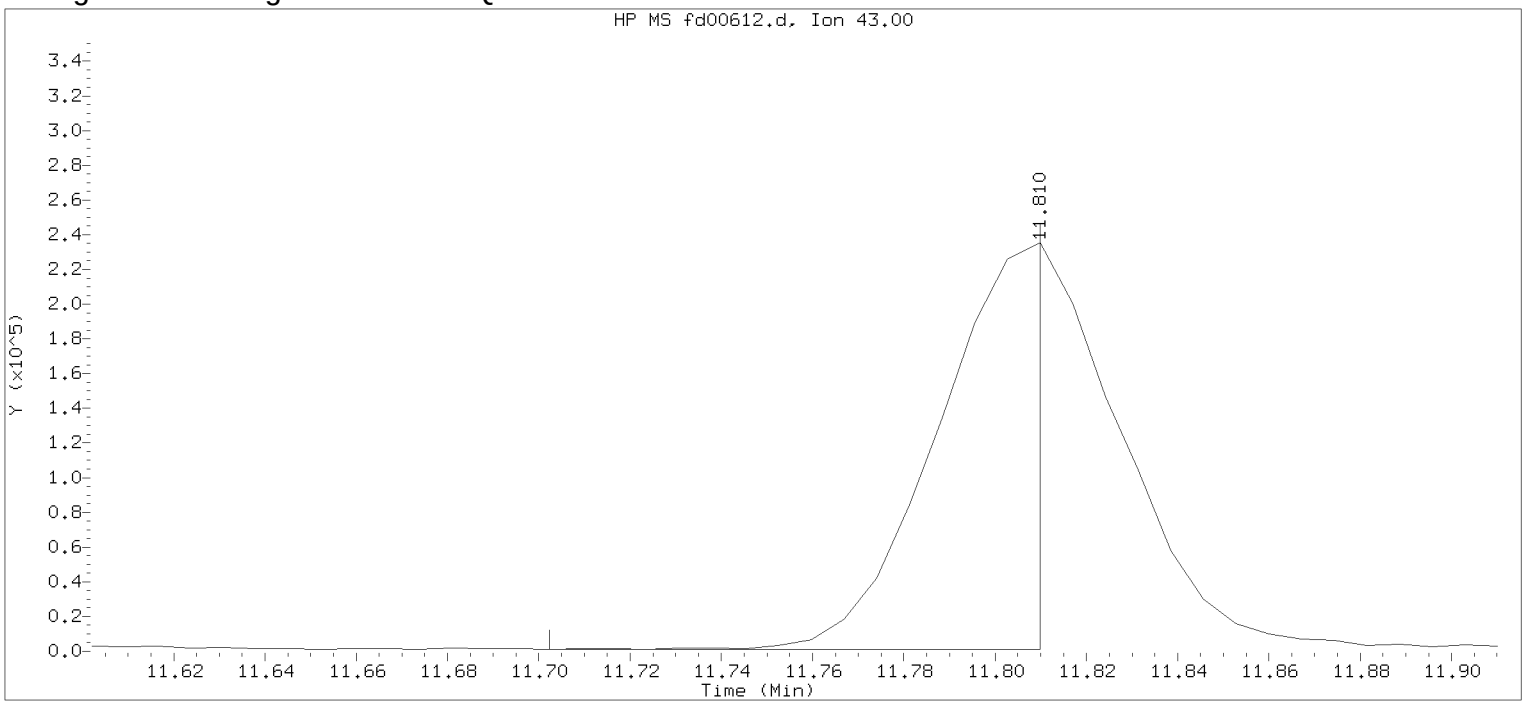
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 04/27/2018 at 19:07.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 05/01/2018 at 14:47.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



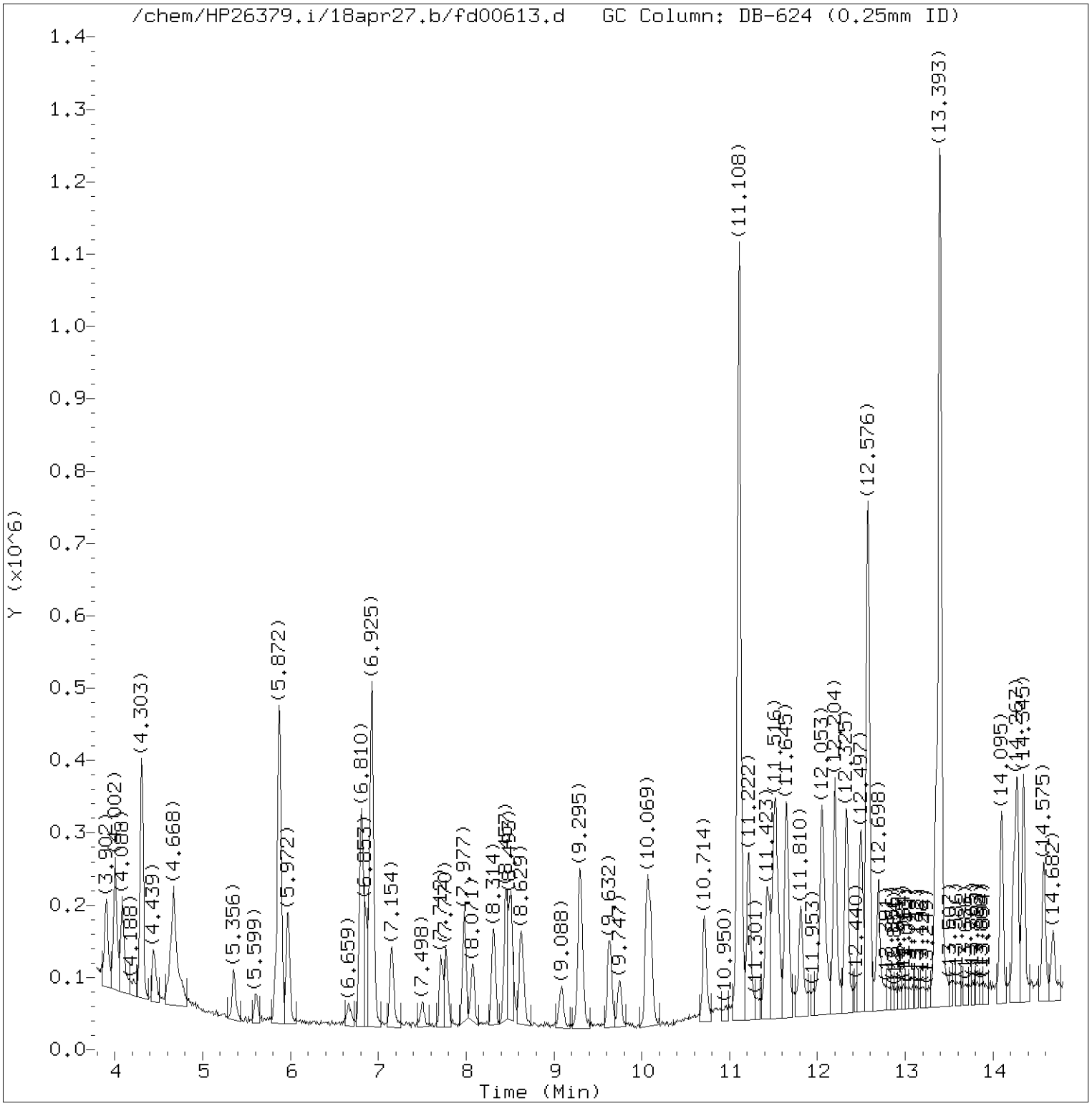
Data File: /chem/HP26379.i/18apr27.b/fd00612.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 11:07 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 20-APR-2018 11:01
Date, time and analyst ID of latest file update: 27-Apr-2018 11:34 Unknown

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compound Number : 45
Compound Name : 2-Butanone
Scan Number : 1120
Retention Time (minutes): 11.810
Quant Ion : 43.00
Area : 350271
Concentration (ppb(v)) : 2.5791
Integration start scan : 1104 Integration stop scan: 1119
Y at integration start : 1117 Y at integration end: 1117

Digitally signed by Jacob E. Bailey on 04/27/2018 at 19:07.
Target 3.5 esignature userGLE02jbailey



Total Ion Chromatogram (TIC)

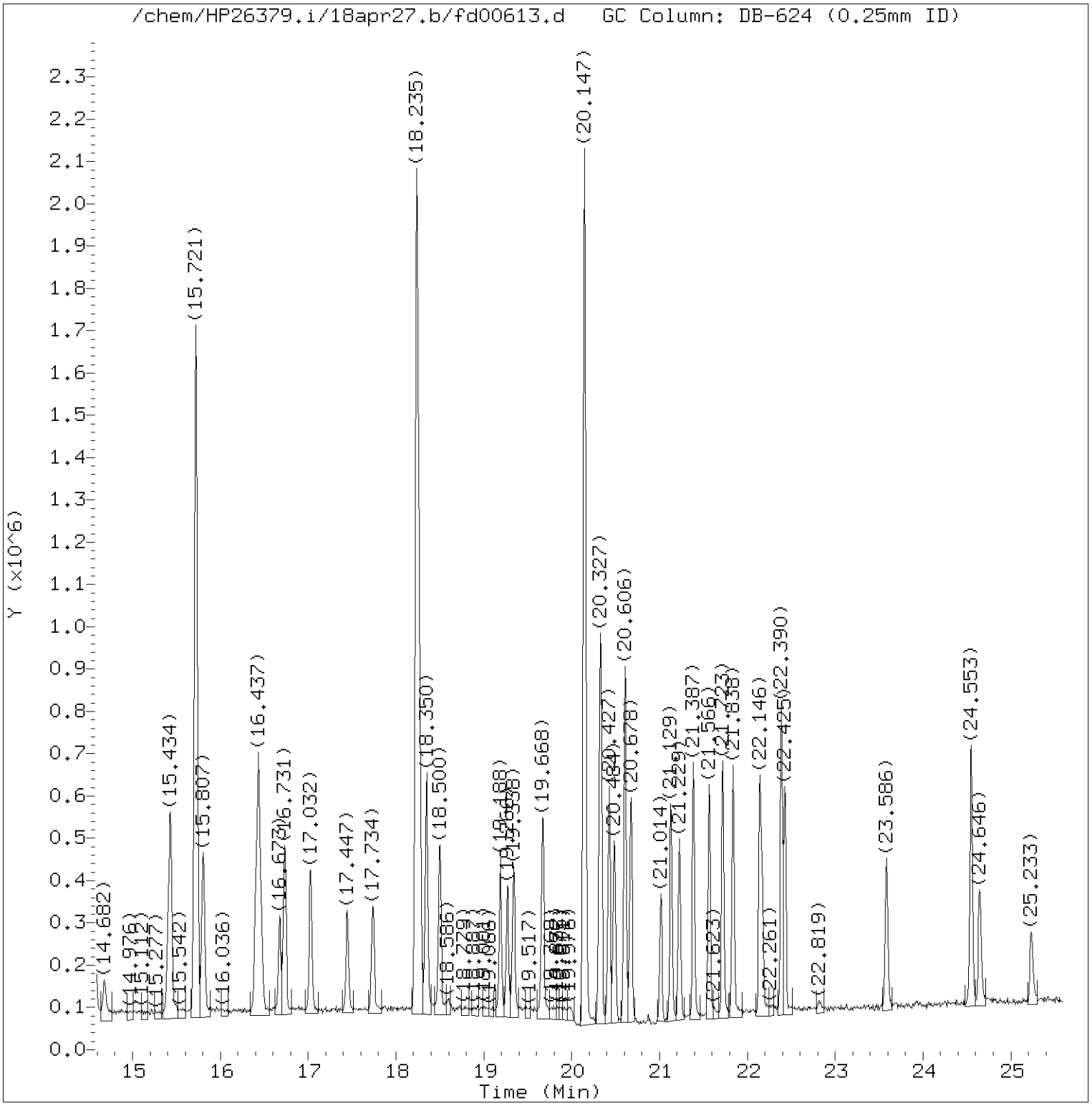
Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00613.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 11:38 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:37
Date, time and analyst ID of latest file update: 27-Apr-2018 14:37 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Digitally signed by Jacob E. Bailey
on 04/27/2018 at 15:46.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00613.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 11:38 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:37
Date, time and analyst ID of latest file update: 27-Apr-2018 14:37 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Digitally signed by Jacob E. Bailey
on 04/27/2018 at 15:46.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00613.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 11:38 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:37
Date, time and analyst ID of latest file update: 27-Apr-2018 14:37 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	98385	2.005
2) Dichlorodifluoromethane	(1)	4.002	85	255776	1.872
3) Chlorodifluoromethane	(1)	4.088	51	217068	1.989
4) Freon 114	(1)	4.303	85	266810	1.920
5) Chloromethane	(1)	4.446	50	123266	2.071
6) Vinyl Chloride	(1)	4.640	62	71444	2.072
7) 1,3-Butadiene	(1)	4.675	54	61522	1.976
8) Bromomethane	(1)	5.356	94	73183	1.848
9) Chloroethane	(1)	5.614	64	53308	1.945
10) Bromoethene	(1)	5.836	106	62187	1.701
11) Pentane	(1)	5.872	43	172194	1.734
12) Trichlorofluoromethane	(1)	5.879	101	291832	2.006
13) Dichlorofluoromethane	(1)	5.972	67	214796	1.922
14) Ethanol	(1)	6.659	45	39879	1.872
15) Freon123a	(1)	6.810	67	245349	2.287
16) 1,1-Dichloroethene	(1)	6.860	61	137212	1.783
17) Freon 113	(1)	6.917	103	171061	2.116
18) Carbon Disulfide	(1)	6.939	76	206421	1.767
19) Methyl Iodide	(1)	7.154	142	185728	1.933
20) Acrolein	(1)	7.512	56	31914	1.812
21) Isopropanol	(1)	7.712	45	154691	1.792
22) 3-Chloropropene	(1)	7.770	41	120724	1.760
23) Methylene Chloride	(1)	7.977	84	84248	2.122
24) Acetone	(1)	8.071	43	174379	1.892
25) trans-1,2-Dichloroethene	(1)	8.314	61	133600	1.810
26) Hexane	(1)	8.450	56	104934	1.832
27) Methyl t-Butyl Ether	(1)	8.508	73	213915	1.756
28) tert-Butyl Alcohol	(1)	8.629	59	204663	2.023
29) Acetonitrile	(1)	9.088	41	106872	1.838
30) Di-Isopropyl Ether	(1)	9.295	45	297912	1.716
31) 1,1-Dichloroethane	(1)	9.632	63	193299	1.909
32) Acrylonitrile	(1)	9.740	53	79599	1.758
33) Ethyl Tert-Butyl Ether	(1)	10.069	59	240595	1.686
34) Vinyl Acetate	(1)	10.105	43	255483	1.756
35) cis-1,2-Dichloroethene	(1)	10.714	61	120061	1.781
36) 1,2-Dichloroethene (total)	(1)		61	253661	3.591
37)*Bromochloromethane	(1)	11.108	130	412464	10.000
38) Cyclohexane	(1)	11.122	56	141266	1.766

* = Compound is an internal standard.

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on 04/27/2018 at 15:46.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00613.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 11:38 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:37
Date, time and analyst ID of latest file update: 27-Apr-2018 14:37 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.222	83	218142	1.903
40) Ethyl Acetate	(1)	11.423	43	243396	1.817
41) Methyl Acrylate	(1)	11.466	55	152589	1.668
42) Carbon Tetrachloride	(1)	11.516	117	242234	1.962
43) Tetrahydrofuran	(1)	11.545	42	108777	1.685
44) 1,1,1-Trichloroethane	(1)	11.652	97	251664	2.027
45) 2-Butanone	(1)	11.810	43	212720	1.746
46) Isooctane	(2)	12.053	57	383020	1.768
47) Heptane	(2)	12.204	71	68464	1.662
48) Benzene	(2)	12.333	78	292234	2.023
49) Tert-Amyl Methyl Ether	(2)	12.497	73	191151	1.808
50) 1,2-Dichloroethane	(2)	12.698	62	163081	2.022
51) Trichloroethene	(2)	13.343	130	119703	2.018
52)*1,4-Difluorobenzene	(2)	13.393	114	1141808	10.000
53) Dibromomethane	(2)	14.095	174	119104	1.996
54) Ethyl Acrylate	(2)	14.231	55	182823	1.768
55) 1,2-Dichloropropane	(2)	14.267	63	128808	1.996
56) Bromodichloromethane	(2)	14.345	83	224539	2.012
57) Methyl Methacrylate	(2)	14.575	69	76665	1.855
58) 1,4-Dioxane	(2)	14.689	88	50162	1.722
59) cis-1,3-Dichloropropene	(2)	15.406	75	149045	1.937
60) Octane	(3)	15.434	43	227372	1.706
61) Toluene	(3)	15.807	91	317986	1.950
62) 4-Methyl-2-Pentanone	(2)	16.401	43	259125	1.905
63) Tetrachloroethene	(3)	16.437	166	196841	2.063
64) trans-1,3-Dichloropropene	(3)	16.466	75	133458	1.827
65) 1,3-Dichloropropene (total)	(3)		75	282503	3.736
66) Ethyl Methacrylate	(3)	16.673	69	121261	1.732
67) 1,1,2-Trichloroethane	(3)	16.738	97	147622	2.087
68) Dibromochloromethane	(3)	17.032	127	167778	1.991
69) 1,2-Dibromoethane	(3)	17.447	107	197333	2.024
70) 2-Hexanone	(3)	17.734	43	223019	1.790
71)*Chlorobenzene-d5	(3)	18.235	117	1193125	10.000
72) Chlorobenzene	(3)	18.264	112	303208	2.050
73) Ethylbenzene	(3)	18.271	91	408311	1.903
74) 1,1,1,2-Tetrachloroethane	(3)	18.350	131	181785	2.127
75) m/p-Xylene	(3)	18.500	91	267529	1.779
76) o-Xylene	(3)	19.188	91	237973	1.690

* = Compound is an internal standard.

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on 04/27/2018 at 15:46.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

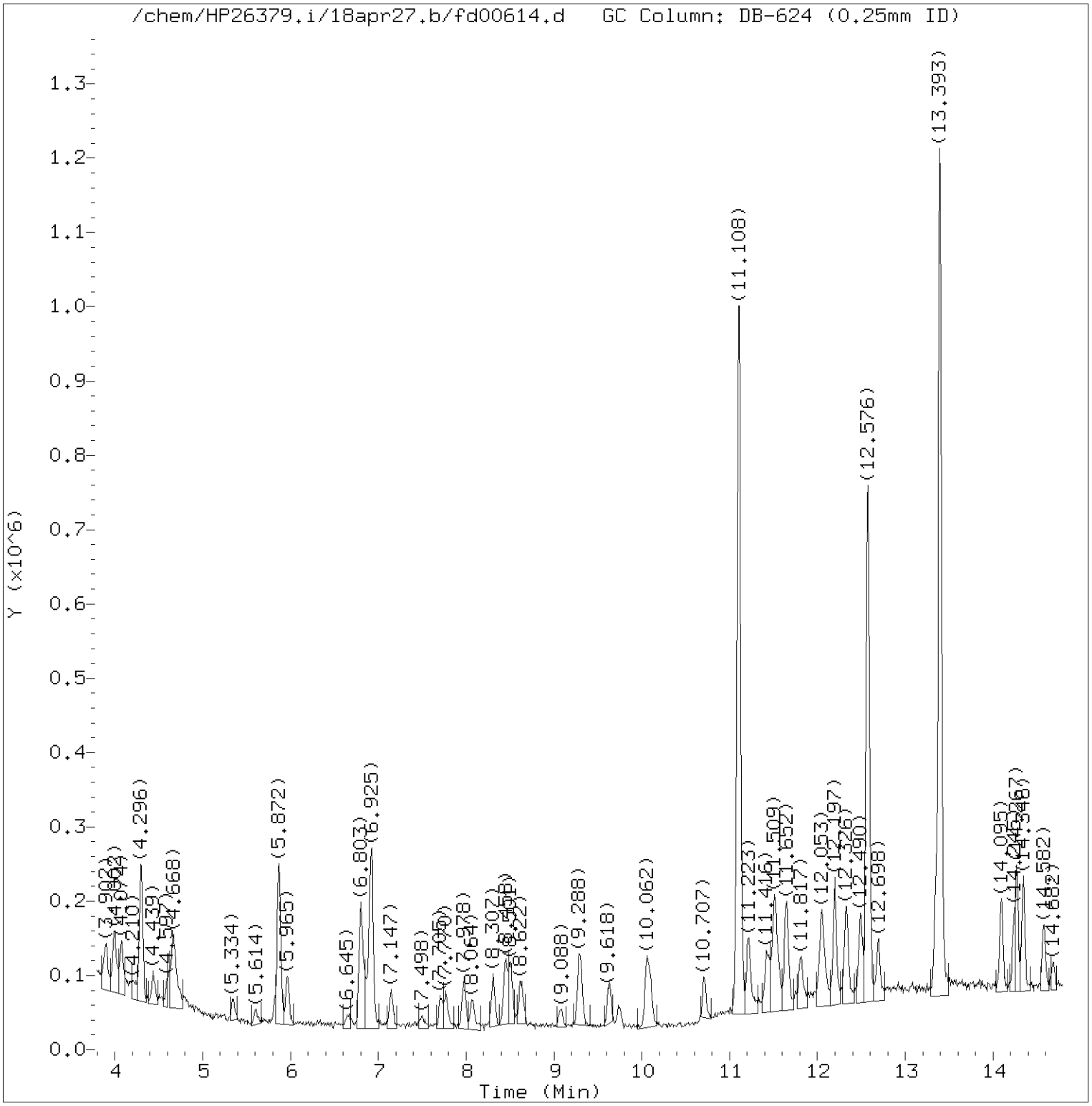
Data File: /chem/HP26379.i/18apr27.b/fd00613.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 11:38 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:37
Date, time and analyst ID of latest file update: 27-Apr-2018 14:37 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	505502	3.472
78) Styrene	(3)	19.274	104	170303	1.652
79) Bromoform	(3)	19.338	173	185848	1.885
80) Cumene	(3)	19.668	105	330681	1.733
81) n-Propylbenzene	(3)	20.327	120	101460	1.696
82) Bromobenzene	(3)	20.334	156	151662	1.849
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	306114	2.081
84) 4-Ethyltoluene	(3)	20.484	105	325286	1.659
85) 2-Chlorotoluene	(3)	20.606	126	97769	1.728
86) 1,3,5-Trimethylbenzene	(3)	20.613	105	277224	1.627
87) 1,2,3-Trichloropropane	(3)	20.678	110	99738	2.151
88) Alpha Methyl Styrene	(3)	21.014	118	111905	1.625
89) tert-Butylbenzene	(3)	21.129	119	246663	1.594
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	255606	1.597
91) sec-Butylbenzene	(3)	21.387	105	406619	1.678
92) p-Isopropyltoluene	(3)	21.566	119	296691	1.593
93) 1,3-Dichlorobenzene	(3)	21.723	146	259908	1.932
94) 1,4-Dichlorobenzene	(3)	21.838	146	237017	1.849
95) n-Butylbenzene	(3)	22.146	92	174772	1.511
96) Benzyl Chloride	(3)	22.167	126	45569	1.643
97) Hexachloroethane	(3)	22.390	117	129888	1.813
98) 1,2-Dichlorobenzene	(3)	22.425	146	224144	1.872
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	85919	1.739
100) Hexachlorobutadiene	(3)	24.553	225	143703	1.959
101) 1,2,4-Trichlorobenzene	(3)	24.653	180	115403	1.678
102) Naphthalene	(3)	25.233	128	186825	1.640

Digitally signed by Jacob E. Bailey
on 04/27/2018 at 15:46.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

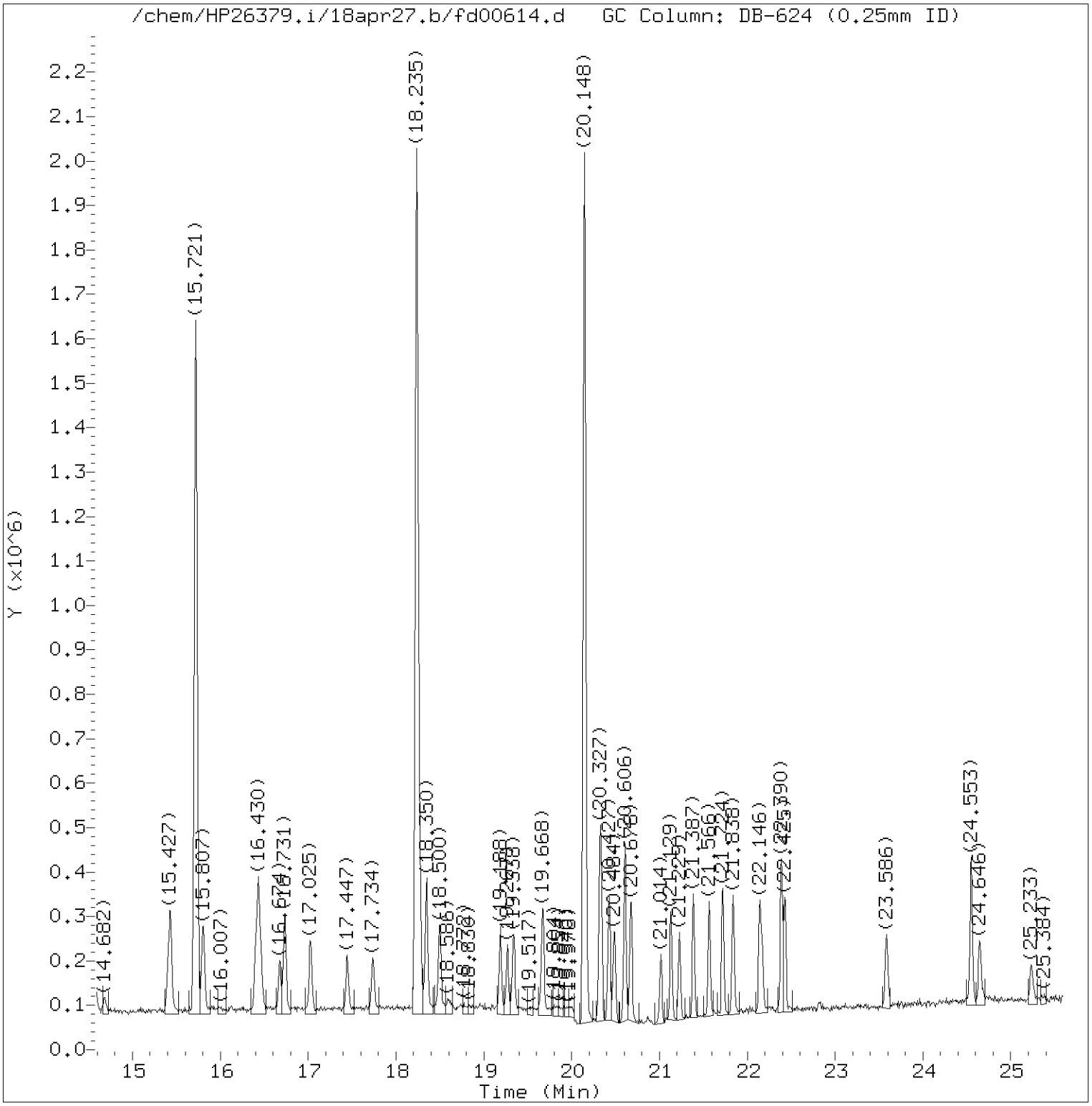
Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00614.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 12:08 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:37
Date, time and analyst ID of latest file update: 27-Apr-2018 14:37 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Jacob E. Bailey
on 04/27/2018 at 15:46.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00614.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 12:08 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:37
Date, time and analyst ID of latest file update: 27-Apr-2018 14:37 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Jacob E. Bailey
on 04/27/2018 at 15:46.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00614.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 12:08 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:37
Date, time and analyst ID of latest file update: 27-Apr-2018 14:37 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.888	41	37443	0.804
2) Dichlorodifluoromethane	(1)	4.002	85	106131	0.818
3) Chlorodifluoromethane	(1)	4.074	51	102852	0.993
4) Freon 114	(1)	4.303	85	136639	1.036
5) Chloromethane	(1)	4.439	50	57828	1.023
6) Vinyl Chloride	(1)	4.633	62	26403	0.807
7) 1,3-Butadiene	(1)	4.668	54	29693	1.005
8) Bromomethane	(1)	5.342	94	27163	0.722
9) Chloroethane	(1)	5.585	64	21165	0.813
10) Bromoethene	(1)	5.822	106	25933	0.747
11) Pentane	(1)	5.865	43	79825	0.847
12) Trichlorofluoromethane	(1)	5.872	101	149679	1.084
13) Dichlorofluoromethane	(1)	5.958	67	80248	0.756
14) Ethanol	(1)	6.652	45	19636	0.971
15) Freon123a	(1)	6.803	67	127854	1.255
16) 1,1-Dichloroethene	(1)	6.846	61	54048	0.740
17) Freon 113	(1)	6.925	103	92285	1.202
18) Carbon Disulfide	(1)	6.932	76	79959	0.721
19) Methyl Iodide	(1)	7.147	142	71503	0.784
20) Acrolein	(1)	7.483	56	10751	0.643
21) Isopropanol	(1)	7.705	45	68885	0.841
22) 3-Chloropropene	(1)	7.784	41	59303	0.911
23) Methylene Chloride	(1)	7.978	84	31790	0.844
24) Acetone	(1)	8.071	43	71143	0.813
25) trans-1,2-Dichloroethene	(1)	8.307	61	56663	0.809
26) Hexane	(1)	8.458	56	52408	0.964
27) Methyl t-Butyl Ether	(1)	8.515	73	97701	0.845
28) tert-Butyl Alcohol	(1)	8.622	59	96845	1.008
29) Acetonitrile	(1)	9.081	41	47727	0.865
30) Di-Isopropyl Ether	(1)	9.296	45	146050	0.886
31) 1,1-Dichloroethane	(1)	9.632	63	89252	0.928
32) Acrylonitrile	(1)	9.740	53	33751	0.785
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	102145	0.754
34) Vinyl Acetate	(1)	10.112	43	110090	0.797
35) cis-1,2-Dichloroethene	(1)	10.707	61	49968	0.781
36) 1,2-Dichloroethene (total)	(1)		61	106631	1.589
37)*Bromochloromethane	(1)	11.101	130	391569	10.000
38) Cyclohexane	(1)	11.122	56	62802	0.827

* = Compound is an internal standard.

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on 04/27/2018 at 15:46.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00614.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 12:08 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:37
Date, time and analyst ID of latest file update: 27-Apr-2018 14:37 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	100529	0.924
40) Ethyl Acetate	(1)	11.416	43	111127	0.874
41) Methyl Acrylate	(1)	11.459	55	70376	0.810
42) Carbon Tetrachloride	(1)	11.509	117	124695	1.064
43) Tetrahydrofuran	(1)	11.552	42	47737	0.779
44) 1,1,1-Trichloroethane	(1)	11.652	97	120833	1.025
45) 2-Butanone	(1)	11.810	43	102202	0.884
46) Isooctane	(2)	12.046	57	160611	0.773
47) Heptane	(2)	12.197	71	35630	0.901
48) Benzene	(2)	12.326	78	134495	0.971
49) Tert-Amyl Methyl Ether	(2)	12.498	73	82606	0.815
50) 1,2-Dichloroethane	(2)	12.691	62	76973	0.995
51) Trichloroethene	(2)	13.350	130	53472	0.940
52)*1,4-Difluorobenzene	(2)	13.393	114	1095376	10.000
53) Dibromomethane	(2)	14.095	174	56628	0.989
54) Ethyl Acrylate	(2)	14.238	55	98510	0.993
55) 1,2-Dichloropropane	(2)	14.267	63	68555	1.108
56) Bromodichloromethane	(2)	14.346	83	109577	1.023
57) Methyl Methacrylate	(2)	14.575	69	37329	0.942
58) 1,4-Dioxane	(2)	14.682	88	24119	0.863
59) cis-1,3-Dichloropropene	(2)	15.413	75	70803	0.959
60) Octane	(3)	15.434	43	108782	0.844
61) Toluene	(3)	15.807	91	161916	1.027
62) 4-Methyl-2-Pentanone	(2)	16.401	43	127790	0.979
63) Tetrachloroethene	(3)	16.437	166	95541	1.035
64) trans-1,3-Dichloropropene	(3)	16.466	75	66067	0.935
65) 1,3-Dichloropropene (total)	(3)		75	136870	1.872
66) Ethyl Methacrylate	(3)	16.674	69	60032	0.887
67) 1,1,2-Trichloroethane	(3)	16.731	97	74927	1.096
68) Dibromochloromethane	(3)	17.025	127	82684	1.015
69) 1,2-Dibromoethane	(3)	17.447	107	100793	1.069
70) 2-Hexanone	(3)	17.734	43	106088	0.881
71)*Chlorobenzene-d5	(3)	18.235	117	1153600	10.000
72) Chlorobenzene	(3)	18.264	112	152873	1.069
73) Ethylbenzene	(3)	18.271	91	203954	0.983
74) 1,1,1,2-Tetrachloroethane	(3)	18.343	131	90174	1.091
75) m/p-Xylene	(3)	18.500	91	139204	0.957
76) o-Xylene	(3)	19.188	91	127803	0.939

* = 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/HP26379.i/18apr27.b/fd00614.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 12:08 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:37
Date, time and analyst ID of latest file update: 27-Apr-2018 14:37 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	267007	1.897
78) Styrene	(3)	19.267	104	77870	0.781
79) Bromoform	(3)	19.345	173	94922	0.996
80) Cumene	(3)	19.668	105	161516	0.876
81) n-Propylbenzene	(3)	20.320	120	47034	0.813
82) Bromobenzene	(3)	20.341	156	75062	0.947
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	164594	1.157
84) 4-Ethyltoluene	(3)	20.491	105	157588	0.831
85) 2-Chlorotoluene	(3)	20.599	126	45998	0.841
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	126170	0.766
87) 1,2,3-Trichloropropane	(3)	20.678	110	49311	1.100
88) Alpha Methyl Styrene	(3)	21.014	118	52577	0.790
89) tert-Butylbenzene	(3)	21.129	119	110757	0.740
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	116272	0.751
91) sec-Butylbenzene	(3)	21.387	105	182871	0.781
92) p-Isopropyltoluene	(3)	21.566	119	134378	0.746
93) 1,3-Dichlorobenzene	(3)	21.724	146	126840	0.975
94) 1,4-Dichlorobenzene	(3)	21.838	146	116172	0.937
95) n-Butylbenzene	(3)	22.146	92	83405	0.746
96) Benzyl Chloride	(3)	22.168	126	20273	0.756
97) Hexachloroethane	(3)	22.390	117	64753	0.935
98) 1,2-Dichlorobenzene	(3)	22.425	146	106961	0.924
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	42519	0.890
100) Hexachlorobutadiene	(3)	24.553	225	76321	1.076
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	57209	0.860
102) Naphthalene	(3)	25.241	128	92663	0.841

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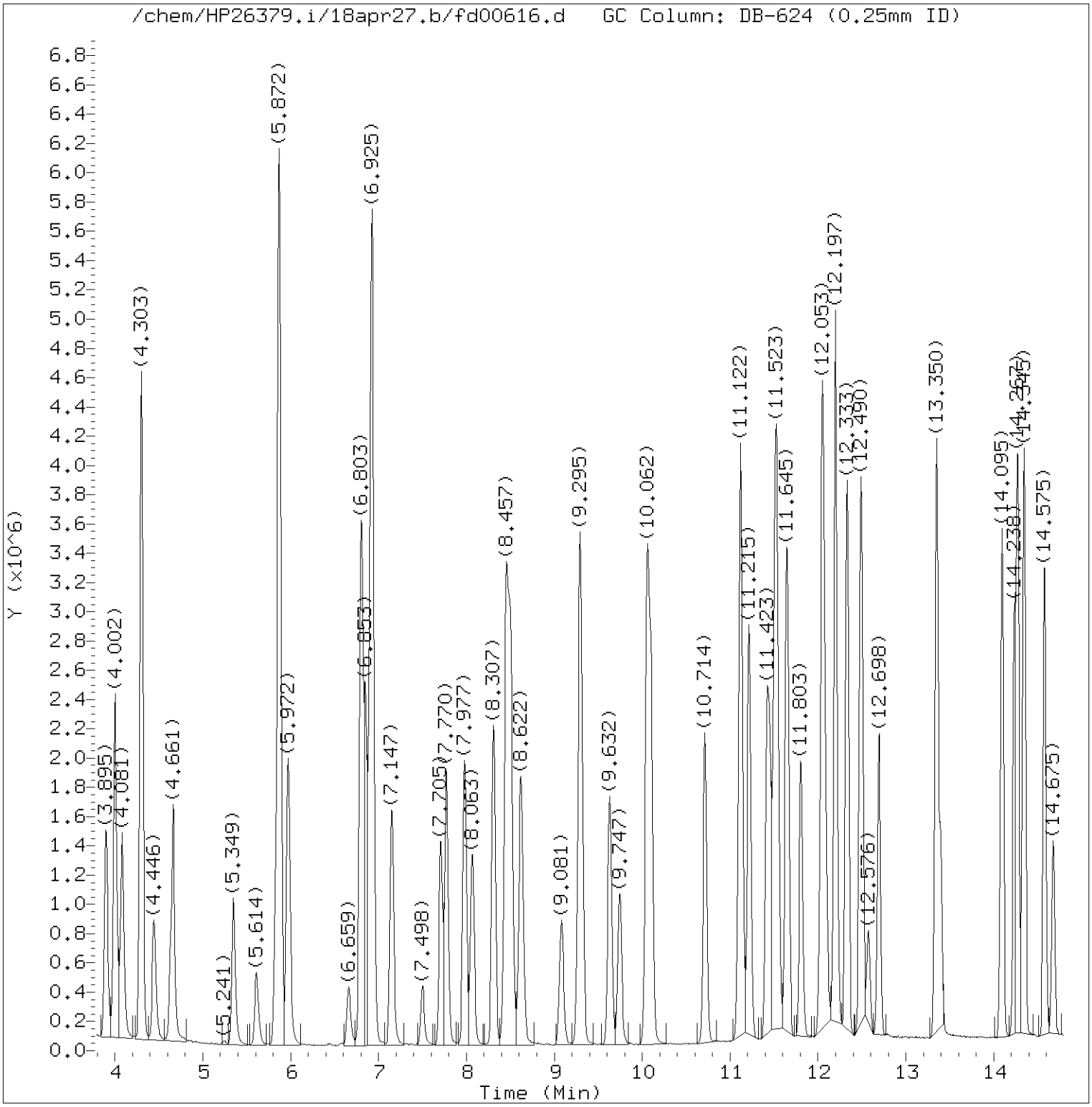
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00616.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 13:10 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:38
Date, time and analyst ID of latest file update: 27-Apr-2018 14:38 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

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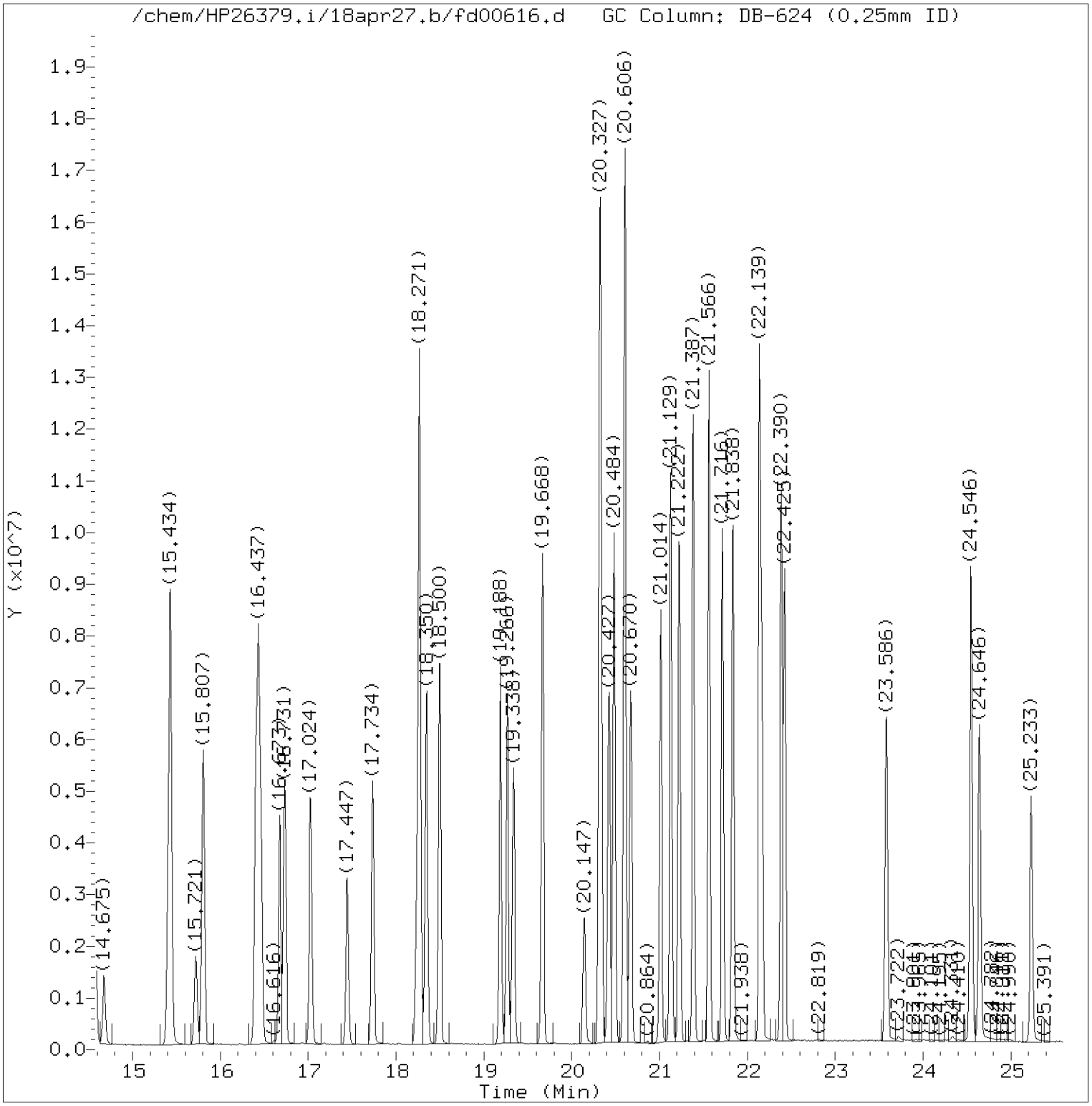
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00616.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 13:10 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:38
Date, time and analyst ID of latest file update: 27-Apr-2018 14:38 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

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Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00616.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 13:10 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:38
Date, time and analyst ID of latest file update: 27-Apr-2018 14:38 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.895	41	1295766	24.901
2) Dichlorodifluoromethane	(1)	4.002	85	3762869	25.978
3) Chlorodifluoromethane	(1)	4.081	51	2851926	24.643
4) Freon 114	(1)	4.303	85	3559750	24.159
5) Chloromethane	(1)	4.446	50	1531614	24.273
6) Vinyl Chloride	(1)	4.632	62	911018	24.922
7) 1,3-Butadiene	(1)	4.668	54	758561	22.983
8) Bromomethane	(1)	5.349	94	1101490	26.232
9) Chloroethane	(1)	5.614	64	736915	25.360
10) Bromoethene	(1)	5.829	106	1040691	26.845
11) Pentane	(1)	5.864	43	2890798	27.455
12) Trichlorofluoromethane	(1)	5.879	101	3639715	23.600
13) Dichlorofluoromethane	(1)	5.972	67	3107381	26.225
14) Ethanol	(1)	6.659	45	539867	23.906
15) Freon123a	(1)	6.803	67	2953983	25.971
16) 1,1-Dichloroethene	(1)	6.853	61	2178742	26.705
17) Freon 113	(1)	6.917	103	1949485	22.745
18) Carbon Disulfide	(1)	6.932	76	3400307	27.457
19) Methyl Iodide	(1)	7.147	142	2821570	27.694
20) Acrolein	(1)	7.498	56	510143	27.325
21) Isopropanol	(1)	7.712	45	2402371	26.254
22) 3-Chloropropene	(1)	7.777	41	2278320	31.323
23) Methylene Chloride	(1)	7.977	84	1235699	29.360
24) Acetone	(1)	8.071	43	2567592	26.269
25) trans-1,2-Dichloroethene	(1)	8.307	61	2043039	26.112
26) Hexane	(1)	8.457	56	1594420	26.253
27) Methyl t-Butyl Ether	(1)	8.500	73	3585408	27.765
28) tert-Butyl Alcohol	(1)	8.622	59	3082468	28.732
29) Acetonitrile	(1)	9.081	41	1592257	25.827
30) Di-Isopropyl Ether	(1)	9.295	45	5047202	27.427
31) 1,1-Dichloroethane	(1)	9.632	63	2710211	25.239
32) Acrylonitrile	(1)	9.740	53	1286839	26.804
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	4315847	28.522
34) Vinyl Acetate	(1)	10.105	43	5055939	32.769
35) cis-1,2-Dichloroethene	(1)	10.714	61	1881025	26.311
36) 1,2-Dichloroethene (total)	(1)		61	3924064	52.423
37)*Bromochloromethane	(1)	11.101	130	437312	10.000
38) Cyclohexane	(1)	11.122	56	2379771	28.057

* = 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/HP26379.i/18apr27.b/fd00616.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 13:10 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:38
Date, time and analyst ID of latest file update: 27-Apr-2018 14:38 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	3064226	25.211
40) Ethyl Acetate	(1)	11.423	43	3733406	26.287
41) Methyl Acrylate	(1)	11.452	55	2731549	28.157
42) Carbon Tetrachloride	(1)	11.509	117	3204598	24.485
43) Tetrahydrofuran	(1)	11.545	42	1907823	27.880
44) 1,1,1-Trichloroethane	(1)	11.652	97	3222413	24.480
45) 2-Butanone	(1)	11.803	43	3432383	26.570
46) Isooctane	(2)	12.053	57	7241284	28.802
47) Heptane	(2)	12.204	71	1350785	28.257
48) Benzene	(2)	12.333	78	4207441	25.108
49) Tert-Amyl Methyl Ether	(2)	12.490	73	3452685M	28.147
50) 1,2-Dichloroethane	(2)	12.698	62	2304544	24.625
51) Trichloroethene	(2)	13.350	130	1709821	24.846
52)*1,4-Difluorobenzene	(2)	13.393	114	1324863	10.000
53) Dibromomethane	(2)	14.095	174	1709951	24.695
54) Ethyl Acrylate	(2)	14.231	55	3242147	27.025
55) 1,2-Dichloropropane	(2)	14.274	63	1848602	24.693
56) Bromodichloromethane	(2)	14.345	83	3230630	24.948
57) Methyl Methacrylate	(2)	14.582	69	1293864	26.984
58) 1,4-Dioxane	(2)	14.675	88	955973	28.283
59) cis-1,3-Dichloropropene	(2)	15.406	75	2389716	26.771
60) Octane	(3)	15.434	43	4497142	30.759
61) Toluene	(3)	15.807	91	4728712	26.434
62) 4-Methyl-2-Pentanone	(2)	16.401	43	4222303	26.751
63) Tetrachloroethene	(3)	16.437	166	2656306	25.375
64) trans-1,3-Dichloropropene	(3)	16.466	75	2223048	27.739
65) 1,3-Dichloropropene (total)	(3)		75	4612764	55.608
66) Ethyl Methacrylate	(3)	16.673	69	2277867	29.664
67) 1,1,2-Trichloroethane	(3)	16.731	97	1913036	24.655
68) Dibromochloromethane	(3)	17.024	127	2407445	26.049
69) 1,2-Dibromoethane	(3)	17.447	107	2716351	25.394
70) 2-Hexanone	(3)	17.734	43	4033643	29.520
71)*Chlorobenzene-d5	(3)	18.235	117	1308734	10.000
72) Chlorobenzene	(3)	18.264	112	4218357	25.998
73) Ethylbenzene	(3)	18.271	91	6580492	27.960
74) 1,1,1,2-Tetrachloroethane	(3)	18.350	131	2333388	24.896
75) m/p-Xylene	(3)	18.500	91	4843521	29.358
76) o-Xylene	(3)	19.188	91	4688731	30.360

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

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on 04/27/2018 at 15:46.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00616.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 13:10 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:38
Date, time and analyst ID of latest file update: 27-Apr-2018 14:38 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	9532252	59.685
78) Styrene	(3)	19.266	104	3606531	31.891
79) Bromoform	(3)	19.338	173	3008679	27.819
80) Cumene	(3)	19.668	105	6735800	32.191
81) n-Propylbenzene	(3)	20.319	120	2034633	31.012
82) Bromobenzene	(3)	20.334	156	2521152	28.023
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	4036739	25.019
84) 4-Ethyltoluene	(3)	20.484	105	7029697	32.679
85) 2-Chlorotoluene	(3)	20.599	126	1858487	29.938
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	6112064	32.704
87) 1,2,3-Trichloropropane	(3)	20.670	110	1275698	25.079
88) Alpha Methyl Styrene	(3)	21.014	118	2732019	36.168
89) tert-Butylbenzene	(3)	21.129	119	5661960	33.348
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	5887276	33.531
91) sec-Butylbenzene	(3)	21.387	105	8555173	32.194
92) p-Isopropyltoluene	(3)	21.566	119	7065820	34.581
93) 1,3-Dichlorobenzene	(3)	21.716	146	4121800	27.939
94) 1,4-Dichlorobenzene	(3)	21.838	146	4176886	29.710
95) n-Butylbenzene	(3)	22.139	92	4337160	34.183
96) Benzyl Chloride	(3)	22.167	126	1083988	35.628
97) Hexachloroethane	(3)	22.390	117	2316235	29.471
98) 1,2-Dichlorobenzene	(3)	22.425	146	3836360	29.206
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	1832864	33.816
100) Hexachlorobutadiene	(3)	24.553	225	2164135	26.892
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	2339485	31.004
102) Naphthalene	(3)	25.233	128	4600786	36.816

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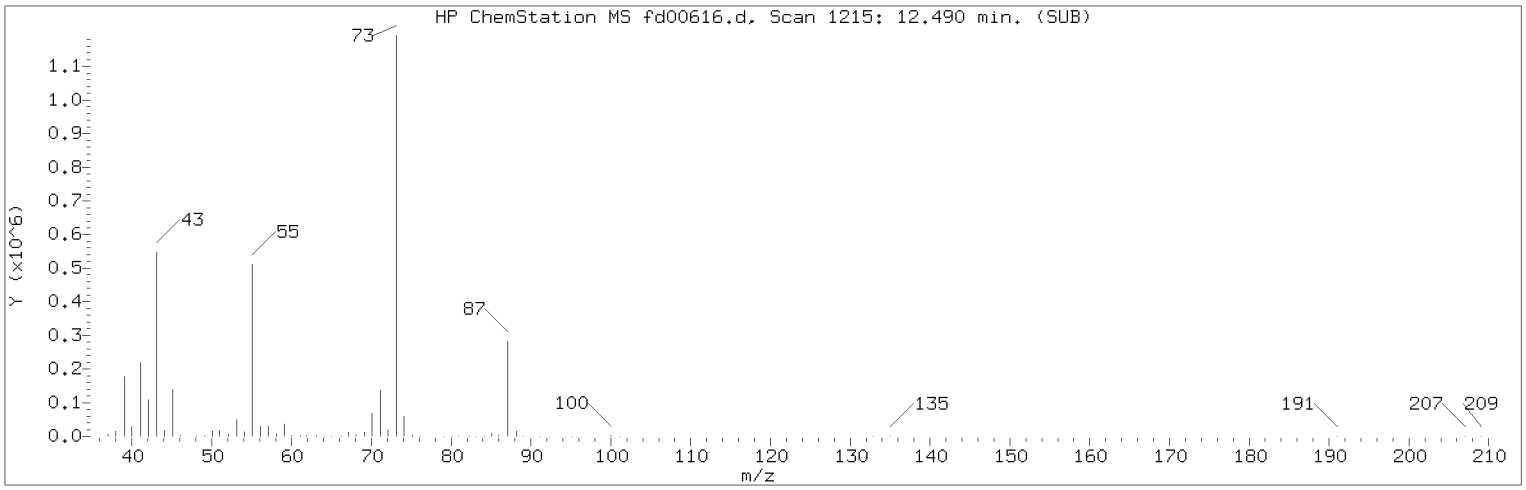
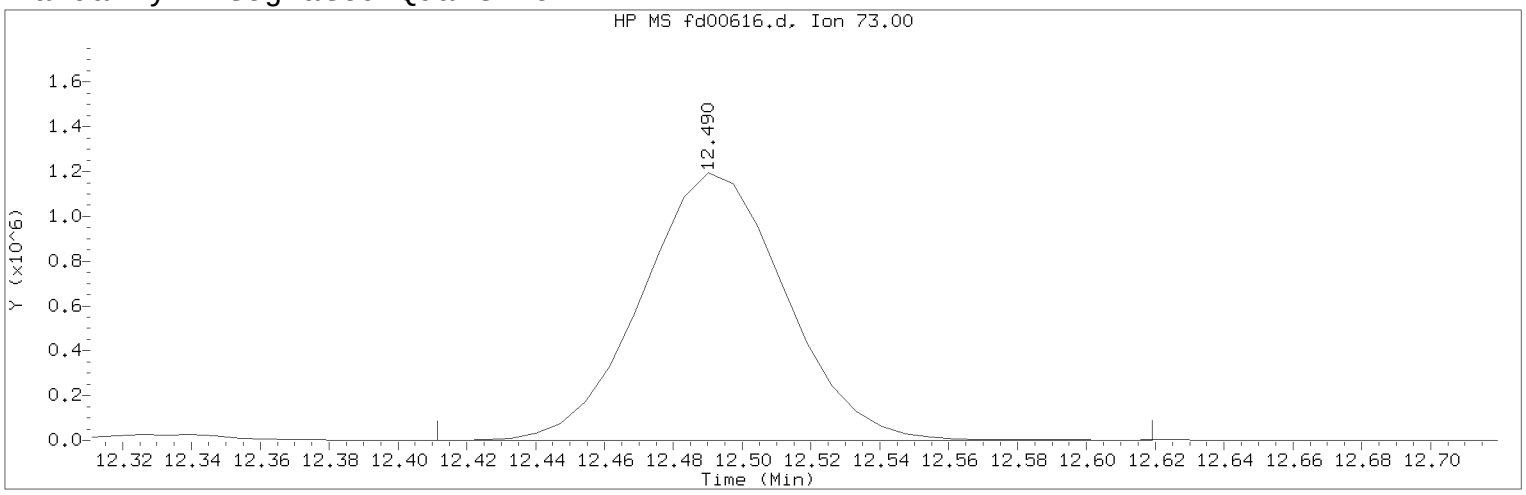
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18apr27.b/fd00616.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 13:10 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:38
Date, time and analyst ID of latest file update: 27-Apr-2018 14:38 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

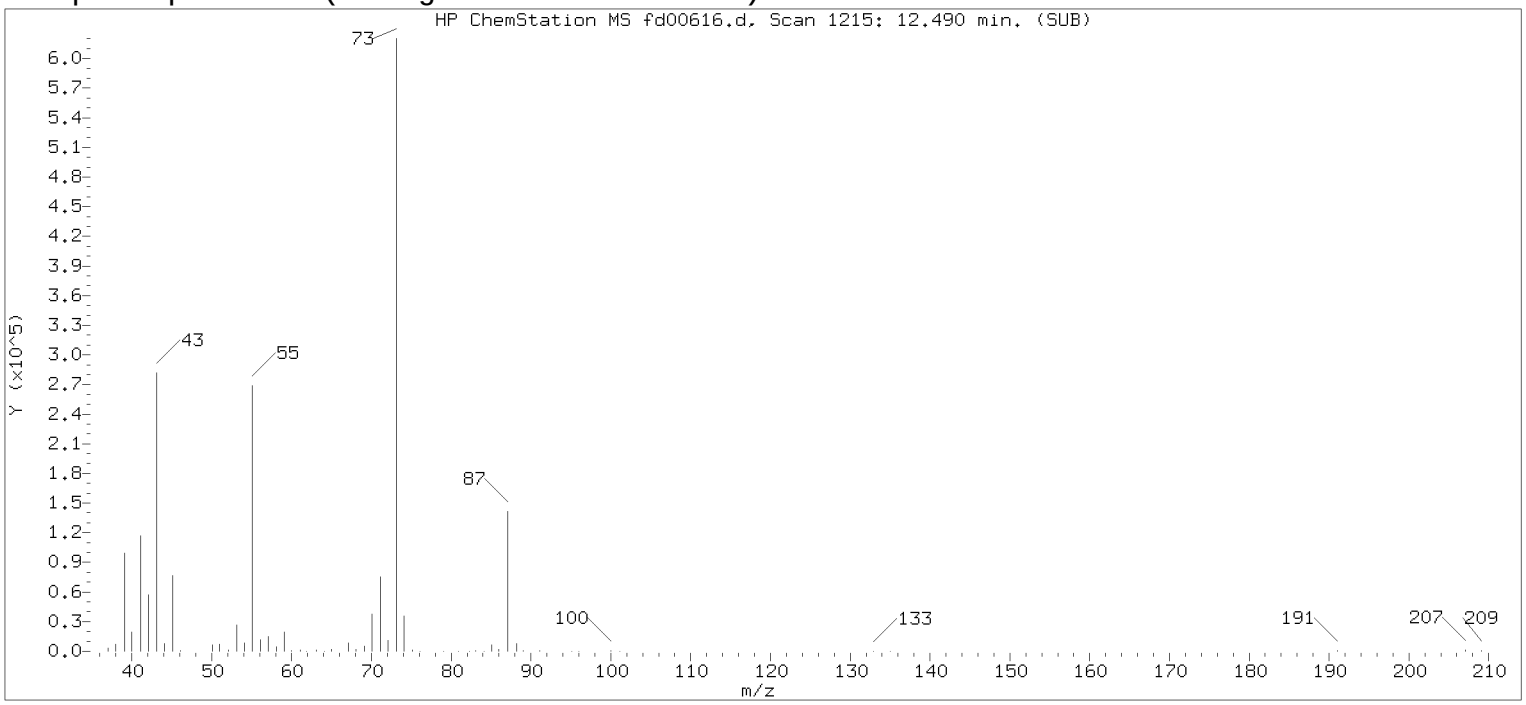
Compound Number : 49
Compound Name : Tert-Amyl Methyl Ether
Scan Number : 1215
Retention Time (minutes): 12.490
Quant Ion : 73.00
Area (flag) : 3452685M
Concentration (ppb(v)) : 28.1470
Integration start scan : 1203 Integration stop scan: 1232
Y at integration start : 30 Y at integration end: 30

Reason for manual integration: improper integration

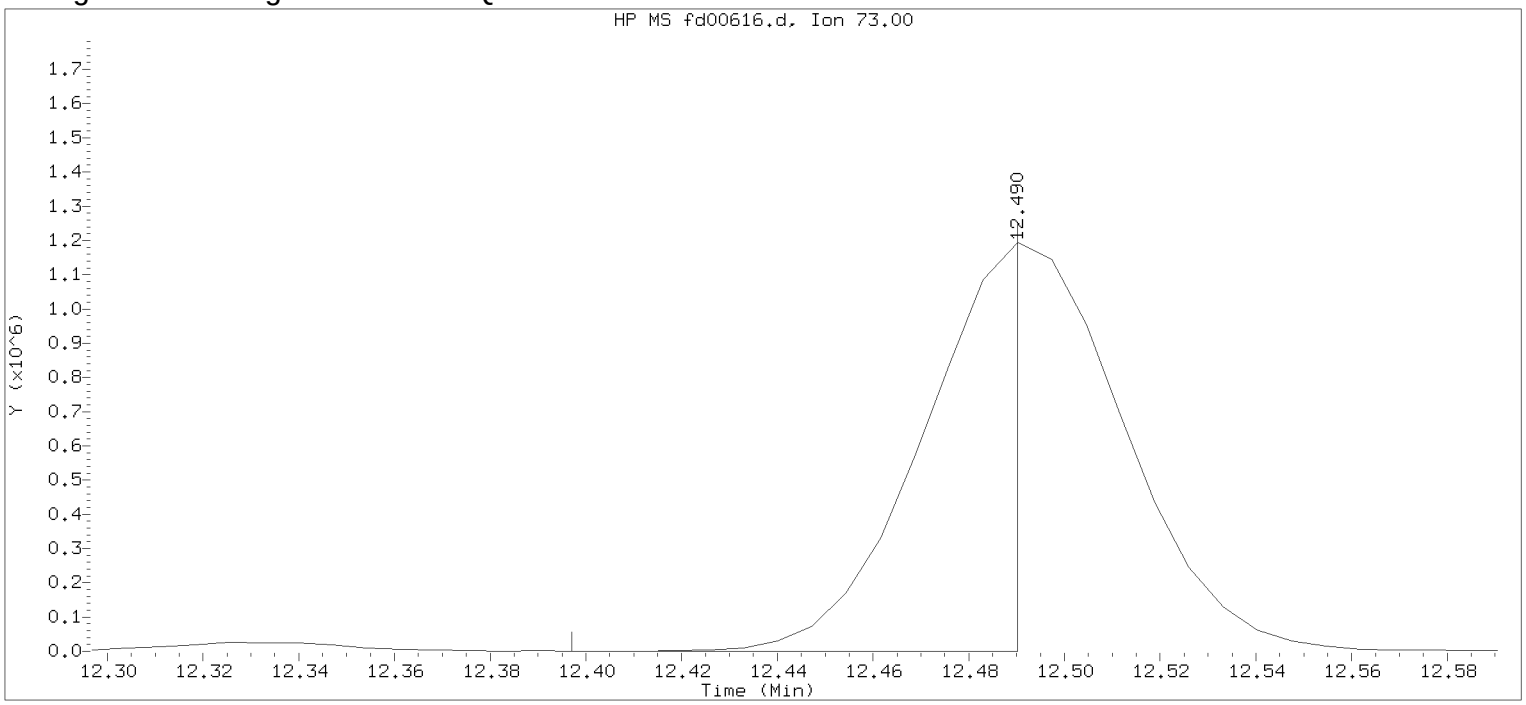
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 04/27/2018 at 15:46.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 05/01/2018 at 14:47.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18apr27.b/fd00616.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 13:10 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 12:54
Date, time and analyst ID of latest file update: 27-Apr-2018 13:37 Unknown

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compound Number : 49
Compound Name : Tert-Amyl Methyl Ether
Scan Number : 1215
Retention Time (minutes): 12.490
Quant Ion : 73.00
Area : 1590440
Concentration (ppb(v)) : 13.8632
Integration start scan : 1201 Integration stop scan: 1214
Y at integration start : 512 Y at integration end: 512

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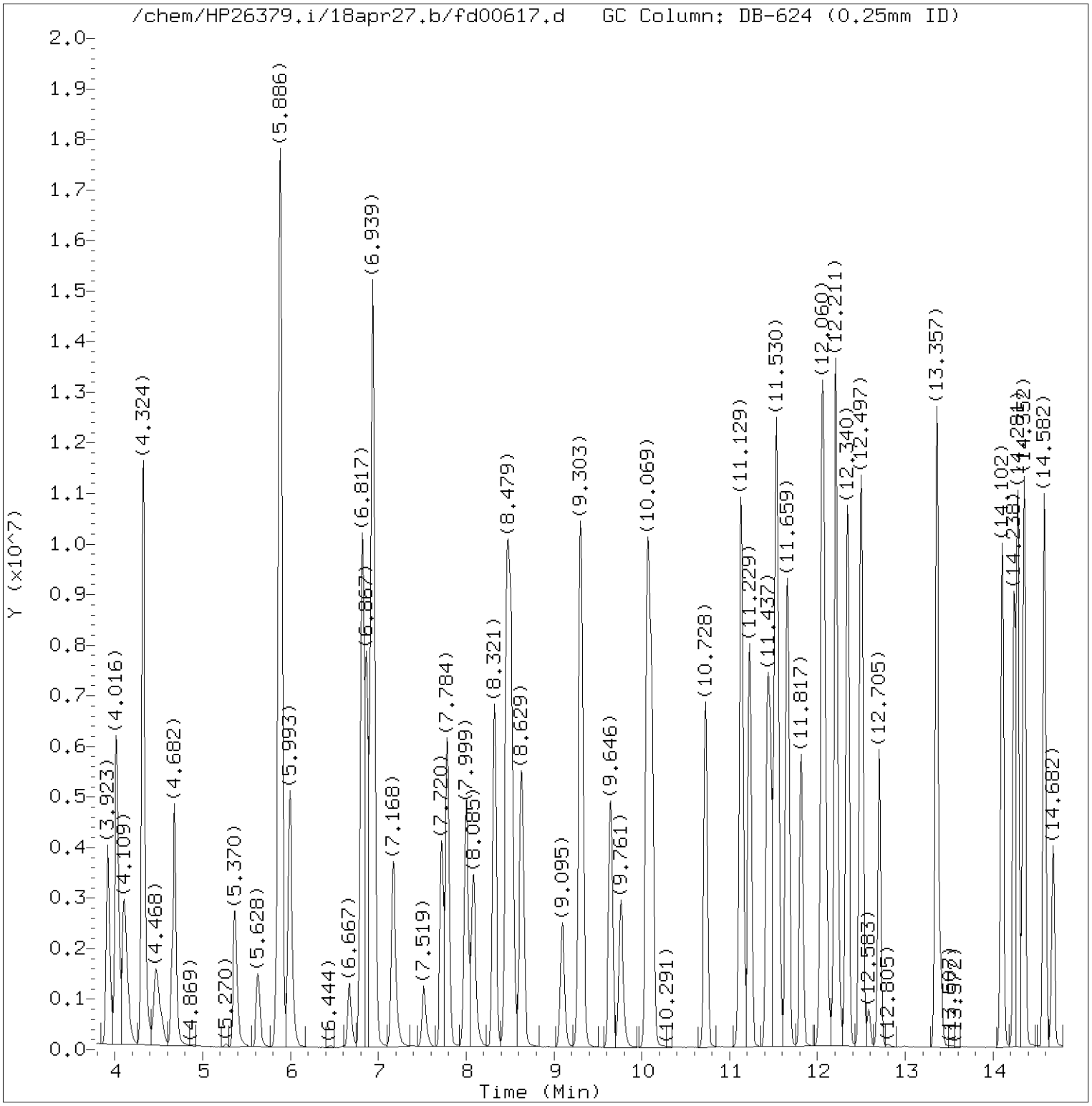
Target 3.5 esignature user ID: JEB Page 485 of 970



Total Ion Chromatogram (TIC)

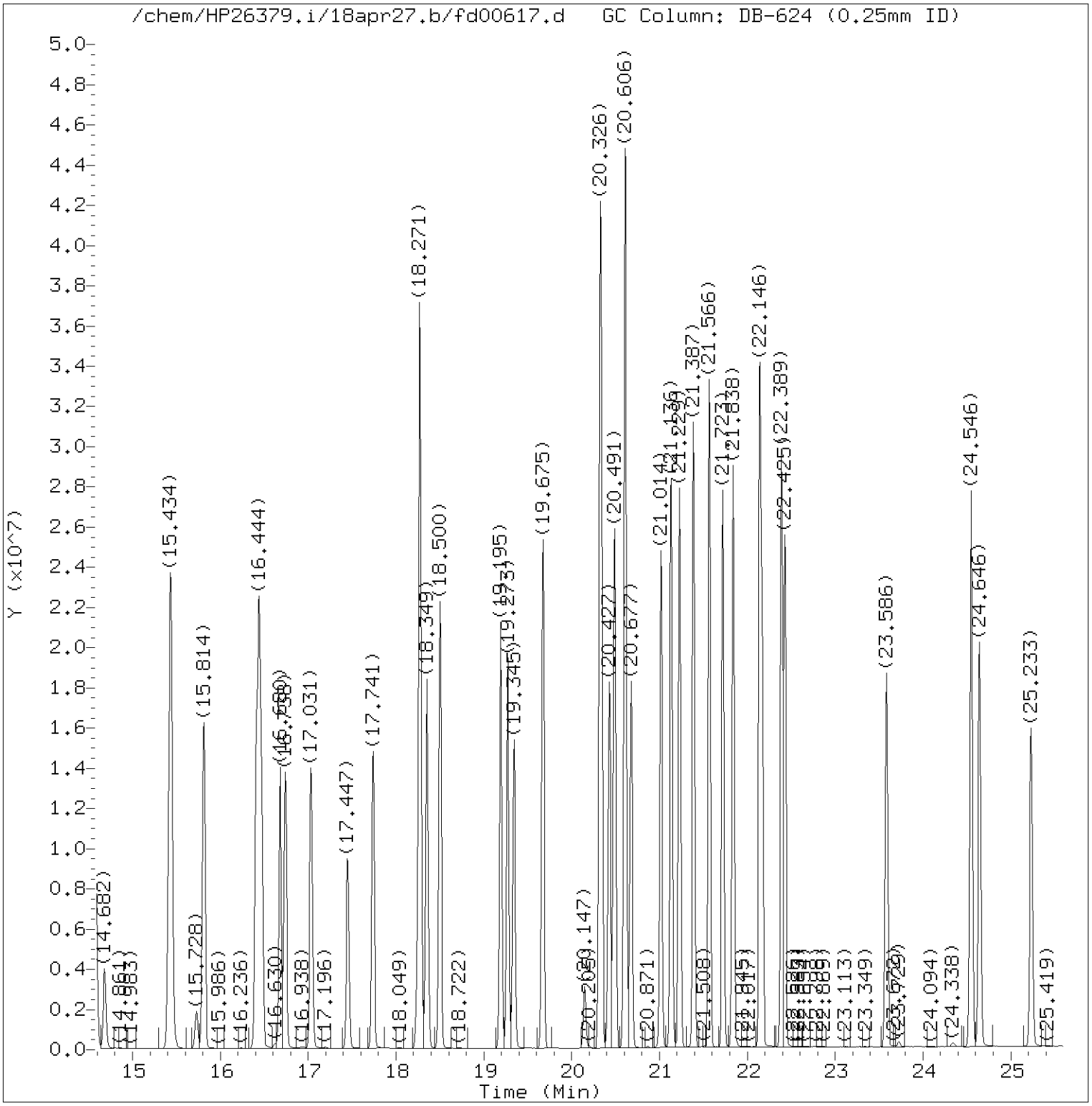
Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00617.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 13:40 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:38
Date, time and analyst ID of latest file update: 27-Apr-2018 14:38 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Digitally signed by Jacob E. Bailey
on 04/27/2018 at 15:46.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00617.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 13:40 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:38
Date, time and analyst ID of latest file update: 27-Apr-2018 14:38 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Digitally signed by Jacob E. Bailey
on 04/27/2018 at 15:46.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00617.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 13:40 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:38
Date, time and analyst ID of latest file update: 27-Apr-2018 14:38 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.923	41	4110601	80.280
2) Dichlorodifluoromethane	(1)	4.016	85	10551945	74.033
3) Chlorodifluoromethane	(1)	4.109	51	7966612	69.957
4) Freon 114	(1)	4.324	85	9986294	68.876
5) Chloromethane	(1)	4.468	50	4122772	66.399
6) Vinyl Chloride	(1)	4.654	62	2716390	75.519
7) 1,3-Butadiene	(1)	4.682	54	2374860	73.125
8) Bromomethane	(1)	5.363	94	3258347	78.861
9) Chloroethane	(1)	5.628	64	2209409	77.272
10) Bromoethene	(1)	5.850	106	3401488	89.170
11) Pentane	(1)	5.879	43	8816428	85.094
12) Trichlorofluoromethane	(1)	5.893	101	10195477	67.184
13) Dichlorofluoromethane	(1)	5.993	67	8665245	74.320
14) Ethanol	(1)	6.667	45	1884914	84.823
15) Freon123a	(1)	6.817	67	8231024	73.544
16) 1,1-Dichloroethene	(1)	6.867	61	6917415	86.165
17) Freon 113	(1)	6.932	103	5297567	62.813
18) Carbon Disulfide	(1)	6.953	76	10069580	82.632
19) Methyl Iodide	(1)	7.168	142	7706253	76.868
20) Acrolein	(1)	7.519	56	1763377	95.991
21) Isopropanol	(1)	7.720	45	8135020	90.349
22) 3-Chloropropene	(1)	7.784	41	7254961	101.365
23) Methylene Chloride	(1)	7.999	84	3488330	84.231
24) Acetone	(1)	8.085	43	7476959	77.740
25) trans-1,2-Dichloroethene	(1)	8.321	61	6419493	83.383
26) Hexane	(1)	8.464	56	4645913	77.742
27) Methyl t-Butyl Ether	(1)	8.515	73	10547327	83.007
28) tert-Butyl Alcohol	(1)	8.629	59	9705262	91.934
29) Acetonitrile	(1)	9.095	41	4629988	76.322
30) Di-Isopropyl Ether	(1)	9.303	45	16302233	90.028
31) 1,1-Dichloroethane	(1)	9.646	63	7911791	74.878
32) Acrylonitrile	(1)	9.761	53	4059220	85.927
33) Ethyl Tert-Butyl Ether	(1)	10.069	59	14005199	94.062
34) Vinyl Acetate	(1)	10.119	43	15723758	103.567
35) cis-1,2-Dichloroethene	(1)	10.728	61	6131911	87.166
36) 1,2-Dichloroethene (total)	(1)		61	12551404	170.549
37)*Bromochloromethane	(1)	11.122	130	430312	10.000
38) Cyclohexane	(1)	11.129	56	7652758	91.693

* = Compound is an internal standard.

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on 04/27/2018 at 15:46.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00617.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 13:40 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:38
Date, time and analyst ID of latest file update: 27-Apr-2018 14:38 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.229	83	8640621	72.248
40) Ethyl Acetate	(1)	11.430	43	11505891	82.332
41) Methyl Acrylate	(1)	11.466	55	8552089	89.591
42) Carbon Tetrachloride	(1)	11.523	117	8938010	69.402
43) Tetrahydrofuran	(1)	11.552	42	5914825	87.842
44) 1,1,1-Trichloroethane	(1)	11.659	97	8920685	68.870
45) 2-Butanone	(1)	11.817	43	10312071	81.125
46) Isooctane	(2)	12.060	57	22549090	79.730
47) Heptane	(2)	12.211	71	4275121	79.501
48) Benzene	(2)	12.340	78	11999449	63.656
49) Tert-Amyl Methyl Ether	(2)	12.497	73	10944658	79.317
50) 1,2-Dichloroethane	(2)	12.705	62	6520190	61.935
51) Trichloroethene	(2)	13.357	130	5381325	69.515
52)*1,4-Difluorobenzene	(2)	13.407	114	1490334	10.000
53) Dibromomethane	(2)	14.102	174	5010201	64.324
54) Ethyl Acrylate	(2)	14.238	55	10747092	79.636
55) 1,2-Dichloropropane	(2)	14.281	63	5156593	61.233
56) Bromodichloromethane	(2)	14.352	83	9029592	61.987
57) Methyl Methacrylate	(2)	14.582	69	4320904	80.109
58) 1,4-Dioxane	(2)	14.682	88	3018941	79.401
59) cis-1,3-Dichloropropene	(2)	15.413	75	7417495	73.869
60) Octane	(3)	15.441	43	13079562	77.785
61) Toluene	(3)	15.814	91	13936888	67.742
62) 4-Methyl-2-Pentanone	(2)	16.408	43	12433074	70.026
63) Tetrachloroethene	(3)	16.444	166	7582090	62.978
64) trans-1,3-Dichloropropene	(3)	16.473	75	6605255	71.664
65) 1,3-Dichloropropene (total)	(3)		75	14022750	146.987
66) Ethyl Methacrylate	(3)	16.680	69	7315357	82.835
67) 1,1,2-Trichloroethane	(3)	16.738	97	5282868	59.202
68) Dibromochloromethane	(3)	17.031	127	6956273	65.446
69) 1,2-Dibromoethane	(3)	17.447	107	7950144	64.625
70) 2-Hexanone	(3)	17.741	43	12240041	77.888
71)*Chlorobenzene-d5	(3)	18.242	117	1505146	10.000
72) Chlorobenzene	(3)	18.264	112	11672013	62.549
73) Ethylbenzene	(3)	18.278	91	17981525	66.433
74) 1,1,1,2-Tetrachloroethane	(3)	18.349	131	6368564	59.082
75) m/p-Xylene	(3)	18.500	91	14482375	76.326
76) o-Xylene	(3)	19.195	91	14422659	81.202

* = Compound is an internal standard.

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on 04/27/2018 at 15:46.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00617.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 13:40 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:38
Date, time and analyst ID of latest file update: 27-Apr-2018 14:38 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	28905034	157.367
78) Styrene	(3)	19.273	104	10814610	83.151
79) Bromoform	(3)	19.345	173	8579850	68.978
80) Cumene	(3)	19.675	105	18784822	78.058
81) n-Propylbenzene	(3)	20.326	120	6051757	80.205
82) Bromobenzene	(3)	20.334	156	7001795	67.670
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	10692891	57.625
84) 4-Ethyltoluene	(3)	20.491	105	18725191	75.689
85) 2-Chlorotoluene	(3)	20.606	126	5266091	73.760
86) 1,3,5-Trimethylbenzene	(3)	20.613	105	16519935	76.858
87) 1,2,3-Trichloropropane	(3)	20.677	110	3527375	60.295
88) Alpha Methyl Styrene	(3)	21.014	118	8642424	99.484
89) tert-Butylbenzene	(3)	21.136	119	15524922	79.508
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	16191170	80.183
91) sec-Butylbenzene	(3)	21.394	105	19327382	63.239
92) p-Isopropyltoluene	(3)	21.573	119	17275634	73.516
93) 1,3-Dichlorobenzene	(3)	21.723	146	11497796	67.767
94) 1,4-Dichlorobenzene	(3)	21.838	146	11646641	72.031
95) n-Butylbenzene	(3)	22.139	92	12524229	85.827
96) Benzyl Chloride	(3)	22.167	126	3283011	93.822
97) Hexachloroethane	(3)	22.389	117	6581423	72.812
98) 1,2-Dichlorobenzene	(3)	22.432	146	10785085	71.392
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	5619684	90.152
100) Hexachlorobutadiene	(3)	24.553	225	6773897	73.189
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	7779792	89.648
102) Naphthalene	(3)	25.233	128	16199115	112.711

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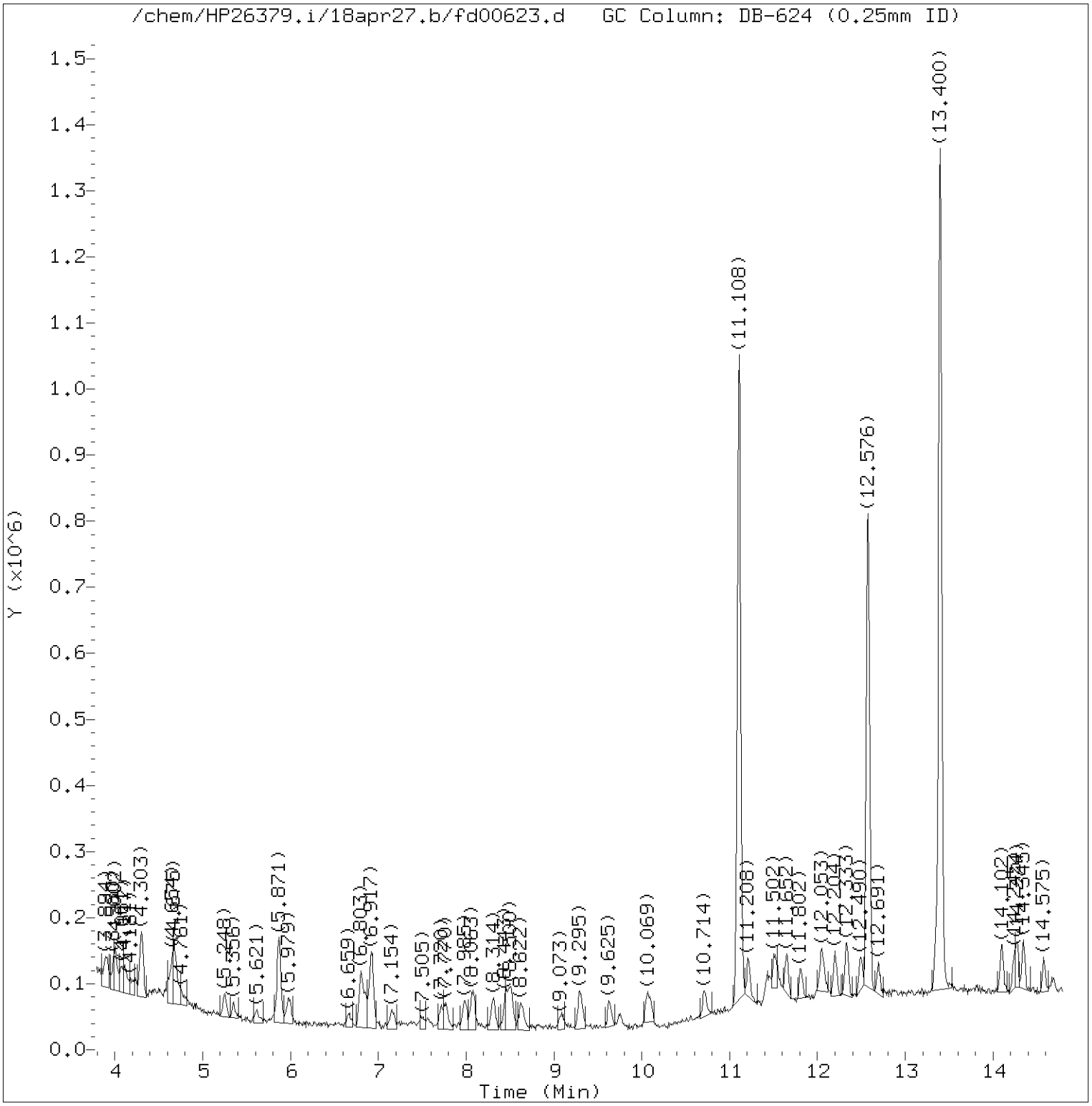
on 04/27/2018 at 15:46.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

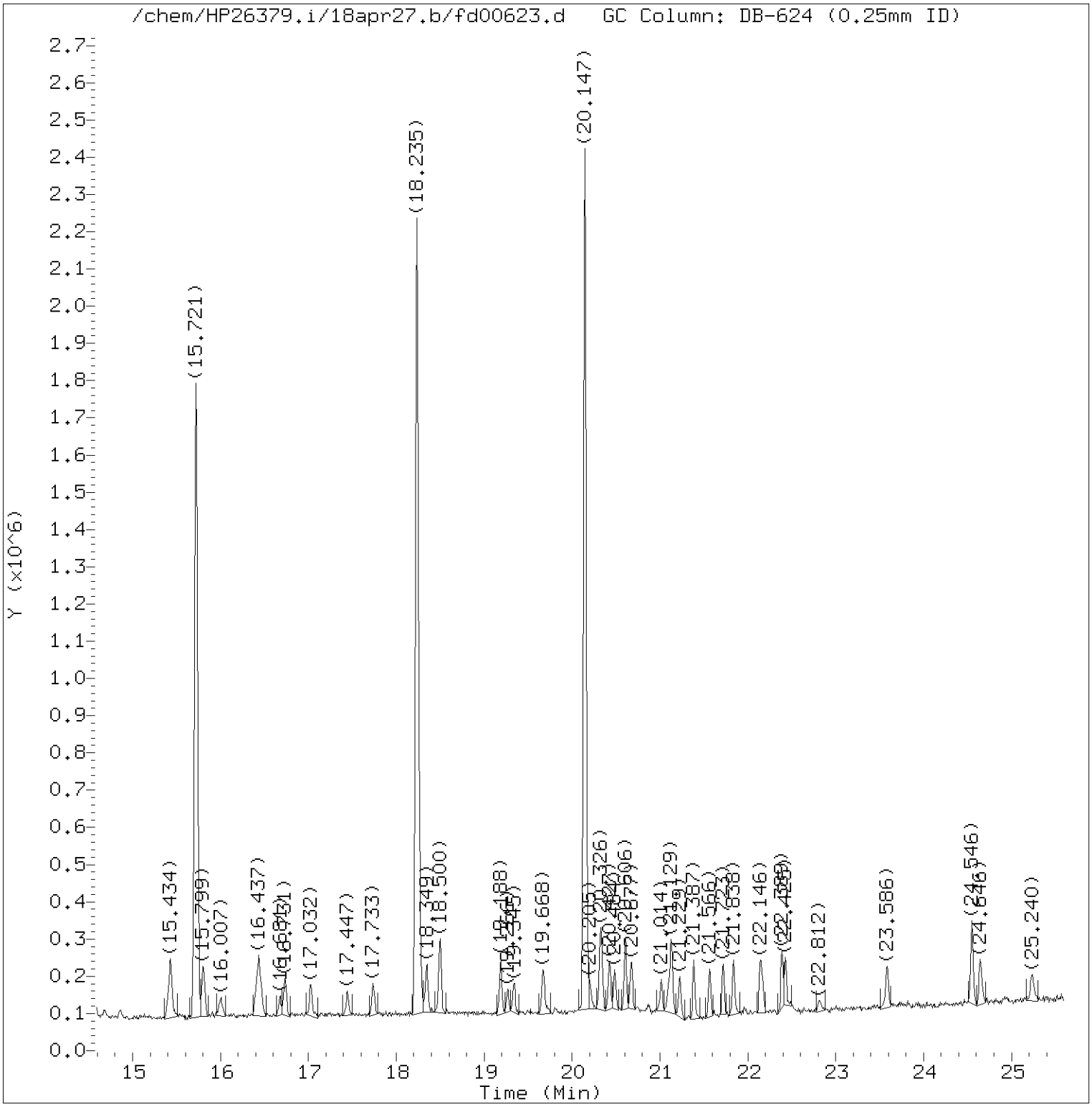
Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00623.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 17:00 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 19:07
Date, time and analyst ID of latest file update: 01-May-2018 14:47 jbs01304

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

Digitally signed by Jeffrey B. Smith
on 05/01/2018 at 14:48.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00623.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 17:00 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 19:07
Date, time and analyst ID of latest file update: 01-May-2018 14:47 jbs01304

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

Digitally signed by Jeffrey B. Smith
on 05/01/2018 at 14:48.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00623.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 17:00 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 19:07
Date, time and analyst ID of latest file update: 01-May-2018 14:47 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.916	41	27404	0.529
2) Dichlorodifluoromethane	(1)	4.002	85	81497	0.565
3) Chlorodifluoromethane	(1)	4.095	51	65591	0.569
4) Freon 114	(1)	4.303	85	74883	0.510
5) Chloromethane	(1)	4.446	50	24764	0.394
6) Vinyl Chloride	(1)	4.639	62	21482	0.590
7) 1,3-Butadiene	(1)	4.668	54	20670	0.629
8) Bromomethane	(1)	5.341	94	25156	0.602
9) Chloroethane	(1)	5.621	64	17656	0.610
10) Bromoethene	(1)	5.829	106	18020	0.467
11) Pentane	(1)	5.864	43	57588	0.549
12) Trichlorofluoromethane	(1)	5.879	101	78423	0.511
13) Dichlorofluoromethane	(1)	5.972	67	65231	0.553
14) Ethanol	(1)	6.674	45	28435	1.264
15) Freon123a	(1)	6.810	67	60387	0.533
16) 1,1-Dichloroethene	(1)	6.853	61	43549	0.536
17) Freon 113	(1)	6.917	103	40619	0.476
18) Carbon Disulfide	(1)	6.932	76	65236	0.529
19) Methyl Iodide	(1)	7.168	142	39998	0.394
20) Acrolein	(1)	7.512	56	6603	0.355
21) Isopropanol	(1)	7.712	45	61365	0.673
22) 3-Chloropropene	(1)	7.770	41	38556	0.532
23) Methylene Chloride	(1)	7.985	84	24574	0.586
24) Acetone	(1)	8.078	43	123830	1.272
25) trans-1,2-Dichloroethene	(1)	8.300	61	42148	0.541
26) Hexane	(1)	8.457	56	37381	0.618
27) Methyl t-Butyl Ether	(1)	8.507	73	76665	0.596
28) tert-Butyl Alcohol	(1)	8.622	59	56020	0.524
29) Acetonitrile	(1)	9.088	41	42524	0.693
30) Di-Isopropyl Ether	(1)	9.295	45	78751	0.430
31) 1,1-Dichloroethane	(1)	9.625	63	55818	0.522
32) Acrylonitrile	(1)	9.754	53	29450	0.616
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	58790	0.390
34) Vinyl Acetate	(1)	10.112	43	79395	0.517
35) cis-1,2-Dichloroethene	(1)	10.721	61	38363	0.539
36) 1,2-Dichloroethene (total)	(1)		61	80511	1.080
37)*Bromochloromethane	(1)	11.108	130	435548	10.000
38) Cyclohexane	(1)	11.122	56	36801	0.436

* = Compound is an internal standard.

Digitally signed by Jeffrey B. Smith
on 05/01/2018 at 14:48.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00623.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 17:00 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 19:07
Date, time and analyst ID of latest file update: 01-May-2018 14:47 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.222	83	63798	0.527
40) Ethyl Acetate	(1)	11.423	43	76701	0.542
41) Methyl Acrylate	(1)	11.466	55	46947	0.486
42) Carbon Tetrachloride	(1)	11.509	117	60356	0.463
43) Tetrahydrofuran	(1)	11.545	42	35770	0.525
44) 1,1,1-Trichloroethane	(1)	11.645	97	60546	0.462
45) 2-Butanone	(1)	11.810	43	82364	0.640
46) Isooctane	(2)	12.053	57	109128	0.459
47) Heptane	(2)	12.196	71	16368	0.362
48) Benzene	(2)	12.325	78	88183	0.556
49) Tert-Amyl Methyl Ether	(2)	12.497	73	53699	0.463
50) 1,2-Dichloroethane	(2)	12.691	62	48546	0.549
51) Trichloroethene	(2)	13.350	130	35836	0.551
52)*1,4-Difluorobenzene	(2)	13.400	114	1252944	10.000
53) Dibromomethane	(2)	14.095	174	32900	0.502
54) Ethyl Acrylate	(2)	14.231	55	57144	0.504
55) 1,2-Dichloropropane	(2)	14.274	63	35543	0.502
56) Bromodichloromethane	(2)	14.345	83	59284	0.484
57) Methyl Methacrylate	(2)	14.575	69	19225	0.424
58) 1,4-Dioxane	(2)	14.682	88	13260	0.415
59) cis-1,3-Dichloropropene	(2)	15.413	75	38110	0.451
60) Octane	(3)	15.434	43	78388	0.532
61) Toluene	(3)	15.807	91	111738	0.620
62) 4-Methyl-2-Pentanone	(2)	16.408	43	65539	0.439
63) Tetrachloroethene	(3)	16.437	166	51597	0.489
64) trans-1,3-Dichloropropene	(3)	16.466	75	36528	0.453
65) 1,3-Dichloropropene (total)	(3)		75	74638	0.904
66) Ethyl Methacrylate	(3)	16.673	69	29384	0.380
67) 1,1,2-Trichloroethane	(3)	16.738	97	34571	0.442
68) Dibromochloromethane	(3)	17.032	127	41734	0.448
69) 1,2-Dibromoethane	(3)	17.447	107	50435	0.468
70) 2-Hexanone	(3)	17.733	43	64553	0.469
71)*Chlorobenzene-d5	(3)	18.235	117	1318023	10.000
72) Chlorobenzene	(3)	18.264	112	74520	0.456
73) Ethylbenzene	(3)	18.271	91	153241	0.647
74) 1,1,1,2-Tetrachloroethane	(3)	18.349	131	42266	0.448
75) m/p-Xylene	(3)	18.500	91	133785	0.805
76) o-Xylene	(3)	19.188	91	102380	0.658

* = Compound is an internal standard.

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on 05/01/2018 at 14:48.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00623.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 17:00 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 19:07
Date, time and analyst ID of latest file update: 01-May-2018 14:47 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	236165	1.463
78) Styrene	(3)	19.266	104	36038	0.316
79) Bromoform	(3)	19.338	173	43682	0.401
80) Cumene	(3)	19.675	105	78614	0.373
81) n-Propylbenzene	(3)	20.319	120	23654	0.358
82) Bromobenzene	(3)	20.326	156	39404	0.435
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	78027	0.480
84) 4-Ethyltoluene	(3)	20.484	105	77358	0.357
85) 2-Chlorotoluene	(3)	20.606	126	24212	0.387
86) 1,3,5-Trimethylbenzene	(3)	20.613	105	65716	0.349
87) 1,2,3-Trichloropropane	(3)	20.670	110	24139	0.471
88) Alpha Methyl Styrene	(3)	21.014	118	25665	0.337
89) tert-Butylbenzene	(3)	21.136	119	76793	0.449
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	63661	0.360
91) sec-Butylbenzene	(3)	21.387	105	100251	0.375
92) p-Isopropyltoluene	(3)	21.566	119	69405	0.337
93) 1,3-Dichlorobenzene	(3)	21.723	146	60353	0.406
94) 1,4-Dichlorobenzene	(3)	21.838	146	60198	0.425
95) n-Butylbenzene	(3)	22.146	92	44029	0.345
96) Benzyl Chloride	(3)	22.167	126	13080	0.427
97) Hexachloroethane	(3)	22.382	117	31848	0.402
98) 1,2-Dichlorobenzene	(3)	22.432	146	60258	0.456
99) 1,2-Dibromo-3-chloropropane	(3)	23.593	157	28485	0.522
100) Hexachlorobutadiene	(3)	24.553	225	52765	0.651
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	43856	0.577
102) Naphthalene	(3)	25.240	128	81306	0.646

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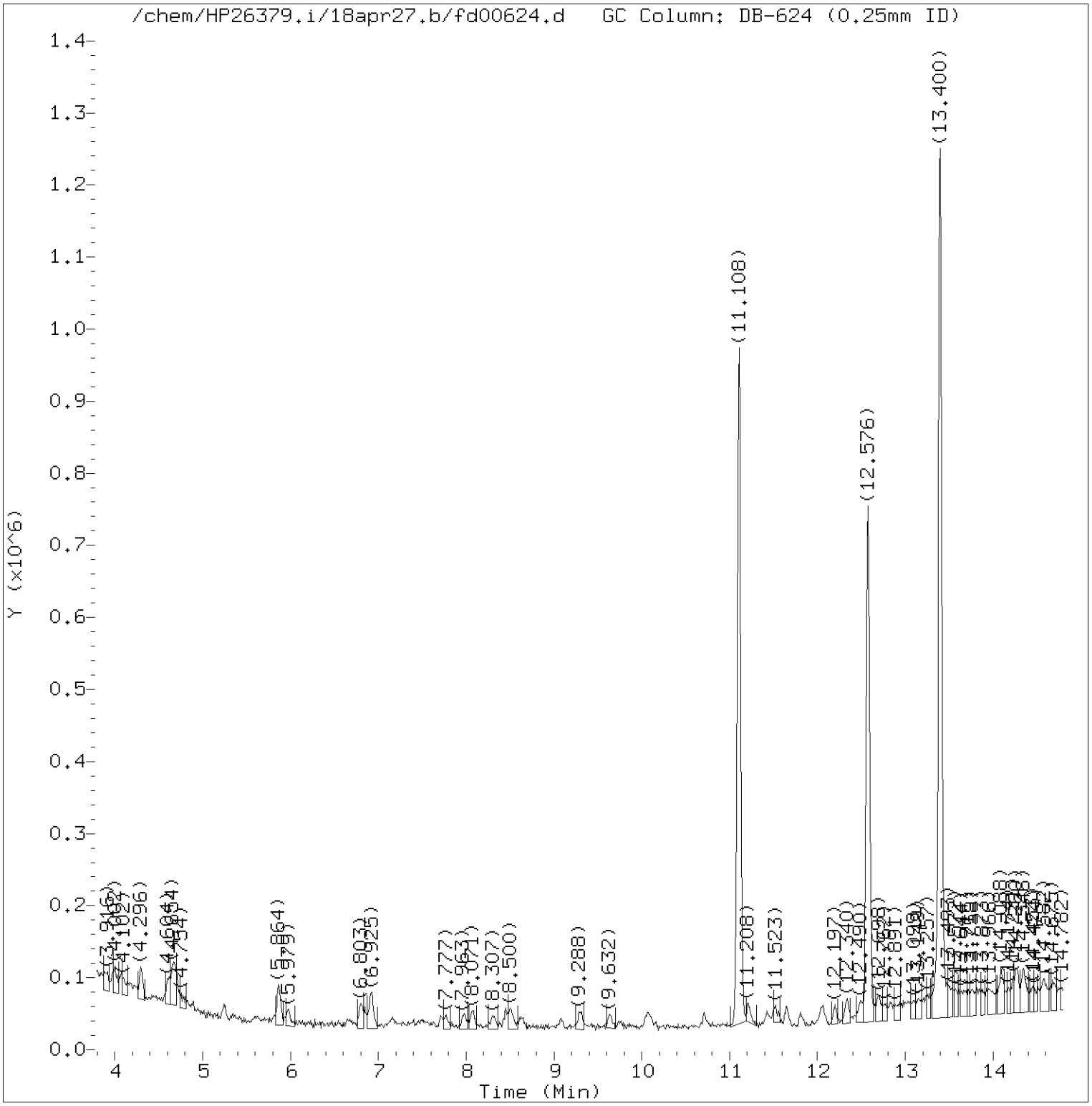
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00624.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 17:31 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 19:07
Date, time and analyst ID of latest file update: 01-May-2018 14:48 jbs01304

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

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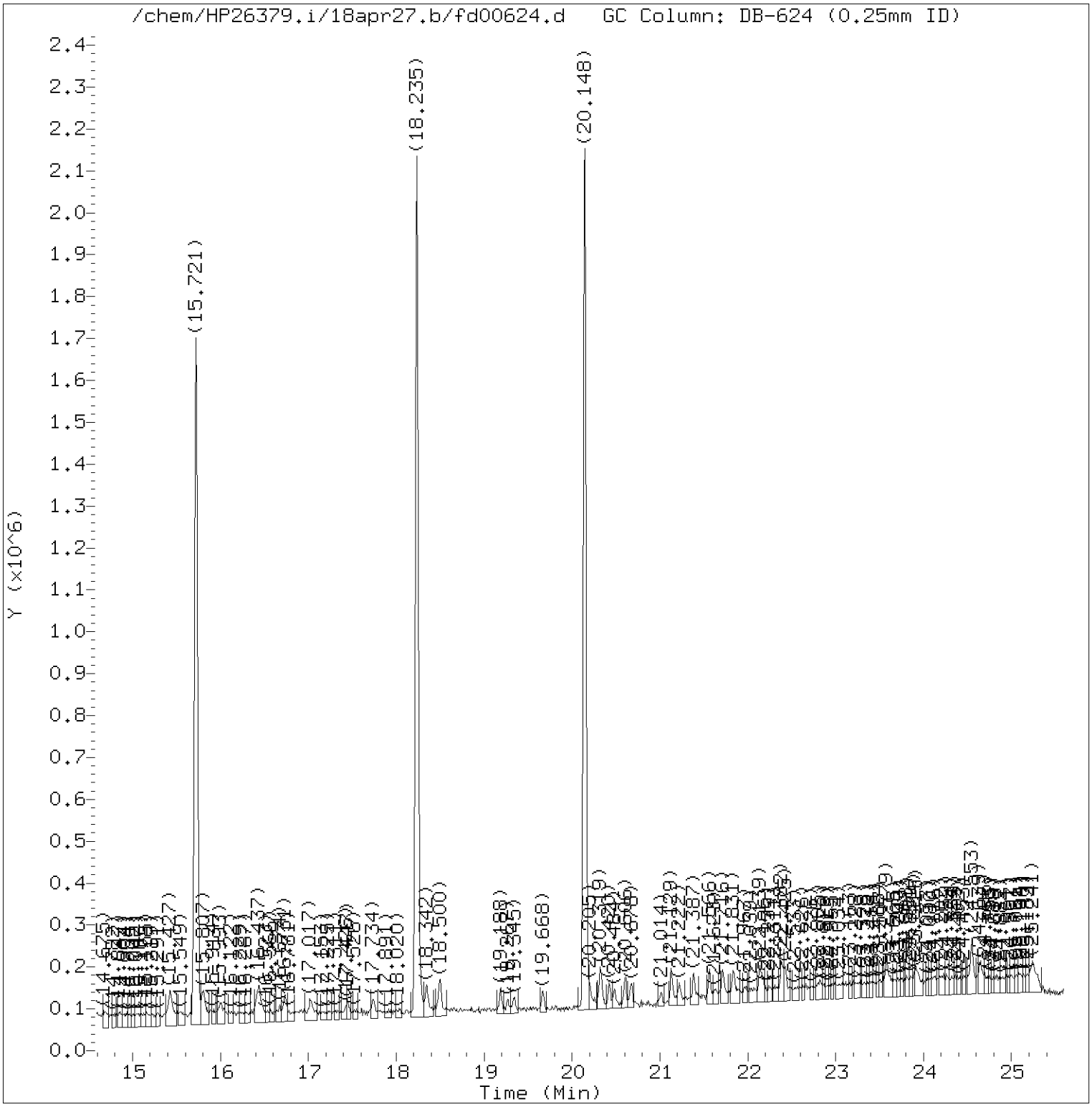
on 05/01/2018 at 14:48.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00624.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 17:31 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 19:07
Date, time and analyst ID of latest file update: 01-May-2018 14:48 jbs01304

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

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Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00624.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 17:31 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 19:07
Date, time and analyst ID of latest file update: 01-May-2018 14:48 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.909	41	6926	0.140
2) Dichlorodifluoromethane	(1)	4.002	85	29818	0.217
3) Chlorodifluoromethane	(1)	4.074	51	24631	0.224
4) Freon 114	(1)	4.296	85	28354	0.203
5) Chloromethane	(1)	4.439	50	13339	0.222
6) Vinyl Chloride	(1)	4.625	62	7660	0.221
7) 1,3-Butadiene	(1)	4.675	54	7011	0.224
8) Bromomethane	(1)	5.356	94	9836	0.247
9) Chloroethane	(1)	5.607	64	6870	0.249
10) Bromoethene	(1)	5.822	106	7087	0.192
11) Pentane	(1)	5.850	43	19758	0.198
12) Trichlorofluoromethane	(1)	5.864	101	27919	0.191
13) Dichlorofluoromethane	(1)	5.972	67	25261	0.224
14) Ethanol	(1)	6.660	45	15356	0.716
15) Freon123a	(1)	6.803	67	26242	0.243
16) 1,1-Dichloroethene	(1)	6.853	61	15783	0.204
17) Freon 113	(1)	6.910	103	15890	0.195
18) Carbon Disulfide	(1)	6.939	76	25692	0.218
19) Methyl Iodide	(1)	7.147	142	21869	0.226
20) Acrolein	(1)	7.505	56	7508	0.423
21) Isopropanol	(1)	7.713	45	26576	0.306
22) 3-Chloropropene	(1)	7.777	41	16834	0.244
23) Methylene Chloride	(1)	7.963	84	10109	0.253
24) Acetone	(1)	8.064	43	52055	0.561
25) trans-1,2-Dichloroethene	(1)	8.314	61	14035	0.189
26) Hexane	(1)	8.450	56	14930	0.259
27) Methyl t-Butyl Ether	(1)	8.515	73	29036	0.237
28) tert-Butyl Alcohol	(1)	8.651	59	19302	0.189
29) Acetonitrile	(1)	9.081	41	23259	0.397
30) Di-Isopropyl Ether	(1)	9.303	45	35193	0.201
31) 1,1-Dichloroethane	(1)	9.632	63	23173	0.227
32) Acrylonitrile	(1)	9.761	53	11994	0.263
33) Ethyl Tert-Butyl Ether	(1)	10.069	59	22325	0.155
34) Vinyl Acetate	(1)	10.112	43	30775	0.210
35) cis-1,2-Dichloroethene	(1)	10.714	61	14607	0.215
36) 1,2-Dichloroethene (total)	(1)		61	28642	0.404
37)*Bromochloromethane	(1)	11.108	130	415490	10.000
38) Cyclohexane	(1)	11.115	56	15088	0.187

* = Compound is an internal standard.

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Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00624.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 17:31 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 19:07
Date, time and analyst ID of latest file update: 01-May-2018 14:48 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.222	83	23722	0.205
40) Ethyl Acetate	(1)	11.423	43	28393	0.210
41) Methyl Acrylate	(1)	11.466	55	20049	0.218
42) Carbon Tetrachloride	(1)	11.502	117	23338	0.188
43) Tetrahydrofuran	(1)	11.559	42	14035	0.216
44) 1,1,1-Trichloroethane	(1)	11.652	97	21589	0.173
45) 2-Butanone	(1)	11.810	43	33774	0.275
46) Isooctane	(2)	12.046	57	41235	0.189
47) Heptane	(2)	12.197	71	6822	0.164
48) Benzene	(2)	12.340	78	35348	0.243
49) Tert-Amyl Methyl Ether	(2)	12.497	73	20114	0.189
50) 1,2-Dichloroethane	(2)	12.691	62	18112	0.223
51) Trichloroethene	(2)	13.343	130	12265	0.205
52)*1,4-Difluorobenzene	(2)	13.400	114	1152193	10.000
53) Dibromomethane	(2)	14.088	174	13096	0.217
54) Ethyl Acrylate	(2)	14.231	55	20611	0.198
55) 1,2-Dichloropropane	(2)	14.267	63	14427	0.222
56) Bromodichloromethane	(2)	14.324	83	21991	0.195
57) Methyl Methacrylate	(2)	14.568	69	7052	0.169
58) 1,4-Dioxane	(2)	14.682	88	4321	0.147
59) cis-1,3-Dichloropropene	(2)	15.406	75	15213	0.196
60) Octane	(3)	15.427	43	32130	0.232
61) Toluene	(3)	15.807	91	44775	0.264
62) 4-Methyl-2-Pentanone	(2)	16.408	43	27586	0.201
63) Tetrachloroethene	(3)	16.430	166	20897	0.211
64) trans-1,3-Dichloropropene	(3)	16.466	75	15161	0.200
65) 1,3-Dichloropropene (total)	(3)		75	30374	0.396
66) Ethyl Methacrylate	(3)	16.681	69	11568	0.159
67) 1,1,2-Trichloroethane	(3)	16.724	97	15019	0.204
68) Dibromochloromethane	(3)	17.024	127	14465	0.165
69) 1,2-Dibromoethane	(3)	17.440	107	19610	0.193
70) 2-Hexanone	(3)	17.734	43	30242	0.233
71)*Chlorobenzene-d5	(3)	18.235	117	1240538	10.000
72) Chlorobenzene	(3)	18.257	112	26196	0.170
73) Ethylbenzene	(3)	18.271	91	56836	0.255
74) 1,1,1,2-Tetrachloroethane	(3)	18.350	131	16772	0.189
75) m/p-Xylene	(3)	18.493	91	51092	0.327
76) o-Xylene	(3)	19.188	91	37980	0.259

* = Compound is an internal standard.

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Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00624.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 17:31 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 19:07
Date, time and analyst ID of latest file update: 01-May-2018 14:48 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	89072	0.586
78) Styrene	(3)	19.274	104	13521	0.126
79) Bromoform	(3)	19.338	173	15770	0.154
80) Cumene	(3)	19.668	105	28440	0.143
81) n-Propylbenzene	(3)	20.319	120	8845	0.142
82) Bromobenzene	(3)	20.341	156	13754	0.161
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	27752	0.181
84) 4-Ethyltoluene	(3)	20.484	105	28964	0.142
85) 2-Chlorotoluene	(3)	20.599	126	8518	0.145
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	22935	0.129
87) 1,2,3-Trichloropropane	(3)	20.678	110	8789	0.182
88) Alpha Methyl Styrene	(3)	21.021	118	11711	0.164
89) tert-Butylbenzene	(3)	21.129	119	32256	0.200
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	24493	0.147
91) sec-Butylbenzene	(3)	21.387	105	38810	0.154
92) p-Isopropyltoluene	(3)	21.566	119	28738	0.148
93) 1,3-Dichlorobenzene	(3)	21.716	146	22172	0.159
94) 1,4-Dichlorobenzene	(3)	21.838	146	22494	0.169
95) n-Butylbenzene	(3)	22.139	92	15995	0.133
96) Benzyl Chloride	(3)	22.160	126	5171	0.179
97) Hexachloroethane	(3)	22.390	117	15498	0.208
98) 1,2-Dichlorobenzene	(3)	22.425	146	22802	0.183
99) 1,2-Dibromo-3-chloropropane	(3)	23.593	157	11047	0.215
100) Hexachlorobutadiene	(3)	24.553	225	21904	0.287
101) 1,2,4-Trichlorobenzene	(3)	24.653	180	17028	0.238
102) Naphthalene	(3)	25.241	128	31029	0.262

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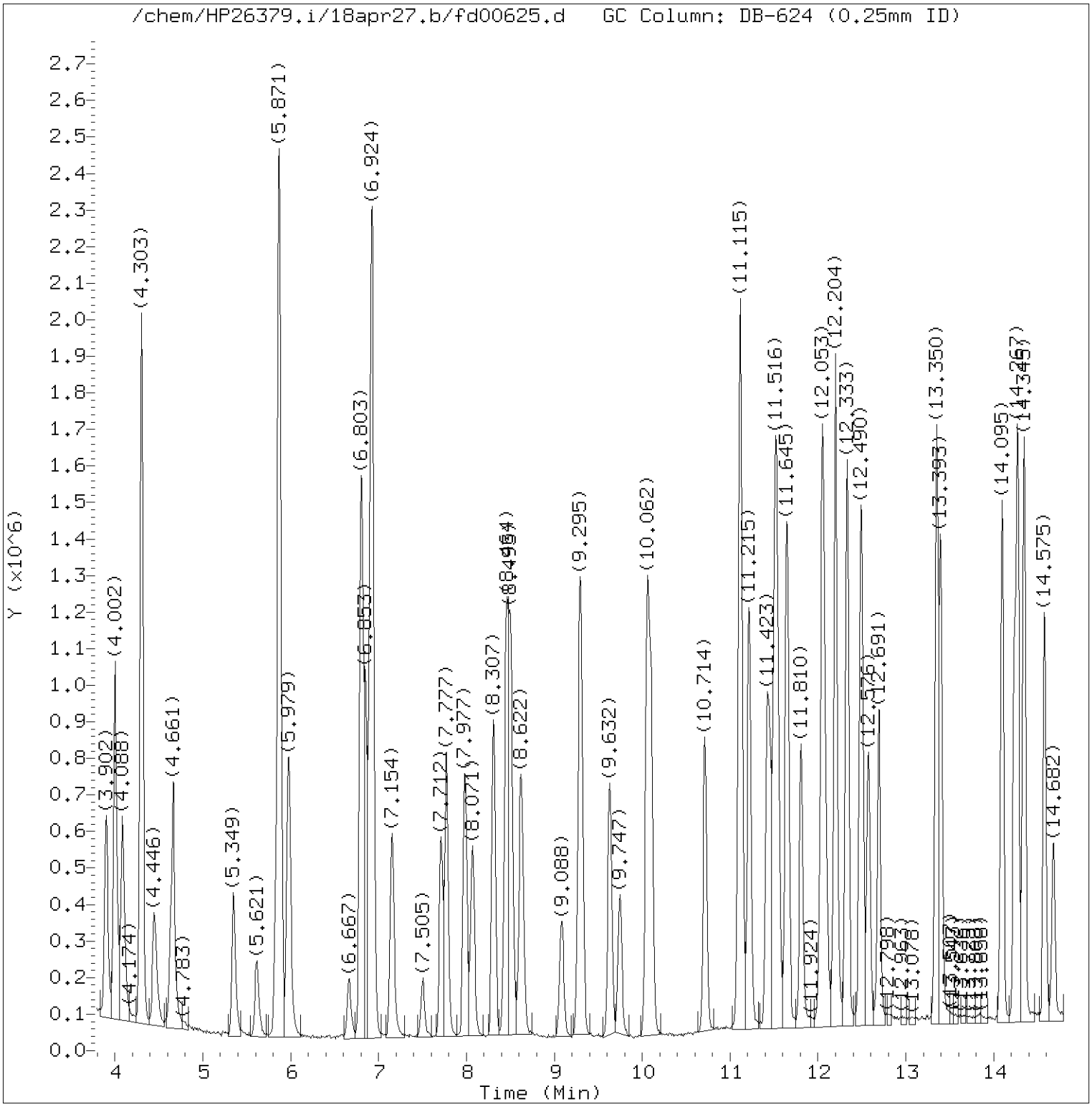
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00625.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 18:02 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:39
Date, time and analyst ID of latest file update: 27-Apr-2018 19:09 jeb07445

Sample Name: LCSF30 Lab Sample ID: LCSF30

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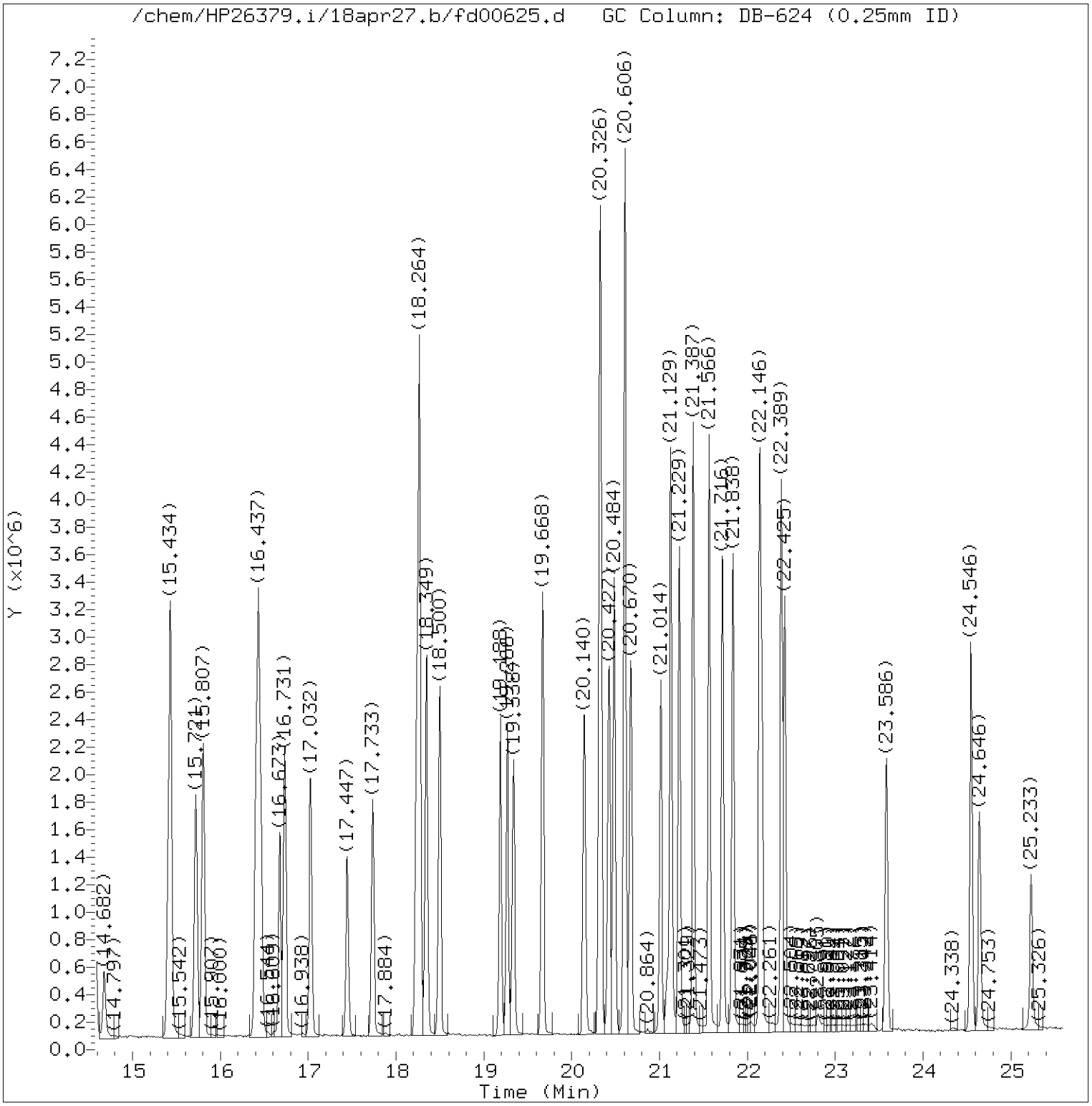
on 04/27/2018 at 19:10.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00625.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 18:02 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:39
Date, time and analyst ID of latest file update: 27-Apr-2018 19:09 jeb07445

Sample Name: LCSF30 Lab Sample ID: LCSF30

Digitally signed by Jacob E. Bailey
on 04/27/2018 at 19:10.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00625.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 18:02 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:39
Date, time and analyst ID of latest file update: 27-Apr-2018 19:09 jeb07445

Sample Name: LCSF30 Lab Sample ID: LCSF30

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	511955	9.973
2) Dichlorodifluoromethane	(1)	4.002	85	1530152	10.708
3) Chlorodifluoromethane	(1)	4.088	51	1217201	10.661
4) Freon 114	(1)	4.303	85	1514403	10.418
5) Chloromethane	(1)	4.446	50	638375	10.255
6) Vinyl Chloride	(1)	4.632	62	374885	10.395
7) 1,3-Butadiene	(1)	4.668	54	308774	9.483
8) Bromomethane	(1)	5.349	94	450462	10.874
9) Chloroethane	(1)	5.614	64	317799	11.086
10) Bromoethene	(1)	5.836	106	417819	10.925
11) Pentane	(1)	5.864	43	1006826	9.693
12) Trichlorofluoromethane	(1)	5.879	101	1519529	9.987
13) Dichlorofluoromethane	(1)	5.972	67	1329014	11.369
14) Ethanol	(1)	6.659	45	208492	9.358
15) Freon123a	(1)	6.803	67	1257061	11.203
16) 1,1-Dichloroethene	(1)	6.853	61	862389	10.714
17) Freon 113	(1)	6.917	103	815093	9.640
18) Carbon Disulfide	(1)	6.939	76	1315748	10.769
19) Methyl Iodide	(1)	7.154	142	1062292	10.569
20) Acrolein	(1)	7.505	56	203840	11.068
21) Isopropanol	(1)	7.712	45	951657	10.542
22) 3-Chloropropene	(1)	7.770	41	935131	13.032
23) Methylene Chloride	(1)	7.977	84	500844	12.062
24) Acetone	(1)	8.071	43	1031010	10.692
25) trans-1,2-Dichloroethene	(1)	8.307	61	811745	10.517
26) Hexane	(1)	8.457	56	602092	10.049
27) Methyl t-Butyl Ether	(1)	8.500	73	1342488	10.538
28) tert-Butyl Alcohol	(1)	8.622	59	1196824	11.308
29) Acetonitrile	(1)	9.081	41	627711	10.321
30) Di-Isopropyl Ether	(1)	9.295	45	1817013	10.008
31) 1,1-Dichloroethane	(1)	9.632	63	1116965	10.544
32) Acrylonitrile	(1)	9.747	53	508970	10.746
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	1532794	10.268
34) Vinyl Acetate	(1)	10.105	43	1881841	12.363
35) cis-1,2-Dichloroethene	(1)	10.714	61	751998	10.662
36) 1,2-Dichloroethene (total)	(1)		61	1563743	21.179
37)*Bromochloromethane	(1)	11.108	130	431426	10.000
38) Cyclohexane	(1)	11.122	56	863619	10.321

* = Compound is an internal standard.

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on 04/27/2018 at 19:10.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00625.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 18:02 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:39
Date, time and analyst ID of latest file update: 27-Apr-2018 19:09 jeb07445

Sample Name: LCSF30 Lab Sample ID: LCSF30

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	1253317	10.452
40) Ethyl Acetate	(1)	11.423	43	1415877	10.105
41) Methyl Acrylate	(1)	11.459	55	1005860	10.510
42) Carbon Tetrachloride	(1)	11.509	117	1299958	10.068
43) Tetrahydrofuran	(1)	11.545	42	726763	10.765
44) 1,1,1-Trichloroethane	(1)	11.652	97	1309952	10.087
45) 2-Butanone	(1)	11.810	43	1360387	10.675
46) Isooctane	(2)	12.053	57	2589639	10.834
47) Heptane	(2)	12.196	71	478339	10.525
48) Benzene	(2)	12.333	78	1679759	10.544
49) Tert-Amyl Methyl Ether	(2)	12.490	73	1231565	10.561
50) 1,2-Dichloroethane	(2)	12.691	62	957391	10.760
51) Trichloroethene	(2)	13.350	130	676545	10.341
52)*1,4-Difluorobenzene	(2)	13.400	114	1259558	10.000
53) Dibromomethane	(2)	14.095	174	698400	10.609
54) Ethyl Acrylate	(2)	14.231	55	1175230	10.304
55) 1,2-Dichloropropane	(2)	14.274	63	729565	10.251
56) Bromodichloromethane	(2)	14.345	83	1267795	10.298
57) Methyl Methacrylate	(2)	14.575	69	457568	10.038
58) 1,4-Dioxane	(2)	14.682	88	343839	10.700
59) cis-1,3-Dichloropropene	(2)	15.405	75	893421	10.528
60) Octane	(3)	15.434	43	1556463	10.544
61) Toluene	(3)	15.807	91	1828571	10.124
62) 4-Methyl-2-Pentanone	(2)	16.401	43	1575243	10.498
63) Tetrachloroethene	(3)	16.437	166	1065176	10.078
64) trans-1,3-Dichloropropene	(3)	16.466	75	855230	10.569
65) 1,3-Dichloropropene (total)	(3)		75	1748651	21.097
66) Ethyl Methacrylate	(3)	16.673	69	772842	9.968
67) 1,1,2-Trichloroethane	(3)	16.731	97	769179	9.818
68) Dibromochloromethane	(3)	17.024	127	932552	9.994
69) 1,2-Dibromoethane	(3)	17.447	107	1086825	10.063
70) 2-Hexanone	(3)	17.733	43	1419455	10.289
71)*Chlorobenzene-d5	(3)	18.235	117	1321375	10.000
72) Chlorobenzene	(3)	18.264	112	1599482	9.764
73) Ethylbenzene	(3)	18.271	91	2412069	10.151
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	939352	9.926
75) m/p-Xylene	(3)	18.500	91	1658490	9.956
76) o-Xylene	(3)	19.188	91	1569543	10.066

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 04/27/2018 at 19:10.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00625.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 18:02 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:39
Date, time and analyst ID of latest file update: 27-Apr-2018 19:09 jeb07445

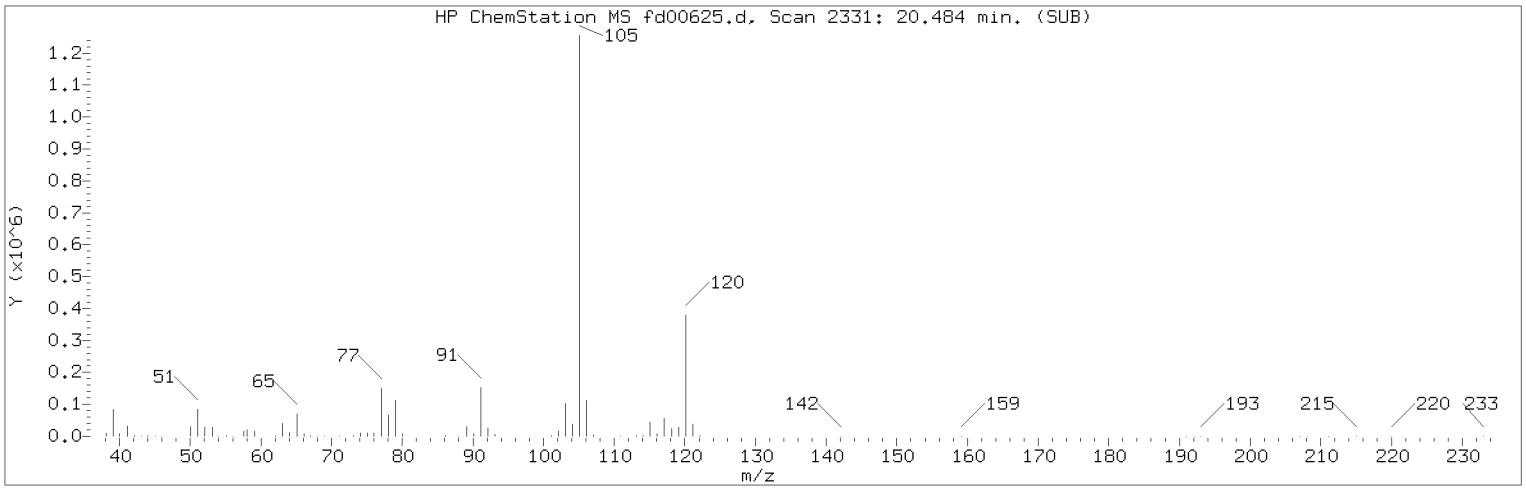
Sample Name: LCSF30 Lab Sample ID: LCSF30

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	3228033	20.022
78) Styrene	(3)	19.266	104	1240491	10.864
79) Bromoform	(3)	19.338	173	1117853	10.237
80) Cumene	(3)	19.668	105	2316106	10.963
81) n-Propylbenzene	(3)	20.319	120	671298	10.134
82) Bromobenzene	(3)	20.334	156	958193	10.548
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	1578706	9.691
84) 4-Ethyltoluene	(3)	20.484	105	2344062M	10.793
85) 2-Chlorotoluene	(3)	20.599	126	678915	10.832
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	2151110	11.400
87) 1,2,3-Trichloropropane	(3)	20.670	110	509910	9.928
88) Alpha Methyl Styrene	(3)	21.014	118	863030	11.316
89) tert-Butylbenzene	(3)	21.129	119	2081638	12.143
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	2059172	11.616
91) sec-Butylbenzene	(3)	21.387	105	3003040	11.193
92) p-Isopropyltoluene	(3)	21.566	119	2330691	11.298
93) 1,3-Dichlorobenzene	(3)	21.723	146	1465878	9.841
94) 1,4-Dichlorobenzene	(3)	21.838	146	1424989	10.039
95) n-Butylbenzene	(3)	22.139	92	1354878	10.576
96) Benzyl Chloride	(3)	22.167	126	356510	11.605
97) Hexachloroethane	(3)	22.389	117	827803	10.432
98) 1,2-Dichlorobenzene	(3)	22.425	146	1291966	9.742
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	542779	9.918
100) Hexachlorobutadiene	(3)	24.553	225	655012	8.061
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	618674	8.121
102) Naphthalene	(3)	25.233	128	1146726	9.088

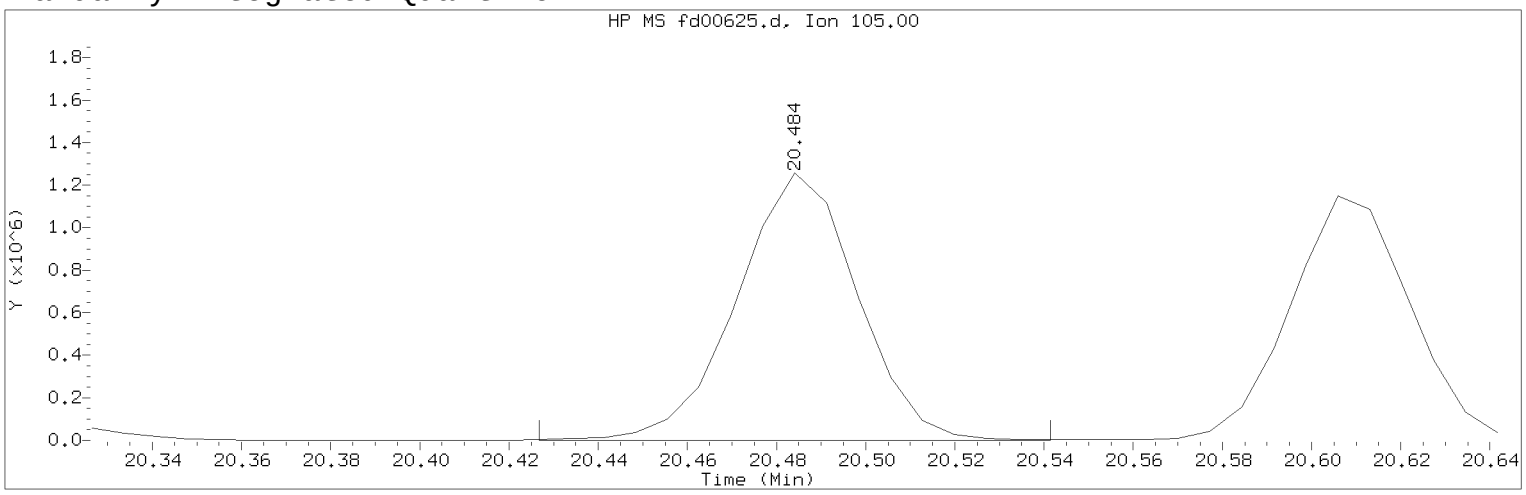
M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 04/27/2018 at 19:10.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18apr27.b/fd00625.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 18:02 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:39
Date, time and analyst ID of latest file update: 27-Apr-2018 19:09 jeb07445

Sample Name: LCSF30 Lab Sample ID: LCSF30

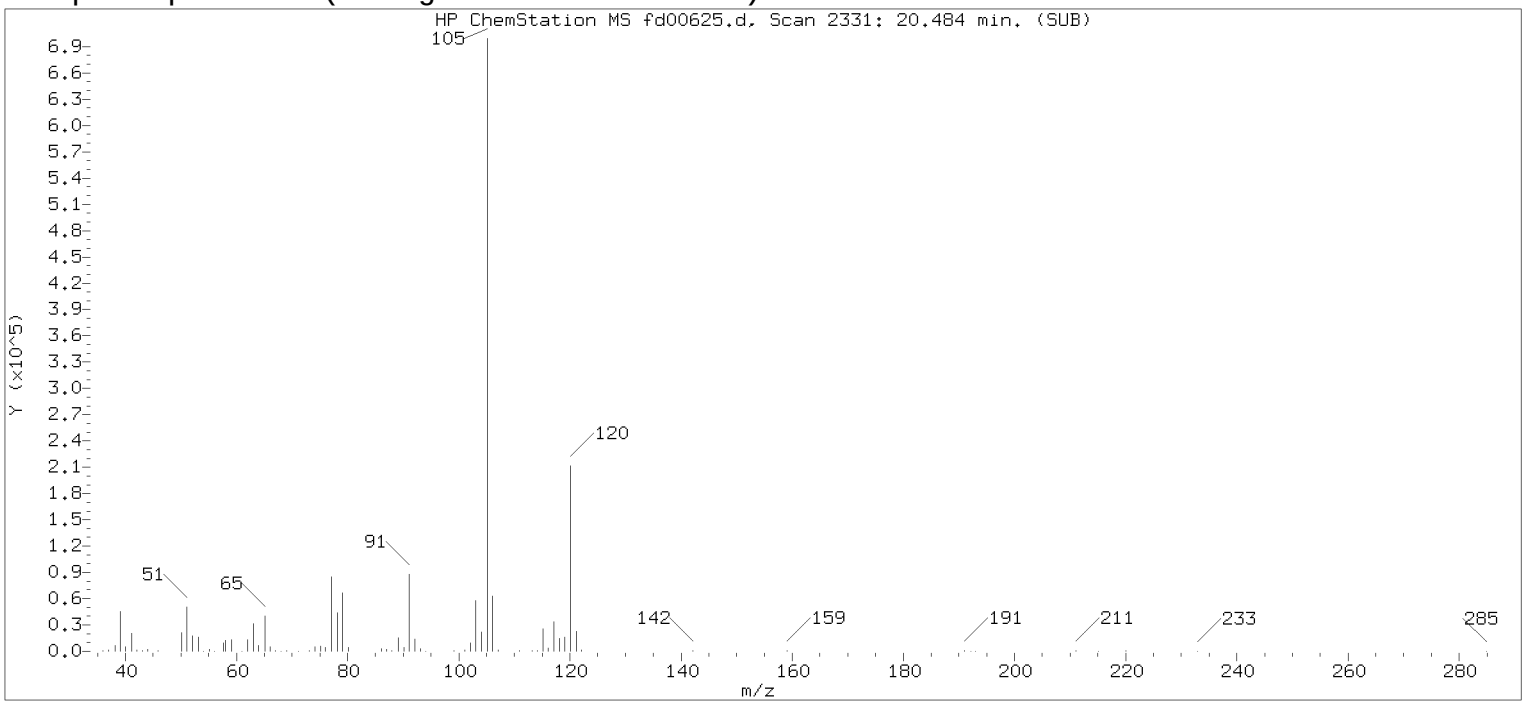
Compound Number : 84
Compound Name : 4-Ethyltoluene
Scan Number : 2331
Retention Time (minutes): 20.484
Quant Ion : 105.00
Area (flag) : 2344062M
Concentration (ppb(v)) : 10.7927
Integration start scan : 2322 Integration stop scan: 2338
Y at integration start : 814 Y at integration end: 814

Reason for manual integration: improper integration

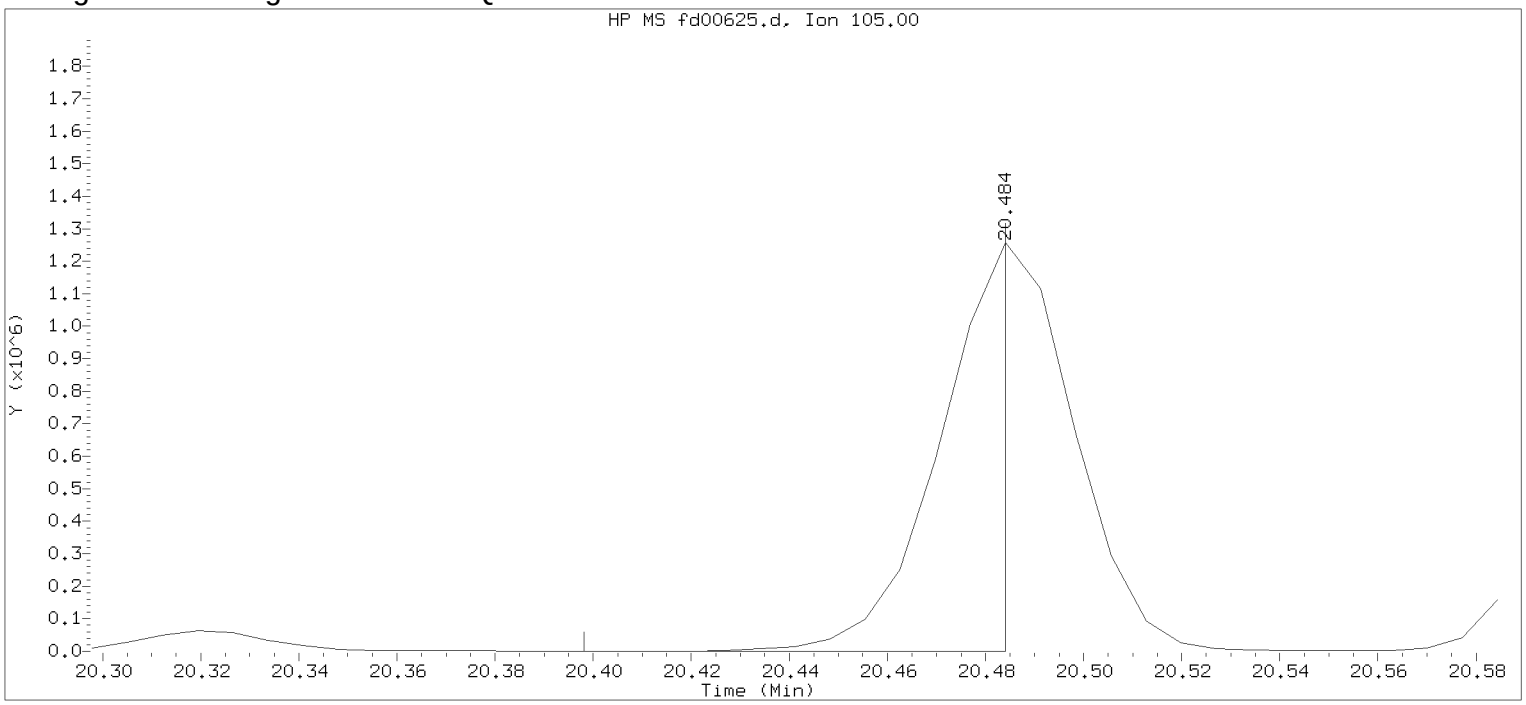
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 04/27/2018 at 19:10.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 05/01/2018 at 14:47.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



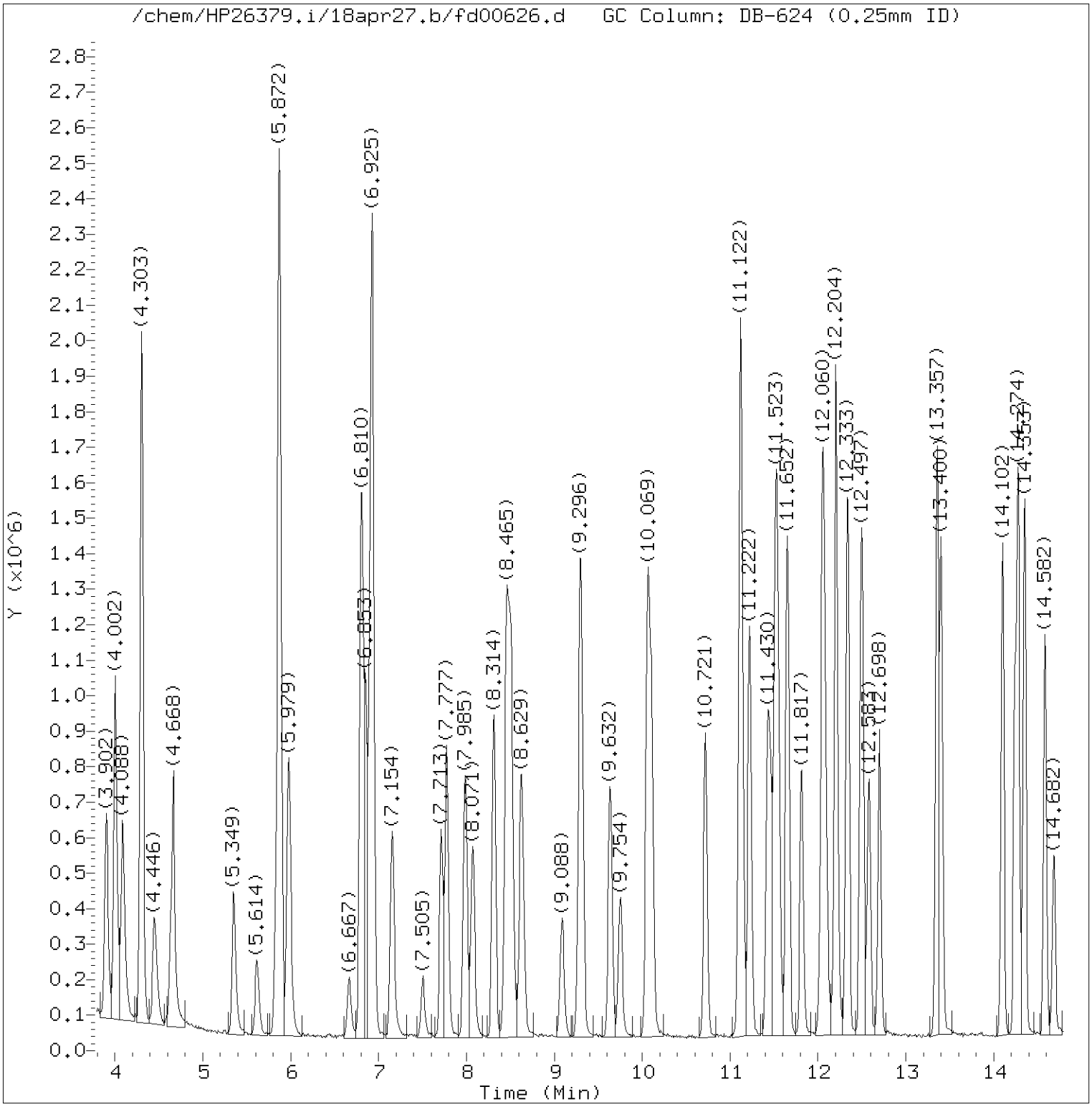
Data File: /chem/HP26379.i/18apr27.b/fd00625.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 18:02 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:39
Date, time and analyst ID of latest file update: 27-Apr-2018 18:29 Unknown

Sample Name: LCSF30 Lab Sample ID: LCSF30

Compound Number : 84
Compound Name : 4-Ethyltoluene
Scan Number : 2331
Retention Time (minutes): 20.484
Quant Ion : 105.00
Area : 1129022
Concentration (ppb(v)) : 5.1983
Integration start scan : 2318 Integration stop scan: 2330
Y at integration start : 386 Y at integration end: 386

Digitally signed by Jacob E. Bailey on 04/27/2018 at 19:10.
Target 3.5 esignature user ID: jbailey



Total Ion Chromatogram (TIC)

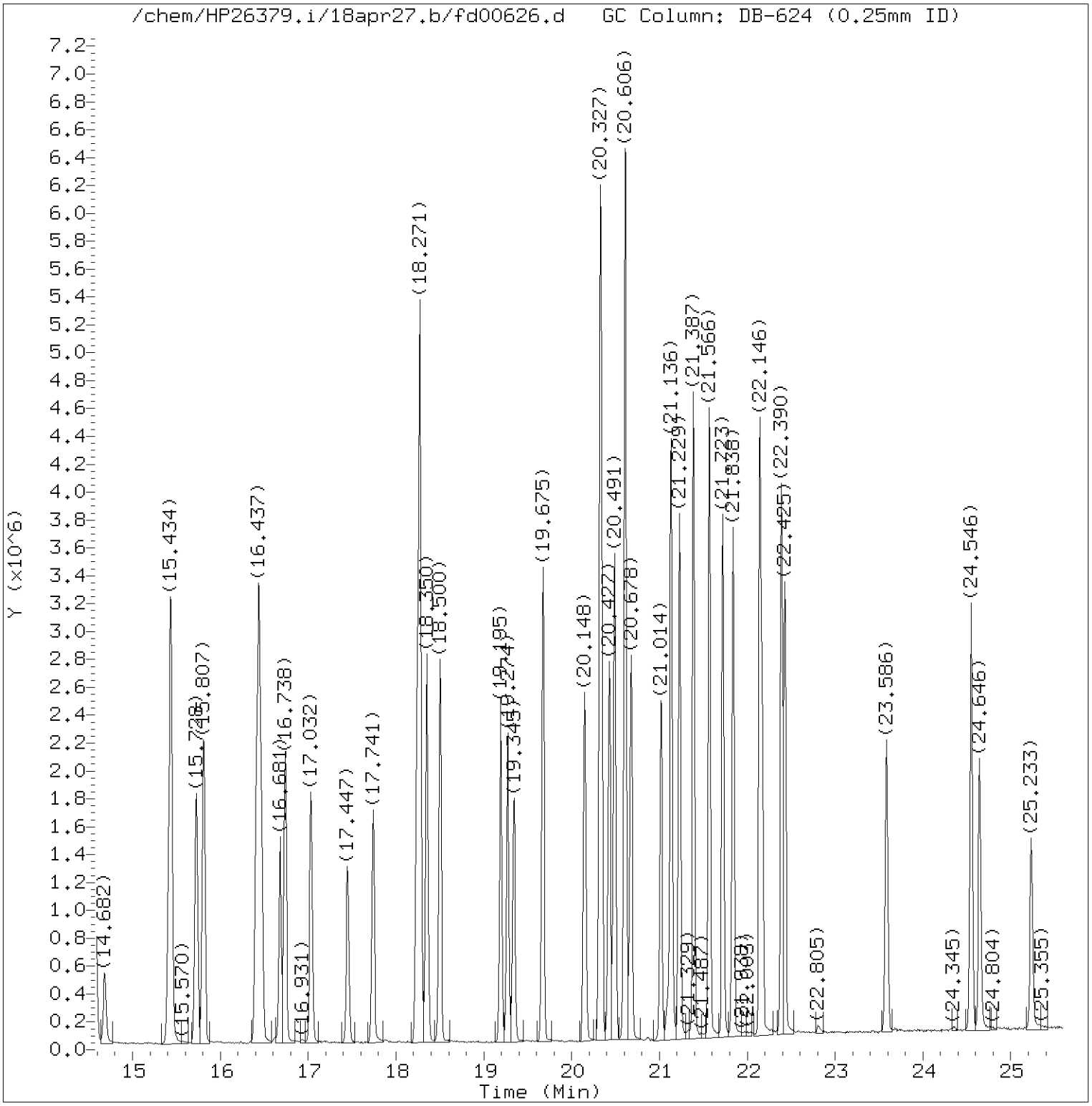
Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00626.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 18:32 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:39
Date, time and analyst ID of latest file update: 27-Apr-2018 18:59 Unknown

Sample Name: LCSDF30 Lab Sample ID: LCSDF30

Digitally signed by Jacob E. Bailey
on 04/27/2018 at 19:04.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00626.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 18:32 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:39
Date, time and analyst ID of latest file update: 27-Apr-2018 18:59 Unknown

Sample Name: LCSDF30 Lab Sample ID: LCSDF30

Digitally signed by Jacob E. Bailey
on 04/27/2018 at 19:04.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00626.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 18:32 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:39
Date, time and analyst ID of latest file update: 27-Apr-2018 18:59 Unknown

Sample Name: LCSDF30 Lab Sample ID: LCSDF30

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	544727	10.618
2) Dichlorodifluoromethane	(1)	4.002	85	1578114	11.051
3) Chlorodifluoromethane	(1)	4.088	51	1230849	10.787
4) Freon 114	(1)	4.303	85	1530870	10.538
5) Chloromethane	(1)	4.453	50	648621	10.426
6) Vinyl Chloride	(1)	4.632	62	396300	10.996
7) 1,3-Butadiene	(1)	4.668	54	326448	10.032
8) Bromomethane	(1)	5.356	94	469162	11.333
9) Chloroethane	(1)	5.614	64	319103	11.139
10) Bromoethene	(1)	5.829	106	442553	11.579
11) Pentane	(1)	5.864	43	1093921	10.538
12) Trichlorofluoromethane	(1)	5.879	101	1543052	10.148
13) Dichlorofluoromethane	(1)	5.979	67	1344465	11.509
14) Ethanol	(1)	6.667	45	223958	10.059
15) Freon123a	(1)	6.803	67	1278014	11.397
16) 1,1-Dichloroethene	(1)	6.853	61	913762	11.360
17) Freon 113	(1)	6.917	103	802570	9.498
18) Carbon Disulfide	(1)	6.939	76	1333343	10.920
19) Methyl Iodide	(1)	7.154	142	1119841	11.148
20) Acrolein	(1)	7.505	56	217396	11.811
21) Isopropanol	(1)	7.713	45	995460	11.034
22) 3-Chloropropene	(1)	7.777	41	985222	13.739
23) Methylene Chloride	(1)	7.985	84	514586	12.401
24) Acetone	(1)	8.071	43	1080477	11.212
25) trans-1,2-Dichloroethene	(1)	8.307	61	859933	11.148
26) Hexane	(1)	8.465	56	624967	10.437
27) Methyl t-Butyl Ether	(1)	8.508	73	1409000	11.067
28) tert-Butyl Alcohol	(1)	8.622	59	1220201	11.536
29) Acetonitrile	(1)	9.088	41	634646	10.441
30) Di-Isopropyl Ether	(1)	9.303	45	1957307	10.788
31) 1,1-Dichloroethane	(1)	9.639	63	1136396	10.734
32) Acrylonitrile	(1)	9.747	53	520143	10.989
33) Ethyl Tert-Butyl Ether	(1)	10.069	59	1649745	11.058
34) Vinyl Acetate	(1)	10.112	43	1945021	12.786
35) cis-1,2-Dichloroethene	(1)	10.721	61	777262	11.027
36) 1,2-Dichloroethene (total)	(1)		61	1637195	22.175
37)*Bromochloromethane	(1)	11.108	130	431151	10.000
38) Cyclohexane	(1)	11.129	56	908761	10.867

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 04/27/2018 at 19:04.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00626.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 18:32 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:39
Date, time and analyst ID of latest file update: 27-Apr-2018 18:59 Unknown

Sample Name: LCSDF30 Lab Sample ID: LCSDF30

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.222	83	1241603	10.361
40) Ethyl Acetate	(1)	11.430	43	1475641	10.539
41) Methyl Acrylate	(1)	11.459	55	1015746	10.620
42) Carbon Tetrachloride	(1)	11.516	117	1286002	9.966
43) Tetrahydrofuran	(1)	11.552	42	765289	11.343
44) 1,1,1-Trichloroethane	(1)	11.652	97	1310918	10.101
45) 2-Butanone	(1)	11.810	43	1386662	10.888
46) Isooctane	(2)	12.060	57	2695955	10.996
47) Heptane	(2)	12.204	71	504427	10.821
48) Benzene	(2)	12.333	78	1736452	10.626
49) Tert-Amyl Methyl Ether	(2)	12.497	73	1295115	10.827
50) 1,2-Dichloroethane	(2)	12.698	62	947769	10.385
51) Trichloroethene	(2)	13.357	130	692990	10.326
52)*1,4-Difluorobenzene	(2)	13.400	114	1291956	10.000
53) Dibromomethane	(2)	14.102	174	683281	10.119
54) Ethyl Acrylate	(2)	14.238	55	1135664	9.707
55) 1,2-Dichloropropane	(2)	14.274	63	728855	9.984
56) Bromodichloromethane	(2)	14.353	83	1213197	9.607
57) Methyl Methacrylate	(2)	14.582	69	445741	9.533
58) 1,4-Dioxane	(2)	14.689	88	364685	11.064
59) cis-1,3-Dichloropropene	(2)	15.413	75	882796	10.142
60) Octane	(3)	15.441	43	1593668	10.753
61) Toluene	(3)	15.807	91	1900544	10.481
62) 4-Methyl-2-Pentanone	(2)	16.408	43	1543511	10.028
63) Tetrachloroethene	(3)	16.444	166	1089632	10.269
64) trans-1,3-Dichloropropene	(3)	16.466	75	839419	10.333
65) 1,3-Dichloropropene (total)	(3)		75	1722215	20.475
66) Ethyl Methacrylate	(3)	16.681	69	771520	9.912
67) 1,1,2-Trichloroethane	(3)	16.738	97	776431	9.872
68) Dibromochloromethane	(3)	17.032	127	871694	9.305
69) 1,2-Dibromoethane	(3)	17.447	107	1050955	9.693
70) 2-Hexanone	(3)	17.741	43	1391828	10.049
71)*Chlorobenzene-d5	(3)	18.242	117	1326586	10.000
72) Chlorobenzene	(3)	18.264	112	1628886	9.904
73) Ethylbenzene	(3)	18.278	91	2484964	10.416
74) 1,1,1,2-Tetrachloroethane	(3)	18.350	131	904265	9.518
75) m/p-Xylene	(3)	18.500	91	1769618	10.582
76) o-Xylene	(3)	19.195	91	1646560	10.518

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 04/27/2018 at 19:04.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18apr27.b/fd00626.d Instrument ID: HP26379.i
Injection date and time: 27-APR-2018 18:32 Analyst ID: ads07818

Method used: /chem/HP26379.i/18apr27.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:39
Date, time and analyst ID of latest file update: 27-Apr-2018 18:59 Unknown

Sample Name: LCSDF30 Lab Sample ID: LCSDF30

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	3416178	21.100
78) Styrene	(3)	19.274	104	1238841	10.807
79) Bromoform	(3)	19.345	173	982878	8.966
80) Cumene	(3)	19.675	105	2465027	11.622
81) n-Propylbenzene	(3)	20.327	120	724209	10.890
82) Bromobenzene	(3)	20.334	156	974306	10.684
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	1578084	9.649
84) 4-Ethyltoluene	(3)	20.491	105	2540649	11.652
85) 2-Chlorotoluene	(3)	20.606	126	705137	11.206
86) 1,3,5-Trimethylbenzene	(3)	20.613	105	2298024	12.131
87) 1,2,3-Trichloropropane	(3)	20.678	110	505164	9.797
88) Alpha Methyl Styrene	(3)	21.014	118	853249	11.144
89) tert-Butylbenzene	(3)	21.136	119	2193337	12.745
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	2187626	12.292
91) sec-Butylbenzene	(3)	21.387	105	3212228	11.925
92) p-Isopropyltoluene	(3)	21.566	119	2499505	12.068
93) 1,3-Dichlorobenzene	(3)	21.723	146	1525038	10.198
94) 1,4-Dichlorobenzene	(3)	21.838	146	1510177	10.597
95) n-Butylbenzene	(3)	22.146	92	1424417	11.075
96) Benzyl Chloride	(3)	22.168	126	348699	11.307
97) Hexachloroethane	(3)	22.390	117	787715	9.888
98) 1,2-Dichlorobenzene	(3)	22.425	146	1362980	10.237
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	554223	10.088
100) Hexachlorobutadiene	(3)	24.553	225	716225	8.780
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	734198	9.599
102) Naphthalene	(3)	25.233	128	1402052	11.068

Digitally signed by Jacob E. Bailey
on 04/27/2018 at 19:04.
Target 3.5 esignature user ID: jeb07445

Lancaster Laboratories
Volatiles in Air
Runlog for Agilent GC/MS System HP26379 **HP #06**

Data Directory Path is - D:\data\18may07\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
ads07818	FE00090.D	50NGBFB	05/07/2018	09:41		
ads07818	FE00091.D	VSTD010	05/07/2018	10:52		
ads07818	FE00092.D	VBLKF04	05/07/2018	11:56	F1812730AA	
ads07818	FE00093.D	LCSF04	05/07/2018	12:47	F1812730AA	
ads07818	FE00094.D	LCSDF04	05/07/2018	13:17	F1812730AA	
ads07818	FE00095.D	9590982	05/07/2018	14:28	F1812730AA	
ads07818	FE00096.D	9590983	05/07/2018	14:58	F1812730AA	
ads07818	FE00097.D	9590984	05/07/2018	15:28	F1812730AA	
ads07818	FE00098.D	9590983	05/07/2018	15:59	F1812730AA	
ads07818	FE00099.D	9592715	05/07/2018	16:30	F1812730AA	100
ads07818	FE00100.D	9592716	05/07/2018	17:00	F1812730AA	100
ads07818	FE00101.D	9592717	05/07/2018	17:31	F1812730AA	100
ads07818	FE00102.D	9592718	05/07/2018	18:01	F1812730AA	100
ads07818	FE00103.D	9592719	05/07/2018	18:32	F1812730AA	100
ads07818	FE00104.D	9592720	05/07/2018	19:03	F1812730AA	100
ads07818	FE00105.D	9592721	05/07/2018	19:33	F1812730AA	
ads07818	FE00106.D	9592722	05/07/2018	20:04	F1812730AA	100
ads07818	FE00107.D	9592723	05/07/2018	20:34	F1812730AA	
ads07818	FE00108.D	9592724	05/07/2018	21:05	F1812730AA	
ads07818	FE00109.D	9592718	05/07/2018	21:35	F1812730AA	
ads07818	FE00110.D	9595556	05/07/2018	22:06	F1812730AA	
ads07818	FE00111.D	9595557	05/07/2018	22:36	F1812730AA	
ads07818	FE00112.D	9595558	05/07/2018	23:07	F1812730AA	
ads07818	FE00113.D	9590178	05/07/2018	23:37	F1812730AA	100
ads07818	FE00114.D	9590191	05/08/2018	00:08	F1812730AA	
ads07818	FE00115.D	9590191DL	05/08/2018	00:38	F1812730AA	
ads07818	FE00116.D	VBLKF04	05/08/2018	01:09	F1812730AA	
ads07818	FE00117.D	cc1263	05/08/2018	01:39	F1812730AA	
ads07818	FE00118.D	cc1350	05/08/2018	02:10	F1812730AA	
ads07818	FE00119.D	9590191	05/08/2018	08:57	F1812730AA	
ads07818	FE00120.D	VBLKF04	05/08/2018	09:45	F1812730AA	

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKF04
Canister ID:	N/A	Lab File ID:	fe00092.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	05/07/2018
Injection Volume:	200 cc	Analyzed Time:	11:56
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
115-07-1	Propene	0.50	U
75-71-8	Dichlorodifluoromethane	0.20	U
75-45-6	Chlorodifluoromethane	0.20	U
76-14-2	Freon 114	0.20	U
74-87-3	Chloromethane	0.20	U
75-01-4	Vinyl Chloride	0.20	U
106-99-0	1,3-Butadiene	0.40	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.20	U
593-60-2	Bromoethene	0.40	U
75-43-4	Dichlorofluoromethane	0.20	U
75-69-4	Trichlorofluoromethane	0.20	U
109-66-0	Pentane	0.50	U
64-17-5	Ethanol	0.50	U
107-02-8	Acrolein	1.0	U
75-35-4	1,1-Dichloroethene	0.20	U
76-13-1	Freon 113	0.50	U
67-64-1	Acetone	0.50	U
74-88-4	Methyl Iodide	0.20	U
75-15-0	Carbon Disulfide	1.0	U
67-63-0	Isopropanol	0.50	U
75-05-8	Acetonitrile	0.50	U
107-05-1	3-Chloropropene	0.20	U
75-09-2	Methylene Chloride	0.20	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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SDG No.:

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Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	05/07/2018
Injection Volume:	200 cc	Analyzed Time:	11:56
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-65-0	tert-Butyl Alcohol	0.50	U
107-13-1	Acrylonitrile	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.20	U
1634-04-4	Methyl t-Butyl Ether	0.20	U
110-54-3	Hexane	0.20	U
75-34-3	1,1-Dichloroethane	0.20	U
108-05-4	Vinyl Acetate	1.0	U
108-20-3	Di-Isopropyl Ether	0.20	U
637-92-3	Ethyl Tert-Butyl Ether	0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	U
540-59-0	1,2-Dichloroethene (total)	0.20	U
78-93-3	2-Butanone	0.50	U
141-78-6	Ethyl Acetate	0.50	U
96-33-3	Methyl Acrylate	0.20	U
109-99-9	Tetrahydrofuran	0.50	U
67-66-3	Chloroform	0.20	U
71-55-6	1,1,1-Trichloroethane	0.20	U
110-82-7	Cyclohexane	0.20	U
56-23-5	Carbon Tetrachloride	0.20	U
71-43-2	Benzene	0.20	U
107-06-2	1,2-Dichloroethane	0.20	U
540-84-1	Isooctane	0.20	U
994-05-8	Tert-Amyl Methyl Ether	0.20	U
142-82-5	Heptane	0.50	U

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Nominal Volume:	200 cc	Analyzed Date:	05/07/2018
Injection Volume:	200 cc	Analyzed Time:	11:56
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
79-01-6	Trichloroethene	0.20	U
140-88-5	Ethyl Acrylate	0.20	U
78-87-5	1,2-Dichloropropane	0.20	U
74-95-3	Dibromomethane	0.20	U
123-91-1	1,4-Dioxane	0.50	U
80-62-6	Methyl Methacrylate	0.20	U
75-27-4	Bromodichloromethane	0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	U
108-10-1	4-Methyl-2-Pentanone	0.50	U
108-88-3	Toluene	0.20	U
111-65-9	Octane	0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	U
542-75-6	1,3-Dichloropropene (total)	0.20	U
97-63-2	Ethyl Methacrylate	0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	U
127-18-4	Tetrachloroethene	0.20	U
591-78-6	2-Hexanone	0.50	U
124-48-1	Dibromochloromethane	0.20	U
106-93-4	1,2-Dibromoethane	0.20	U
108-90-7	Chlorobenzene	0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	U
100-41-4	Ethylbenzene	0.20	U
179601-23-1	m/p-Xylene	0.20	U
95-47-6	o-Xylene	0.20	U

Abbreviations:
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Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	05/07/2018
Injection Volume:	200 cc	Analyzed Time:	11:56
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
1330-20-7	Xylene (total)	0.20	U
100-42-5	Styrene	0.20	U
75-25-2	Bromoform	0.20	U
98-82-8	Cumene	0.20	U
108-86-1	Bromobenzene	0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U
96-18-4	1,2,3-Trichloropropane	0.20	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.20	U
622-96-8	4-Ethyltoluene	0.20	U
108-67-8	1,3,5-Trimethylbenzene	0.20	U
98-83-9	Alpha Methyl Styrene	0.20	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.20	U
135-98-8	sec-Butylbenzene	0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	U
99-87-6	p-Isopropyltoluene	0.20	U
100-44-7	Benzyl Chloride	0.50	U
95-50-1	1,2-Dichlorobenzene	0.20	U
104-51-8	n-Butylbenzene	0.20	U
67-72-1	Hexachloroethane	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKF04
Canister ID:	N/A	Lab File ID:	fe00092.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	05/07/2018
Injection Volume:	200 cc	Analyzed Time:	11:56
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
87-68-3	Hexachlorobutadiene	0.40	U
91-20-3	Naphthalene	0.40	U

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 LCS File ID: fe00093.d LCSD File ID: fe00094.d

Batch: F1812730AA LCS Injected: 05/07/2018 LCSD Injected: 05/07/2018

Method: EPA TO-15 LCS Client ID: LCSF04 LCSD Client ID: LCSDF04

Dilution Factor: 1

COMPOUND	SPIKE LEVEL	LCS CONC. (ppb(v))	LCSD CONC. (ppb(v))	LCS %REC	LCSD %REC	RANGE	%RPD	RPD MAX	IN SPEC
Vinyl Chloride	10.00	12.03	12.72	120	127	75-130	6	25	YES
1,1-Dichloroethene	10.00	10.25	11.47	103	115	70-129	11	25	YES
Methyl t-Butyl Ether	10.00	9.43	10.36	94	104	71-119	9	25	YES
1,1-Dichloroethane	10.00	10.95	11.76	110	118	74-129	7	25	YES
cis-1,2-Dichloroethene	10.00	9.74	10.86	97	109	76-126	11	25	YES
1,1,1-Trichloroethane	10.00	10.17	10.43	102	104	74-122	3	25	YES
Benzene	10.00	11.77	12.31	118	123	76-123	5	25	YES
Trichloroethene	10.00	10.50	11.17	105	112	76-118	6	25	YES
Toluene	10.00	10.12	10.78	101	108	78-119	6	25	YES
1,1,2-Trichloroethane	10.00	11.13	11.21	111	112	76-127	1	25	YES
Ethylbenzene	10.00	9.99	10.68	100	107	77-117	7	25	YES
m/p-Xylene	10.00	9.24	10.30	92	103	78-119	11	25	YES
o-Xylene	10.00	8.72	9.68	87	97	78-121	10	25	YES

COMMENTS:
Applies to Sample(s): 9590191, 9590982-9590984, 95955569595558

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FORM 04
VOLATILE ORGANICS IN AIR
METHOD BLANK SUMMARY

SDG No.:

Lab Sample ID: VBLKF04 Analyzed Date: 05/07/2018

Lab File ID: fe00092.d Analyzed Time: 11:56

Instrument ID: 26379

THIS BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS AND LCSD:

LAB SAMPLE ID	LAB FILE ID	CANISTER ID	DATE ANALYZED	TIME ANALYZED
LCSF04	fe00093.d	N/A	05/07/2018	12:47
LCSDF04	fe00094.d	N/A	05/07/2018	13:17
9590982	fe00095.d	N/A	05/07/2018	14:28
9590983	fe00096.d	N/A	05/07/2018	14:58
9590984	fe00097.d	N/A	05/07/2018	15:28
9590983	fe00098.d	N/A	05/07/2018	15:59
9592715	fe00099.d	N/A	05/07/2018	16:30
9592716	fe00100.d	N/A	05/07/2018	17:00
9592717	fe00101.d	N/A	05/07/2018	17:31
9592719	fe00103.d	N/A	05/07/2018	18:32
9592720	fe00104.d	N/A	05/07/2018	19:03
9592721	fe00105.d	N/A	05/07/2018	19:33
9592722	fe00106.d	N/A	05/07/2018	20:04
9592723	fe00107.d	N/A	05/07/2018	20:34
9592724	fe00108.d	N/A	05/07/2018	21:05
9592718	fe00109.d	N/A	05/07/2018	21:35
9595556	fe00110.d	1349	05/07/2018	22:06
9595557	fe00111.d	1282	05/07/2018	22:36
9595558	fe00112.d	1380	05/07/2018	23:07
9590191	fe00114.d	N/A	05/08/2018	00:08
cc1263	fe00117.d	1263	05/08/2018	01:39
cc1350	fe00118.d	1350	05/08/2018	02:10
9590191RE	fe00119.d	N/A	05/08/2018	08:57

COMMENTS:

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

SDG No.:

Lab File ID: fe00090.d

BFB Injection Date: 05/07/2018

Instrument ID: 26379

BFB Injection Time: 09:41

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0% - 40.0% of mass 95	28.78
75	30.0% - 66.0% of mass 95	52.15
95	Base peak, 100% relative abundance	100.00
96	5.0% - 9.0% of mass 95	6.67
173	< 2.0% of mass 174	0.80 (1.08)
174	> 50.0% of mass 95	74.12
175	4.0% - 9.0% of mass 174	5.29 (7.14)
176	93.0% - 101.0% of mass 174	70.18 (94.68)
177	5.0% - 9.0% of mass 176	4.59 (6.53)

THIS CHECK APPLIES TO THE FOLLOWING:

LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD010	fe00091.d	05/07/2018	10:52
VBLKF04	fe00092.d	05/07/2018	11:56
LCSF04	fe00093.d	05/07/2018	12:47
LCSDF04	fe00094.d	05/07/2018	13:17
9590982	fe00095.d	05/07/2018	14:28
9590983	fe00096.d	05/07/2018	14:58
9590984	fe00097.d	05/07/2018	15:28
9590983	fe00098.d	05/07/2018	15:59
9592715	fe00099.d	05/07/2018	16:30
9592716	fe00100.d	05/07/2018	17:00
9592717	fe00101.d	05/07/2018	17:31
9592719	fe00103.d	05/07/2018	18:32
9592720	fe00104.d	05/07/2018	19:03
9592721	fe00105.d	05/07/2018	19:33
9592722	fe00106.d	05/07/2018	20:04
9592723	fe00107.d	05/07/2018	20:34
9592724	fe00108.d	05/07/2018	21:05
9592718	fe00109.d	05/07/2018	21:35
9595556	fe00110.d	05/07/2018	22:06
9595557	fe00111.d	05/07/2018	22:36
9595558	fe00112.d	05/07/2018	23:07
9590191	fe00114.d	05/08/2018	00:08
cc1263	fe00117.d	05/08/2018	01:39
cc1350	fe00118.d	05/08/2018	02:10
9590191RE	fe00119.d	05/08/2018	08:57

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: fe00091.d

Calibration Date: 05/07/2018

Instrument ID: 26379

Calibration Time: 10:52

Init. Calib. Date(s): 04/27/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
Propene	1.190	1.224	10.286	10	3
Dichlorodifluoromethane	3.312	3.744	11.304	10	13
Chlorodifluoromethane	2.646	3.041	11.491	10	15
Freon 114	3.369	3.702	10.986	10	10
Chloromethane	1.443	1.587	10.996	10	10
Vinyl Chloride	0.836	0.972	11.632	10	16
1,3-Butadiene	0.755	0.860	11.398	10	14
Bromomethane	0.960	1.114	11.605	10	16
Chloroethane	0.664	0.710	10.680	10	7
Bromoethene	0.886	0.819	9.236	10	-8
Dichlorofluoromethane	2.710	3.156	11.646	10	16
Trichlorofluoromethane	3.527	3.653	10.359	10	4
Pentane	2.408	2.316	9.620	10	-4
Ethanol	0.516	0.453	8.778	10	-12
Freon123a	2.887	2.690	10.342	11.1	-7
Acrolein	0.427	0.376	8.807	10	-12
1,1-Dichloroethene	1.866	1.826	9.786	10	-2
Freon 113	1.960	1.858	9.478	10	-5
Acetone	2.235	2.622	11.730	10	17
Methyl Iodide	2.330	1.766	7.580	10	-24
Carbon Disulfide	2.832	2.968	10.482	10	5
Isopropanol	1.852	1.867	10.084	10	1
Acetonitrile	1.410	1.697	12.040	10	20
3-Chloropropene	1.648	1.751	11.788	11.1	6
Methylene Chloride	0.954	1.071	12.468	11.1	12
tert-Butyl Alcohol	2.431	2.160	9.863	11.1	-11
Acrylonitrile	1.098	1.094	9.965	10	0
trans-1,2-Dichloroethene	1.789	1.812	10.127	10	1
Methyl t-Butyl Ether	2.953	2.625	8.890	10	-11
Hexane	1.389	1.438	10.356	10	4
1,1-Dichloroethane	2.455	2.662	10.843	10	8
Vinyl Acetate	3.497	3.580	11.466	11.2	2
Di-Isopropyl Ether	4.208	3.465	8.234	10	-18
Ethyl Tert-Butyl Ether	3.460	2.829	8.176	10	-18
cis-1,2-Dichloroethene	1.635	1.518	9.285	10	-7
2-Butanone	2.954	3.015	10.207	10	2
Ethyl Acetate	3.248	3.208	9.879	10	-1
Methyl Acrylate	2.218	2.041	9.199	10	-8
Tetrahydrofuran	1.565	1.537	9.822	10	-2

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: fe00091.d

Calibration Date: 05/07/2018

Instrument ID: 26379

Calibration Time: 10:52

Init. Calib. Date(s): 04/27/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
Chloroform	2.779	2.965	10.669	10	7
1,1,1-Trichloroethane	3.010	2.940	9.768	10	-2
Cyclohexane	1.940	1.552	8.004	10	-20
Carbon Tetrachloride	2.993	2.761	9.226	10	-8
Benzene	1.265	1.600	12.646	10	26
1,2-Dichloroethane *	0.706	0.963	13.639	10	36 *
Isooctane	1.898	2.230	11.749	10	17
Tert-Amyl Methyl Ether	0.926	0.959	10.362	10	4
Heptane	0.361	0.410	11.356	10	14
Trichloroethene	0.519	0.549	10.577	10	6
Ethyl Acrylate	0.906	0.840	9.272	10	-7
1,2-Dichloropropane	0.565	0.699	12.379	10	24
Dibromomethane	0.523	0.609	11.653	10	17
1,4-Dioxane	0.255	0.267	10.474	10	5
Methyl Methacrylate	0.362	0.322	8.895	10	-11
Bromodichloromethane	0.977	1.146	11.729	10	17
cis-1,3-Dichloropropene	0.674	0.694	10.295	10	3
4-Methyl-2-Pentanone	1.191	1.308	10.979	10	10
Toluene	1.367	1.373	10.043	10	0
Octane	1.117	1.197	10.714	10	7
trans-1,3-Dichloropropene	0.612	0.673	10.996	10	10
Ethyl Methacrylate	0.587	0.493	8.400	10	-16
1,1,2-Trichloroethane	0.593	0.639	10.772	10	8
Tetrachloroethene	0.800	0.921	11.515	10	15
2-Hexanone	1.044	1.060	10.154	10	2
Dibromochloromethane	0.706	0.670	9.490	10	-5
1,2-Dibromoethane	0.817	0.816	9.980	10	0
Chlorobenzene	1.240	1.276	10.292	10	3
1,1,1,2-Tetrachloroethane	0.716	0.733	10.233	10	2
Ethylbenzene	1.798	1.779	9.892	10	-1
m/p-Xylene	1.261	1.156	9.171	10	-8
o-Xylene	1.180	0.984	8.335	10	-17
Styrene	0.864	0.785	9.079	10	-9
Bromoform	0.826	0.707	8.553	10	-14
Cumene	1.599	1.517	9.491	10	-5
Bromobenzene	0.687	0.761	11.067	10	11
1,1,2,2-Tetrachloroethane	1.233	1.291	10.469	10	5
1,2,3-Trichloropropane	0.389	0.416	10.702	10	7
n-Propylbenzene	0.501	0.478	9.529	10	-5

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: fe00091.d

Calibration Date: 05/07/2018

Instrument ID: 26379

Calibration Time: 10:52

Init. Calib. Date(s): 04/27/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
2-Chlorotoluene	0.474	0.524	11.057	10	11
4-Ethyltoluene	1.644	1.724	10.486	10	5
1,3,5-Trimethylbenzene	1.428	1.667	11.674	10	17
Alpha Methyl Styrene	0.577	0.512	8.872	10	-11
tert-Butylbenzene	1.297	1.472	11.348	10	13
1,2,4-Trimethylbenzene	1.342	1.520	11.330	10	13
sec-Butylbenzene	2.031	2.266	11.160	10	12
1,3-Dichlorobenzene	1.127	1.163	10.319	10	3
1,4-Dichlorobenzene	1.074	1.092	10.167	10	2
p-Isopropyltoluene	1.561	1.705	10.919	10	9
Benzyl Chloride	0.232	0.267	11.498	10	15
1,2-Dichlorobenzene	1.004	0.999	9.955	10	0
n-Butylbenzene	0.970	0.998	10.290	10	3
Hexachloroethane	0.601	0.471	7.849	10	-22
1,2-Dibromo-3-chloropropane	0.414	0.385	9.297	10	-7
1,2,4-Trichlorobenzene	0.577	0.501	8.684	10	-13
Hexachlorobutadiene	0.615	0.575	9.351	10	-6
Naphthalene	0.955	0.847	8.867	10	-11

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

Continuing Calibration
Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP26379.i/18apr27.b/fd00611.d
/chem/HP26379.i/18apr27.b/fd00612.d
/chem/HP26379.i/18apr27.b/fd00613.d
/chem/HP26379.i/18apr27.b/fd00614.d
/chem/HP26379.i/18apr27.b/fd00616.d
/chem/HP26379.i/18apr27.b/fd00617.d

** ICAL Area and RT are the average from the above standards.

Current Continuing Calibration Standard:

/chem/HP26379.i/18may07.b/fe00091.d

Area Summary

Internal Standard Name	File ID: fe00091.d	ICAL Area	Low Limit	High Limit	In Spec
Bromochloromethane	406522	425459	255275	595643	Yes
1,4-Difluorobenzene	963046	1263896	758338	1769454	Yes
Chlorobenzene-d5	1088483	1299258	779555	1818961	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

RT Summary

Internal Standard Name	File ID: fe00091.d	ICAL RT	In Spec
Bromochloromethane	11.108	11.105	Yes
1,4-Difluorobenzene	13.400	13.395	Yes
Chlorobenzene-d5	18.235	18.236	Yes

A "No" indicates the retention time is greater than 30 seconds from the RT of the referenced ICAL average.

Comments:_____

_____

Page 1 of 1

Report generated on 05/07/2018 at 11:28

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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: 05/07/2018

Lab File ID: fe00091.d Analyzed Time: 10:52

Instrument ID: 26379

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	R.T.	Area	R.T.	Area	R.T.
24 HOUR STANDARD	406522	11.11	963046	13.40	1088483	18.23
UPPER LIMIT	569131	11.44	1348264	13.73	1523876	18.56
LOWER LIMIT	243913	10.78	577828	13.07	653090	17.90
LAB SAMPLE ID						
VBLKF04	396198	11.10	889776	13.40	939258	18.23
LCSF04	401582	11.10	1041640	13.39	1090127	18.24
LCSDF04	386573	11.11	1007306	13.40	1074293	18.24
9590982	386535	11.09	1221131	13.39	1007723	18.23
9590983	381896	11.11	887079	13.39	940313	18.24
9590984	358971	11.11	761075	13.40	891713	18.23
9590983	364219	11.11	795522	13.40	875124	18.23
9592715	355646	11.11	806002	13.40	891648	18.23
9592716	364707	11.11	809357	13.40	895785	18.23
9592717	357764	11.11	791321	13.40	906234	18.23
9592719	371347	11.11	876261	13.40	948118	18.24
9592720	366482	11.11	819987	13.39	946849	18.23
9592721	358082	11.11	810975	13.39	928650	18.24
9592722	374653	11.12	856133	13.40	947791	18.24
9592723	350346	11.11	1050789	13.40	889022	18.23
9592724	352304	11.10	875601	13.39	879692	18.23
9592718	352885	11.11	780590	13.39	874846	18.23
9595556	372809	11.12	873565	13.40	1050061	18.24
9595557	342491	11.11	781028	13.40	911419	18.24
9595558	338895	11.11	803445	13.40	924803	18.24
9590191	376478	11.11	1695883 *	13.39	1440176	18.23
cc1263	373487	11.11	999503	13.40	1131824	18.24
cc1350	366860	11.11	865236	13.41	991078	18.24
9590191RE	390021	11.11	1804972 *	13.39	1538526 *	18.23

* = 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.

Data File: /chem/HP26379.i/18may07.b/fe00090.d

Date : 07-MAY-2018 09:41

Client ID: BFB

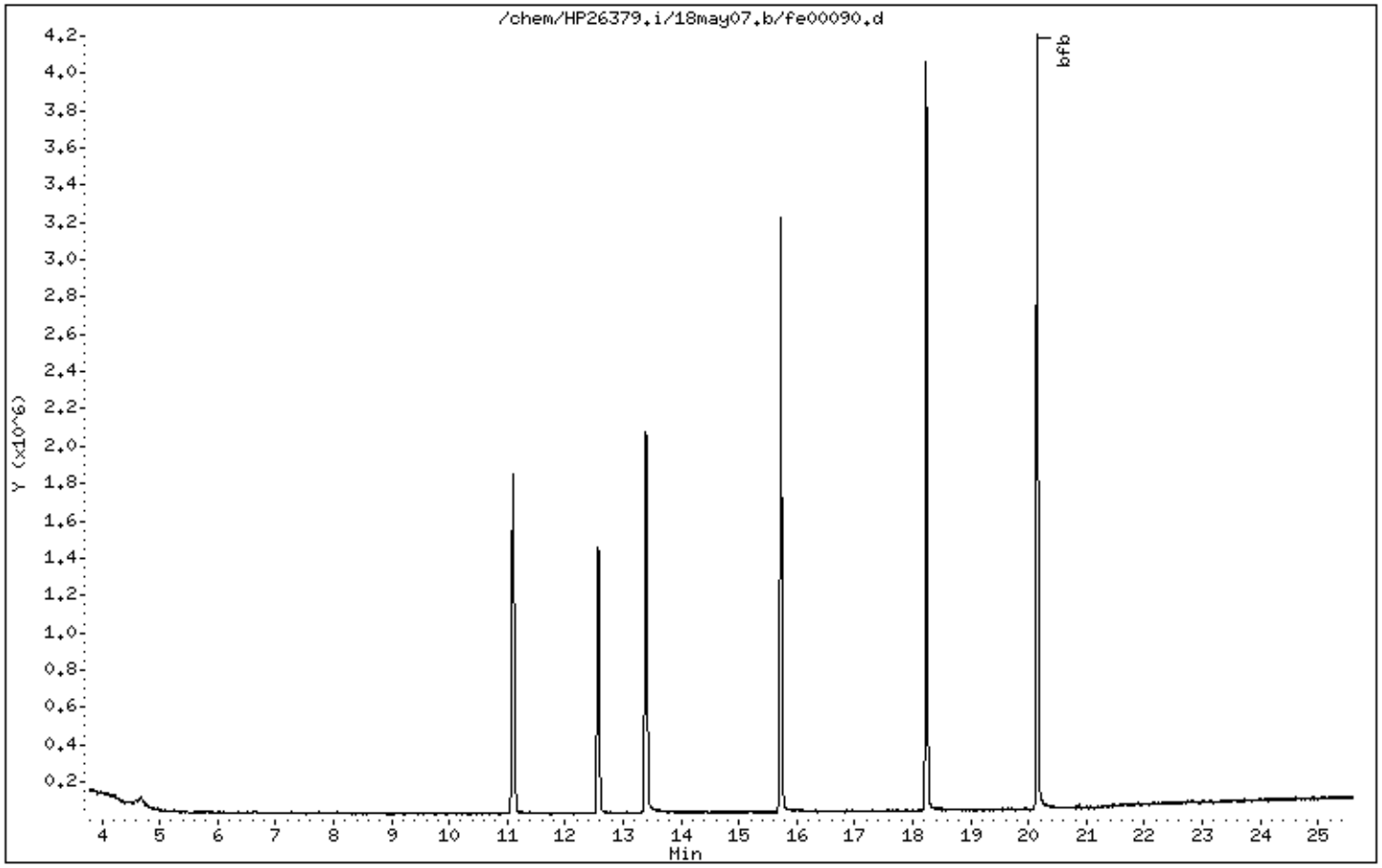
Instrument: HP26379.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: ads07818

Column phase: DB-624

Column diameter: 0.25



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Target 3.5 esignature user ID: ads07818

Data File: /chem/HP26379.i/18may07.b/fe00090.d

Date : 07-MAY-2018 09:41

Client ID: BFB

Instrument: HP26379.i

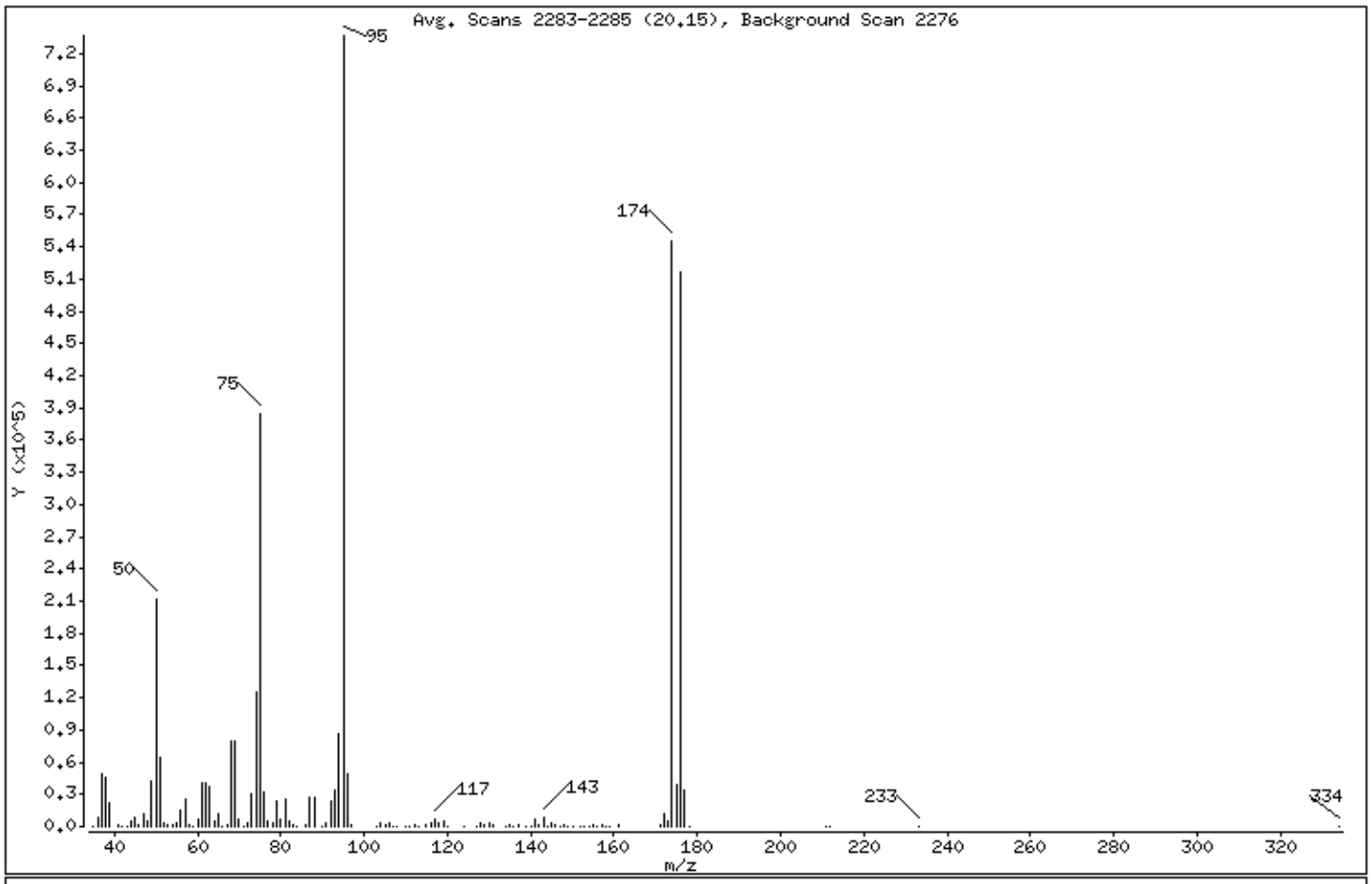
Sample Info: 50NGBFB;;;BFB;0;;;

Operator: ads07818

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	28.78
75	30.00 - 66.00% of mass 95	52.15
96	5.00 - 9.00% of mass 95	6.67
173	Less than 2.00% of mass 174	0.80 (1.08)
174	50.00 - 120.00% of mass 95	74.12
175	4.00 - 9.00% of mass 174	5.29 (7.14)
176	93.00 - 101.00% of mass 174	70.18 (94.68)
177	5.00 - 9.00% of mass 176	4.59 (6.53)

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Target 3.5 esignature user ID: ads07818

Date : 07-MAY-2018 09:41

Client ID: BFB Instrument: HP26379.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: ads07818

Column phase: DB-624 Column diameter: 0.25

Data File: fe00090.d
Spectrum: Avg. Scans 2283-2285 (20,15), Background Scan 2276
Location of Maximum: 95.00
Number of points: 119

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	354	66.00	820	103.00	662	143.00	9246
36.00	8140	67.00	1674	104.00	3299	144.00	544
37.00	49304	68.00	80400	105.00	1207	145.00	2983
38.00	45272	69.00	80432	106.00	3201	146.00	1093
39.00	21528	70.00	6078	107.00	719	147.00	283
41.00	1102	71.00	374	108.00	432	148.00	1659
42.00	659	72.00	3710	110.00	506	149.00	665
43.00	826	73.00	30440	111.00	783	150.00	704
44.00	4322	74.00	124872	112.00	1267	152.00	209
45.00	8685	75.00	384256	113.00	506	153.00	781
46.00	1542	76.00	32480	115.00	976	154.00	329
47.00	12205	77.00	4917	116.00	2992	155.00	1568
48.00	5050	78.00	2740	117.00	6264	156.00	380
49.00	42744	79.00	24208	118.00	3130	157.00	1493
50.00	212096	80.00	6883	119.00	5122	158.00	587
51.00	64512	81.00	24664	120.00	149	159.00	726
52.00	3116	82.00	5172	124.00	476	161.00	883
53.00	1180	83.00	1336	127.00	348	171.00	1328
54.00	1074	84.00	715	128.00	3282	172.00	11215
55.00	2576	86.00	1723	129.00	1201	173.00	5899
56.00	15483	87.00	27552	130.00	2762	174.00	546176
57.00	25832	88.00	26616	131.00	1131	175.00	39008
58.00	1359	90.00	110	134.00	149	176.00	517120
59.00	113	91.00	2786	135.00	1517	177.00	33784
60.00	7219	92.00	22976	136.00	308	178.00	742
61.00	41392	93.00	34352	137.00	964	211.00	35
62.00	40472	94.00	87072	139.00	134	212.00	107
63.00	37984	95.00	736832	140.00	556	233.00	127
64.00	5525	96.00	49168	141.00	7538	334.00	136
65.00	11272	97.00	1688	142.00	912		

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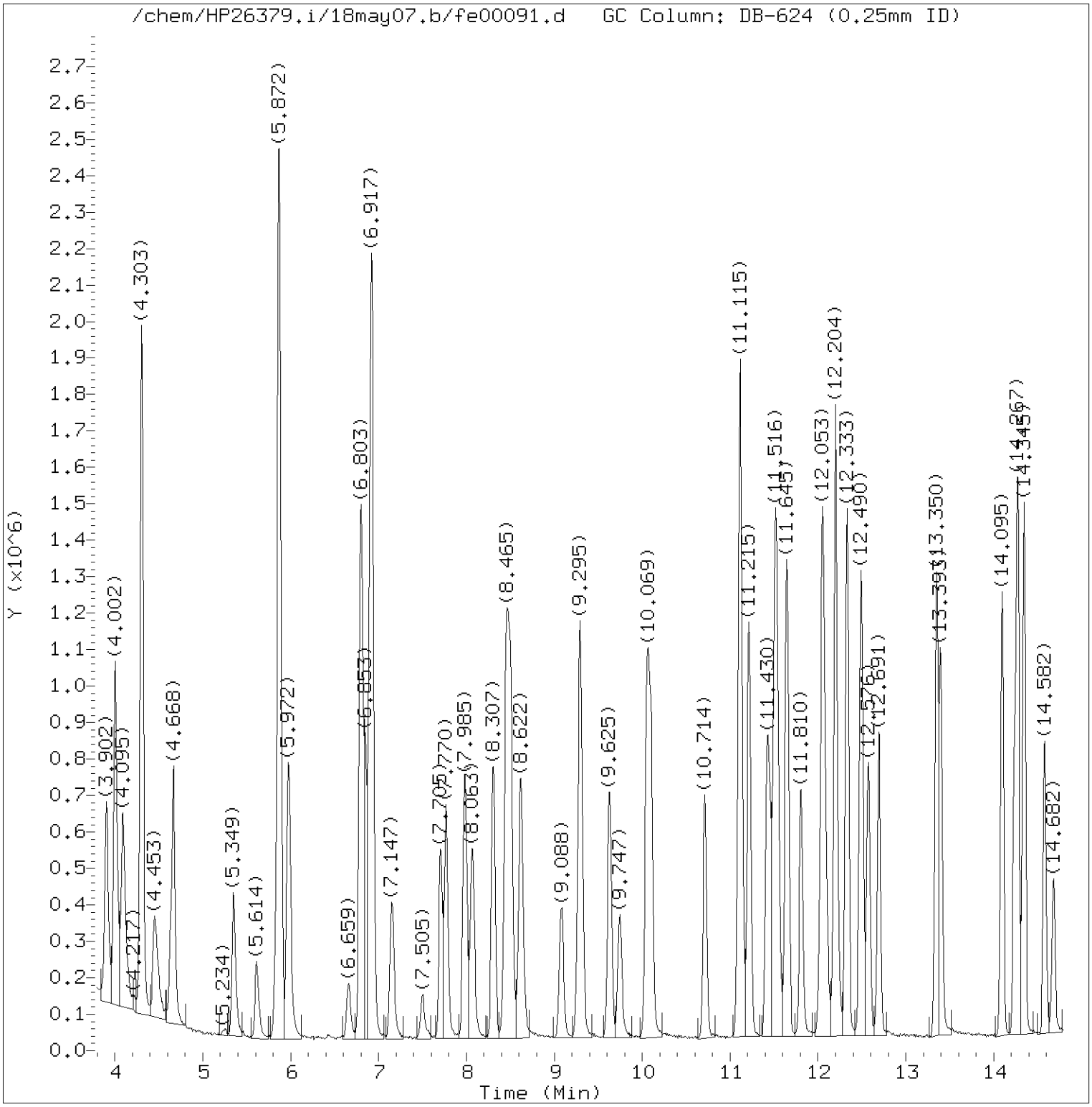
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18may07.b/fe00091.d Instrument ID: HP26379.i
Injection date and time: 07-MAY-2018 10:52 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: all
Calibration date and time: 07-MAY-2018 13:53
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

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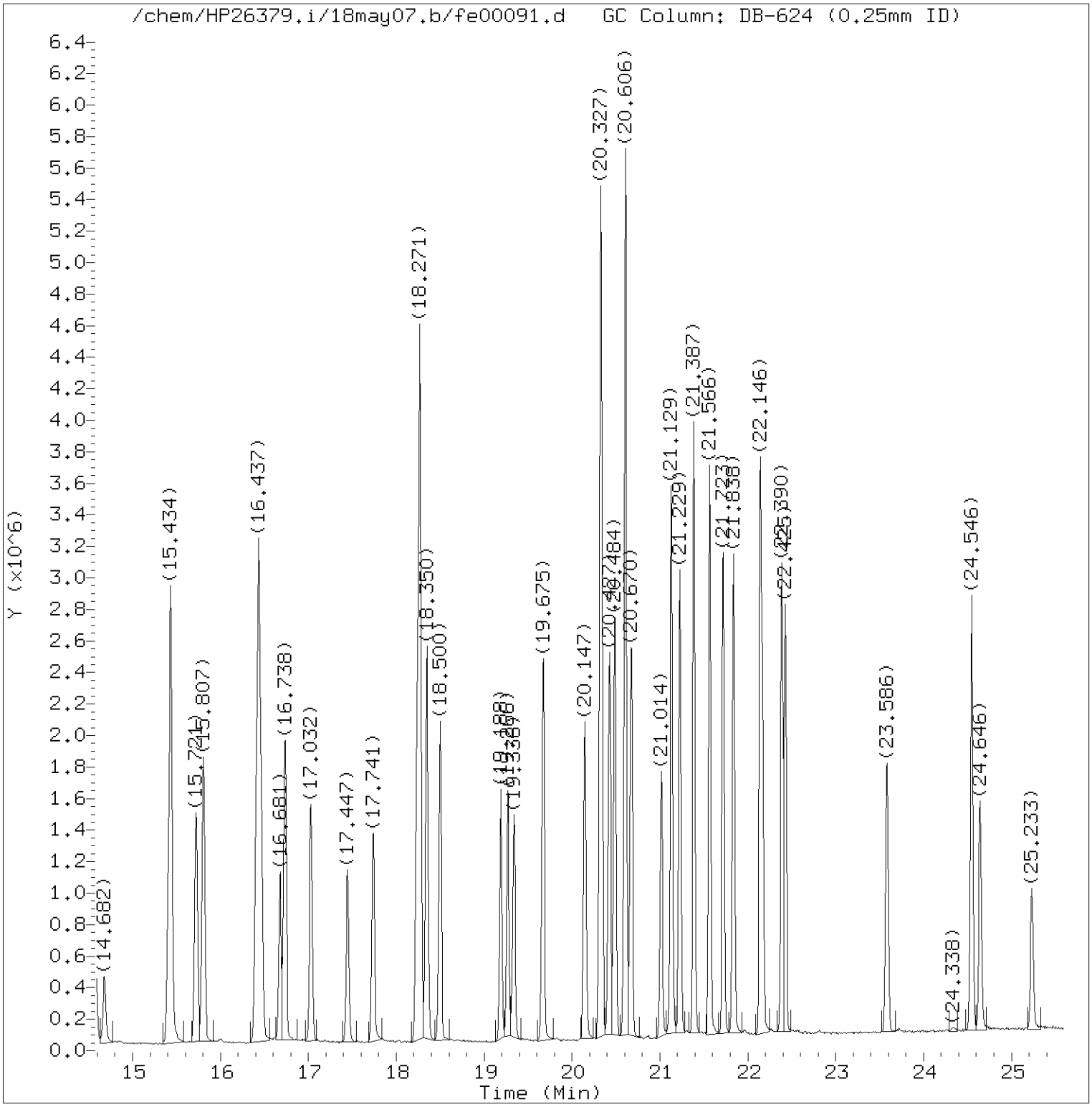
on 05/07/2018 at 13:54.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18may07.b/fe00091.d Instrument ID: HP26379.i
Injection date and time: 07-MAY-2018 10:52 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: all
Calibration date and time: 07-MAY-2018 13:53
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

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on 05/07/2018 at 13:54.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may07.b/fe00091.d Instrument ID: HP26379.i
Injection date and time: 07-MAY-2018 10:52 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: all
Calibration date and time: 07-MAY-2018 13:53
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	497557	10.286
2) Dichlorodifluoromethane	(1)	4.002	85	1522145	11.304
3) Chlorodifluoromethane	(1)	4.095	51	1236255	11.491
4) Freon 114	(1)	4.303	85	1504849	10.986
5) Chloromethane	(1)	4.453	50	645001	10.996
6) Vinyl Chloride	(1)	4.632	62	395252	11.632
7) 1,3-Butadiene	(1)	4.668	54	349698	11.398
8) Bromomethane	(1)	5.349	94	452970	11.605
9) Chloroethane	(1)	5.614	64	288501	10.680
10) Bromoethene	(1)	5.829	106	332823	9.236
11) Pentane	(1)	5.864	43	941560	9.620
12) Trichlorofluoromethane	(1)	5.872	101	1485160	10.359
13) Dichlorofluoromethane	(1)	5.972	67	1282830	11.646
14) Ethanol	(1)	6.652	45	184274	8.778
15) Freon123a	(1)	6.803	67	1213804	10.342
16) 1,1-Dichloroethene	(1)	6.853	61	742199	9.786
17) Freon 113	(1)	6.910	103	755187	9.478
18) Carbon Disulfide	(1)	6.932	76	1206715	10.482
19) Methyl Iodide	(1)	7.154	142	717925	7.580
20) Acrolein	(1)	7.498	56	152835	8.807
21) Isopropanol	(1)	7.705	45	759078	10.084
22) 3-Chloropropene	(1)	7.770	41	789937	11.788
23) Methylene Chloride	(1)	7.985	84	483460	12.468
24) Acetone	(1)	8.071	43	1065811	11.730
25) trans-1,2-Dichloroethene	(1)	8.307	61	736541	10.127
26) Hexane	(1)	8.457	56	584670	10.356
27) Methyl t-Butyl Ether	(1)	8.500	73	1067139	8.890
28) tert-Butyl Alcohol	(1)	8.615	59	974856	9.863
29) Acetonitrile	(1)	9.088	41	689998	12.040
30) Di-Isopropyl Ether	(1)	9.295	45	1408624	8.234
31) 1,1-Dichloroethane	(1)	9.625	63	1082309	10.843
32) Acrylonitrile	(1)	9.747	53	444700	9.965
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	1150039	8.176
34) Vinyl Acetate	(1)	10.105	43	1630056	11.466
35) cis-1,2-Dichloroethene	(1)	10.714	61	617053	9.285
36) 1,2-Dichloroethene (total)	(1)		61	1353594	19.412
37)*Bromochloromethane	(1)	11.108	130	406522	10.000
38) Cyclohexane	(1)	11.122	56	631078	8.004

* = Compound is an internal standard.

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on 05/07/2018 at 13:54.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may07.b/fe00091.d Instrument ID: HP26379.i
Injection date and time: 07-MAY-2018 10:52 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: all
Calibration date and time: 07-MAY-2018 13:53
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	1205389	10.669
40) Ethyl Acetate	(1)	11.423	43	1304292	9.879
41) Methyl Acrylate	(1)	11.459	55	829592	9.199
42) Carbon Tetrachloride	(1)	11.516	117	1122528	9.226
43) Tetrahydrofuran	(1)	11.545	42	624823	9.822
44) 1,1,1-Trichloroethane	(1)	11.645	97	1195240	9.768
45) 2-Butanone	(1)	11.810	43	1225738M	10.207
46) Isooctane	(2)	12.053	57	2147159	11.749
47) Heptane	(2)	12.204	71	394624	11.356
48) Benzene	(2)	12.333	78	1540472	12.646
49) Tert-Amyl Methyl Ether	(2)	12.490	73	923915	10.362
50) 1,2-Dichloroethane	(2)	12.698	62	927843	13.639
51) Trichloroethene	(2)	13.350	130	529099	10.577
52)*1,4-Difluorobenzene	(2)	13.400	114	963046	10.000
53) Dibromomethane	(2)	14.095	174	586521	11.653
54) Ethyl Acrylate	(2)	14.231	55	808570	9.272
55) 1,2-Dichloropropane	(2)	14.274	63	673609	12.379
56) Bromodichloromethane	(2)	14.345	83	1104036	11.729
57) Methyl Methacrylate	(2)	14.575	69	310031	8.895
58) 1,4-Dioxane	(2)	14.682	88	257333	10.474
59) cis-1,3-Dichloropropene	(2)	15.413	75	668030	10.295
60) Octane	(3)	15.434	43	1302868	10.714
61) Toluene	(3)	15.807	91	1494262	10.043
62) 4-Methyl-2-Pentanone	(2)	16.408	43	1259618	10.979
63) Tetrachloroethene	(3)	16.437	166	1002554	11.515
64) trans-1,3-Dichloropropene	(3)	16.466	75	732923	10.996
65) 1,3-Dichloropropene (total)	(3)		75	1400953	20.306
66) Ethyl Methacrylate	(3)	16.681	69	536440	8.400
67) 1,1,2-Trichloroethane	(3)	16.738	97	695162	10.772
68) Dibromochloromethane	(3)	17.032	127	729443	9.490
69) 1,2-Dibromoethane	(3)	17.447	107	887871	9.980
70) 2-Hexanone	(3)	17.734	43	1153979	10.154
71)*Chlorobenzene-d5	(3)	18.235	117	1088483	10.000
72) Chlorobenzene	(3)	18.264	112	1388835	10.292
73) Ethylbenzene	(3)	18.278	91	1936373	9.892
74) 1,1,1,2-Tetrachloroethane	(3)	18.350	131	797678	10.233
75) m/p-Xylene	(3)	18.500	91	1258450	9.171
76) o-Xylene	(3)	19.188	91	1070573	8.335

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

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on 05/07/2018 at 13:54.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may07.b/fe00091.d Instrument ID: HP26379.i
Injection date and time: 07-MAY-2018 10:52 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: all
Calibration date and time: 07-MAY-2018 13:53
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	2329023	17.534
78) Styrene	(3)	19.274	104	853937	9.079
79) Bromoform	(3)	19.338	173	769345	8.553
80) Cumene	(3)	19.675	105	1651665	9.491
81) n-Propylbenzene	(3)	20.319	120	519977	9.529
82) Bromobenzene	(3)	20.334	156	828121	11.067
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	1404813	10.469
84) 4-Ethyltoluene	(3)	20.491	105	1876122	10.486
85) 2-Chlorotoluene	(3)	20.606	126	570877	11.057
86) 1,3,5-Trimethylbenzene	(3)	20.613	105	1814517	11.674
87) 1,2,3-Trichloropropane	(3)	20.678	110	452792	10.702
88) Alpha Methyl Styrene	(3)	21.014	118	557364	8.872
89) tert-Butylbenzene	(3)	21.129	119	1602499	11.348
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	1654522	11.330
91) sec-Butylbenzene	(3)	21.387	105	2466673	11.160
92) p-Isopropyltoluene	(3)	21.566	119	1855509	10.919
93) 1,3-Dichlorobenzene	(3)	21.723	146	1266106	10.319
94) 1,4-Dichlorobenzene	(3)	21.838	146	1188785	10.167
95) n-Butylbenzene	(3)	22.146	92	1085905	10.290
96) Benzyl Chloride	(3)	22.167	126	290951	11.498
97) Hexachloroethane	(3)	22.390	117	513087	7.849
98) 1,2-Dichlorobenzene	(3)	22.425	146	1087624	9.955
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	419087	9.297
100) Hexachlorobutadiene	(3)	24.546	225	625882	9.351
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	544973	8.684
102) Naphthalene	(3)	25.233	128	921646	8.867

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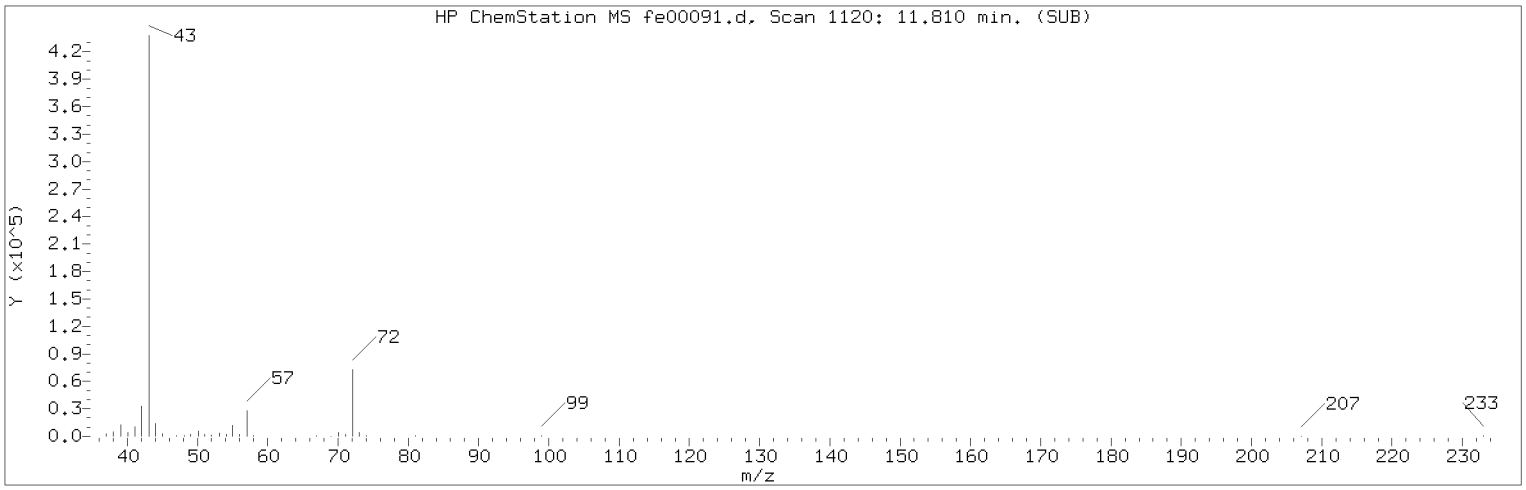
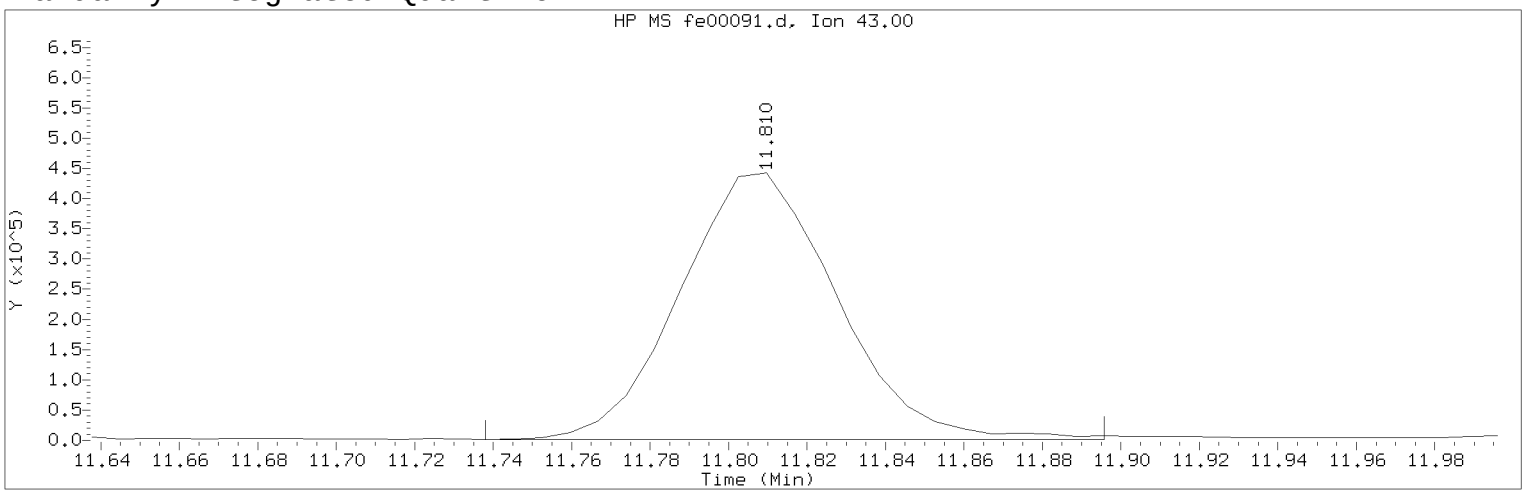
Target 3.5 esignature user ID: ads07818

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18may07.b/fe00091.d Instrument ID: HP26379.i
Injection date and time: 07-MAY-2018 10:52 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: all
Calibration date and time: 07-MAY-2018 13:53
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

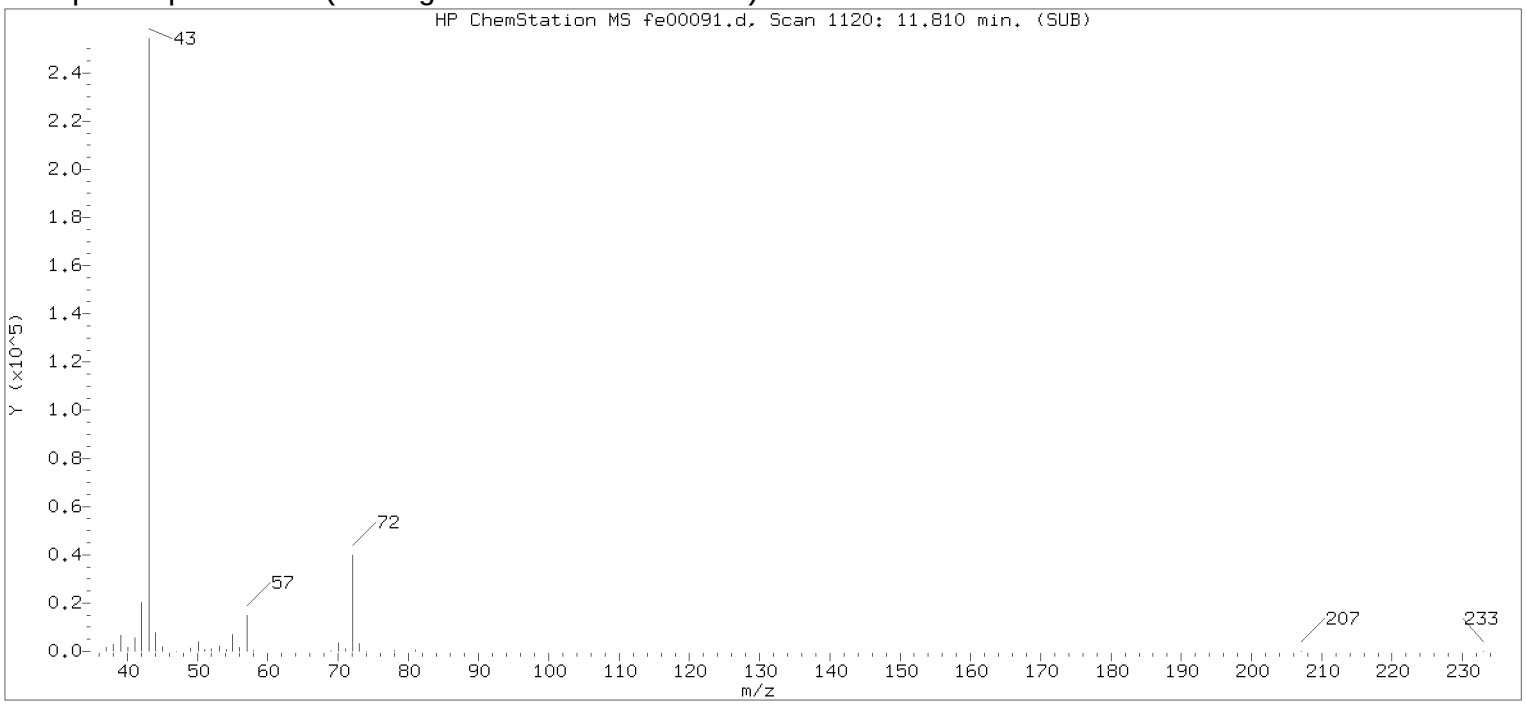
Compound Number : 45
Compound Name : 2-Butanone
Scan Number : 1120
Retention Time (minutes): 11.810
Quant Ion : 43.00
Area (flag) : 1225738M
Concentration (ppb(v)) : 10.2072
Integration start scan : 1109 Integration stop scan: 1131
Y at integration start : 1082 Y at integration end: 1082

Reason for manual integration: improper integration

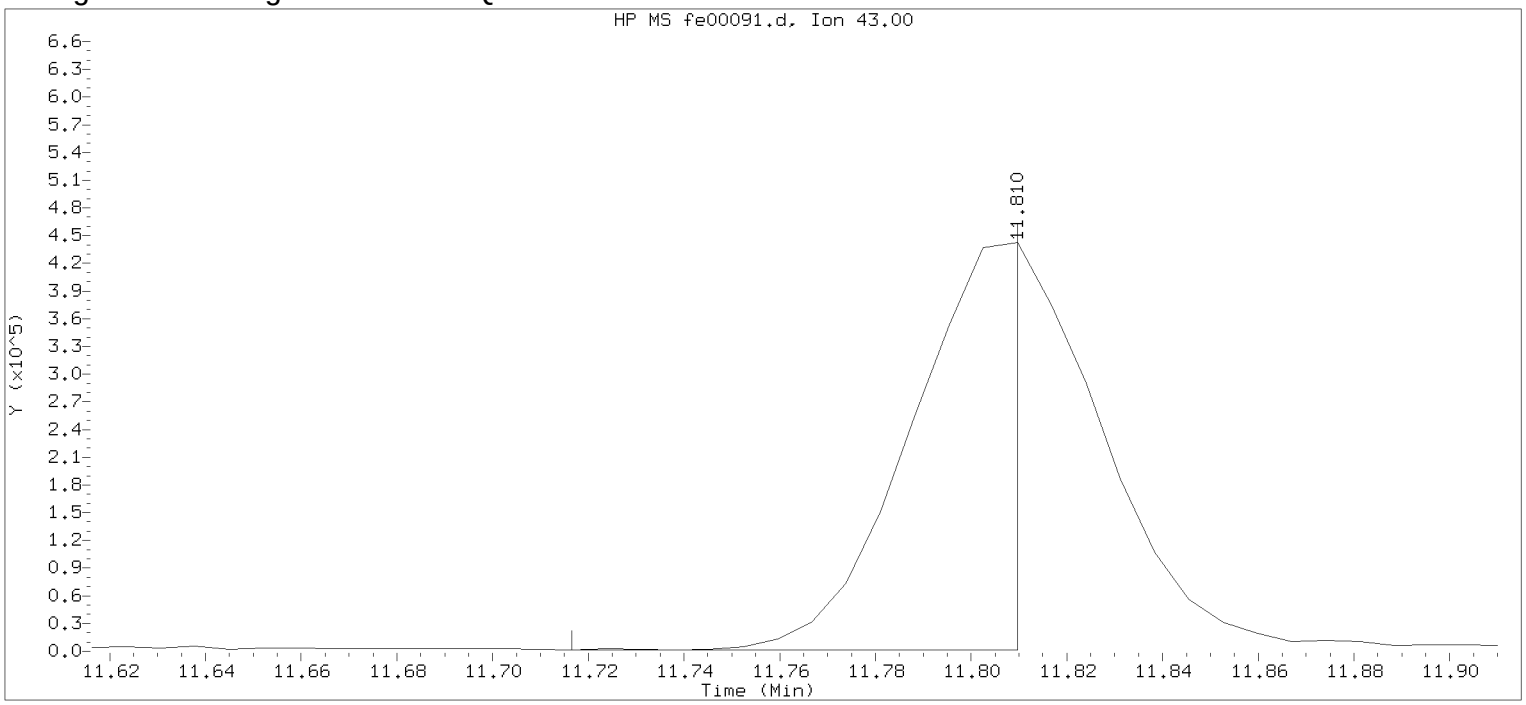
Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 05/07/2018 at 13:54.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 06/11/2018 at 10:00.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18may07.b/fe00091.d Instrument ID: HP26379.i
Injection date and time: 07-MAY-2018 10:52 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: all
Calibration date and time: 27-APR-2018 14:37
Date, time and analyst ID of latest file update: 07-May-2018 11:19 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 45
Compound Name : 2-Butanone
Scan Number : 1120
Retention Time (minutes): 11.810
Quant Ion : 43.00
Area : 658663
Concentration (ppb(v)) : 5.4850
Integration start scan : 1106 Integration stop scan: 1119
Y at integration start : 1322 Y at integration end: 1322

Digitally signed by Alexander D. Sechrist on 05/07/2018 at 13:54.
Target 3.5 esignature user GLE02a Page 738 of 970

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

VBLKF04

Data file: /chem/HP26379.i/18may07.b/fe00092.d Injection date and time: **07-MAY-2018 11:56**
Data file Sample Info. Line: VBLKF04;200;F1812730AA;VBLKF04;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1812730AA**
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

Blank Data file reference: **/chem/HP26379.i/18may07.b/fe00092.d**

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 07-MAY-2018 13:53
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18may07.b/fe00091.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.101(0.007)	1021	130	396198 (-3)	10.00		243914 - 569130
52) 1,4-Difluorobenzene	13.400(0.000)	1342	114	889776 (-8)	10.00		577828 - 1348264
71) Chlorobenzene-d5	18.235(0.000)	2017	117	939258 (-14)	10.00		653090 - 1523876

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)			Not Detected					0.5	1
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)			Not Detected					0.2	1
7) 1,3-Butadiene	(1)			Not Detected					0.4	2
8) Bromomethane	(1)			Not Detected					0.5	1
9) Chloroethane	(1)			Not Detected					0.2	1
10) Bromoethene	(1)			Not Detected					0.4	2
13) Dichlorofluoromethane	(1)			Not Detected					0.2	1
12) Trichlorofluoromethane	(1)			Not Detected					0.2	1
11) Pentane	(1)			Not Detected					0.5	1
14) Ethanol	(1)			Not Detected					0.5	2
15) Freon123a	(1)			Not Detected					0.2	1
20) Acrolein	(1)			Not Detected					1	2
16) 1,1-Dichloroethene	(1)			Not Detected					0.2	1
17) Freon 113	(1)			Not Detected					0.5	2
24) Acetone	(1)			Not Detected					0.5	2
19) Methyl Iodide	(1)			Not Detected					0.2	1
18) Carbon Disulfide	(1)			Not Detected					1	1
21) Isopropanol	(1)			Not Detected					0.5	2
29) Acetonitrile	(1)			Not Detected					0.5	2
22) 3-Chloropropene	(1)			Not Detected					0.2	1
23) Methylene Chloride	(1)			Not Detected					0.2	1
28) tert-Butyl Alcohol	(1)			Not Detected					0.5	1
32) Acrylonitrile	(1)			Not Detected					0.5	2
25) trans-1,2-Dichloroethene	(1)			Not Detected					0.2	1
27) Methyl t-Butyl Ether	(1)			Not Detected					0.2	1
26) Hexane	(1)			Not Detected					0.2	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.2	1
34) Vinyl Acetate	(1)			Not Detected					1	1
30) Di-Isopropyl Ether	(1)			Not Detected					0.2	1
33) Ethyl Tert-Butyl Ether	(1)			Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.2	1
36) 1,2-Dichloroethene (total)	(1)			Not Detected					0.2	1
45) 2-Butanone	(1)			Not Detected					0.5	2
40) Ethyl Acetate	(1)			Not Detected					0.5	1
41) Methyl Acrylate	(1)			Not Detected					0.2	1
43) Tetrahydrofuran	(1)			Not Detected					0.5	1
39) Chloroform	(1)			Not Detected					0.2	1
44) 1,1,1-Trichloroethane	(1)			Not Detected					0.2	1
38) Cyclohexane	(1)			Not Detected					0.2	1

Digitally signed by Alexander D. Sechrist on 05/07/2018 at 13:54. Target 3.5 esignature user ID: ads07818

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18may07.b/fe00092.d Injection date and time: **07-MAY-2018 11:56**
Data file Sample Info. Line: VBLKF04;200;F1812730AA;VBLKF04;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1812730AA**
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

Blank Data file reference: **/chem/HP26379.i/18may07.b/fe00092.d**

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 07-MAY-2018 13:53
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18may07.b/fe00091.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
42) Carbon Tetrachloride	(1)				Not Detected					0.2	1
48) Benzene	(2)				Not Detected					0.2	1
50) 1,2-Dichloroethane	(2)				Not Detected					0.2	1
46) Isooctane	(2)				Not Detected					0.2	1
49) Tert-Amyl Methyl Ether	(2)				Not Detected					0.2	1
47) Heptane	(2)				Not Detected					0.5	1
51) Trichloroethene	(2)				Not Detected					0.2	1
54) Ethyl Acrylate	(2)				Not Detected					0.2	1
55) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
53) Dibromomethane	(2)				Not Detected					0.2	1
58) 1,4-Dioxane	(2)				Not Detected					0.5	1
57) Methyl Methacrylate	(2)				Not Detected					0.2	1
56) Bromodichloromethane	(2)				Not Detected					0.2	1
59) cis-1,3-Dichloropropene	(2)				Not Detected					0.2	1
62) 4-Methyl-2-Pentanone	(2)				Not Detected					0.5	2
61) Toluene	(3)				Not Detected					0.2	1
60) Octane	(3)				Not Detected					0.2	1
64) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
65) 1,3-Dichloropropene (total)	(3)				Not Detected					0.2	1
66) Ethyl Methacrylate	(3)				Not Detected					0.2	1
67) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
63) Tetrachloroethene	(3)				Not Detected					0.2	1
70) 2-Hexanone	(3)				Not Detected					0.5	2
68) Dibromochloromethane	(3)				Not Detected					0.2	1
69) 1,2-Dibromoethane	(3)				Not Detected					0.2	1
72) Chlorobenzene	(3)				Not Detected					0.2	1
74) 1,1,1,2-Tetrachloroethane	(3)				Not Detected					0.2	1
73) Ethylbenzene	(3)				Not Detected					0.2	1
75) m/p-Xylene	(3)				Not Detected					0.2	1
76) o-Xylene	(3)				Not Detected					0.2	1
77) Xylene (total)	(3)				Not Detected					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
82) Bromobenzene	(3)				Not Detected					0.2	1
83) 1,1,2,2-Tetrachloroethane	(3)				Not Detected					0.2	1
87) 1,2,3-Trichloropropane	(3)				Not Detected					0.2	1
81) n-Propylbenzene	(3)				Not Detected					0.5	1
85) 2-Chlorotoluene	(3)				Not Detected					0.2	1
84) 4-Ethyltoluene	(3)				Not Detected					0.2	1
86) 1,3,5-Trimethylbenzene	(3)				Not Detected					0.2	1
88) Alpha Methyl Styrene	(3)				Not Detected					0.2	1
89) tert-Butylbenzene	(3)				Not Detected					0.5	1
90) 1,2,4-Trimethylbenzene	(3)				Not Detected					0.2	1
91) sec-Butylbenzene	(3)				Not Detected					0.2	1
93) 1,3-Dichlorobenzene	(3)				Not Detected					0.2	1
94) 1,4-Dichlorobenzene	(3)				Not Detected					0.2	1
92) p-Isopropyltoluene	(3)				Not Detected					0.2	1
96) Benzyl Chloride	(3)				Not Detected					0.5	1
98) 1,2-Dichlorobenzene	(3)				Not Detected					0.2	1
95) n-Butylbenzene	(3)				Not Detected					0.2	1
97) Hexachloroethane	(3)				Not Detected					0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)				Not Detected					0.2	1
101) 1,2,4-Trichlorobenzene	(3)				Not Detected					0.5	2

Digitally signed by Alexander D. Sechrist on 05/07/2018 at 13:54. Target 3.5 esignature user ID: ads07818

Data file: /chem/HP26379.i/18may07.b/fe00092.d Injection date and time: **07-MAY-2018 11:56**
Data file Sample Info. Line: VBLKF04;200;F1812730AA;VBLKF04;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1812730AA**
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

Blank Data file reference: **/chem/HP26379.i/18may07.b/fe00092.d**

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 07-MAY-2018 13:53
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18may07.b/fe00091.d**

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

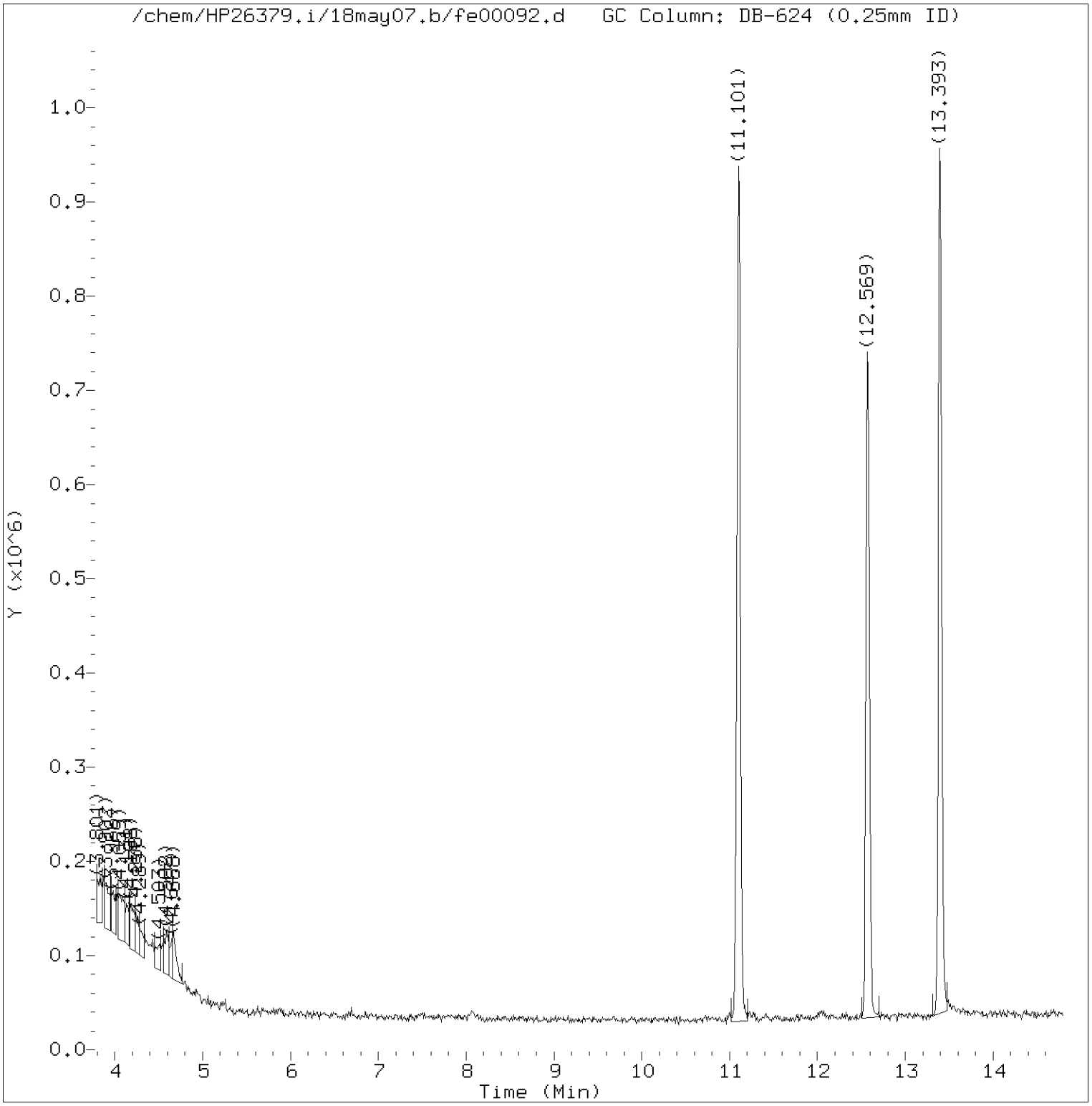
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
100) Hexachlorobutadiene	(3)				Not Detected					0.4	2
102) Naphthalene	(3)				Not Detected					0.4	1

Total number of targets = 99

Digitally signed by Alexander D. Sechrist on 05/07/2018 at 13:54. Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 05/08/2018 at 11:17. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

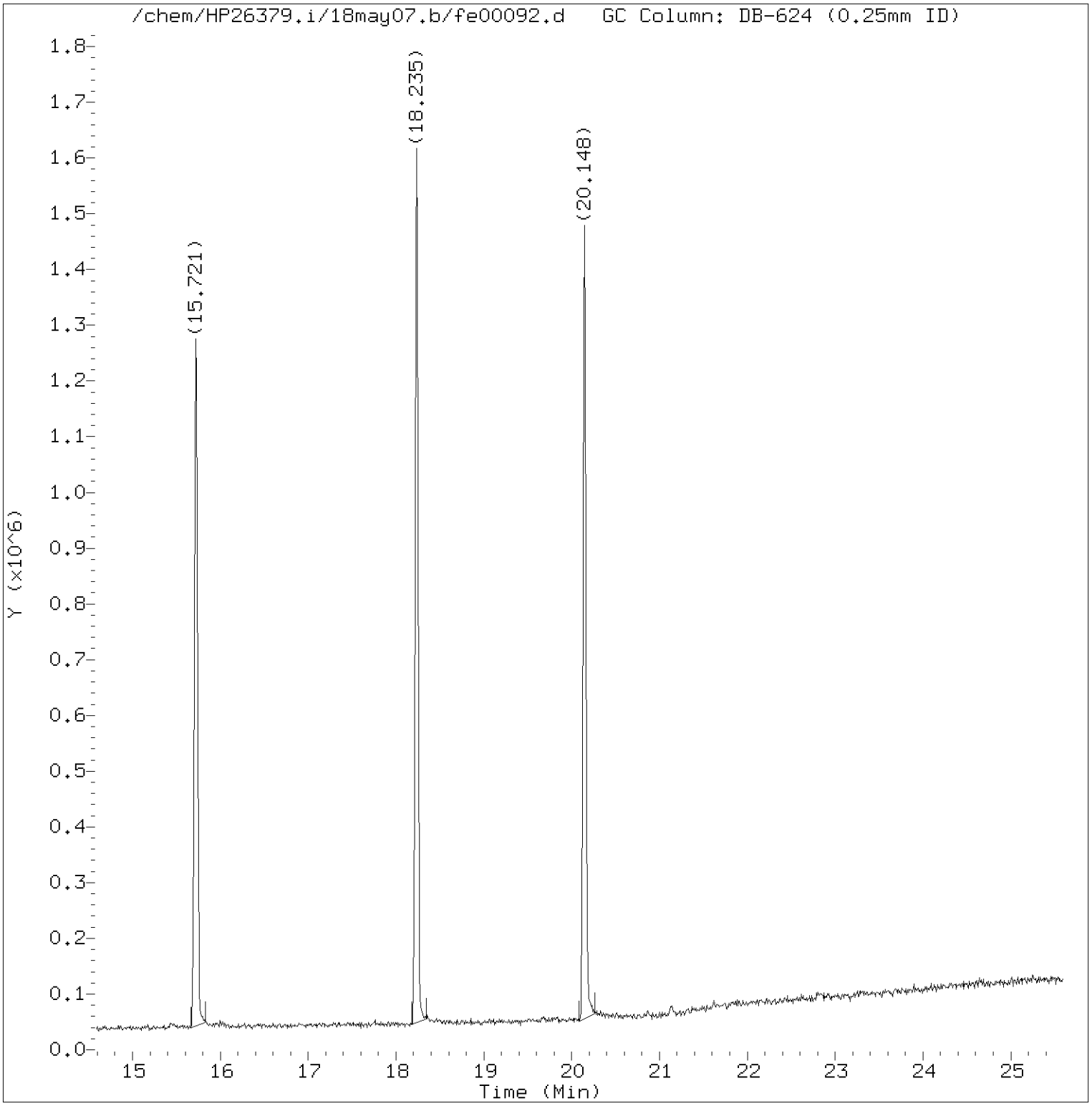
Target Revision 3.5

Data File: /chem/HP26379.i/18may07.b/fe00092.d Instrument ID: HP26379.i
Injection date and time: 07-MAY-2018 11:56 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: all
Calibration date and time: 07-MAY-2018 13:53
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

Sample Name: VBLKF04 Lab Sample ID: VBLKF04

Digitally signed by Alexander D. Sechrist
on 05/07/2018 at 13:54.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18may07.b/fe00092.d Instrument ID: HP26379.i
Injection date and time: 07-MAY-2018 11:56 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: all
Calibration date and time: 07-MAY-2018 13:53
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

Sample Name: VBLKF04 Lab Sample ID: VBLKF04

Digitally signed by Alexander D. Sechrist
on 05/07/2018 at 13:54.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may07.b/fe00092.d Instrument ID: HP26379.i
Injection date and time: 07-MAY-2018 11:56 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: all
Calibration date and time: 07-MAY-2018 13:53
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

Sample Name: VBLKF04 Lab Sample ID: VBLKF04

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
37)*Bromochloromethane	(1)	11.101	130	396198	10.000
52)*1,4-Difluorobenzene	(2)	13.400	114	889776	10.000
71)*Chlorobenzene-d5	(3)	18.235	117	939258	10.000

* = Compound is an internal standard.

Digitally signed by Alexander D. Sechrist
on 05/07/2018 at 13:54.
Target 3.5 esignature user ID: ads07818

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18may07.b/fe00093.d Injection date and time: **07-MAY-2018 12:47**
Data file Sample Info. Line: LCSF04;200;F1812730AA;LCSF04;0;3;LCS; Instrument ID: **HP26379.i** Batch: **F1812730AA**
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

Blank Data file reference: **/chem/HP26379.i/18may07.b/fe00092.d**

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 07-MAY-2018 13:53
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18may07.b/fe00091.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.101(0.007)	1021	130	401582 (-1)	10.00		243914 - 569130
52) 1,4-Difluorobenzene	13.393(0.007)	1341	114	1041640 (8)	10.00		577828 - 1348264
71) Chlorobenzene-d5	18.235(0.000)	2017	117	1090127 (0)	10.00		653090 - 1523876

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)	3.902(-0.000)	41	507405	10.619	10.62			0.5	1
2) Dichlorodifluoromethane	(1)	4.002(-0.000)	85	1522234	11.444	11.44			0.2	1
3) Chlorodifluoromethane	(1)	4.088(0.000)	51	1316714	12.390	12.39			0.2	1
4) Freon 114	(1)	4.303(-0.000)	85	1490153	11.013	11.01			0.2	1
5) Chloromethane	(1)	4.453(-0.000)	50	661147	11.410	11.41			0.2	1
6) Vinyl Chloride	(1)	4.632(-0.000)	62	403821	12.030	12.03			0.2	1
7) 1,3-Butadiene	(1)	4.661(0.000)	54	347534	11.467	11.47			0.4	2
8) Bromomethane	(1)	5.349(-0.000)	94	446721	11.585	11.59			0.5	1
9) Chloroethane	(1)	5.614(-0.000)	64	297081	11.133	11.13			0.2	1
10) Bromoethene	(1)	5.829(-0.000)	106	348271	9.783	9.78			0.4	2
13) Dichlorofluoromethane	(1)	5.972(-0.000)	67	1322125	12.151	12.15			0.2	1
12) Trichlorofluoromethane	(1)	5.872(-0.000)	101	1457606	10.292	10.29			0.2	1
11) Pentane	(1)	5.864(-0.000)	43	934083	9.661	9.66			0.5	1
14) Ethanol	(1)	6.660(-0.001)	45	186277	8.982	8.98			0.5	2
15) Freon123a	(1)	6.796(0.000)	67	1248139	10.766	10.77			0.2	1
20) Acrolein	(1)	7.498(-0.000)	56	165459	9.651	9.65			1	2
16) 1,1-Dichloroethene	(1)	6.853(-0.000)	61	768179	10.253	10.25			0.2	1
17) Freon 113	(1)	6.910(-0.000)	103	769661	9.779	9.78			0.5	2
24) Acetone	(1)	8.063(0.000)	43	1082106	12.056	12.06			0.5	2
19) Methyl Iodide	(1)	7.147(0.000)	142	797506	8.524	8.52			0.2	1
18) Carbon Disulfide	(1)	6.932(-0.000)	76	1182758	10.400	10.40			1	1
21) Isopropanol	(1)	7.705(-0.000)	45	817055	10.988	10.99			0.5	2
29) Acetonitrile	(1)	9.081(0.000)	41	649900	11.480	11.48			0.5	2
22) 3-Chloropropene	(1)	7.770(-0.000)	41	777857	11.751	11.75			0.2	1
23) Methylene Chloride	(1)	7.985(-0.000)	84	474565	12.390	12.39			0.2	1
28) tert-Butyl Alcohol	(1)	8.615(-0.000)	59	1005619	10.299	10.30			0.5	1
32) Acrylonitrile	(1)	9.732(0.000)	53	466147	10.574	10.57			0.5	2
25) trans-1,2-Dichloroethene	(1)	8.307(-0.000)	61	742404	10.333	10.33			0.2	1
27) Methyl t-Butyl Ether	(1)	8.500(-0.000)	73	1118679	9.434	9.43			0.2	1
26) Hexane	(1)	8.450(0.000)	56	596848	10.702	10.70			0.2	1
31) 1,1-Dichloroethane	(1)	9.625(-0.000)	63	1080171	10.954	10.95			0.2	1
34) Vinyl Acetate	(1)	10.098(0.000)	43	1675689	11.932	11.93			1	1
30) Di-Isopropyl Ether	(1)	9.288(0.000)	45	1487338	8.801	8.80			0.2	1
33) Ethyl Tert-Butyl Ether	(1)	10.055(0.000)	59	1223814	8.807	8.81			0.2	1
35) cis-1,2-Dichloroethene	(1)	10.707(0.000)	61	639709	9.744	9.74			0.2	1
36) 1,2-Dichloroethene (total)	(1)		61	1382113	20.077	20.08			0.2	1
45) 2-Butanone	(1)	11.803(-0.000)	43	1303071	10.985	10.98			0.5	2
40) Ethyl Acetate	(1)	11.416(-0.000)	43	1320244	10.123	10.12			0.5	1
41) Methyl Acrylate	(1)	11.452(-0.000)	55	893875	10.034	10.03			0.2	1
43) Tetrahydrofuran	(1)	11.538(-0.000)	42	673115	10.712	10.71			0.5	1
39) Chloroform	(1)	11.215(-0.000)	83	1197186	10.726	10.73			0.2	1
44) 1,1,1-Trichloroethane	(1)	11.645(-0.000)	97	1228968	10.167	10.17			0.2	1
38) Cyclohexane	(1)	11.122(-0.000)	56	688341	8.838	8.84			0.2	1

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18may07.b/fe00093.d Injection date and time: **07-MAY-2018 12:47**
Data file Sample Info. Line: LCSF04;200;F1812730AA;LCSF04;0;3;LCS; Instrument ID: **HP26379.i** Batch: **F1812730AA**
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

Blank Data file reference: **/chem/HP26379.i/18may07.b/fe00092.d**

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 07-MAY-2018 13:53
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18may07.b/fe00091.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
42) Carbon Tetrachloride	(1)	11.502(0.000)	117	1190554	9.906	9.91			0.2	1
48) Benzene	(2)	12.326(0.000)	78	1550844	11.771	11.77			0.2	1
50) 1,2-Dichloroethane	(2)	12.691(0.000)	62	939294	12.766	12.77			0.2	1
46) Isooctane	(2)	12.046(0.000)	57	2224341	11.253	11.25			0.2	1
49) Tert-Amyl Methyl Ether	(2)	12.490(-0.000)	73	960310	9.957	9.96			0.2	1
47) Heptane	(2)	12.196(0.000)	71	403364	10.732	10.73			0.5	1
51) Trichloroethene	(2)	13.343(0.000)	130	568029	10.498	10.50			0.2	1
54) Ethyl Acrylate	(2)	14.224(-0.000)	55	925987	9.817	9.82			0.2	1
55) 1,2-Dichloropropane	(2)	14.267(-0.000)	63	702028	11.927	11.93			0.2	1
53) Dibromomethane	(2)	14.088(-0.000)	174	609742	11.200	11.20			0.2	1
58) 1,4-Dioxane	(2)	14.675(-0.000)	88	270083	10.163	10.16			0.5	1
57) Methyl Methacrylate	(2)	14.575(-0.000)	69	334560	8.875	8.87			0.2	1
56) Bromodichloromethane	(2)	14.345(-0.000)	83	1181461	11.604	11.60			0.2	1
59) cis-1,3-Dichloropropene	(2)	15.406(-0.000)	75	723792	10.313	10.31			0.2	1
62) 4-Methyl-2-Pentanone	(2)	16.401(-0.000)	43	1430418	11.527	11.53			0.5	2
61) Toluene	(3)	15.800(0.000)	91	1507726	10.119	10.12			0.2	1
60) Octane	(3)	15.434(-0.000)	43	1361427	11.179	11.18			0.2	1
64) trans-1,3-Dichloropropene	(3)	16.458(0.000)	75	765085	11.461	11.46			0.2	1
65) 1,3-Dichloropropene (total)	(3)		75	1488877	21.774	21.77			0.2	1
66) Ethyl Methacrylate	(3)	16.673(0.000)	69	591538	9.248	9.25			0.2	1
67) 1,1,2-Trichloroethane	(3)	16.731(0.000)	97	719207	11.128	11.13			0.2	1
63) Tetrachloroethene	(3)	16.430(0.000)	166	953848	10.939	10.94			0.2	1
70) 2-Hexanone	(3)	17.734(-0.000)	43	1263440	11.101	11.10			0.5	2
68) Dibromochloromethane	(3)	17.024(0.000)	127	801740	10.415	10.41			0.2	1
69) 1,2-Dibromoethane	(3)	17.440(0.000)	107	926319	10.396	10.40			0.2	1
72) Chlorobenzene	(3)	18.256(0.000)	112	1385392	10.251	10.25			0.2	1
74) 1,1,1,2-Tetrachloroethane	(3)	18.342(0.000)	131	853746	10.936	10.94			0.2	1
73) Ethylbenzene	(3)	18.271(0.000)	91	1958194	9.989	9.99			0.2	1
75) m/p-Xylene	(3)	18.493(0.000)	91	1269932	9.241	9.24			0.2	1
76) o-Xylene	(3)	19.188(0.000)	91	1121720	8.720	8.72			0.2	1
77) Xylene (total)	(3)		91	2391652	17.961	17.96			0.2	1
78) Styrene	(3)	19.266(0.000)	104	945129	10.033	10.03			0.2	1
79) Bromoform	(3)	19.338(0.000)	173	907008	10.068	10.07			0.2	1
80) Cumene	(3)	19.668(0.000)	105	1723145	9.886	9.89			0.2	1
82) Bromobenzene	(3)	20.327(0.000)	156	822746	10.979	10.98			0.2	1
83) 1,1,2,2-Tetrachloroethane	(3)	20.420(0.000)	83	1456380	10.837	10.84			0.2	1
87) 1,2,3-Trichloropropane	(3)	20.670(0.000)	110	463748	10.945	10.94			0.2	1
81) n-Propylbenzene	(3)	20.319(-0.000)	120	527607	9.655	9.65			0.5	1
85) 2-Chlorotoluene	(3)	20.599(0.000)	126	565379	10.934	10.93			0.2	1
84) 4-Ethyltoluene	(3)	20.484(0.000)	105	1841737	10.279	10.28			0.2	1
86) 1,3,5-Trimethylbenzene	(3)	20.606(0.000)	105	1828348	11.745	11.74			0.2	1
88) Alpha Methyl Styrene	(3)	21.014(-0.000)	118	619104	9.840	9.84			0.2	1
89) tert-Butylbenzene	(3)	21.129(0.000)	119	1554544	10.992	10.99			0.5	1
90) 1,2,4-Trimethylbenzene	(3)	21.222(0.000)	105	1584518	10.834	10.83			0.2	1
91) sec-Butylbenzene	(3)	21.387(0.000)	105	2422185	10.943	10.94			0.2	1
93) 1,3-Dichlorobenzene	(3)	21.716(0.000)	146	1256012	10.221	10.22			0.2	1
94) 1,4-Dichlorobenzene	(3)	21.838(-0.000)	146	1183716	10.108	10.11			0.2	1
92) p-Isopropyltoluene	(3)	21.566(-0.000)	119	1802333	10.590	10.59			0.2	1
96) Benzyl Chloride	(3)	22.168(-0.000)	126	316794	12.500	12.50			0.5	1
98) 1,2-Dichlorobenzene	(3)	22.425(-0.000)	146	1085721	9.923	9.92			0.2	1
95) n-Butylbenzene	(3)	22.139(0.000)	92	1073682	10.159	10.16			0.2	1
97) Hexachloroethane	(3)	22.390(-0.000)	117	659536	10.074	10.07			0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)	23.586(0.000)	157	459655	10.181	10.18			0.2	1
101) 1,2,4-Trichlorobenzene	(3)	24.646(0.000)	180	467707	7.441	7.44			0.5	2

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18may07.b/fe00093.d Injection date and time: **07-MAY-2018 12:47**
Data file Sample Info. Line: LCSF04;200;F1812730AA;LCSF04;0;3;LCS; Instrument ID: **HP26379.i** Batch: **F1812730AA**
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

Blank Data file reference: **/chem/HP26379.i/18may07.b/fe00092.d**

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 07-MAY-2018 13:53
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18may07.b/fe00091.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
100) Hexachlorobutadiene	(3)	24.553(-0.000)	225	563598	8.408	8.41			0.4	2
102) Naphthalene	(3)	25.233(0.000)	128	822837	7.905	7.90			0.4	1

Total number of targets = 99

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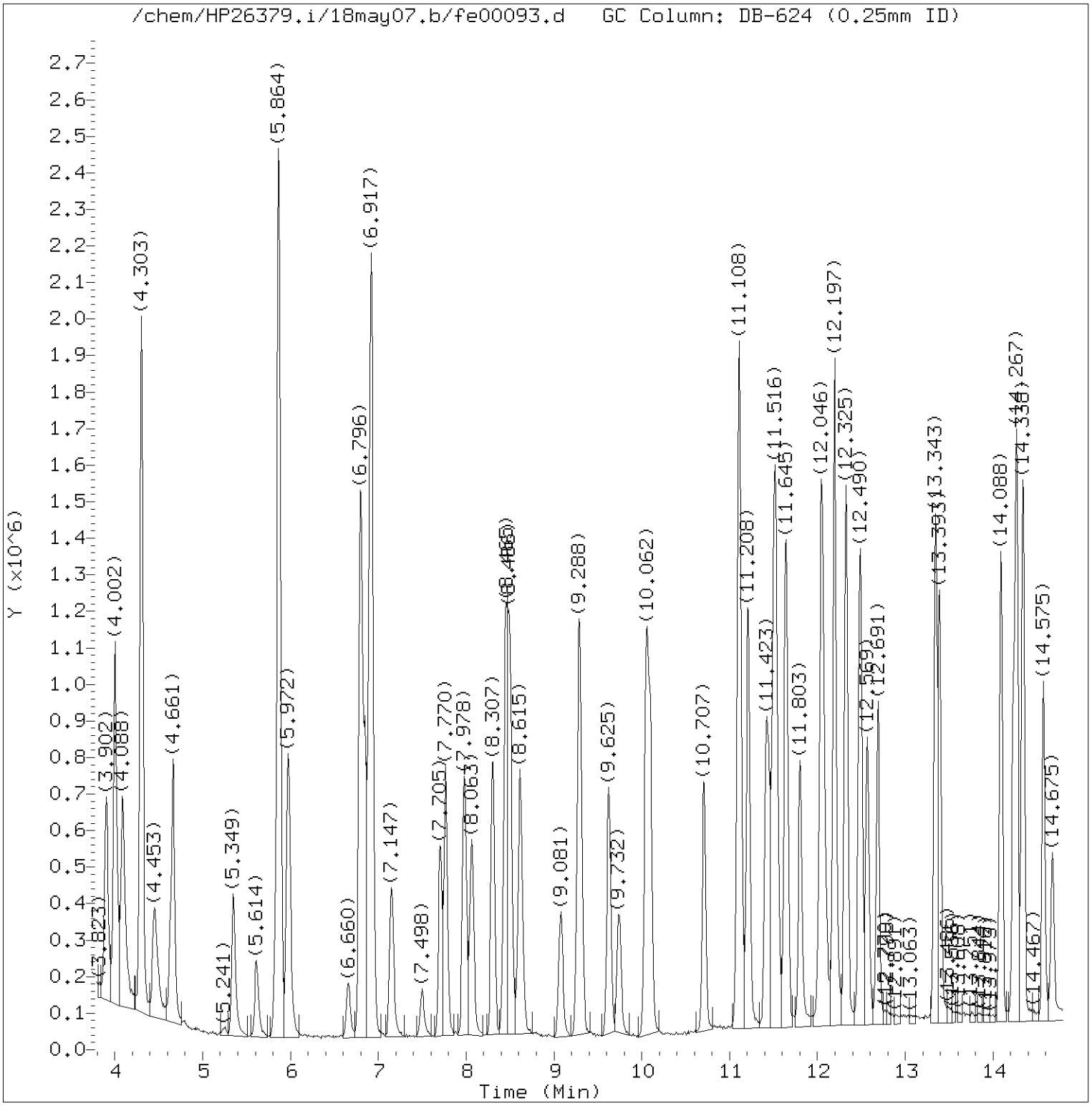
Secondary review performed and digitally signed by Jeffrey B. Smith on 05/08/2018 at 11:17. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

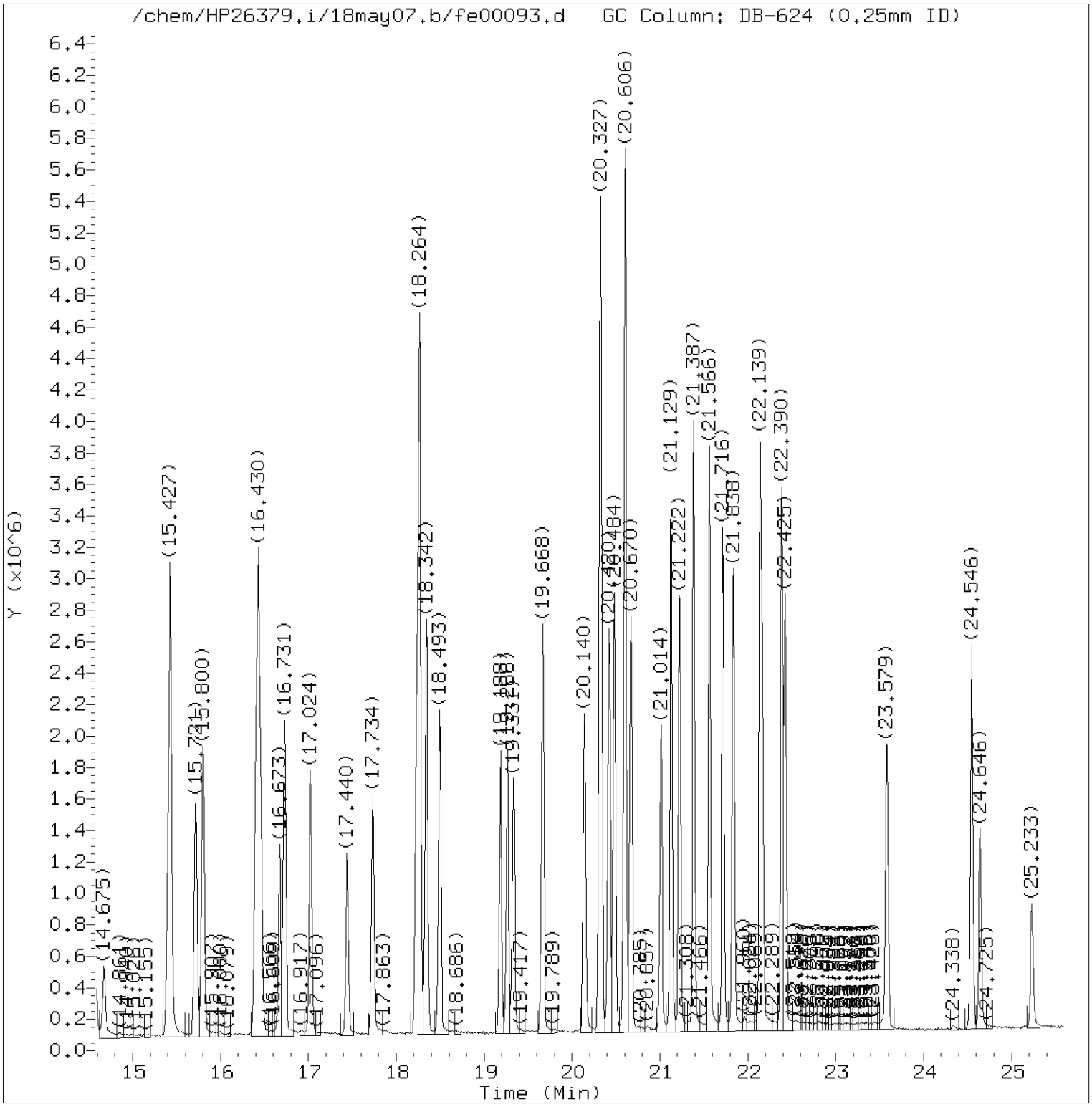
Target Revision 3.5

Data File: /chem/HP26379.i/18may07.b/fe00093.d Instrument ID: HP26379.i
Injection date and time: 07-MAY-2018 12:47 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: all
Calibration date and time: 07-MAY-2018 13:53
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

Sample Name: LCSF04 Lab Sample ID: LCSF04

Digitally signed by Alexander D. Sechrist
on 05/07/2018 at 13:54.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18may07.b/fe00093.d Instrument ID: HP26379.i
Injection date and time: 07-MAY-2018 12:47 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: all
Calibration date and time: 07-MAY-2018 13:53
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

Sample Name: LCSF04 Lab Sample ID: LCSF04

Digitally signed by Alexander D. Sechrist
on 05/07/2018 at 13:54.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may07.b/fe00093.d Instrument ID: HP26379.i
Injection date and time: 07-MAY-2018 12:47 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: all
Calibration date and time: 07-MAY-2018 13:53
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

Sample Name: LCSF04 Lab Sample ID: LCSF04

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	507405	10.619
2) Dichlorodifluoromethane	(1)	4.002	85	1522234	11.444
3) Chlorodifluoromethane	(1)	4.088	51	1316714	12.390
4) Freon 114	(1)	4.303	85	1490153	11.013
5) Chloromethane	(1)	4.453	50	661147	11.410
6) Vinyl Chloride	(1)	4.632	62	403821	12.030
7) 1,3-Butadiene	(1)	4.661	54	347534	11.467
8) Bromomethane	(1)	5.349	94	446721	11.585
9) Chloroethane	(1)	5.614	64	297081	11.133
10) Bromoethene	(1)	5.829	106	348271	9.783
11) Pentane	(1)	5.864	43	934083	9.661
12) Trichlorofluoromethane	(1)	5.872	101	1457606	10.292
13) Dichlorofluoromethane	(1)	5.972	67	1322125	12.151
14) Ethanol	(1)	6.660	45	186277	8.982
15) Freon123a	(1)	6.796	67	1248139	10.766
16) 1,1-Dichloroethene	(1)	6.853	61	768179	10.253
17) Freon 113	(1)	6.910	103	769661	9.779
18) Carbon Disulfide	(1)	6.932	76	1182758	10.400
19) Methyl Iodide	(1)	7.147	142	797506	8.524
20) Acrolein	(1)	7.498	56	165459	9.651
21) Isopropanol	(1)	7.705	45	817055	10.988
22) 3-Chloropropene	(1)	7.770	41	777857	11.751
23) Methylene Chloride	(1)	7.985	84	474565	12.390
24) Acetone	(1)	8.063	43	1082106	12.056
25) trans-1,2-Dichloroethene	(1)	8.307	61	742404	10.333
26) Hexane	(1)	8.450	56	596848	10.702
27) Methyl t-Butyl Ether	(1)	8.500	73	1118679	9.434
28) tert-Butyl Alcohol	(1)	8.615	59	1005619	10.299
29) Acetonitrile	(1)	9.081	41	649900	11.480
30) Di-Isopropyl Ether	(1)	9.288	45	1487338	8.801
31) 1,1-Dichloroethane	(1)	9.625	63	1080171	10.954
32) Acrylonitrile	(1)	9.732	53	466147	10.574
33) Ethyl Tert-Butyl Ether	(1)	10.055	59	1223814	8.807
34) Vinyl Acetate	(1)	10.098	43	1675689	11.932
35) cis-1,2-Dichloroethene	(1)	10.707	61	639709	9.744
36) 1,2-Dichloroethene (total)	(1)		61	1382113	20.077
37)*Bromochloromethane	(1)	11.101	130	401582	10.000
38) Cyclohexane	(1)	11.122	56	688341	8.838

* = Compound is an internal standard.

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on 05/07/2018 at 13:54.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may07.b/fe00093.d Instrument ID: HP26379.i
Injection date and time: 07-MAY-2018 12:47 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: all
Calibration date and time: 07-MAY-2018 13:53
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

Sample Name: LCSF04 Lab Sample ID: LCSF04

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	1197186	10.726
40) Ethyl Acetate	(1)	11.416	43	1320244	10.123
41) Methyl Acrylate	(1)	11.452	55	893875	10.034
42) Carbon Tetrachloride	(1)	11.502	117	1190554	9.906
43) Tetrahydrofuran	(1)	11.538	42	673115	10.712
44) 1,1,1-Trichloroethane	(1)	11.645	97	1228968	10.167
45) 2-Butanone	(1)	11.803	43	1303071	10.985
46) Isooctane	(2)	12.046	57	2224341	11.253
47) Heptane	(2)	12.197	71	403364	10.732
48) Benzene	(2)	12.325	78	1550844	11.771
49) Tert-Amyl Methyl Ether	(2)	12.490	73	960310	9.957
50) 1,2-Dichloroethane	(2)	12.691	62	939294	12.766
51) Trichloroethene	(2)	13.343	130	568029	10.498
52)*1,4-Difluorobenzene	(2)	13.393	114	1041640	10.000
53) Dibromomethane	(2)	14.088	174	609742	11.200
54) Ethyl Acrylate	(2)	14.224	55	925987	9.817
55) 1,2-Dichloropropane	(2)	14.267	63	702028	11.927
56) Bromodichloromethane	(2)	14.345	83	1181461	11.604
57) Methyl Methacrylate	(2)	14.575	69	334560	8.875
58) 1,4-Dioxane	(2)	14.675	88	270083	10.163
59) cis-1,3-Dichloropropene	(2)	15.406	75	723792	10.313
60) Octane	(3)	15.434	43	1361427	11.179
61) Toluene	(3)	15.800	91	1507726	10.119
62) 4-Methyl-2-Pentanone	(2)	16.401	43	1430418	11.527
63) Tetrachloroethene	(3)	16.430	166	953848	10.939
64) trans-1,3-Dichloropropene	(3)	16.459	75	765085	11.461
65) 1,3-Dichloropropene (total)	(3)		75	1488877	21.774
66) Ethyl Methacrylate	(3)	16.673	69	591538	9.248
67) 1,1,2-Trichloroethane	(3)	16.731	97	719207	11.128
68) Dibromochloromethane	(3)	17.024	127	801740	10.415
69) 1,2-Dibromoethane	(3)	17.440	107	926319	10.396
70) 2-Hexanone	(3)	17.734	43	1263440	11.101
71)*Chlorobenzene-d5	(3)	18.235	117	1090127	10.000
72) Chlorobenzene	(3)	18.256	112	1385392	10.251
73) Ethylbenzene	(3)	18.271	91	1958194	9.989
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	853746	10.936
75) m/p-Xylene	(3)	18.493	91	1269932	9.241
76) o-Xylene	(3)	19.188	91	1121720	8.720

* = Compound is an internal standard.

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Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may07.b/fe00093.d Instrument ID: HP26379.i
Injection date and time: 07-MAY-2018 12:47 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: all
Calibration date and time: 07-MAY-2018 13:53
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

Sample Name: LCSF04 Lab Sample ID: LCSF04

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	2391652	17.961
78) Styrene	(3)	19.266	104	945129	10.033
79) Bromoform	(3)	19.338	173	907008	10.068
80) Cumene	(3)	19.668	105	1723145	9.886
81) n-Propylbenzene	(3)	20.319	120	527607	9.655
82) Bromobenzene	(3)	20.327	156	822746	10.979
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	1456380	10.837
84) 4-Ethyltoluene	(3)	20.484	105	1841737	10.279
85) 2-Chlorotoluene	(3)	20.599	126	565379	10.934
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	1828348	11.745
87) 1,2,3-Trichloropropane	(3)	20.670	110	463748	10.945
88) Alpha Methyl Styrene	(3)	21.014	118	619104	9.840
89) tert-Butylbenzene	(3)	21.129	119	1554544	10.992
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	1584518	10.834
91) sec-Butylbenzene	(3)	21.387	105	2422185	10.943
92) p-Isopropyltoluene	(3)	21.566	119	1802333	10.590
93) 1,3-Dichlorobenzene	(3)	21.716	146	1256012	10.221
94) 1,4-Dichlorobenzene	(3)	21.838	146	1183716	10.108
95) n-Butylbenzene	(3)	22.139	92	1073682	10.159
96) Benzyl Chloride	(3)	22.168	126	316794	12.500
97) Hexachloroethane	(3)	22.390	117	659536	10.074
98) 1,2-Dichlorobenzene	(3)	22.425	146	1085721	9.923
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	459655	10.181
100) Hexachlorobutadiene	(3)	24.553	225	563598	8.408
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	467707	7.441
102) Naphthalene	(3)	25.233	128	822837	7.905

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on 05/07/2018 at 13:54.
Target 3.5 esignature user ID: ads07818

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18may07.b/fe00094.d Injection date and time: **07-MAY-2018 13:17**
Data file Sample Info. Line: LCSDF04;200;F1812730AA;LCSDF04;0;3;LCSD; Instrument ID: **HP26379.i** Batch: **F1812730AA**
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

Blank Data file reference: **/chem/HP26379.i/18may07.b/fe00092.d**

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 07-MAY-2018 13:53
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18may07.b/fe00091.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.115(-0.007)	1023	130	386573 (-5)	10.00		243914 - 569130
52) 1,4-Difluorobenzene	13.400(0.000)	1342	114	1007306 (5)	10.00		577828 - 1348264
71) Chlorobenzene-d5	18.235(0.000)	2017	117	1074293 (-1)	10.00		653090 - 1523876

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)	3.895(0.000)	41	555226	12.070	12.07			0.5	1
2) Dichlorodifluoromethane	(1)	3.995(0.000)	85	1506721	11.767	11.77			0.2	1
3) Chlorodifluoromethane	(1)	4.081(0.001)	51	1311472	12.819	12.82			0.2	1
4) Freon 114	(1)	4.296(0.000)	85	1485377	11.404	11.40			0.2	1
5) Chloromethane	(1)	4.446(0.000)	50	661348	11.856	11.86			0.2	1
6) Vinyl Chloride	(1)	4.625(0.000)	62	410905	12.716	12.72			0.2	1
7) 1,3-Butadiene	(1)	4.661(0.000)	54	332877	11.409	11.41			0.4	2
8) Bromomethane	(1)	5.342(0.000)	94	457372	12.322	12.32			0.5	1
9) Chloroethane	(1)	5.607(0.000)	64	305377	11.889	11.89			0.2	1
10) Bromoethene	(1)	5.821(0.000)	106	388490	11.337	11.34			0.4	2
13) Dichlorofluoromethane	(1)	5.972(0.000)	67	1323219	12.633	12.63			0.2	1
12) Trichlorofluoromethane	(1)	5.872(0.000)	101	1461547	10.721	10.72			0.2	1
11) Pentane	(1)	5.864(0.000)	43	1009506	10.846	10.85			0.5	1
14) Ethanol	(1)	6.660(-0.000)	45	204051	10.221	10.22			0.5	2
15) Freon123a	(1)	6.803(0.000)	67	1235823	11.073	11.07			0.2	1
20) Acrolein	(1)	7.498(0.000)	56	180366	10.929	10.93			1	2
16) 1,1-Dichloroethene	(1)	6.853(0.000)	61	826892	11.465	11.47			0.2	1
17) Freon 113	(1)	6.910(0.000)	103	764816	10.094	10.09			0.5	2
24) Acetone	(1)	8.071(0.000)	43	1107429	12.817	12.82			0.5	2
19) Methyl Iodide	(1)	7.154(0.000)	142	861863	9.570	9.57			0.2	1
18) Carbon Disulfide	(1)	6.932(0.000)	76	1184850	10.823	10.82			1	1
21) Isopropanol	(1)	7.712(-0.000)	45	892574	12.469	12.47			0.5	2
29) Acetonitrile	(1)	9.081(0.001)	41	660214	12.114	12.11			0.5	2
22) 3-Chloropropene	(1)	7.770(0.000)	41	936456	14.696	14.70			0.2	1
23) Methylene Chloride	(1)	7.985(0.000)	84	481923	13.070	13.07			0.2	1
28) tert-Butyl Alcohol	(1)	8.622(-0.000)	59	1082249	11.514	11.51			0.5	1
32) Acrylonitrile	(1)	9.747(0.000)	53	491794	11.588	11.59			0.5	2
25) trans-1,2-Dichloroethene	(1)	8.307(0.000)	61	781095	11.294	11.29			0.2	1
27) Methyl t-Butyl Ether	(1)	8.500(0.000)	73	1182874	10.362	10.36			0.2	1
26) Hexane	(1)	8.457(0.000)	56	629050	11.717	11.72			0.2	1
31) 1,1-Dichloroethane	(1)	9.632(-0.000)	63	1116012	11.757	11.76			0.2	1
34) Vinyl Acetate	(1)	10.112(-0.000)	43	1806309	13.362	13.36			1	1
30) Di-Isopropyl Ether	(1)	9.303(-0.000)	45	1660457	10.207	10.21			0.2	1
33) Ethyl Tert-Butyl Ether	(1)	10.062(0.000)	59	1324134	9.899	9.90			0.2	1
35) cis-1,2-Dichloroethene	(1)	10.721(-0.000)	61	686401	10.861	10.86			0.2	1
36) 1,2-Dichloroethene (total)	(1)		61	1467496	22.155	22.15			0.2	1
45) 2-Butanone	(1)	11.810(0.000)	43	1331316	11.659	11.66			0.5	2
40) Ethyl Acetate	(1)	11.423(0.000)	43	1367864	10.895	10.90			0.5	1
41) Methyl Acrylate	(1)	11.459(0.000)	55	933002	10.880	10.88			0.2	1
43) Tetrahydrofuran	(1)	11.545(0.000)	42	705535	11.664	11.66			0.5	1
39) Chloroform	(1)	11.222(0.000)	83	1189880	11.075	11.07			0.2	1
44) 1,1,1-Trichloroethane	(1)	11.652(0.000)	97	1214130	10.434	10.43			0.2	1
38) Cyclohexane	(1)	11.129(0.000)	56	749156	9.992	9.99			0.2	1

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Data file: /chem/HP26379.i/18may07.b/fe00094.d Injection date and time: **07-MAY-2018 13:17**
Data file Sample Info. Line: LCSDF04;200;F1812730AA;LCSDF04;0;3;LCSD; Instrument ID: **HP26379.i** Batch: **F1812730AA**
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

Blank Data file reference: **/chem/HP26379.i/18may07.b/fe00092.d**

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 07-MAY-2018 13:53
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18may07.b/fe00091.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
42) Carbon Tetrachloride	(1)	11.516(0.000)	117	1147992	9.922	9.92			0.2	1
48) Benzene	(2)	12.340(-0.000)	78	1568907	12.314	12.31			0.2	1
50) 1,2-Dichloroethane	(2)	12.698(-0.000)	62	950570	13.359	13.36			0.2	1
46) Isooctane	(2)	12.060(-0.000)	57	2328612	12.182	12.18			0.2	1
49) Tert-Amyl Methyl Ether	(2)	12.497(-0.000)	73	1017948	10.915	10.91			0.2	1
47) Heptane	(2)	12.204(-0.000)	71	423716	11.658	11.66			0.5	1
51) Trichloroethene	(2)	13.350(-0.000)	130	584422	11.170	11.17			0.2	1
54) Ethyl Acrylate	(2)	14.238(-0.000)	55	931536	10.213	10.21			0.2	1
55) 1,2-Dichloropropane	(2)	14.274(0.000)	63	698275	12.268	12.27			0.2	1
53) Dibromomethane	(2)	14.102(-0.000)	174	585751	11.126	11.13			0.2	1
58) 1,4-Dioxane	(2)	14.682(0.000)	88	293702	11.429	11.43			0.5	1
57) Methyl Methacrylate	(2)	14.582(-0.000)	69	346180	9.496	9.50			0.2	1
56) Bromodichloromethane	(2)	14.346(0.000)	83	1115191	11.327	11.33			0.2	1
59) cis-1,3-Dichloropropene	(2)	15.413(-0.000)	75	721853	10.636	10.64			0.2	1
62) 4-Methyl-2-Pentanone	(2)	16.408(0.000)	43	1421571	11.846	11.85			0.5	2
61) Toluene	(3)	15.807(-0.000)	91	1582385	10.776	10.78			0.2	1
60) Octane	(3)	15.441(-0.000)	43	1440240	12.000	12.00			0.2	1
64) trans-1,3-Dichloropropene	(3)	16.466(-0.000)	75	757579	11.516	11.52			0.2	1
65) 1,3-Dichloropropene (total)	(3)		75	1479432	22.152	22.15			0.2	1
66) Ethyl Methacrylate	(3)	16.681(-0.000)	69	602804	9.563	9.56			0.2	1
67) 1,1,2-Trichloroethane	(3)	16.738(-0.000)	97	714004	11.210	11.21			0.2	1
63) Tetrachloroethene	(3)	16.437(-0.000)	166	955963	11.125	11.12			0.2	1
70) 2-Hexanone	(3)	17.741(-0.000)	43	1264217	11.271	11.27			0.5	2
68) Dibromochloromethane	(3)	17.032(-0.000)	127	739897	9.753	9.75			0.2	1
69) 1,2-Dibromoethane	(3)	17.447(-0.000)	107	923083	10.513	10.51			0.2	1
72) Chlorobenzene	(3)	18.264(0.000)	112	1453340	10.912	10.91			0.2	1
74) 1,1,1,2-Tetrachloroethane	(3)	18.350(0.000)	131	788796	10.253	10.25			0.2	1
73) Ethylbenzene	(3)	18.278(0.000)	91	2063759	10.682	10.68			0.2	1
75) m/p-Xylene	(3)	18.500(-0.000)	91	1394253	10.295	10.30			0.2	1
76) o-Xylene	(3)	19.195(-0.000)	91	1227549	9.683	9.68			0.2	1
77) Xylene (total)	(3)		91	2621802	19.978	19.98			0.2	1
78) Styrene	(3)	19.274(0.000)	104	972231	10.473	10.47			0.2	1
79) Bromoform	(3)	19.338(0.000)	173	795226	8.957	8.96			0.2	1
80) Cumene	(3)	19.675(0.000)	105	1867488	10.872	10.87			0.2	1
82) Bromobenzene	(3)	20.334(0.000)	156	851344	11.528	11.53			0.2	1
83) 1,1,2,2-Tetrachloroethane	(3)	20.427(0.000)	83	1420899	10.728	10.73			0.2	1
87) 1,2,3-Trichloropropane	(3)	20.678(-0.000)	110	459760	11.011	11.01			0.2	1
81) n-Propylbenzene	(3)	20.327(-0.000)	120	570908	10.601	10.60			0.5	1
85) 2-Chlorotoluene	(3)	20.606(0.000)	126	616093	12.090	12.09			0.2	1
84) 4-Ethyltoluene	(3)	20.491(0.000)	105	2034781M	11.523	11.52			0.2	1
86) 1,3,5-Trimethylbenzene	(3)	20.613(0.000)	105	1943740	12.670	12.67			0.2	1
88) Alpha Methyl Styrene	(3)	21.014(0.000)	118	635252	10.245	10.25			0.2	1
89) tert-Butylbenzene	(3)	21.136(-0.000)	119	1713584	12.295	12.30			0.5	1
90) 1,2,4-Trimethylbenzene	(3)	21.229(0.000)	105	1797318	12.471	12.47			0.2	1
91) sec-Butylbenzene	(3)	21.387(0.000)	105	2636435	12.086	12.09			0.2	1
93) 1,3-Dichlorobenzene	(3)	21.723(0.000)	146	1330263	10.985	10.98			0.2	1
94) 1,4-Dichlorobenzene	(3)	21.838(0.000)	146	1260038	10.918	10.92			0.2	1
92) p-Isopropyltoluene	(3)	21.566(-0.000)	119	1995840	11.899	11.90			0.2	1
96) Benzyl Chloride	(3)	22.168(0.000)	126	302937	12.129	12.13			0.5	1
98) 1,2-Dichlorobenzene	(3)	22.425(0.000)	146	1168751	10.839	10.84			0.2	1
95) n-Butylbenzene	(3)	22.146(0.000)	92	1156301	11.102	11.10			0.2	1
97) Hexachloroethane	(3)	22.390(0.000)	117	593939	9.206	9.21			0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)	23.586(0.000)	157	453027	10.182	10.18			0.2	1
101) 1,2,4-Trichlorobenzene	(3)	24.646(0.000)	180	584321	9.434	9.43			0.5	2

M = Compound was manually integrated.

Digitally signed by Alexander D. Sechrist on 05/07/2018 at 13:54. Target 3.5 esignature user ID: ads07818

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18may07.b/fe00094.d Injection date and time: **07-MAY-2018 13:17**
Data file Sample Info. Line: LCSDF04;200;F1812730AA;LCSDF04;0;3;LCSD; Instrument ID: **HP26379.i** Batch: **F1812730AA**
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

Blank Data file reference: **/chem/HP26379.i/18may07.b/fe00092.d**

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 07-MAY-2018 13:53
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18may07.b/fe00091.d**

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

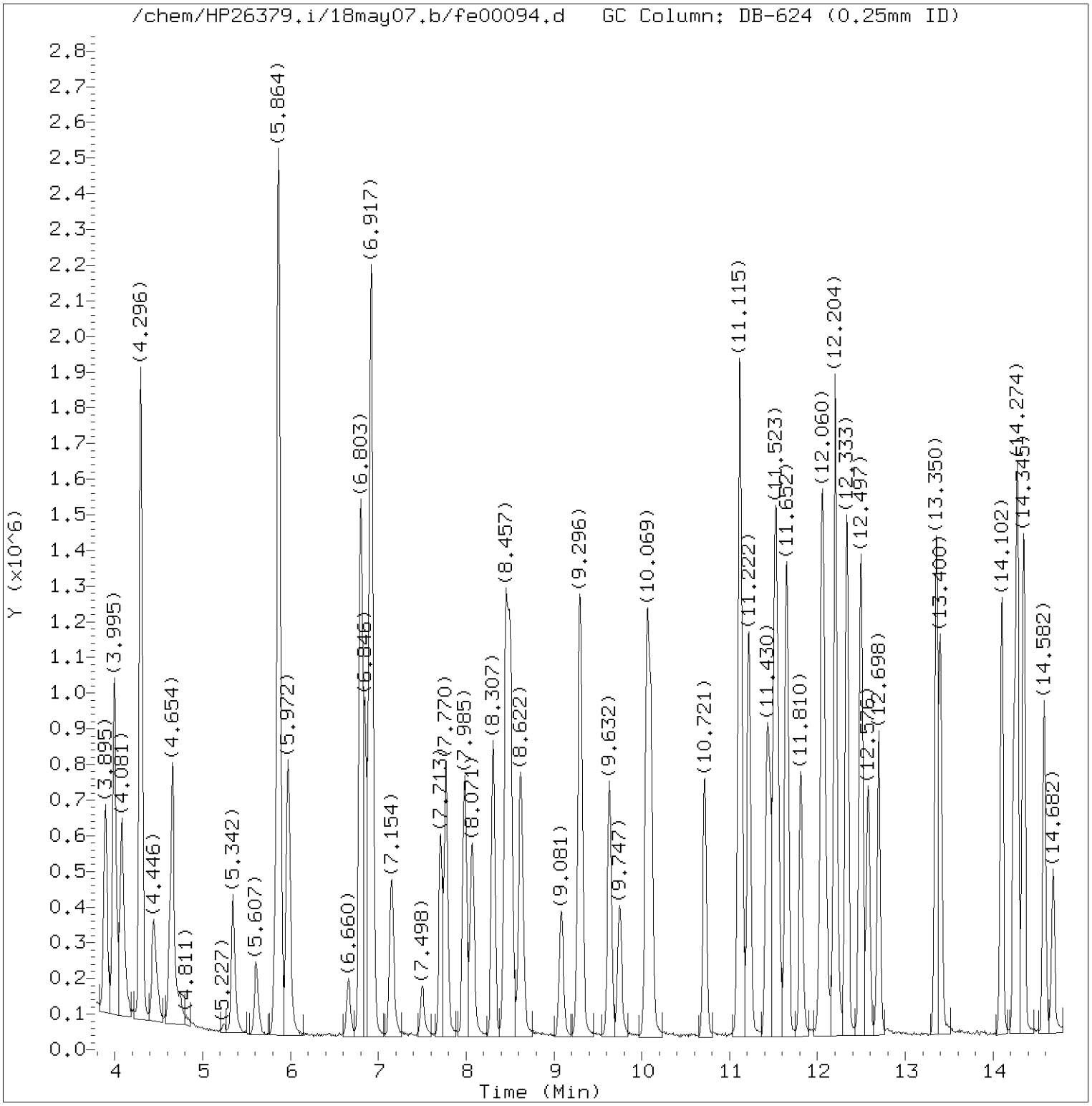
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
100) Hexachlorobutadiene	(3)	24.546(0.000)	225	603561	9.137	9.14			0.4	2
102) Naphthalene	(3)	25.233(0.000)	128	1015382	9.898	9.90			0.4	1

Total number of targets = 99

Digitally signed by Alexander D. Sechrist on 05/07/2018 at 13:54. Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 05/08/2018 at 11:17. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

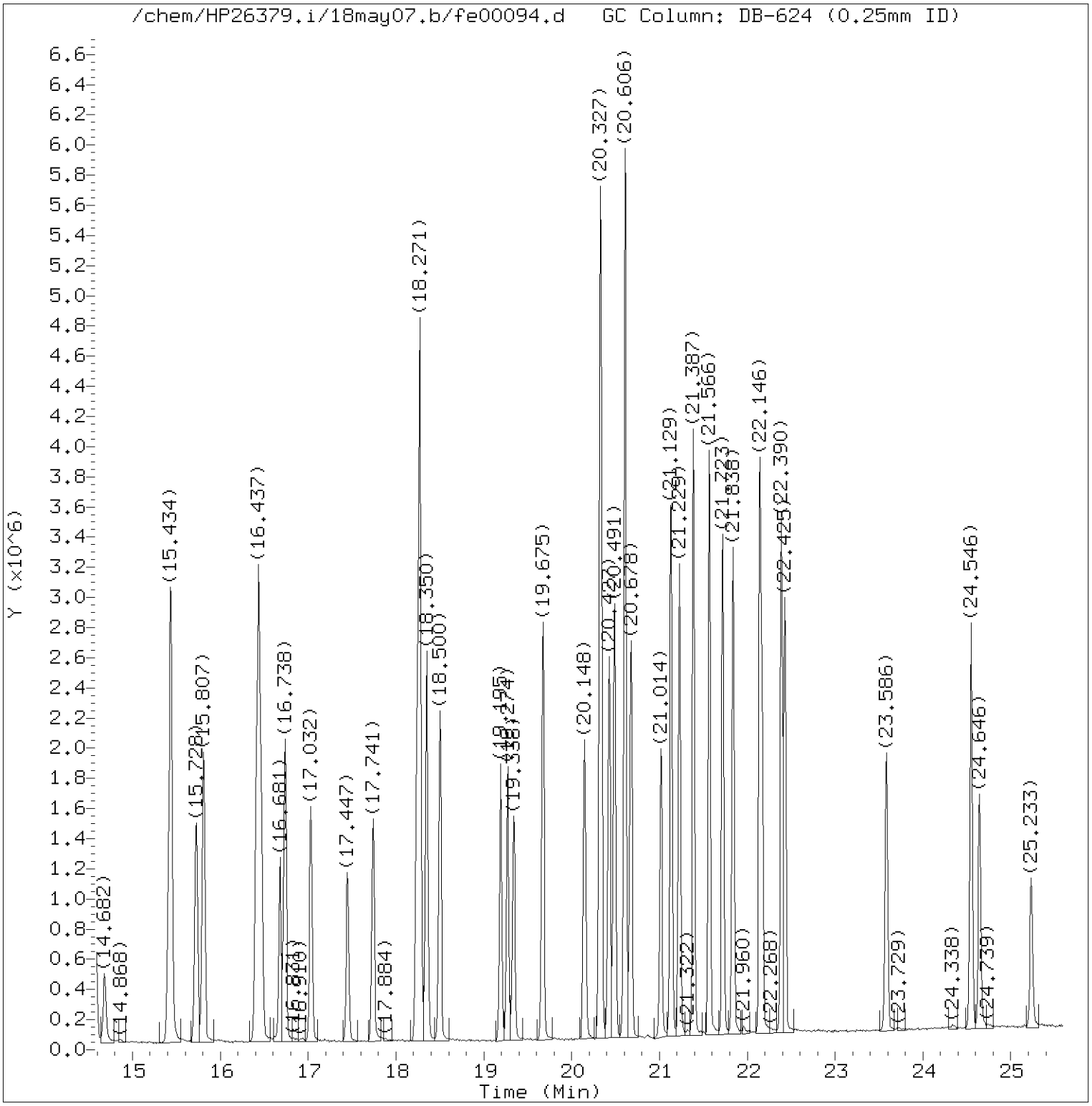
Target Revision 3.5

Data File: /chem/HP26379.i/18may07.b/fe00094.d Instrument ID: HP26379.i
Injection date and time: 07-MAY-2018 13:17 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: all
Calibration date and time: 07-MAY-2018 13:53
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

Sample Name: LCSDF04 Lab Sample ID: LCSDF04

Digitally signed by Alexander D. Sechrist
on 05/07/2018 at 13:54.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18may07.b/fe00094.d Instrument ID: HP26379.i
Injection date and time: 07-MAY-2018 13:17 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: all
Calibration date and time: 07-MAY-2018 13:53
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

Sample Name: LCSDF04 Lab Sample ID: LCSDF04

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on 05/07/2018 at 13:54.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may07.b/fe00094.d Instrument ID: HP26379.i
Injection date and time: 07-MAY-2018 13:17 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: all
Calibration date and time: 07-MAY-2018 13:53
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

Sample Name: LCSDF04 Lab Sample ID: LCSDF04

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.895	41	555226	12.070
2) Dichlorodifluoromethane	(1)	3.995	85	1506721	11.767
3) Chlorodifluoromethane	(1)	4.081	51	1311472	12.819
4) Freon 114	(1)	4.296	85	1485377	11.404
5) Chloromethane	(1)	4.446	50	661348	11.856
6) Vinyl Chloride	(1)	4.625	62	410905	12.716
7) 1,3-Butadiene	(1)	4.661	54	332877	11.409
8) Bromomethane	(1)	5.342	94	457372	12.322
9) Chloroethane	(1)	5.607	64	305377	11.889
10) Bromoethene	(1)	5.821	106	388490	11.337
11) Pentane	(1)	5.864	43	1009506	10.846
12) Trichlorofluoromethane	(1)	5.872	101	1461547	10.721
13) Dichlorofluoromethane	(1)	5.972	67	1323219	12.633
14) Ethanol	(1)	6.660	45	204051	10.221
15) Freon123a	(1)	6.803	67	1235823	11.073
16) 1,1-Dichloroethene	(1)	6.853	61	826892	11.465
17) Freon 113	(1)	6.910	103	764816	10.094
18) Carbon Disulfide	(1)	6.932	76	1184850	10.823
19) Methyl Iodide	(1)	7.154	142	861863	9.570
20) Acrolein	(1)	7.498	56	180366	10.929
21) Isopropanol	(1)	7.713	45	892574	12.469
22) 3-Chloropropene	(1)	7.770	41	936456	14.696
23) Methylene Chloride	(1)	7.985	84	481923	13.070
24) Acetone	(1)	8.071	43	1107429	12.817
25) trans-1,2-Dichloroethene	(1)	8.307	61	781095	11.294
26) Hexane	(1)	8.457	56	629050	11.717
27) Methyl t-Butyl Ether	(1)	8.500	73	1182874	10.362
28) tert-Butyl Alcohol	(1)	8.622	59	1082249	11.514
29) Acetonitrile	(1)	9.081	41	660214	12.114
30) Di-Isopropyl Ether	(1)	9.303	45	1660457	10.207
31) 1,1-Dichloroethane	(1)	9.632	63	1116012	11.757
32) Acrylonitrile	(1)	9.747	53	491794	11.588
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	1324134	9.899
34) Vinyl Acetate	(1)	10.112	43	1806309	13.362
35) cis-1,2-Dichloroethene	(1)	10.721	61	686401	10.861
36) 1,2-Dichloroethene (total)	(1)		61	1467496	22.155
37)*Bromochloromethane	(1)	11.115	130	386573	10.000
38) Cyclohexane	(1)	11.129	56	749156	9.992

* = Compound is an internal standard.

Digitally signed by Alexander D. Sechrist
on 05/07/2018 at 13:54.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may07.b/fe00094.d Instrument ID: HP26379.i
Injection date and time: 07-MAY-2018 13:17 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: all
Calibration date and time: 07-MAY-2018 13:53
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

Sample Name: LCSDF04 Lab Sample ID: LCSDF04

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.222	83	1189880	11.075
40) Ethyl Acetate	(1)	11.423	43	1367864	10.895
41) Methyl Acrylate	(1)	11.459	55	933002	10.880
42) Carbon Tetrachloride	(1)	11.516	117	1147992	9.922
43) Tetrahydrofuran	(1)	11.545	42	705535	11.664
44) 1,1,1-Trichloroethane	(1)	11.652	97	1214130	10.434
45) 2-Butanone	(1)	11.810	43	1331316	11.659
46) Isooctane	(2)	12.060	57	2328612	12.182
47) Heptane	(2)	12.204	71	423716	11.658
48) Benzene	(2)	12.340	78	1568907	12.314
49) Tert-Amyl Methyl Ether	(2)	12.497	73	1017948	10.915
50) 1,2-Dichloroethane	(2)	12.698	62	950570	13.359
51) Trichloroethene	(2)	13.350	130	584422	11.170
52)*1,4-Difluorobenzene	(2)	13.400	114	1007306	10.000
53) Dibromomethane	(2)	14.102	174	585751	11.126
54) Ethyl Acrylate	(2)	14.238	55	931536	10.213
55) 1,2-Dichloropropane	(2)	14.274	63	698275	12.268
56) Bromodichloromethane	(2)	14.345	83	1115191	11.327
57) Methyl Methacrylate	(2)	14.582	69	346180	9.496
58) 1,4-Dioxane	(2)	14.682	88	293702	11.429
59) cis-1,3-Dichloropropene	(2)	15.413	75	721853	10.636
60) Octane	(3)	15.441	43	1440240	12.000
61) Toluene	(3)	15.807	91	1582385	10.776
62) 4-Methyl-2-Pentanone	(2)	16.408	43	1421571	11.846
63) Tetrachloroethene	(3)	16.437	166	955963	11.125
64) trans-1,3-Dichloropropene	(3)	16.466	75	757579	11.516
65) 1,3-Dichloropropene (total)	(3)		75	1479432	22.152
66) Ethyl Methacrylate	(3)	16.681	69	602804	9.563
67) 1,1,2-Trichloroethane	(3)	16.738	97	714004	11.210
68) Dibromochloromethane	(3)	17.032	127	739897	9.753
69) 1,2-Dibromoethane	(3)	17.447	107	923083	10.513
70) 2-Hexanone	(3)	17.741	43	1264217	11.271
71)*Chlorobenzene-d5	(3)	18.235	117	1074293	10.000
72) Chlorobenzene	(3)	18.264	112	1453340	10.912
73) Ethylbenzene	(3)	18.278	91	2063759	10.682
74) 1,1,1,2-Tetrachloroethane	(3)	18.350	131	788796	10.253
75) m/p-Xylene	(3)	18.500	91	1394253	10.295
76) o-Xylene	(3)	19.195	91	1227549	9.683

* = Compound is an internal standard.

Digitally signed by Alexander D. Sechrist
on 05/07/2018 at 13:54.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may07.b/fe00094.d Instrument ID: HP26379.i
Injection date and time: 07-MAY-2018 13:17 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: all
Calibration date and time: 07-MAY-2018 13:53
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

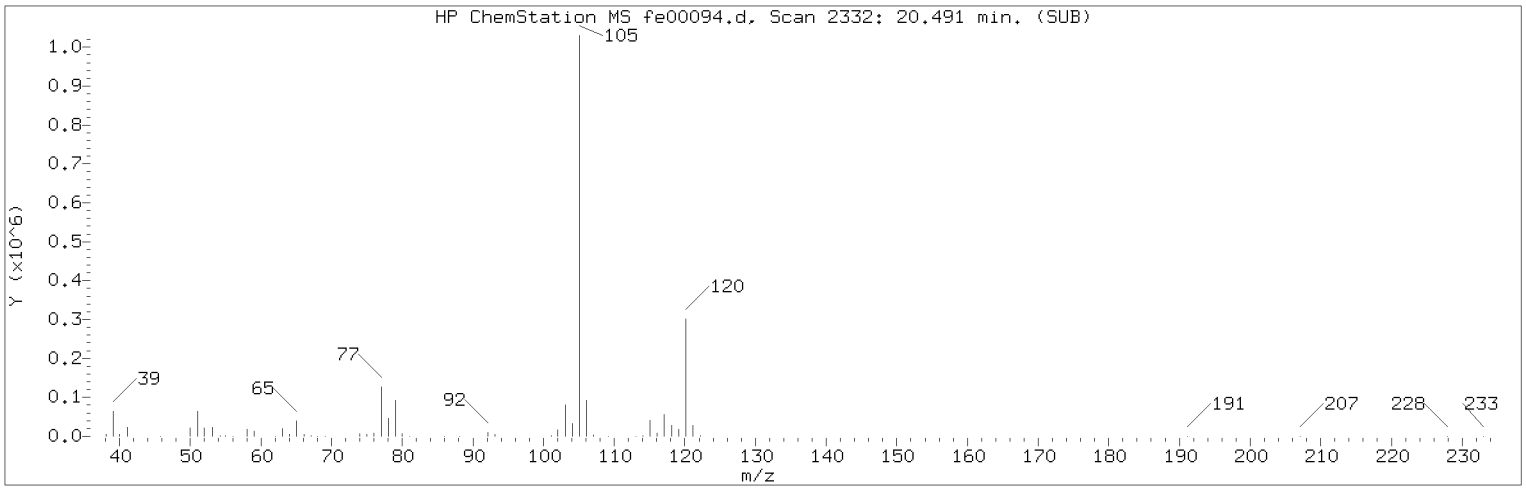
Sample Name: LCSDF04 Lab Sample ID: LCSDF04

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	2621802	19.978
78) Styrene	(3)	19.274	104	972231	10.473
79) Bromoform	(3)	19.338	173	795226	8.957
80) Cumene	(3)	19.675	105	1867488	10.872
81) n-Propylbenzene	(3)	20.327	120	570908	10.601
82) Bromobenzene	(3)	20.334	156	851344	11.528
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	1420899	10.728
84) 4-Ethyltoluene	(3)	20.491	105	2034781M	11.523
85) 2-Chlorotoluene	(3)	20.606	126	616093	12.090
86) 1,3,5-Trimethylbenzene	(3)	20.613	105	1943740	12.670
87) 1,2,3-Trichloropropane	(3)	20.678	110	459760	11.011
88) Alpha Methyl Styrene	(3)	21.014	118	635252	10.245
89) tert-Butylbenzene	(3)	21.136	119	1713584	12.295
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	1797318	12.471
91) sec-Butylbenzene	(3)	21.387	105	2636435	12.086
92) p-Isopropyltoluene	(3)	21.566	119	1995840	11.899
93) 1,3-Dichlorobenzene	(3)	21.723	146	1330263	10.985
94) 1,4-Dichlorobenzene	(3)	21.838	146	1260038	10.918
95) n-Butylbenzene	(3)	22.146	92	1156301	11.102
96) Benzyl Chloride	(3)	22.168	126	302937	12.129
97) Hexachloroethane	(3)	22.390	117	593939	9.206
98) 1,2-Dichlorobenzene	(3)	22.425	146	1168751	10.839
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	453027	10.182
100) Hexachlorobutadiene	(3)	24.546	225	603561	9.137
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	584321	9.434
102) Naphthalene	(3)	25.233	128	1015382	9.898

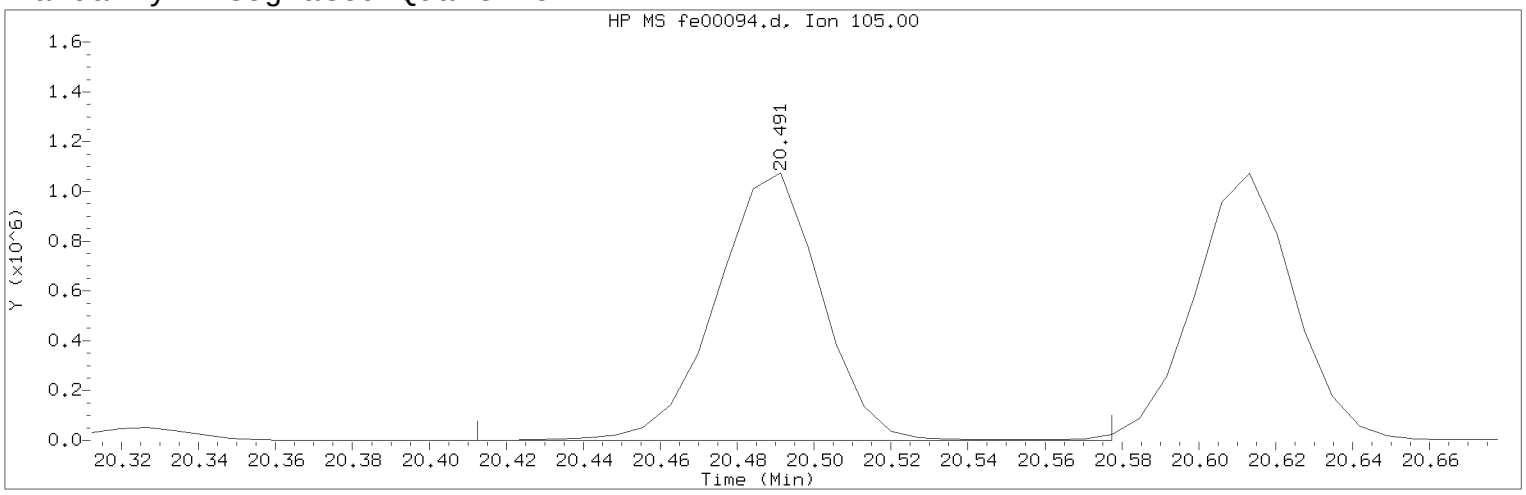
M = Compound was manually integrated.

Digitally signed by Alexander D. Sechrist
on 05/07/2018 at 13:54.
Target 3.5 esignature user ID: ads07818

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18may07.b/fe00094.d Instrument ID: HP26379.i
Injection date and time: 07-MAY-2018 13:17 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: all
Calibration date and time: 07-MAY-2018 13:53
Date, time and analyst ID of latest file update: 07-May-2018 13:53 ads07818

Sample Name: LCSDF04 Lab Sample ID: LCSDF04

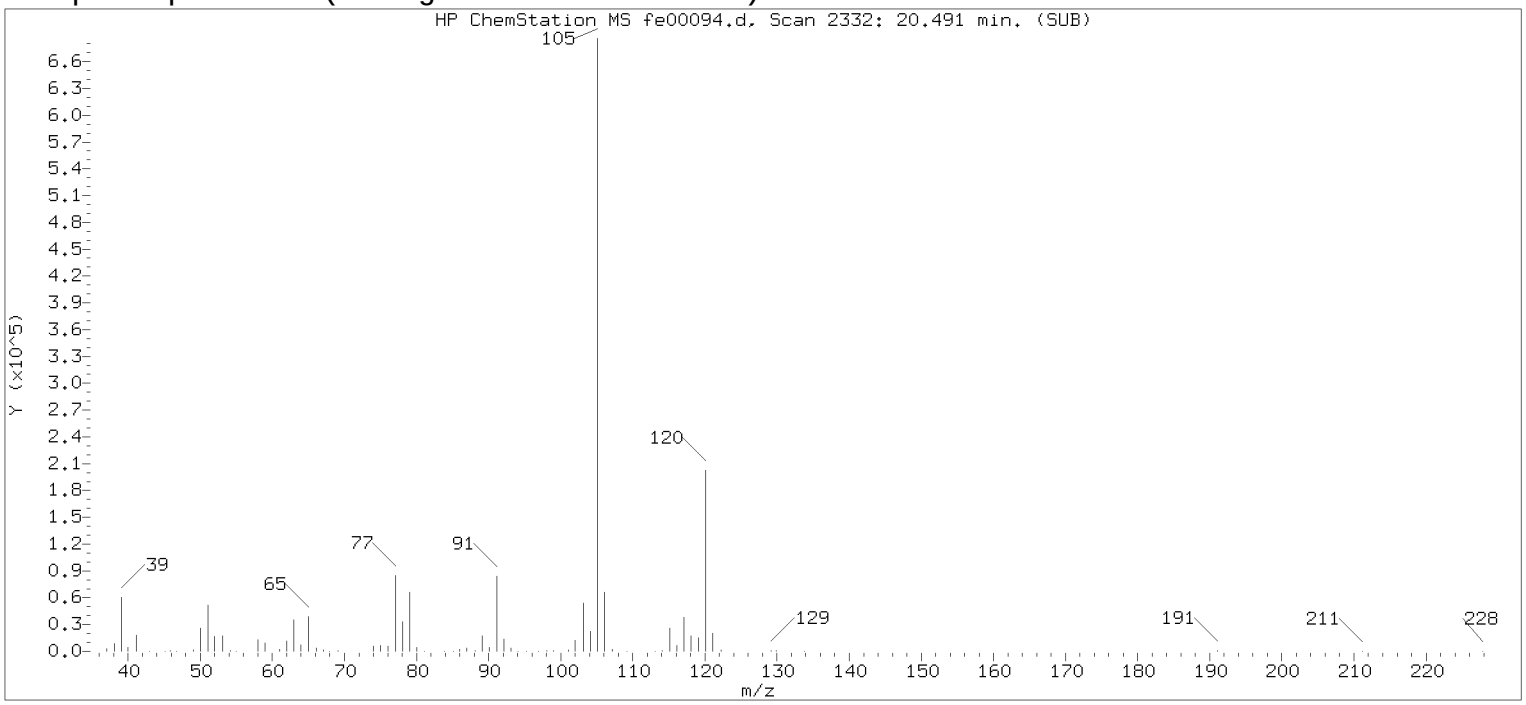
Compound Number : 84
Compound Name : 4-Ethyltoluene
Scan Number : 2332
Retention Time (minutes): 20.491
Quant Ion : 105.00
Area (flag) : 2034781M
Concentration (ppb(v)) : 11.5235
Integration start scan : 2320 Integration stop scan: 2343
Y at integration start : 386 Y at integration end: 386

Reason for manual integration: improper integration

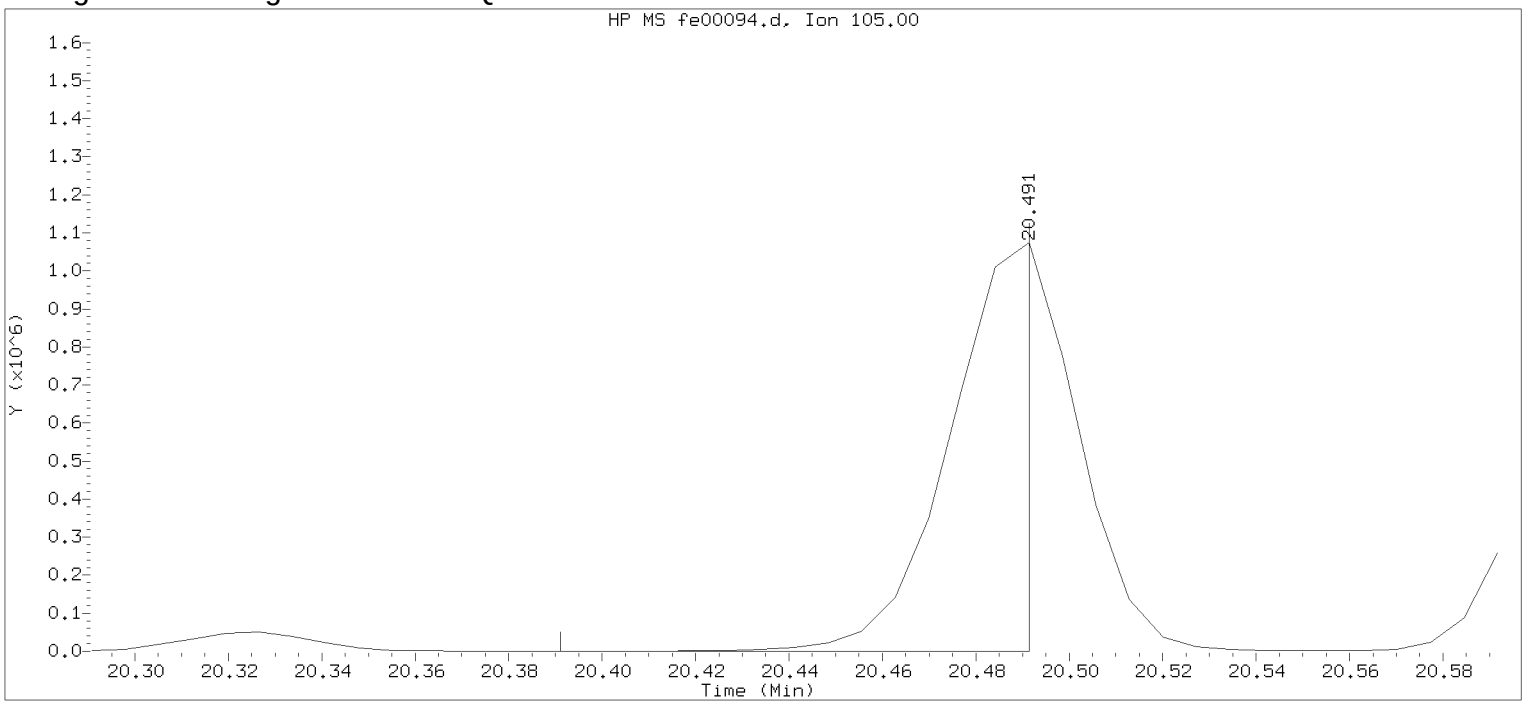
Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 05/07/2018 at 13:54.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 05/08/2018 at 11:17.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18may07.b/fe00094.d Instrument ID: HP26379.i
Injection date and time: 07-MAY-2018 13:17 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: all
Calibration date and time: 07-MAY-2018 11:30
Date, time and analyst ID of latest file update: 07-May-2018 13:44 Unknown

Sample Name: LCSDF04 Lab Sample ID: LCSDF04

Compound Number : 84
Compound Name : 4-Ethyltoluene
Scan Number : 2332
Retention Time (minutes): 20.491
Quant Ion : 105.00
Area : 1210247
Concentration (ppb(v)) : 6.8539
Integration start scan : 2317 Integration stop scan: 2331
Y at integration start : 429 Y at integration end: 429

Digitally signed by Alexander D. Sechrist on 05/07/2018 at 13:54.
Target 3.5 esignature user ID: ads07818

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

Data file: /chem/HP26379.i/18may07.b/fe00117.d Injection date and time: **08-MAY-2018 01:39**
Data file Sample Info. Line: cc1263;200;F1812730AA;cc1263;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1812730AA**
Date, time and analyst ID of latest file update: 16-Jul-2018 13:10 jeb07445

Blank Data file reference: **/chem/HP26379.i/18may07.b/fe00092.d**

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 10-MAY-2018 14:25
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18may07.b/fe00091.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.108(0.000)	1022	130	373487 (-8)	10.00		243914 - 569130
52) 1,4-Difluorobenzene	13.400(0.000)	1342	114	999503 (4)	10.00		577828 - 1348264
71) Chlorobenzene-d5	18.235(0.000)	2017	117	1131824 (4)	10.00		653090 - 1523876

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)			Not Detected					0.5	1
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)			Not Detected					0.2	1
7) 1,3-Butadiene	(1)			Not Detected					0.4	2
8) Bromomethane	(1)			Not Detected					0.5	1
9) Chloroethane	(1)			Not Detected					0.2	1
10) Bromoethene	(1)			Not Detected					0.4	2
13) Dichlorofluoromethane	(1)			Not Detected					0.2	1
12) Trichlorofluoromethane	(1)			Not Detected					0.2	1
11) Pentane	(1)			Not Detected					0.5	1
14) Ethanol	(1)			Not Detected					0.5	2
15) Freon123a	(1)			Not Detected					0.2	1
20) Acrolein	(1)			Not Detected					1	2
16) 1,1-Dichloroethene	(1)			Not Detected					0.2	1
17) Freon 113	(1)			Not Detected					0.5	2
24) Acetone	(1)	8.078(-0.000)	43	50403	0.604	0.60		J	0.5	2
19) Methyl Iodide	(1)			Not Detected					0.2	1
18) Carbon Disulfide	(1)			Not Detected					1	1
21) Isopropanol	(1)			Not Detected					0.5	2
29) Acetonitrile	(1)			Not Detected					0.5	2
22) 3-Chloropropene	(1)			Not Detected					0.2	1
23) Methylene Chloride	(1)			Not Detected					0.2	1
28) tert-Butyl Alcohol	(1)			Not Detected					0.5	1
32) Acrylonitrile	(1)			Not Detected					0.5	2
25) trans-1,2-Dichloroethene	(1)			Not Detected					0.2	1
27) Methyl t-Butyl Ether	(1)			Not Detected					0.2	1
26) Hexane	(1)			Not Detected					0.2	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.2	1
34) Vinyl Acetate	(1)			Not Detected					1	1
30) Di-Isopropyl Ether	(1)			Not Detected					0.2	1
33) Ethyl Tert-Butyl Ether	(1)			Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.2	1
36) 1,2-Dichloroethene (total)	(1)			Not Detected					0.2	1
45) 2-Butanone	(1)			Not Detected					0.5	2
40) Ethyl Acetate	(1)			Not Detected					0.5	1
41) Methyl Acrylate	(1)			Not Detected					0.2	1
43) Tetrahydrofuran	(1)			Not Detected					0.5	1
39) Chloroform	(1)			Not Detected					0.2	1
44) 1,1,1-Trichloroethane	(1)			Not Detected					0.2	1
38) Cyclohexane	(1)			Not Detected					0.2	1

Digitally signed by Jacob E. Bailey on 07/16/2018 at 13:11. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18may07.b/fe00117.d Injection date and time: **08-MAY-2018 01:39**
Data file Sample Info. Line: cc1263;200;F1812730AA;cc1263;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1812730AA**
Date, time and analyst ID of latest file update: 16-Jul-2018 13:10 jeb07445

Blank Data file reference: **/chem/HP26379.i/18may07.b/fe00092.d**

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 10-MAY-2018 14:25
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18may07.b/fe00091.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
42) Carbon Tetrachloride	(1)				Not Detected					0.2	1
48) Benzene	(2)				Not Detected					0.2	1
50) 1,2-Dichloroethane	(2)				Not Detected					0.2	1
46) Isooctane	(2)				Not Detected					0.2	1
49) Tert-Amyl Methyl Ether	(2)				Not Detected					0.2	1
47) Heptane	(2)				Not Detected					0.5	1
51) Trichloroethene	(2)				Not Detected					0.2	1
54) Ethyl Acrylate	(2)				Not Detected					0.2	1
55) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
53) Dibromomethane	(2)				Not Detected					0.2	1
58) 1,4-Dioxane	(2)				Not Detected					0.5	1
57) Methyl Methacrylate	(2)				Not Detected					0.2	1
56) Bromodichloromethane	(2)				Not Detected					0.2	1
59) cis-1,3-Dichloropropene	(2)				Not Detected					0.2	1
62) 4-Methyl-2-Pentanone	(2)				Not Detected					0.5	2
61) Toluene	(3)				Not Detected					0.2	1
60) Octane	(3)				Not Detected					0.2	1
64) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
65) 1,3-Dichloropropene (total)	(3)				Not Detected					0.2	1
66) Ethyl Methacrylate	(3)				Not Detected					0.2	1
67) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
63) Tetrachloroethene	(3)				Not Detected					0.2	1
70) 2-Hexanone	(3)				Not Detected					0.5	2
68) Dibromochloromethane	(3)				Not Detected					0.2	1
69) 1,2-Dibromoethane	(3)				Not Detected					0.2	1
72) Chlorobenzene	(3)				Not Detected					0.2	1
74) 1,1,1,2-Tetrachloroethane	(3)				Not Detected					0.2	1
73) Ethylbenzene	(3)				Not Detected					0.2	1
75) m/p-Xylene	(3)				Not Detected					0.2	1
76) o-Xylene	(3)				Not Detected					0.2	1
77) Xylene (total)	(3)				Not Detected					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
82) Bromobenzene	(3)				Not Detected					0.2	1
83) 1,1,2,2-Tetrachloroethane	(3)				Not Detected					0.2	1
87) 1,2,3-Trichloropropane	(3)				Not Detected					0.2	1
81) n-Propylbenzene	(3)				Not Detected					0.5	1
85) 2-Chlorotoluene	(3)				Not Detected					0.2	1
84) 4-Ethyltoluene	(3)				Not Detected					0.2	1
86) 1,3,5-Trimethylbenzene	(3)				Not Detected					0.2	1
88) Alpha Methyl Styrene	(3)				Not Detected					0.2	1
89) tert-Butylbenzene	(3)				Not Detected					0.5	1
90) 1,2,4-Trimethylbenzene	(3)				Not Detected					0.2	1
91) sec-Butylbenzene	(3)				Not Detected					0.2	1
93) 1,3-Dichlorobenzene	(3)				Not Detected					0.2	1
94) 1,4-Dichlorobenzene	(3)				Not Detected					0.2	1
92) p-Isopropyltoluene	(3)				Not Detected					0.2	1
96) Benzyl Chloride	(3)				Not Detected					0.5	1
98) 1,2-Dichlorobenzene	(3)				Not Detected					0.2	1
95) n-Butylbenzene	(3)				Not Detected					0.2	1
97) Hexachloroethane	(3)				Not Detected					0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)				Not Detected					0.2	1
101) 1,2,4-Trichlorobenzene	(3)				Not Detected					0.5	2

Digitally signed by Jacob E. Bailey on 07/16/2018 at 13:11. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18may07.b/fe00117.d Injection date and time: **08-MAY-2018 01:39**
Data file Sample Info. Line: cc1263;200;F1812730AA;cc1263;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1812730AA**
Date, time and analyst ID of latest file update: 16-Jul-2018 13:10 jeb07445

Blank Data file reference: **/chem/HP26379.i/18may07.b/fe00092.d**

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 10-MAY-2018 14:25
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18may07.b/fe00091.d**

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

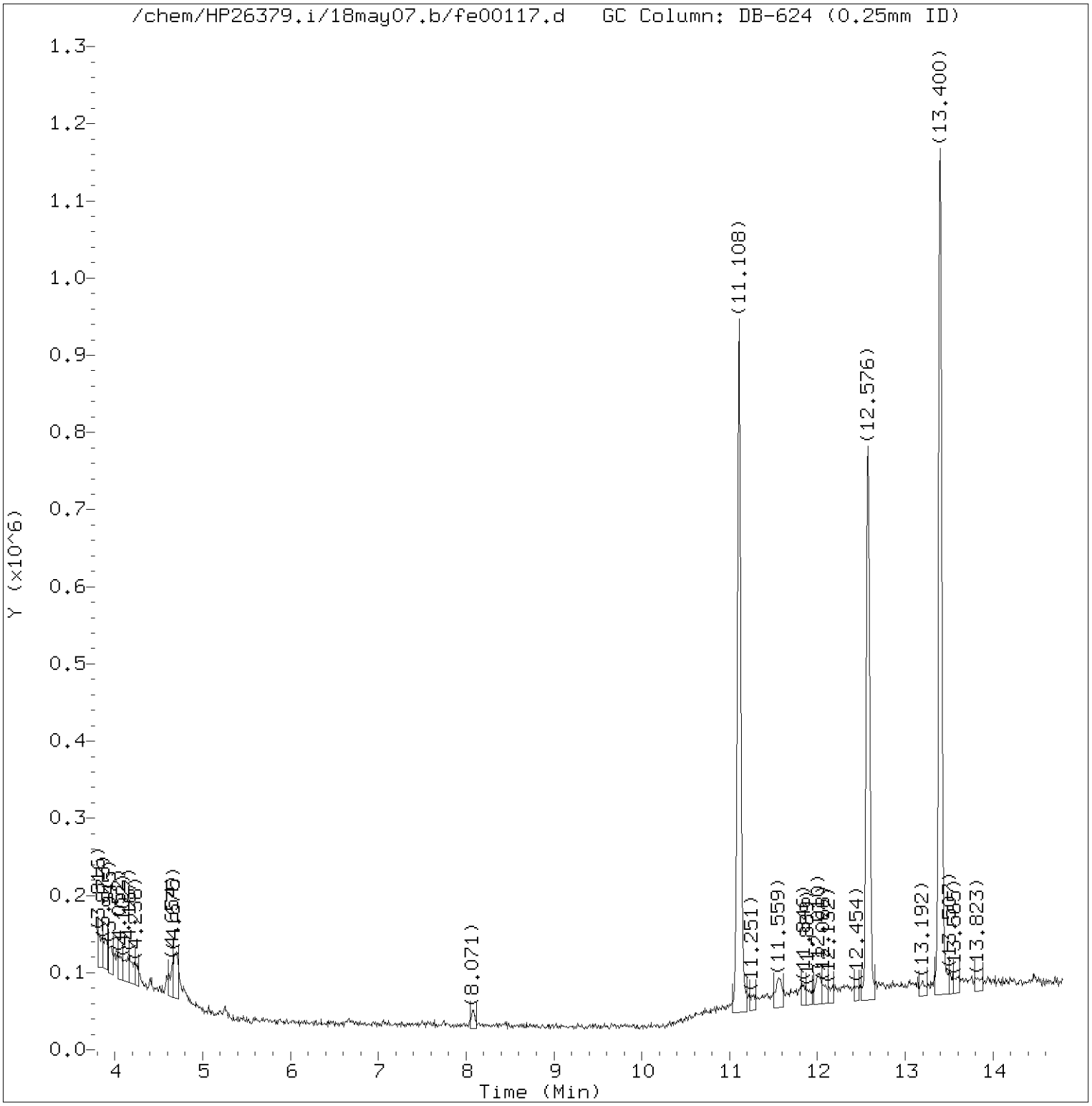
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
100) Hexachlorobutadiene	(3)				Not Detected					0.4	2
102) Naphthalene	(3)				Not Detected					0.4	1

Total number of targets = 99

Digitally signed by Jacob E. Bailey on 07/16/2018 at 13:11. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 09/07/2018 at 10:32. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

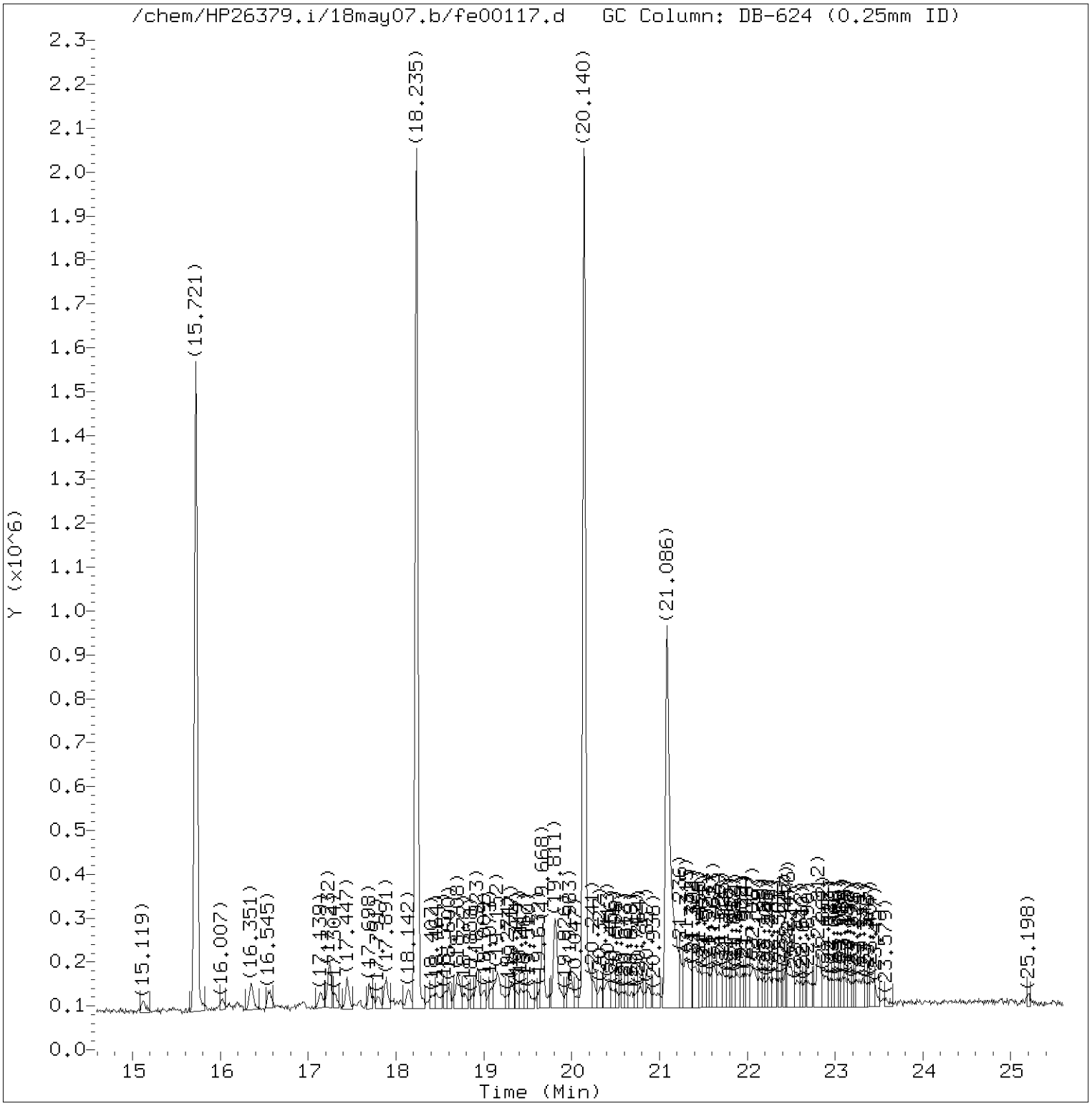
Target Revision 3.5

Data File: /chem/HP26379.i/18may07.b/fe00117.d Instrument ID: HP26379.i
Injection date and time: 08-MAY-2018 01:39 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: all
Calibration date and time: 10-MAY-2018 14:25
Date, time and analyst ID of latest file update: 16-Jul-2018 13:10 jeb07445

Sample Name: cc1263 Lab Sample ID: cc1263

Digitally signed by Jacob E. Bailey
on 07/16/2018 at 13:11.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18may07.b/fe00117.d Instrument ID: HP26379.i
Injection date and time: 08-MAY-2018 01:39 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: all
Calibration date and time: 10-MAY-2018 14:25
Date, time and analyst ID of latest file update: 16-Jul-2018 13:10 jeb07445

Sample Name: cc1263 Lab Sample ID: cc1263

Digitally signed by Jacob E. Bailey
on 07/16/2018 at 13:11.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18may07.b/fe00117.d Instrument ID: HP26379.i
Injection date and time: 08-MAY-2018 01:39 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: all
Calibration date and time: 10-MAY-2018 14:25
Date, time and analyst ID of latest file update: 16-Jul-2018 13:10 jeb07445

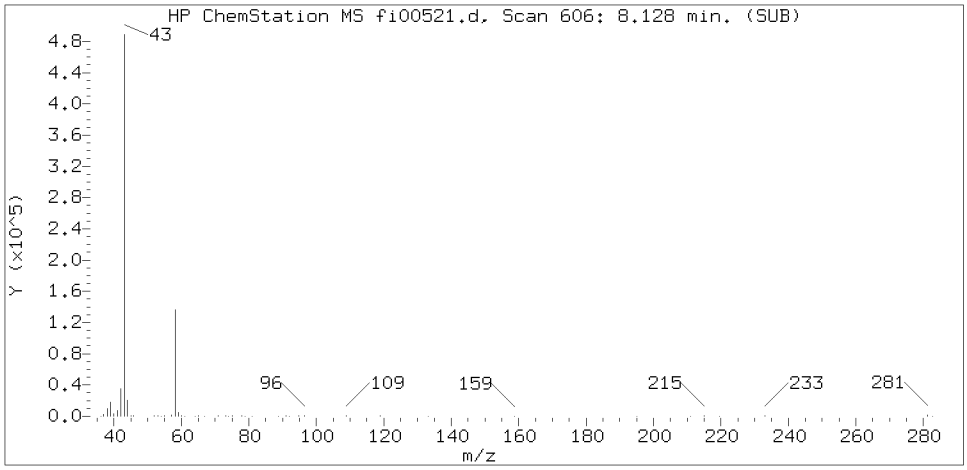
Sample Name: cc1263 Lab Sample ID: cc1263

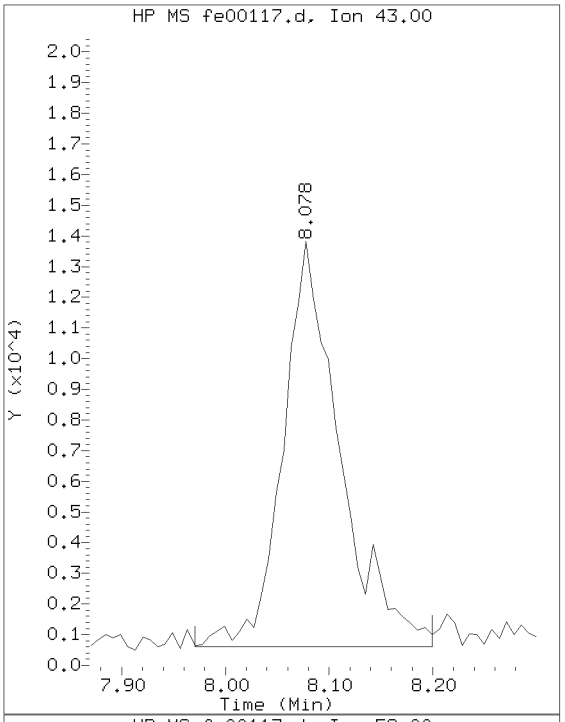
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
24) Acetone	(1)	8.078	43	50403	0.604
37)*Bromochloromethane	(1)	11.108	130	373487	10.000
52)*1,4-Difluorobenzene	(2)	13.400	114	999503	10.000
71)*Chlorobenzene-d5	(3)	18.235	117	1131824	10.000

* = Compound is an internal standard.

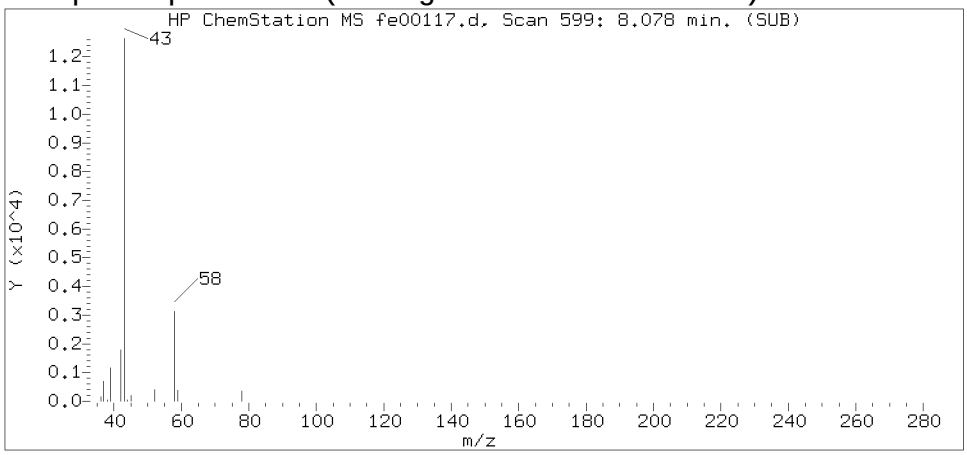
Digitally signed by Jacob E. Bailey
on 07/16/2018 at 13:11.
Target 3.5 esignature user ID: jeb07445

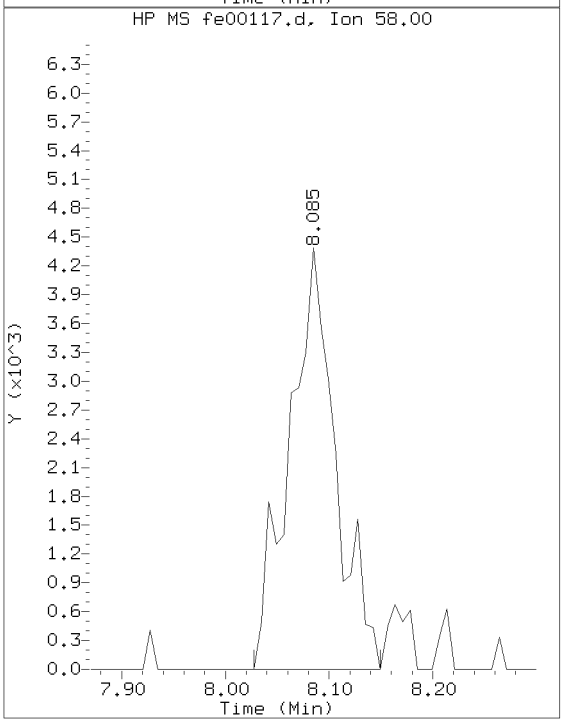
Reference Standard Spectrum for Acetone



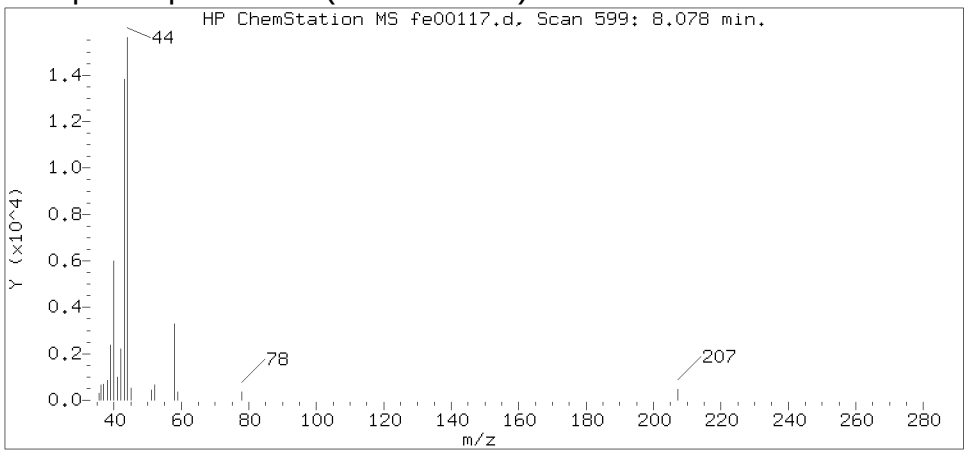


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP26379.i/18may07.b/fe00117.d Instrument ID: HP26379.i
Injection date and time: 08-MAY-2018 01:39 Analyst ID: ads07818

Method used: /chem/HP26379.i/18may07.b/to-15.m Sublist used: all
Calibration date and time: 10-MAY-2018 14:25
Date, time and analyst ID of latest file update: 16-Jul-2018 13:10 jeb07445

Sample Name: cc1263 Lab Sample ID: cc1263

Compound Number : 24
Compound Name : Acetone
Scan Number : 599
Retention Time (minutes): 8.078
Relative Retention Time :-0.00065
Quant Ion : 43.00
Area (flag) : 50403
Concentration (ppb(v)) : 0.6038

Digitally signed by Jacob E. Bailey on 07/16/2018 at 13:11.
Target 3.5 esignature user ID: jeb07445

Lancaster Laboratories
Volatiles in Air
Runlog for Agilent GC/MS System HP26379 **HP #06**

Data Directory Path is - D:\data\18aug16\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
jeb07445	FH00350.D	50NGBFB	08/16/2018	08:01		
jeb07445	FH00351.D	VSTD010	08/16/2018	09:02		
jeb07445	FH00352.D	VSTD005	08/16/2018	09:32		
jeb07445	FH00353.D	VSTD002	08/16/2018	10:03		
jeb07445	FH00354.D	VSTD001	08/16/2018	10:33		
jeb07445	FH00361.D	VSTD010	08/16/2018	11:32		
jeb07445	FH00362.D	VSTD005	08/16/2018	12:03		
jeb07445	FH00363.D	VSTD002	08/16/2018	12:34		
jeb07445	FH00364.D	VSTD001	08/16/2018	13:04		
jeb07445	FH00365.D	VSTD025	08/16/2018	13:35		
jeb07445	FH00366.D	VSTD070	08/16/2018	14:06		
jeb07445	FH00367.D	VSTD010	08/16/2018	14:42		
jeb07445	FH00368.D	VBLKF23	08/16/2018	16:43	F1822830AA	
jeb07445	FH00369.D	VBLKF23	08/16/2018	17:14	F1822830AA	
jeb07445	FH00370.D	VBLKF23	08/16/2018	17:44	F1822830AA	
jeb07445	FH00371.D	VBLKF23	08/16/2018	18:15	F1822830AA	
jeb07445	FH00372.D	LCSF23	08/16/2018	18:46	F1822830AA	
jeb07445	FH00373.D	LCSDF23	08/16/2018	19:17	F1822830AA	
jeb07445	FH00374.D	mldv0.5	08/16/2018	19:48	F1822830AA	
jeb07445	FH00375.D	mldv0.2	08/16/2018	20:18	F1822830AA	
jeb07445	FH00376.D	9749231	08/16/2018	20:49	F1822830AA	
jeb07445	FH00377.D	9749231	08/16/2018	21:20	F1822830AA	
jeb07445	FH00378.D	9749231DL	08/16/2018	21:51	F1822830AA	
jeb07445	FH00379.D	9749232	08/16/2018	22:22	F1822830AA	
jeb07445	FH00380.D	9749232DL	08/16/2018	22:52	F1822830AA	
jeb07445	FH00381.D	9749233	08/16/2018	23:23	F1822830AA	
jeb07445	FH00382.D	9749233DL	08/16/2018	23:54	F1822830AA	
jeb07445	FH00383.D	9749234	08/17/2018	00:25	F1822830AA	
jeb07445	FH00384.D	9749235	08/17/2018	00:55	F1822830AA	
jeb07445	FH00385.D	9749235DL	08/17/2018	01:26	F1822830AA	
jeb07445	FH00386.D	9749236	08/17/2018	01:57	F1822830AA	
jeb07445	FH00387.D	9749236DL	08/17/2018	02:28	F1822830AA	

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

SDG No.:

Lab File ID: fh00350.d

BFB Injection Date: 08/16/2018

Instrument ID: 26379

BFB Injection Time: 08:01

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0% - 40.0% of mass 95	26.91
75	30.0% - 66.0% of mass 95	47.81
95	Base peak, 100% relative abundance	100.00
96	5.0% - 9.0% of mass 95	6.64
173	< 2.0% of mass 174	0.62 (0.90)
174	> 50.0% of mass 95	69.37
175	4.0% - 9.0% of mass 174	5.17 (7.45)
176	93.0% - 101.0% of mass 174	69.05 (99.53)
177	5.0% - 9.0% of mass 176	4.45 (6.45)

THIS CHECK APPLIES TO THE FOLLOWING:

LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD005	fh00362.d	08/16/2018	12:03
VSTD002	fh00363.d	08/16/2018	12:34
VSTD001	fh00364.d	08/16/2018	13:04
VSTD025	fh00365.d	08/16/2018	13:35
VSTD070	fh00366.d	08/16/2018	14:06
VSTD010	fh00367.d	08/16/2018	14:42
VBLKF23	fh00371.d	08/16/2018	18:15
LCSF23	fh00372.d	08/16/2018	18:46
LCSDF23	fh00373.d	08/16/2018	19:17
mdlv0.5	fh00374.d	08/16/2018	19:48
mdlv0.2	fh00375.d	08/16/2018	20:18
9749231	fh00376.d	08/16/2018	20:49
9749231	fh00377.d	08/16/2018	21:20
9749232	fh00379.d	08/16/2018	22:22
9749232DL	fh00380.d	08/16/2018	22:52
9749233	fh00381.d	08/16/2018	23:23
9749233DL	fh00382.d	08/16/2018	23:54
9749234	fh00383.d	08/17/2018	00:25
9749235	fh00384.d	08/17/2018	00:55
9749236	fh00386.d	08/17/2018	01:57
9749236DL	fh00387.d	08/17/2018	02:28

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FORM 06
VOLATILE ORGANICS IN AIR
INITIAL CALIBRATION DATA

SDG No.:

Instrument ID: 26379 Calibration Start Date: 08/16/2018 Calibration End Date: 08/16/2018

Calibration Start Time: 12:03 Calibration End Time: 14:42

LAB FILE IDs:
RRF 1 = fh00364.d RRF 2 = fh00363.d RRF 5 = fh00362.d RRF 10 = fh00367.d RRF 25 = fh00365.d
RRF 70 = fh00366.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
Propene	1.450	1.613	1.578	1.597	1.569	1.610	1.569	4	AVG
Dichlorodifluoromethane	2.581	3.107	3.391	3.679	3.542	3.646	3.324	13	AVG
Chlorodifluoromethane	3.152	3.224	3.237	3.450	3.462	3.440	3.327	4	AVG
Freon 114	3.288	3.352	3.436	3.654	3.504	3.547	3.463	4	AVG
Chloromethane	1.885	1.854	1.913	1.935	1.940	1.885	1.902	2	AVG
Vinyl Chloride	1.109	1.273	1.355	1.404	1.352	1.354	1.308	8	AVG
1,3-Butadiene	1.450	1.375	1.258	1.350	1.208	1.197	1.306	8	AVG
Bromomethane	0.748	1.030	1.092	1.222	1.124	1.209	1.071	16	AVG
Chloroethane	0.710	0.983	0.960	1.039	1.006	1.029	0.955	13	AVG
Bromoethene	0.921	1.071	1.171	1.244	1.208	1.226	1.140	11	AVG
Dichlorofluoromethane	2.633	2.962	3.298	3.554	3.399	3.435	3.213	11	AVG
Trichlorofluoromethane	3.432	3.433	3.369	3.565	3.305	3.309	3.402	3	AVG
Pentane	3.897	3.664	3.664	3.832	3.729	3.635	3.737	3	AVG
Ethanol	0.766	0.834	0.859	0.938	0.829	0.864	0.848	7	AVG
Freon123a	3.319	3.004	2.900	3.053	2.945	2.931	3.026	5	AVG
Acrolein	0.742	0.811	0.935	0.999	0.916	0.943	0.891	11	AVG
1,1-Dichloroethene	2.418	2.984	3.255	3.469	3.276	3.337	3.123	12	AVG
Freon 113	2.190	2.021	1.872	1.917	1.861	1.754	1.936	8	AVG
Acetone	2.635	2.939	3.008	3.214	2.993	3.021	2.968	6	AVG
Methyl Iodide	2.244	2.687	2.910	2.827	2.866	2.555	2.682	9	AVG
Carbon Disulfide	2.984	3.575	3.990	4.229	3.936	3.972	3.781	12	AVG
Isopropanol	3.359	3.358	3.583	3.901	3.586	3.694	3.580	6	AVG
Acetonitrile	1.599	1.971	1.788	1.932	1.787	1.856	1.822	7	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: 26379 Calibration Start Date: 08/16/2018 Calibration End Date: 08/16/2018

Calibration Start Time: 12:03 Calibration End Time: 14:42

LAB FILE IDs:
RRF 1 = fh00364.d RRF 2 = fh00363.d RRF 5 = fh00362.d RRF 10 = fh00367.d RRF 25 = fh00365.d
RRF 70 = fh00366.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
3-Chloropropene	2.355	2.565	2.634	2.838	2.647	2.678	2.619	6	AVG
Methylene Chloride	0.904	1.083	1.163	1.236	1.146	1.170	1.117	10	AVG
tert-Butyl Alcohol	4.820	4.813	4.568	4.846	4.581	4.519	4.691	3	AVG
Acrylonitrile	1.772	1.913	1.964	2.134	1.991	2.029	1.967	6	AVG
trans-1,2-Dichloroethene	2.477	2.812	2.963	3.252	3.051	3.099	2.942	9	AVG
Methyl t-Butyl Ether	4.957	4.837	4.456	4.578	4.549	4.275	4.609	5	AVG
Hexane	2.632	2.234	2.234	2.278	2.216	2.153	2.291	7	AVG
1,1-Dichloroethane	3.292	3.475	3.578	3.852	3.644	3.702	3.590	5	AVG
Vinyl Acetate	5.327	5.680	5.970	6.372	6.031	5.923	5.884	6	AVG
Di-Isopropyl Ether	7.909	7.971	7.498	7.762	7.726	7.465	7.722	3	AVG
Ethyl Tert-Butyl Ether	6.989	7.457	7.279	7.686	7.502	7.248	7.360	3	AVG
cis-1,2-Dichloroethene	2.423	2.700	2.869	3.131	2.948	2.985	2.843	9	AVG
2-Butanone	4.260	4.380	4.446	4.640	4.340	4.337	4.401	3	AVG
Ethyl Acetate	4.780	4.935	4.879	5.238	4.980	4.969	4.963	3	AVG
Methyl Acrylate	4.070	4.104	4.375	4.662	4.359	4.356	4.321	5	AVG
Tetrahydrofuran	2.492	2.497	2.439	2.521	2.423	2.432	2.467	2	AVG
Chloroform	2.837	2.880	2.990	3.282	3.076	3.115	3.030	5	AVG
1,1,1-Trichloroethane	3.282	3.330	3.126	3.257	3.164	3.051	3.202	3	AVG
Cyclohexane	4.391	4.300	4.024	4.161	4.096	3.947	4.153	4	AVG
Carbon Tetrachloride	3.011	3.112	2.946	3.053	2.958	2.865	2.991	3	AVG
Benzene	1.135	1.171	1.141	1.192	1.160	1.163	1.160	2	AVG
1,2-Dichloroethane	0.585	0.659	0.674	0.711	0.697	0.717	0.674	7	AVG
Isooctane	2.595	2.820	2.919	3.033	2.975	2.958	2.883	5	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: 26379 Calibration Start Date: 08/16/2018 Calibration End Date: 08/16/2018

Calibration Start Time: 12:03 Calibration End Time: 14:42

LAB FILE IDs:
RRF 1 = fh00364.d RRF 2 = fh00363.d RRF 5 = fh00362.d RRF 10 = fh00367.d RRF 25 = fh00365.d
RRF 70 = fh00366.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
Tert-Amyl Methyl Ether	1.088	1.144	1.153	1.214	1.185	****	1.157	4	AVG
Heptane	0.472	0.491	0.459	0.458	0.454	0.447	0.463	3	AVG
Trichloroethene	0.431	0.427	0.451	0.464	0.445	0.472	0.449	4	AVG
Ethyl Acrylate	1.468	1.378	1.441	1.469	1.460	1.477	1.449	3	AVG
1,2-Dichloropropane	0.634	0.611	0.591	0.614	0.597	0.605	0.609	3	AVG
Dibromomethane	0.294	0.354	0.387	0.407	0.382	0.413	0.373	12	AVG
1,4-Dioxane	0.276	0.275	0.281	0.291	0.279	0.287	0.281	2	AVG
Methyl Methacrylate	0.464	0.448	0.454	0.460	0.461	0.461	0.458	1	AVG
Bromodichloromethane	0.779	0.788	0.817	0.846	0.834	0.850	0.819	4	AVG
cis-1,3-Dichloropropene	0.724	0.727	0.750	0.777	0.768	0.786	0.755	3	AVG
4-Methyl-2-Pentanone	1.538	1.442	1.371	1.397	1.400	1.359	1.418	5	AVG
Toluene	1.467	1.449	1.392	1.447	1.415	1.378	1.425	2	AVG
Octane	1.626	1.662	1.567	1.580	1.543	1.443	1.570	5	AVG
trans-1,3-Dichloropropene	0.707	0.718	0.688	0.720	0.691	0.683	0.701	2	AVG
Ethyl Methacrylate	0.850	0.906	0.801	0.839	0.854	0.809	0.843	4	AVG
1,1,2-Trichloroethane	0.500	0.490	0.483	0.509	0.486	0.481	0.491	2	AVG
Tetrachloroethene	0.608	0.629	0.603	0.635	0.601	0.599	0.613	3	AVG
2-Hexanone	1.419	1.473	1.382	1.411	1.408	1.352	1.408	3	AVG
Dibromochloromethane	0.575	0.603	0.571	0.603	0.595	0.601	0.591	2	AVG
1,2-Dibromoethane	0.714	0.761	0.729	0.770	0.744	0.746	0.744	3	AVG
Chlorobenzene	1.161	1.117	1.074	1.116	1.078	1.025	1.095	4	AVG
1,1,1,2-Tetrachloroethane	0.583	0.573	0.539	0.554	0.542	0.522	0.552	4	AVG
Ethylbenzene	2.225	2.162	1.994	1.977	1.959	1.772	2.015	8	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: 26379 Calibration Start Date: 08/16/2018 Calibration End Date: 08/16/2018

Calibration Start Time: 12:03 Calibration End Time: 14:42

LAB FILE IDs:
RRF 1 = fh00364.d RRF 2 = fh00363.d RRF 5 = fh00362.d RRF 10 = fh00367.d RRF 25 = fh00365.d
RRF 70 = fh00366.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
m/p-Xylene	1.673	1.691	1.508	1.564	1.543	1.448	1.571	6	AVG
o-Xylene	1.740	1.662	1.555	1.578	1.569	1.480	1.598	6	AVG
Styrene	1.171	1.197	1.089	1.114	1.104	1.050	1.121	5	AVG
Bromoform	0.781	0.799	0.752	0.773	0.768	0.766	0.773	2	AVG
Cumene	2.252	2.218	2.036	2.090	2.035	1.881	2.085	7	AVG
Bromobenzene	0.647	0.640	0.597	0.619	0.594	0.572	0.612	5	AVG
1,1,2,2-Tetrachloroethane	1.218	1.235	1.089	1.085	1.080	0.993	1.117	8	AVG
1,2,3-Trichloropropane	0.363	0.346	0.324	0.319	0.317	0.298	0.328	7	AVG
n-Propylbenzene	0.585	0.590	0.537	0.573	0.559	0.527	0.562	5	AVG
2-Chlorotoluene	0.521	0.514	0.470	0.481	0.458	0.425	0.478	7	AVG
4-Ethyltoluene	2.319	2.225	2.081	2.093	2.078	1.874	2.112	7	AVG
1,3,5-Trimethylbenzene	1.913	1.892	1.760	1.771	1.695	1.507	1.756	8	AVG
Alpha Methyl Styrene	0.915	0.864	0.818	0.852	0.849	****	0.859	4	AVG
tert-Butylbenzene	1.618	1.632	1.568	1.716	1.512	****	1.609	5	AVG
1,2,4-Trimethylbenzene	1.831	1.868	1.723	1.745	1.700	1.524	1.732	7	AVG
sec-Butylbenzene	2.710	2.672	2.528	2.605	2.462	****	2.595	4	AVG
1,3-Dichlorobenzene	1.122	1.121	1.033	1.061	1.021	****	1.072	4	AVG
1,4-Dichlorobenzene	1.200	1.186	1.067	1.115	1.052	****	1.124	6	AVG
p-Isopropyltoluene	2.169	2.111	1.999	2.016	1.952	****	2.049	4	AVG
Benzyl Chloride	0.342	0.343	0.310	0.319	0.314	****	0.326	5	AVG
1,2-Dichlorobenzene	1.070	1.078	1.003	1.030	0.988	0.936	1.018	5	AVG
n-Butylbenzene	1.404	1.460	1.360	1.369	1.346	****	1.388	3	AVG
Hexachloroethane	0.647	0.671	0.646	0.653	0.649	0.621	0.648	2	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.

SDG No.:

Instrument ID: 26379 Calibration Start Date: 08/16/2018 Calibration End Date: 08/16/2018

Calibration Start Time: 12:03 Calibration End Time: 14:42

LAB FILE IDs:
RRF 1 = fh00364.d RRF 2 = fh00363.d RRF 5 = fh00362.d RRF 10 = fh00367.d RRF 25 = fh00365.d
RRF 70 = fh00366.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
1,2-Dibromo-3-chloropropane	0.529	0.541	0.535	0.552	0.550	0.551	0.543	2	AVG
1,2,4-Trichlorobenzene	0.828	0.840	0.819	0.845	0.776	0.793	0.817	3	AVG
Hexachlorobutadiene	0.704	0.709	0.664	0.703	0.657	0.663	0.684	4	AVG
Naphthalene	1.921	2.001	1.888	2.017	1.867	****	1.939	3	AVG

Average % RSD: 5

* 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.

Internal Standard
Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP26379.i/18aug16.b/fh00362.d VSTD005
/chem/HP26379.i/18aug16.b/fh00363.d VSTD002
/chem/HP26379.i/18aug16.b/fh00364.d VSTD001
/chem/HP26379.i/18aug16.b/fh00365.d VSTD025
/chem/HP26379.i/18aug16.b/fh00366.d VSTD075
/chem/HP26379.i/18aug16.b/fh00367.d VSTD010

Area Summary

	File ID:								
Internal Standard Name	fh00362.d	fh00363.d	fh00364.d	fh00365.d	fh00366.d	fh00367.d	Avg. Area	%RSD	In Spec
Bromochloromethane	266895	256673	255285	255158	253908	262988	258484	2	Yes
1,4-Difluorobenzene	1087725	1054818	1064887	1035018	994434	1090427	1054552	3	Yes
Chlorobenzene-d5	1041305	984552	1025336	987125	966940	1039141	1007400	3	Yes

%RSD of internal standard area is flagged out of spec if greater than 30.

RT Summary

	File ID:						
Internal Standard Name	fh00362.d	fh00363.d	fh00364.d	fh00365.d	fh00366.d	fh00367.d	Avg. RT
Bromochloromethane	11.093	11.101	11.108	11.108	11.108	11.101	11.103
1,4-Difluorobenzene	13.393	13.393	13.393	13.393	13.400	13.393	13.394
Chlorobenzene-d5	18.228	18.228	18.228	18.228	18.235	18.235	18.230

Comments:_____

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Report generated on 08/16/2018 at 18:55

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 LCS File ID: fh00372.d LCSD File ID: fh00373.d

Batch: F1822830AA LCS Injected: 08/16/2018 LCSD Injected: 08/16/2018

Method: EPA TO-15 LCS Client ID: LCSF23 LCSD Client ID: LCSDF23

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	10.00	10.10	10.55	101	106	78-126	4	25	YES
Dichlorodifluoromethane	10.00	11.28	11.38	113	114	74-133	1	25	YES
Chlorodifluoromethane	10.00	11.07	11.20	111	112	70-138	1	25	YES
Freon 114	10.00	10.81	10.95	108	110	66-126	1	25	YES
Chloromethane	10.00	10.31	10.56	103	106	65-140	2	25	YES
Vinyl Chloride	10.00	10.81	11.16	108	112	75-130	3	25	YES
1,3-Butadiene	10.00	9.85	9.98	98	100	72-122	1	25	YES
Bromomethane	10.00	11.32	11.49	113	115	71-133	1	25	YES
Chloroethane	10.00	11.12	11.52	111	115	76-129	4	25	YES
Bromoethene	10.00	11.08	11.13	111	111	77-123	0	25	YES
Dichlorofluoromethane	10.00	11.93	12.03	119	120	75-137	1	25	YES
Trichlorofluoromethane	10.00	10.21	10.44	102	104	73-132	2	25	YES
Pentane	10.00	9.85	10.01	98	100	69-125	2	25	YES
Ethanol	10.00	9.31	9.84	93	98	56-149	6	25	YES
Acrolein	10.00	11.15	11.76	111	118	54-132	5	25	YES
1,1-Dichloroethene	10.00	11.16	11.35	112	114	70-129	2	25	YES
Freon 113	10.00	9.82	9.96	98	100	66-119	1	25	YES
Acetone	10.00	10.73	10.83	107	108	71-136	1	25	YES
Methyl Iodide	10.00	10.28	10.51	103	105	72-127	2	25	YES
Carbon Disulfide	10.00	10.90	11.18	109	112	72-128	3	25	YES
Isopropanol	10.00	10.78	10.86	108	109	69-160	1	25	YES
Acetonitrile	10.00	9.25	9.50	93	95	56-136	3	25	YES
3-Chloropropene	10.00	12.61	12.66	126	127	67-141	0	25	YES
Methylene Chloride	10.00	11.97	12.21	120	122	69-128	2	25	YES
tert-Butyl Alcohol	10.00	11.30	11.39	113	114	71-154	1	25	YES
Acrylonitrile	10.00	10.23	10.33	102	103	68-135	1	25	YES
trans-1,2-Dichloroethene	10.00	10.79	11.12	108	111	77-128	3	25	YES
Methyl t-Butyl Ether	10.00	10.06	10.23	101	102	71-119	2	25	YES
Hexane	10.00	9.99	10.20	100	102	70-118	2	25	YES
1,1-Dichloroethane	10.00	10.68	10.90	107	109	74-129	2	25	YES
Vinyl Acetate	10.00	11.96	12.22	120	122	75-161	2	25	YES
Di-Isopropyl Ether	10.00	10.00	10.31	100	103	71-122	3	25	YES
Ethyl Tert-Butyl Ether	10.00	10.21	10.49	102	105	68-121	3	25	YES
cis-1,2-Dichloroethene	10.00	10.80	10.81	108	108	76-126	0	25	YES
2-Butanone	10.00	10.10	10.63	101	106	75-126	5	25	YES
Ethyl Acetate	10.00	9.97	10.24	100	102	73-124	3	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 LCS File ID: fh00372.d LCSD File ID: fh00373.d

Batch: F1822830AA LCS Injected: 08/16/2018 LCSD Injected: 08/16/2018

Method: EPA TO-15 LCS Client ID: LCSF23 LCSD Client ID: LCSDF23

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	10.00	10.36	10.50	104	105	75-125	1	25	YES
Tetrahydrofuran	10.00	10.46	10.69	105	107	67-127	2	25	YES
Chloroform	10.00	10.51	10.88	105	109	75-127	3	25	YES
1,1,1-Trichloroethane	10.00	10.07	10.17	101	102	74-122	1	25	YES
Cyclohexane	10.00	9.97	10.14	100	101	70-118	2	25	YES
Carbon Tetrachloride	10.00	10.15	10.26	101	103	72-127	1	25	YES
Benzene	10.00	10.50	10.32	105	103	76-123	2	25	YES
1,2-Dichloroethane	10.00	10.89	10.69	109	107	72-138	2	25	YES
Isooctane	10.00	10.42	10.30	104	103	74-127	1	25	YES
Tert-Amyl Methyl Ether	10.00	10.41	10.30	104	103	78-124	1	25	YES
Heptane	10.00	9.98	9.75	100	98	74-122	2	25	YES
Trichloroethene	10.00	9.88	9.61	99	96	76-118	3	25	YES
Ethyl Acrylate	10.00	10.42	10.22	104	102	71-126	2	25	YES
1,2-Dichloropropane	10.00	10.19	10.43	102	104	75-127	2	25	YES
Dibromomethane	10.00	10.67	10.38	107	104	76-124	3	25	YES
1,4-Dioxane	10.00	10.17	9.93	102	99	76-124	2	25	YES
Methyl Methacrylate	10.00	10.64	10.38	106	104	73-117	2	25	YES
Bromodichloromethane	10.00	10.47	10.25	105	103	75-134	2	25	YES
cis-1,3-Dichloropropene	10.00	10.72	10.41	107	104	51-120	3	25	YES
4-Methyl-2-Pentanone	10.00	10.43	10.29	104	103	79-131	1	25	YES
Toluene	10.00	10.31	10.47	103	105	78-119	2	25	YES
Octane	10.00	9.78	9.85	98	99	73-122	1	25	YES
trans-1,3-Dichloropropene	10.00	10.31	10.36	103	104	76-131	0	25	YES
Ethyl Methacrylate	10.00	10.45	10.46	104	105	69-137	0	25	YES
1,1,2-Trichloroethane	10.00	10.74	10.53	107	105	76-127	2	25	YES
Tetrachloroethene	10.00	9.97	9.96	100	100	68-123	0	25	YES
2-Hexanone	10.00	10.44	10.31	104	103	74-134	1	25	YES
Dibromochloromethane	10.00	10.46	10.51	105	105	74-131	1	25	YES
1,2-Dibromoethane	10.00	10.36	10.39	104	104	73-121	0	25	YES
Chlorobenzene	10.00	10.03	10.02	100	100	76-117	0	25	YES
1,1,1,2-Tetrachloroethane	10.00	10.11	10.14	101	101	73-137	0	25	YES
Ethylbenzene	10.00	10.14	10.07	101	101	77-117	1	25	YES
m/p-Xylene	10.00	10.03	10.01	100	100	78-119	0	25	YES
o-Xylene	10.00	10.32	10.10	103	101	78-121	2	25	YES
Xylene (total)	20.00	20.35	20.12	102	101	79-120	1	25	YES
Styrene	10.00	10.40	10.37	104	104	77-143	0	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 LCS File ID: fh00372.d LCSD File ID: fh00373.d

Batch: F1822830AA LCS Injected: 08/16/2018 LCSD Injected: 08/16/2018

Method: EPA TO-15 LCS Client ID: LCSF23 LCSD Client ID: LCSDF23

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	10.17	10.15	102	101	58-144	0	25	YES
Cumene	10.00	10.24	10.21	102	102	80-133	0	25	YES
Bromobenzene	10.00	9.89	9.98	99	100	74-118	1	25	YES
1,1,2,2-Tetrachloroethane	10.00	11.07	11.13	111	111	72-133	1	25	YES
1,2,3-Trichloropropane	10.00	10.54	10.22	105	102	71-127	3	25	YES
n-Propylbenzene	10.00	10.14	9.73	101	97	73-120	4	25	YES
2-Chlorotoluene	10.00	10.21	10.02	102	100	74-123	2	25	YES
4-Ethyltoluene	10.00	9.97	9.96	100	100	73-130	0	25	YES
1,3,5-Trimethylbenzene	10.00	10.10	10.17	101	102	72-130	1	25	YES
Alpha Methyl Styrene	10.00	10.03	10.09	100	101	71-138	1	25	YES
tert-Butylbenzene	10.00	9.68	9.75	97	97	78-138	1	25	YES
1,2,4-Trimethylbenzene	10.00	10.16	10.10	102	101	70-138	1	25	YES
sec-Butylbenzene	10.00	9.93	9.86	99	99	79-139	1	25	YES
1,3-Dichlorobenzene	10.00	9.64	9.67	96	97	75-129	0	25	YES
1,4-Dichlorobenzene	10.00	9.32	9.26	93	93	74-123	1	25	YES
p-Isopropyltoluene	10.00	9.62	9.54	96	95	75-145	1	25	YES
Benzyl Chloride	10.00	10.02	9.79	100	98	49-163	2	25	YES
1,2-Dichlorobenzene	10.00	9.53	9.52	95	95	71-126	0	25	YES
n-Butylbenzene	10.00	9.46	9.61	95	96	72-143	2	25	YES
Hexachloroethane	10.00	10.17	10.13	102	101	59-135	0	25	YES
1,2-Dibromo-3-chloropropane	10.00	9.63	9.52	96	95	52-156	1	25	YES
1,2,4-Trichlorobenzene	10.00	7.94	8.04	79	80	45-156	1	25	YES
Hexachlorobutadiene	10.00	7.88	7.99	79	80	49-154	1	25	YES
Naphthalene	10.00	7.87	7.95	79	80	39-152	1	25	YES

COMMENTS:

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Data File: /chem/HP26379.i/18aug16.b/fh00350.d

Page 1

Date : 16-AUG-2018 08:01

Client ID: BFB

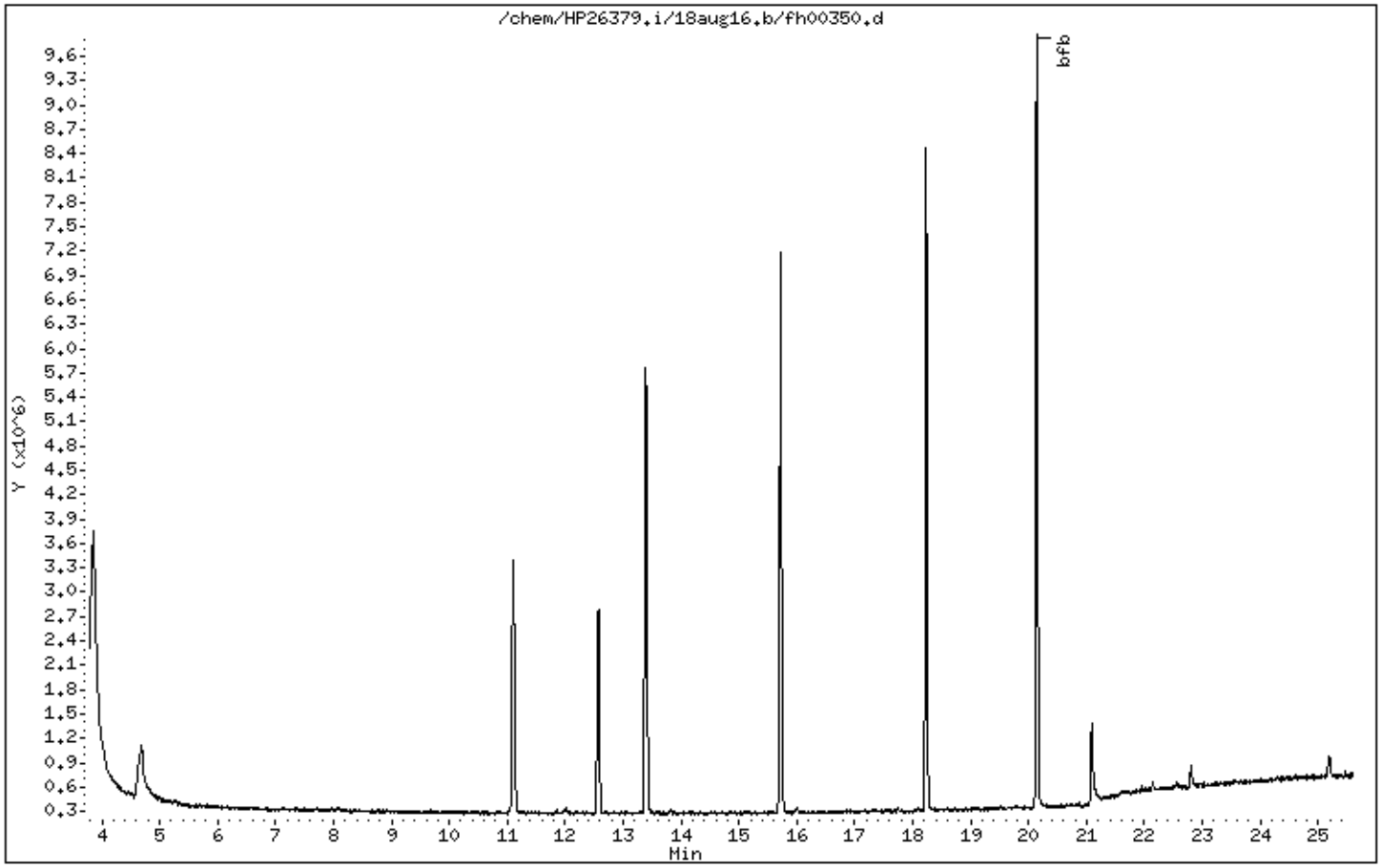
Instrument: HP26379.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25



Digitally signed by Jeffrey B. Smith on 08/16/2018 at 19:07.
Target 3.5 esignature user ID: jbs01304

Data File: /chem/HP26379.i/18aug16.b/fh00350.d

Date : 16-AUG-2018 08:01

Client ID: BFB

Instrument: HP26379.i

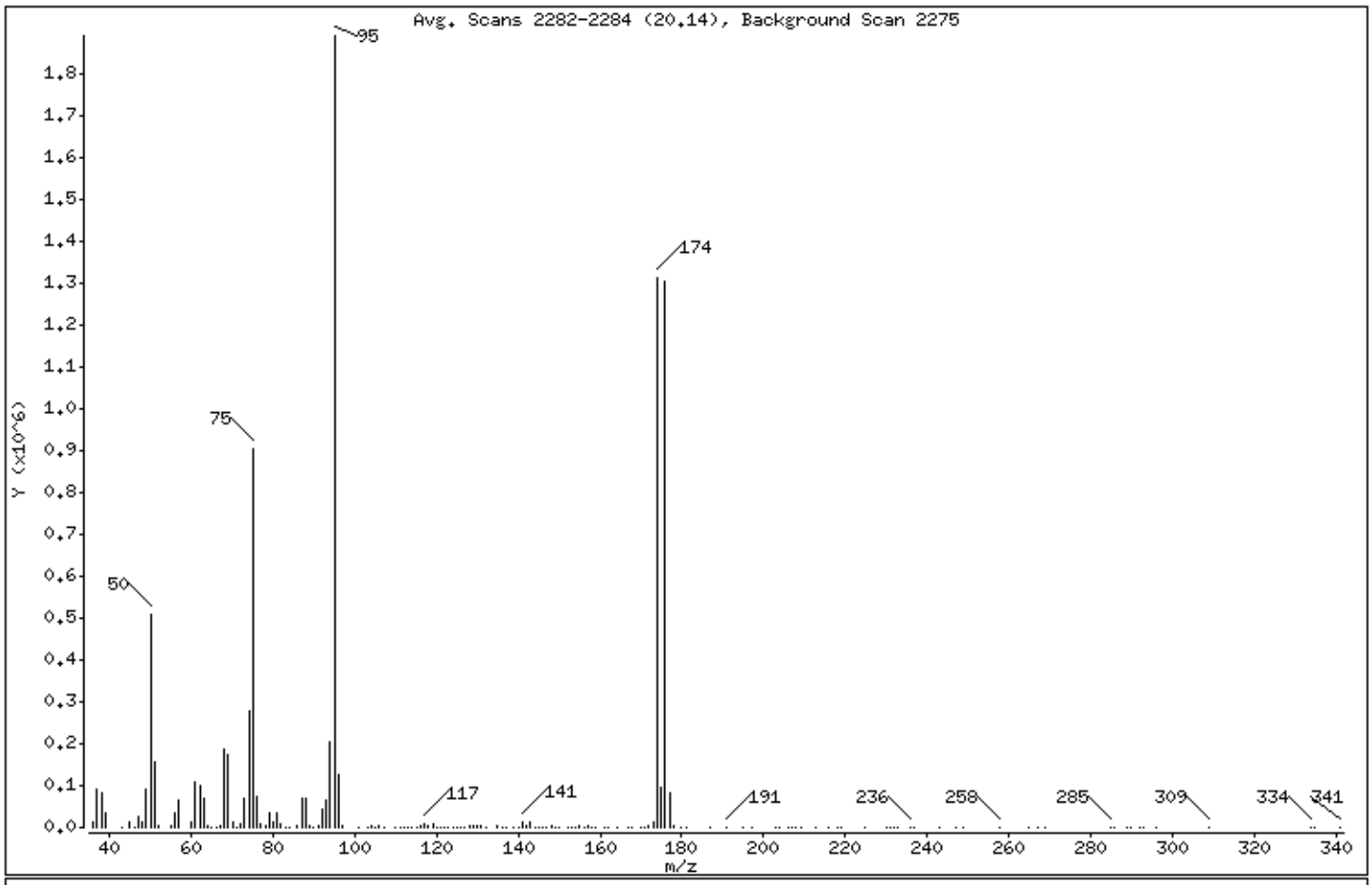
Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	26.91
75	30.00 - 66.00% of mass 95	47.81
96	5.00 - 9.00% of mass 95	6.64
173	Less than 2.00% of mass 174	0.62 (0.90)
174	50.00 - 120.00% of mass 95	69.37
175	4.00 - 9.00% of mass 174	5.17 (7.45)
176	93.00 - 101.00% of mass 174	69.05 (99.53)
177	5.00 - 9.00% of mass 176	4.45 (6.45)

Digitally signed by Jeffrey B. Smith on 08/16/2018 at 19:07.
Target 3.5 esignature user ID: jbs01304

Date : 16-AUG-2018 08:01

Client ID: BFB Instrument: HP26379.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624 Column diameter: 0.25

Data File: fh00350.d
Spectrum: Avg. Scans 2282-2284 (20.14), Background Scan 2275
Location of Maximum: 95.00
Number of points: 160

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	15148	86.00	2181	135.00	2535	195.00	173
37.00	93032	87.00	67944	136.00	1538	197.00	214
38.00	82952	88.00	67872	137.00	1290	203.00	249
39.00	33704	89.00	2258	139.00	460	204.00	222
43.00	177	90.00	499	140.00	1031	206.00	230
45.00	14120	91.00	3600	141.00	14547	207.00	285
46.00	769	92.00	44200	142.00	2191	208.00	63
47.00	25096	93.00	66744	143.00	13614	209.00	455
48.00	12519	94.00	203072	144.00	807	213.00	219
49.00	90232	95.00	1890816	145.00	52	216.00	554
50.00	508800	96.00	125592	146.00	1444	218.00	435
51.00	157312	97.00	2697	147.00	861	219.00	509
52.00	4892	101.00	127	148.00	2809	225.00	108
55.00	4425	103.00	227	149.00	1638	230.00	107
56.00	35400	104.00	6436	150.00	572	231.00	120
57.00	64072	105.00	591	152.00	898	232.00	810
60.00	15093	106.00	5210	153.00	1790	233.00	500
61.00	109200	107.00	1592	154.00	936	236.00	899
62.00	99696	110.00	460	155.00	4883	237.00	809
63.00	71208	111.00	356	156.00	330	243.00	169
64.00	5745	112.00	430	157.00	3417	247.00	168
65.00	1125	113.00	1686	158.00	17	249.00	192
66.00	930	114.00	246	159.00	2118	258.00	237
67.00	5040	115.00	1805	161.00	2029	265.00	314
68.00	187712	116.00	5111	162.00	107	267.00	259
69.00	175872	117.00	8867	164.00	175	269.00	8
70.00	13793	118.00	5754	167.00	132	285.00	1345
71.00	1214	119.00	7643	168.00	177	286.00	588
72.00	7561	120.00	189	170.00	239	289.00	255
73.00	71584	121.00	1448	171.00	1033	290.00	250
74.00	277888	122.00	1551	172.00	2842	292.00	106
75.00	903936	123.00	1006	173.00	11772	293.00	131
76.00	74064	124.00	453	174.00	1311744	296.00	154
77.00	9150	125.00	733	175.00	97696	309.00	155
78.00	5077	126.00	1330	176.00	1305600	334.00	886

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Target 3.5 esignature user ID: jbs01304

Date : 16-AUG-2018 08:01

Client ID: BFB Instrument: HP26379.i

Sample Info: 50NGBFB;;;BFB;0;;;

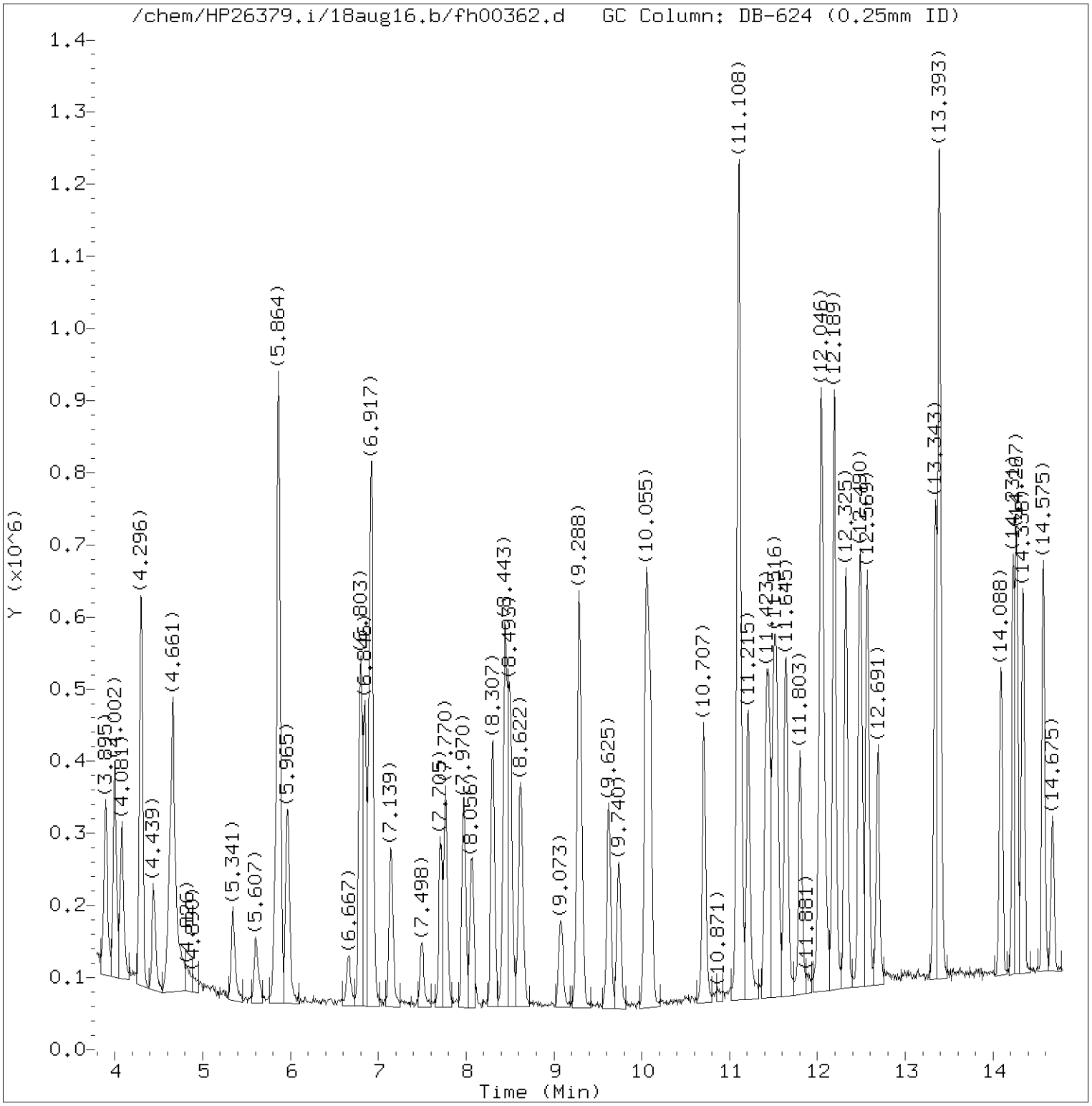
Operator: jeb07445

Column phase: DB-624 Column diameter: 0.25

Data File: fh00350.d
Spectrum: Avg. Scans 2282-2284 (20.14), Background Scan 2275
Location of Maximum: 95.00
Number of points: 160

m/z	Y	m/z	Y	m/z	Y	m/z	Y
79.00	34904	127.00	877	177.00	84224	335.00	111
80.00	10870	128.00	4705	178.00	3091	341.00	48
81.00	35808	129.00	2616	180.00	173		
82.00	8990	130.00	5515	181.00	130		
83.00	341	131.00	2562	187.00	516		
84.00	640	132.00	276	191.00	554		

Digitally signed by Jeffrey B. Smith on 08/16/2018 at 19:07.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

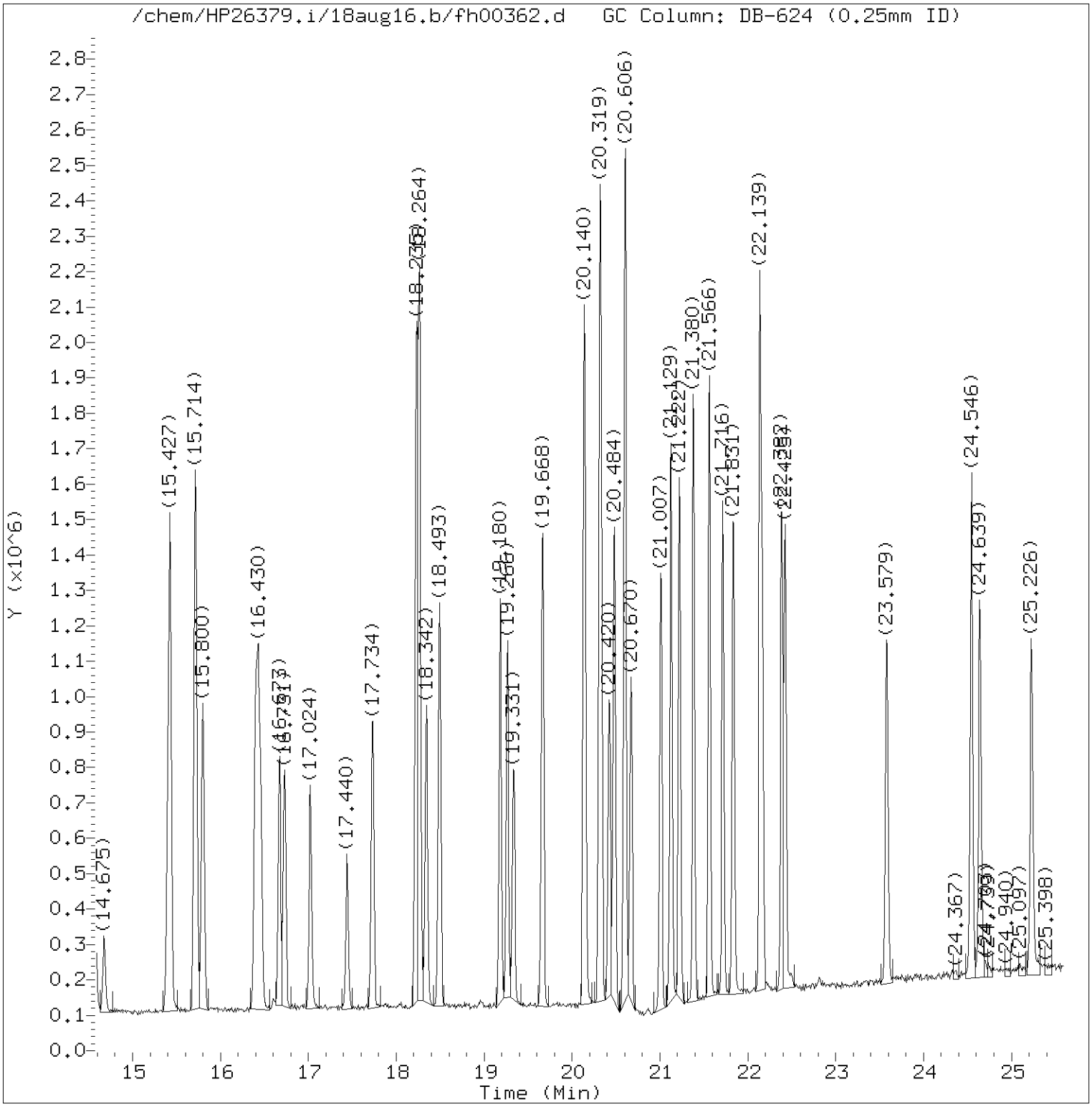
Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00362.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 12:03 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

Digitally signed by Jeffrey B. Smith
on 08/16/2018 at 18:55.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00362.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 12:03 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

Digitally signed by Jeffrey B. Smith
on 08/16/2018 at 18:55.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00362.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 12:03 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.895	41	210522	5.026
2) Dichlorodifluoromethane	(1)	3.995	85	452561	5.101
3) Chlorodifluoromethane	(1)	4.081	51	432015	4.865
4) Freon 114	(1)	4.296	85	458461	4.960
5) Chloromethane	(1)	4.439	50	255296	5.029
6) Vinyl Chloride	(1)	4.632	62	180793	5.179
7) 1,3-Butadiene	(1)	4.661	54	167929	4.816
8) Bromomethane	(1)	5.349	94	145701	5.099
9) Chloroethane	(1)	5.607	64	128045	5.026
10) Bromoethene	(1)	5.821	106	156225	5.134
11) Pentane	(1)	5.864	43	488901	4.902
12) Trichlorofluoromethane	(1)	5.864	101	449614	4.951
13) Dichlorofluoromethane	(1)	5.965	67	440077	5.131
14) Ethanol	(1)	6.660	45	114586	5.061
15) Freon123a	(1)	6.803	67	429556	5.320
16) 1,1-Dichloroethene	(1)	6.853	61	434404	5.212
17) Freon 113	(1)	6.917	103	249783	4.834
18) Carbon Disulfide	(1)	6.932	76	532430	5.276
19) Methyl Iodide	(1)	7.139	142	388328	5.426
20) Acrolein	(1)	7.498	56	124783	5.248
21) Isopropanol	(1)	7.705	45	478107	5.004
22) 3-Chloropropene	(1)	7.770	41	390182	5.581
23) Methylene Chloride	(1)	7.970	84	172203	5.777
24) Acetone	(1)	8.056	43	401390	5.067
25) trans-1,2-Dichloroethene	(1)	8.307	61	395427	5.036
26) Hexane	(1)	8.443	56	298184	4.876
27) Methyl t-Butyl Ether	(1)	8.493	73	594581	4.834
28) tert-Butyl Alcohol	(1)	8.615	59	676645	5.404
29) Acetonitrile	(1)	9.081	41	238567	4.906
30) Di-Isopropyl Ether	(1)	9.288	45	1000599	4.855
31) 1,1-Dichloroethane	(1)	9.625	63	477415	4.982
32) Acrylonitrile	(1)	9.740	53	262054	4.992
33) Ethyl Tert-Butyl Ether	(1)	10.055	59	971364	4.945
34) Vinyl Acetate	(1)	10.105	43	892332	5.682
35) cis-1,2-Dichloroethene	(1)	10.707	61	382835	5.046
36) 1,2-Dichloroethene (total)	(1)		61	778262	10.082
37)*Bromochloromethane	(1)	11.093	130	266895	10.000
38) Cyclohexane	(1)	11.108	56	536991	4.844

* = Compound is an internal standard.

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on 08/16/2018 at 18:55.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00362.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 12:03 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	398975	4.934
40) Ethyl Acetate	(1)	11.416	43	651036	4.915
41) Methyl Acrylate	(1)	11.452	55	583787	5.062
42) Carbon Tetrachloride	(1)	11.502	117	393150	4.925
43) Tetrahydrofuran	(1)	11.538	42	325485	4.942
44) 1,1,1-Trichloroethane	(1)	11.645	97	417223	4.882
45) 2-Butanone	(1)	11.803	43	593257	5.051
46) Isooctane	(2)	12.046	57	1587360	5.062
47) Heptane	(2)	12.197	71	249780	4.956
48) Benzene	(2)	12.325	78	620421	4.916
49) Tert-Amyl Methyl Ether	(2)	12.490	73	627318	4.986
50) 1,2-Dichloroethane	(2)	12.691	62	366516	5.001
51) Trichloroethene	(2)	13.343	130	245315	5.027
52)*1,4-Difluorobenzene	(2)	13.393	114	1087725	10.000
53) Dibromomethane	(2)	14.088	174	210270	5.187
54) Ethyl Acrylate	(2)	14.224	55	783890	4.974
55) 1,2-Dichloropropane	(2)	14.267	63	321369	4.854
56) Bromodichloromethane	(2)	14.338	83	444388	4.989
57) Methyl Methacrylate	(2)	14.575	69	247139	4.961
58) 1,4-Dioxane	(2)	14.675	88	152873	4.993
59) cis-1,3-Dichloropropene	(2)	15.406	75	408137	4.969
60) Octane	(3)	15.427	43	815651	4.989
61) Toluene	(3)	15.800	91	724693	4.885
62) 4-Methyl-2-Pentanone	(2)	16.401	43	745806	4.836
63) Tetrachloroethene	(3)	16.430	166	314081	4.924
64) trans-1,3-Dichloropropene	(3)	16.459	75	358240	4.907
65) 1,3-Dichloropropene (total)	(3)		75	766377	9.869
66) Ethyl Methacrylate	(3)	16.673	69	417027	4.749
67) 1,1,2-Trichloroethane	(3)	16.731	97	251457	4.914
68) Dibromochloromethane	(3)	17.024	127	297217	4.828
69) 1,2-Dibromoethane	(3)	17.440	107	379580	4.900
70) 2-Hexanone	(3)	17.726	43	719519	4.909
71)*Chlorobenzene-d5	(3)	18.228	117	1041305	10.000
72) Chlorobenzene	(3)	18.256	112	559146	4.903
73) Ethylbenzene	(3)	18.271	91	1038173	4.948
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	280452	4.878
75) m/p-Xylene	(3)	18.493	91	785008	4.798
76) o-Xylene	(3)	19.180	91	809721	4.867

* = Compound is an internal standard.

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Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00362.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 12:03 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	1594729	9.666
78) Styrene	(3)	19.266	104	567058	4.858
79) Bromoform	(3)	19.338	173	391499	4.862
80) Cumene	(3)	19.668	105	1059873	4.881
81) n-Propylbenzene	(3)	20.319	120	279600	4.778
82) Bromobenzene	(3)	20.334	156	310744	4.880
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	566821	4.875
84) 4-Ethyltoluene	(3)	20.484	105	1083598	4.928
85) 2-Chlorotoluene	(3)	20.599	126	244859	4.915
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	916574	5.011
87) 1,2,3-Trichloropropane	(3)	20.670	110	168675	4.942
88) Alpha Methyl Styrene	(3)	21.007	118	425776	4.758
89) tert-Butylbenzene	(3)	21.129	119	816212	4.872
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	897320	4.975
91) sec-Butylbenzene	(3)	21.380	105	1316168	4.870
92) p-Isopropyltoluene	(3)	21.566	119	1040930	4.878
93) 1,3-Dichlorobenzene	(3)	21.716	146	537906	4.820
94) 1,4-Dichlorobenzene	(3)	21.838	146	555688	4.748
95) n-Butylbenzene	(3)	22.139	92	708190	4.901
96) Benzyl Chloride	(3)	22.160	126	161385	4.759
97) Hexachloroethane	(3)	22.382	117	336540	4.989
98) 1,2-Dichlorobenzene	(3)	22.425	146	522402	4.930
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	278677	4.929
100) Hexachlorobutadiene	(3)	24.546	225	345519	4.855
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	426234	5.011
102) Naphthalene	(3)	25.226	128	983219	4.871

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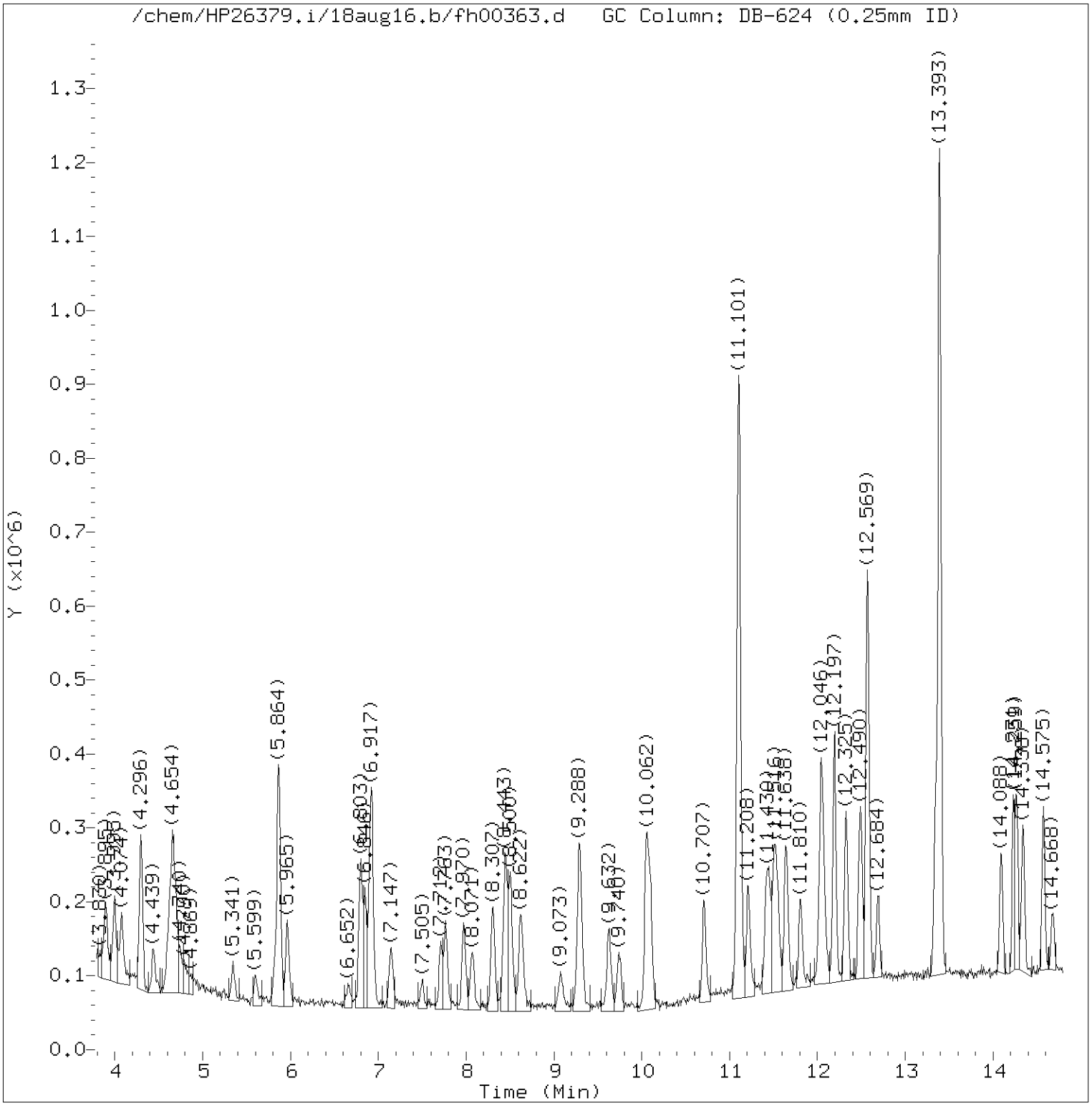
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00363.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 12:34 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD002 Lab Sample ID: VSTD002

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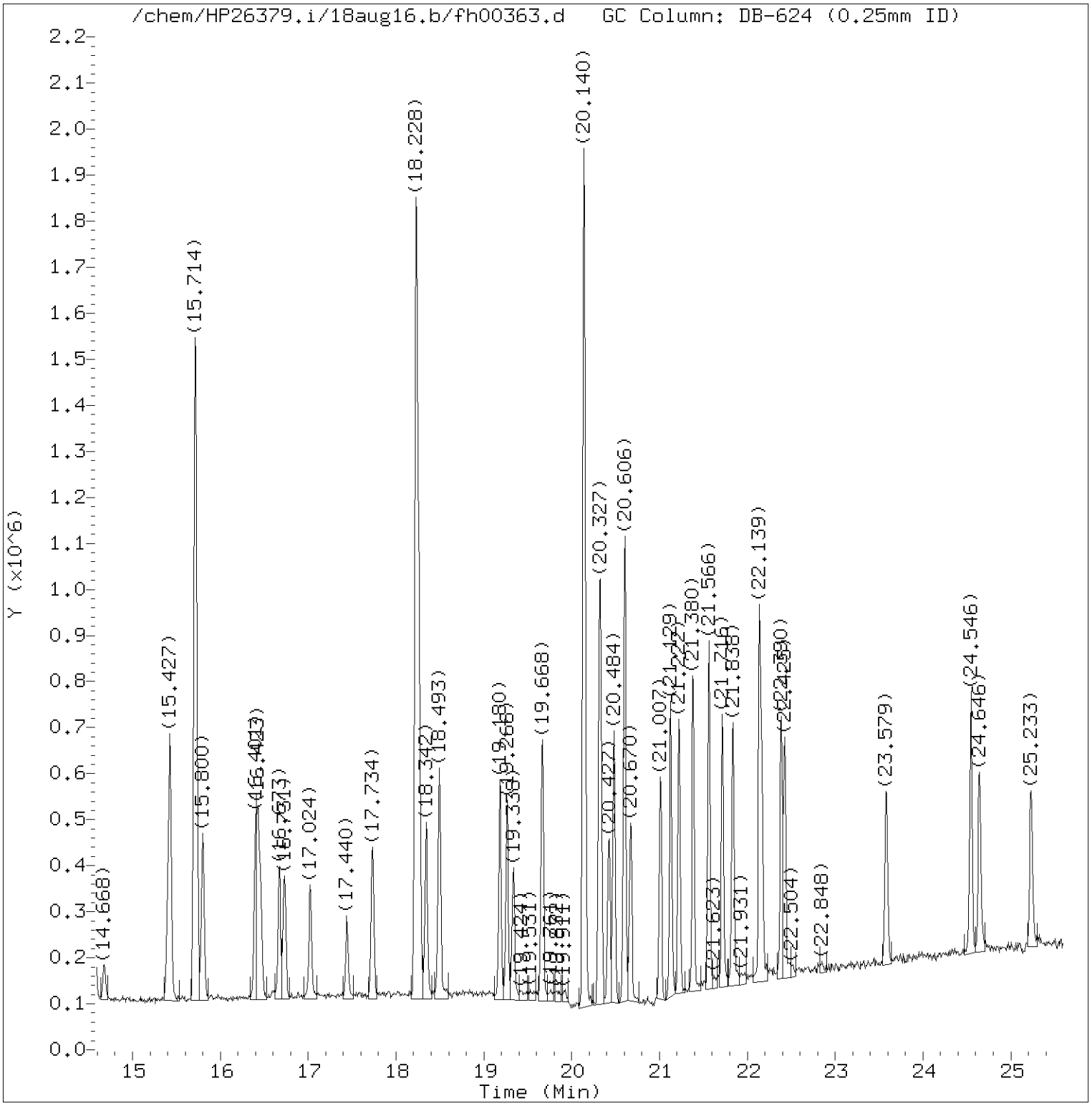
on 08/16/2018 at 18:55.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00363.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 12:34 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD002 Lab Sample ID: VSTD002

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on 08/16/2018 at 18:55.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00363.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 12:34 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.887	41	82803	2.058
2) Dichlorodifluoromethane	(1)	3.995	85	159504	1.877
3) Chlorodifluoromethane	(1)	4.074	51	165511	1.927
4) Freon 114	(1)	4.296	85	172080	1.933
5) Chloromethane	(1)	4.439	50	95175	1.952
6) Vinyl Chloride	(1)	4.632	62	65371	1.961
7) 1,3-Butadiene	(1)	4.668	54	70589	2.090
8) Bromomethane	(1)	5.349	94	52861	1.931
9) Chloroethane	(1)	5.607	64	50467	2.062
10) Bromoethene	(1)	5.821	106	54978	1.889
11) Pentane	(1)	5.872	43	188105	1.954
12) Trichlorofluoromethane	(1)	5.872	101	176238	2.014
13) Dichlorofluoromethane	(1)	5.965	67	152044	1.853
14) Ethanol	(1)	6.652	45	42804	1.971
15) Freon123a	(1)	6.803	67	171196	2.186
16) 1,1-Dichloroethene	(1)	6.846	61	153188	1.927
17) Freon 113	(1)	6.917	103	103772	2.075
18) Carbon Disulfide	(1)	6.932	76	183502	1.912
19) Methyl Iodide	(1)	7.147	142	137960	2.039
20) Acrolein	(1)	7.498	56	41620	1.838
21) Isopropanol	(1)	7.712	45	172359	1.876
22) 3-Chloropropene	(1)	7.770	41	146154	2.176
23) Methylene Chloride	(1)	7.970	84	61686	2.169
24) Acetone	(1)	8.071	43	150848	1.985
25) trans-1,2-Dichloroethene	(1)	8.300	61	144334	1.914
26) Hexane	(1)	8.450	56	114678	1.940
27) Methyl t-Butyl Ether	(1)	8.500	73	248323	2.085
28) tert-Butyl Alcohol	(1)	8.622	59	274266	2.266
29) Acetonitrile	(1)	9.073	41	101158	2.155
30) Di-Isopropyl Ether	(1)	9.288	45	409192	2.053
31) 1,1-Dichloroethane	(1)	9.625	63	178379	1.934
32) Acrylonitrile	(1)	9.740	53	98179	1.944
33) Ethyl Tert-Butyl Ether	(1)	10.055	59	382777	2.022
34) Vinyl Acetate	(1)	10.105	43	326544	2.169
35) cis-1,2-Dichloroethene	(1)	10.707	61	138620	1.903
36) 1,2-Dichloroethene (total)	(1)		61	282954	3.817
37)*Bromochloromethane	(1)	11.101	130	256673	10.000
38) Cyclohexane	(1)	11.122	56	220726	2.058

* = Compound is an internal standard.

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Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00363.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 12:34 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	147841	1.896
40) Ethyl Acetate	(1)	11.423	43	253320	1.982
41) Methyl Acrylate	(1)	11.452	55	210657	1.904
42) Carbon Tetrachloride	(1)	11.509	117	159731	2.075
43) Tetrahydrofuran	(1)	11.545	42	128180	2.019
44) 1,1,1-Trichloroethane	(1)	11.638	97	170954	2.070
45) 2-Butanone	(1)	11.810	43	224840	1.995
46) Isooctane	(2)	12.046	57	594814	1.961
47) Heptane	(2)	12.197	71	103512	2.114
48) Benzene	(2)	12.325	78	246952	2.011
49) Tert-Amyl Methyl Ether	(2)	12.497	73	241293	1.976
50) 1,2-Dichloroethane	(2)	12.691	62	139021	1.956
51) Trichloroethene	(2)	13.350	130	90183	1.908
52)*1,4-Difluorobenzene	(2)	13.393	114	1054818	10.000
53) Dibromomethane	(2)	14.095	174	74701	1.914
54) Ethyl Acrylate	(2)	14.231	55	290771	1.900
55) 1,2-Dichloropropane	(2)	14.267	63	128901	1.996
56) Bromodichloromethane	(2)	14.338	83	166188	1.923
57) Methyl Methacrylate	(2)	14.575	69	94416	1.951
58) 1,4-Dioxane	(2)	14.675	88	57957	1.951
59) cis-1,3-Dichloropropene	(2)	15.406	75	153340	1.923
60) Octane	(3)	15.427	43	327276	2.116
61) Toluene	(3)	15.800	91	285285	2.025
62) 4-Methyl-2-Pentanone	(2)	16.401	43	304143	2.020
63) Tetrachloroethene	(3)	16.430	166	123760	2.046
64) trans-1,3-Dichloropropene	(3)	16.459	75	141358	2.040
66) Ethyl Methacrylate	(3)	16.666	69	178437	2.128
65) 1,3-Dichloropropene (total)	(3)		75	294698	4.003
67) 1,1,2-Trichloroethane	(3)	16.731	97	96473	1.987
68) Dibromochloromethane	(3)	17.032	127	118788	2.027
69) 1,2-Dibromoethane	(3)	17.440	107	149840	2.038
70) 2-Hexanone	(3)	17.734	43	290120	2.086
71)*Chlorobenzene-d5	(3)	18.228	117	984552	10.000
72) Chlorobenzene	(3)	18.256	112	219886	2.031
73) Ethylbenzene	(3)	18.271	91	425803	2.142
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	112893	2.067
75) m/p-Xylene	(3)	18.493	91	332951	2.135
76) o-Xylene	(3)	19.180	91	327341	2.070

* = Compound is an internal standard.

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on 08/16/2018 at 18:55.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00363.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 12:34 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	660292	4.205
78) Styrene	(3)	19.266	104	235742	2.124
79) Bromoform	(3)	19.338	173	157366	2.056
80) Cumene	(3)	19.668	105	436786	2.117
81) n-Propylbenzene	(3)	20.312	120	116176	2.081
82) Bromobenzene	(3)	20.334	156	126053	2.084
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	243221	2.201
84) 4-Ethyltoluene	(3)	20.484	105	438068M	2.101
85) 2-Chlorotoluene	(3)	20.599	126	101303	2.143
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	372582	2.155
87) 1,2,3-Trichloropropane	(3)	20.678	110	68046	2.104
88) Alpha Methyl Styrene	(3)	21.007	118	170133	1.987
89) tert-Butylbenzene	(3)	21.129	119	321326	2.016
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	367923	2.155
91) sec-Butylbenzene	(3)	21.387	105	526193	2.046
92) p-Isopropyltoluene	(3)	21.566	119	415678	2.047
93) 1,3-Dichlorobenzene	(3)	21.716	146	220702	2.073
94) 1,4-Dichlorobenzene	(3)	21.838	146	233500	2.084
95) n-Butylbenzene	(3)	22.139	92	287470	2.094
96) Benzyl Chloride	(3)	22.167	126	67512	2.081
97) Hexachloroethane	(3)	22.390	117	132063	2.069
98) 1,2-Dichlorobenzene	(3)	22.425	146	212197	2.112
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	106511	1.987
100) Hexachlorobutadiene	(3)	24.546	225	139690	2.064
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	165499	2.059
102) Naphthalene	(3)	25.233	128	393998	2.051

M = Compound was manually integrated.

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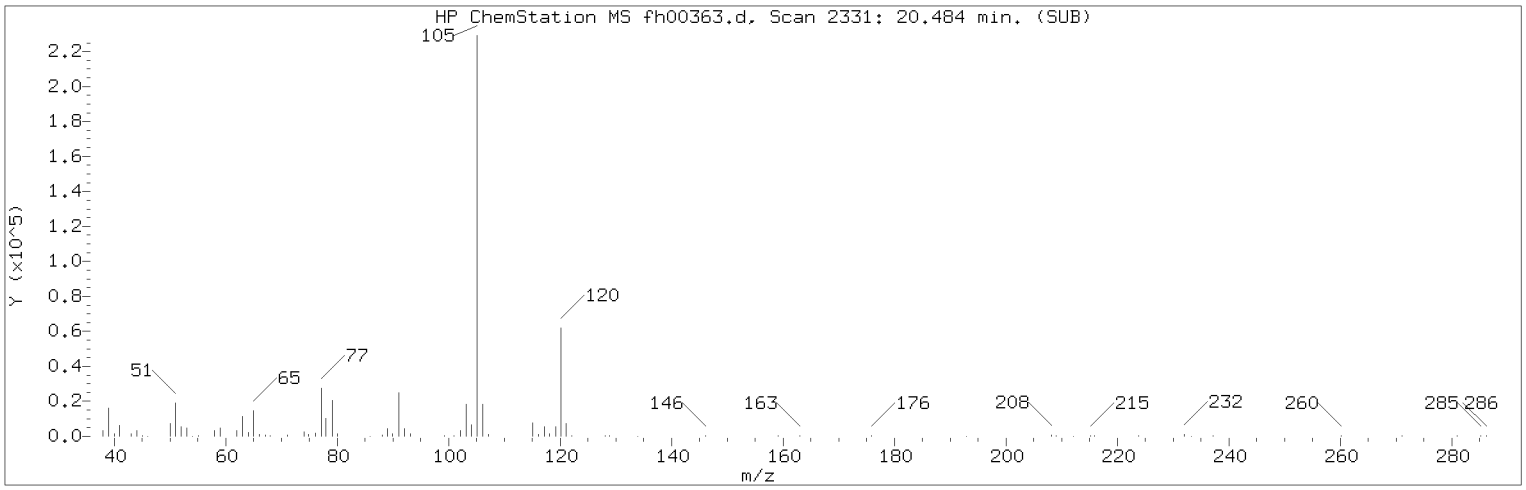
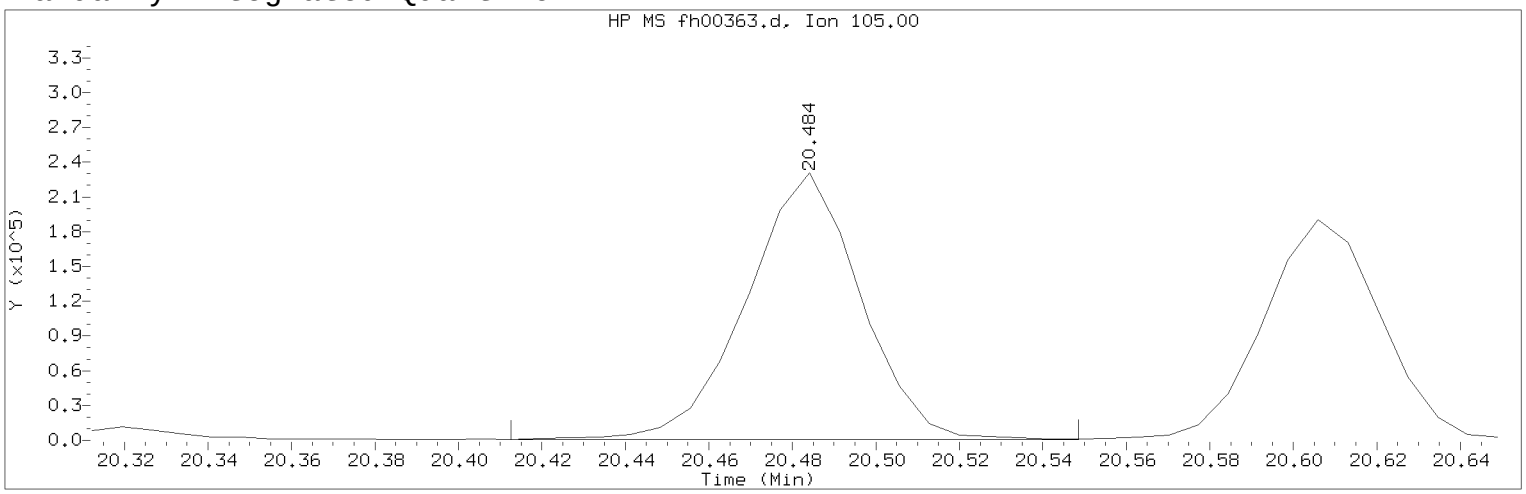
on 08/16/2018 at 18:55.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug16.b/fh00363.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 12:34 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD002 Lab Sample ID: VSTD002

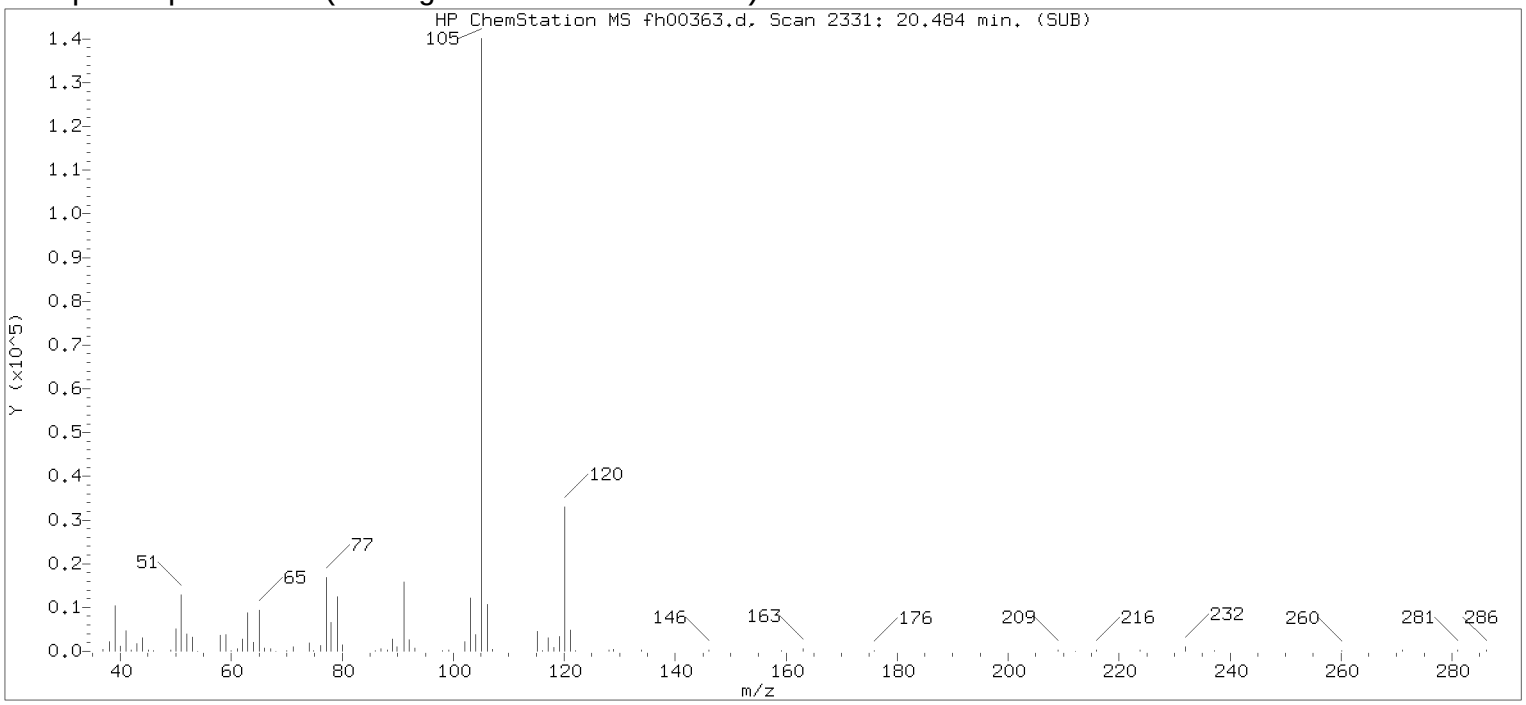
Compound Number : 84
Compound Name : 4-Ethyltoluene
Scan Number : 2331
Retention Time (minutes): 20.484
Quant Ion : 105.00
Area (flag) : 438068M
Concentration (ppb(v)) : 2.1009
Integration start scan : 2320 Integration stop scan: 2339
Y at integration start : 529 Y at integration end: 527

Reason for manual integration: improper integration

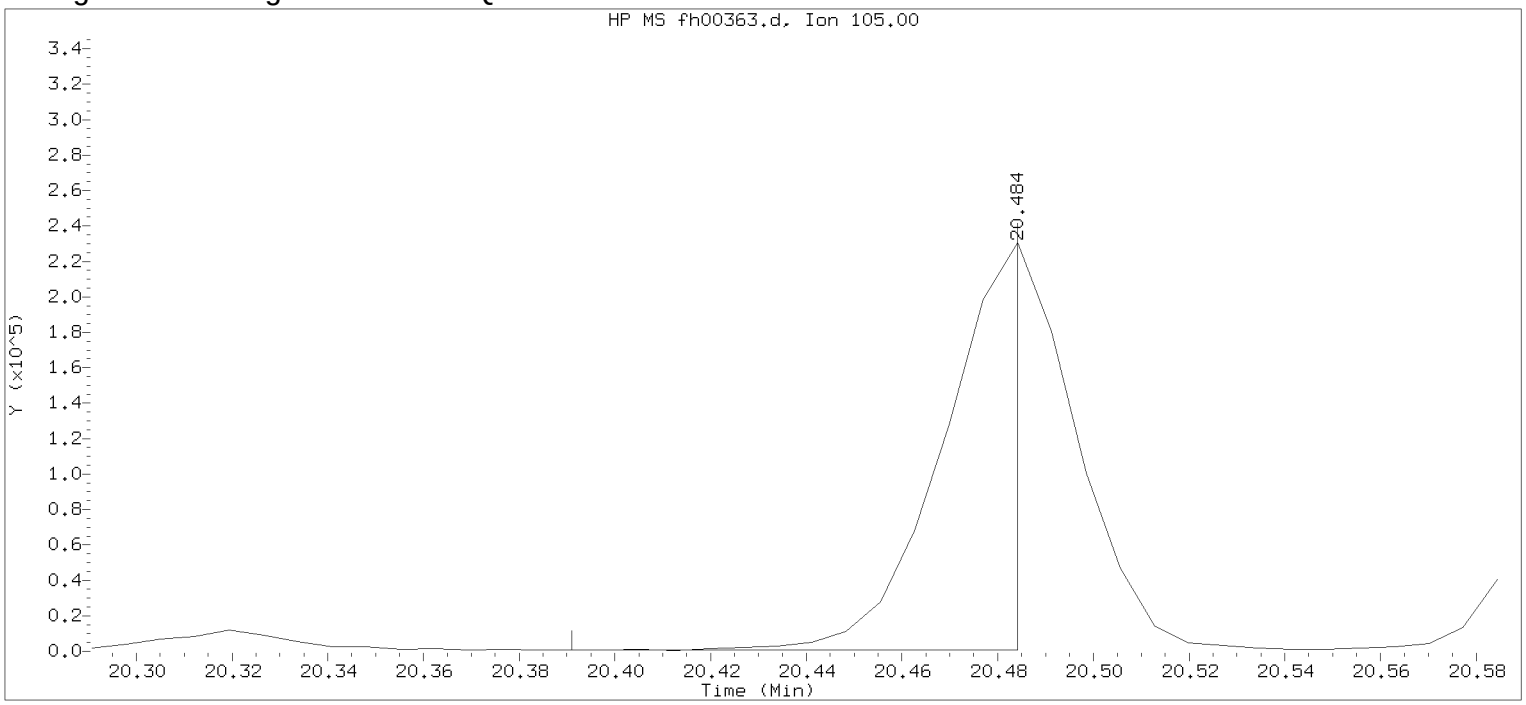
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 08/16/2018 at 18:55.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/21/2018 at 14:19.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



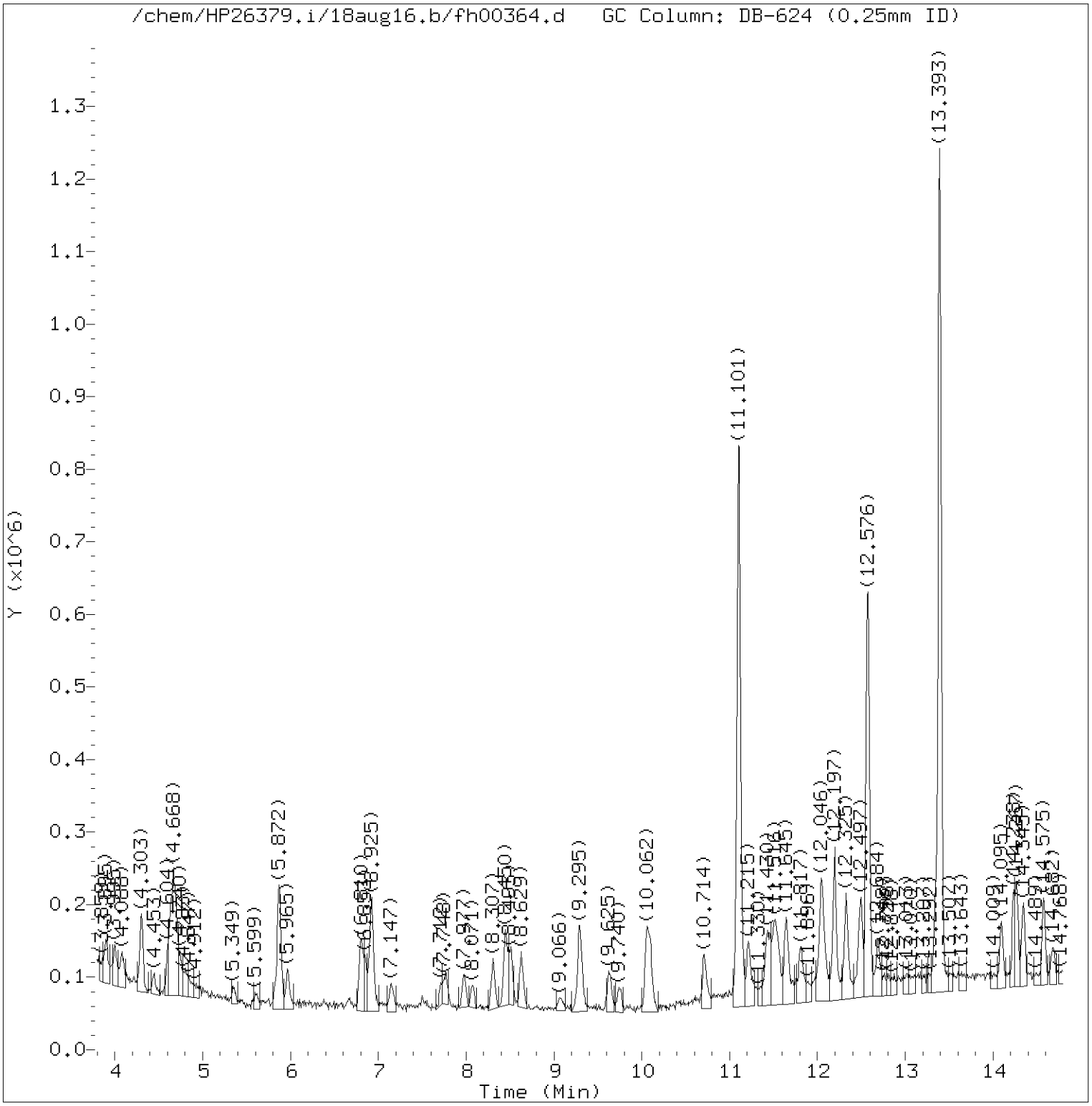
Data File: /chem/HP26379.i/18aug16.b/fh00363.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 12:34 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 12:56
Date, time and analyst ID of latest file update: 16-Aug-2018 13:03 Unknown

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compound Number : 84
Compound Name : 4-Ethyltoluene
Scan Number : 2331
Retention Time (minutes): 20.484
Quant Ion : 105.00
Area : 237619
Concentration (ppb(v)) : 1.1596
Integration start scan : 2317 Integration stop scan: 2330
Y at integration start : 745 Y at integration end: 745

Digitally signed by Jeffrey B. Smith on 08/16/2018 at 18:55.
Target 3.5 esignature user GLE02jbs01346



Total Ion Chromatogram (TIC)

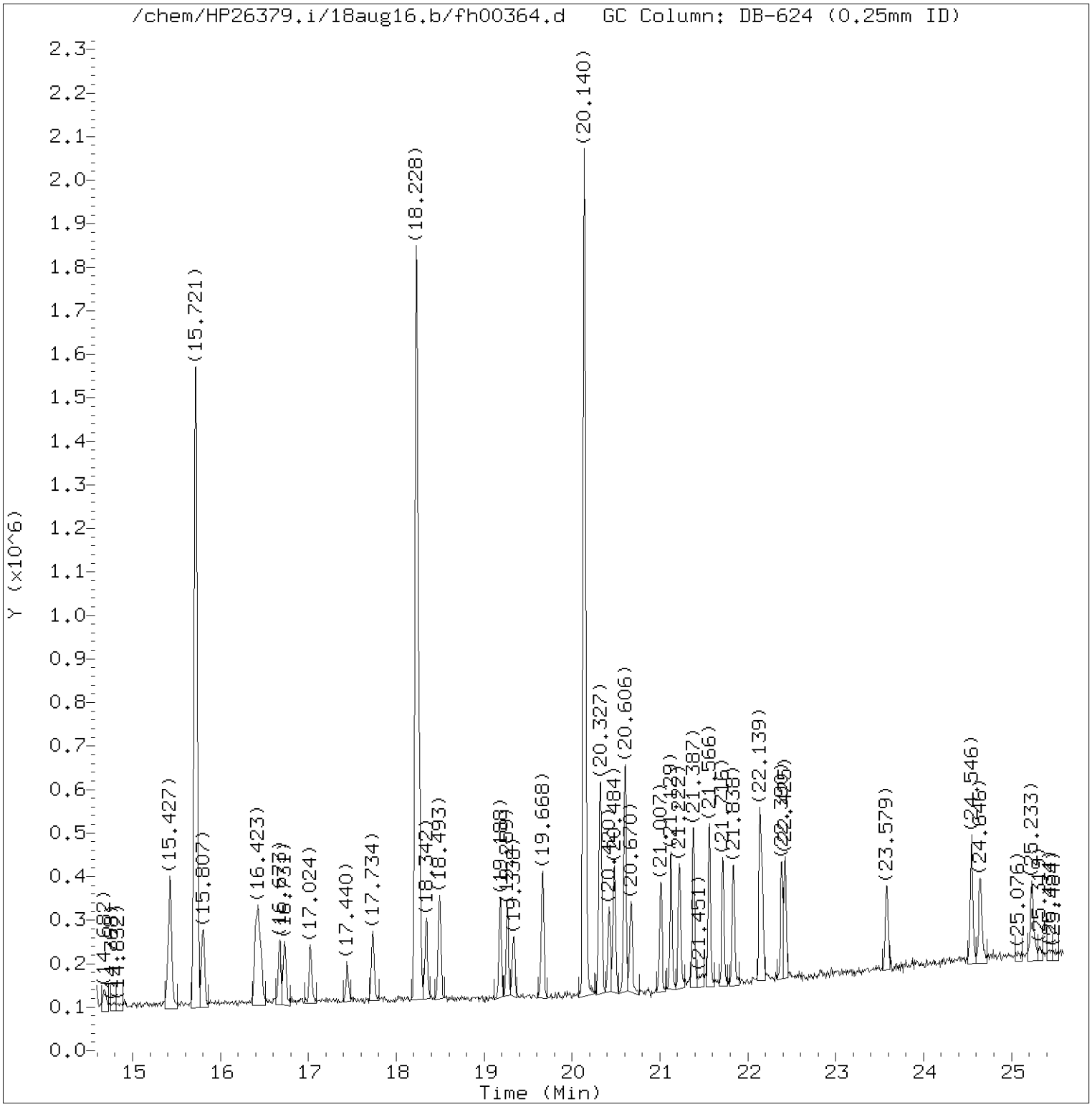
Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00364.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 13:04 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Jeffrey B. Smith
on 08/16/2018 at 18:55.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00364.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 13:04 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Jeffrey B. Smith
on 08/16/2018 at 18:55.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00364.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 13:04 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	37027	0.932
2) Dichlorodifluoromethane	(1)	3.995	85	65877	0.768
3) Chlorodifluoromethane	(1)	4.081	51	80455	0.934
4) Freon 114	(1)	4.303	85	83943	0.940
5) Chloromethane	(1)	4.446	50	48119	0.986
6) Vinyl Chloride	(1)	4.632	62	28318	0.850
7) 1,3-Butadiene	(1)	4.668	54	37007	1.114
8) Bromomethane	(1)	5.341	94	19092	0.695
9) Chloroethane	(1)	5.592	64	18136	0.751
10) Bromoethene	(1)	5.836	106	23501	0.801
11) Pentane	(1)	5.864	43	99486	1.033
12) Trichlorofluoromethane	(1)	5.872	101	87606	1.008
13) Dichlorofluoromethane	(1)	5.965	67	67210	0.809
14) Ethanol	(1)	6.667	45	19558	0.902
15) Freon123a	(1)	6.803	67	94060	1.203
16) 1,1-Dichloroethene	(1)	6.853	61	61721	0.774
17) Freon 113	(1)	6.925	103	55902	1.134
18) Carbon Disulfide	(1)	6.939	76	76181	0.789
19) Methyl Iodide	(1)	7.139	142	57282	0.855
20) Acrolein	(1)	7.498	56	18932	0.824
21) Isopropanol	(1)	7.712	45	85749	0.924
22) 3-Chloropropene	(1)	7.763	41	66743	0.994
23) Methylene Chloride	(1)	7.977	84	25609	0.900
24) Acetone	(1)	8.078	43	67262	0.888
25) trans-1,2-Dichloroethene	(1)	8.307	61	63228	0.834
26) Hexane	(1)	8.443	56	67200	1.135
27) Methyl t-Butyl Ether	(1)	8.508	73	126546	1.080
28) tert-Butyl Alcohol	(1)	8.629	59	136571	1.140
29) Acetonitrile	(1)	9.073	41	40827	0.892
30) Di-Isopropyl Ether	(1)	9.295	45	201901	1.025
31) 1,1-Dichloroethane	(1)	9.625	63	84047	0.909
32) Acrylonitrile	(1)	9.747	53	45247	0.895
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	178426	0.950
34) Vinyl Acetate	(1)	10.105	43	152296	1.009
35) cis-1,2-Dichloroethene	(1)	10.707	61	61859	0.844
36) 1,2-Dichloroethene (total)	(1)		61	125087	1.678
37)*Bromochloromethane	(1)	11.108	130	255285	10.000
38) Cyclohexane	(1)	11.122	56	112106	1.058

* = Compound is an internal standard.

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Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00364.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 13:04 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	72412	0.922
40) Ethyl Acetate	(1)	11.416	43	122021	0.958
41) Methyl Acrylate	(1)	11.459	55	103897	0.933
42) Carbon Tetrachloride	(1)	11.509	117	76856	1.013
43) Tetrahydrofuran	(1)	11.552	42	63620	1.010
44) 1,1,1-Trichloroethane	(1)	11.645	97	83785	1.029
45) 2-Butanone	(1)	11.810	43	108752	0.969
46) Isooctane	(2)	12.046	57	276288	0.898
47) Heptane	(2)	12.197	71	50271	1.032
48) Benzene	(2)	12.325	78	120857	0.976
49) Tert-Amyl Methyl Ether	(2)	12.497	73	115824	0.936
50) 1,2-Dichloroethane	(2)	12.698	62	62336	0.864
51) Trichloroethene	(2)	13.343	130	45943	0.952
52)*1,4-Difluorobenzene	(2)	13.393	114	1064887	10.000
53) Dibromomethane	(2)	14.095	174	31293	0.786
54) Ethyl Acrylate	(2)	14.231	55	156294	0.999
55) 1,2-Dichloropropane	(2)	14.267	63	67567	1.036
56) Bromodichloromethane	(2)	14.345	83	82958	0.942
57) Methyl Methacrylate	(2)	14.575	69	49366	1.004
58) 1,4-Dioxane	(2)	14.682	88	29353	0.973
59) cis-1,3-Dichloropropene	(2)	15.398	75	77074	0.948
60) Octane	(3)	15.434	43	166758	1.051
61) Toluene	(3)	15.807	91	150452	1.028
62) 4-Methyl-2-Pentanone	(2)	16.401	43	163744	1.080
63) Tetrachloroethene	(3)	16.430	166	62391	0.996
64) trans-1,3-Dichloropropene	(3)	16.466	75	72511	1.010
65) 1,3-Dichloropropene (total)	(3)		75	149585	1.951
66) Ethyl Methacrylate	(3)	16.673	69	87172	1.014
67) 1,1,2-Trichloroethane	(3)	16.731	97	51253	1.012
68) Dibromochloromethane	(3)	17.024	127	58951	0.969
69) 1,2-Dibromoethane	(3)	17.440	107	73182	0.960
70) 2-Hexanone	(3)	17.734	43	145464	1.015
71)*Chlorobenzene-d5	(3)	18.228	117	1025336	10.000
72) Chlorobenzene	(3)	18.256	112	119046	1.060
73) Ethylbenzene	(3)	18.271	91	228177	1.122
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	59752	1.059
75) m/p-Xylene	(3)	18.493	91	171541	1.074
76) o-Xylene	(3)	19.188	91	178417	1.093

* = Compound is an internal standard.

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Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00364.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 13:04 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	349958	2.168
78) Styrene	(3)	19.266	104	120023	1.055
79) Bromoform	(3)	19.338	173	80111	1.012
80) Cumene	(3)	19.668	105	230938	1.091
81) n-Propylbenzene	(3)	20.319	120	60018	1.043
82) Bromobenzene	(3)	20.327	156	66324	1.064
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	124912	1.114
84) 4-Ethyltoluene	(3)	20.484	105	237768	1.109
85) 2-Chlorotoluene	(3)	20.592	126	53383	1.104
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	196117	1.111
87) 1,2,3-Trichloropropane	(3)	20.670	110	37200	1.119
88) Alpha Methyl Styrene	(3)	21.014	118	93810	1.049
89) tert-Butylbenzene	(3)	21.129	119	165876	1.002
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	187689	1.077
91) sec-Butylbenzene	(3)	21.387	105	277890	1.045
92) p-Isopropyltoluene	(3)	21.566	119	222367	1.060
93) 1,3-Dichlorobenzene	(3)	21.716	146	115040	1.050
94) 1,4-Dichlorobenzene	(3)	21.831	146	123075	1.069
95) n-Butylbenzene	(3)	22.139	92	143923	1.022
96) Benzyl Chloride	(3)	22.167	126	35051	1.051
97) Hexachloroethane	(3)	22.382	117	66317	1.007
98) 1,2-Dichlorobenzene	(3)	22.425	146	109733	1.064
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	54201	0.969
100) Hexachlorobutadiene	(3)	24.546	225	72165	1.032
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	84899	1.022
102) Naphthalene	(3)	25.233	128	196934	0.993

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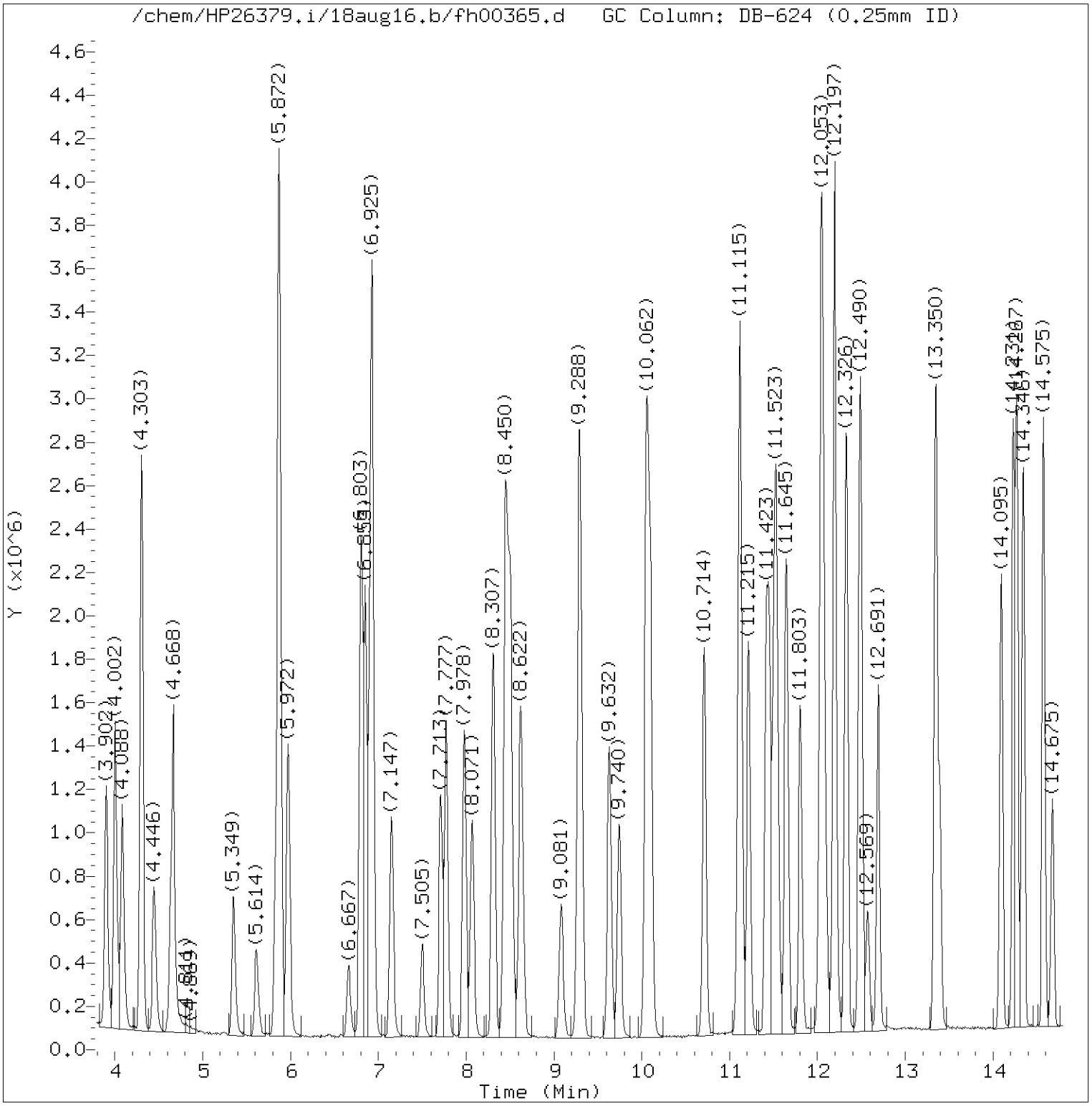
on 08/16/2018 at 18:55.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

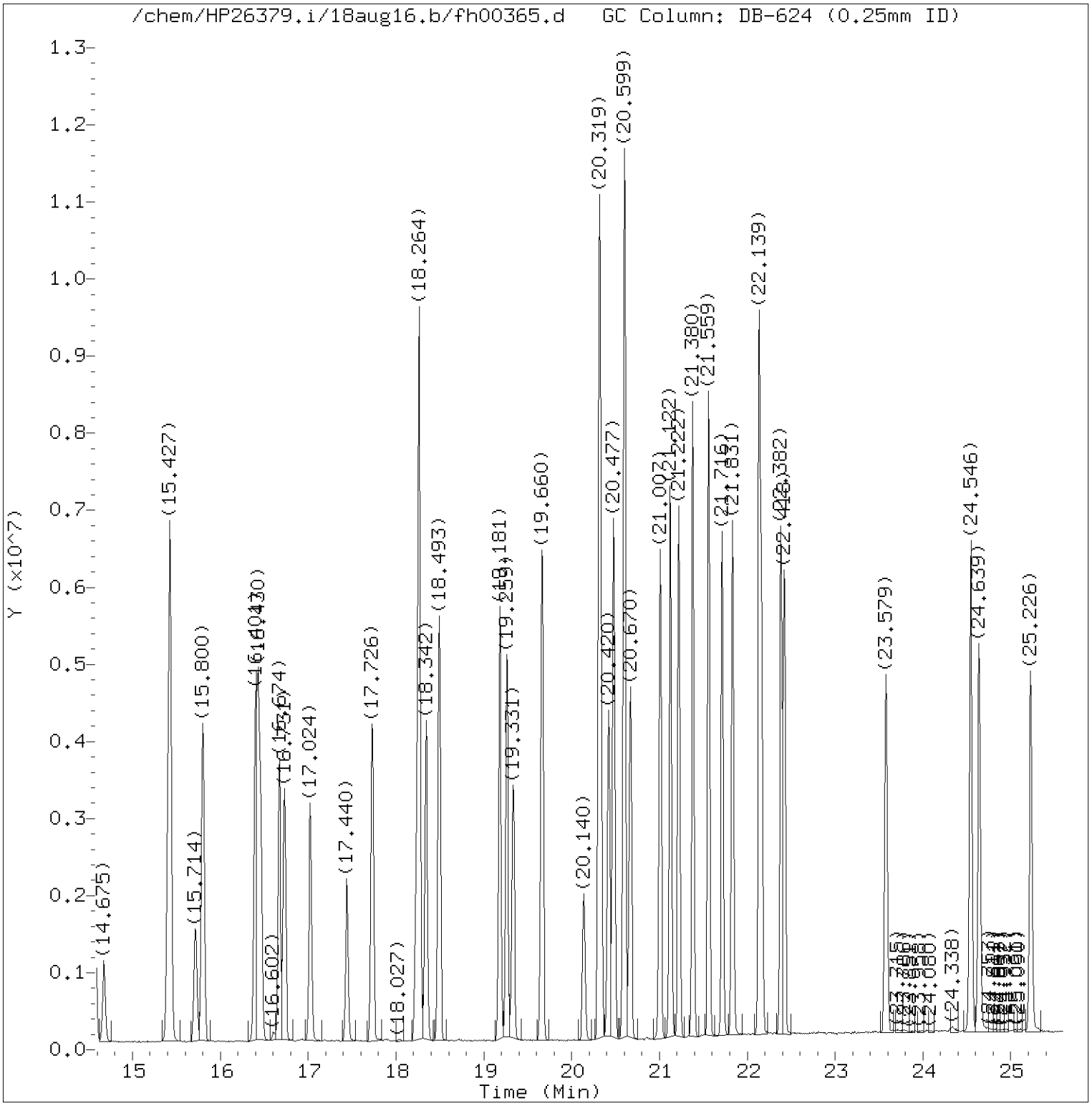
Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00365.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 13:35 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

Digitally signed by Jeffrey B. Smith
on 08/16/2018 at 18:55.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00365.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 13:35 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

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on 08/16/2018 at 18:55.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00365.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 13:35 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	1000683	24.638
2) Dichlorodifluoromethane	(1)	4.002	85	2259665	24.449
3) Chlorodifluoromethane	(1)	4.088	51	2208285	25.082
4) Freon 114	(1)	4.303	85	2235188	24.549
5) Chloromethane	(1)	4.446	50	1237245	25.258
6) Vinyl Chloride	(1)	4.640	62	862187	24.666
7) 1,3-Butadiene	(1)	4.668	54	770348	24.120
8) Bromomethane	(1)	5.349	94	717160	23.720
9) Chloroethane	(1)	5.614	64	641797	24.542
10) Bromoethene	(1)	5.829	106	770681	24.634
11) Pentane	(1)	5.872	43	2378682	24.981
12) Trichlorofluoromethane	(1)	5.879	101	2108497	24.353
13) Dichlorofluoromethane	(1)	5.972	67	2168167	24.542
14) Ethanol	(1)	6.660	45	529065	23.640
15) Freon123a	(1)	6.803	67	2085541	27.461
16) 1,1-Dichloroethene	(1)	6.853	61	2089466	24.368
17) Freon 113	(1)	6.917	103	1187143	25.229
18) Carbon Disulfide	(1)	6.932	76	2510891	24.324
19) Methyl Iodide	(1)	7.147	142	1828374	26.063
20) Acrolein	(1)	7.505	56	584352	24.040
21) Isopropanol	(1)	7.713	45	2287683	24.056
22) 3-Chloropropene	(1)	7.777	41	1874187	26.997
23) Methylene Chloride	(1)	7.978	84	811586	26.860
24) Acetone	(1)	8.071	43	1909134	24.323
25) trans-1,2-Dichloroethene	(1)	8.307	61	1945970	24.335
26) Hexane	(1)	8.457	56	1413758	25.006
27) Methyl t-Butyl Ether	(1)	8.500	73	2901679	25.455
28) tert-Butyl Alcohol	(1)	8.622	59	3243535	27.346
29) Acetonitrile	(1)	9.081	41	1139662	24.035
30) Di-Isopropyl Ether	(1)	9.288	45	4928215	25.245
31) 1,1-Dichloroethane	(1)	9.632	63	2324405	24.406
32) Acrylonitrile	(1)	9.740	53	1269900	24.266
33) Ethyl Tert-Butyl Ether	(1)	10.055	59	4785227	25.077
34) Vinyl Acetate	(1)	10.105	43	4308849	27.645
35) cis-1,2-Dichloroethene	(1)	10.714	61	1880274	24.392
36) 1,2-Dichloroethene (total)	(1)		61	3826244	48.727
37)*Bromochloromethane	(1)	11.108	130	255158	10.000
38) Cyclohexane	(1)	11.122	56	2612976	25.172

* = Compound is an internal standard.

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on 08/16/2018 at 18:55.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00365.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 13:35 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	1961949	24.353
40) Ethyl Acetate	(1)	11.416	43	3176845	24.594
41) Methyl Acrylate	(1)	11.452	55	2780399	24.438
42) Carbon Tetrachloride	(1)	11.509	117	1886725	24.993
43) Tetrahydrofuran	(1)	11.538	42	1545923	24.639
44) 1,1,1-Trichloroethane	(1)	11.645	97	2018290	25.052
45) 2-Butanone	(1)	11.803	43	2768779	24.443
46) Isooctane	(2)	12.053	57	7697842	24.888
47) Heptane	(2)	12.197	71	1174098	25.054
48) Benzene	(2)	12.326	78	3001505	24.751
49) Tert-Amyl Methyl Ether	(2)	12.490	73	3066077	24.698
50) 1,2-Dichloroethane	(2)	12.691	62	1802922	24.597
51) Trichloroethene	(2)	13.350	130	1152531	24.171
52)*1,4-Difluorobenzene	(2)	13.393	114	1035018	10.000
53) Dibromomethane	(2)	14.095	174	988208	23.835
54) Ethyl Acrylate	(2)	14.231	55	3776990	24.844
55) 1,2-Dichloropropane	(2)	14.267	63	1544043	24.646
56) Bromodichloromethane	(2)	14.338	83	2158609	24.731
57) Methyl Methacrylate	(2)	14.575	69	1193984	25.032
58) 1,4-Dioxane	(2)	14.675	88	722601	24.426
59) cis-1,3-Dichloropropene	(2)	15.406	75	1986319	24.709
60) Octane	(3)	15.434	43	3806809	25.338
61) Toluene	(3)	15.800	91	3492677	25.035
62) 4-Methyl-2-Pentanone	(2)	16.401	43	3623269	25.267
63) Tetrachloroethene	(3)	16.430	166	1483055	24.561
64) trans-1,3-Dichloropropene	(3)	16.459	75	1704664	24.742
65) 1,3-Dichloropropene (total)	(3)		75	3690983	49.614
66) Ethyl Methacrylate	(3)	16.674	69	2107671	25.591
67) 1,1,2-Trichloroethane	(3)	16.731	97	1199632	24.702
68) Dibromochloromethane	(3)	17.024	127	1467635	24.801
69) 1,2-Dibromoethane	(3)	17.440	107	1836242	24.699
70) 2-Hexanone	(3)	17.726	43	3474469	25.315
71)*Chlorobenzene-d5	(3)	18.228	117	987125	10.000
72) Chlorobenzene	(3)	18.257	112	2661349	25.121
73) Ethylbenzene	(3)	18.271	91	4833245	25.736
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	1336982	25.114
75) m/p-Xylene	(3)	18.493	91	3808703	25.411
76) o-Xylene	(3)	19.181	91	3871818	25.428

* = Compound is an internal standard.

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on 08/16/2018 at 18:55.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00365.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 13:35 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	7680521	50.839
78) Styrene	(3)	19.259	104	2724851	25.332
79) Bromoform	(3)	19.331	173	1895958	24.973
80) Cumene	(3)	19.660	105	5022725	25.414
81) n-Propylbenzene	(3)	20.312	120	1380474	25.277
82) Bromobenzene	(3)	20.327	156	1465611	24.951
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	2665848	25.656
84) 4-Ethyltoluene	(3)	20.477	105	5128476	25.780
85) 2-Chlorotoluene	(3)	20.599	126	1130864	25.177
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	4183765	25.566
87) 1,2,3-Trichloropropane	(3)	20.670	110	783003	25.467
88) Alpha Methyl Styrene	(3)	21.007	118	2094457	24.955
89) tert-Butylbenzene	(3)	21.122	119	3730201	23.417
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	4196007	25.657
91) sec-Butylbenzene	(3)	21.380	105	6074976	24.291
92) p-Isopropyltoluene	(3)	21.559	119	4817073	24.594
93) 1,3-Dichlorobenzene	(3)	21.716	146	2520065	24.519
94) 1,4-Dichlorobenzene	(3)	21.831	146	2595810	24.272
95) n-Butylbenzene	(3)	22.132	92	3321483	24.787
96) Benzyl Chloride	(3)	22.160	126	775269	24.792
97) Hexachloroethane	(3)	22.382	117	1602096	25.316
98) 1,2-Dichlorobenzene	(3)	22.425	146	2438407	25.084
99) 1,2-Dibromo-3-chloropropane	(3)	23.579	157	1356093	24.932
100) Hexachlorobutadiene	(3)	24.546	225	1622235	24.357
101) 1,2,4-Trichlorobenzene	(3)	24.639	180	1914688	24.104
102) Naphthalene	(3)	25.226	128	4606323	24.034

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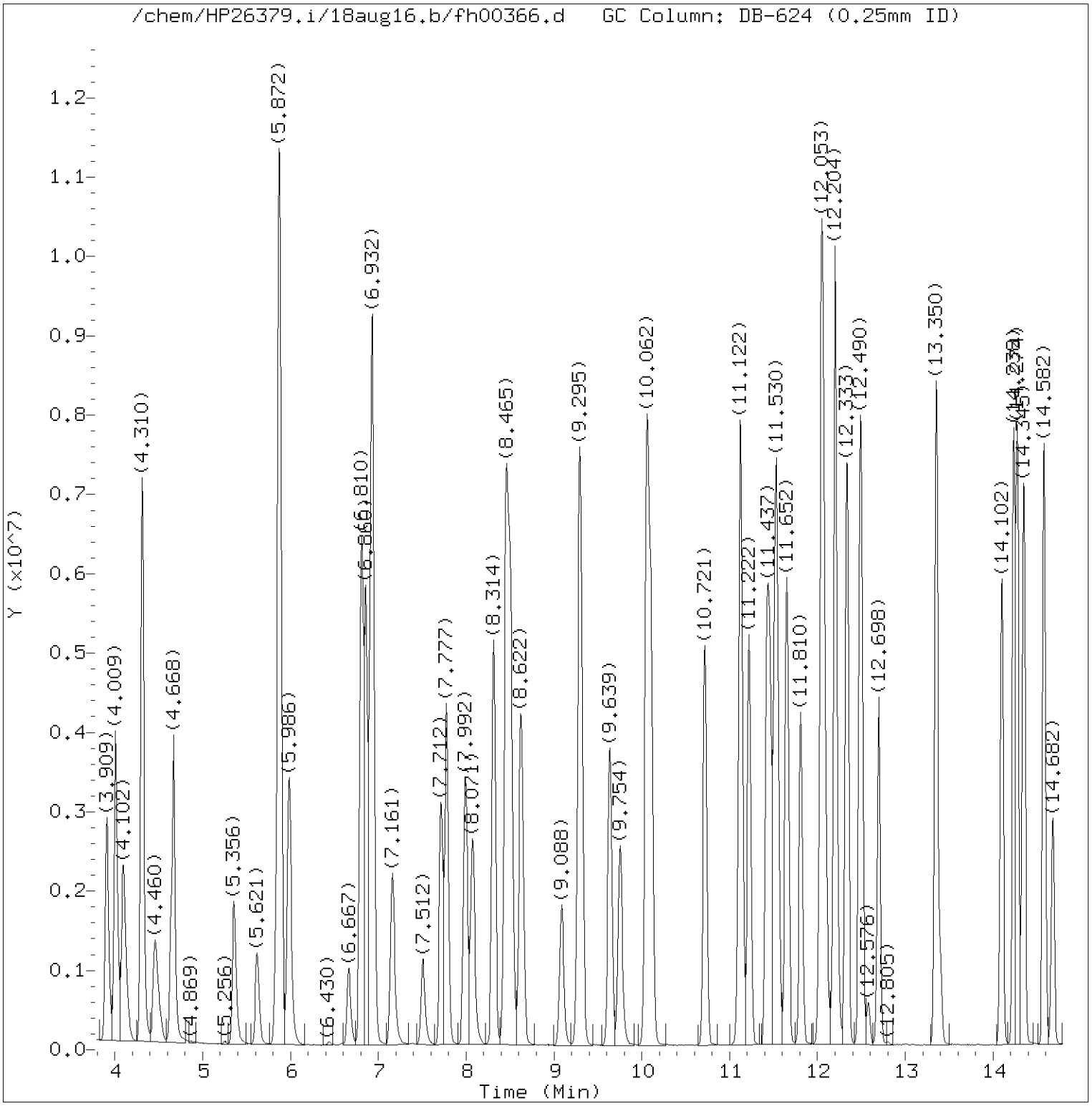
on 08/16/2018 at 18:55.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

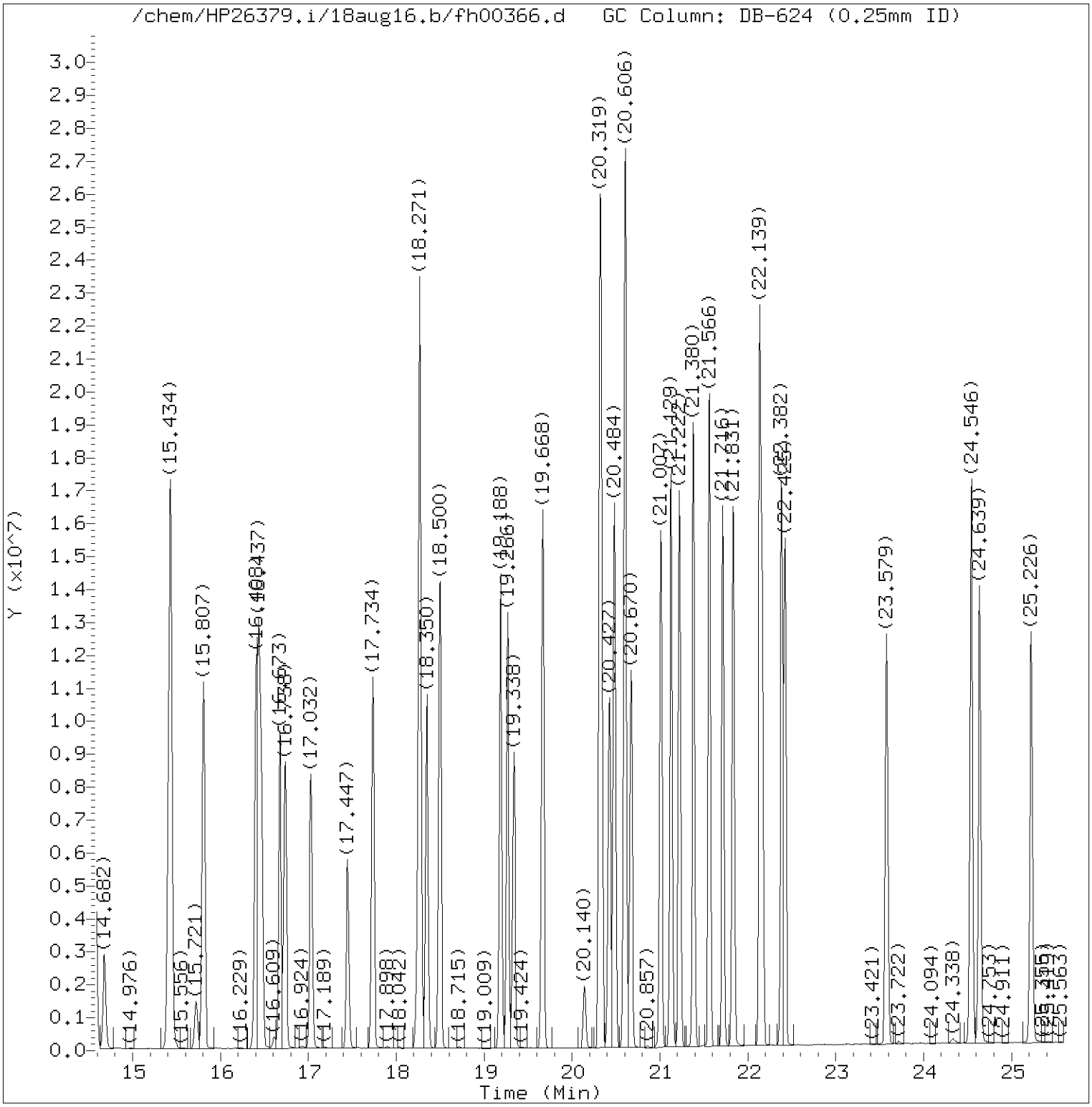
Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00366.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 14:06 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD075 Lab Sample ID: VSTD070

Digitally signed by Jeffrey B. Smith
on 08/16/2018 at 18:55.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00366.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 14:06 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD075 Lab Sample ID: VSTD070

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on 08/16/2018 at 18:55.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00366.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 14:06 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD075 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.909	41	2860764	70.274
2) Dichlorodifluoromethane	(1)	4.009	85	6479744	69.684
3) Chlorodifluoromethane	(1)	4.102	51	6114135	69.902
4) Freon 114	(1)	4.310	85	6304396	68.961
5) Chloromethane	(1)	4.460	50	3349553	69.074
6) Vinyl Chloride	(1)	4.640	62	2406738	68.734
7) 1,3-Butadiene	(1)	4.675	54	2128023	65.798
8) Bromomethane	(1)	5.356	94	2148699	69.636
9) Chloroethane	(1)	5.621	64	1829750	69.674
10) Bromoethene	(1)	5.843	106	2179848	69.513
11) Pentane	(1)	5.872	43	6460377	68.153
12) Trichlorofluoromethane	(1)	5.879	101	5880920	67.388
13) Dichlorofluoromethane	(1)	5.986	67	6104681	68.808
14) Ethanol	(1)	6.659	45	1536141	67.151
15) Freon123a	(1)	6.810	67	5781496	76.104
16) 1,1-Dichloroethene	(1)	6.860	61	5930187	68.634
17) Freon 113	(1)	6.925	103	3117373	66.883
18) Carbon Disulfide	(1)	6.939	76	7059161	67.803
19) Methyl Iodide	(1)	7.161	142	4541722	66.471
20) Acrolein	(1)	7.505	56	1676208	67.992
21) Isopropanol	(1)	7.712	45	6564900	68.088
22) 3-Chloropropene	(1)	7.777	41	5282945	75.449
23) Methylene Chloride	(1)	7.992	84	2308699	75.571
24) Acetone	(1)	8.078	43	5369872	67.832
25) trans-1,2-Dichloroethene	(1)	8.314	61	5508520	68.318
26) Hexane	(1)	8.457	56	3827416	68.037
27) Methyl t-Butyl Ether	(1)	8.508	73	7598917	67.604
28) tert-Butyl Alcohol	(1)	8.622	59	8915134	74.988
29) Acetonitrile	(1)	9.088	41	3298980	68.593
30) Di-Isopropyl Ether	(1)	9.295	45	13268160	68.636
31) 1,1-Dichloroethane	(1)	9.639	63	6579914	68.614
32) Acrylonitrile	(1)	9.754	53	3605854	68.239
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	12881481	67.943
34) Vinyl Acetate	(1)	10.112	43	11789691	75.533
35) cis-1,2-Dichloroethene	(1)	10.721	61	5304779	68.324
36) 1,2-Dichloroethene (total)	(1)		61	10813299	136.642
37)*Bromochloromethane	(1)	11.108	130	253908	10.000
38) Cyclohexane	(1)	11.129	56	7015971	68.157

* = Compound is an internal standard.

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Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00366.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 14:06 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD075 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.222	83	5536273	68.176
40) Ethyl Acetate	(1)	11.423	43	8831249	68.153
41) Methyl Acrylate	(1)	11.459	55	7742593	67.627
42) Carbon Tetrachloride	(1)	11.516	117	5092120	67.775
43) Tetrahydrofuran	(1)	11.545	42	4322713	68.740
44) 1,1,1-Trichloroethane	(1)	11.652	97	5422251	67.706
45) 2-Butanone	(1)	11.810	43	7709224	67.640
46) Isooctane	(2)	12.053	57	20587892	69.123
47) Heptane	(2)	12.204	71	3111114	69.171
48) Benzene	(2)	12.340	78	8099025	69.167
49) Tert-Amyl Methyl Ether	(2)	12.490	73	8271322	68.519
50) 1,2-Dichloroethane	(2)	12.698	62	4990370	70.294
51) Trichloroethene	(2)	13.350	130	3288443	70.611
52)*1,4-Difluorobenzene	(2)	13.400	114	994434	10.000
53) Dibromomethane	(2)	14.102	174	2874938	70.530
54) Ethyl Acrylate	(2)	14.231	55	10283482M	70.185
55) 1,2-Dichloropropane	(2)	14.274	63	4209384	69.440
56) Bromodichloromethane	(2)	14.345	83	5917375	70.182
57) Methyl Methacrylate	(2)	14.582	69	3210830	70.109
58) 1,4-Dioxane	(2)	14.682	88	1999094	69.535
59) cis-1,3-Dichloropropene	(2)	15.413	75	5470373	70.416
60) Octane	(3)	15.434	43	9769334	66.832
61) Toluene	(3)	15.807	91	9324888	68.281
62) 4-Methyl-2-Pentanone	(2)	16.401	43	9458222	69.017
63) Tetrachloroethene	(3)	16.437	166	4054812	67.957
64) trans-1,3-Dichloropropene	(3)	16.466	75	4621576	68.128
65) 1,3-Dichloropropene (total)	(3)		75	10091949	137.955
66) Ethyl Methacrylate	(3)	16.673	69	5478854	68.726
67) 1,1,2-Trichloroethane	(3)	16.738	97	3252976	67.975
68) Dibromochloromethane	(3)	17.032	127	4065693	69.860
69) 1,2-Dibromoethane	(3)	17.447	107	5048036	68.902
70) 2-Hexanone	(3)	17.734	43	9153396	68.517
71)*Chlorobenzene-d5	(3)	18.235	117	966940	10.000
72) Chlorobenzene	(3)	18.264	112	6939715	67.036
73) Ethylbenzene	(3)	18.271	91	11994574	66.175
74) 1,1,1,2-Tetrachloroethane	(3)	18.350	131	3536264	67.967
75) m/p-Xylene	(3)	18.500	91	9801780	67.314
76) o-Xylene	(3)	19.188	91	10019771	67.757

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

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on 08/16/2018 at 18:55.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00366.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 14:06 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD075 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	19821551	135.075
78) Styrene	(3)	19.266	104	7109926	67.929
79) Bromoform	(3)	19.338	173	5185426	69.691
80) Cumene	(3)	19.668	105	12730679	66.307
81) n-Propylbenzene	(3)	20.319	120	3569523	67.094
82) Bromobenzene	(3)	20.334	156	3872580	67.237
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	6719836	66.898
84) 4-Ethyltoluene	(3)	20.484	105	12686252	66.136
85) 2-Chlorotoluene	(3)	20.599	126	2879581	65.681
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	10197646	64.345
87) 1,2,3-Trichloropropane	(3)	20.670	110	2018402	67.652
88) Alpha Methyl Styrene	(3)	21.014	118	5482625	66.566
89) tert-Butylbenzene	(3)	21.129	119	9345219	56.324
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	10318613	65.271
91) sec-Butylbenzene	(3)	21.380	105	14412694	57.211
92) p-Isopropyltoluene	(3)	21.566	119	11791702	60.478
93) 1,3-Dichlorobenzene	(3)	21.716	146	6528157	63.618
94) 1,4-Dichlorobenzene	(3)	21.838	146	6675143	61.916
95) n-Butylbenzene	(3)	22.139	92	8200704	61.948
96) Benzyl Chloride	(3)	22.160	126	1963208	63.563
97) Hexachloroethane	(3)	22.382	117	4201908	68.213
98) 1,2-Dichlorobenzene	(3)	22.425	146	6337836	66.671
99) 1,2-Dibromo-3-chloropropane	(3)	23.579	157	3731704	69.945
100) Hexachlorobutadiene	(3)	24.546	225	4490140	67.950
101) 1,2,4-Trichlorobenzene	(3)	24.639	180	5369224	67.788
102) Naphthalene	(3)	25.226	128	12417871	63.684

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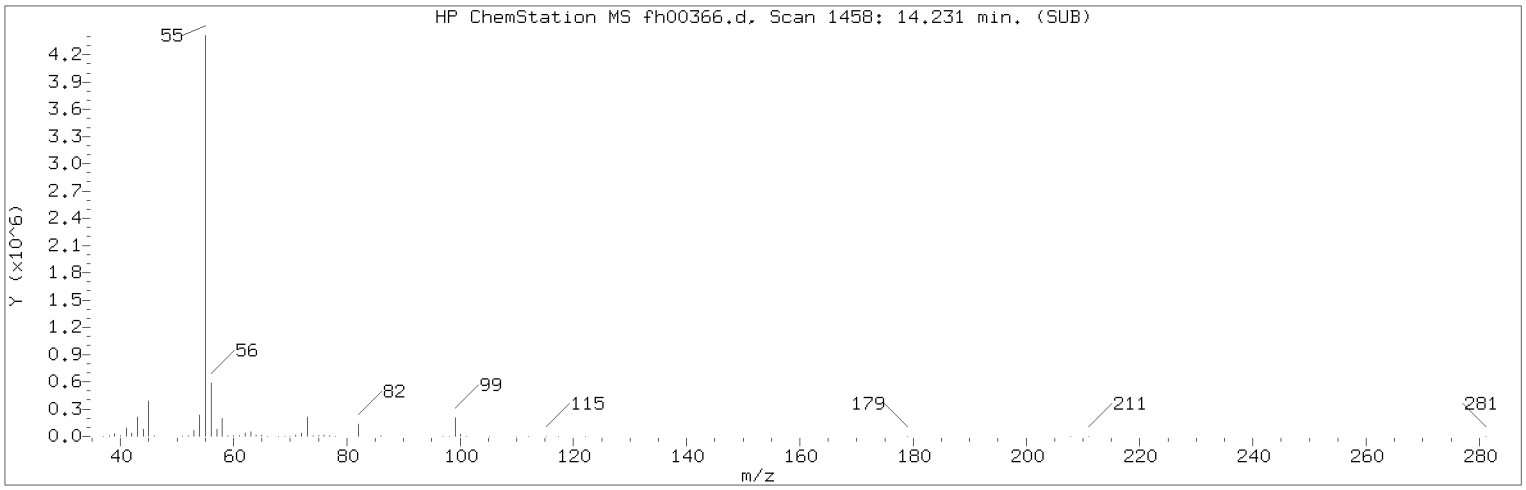
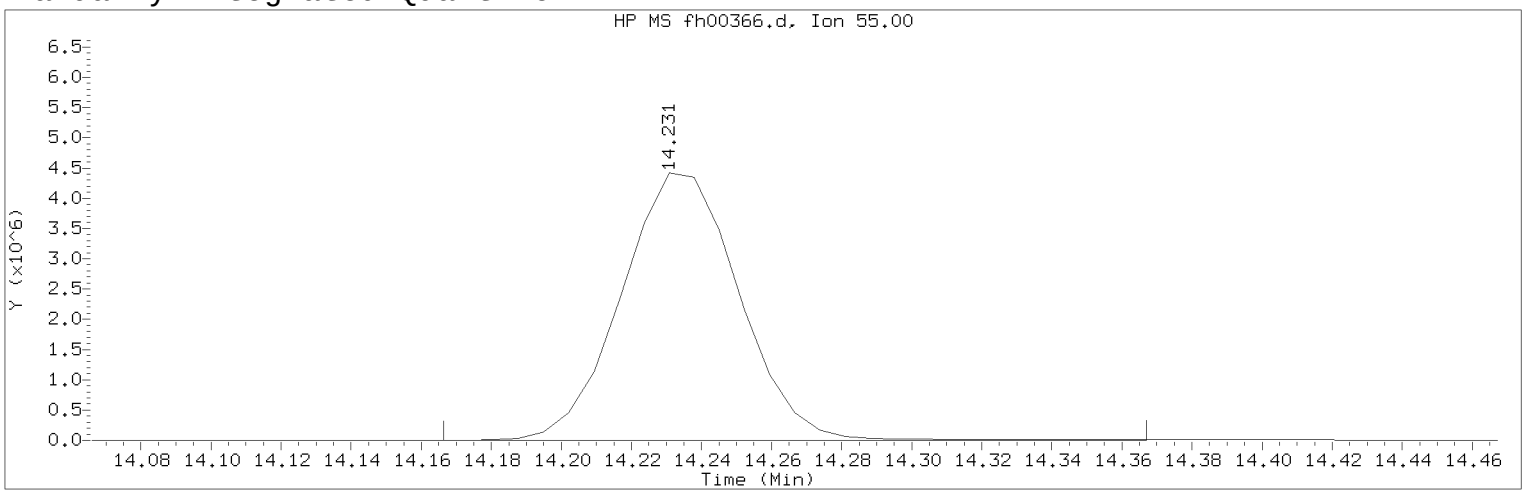
on 08/16/2018 at 18:55.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug16.b/fh00366.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 14:06 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD075 Lab Sample ID: VSTD070

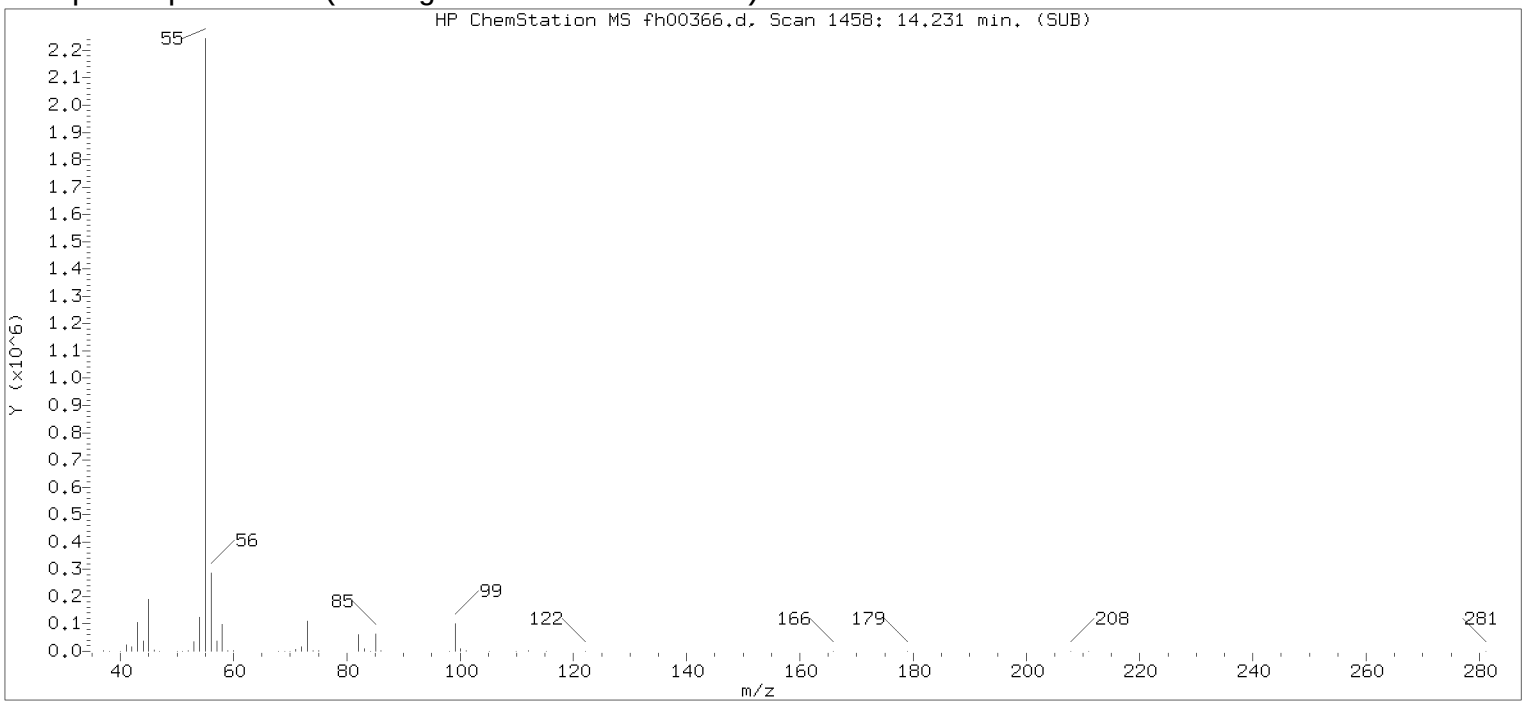
Compound Number : 54
Compound Name : Ethyl Acrylate
Scan Number : 1458
Retention Time (minutes): 14.231
Quant Ion : 55.00
Area (flag) : 10283482M
Concentration (ppb(v)) : 70.1853
Integration start scan : 1448 Integration stop scan: 1476
Y at integration start : 1510 Y at integration end: 1510

Reason for manual integration: improper integration

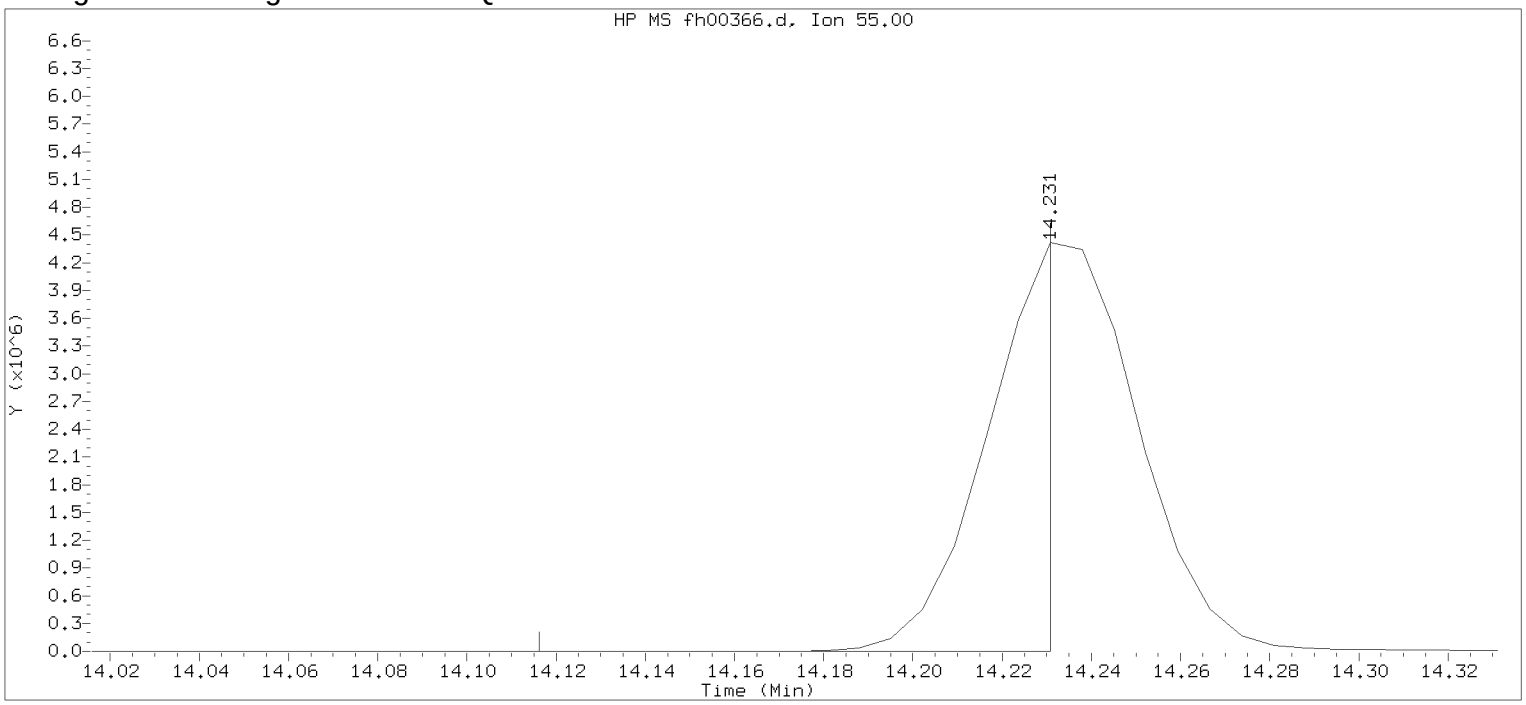
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 08/16/2018 at 18:55.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/21/2018 at 14:19.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



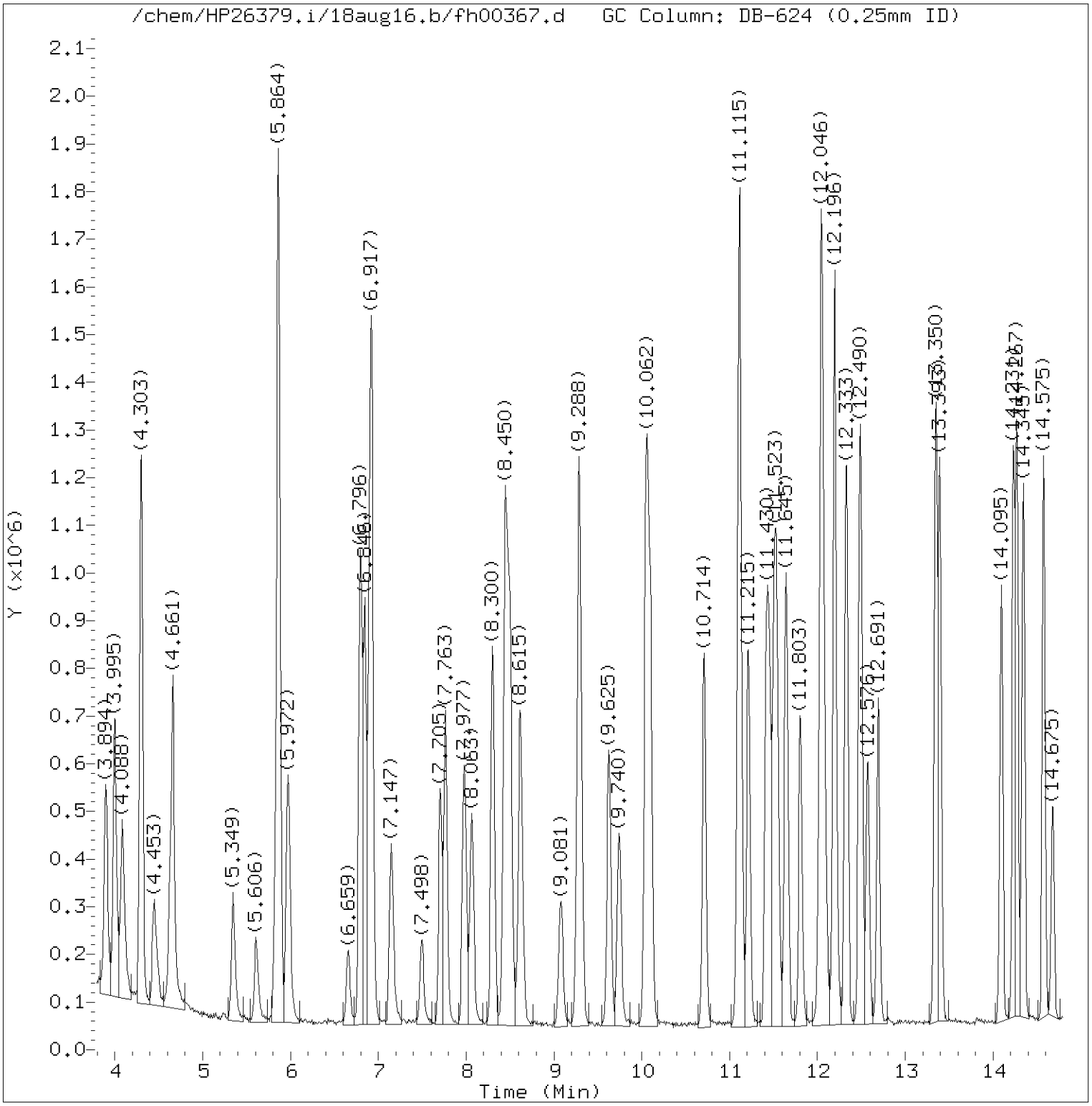
Data File: /chem/HP26379.i/18aug16.b/fh00366.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 14:06 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 14:26
Date, time and analyst ID of latest file update: 16-Aug-2018 14:36 Unknown

Sample Name: VSTD075 Lab Sample ID: VSTD070

Compound Number : 54
Compound Name : Ethyl Acrylate
Scan Number : 1458
Retention Time (minutes): 14.231
Quant Ion : 55.00
Area : 4232369
Concentration (ppb(v)) : 29.6227
Integration start scan : 1441 Integration stop scan: 1457
Y at integration start : 1923 Y at integration end: 1923

Digitally signed by Jeffrey B. Smith on 08/16/2018 at 18:55.
Target 3.5 esignature user ID: jbsmith



Total Ion Chromatogram (TIC)

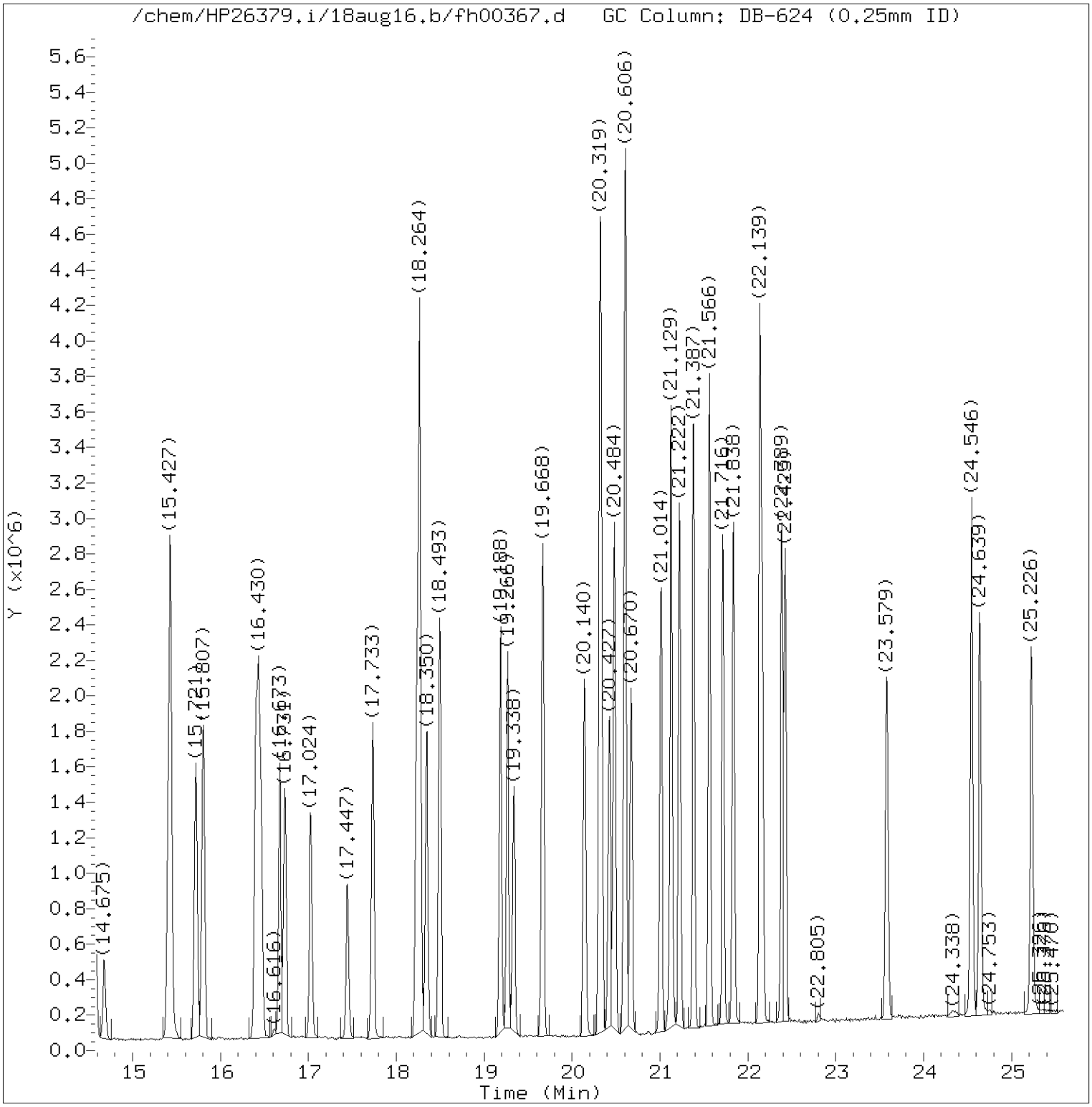
Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00367.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 14:42 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jeffrey B. Smith
on 08/16/2018 at 18:55.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00367.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 14:42 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jeffrey B. Smith
on 08/16/2018 at 18:55.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00367.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 14:42 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.894	41	419999	10.000
2) Dichlorodifluoromethane	(1)	3.995	85	967465	10.000
3) Chlorodifluoromethane	(1)	4.088	51	907228	10.000
4) Freon 114	(1)	4.296	85	960958	10.000
5) Chloromethane	(1)	4.453	50	508912	10.000
6) Vinyl Chloride	(1)	4.632	62	369232	10.000
7) 1,3-Butadiene	(1)	4.661	54	355090	10.000
8) Bromomethane	(1)	5.349	94	321257	10.000
9) Chloroethane	(1)	5.606	64	273277	10.000
10) Bromoethene	(1)	5.821	106	327067	10.000
11) Pentane	(1)	5.864	43	1007720	10.000
12) Trichlorofluoromethane	(1)	5.872	101	937639	10.000
13) Dichlorofluoromethane	(1)	5.972	67	934569	10.000
14) Ethanol	(1)	6.652	45	246584	10.000
15) Freon123a	(1)	6.796	67	891349	11.100
16) 1,1-Dichloroethene	(1)	6.846	61	912386	10.000
17) Freon 113	(1)	6.910	103	504254	10.000
18) Carbon Disulfide	(1)	6.932	76	1112199	10.000
19) Methyl Iodide	(1)	7.147	142	743371	10.000
20) Acrolein	(1)	7.490	56	262668	10.000
21) Isopropanol	(1)	7.705	45	1025931	10.000
22) 3-Chloropropene	(1)	7.770	41	828330	11.100
23) Methylene Chloride	(1)	7.985	84	360854	11.100
24) Acetone	(1)	8.063	43	845352	10.000
25) trans-1,2-Dichloroethene	(1)	8.300	61	855205	10.000
26) Hexane	(1)	8.443	56	598998	10.000
27) Methyl t-Butyl Ether	(1)	8.500	73	1204079	10.000
28) tert-Butyl Alcohol	(1)	8.615	59	1414553	11.100
29) Acetonitrile	(1)	9.081	41	508161	10.000
30) Di-Isopropyl Ether	(1)	9.288	45	2041239	10.000
31) 1,1-Dichloroethane	(1)	9.625	63	1012950	10.000
32) Acrylonitrile	(1)	9.740	53	561088	10.000
33) Ethyl Tert-Butyl Ether	(1)	10.055	59	2021432	10.000
34) Vinyl Acetate	(1)	10.098	43	1876889	11.200
35) cis-1,2-Dichloroethene	(1)	10.714	61	823437	10.000
36) 1,2-Dichloroethene (total)	(1)		61	1678642	20.000
37)*Bromochloromethane	(1)	11.101	130	262988	10.000
38) Cyclohexane	(1)	11.115	56	1094278	10.000

* = Compound is an internal standard.

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Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00367.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 14:42 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	863020	10.000
40) Ethyl Acetate	(1)	11.416	43	1377561	10.000
41) Methyl Acrylate	(1)	11.451	55	1226041	10.000
42) Carbon Tetrachloride	(1)	11.509	117	802931	10.000
43) Tetrahydrofuran	(1)	11.545	42	663069	10.000
44) 1,1,1-Trichloroethane	(1)	11.645	97	856670	10.000
45) 2-Butanone	(1)	11.803	43	1220291	10.000
46) Isooctane	(2)	12.046	57	3306870	10.000
47) Heptane	(2)	12.196	71	499031	10.000
48) Benzene	(2)	12.325	78	1299244	10.000
49) Tert-Amyl Methyl Ether	(2)	12.490	73	1323686	10.000
50) 1,2-Dichloroethane	(2)	12.691	62	775199	10.000
51) Trichloroethene	(2)	13.350	130	506213	10.000
52)*1,4-Difluorobenzene	(2)	13.393	114	1090427	10.000
53) Dibromomethane	(2)	14.095	174	443586	10.000
54) Ethyl Acrylate	(2)	14.231	55	1602372	10.000
55) 1,2-Dichloropropane	(2)	14.267	63	670022	10.000
56) Bromodichloromethane	(2)	14.345	83	922121	10.000
57) Methyl Methacrylate	(2)	14.575	69	501402	10.000
58) 1,4-Dioxane	(2)	14.675	88	317337	10.000
59) cis-1,3-Dichloropropene	(2)	15.406	75	846797	10.000
60) Octane	(3)	15.434	43	1642032	10.000
61) Toluene	(3)	15.807	91	1503685	10.000
62) 4-Methyl-2-Pentanone	(2)	16.401	43	1523787	10.000
63) Tetrachloroethene	(3)	16.437	166	659947	10.000
64) trans-1,3-Dichloropropene	(3)	16.466	75	748506	10.000
65) 1,3-Dichloropropene (total)	(3)		75	1595303	20.000
66) Ethyl Methacrylate	(3)	16.673	69	872332	10.000
67) 1,1,2-Trichloroethane	(3)	16.731	97	529171	10.000
68) Dibromochloromethane	(3)	17.024	127	626681	10.000
69) 1,2-Dibromoethane	(3)	17.447	107	799689	10.000
70) 2-Hexanone	(3)	17.733	43	1466100	10.000
71)*Chlorobenzene-d5	(3)	18.235	117	1039141	10.000
72) Chlorobenzene	(3)	18.264	112	1159641	10.000
73) Ethylbenzene	(3)	18.271	91	2054330	10.000
74) 1,1,1,2-Tetrachloroethane	(3)	18.350	131	575378	10.000
75) m/p-Xylene	(3)	18.493	91	1624918	10.000
76) o-Xylene	(3)	19.188	91	1640103	10.000

* = Compound is an internal standard.

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Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00367.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 14:42 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 16:23
Date, time and analyst ID of latest file update: 16-Aug-2018 16:23 ads07818

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	3265021	20.000
78) Styrene	(3)	19.266	104	1158087	10.000
79) Bromoform	(3)	19.338	173	803149	10.000
80) Cumene	(3)	19.668	105	2172168	10.000
81) n-Propylbenzene	(3)	20.319	120	595476	10.000
82) Bromobenzene	(3)	20.334	156	643396	10.000
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	1127335	10.000
84) 4-Ethyltoluene	(3)	20.484	105	2175227	10.000
85) 2-Chlorotoluene	(3)	20.599	126	500225	10.000
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	1840745	10.000
87) 1,2,3-Trichloropropane	(3)	20.670	110	331387	10.000
88) Alpha Methyl Styrene	(3)	21.014	118	885142	10.000
89) tert-Butylbenzene	(3)	21.129	119	1783072	10.000
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	1813728	10.000
91) sec-Butylbenzene	(3)	21.387	105	2707337	10.000
92) p-Isopropyltoluene	(3)	21.566	119	2095355	10.000
93) 1,3-Dichlorobenzene	(3)	21.723	146	1102770	10.000
94) 1,4-Dichlorobenzene	(3)	21.838	146	1158604	10.000
95) n-Butylbenzene	(3)	22.139	92	1422654	10.000
96) Benzyl Chloride	(3)	22.167	126	331925	10.000
97) Hexachloroethane	(3)	22.389	117	678894	10.000
98) 1,2-Dichlorobenzene	(3)	22.425	146	1070187	10.000
99) 1,2-Dibromo-3-chloropropane	(3)	23.586	157	573800	10.000
100) Hexachlorobutadiene	(3)	24.546	225	730946	10.000
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	878104	10.000
102) Naphthalene	(3)	25.226	128	2095527	10.000

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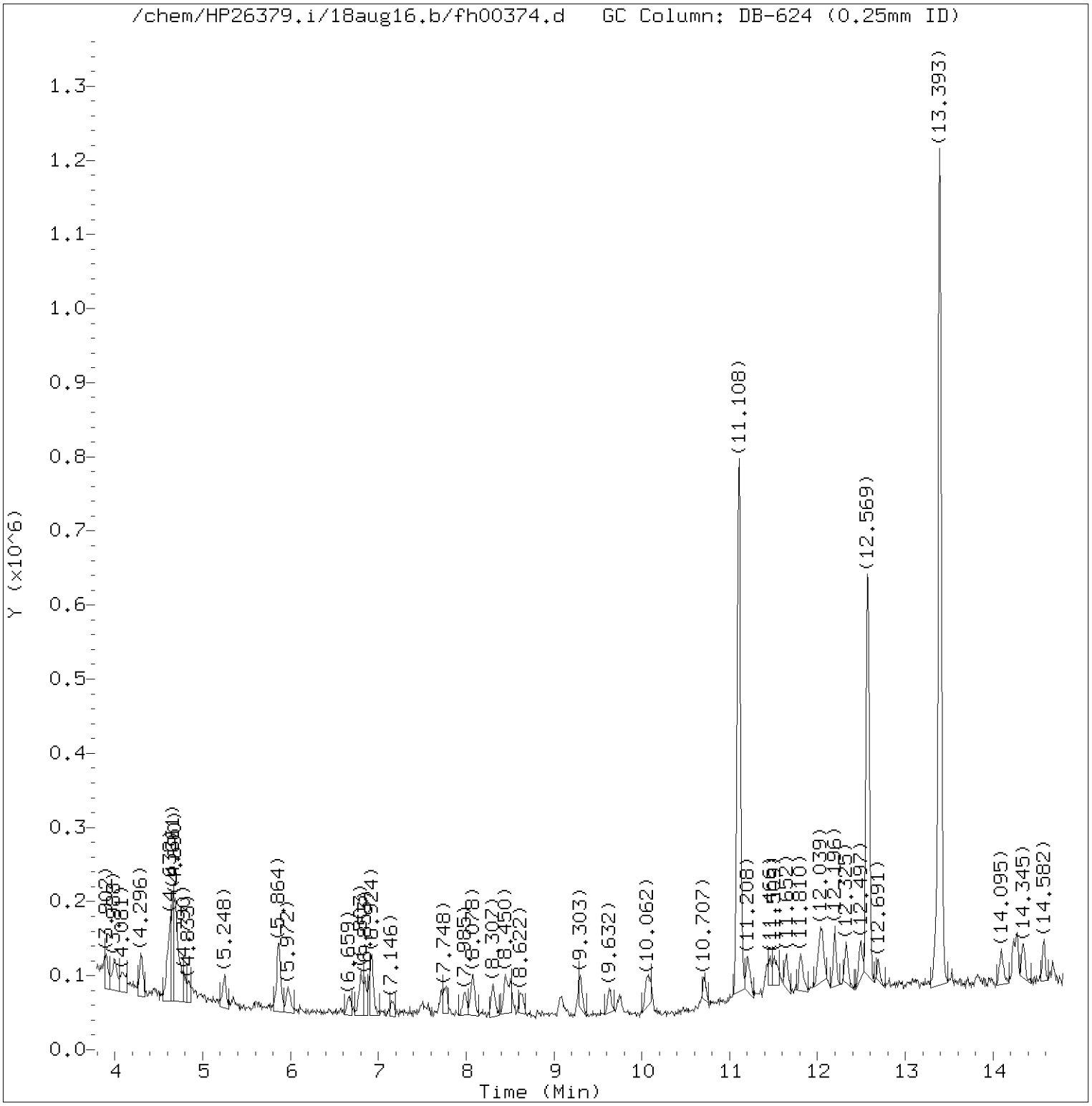
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00374.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 19:48 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 13-Sep-2018 11:13 jbs01304

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

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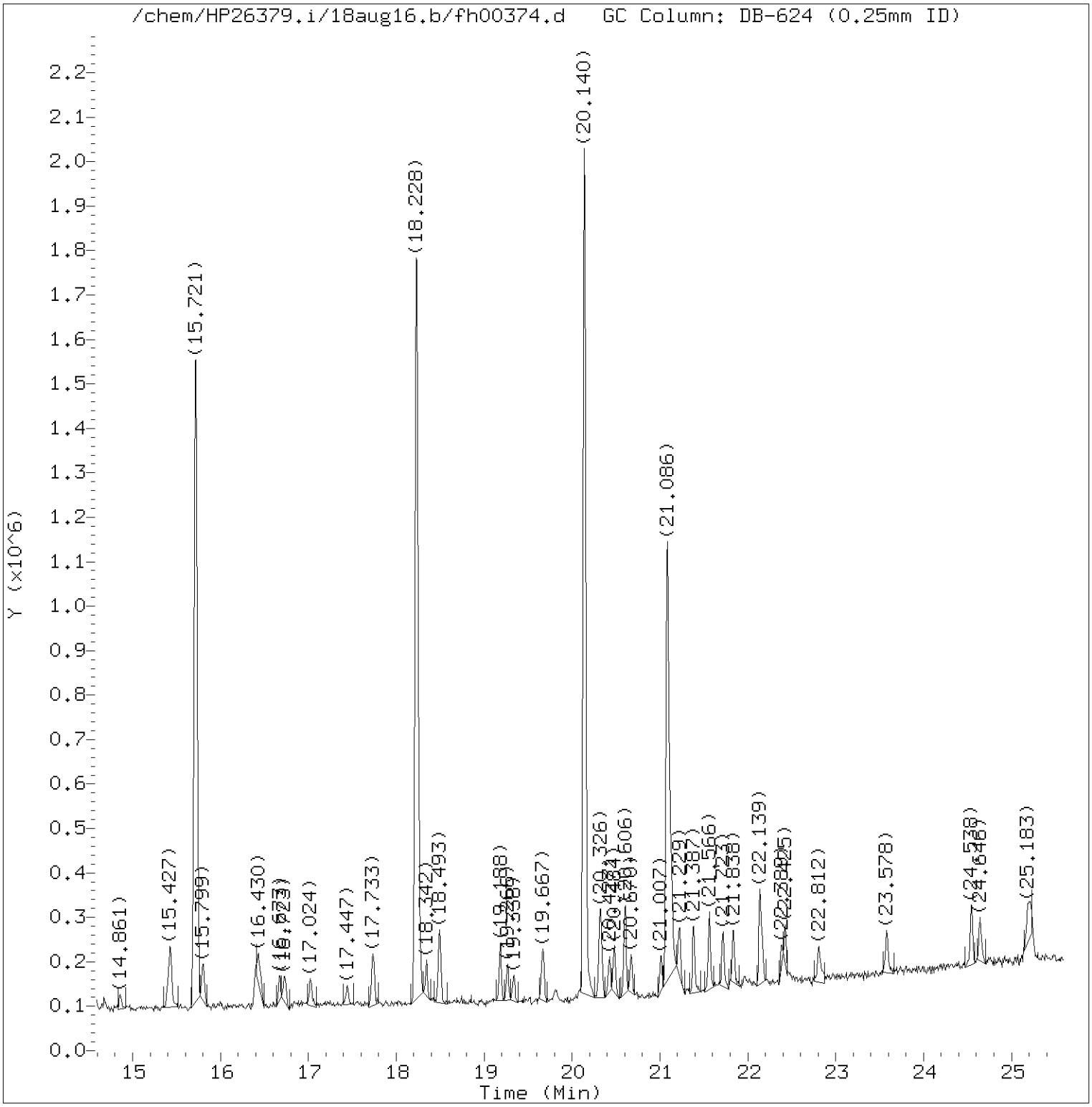
on 09/13/2018 at 11:14.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00374.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 19:48 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 13-Sep-2018 11:13 jbs01304

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

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on 09/13/2018 at 11:14.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00374.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 19:48 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 13-Sep-2018 11:13 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	29196	0.703
2) Dichlorodifluoromethane	(1)	3.995	85	48605	0.552
3) Chlorodifluoromethane	(1)	4.088	51	45576	0.517
4) Freon 114	(1)	4.310	85	46683	0.509
5) Chloromethane	(1)	4.446	50	26498	0.526
6) Vinyl Chloride	(1)	4.632	62	18493	0.534
7) 1,3-Butadiene	(1)	4.661	54	25540	0.738
8) Bromomethane	(1)	5.334	94	16788	0.592
9) Chloroethane	(1)	5.606	64	15510	0.614
10) Bromoethene	(1)	5.836	106	10021	0.332
11) Pentane	(1)	5.857	43	54779	0.554
12) Trichlorofluoromethane	(1)	5.871	101	42764	0.475
13) Dichlorofluoromethane	(1)	5.972	67	51293	0.603
14) Ethanol	(1)	6.659	45	42968	1.913
15) Freon123a	(1)	6.803	67	45632	0.570
16) 1,1-Dichloroethene	(1)	6.853	61	45599	0.551
17) Freon 113	(1)	6.917	103	24526	0.478
18) Carbon Disulfide	(1)	6.924	76	54113	0.540
19) Methyl Iodide	(1)	7.154	142	29112	0.410
20) Acrolein	(1)	7.497	56	16376	0.694
21) Isopropanol	(1)	7.720	45	68595	0.724
22) 3-Chloropropene	(1)	7.770	41	46941	0.677
23) Methylene Chloride	(1)	7.977	84	20539	0.694
24) Acetone	(1)	8.078	43	110938	1.411
25) trans-1,2-Dichloroethene	(1)	8.300	61	41465	0.532
26) Hexane	(1)	8.450	56	32856	0.541
27) Methyl t-Butyl Ether	(1)	8.507	73	63421	0.520
28) tert-Butyl Alcohol	(1)	8.629	59	67637	0.544
29) Acetonitrile	(1)	9.088	41	55224	1.145
30) Di-Isopropyl Ether	(1)	9.295	45	95572	0.467
31) 1,1-Dichloroethane	(1)	9.625	63	50888	0.535
32) Acrylonitrile	(1)	9.747	53	42491	0.816
33) Ethyl Tert-Butyl Ether	(1)	10.055	59	89671	0.460
34) Vinyl Acetate	(1)	10.112	43	97487	0.626
35) cis-1,2-Dichloroethene	(1)	10.707	61	38939	0.517
36) 1,2-Dichloroethene (total)	(1)		61	80404	1.050
37)*Bromochloromethane	(1)	11.108	130	264805	10.000
38) Cyclohexane	(1)	11.115	56	53913	0.490

* = Compound is an internal standard.

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Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00374.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 19:48 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 13-Sep-2018 11:13 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.208	83	44154	0.550
40) Ethyl Acetate	(1)	11.423	43	74760	0.569
41) Methyl Acrylate	(1)	11.466	55	64981	0.568
42) Carbon Tetrachloride	(1)	11.509	117	37686	0.476
43) Tetrahydrofuran	(1)	11.559	42	38847	0.595
44) 1,1,1-Trichloroethane	(1)	11.638	97	39546	0.466
45) 2-Butanone	(1)	11.802	43	101740	0.873
46) Isooctane	(2)	12.053	57	151737	0.501
47) Heptane	(2)	12.196	71	23573	0.484
48) Benzene	(2)	12.325	78	65471	0.537
49) Tert-Amyl Methyl Ether	(2)	12.490	73	63476	0.522
50) 1,2-Dichloroethane	(2)	12.684	62	37926	0.535
51) Trichloroethene	(2)	13.350	130	21405	0.454
52)*1,4-Difluorobenzene	(2)	13.393	114	1051395	10.000
53) Dibromomethane	(2)	14.095	174	19060	0.486
54) Ethyl Acrylate	(2)	14.231	55	83936	0.551
55) 1,2-Dichloropropane	(2)	14.274	63	32196	0.503
56) Bromodichloromethane	(2)	14.338	83	47274	0.549
57) Methyl Methacrylate	(2)	14.567	69	24884	0.517
58) 1,4-Dioxane	(2)	14.689	88	14935	0.505
59) cis-1,3-Dichloropropene	(2)	15.405	75	39634	0.499
60) Octane	(3)	15.434	43	91053	0.583
61) Toluene	(3)	15.799	91	79505	0.561
62) 4-Methyl-2-Pentanone	(2)	16.401	43	79251	0.532
63) Tetrachloroethene	(3)	16.423	166	32989	0.542
64) trans-1,3-Dichloropropene	(3)	16.458	75	34531	0.495
65) 1,3-Dichloropropene (total)	(3)		75	74165	0.995
66) Ethyl Methacrylate	(3)	16.680	69	44030	0.525
67) 1,1,2-Trichloroethane	(3)	16.731	97	28082	0.575
68) Dibromochloromethane	(3)	17.024	127	25693	0.437
69) 1,2-Dibromoethane	(3)	17.440	107	38493	0.521
70) 2-Hexanone	(3)	17.733	43	95583	0.683
71)*Chlorobenzene-d5	(3)	18.235	117	993907	10.000
72) Chlorobenzene	(3)	18.264	112	49537	0.455
73) Ethylbenzene	(3)	18.271	91	120610	0.602
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	26944	0.491
75) m/p-Xylene	(3)	18.493	91	110874	0.710
76) o-Xylene	(3)	19.180	91	98537	0.621

* = Compound is an internal standard.

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Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00374.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 19:48 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 13-Sep-2018 11:13 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	209411	1.331
78) Styrene	(3)	19.266	104	49323	0.443
79) Bromoform	(3)	19.331	173	31373	0.408
80) Cumene	(3)	19.667	105	96438	0.465
81) n-Propylbenzene	(3)	20.319	120	24120	0.432
82) Bromobenzene	(3)	20.326	156	27049	0.445
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	58121	0.524
84) 4-Ethyltoluene	(3)	20.477	105	92898	0.443
85) 2-Chlorotoluene	(3)	20.599	126	21059	0.443
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	85859	0.492
87) 1,2,3-Trichloropropane	(3)	20.663	110	16318	0.501
88) Alpha Methyl Styrene	(3)	21.007	118	32764	0.384
89) tert-Butylbenzene	(3)	21.129	119	82903	0.518
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	79362	0.461
91) sec-Butylbenzene	(3)	21.387	105	113482	0.440
92) p-Isopropyltoluene	(3)	21.566	119	90556	0.445
93) 1,3-Dichlorobenzene	(3)	21.716	146	49916	0.469
94) 1,4-Dichlorobenzene	(3)	21.838	146	53003	0.474
95) n-Butylbenzene	(3)	22.139	92	61243	0.444
96) Benzyl Chloride	(3)	22.160	126	13474	0.416
97) Hexachloroethane	(3)	22.389	117	25282	0.393
98) 1,2-Dichlorobenzene	(3)	22.425	146	47504	0.470
99) 1,2-Dibromo-3-chloropropane	(3)	23.578	157	22765	0.422
100) Hexachlorobutadiene	(3)	24.546	225	37113	0.546
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	41524	0.511
102) Naphthalene	(3)	25.226	128	97669	0.507

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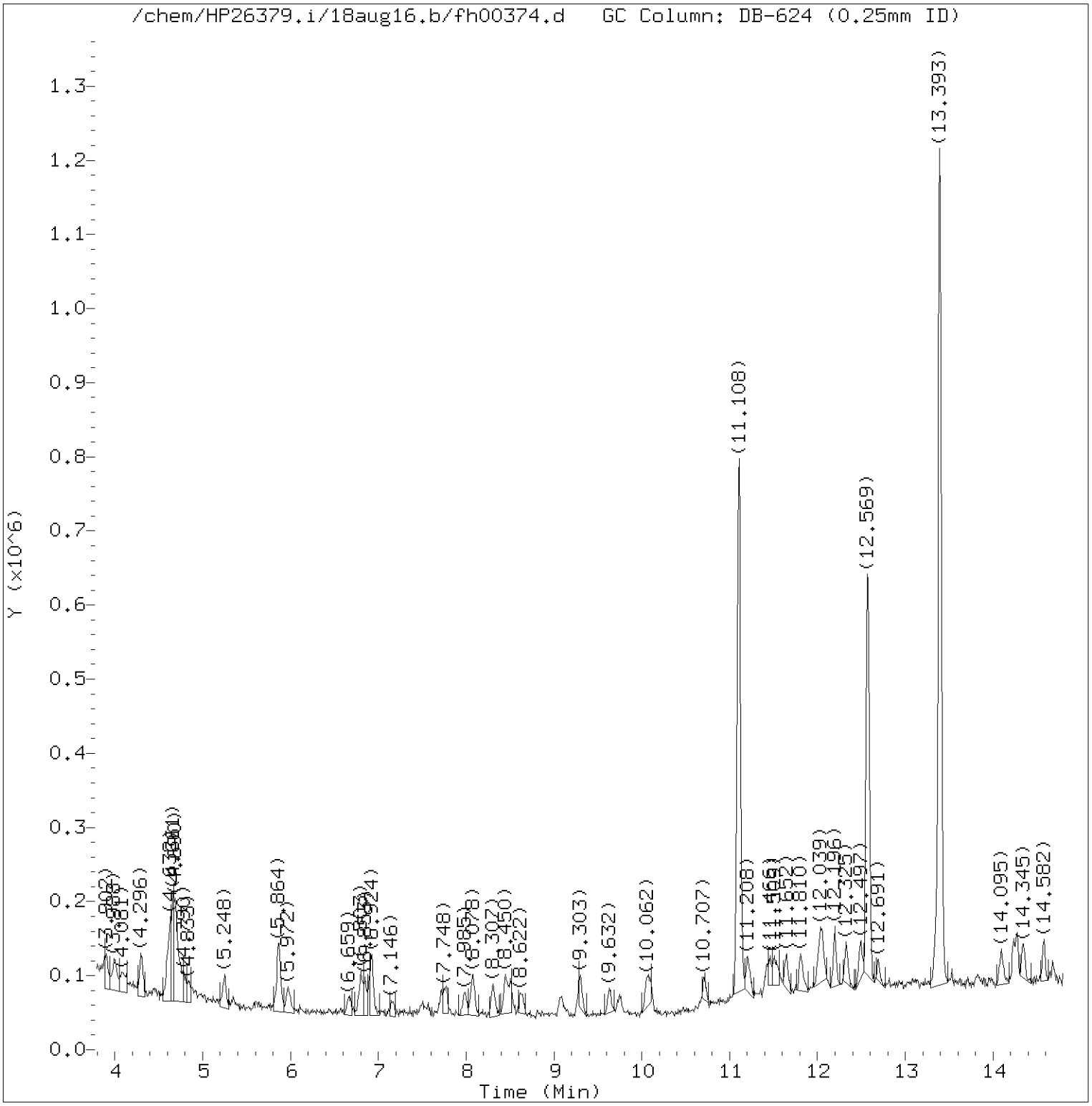
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00374.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 19:48 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 13-Sep-2018 10:59 jbs01304

Sample Name: mldv0.5 Lab Sample ID: mldv0.5

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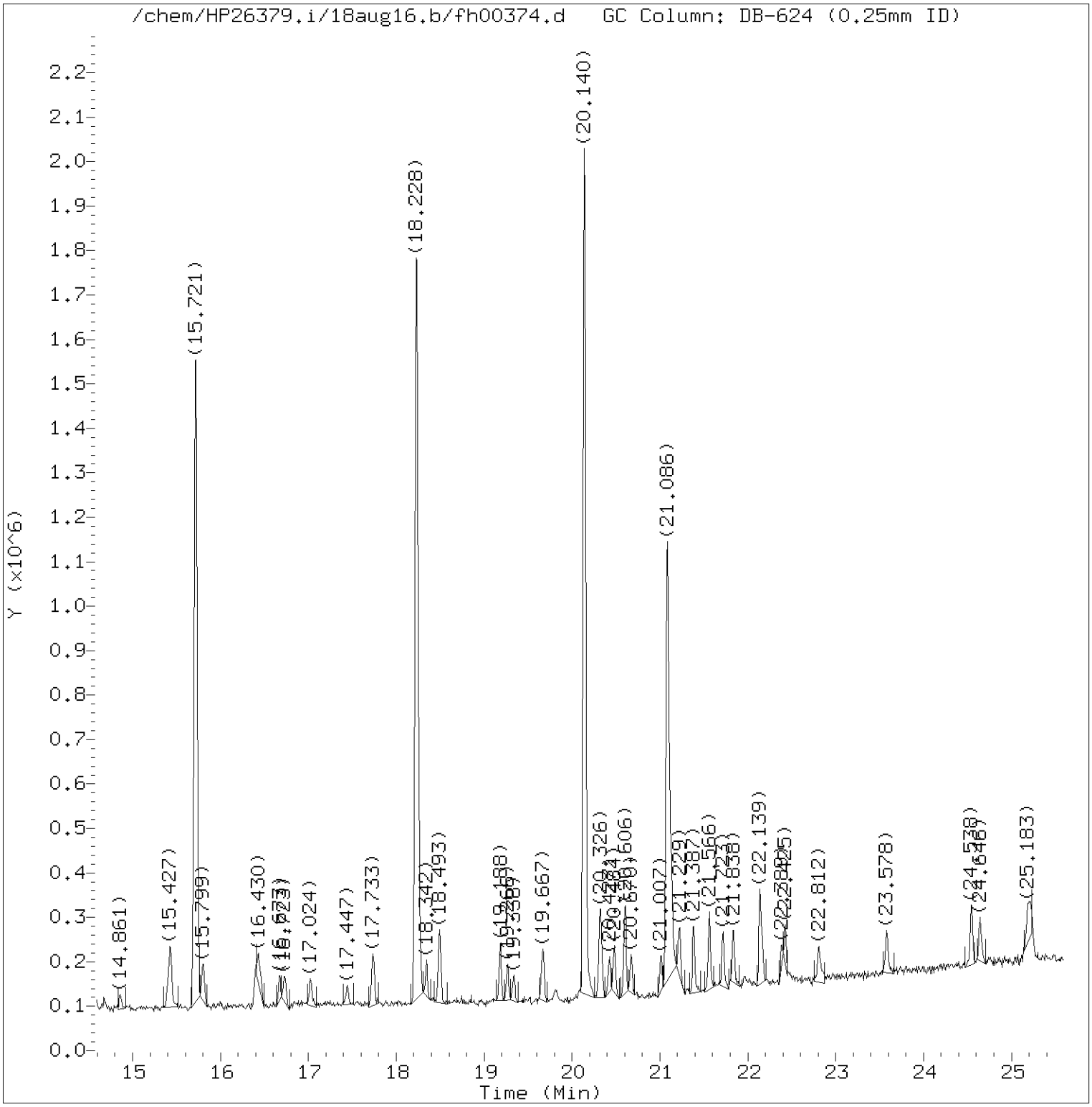
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00374.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 19:48 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 13-Sep-2018 10:59 jbs01304

Sample Name: mldv0.5 Lab Sample ID: mldv0.5

Digitally signed by Jeffrey B. Smith
on 09/13/2018 at 10:59.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00374.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 19:48 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 13-Sep-2018 10:59 jbs01304

Sample Name: mldv0.5 Lab Sample ID: mldv0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	29196	0.703
2) Dichlorodifluoromethane	(1)	3.995	85	48605	0.552
3) Chlorodifluoromethane	(1)	4.088	51	45576	0.517
4) Freon 114	(1)	4.310	85	46683	0.509
5) Chloromethane	(1)	4.446	50	26498	0.526
6) Vinyl Chloride	(1)	4.632	62	18493	0.534
7) 1,3-Butadiene	(1)	4.661	54	25540	0.738
8) Bromomethane	(1)	5.334	94	16788	0.592
9) Chloroethane	(1)	5.606	64	15510	0.614
10) Bromoethene	(1)	5.836	106	10021	0.332
11) Pentane	(1)	5.857	43	54779	0.554
12) Trichlorofluoromethane	(1)	5.871	101	42764	0.475
13) Dichlorofluoromethane	(1)	5.972	67	51293	0.603
14) Ethanol	(1)	6.659	45	42968	1.913
15) Freon123a	(1)	6.803	67	45632	0.570
16) 1,1-Dichloroethene	(1)	6.853	61	45599	0.551
17) Freon 113	(1)	6.917	103	24526	0.478
18) Carbon Disulfide	(1)	6.924	76	54113	0.540
19) Methyl Iodide	(1)	7.154	142	29112	0.410
20) Acrolein	(1)	7.497	56	16376	0.694
21) Isopropanol	(1)	7.720	45	68595	0.724
22) 3-Chloropropene	(1)	7.770	41	46941	0.677
23) Methylene Chloride	(1)	7.977	84	20539	0.694
24) Acetone	(1)	8.078	43	110938	1.411
25) trans-1,2-Dichloroethene	(1)	8.300	61	41465	0.532
26) Hexane	(1)	8.450	56	32856	0.541
27) Methyl t-Butyl Ether	(1)	8.507	73	63421	0.520
28) tert-Butyl Alcohol	(1)	8.629	59	67637	0.544
29) Acetonitrile	(1)	9.088	41	55224	1.145
30) Di-Isopropyl Ether	(1)	9.295	45	95572	0.467
31) 1,1-Dichloroethane	(1)	9.625	63	50888	0.535
32) Acrylonitrile	(1)	9.747	53	42491	0.816
33) Ethyl Tert-Butyl Ether	(1)	10.055	59	89671	0.460
34) Vinyl Acetate	(1)	10.112	43	97487	0.626
35) cis-1,2-Dichloroethene	(1)	10.707	61	38939	0.517
36) 1,2-Dichloroethene (total)	(1)		61	80404	1.050
37)*Bromochloromethane	(1)	11.108	130	264805	10.000
38) Cyclohexane	(1)	11.115	56	53913	0.490

* = Compound is an internal standard.

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Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00374.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 19:48 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 13-Sep-2018 10:59 jbs01304

Sample Name: mldv0.5 Lab Sample ID: mldv0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.208	83	44154	0.550
40) Ethyl Acetate	(1)	11.423	43	74760	0.569
41) Methyl Acrylate	(1)	11.466	55	64981	0.568
42) Carbon Tetrachloride	(1)	11.509	117	37686	0.476
43) Tetrahydrofuran	(1)	11.559	42	38847	0.595
44) 1,1,1-Trichloroethane	(1)	11.638	97	39546	0.466
45) 2-Butanone	(1)	11.802	43	101740	0.873
46) Isooctane	(2)	12.053	57	151737	0.501
47) Heptane	(2)	12.196	71	23573	0.484
48) Benzene	(2)	12.325	78	65471	0.537
49) Tert-Amyl Methyl Ether	(2)	12.490	73	63476	0.522
50) 1,2-Dichloroethane	(2)	12.684	62	37926	0.535
51) Trichloroethene	(2)	13.350	130	21405	0.454
52)*1,4-Difluorobenzene	(2)	13.393	114	1051395	10.000
53) Dibromomethane	(2)	14.095	174	19060	0.486
54) Ethyl Acrylate	(2)	14.231	55	83936	0.551
55) 1,2-Dichloropropane	(2)	14.274	63	32196	0.503
56) Bromodichloromethane	(2)	14.338	83	47274	0.549
57) Methyl Methacrylate	(2)	14.567	69	24884	0.517
58) 1,4-Dioxane	(2)	14.689	88	14935	0.505
59) cis-1,3-Dichloropropene	(2)	15.405	75	39634	0.499
60) Octane	(3)	15.434	43	91053	0.583
61) Toluene	(3)	15.799	91	79505	0.561
62) 4-Methyl-2-Pentanone	(2)	16.401	43	79251	0.532
63) Tetrachloroethene	(3)	16.423	166	32989	0.542
64) trans-1,3-Dichloropropene	(3)	16.458	75	34531	0.495
65) 1,3-Dichloropropene (total)	(3)		75	74165	0.995
66) Ethyl Methacrylate	(3)	16.680	69	44030	0.525
67) 1,1,2-Trichloroethane	(3)	16.731	97	28082	0.575
68) Dibromochloromethane	(3)	17.024	127	25693	0.437
69) 1,2-Dibromoethane	(3)	17.440	107	38493	0.521
70) 2-Hexanone	(3)	17.733	43	95583	0.683
71)*Chlorobenzene-d5	(3)	18.235	117	993907	10.000
72) Chlorobenzene	(3)	18.264	112	49537	0.455
73) Ethylbenzene	(3)	18.271	91	120610	0.602
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	26944	0.491
75) m/p-Xylene	(3)	18.493	91	110874	0.710
76) o-Xylene	(3)	19.180	91	98537	0.621

* = Compound is an internal standard.

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Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00374.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 19:48 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 13-Sep-2018 10:59 jbs01304

Sample Name: mldv0.5 Lab Sample ID: mldv0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	209411	1.331
78) Styrene	(3)	19.266	104	49323	0.443
79) Bromoform	(3)	19.331	173	31373	0.408
80) Cumene	(3)	19.667	105	96438	0.465
81) n-Propylbenzene	(3)	20.319	120	24120	0.432
82) Bromobenzene	(3)	20.326	156	27049	0.445
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	58121	0.524
84) 4-Ethyltoluene	(3)	20.477	105	92898	0.443
85) 2-Chlorotoluene	(3)	20.599	126	21059	0.443
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	85859	0.492
87) 1,2,3-Trichloropropane	(3)	20.663	110	16318	0.501
88) Alpha Methyl Styrene	(3)	21.007	118	32764	0.384
89) tert-Butylbenzene	(3)	21.129	119	82903	0.518
90) 1,2,4-Trimethylbenzene	(3)	21.229	105	79362	0.461
91) sec-Butylbenzene	(3)	21.387	105	113482	0.440
92) p-Isopropyltoluene	(3)	21.566	119	90556	0.445
93) 1,3-Dichlorobenzene	(3)	21.716	146	49916	0.469
94) 1,4-Dichlorobenzene	(3)	21.838	146	53003	0.474
95) n-Butylbenzene	(3)	22.139	92	61243	0.444
96) Benzyl Chloride	(3)	22.160	126	13474	0.416
97) Hexachloroethane	(3)	22.389	117	25282	0.393
98) 1,2-Dichlorobenzene	(3)	22.425	146	47504	0.470
99) 1,2-Dibromo-3-chloropropane	(3)	23.578	157	22765	0.422
100) Hexachlorobutadiene	(3)	24.546	225	37113	0.546
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	41524	0.511
102) Naphthalene	(3)	25.226	128	97669	0.507

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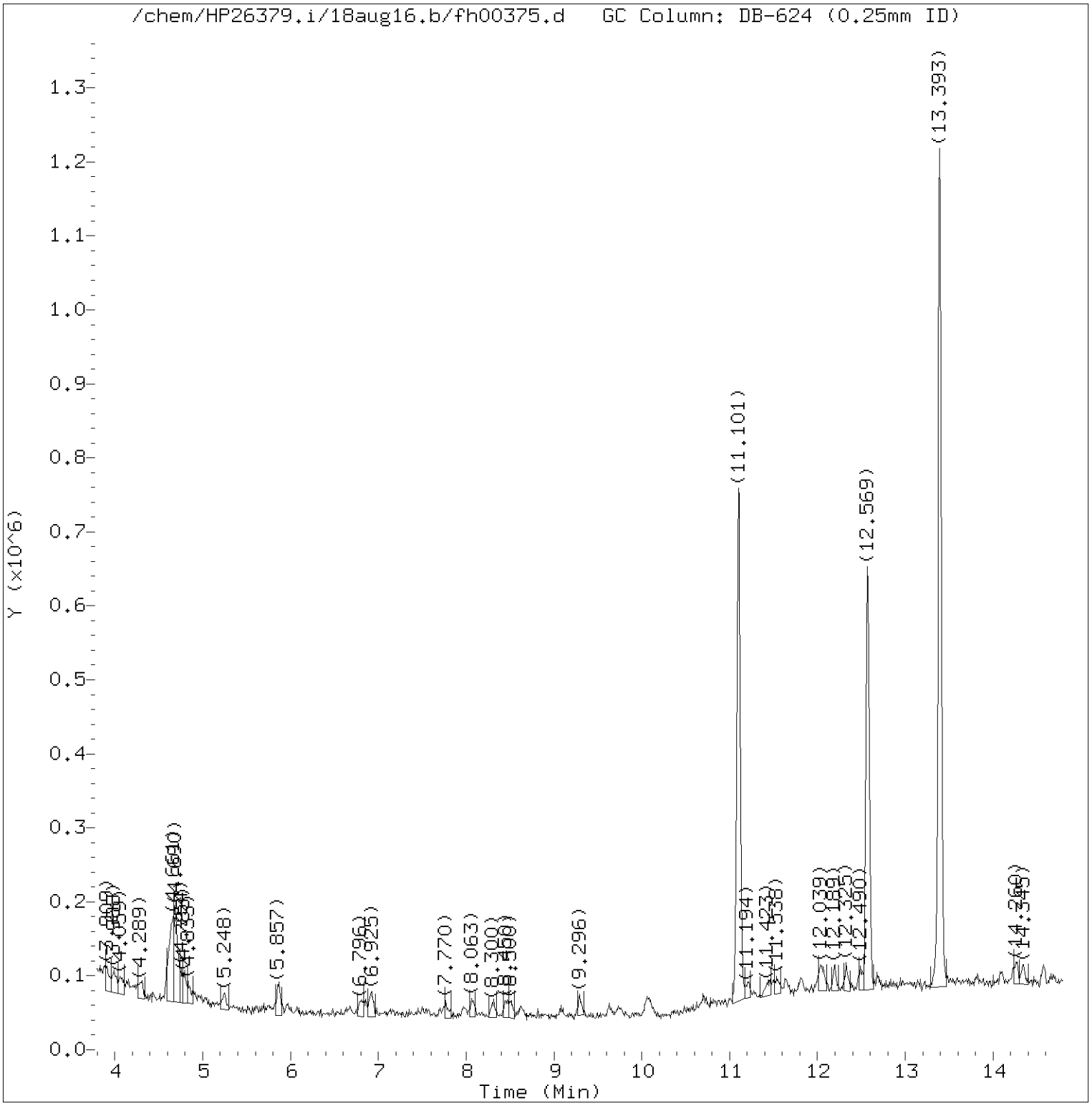

Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00375.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 20:18 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 13-Sep-2018 11:13 jbs01304

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

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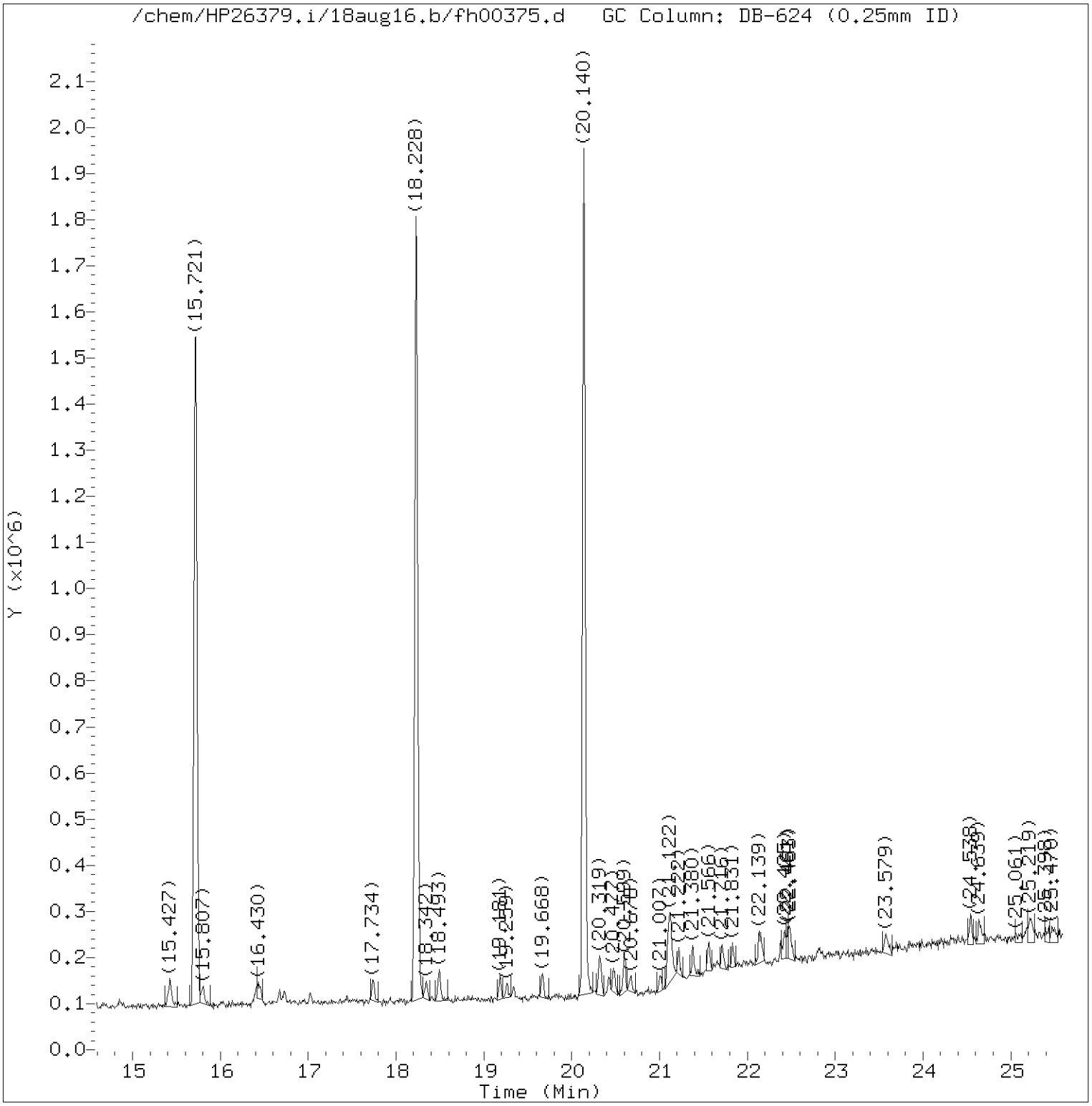
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00375.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 20:18 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 13-Sep-2018 11:13 jbs01304

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

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Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00375.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 20:18 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 13-Sep-2018 11:13 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.895	41	12360	0.304
2) Dichlorodifluoromethane	(1)	4.009	85	19143	0.222
3) Chlorodifluoromethane	(1)	4.088	51	16627	0.193
4) Freon 114	(1)	4.303	85	18247	0.203
5) Chloromethane	(1)	4.446	50	13173	0.267
6) Vinyl Chloride	(1)	4.618	62	6536	0.193
7) 1,3-Butadiene	(1)	4.661	54	15412	0.455
8) Bromomethane	(1)	5.342	94	7560	0.272
9) Chloroethane	(1)	5.607	64	5275	0.213
10) Bromoethene	(1)	5.821	106	6361	0.215
11) Pentane	(1)	5.864	43	18063	0.186
12) Trichlorofluoromethane	(1)	5.879	101	12041	0.136
13) Dichlorofluoromethane	(1)	5.972	67	21830	0.262
14) Ethanol	(1)	6.660	45	18271	0.830
15) Freon123a	(1)	6.796	67	21280	0.271
16) 1,1-Dichloroethene	(1)	6.860	61	11802	0.146
17) Freon 113	(1)	6.896	103	10669	0.212
18) Carbon Disulfide	(1)	6.932	76	21889	0.223
19) Methyl Iodide	(1)	7.161	142	10540	0.152
20) Acrolein	(1)	7.490	56	2815	0.122
21) Isopropanol	(1)	7.727	45	30703	0.331
22) 3-Chloropropene	(1)	7.770	41	17196	0.253
23) Methylene Chloride	(1)	7.992	84	7200	0.249
24) Acetone	(1)	8.063	43	55043	0.715
25) trans-1,2-Dichloroethene	(1)	8.300	61	15691	0.206
26) Hexane	(1)	8.443	56	17549	0.295
27) Methyl t-Butyl Ether	(1)	8.515	73	30239	0.253
28) tert-Butyl Alcohol	(1)	8.622	59	26845	0.221
29) Acetonitrile	(1)	9.073	41	26772	0.566
30) Di-Isopropyl Ether	(1)	9.303	45	40320	0.201
31) 1,1-Dichloroethane	(1)	9.618	63	20230	0.217
32) Acrylonitrile	(1)	9.740	53	19515	0.383
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	40541	0.212
34) Vinyl Acetate	(1)	10.112	43	38511	0.252
35) cis-1,2-Dichloroethene	(1)	10.707	61	16114	0.219
36) 1,2-Dichloroethene (total)	(1)		61	31805	0.424
37)*Bromochloromethane	(1)	11.108	130	259377	10.000
38) Cyclohexane	(1)	11.122	56	24127	0.224

* = Compound is an internal standard.

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Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00375.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 20:18 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 13-Sep-2018 11:13 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.222	83	15710	0.200
40) Ethyl Acetate	(1)	11.430	43	39242	0.305
41) Methyl Acrylate	(1)	11.459	55	29860	0.266
42) Carbon Tetrachloride	(1)	11.523	117	12960	0.167
43) Tetrahydrofuran	(1)	11.559	42	17972	0.281
44) 1,1,1-Trichloroethane	(1)	11.638	97	14763	0.178
45) 2-Butanone	(1)	11.817	43	39690	0.348
46) Isooctane	(2)	12.053	57	65871	0.221
47) Heptane	(2)	12.204	71	10485	0.219
48) Benzene	(2)	12.333	78	30646	0.256
49) Tert-Amyl Methyl Ether	(2)	12.490	73	28298	0.237
50) 1,2-Dichloroethane	(2)	12.691	62	14852	0.213
51) Trichloroethene	(2)	13.335	130	9705	0.209
52)*1,4-Difluorobenzene	(2)	13.393	114	1033470	10.000
53) Dibromomethane	(2)	14.102	174	7176	0.186
54) Ethyl Acrylate	(2)	14.231	55	28894	0.193
55) 1,2-Dichloropropane	(2)	14.274	63	14115	0.224
56) Bromodichloromethane	(2)	14.345	83	17049	0.201
57) Methyl Methacrylate	(2)	14.582	69	12857	0.272
58) 1,4-Dioxane	(2)	14.682	88	6576	0.226
59) cis-1,3-Dichloropropene	(2)	15.406	75	17746	0.227
60) Octane	(3)	15.427	43	37225	0.242
61) Toluene	(3)	15.800	91	33585	0.241
62) 4-Methyl-2-Pentanone	(2)	16.401	43	36441	0.249
63) Tetrachloroethene	(3)	16.437	166	11948	0.199
64) trans-1,3-Dichloropropene	(3)	16.466	75	14486	0.211
65) 1,3-Dichloropropene (total)	(3)		75	32232	0.438
66) Ethyl Methacrylate	(3)	16.673	69	16606	0.201
67) 1,1,2-Trichloroethane	(3)	16.724	97	11441	0.238
68) Dibromochloromethane	(3)	17.024	127	10663	0.184
69) 1,2-Dibromoethane	(3)	17.447	107	13926	0.191
70) 2-Hexanone	(3)	17.734	43	44998	0.326
71)*Chlorobenzene-d5	(3)	18.228	117	979617	10.000
72) Chlorobenzene	(3)	18.256	112	18562	0.173
73) Ethylbenzene	(3)	18.271	91	49451	0.251
74) 1,1,1,2-Tetrachloroethane	(3)	18.350	131	11903	0.220
75) m/p-Xylene	(3)	18.493	91	46109	0.300
76) o-Xylene	(3)	19.188	91	41372	0.264

* = Compound is an internal standard.

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Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00375.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 20:18 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 13-Sep-2018 11:13 jbs01304

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

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	87481	0.564
78) Styrene	(3)	19.266	104	18123	0.165
79) Bromoform	(3)	19.331	173	12480	0.165
80) Cumene	(3)	19.660	105	38795	0.190
81) n-Propylbenzene	(3)	20.312	120	10529	0.191
82) Bromobenzene	(3)	20.334	156	10787	0.180
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	25659	0.235
84) 4-Ethyltoluene	(3)	20.484	105	40563	0.196
85) 2-Chlorotoluene	(3)	20.599	126	8526	0.182
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	38457	0.224
87) 1,2,3-Trichloropropane	(3)	20.670	110	7940	0.247
88) Alpha Methyl Styrene	(3)	21.007	118	13162	0.156
89) tert-Butylbenzene	(3)	21.129	119	36354	0.231
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	34815	0.205
91) sec-Butylbenzene	(3)	21.387	105	50371	0.198
92) p-Isopropyltoluene	(3)	21.566	119	37513	0.187
93) 1,3-Dichlorobenzene	(3)	21.716	146	20685	0.197
94) 1,4-Dichlorobenzene	(3)	21.831	146	19651	0.178
96) Benzyl Chloride	(3)	22.089	126	5325	0.167
95) n-Butylbenzene	(3)	22.139	92	22947	0.169
98) 1,2-Dichlorobenzene	(3)	22.325	146	19122	0.192
97) Hexachloroethane	(3)	22.375	117	10255	0.162
99) 1,2-Dibromo-3-chloropropane	(3)	23.571	157	9878	0.186
100) Hexachlorobutadiene	(3)	24.538	225	15305	0.229
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	17951	0.224
102) Naphthalene	(3)	25.226	128	34945	0.184

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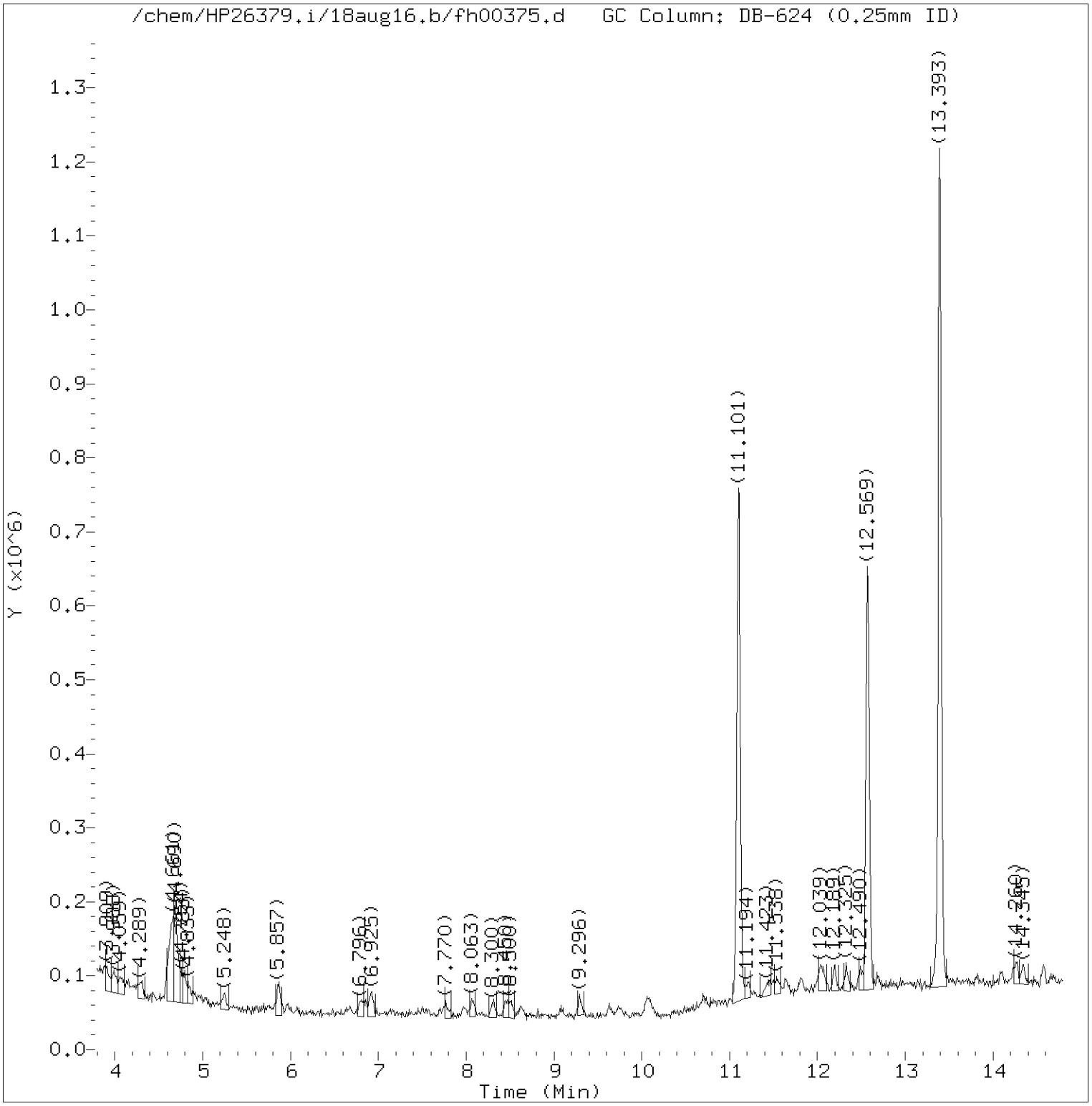
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00375.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 20:18 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 13-Sep-2018 10:59 jbs01304

Sample Name: mldv0.2 Lab Sample ID: mldv0.2

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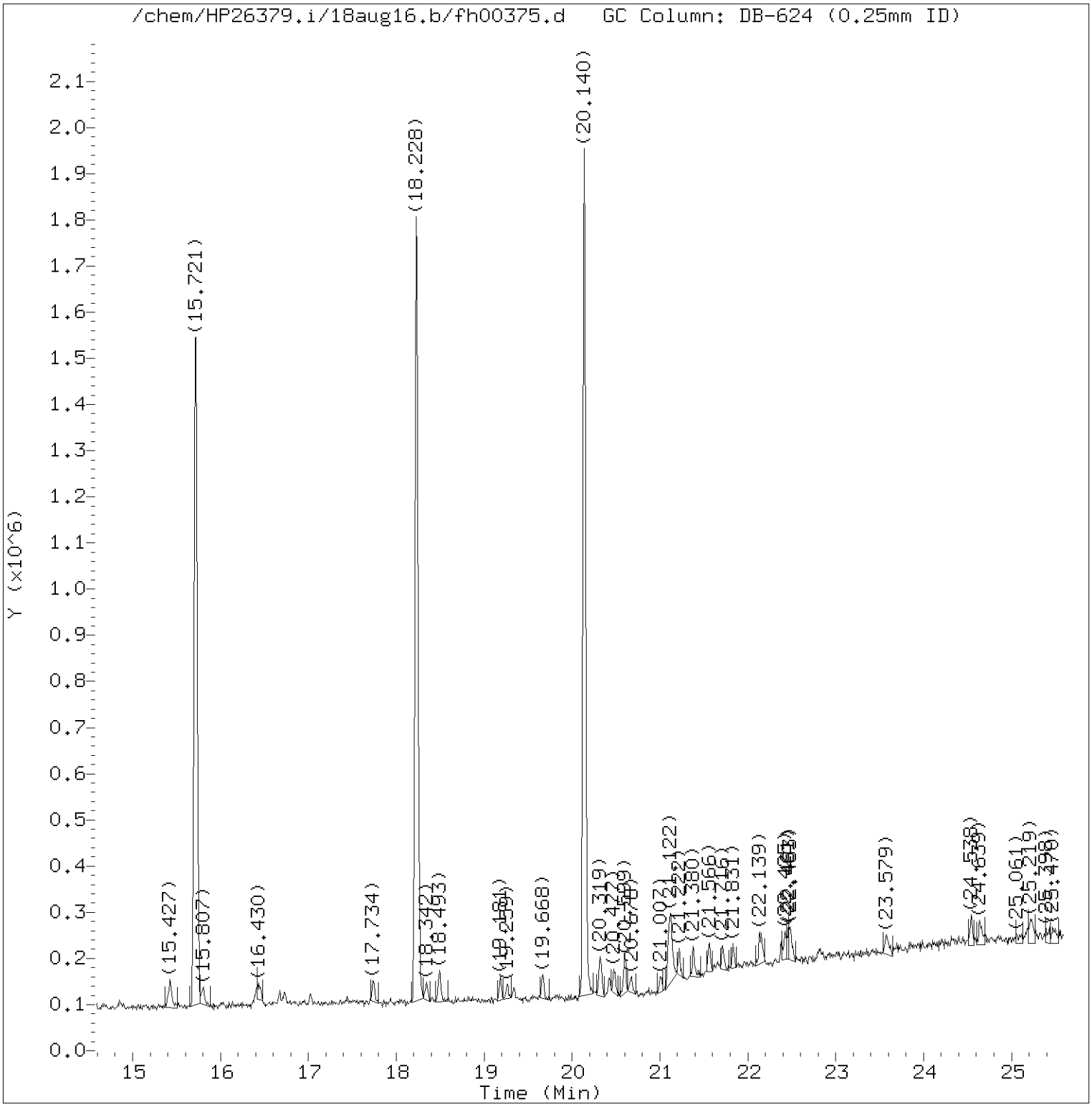
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00375.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 20:18 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 13-Sep-2018 10:59 jbs01304

Sample Name: mldv0.2 Lab Sample ID: mldv0.2

Digitally signed by Jeffrey B. Smith
on 09/13/2018 at 10:59.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00375.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 20:18 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 13-Sep-2018 10:59 jbs01304

Sample Name: mldv0.2 Lab Sample ID: mldv0.2

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.895	41	12360	0.304
2) Dichlorodifluoromethane	(1)	4.009	85	19143	0.222
3) Chlorodifluoromethane	(1)	4.088	51	16627	0.193
4) Freon 114	(1)	4.303	85	18247	0.203
5) Chloromethane	(1)	4.446	50	13173	0.267
6) Vinyl Chloride	(1)	4.618	62	6536	0.193
7) 1,3-Butadiene	(1)	4.661	54	15412	0.455
8) Bromomethane	(1)	5.342	94	7560	0.272
9) Chloroethane	(1)	5.607	64	5275	0.213
10) Bromoethene	(1)	5.821	106	6361	0.215
11) Pentane	(1)	5.864	43	18063	0.186
12) Trichlorofluoromethane	(1)	5.879	101	12041	0.136
13) Dichlorofluoromethane	(1)	5.972	67	21830	0.262
14) Ethanol	(1)	6.660	45	18271	0.830
15) Freon123a	(1)	6.796	67	21280	0.271
16) 1,1-Dichloroethene	(1)	6.860	61	11802	0.146
17) Freon 113	(1)	6.896	103	10669	0.212
18) Carbon Disulfide	(1)	6.932	76	21889	0.223
19) Methyl Iodide	(1)	7.161	142	10540	0.152
20) Acrolein	(1)	7.490	56	2815	0.122
21) Isopropanol	(1)	7.727	45	30703	0.331
22) 3-Chloropropene	(1)	7.770	41	17196	0.253
23) Methylene Chloride	(1)	7.992	84	7200	0.249
24) Acetone	(1)	8.063	43	55043	0.715
25) trans-1,2-Dichloroethene	(1)	8.300	61	15691	0.206
26) Hexane	(1)	8.443	56	17549	0.295
27) Methyl t-Butyl Ether	(1)	8.515	73	30239	0.253
28) tert-Butyl Alcohol	(1)	8.622	59	26845	0.221
29) Acetonitrile	(1)	9.073	41	26772	0.566
30) Di-Isopropyl Ether	(1)	9.303	45	40320	0.201
31) 1,1-Dichloroethane	(1)	9.618	63	20230	0.217
32) Acrylonitrile	(1)	9.740	53	19515	0.383
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	40541	0.212
34) Vinyl Acetate	(1)	10.112	43	38511	0.252
35) cis-1,2-Dichloroethene	(1)	10.707	61	16114	0.219
36) 1,2-Dichloroethene (total)	(1)		61	31805	0.424
37)*Bromochloromethane	(1)	11.108	130	259377	10.000
38) Cyclohexane	(1)	11.122	56	24127	0.224

* = Compound is an internal standard.

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on 09/13/2018 at 10:59.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00375.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 20:18 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 13-Sep-2018 10:59 jbs01304

Sample Name: mldv0.2 Lab Sample ID: mldv0.2

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.222	83	15710	0.200
40) Ethyl Acetate	(1)	11.430	43	39242	0.305
41) Methyl Acrylate	(1)	11.459	55	29860	0.266
42) Carbon Tetrachloride	(1)	11.523	117	12960	0.167
43) Tetrahydrofuran	(1)	11.559	42	17972	0.281
44) 1,1,1-Trichloroethane	(1)	11.638	97	14763	0.178
45) 2-Butanone	(1)	11.817	43	39690	0.348
46) Isooctane	(2)	12.053	57	65871	0.221
47) Heptane	(2)	12.204	71	10485	0.219
48) Benzene	(2)	12.333	78	30646	0.256
49) Tert-Amyl Methyl Ether	(2)	12.490	73	28298	0.237
50) 1,2-Dichloroethane	(2)	12.691	62	14852	0.213
51) Trichloroethene	(2)	13.335	130	9705	0.209
52)*1,4-Difluorobenzene	(2)	13.393	114	1033470	10.000
53) Dibromomethane	(2)	14.102	174	7176	0.186
54) Ethyl Acrylate	(2)	14.231	55	28894	0.193
55) 1,2-Dichloropropane	(2)	14.274	63	14115	0.224
56) Bromodichloromethane	(2)	14.345	83	17049	0.201
57) Methyl Methacrylate	(2)	14.582	69	12857	0.272
58) 1,4-Dioxane	(2)	14.682	88	6576	0.226
59) cis-1,3-Dichloropropene	(2)	15.406	75	17746	0.227
60) Octane	(3)	15.427	43	37225	0.242
61) Toluene	(3)	15.800	91	33585	0.241
62) 4-Methyl-2-Pentanone	(2)	16.401	43	36441	0.249
63) Tetrachloroethene	(3)	16.437	166	11948	0.199
64) trans-1,3-Dichloropropene	(3)	16.466	75	14486	0.211
65) 1,3-Dichloropropene (total)	(3)		75	32232	0.438
66) Ethyl Methacrylate	(3)	16.673	69	16606	0.201
67) 1,1,2-Trichloroethane	(3)	16.724	97	11441	0.238
68) Dibromochloromethane	(3)	17.024	127	10663	0.184
69) 1,2-Dibromoethane	(3)	17.447	107	13926	0.191
70) 2-Hexanone	(3)	17.734	43	44998	0.326
71)*Chlorobenzene-d5	(3)	18.228	117	979617	10.000
72) Chlorobenzene	(3)	18.256	112	18562	0.173
73) Ethylbenzene	(3)	18.271	91	49451	0.251
74) 1,1,1,2-Tetrachloroethane	(3)	18.350	131	11903	0.220
75) m/p-Xylene	(3)	18.493	91	46109	0.300
76) o-Xylene	(3)	19.188	91	41372	0.264

* = Compound is an internal standard.

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Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00375.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 20:18 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 13-Sep-2018 10:59 jbs01304

Sample Name: mldv0.2 Lab Sample ID: mldv0.2

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	87481	0.564
78) Styrene	(3)	19.266	104	18123	0.165
79) Bromoform	(3)	19.331	173	12480	0.165
80) Cumene	(3)	19.660	105	38795	0.190
81) n-Propylbenzene	(3)	20.312	120	10529	0.191
82) Bromobenzene	(3)	20.334	156	10787	0.180
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	25659	0.235
84) 4-Ethyltoluene	(3)	20.484	105	40563	0.196
85) 2-Chlorotoluene	(3)	20.599	126	8526	0.182
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	38457	0.224
87) 1,2,3-Trichloropropane	(3)	20.670	110	7940	0.247
88) Alpha Methyl Styrene	(3)	21.007	118	13162	0.156
89) tert-Butylbenzene	(3)	21.129	119	36354	0.231
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	34815	0.205
91) sec-Butylbenzene	(3)	21.387	105	50371	0.198
92) p-Isopropyltoluene	(3)	21.566	119	37513	0.187
93) 1,3-Dichlorobenzene	(3)	21.716	146	20685	0.197
94) 1,4-Dichlorobenzene	(3)	21.831	146	19651	0.178
96) Benzyl Chloride	(3)	22.089	126	5325	0.167
95) n-Butylbenzene	(3)	22.139	92	22947	0.169
98) 1,2-Dichlorobenzene	(3)	22.325	146	19122	0.192
97) Hexachloroethane	(3)	22.375	117	10255	0.162
99) 1,2-Dibromo-3-chloropropane	(3)	23.571	157	9878	0.186
100) Hexachlorobutadiene	(3)	24.538	225	15305	0.229
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	17951	0.224
102) Naphthalene	(3)	25.226	128	34945	0.184

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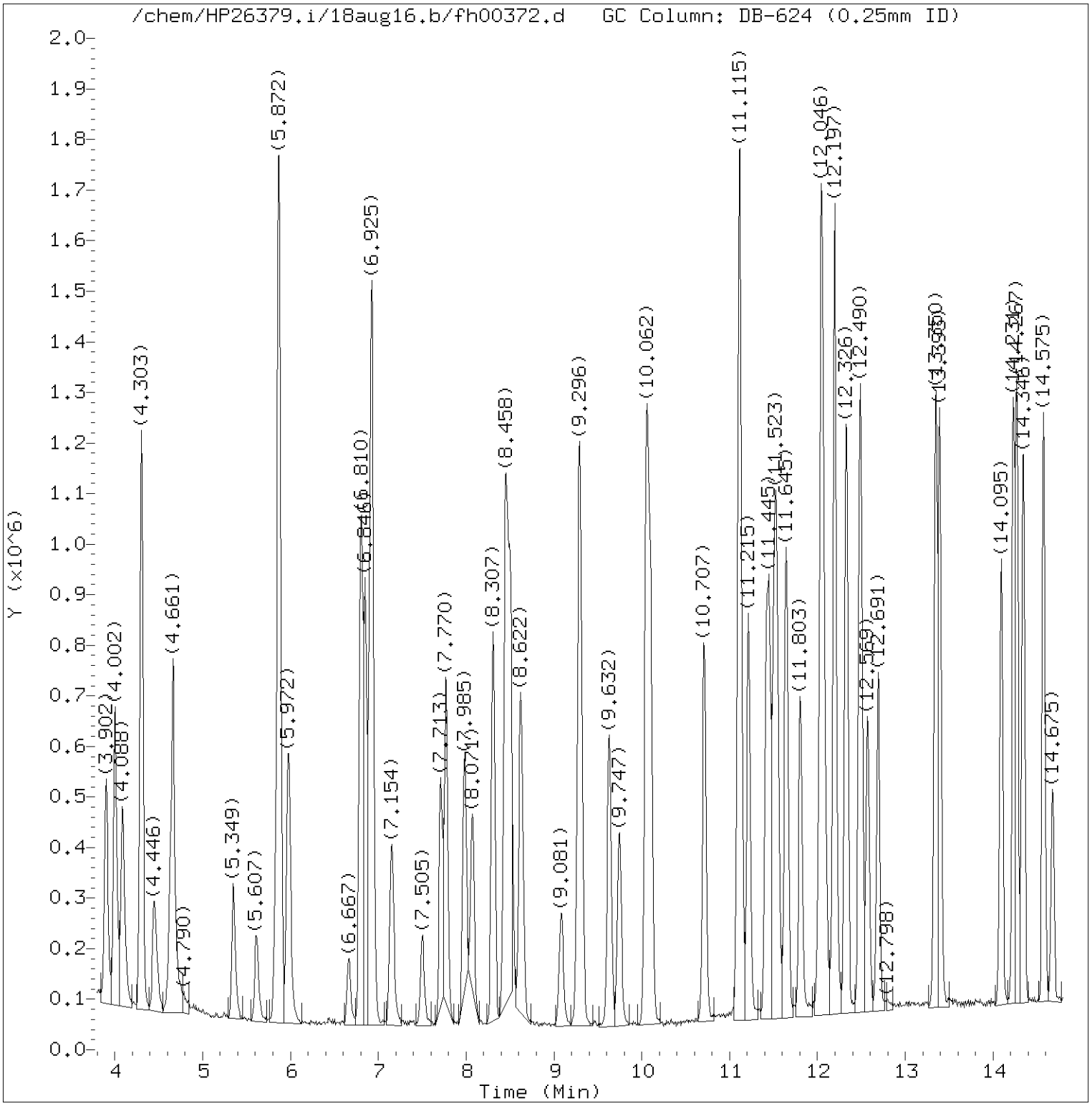
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00372.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 18:46 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 16-Aug-2018 19:26 jbs01304

Sample Name: LCSF23 Lab Sample ID: LCSF23

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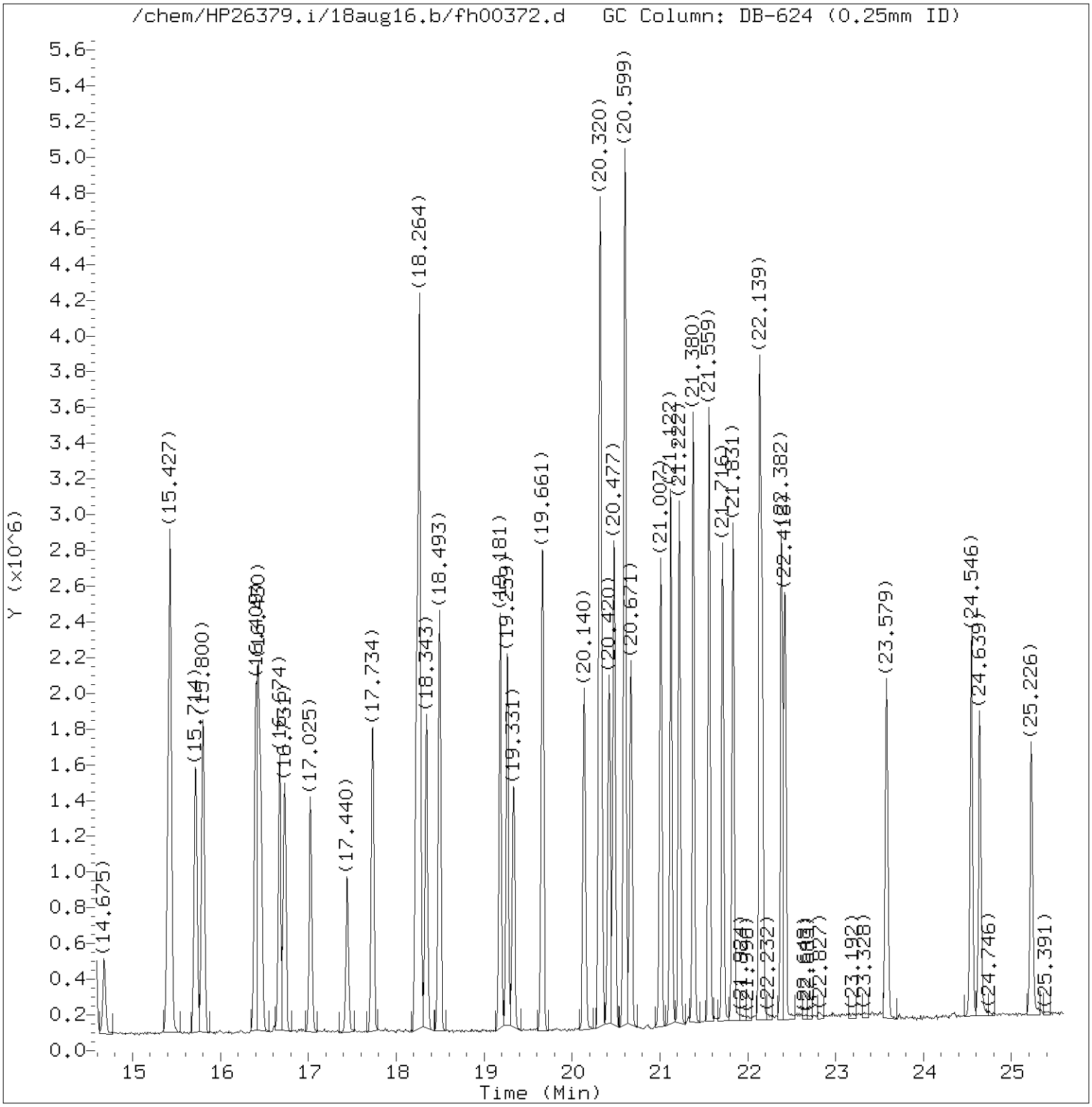
on 08/16/2018 at 19:26.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00372.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 18:46 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 16-Aug-2018 19:26 jbs01304

Sample Name: LCSF23 Lab Sample ID: LCSF23

Digitally signed by Jeffrey B. Smith
on 08/16/2018 at 19:26.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00372.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 18:46 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 16-Aug-2018 19:26 jbs01304

Sample Name: LCSF23 Lab Sample ID: LCSF23

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	411218	10.101
2) Dichlorodifluoromethane	(1)	4.002	85	972834	11.281
3) Chlorodifluoromethane	(1)	4.088	51	955223	11.066
4) Freon 114	(1)	4.303	85	971293	10.811
5) Chloromethane	(1)	4.446	50	508833	10.313
6) Vinyl Chloride	(1)	4.632	62	366864	10.813
7) 1,3-Butadiene	(1)	4.668	54	333652	9.845
8) Bromomethane	(1)	5.349	94	314460	11.322
9) Chloroethane	(1)	5.614	64	275290	11.116
10) Bromoethene	(1)	5.829	106	327831	11.085
11) Pentane	(1)	5.865	43	954388	9.846
12) Trichlorofluoromethane	(1)	5.879	101	900784	10.206
13) Dichlorofluoromethane	(1)	5.972	67	994150	11.927
14) Ethanol	(1)	6.660	45	204798	9.306
15) Freon123a	(1)	6.803	67	934377	11.905
16) 1,1-Dichloroethene	(1)	6.853	61	904480	11.164
17) Freon 113	(1)	6.917	103	493058	9.818
18) Carbon Disulfide	(1)	6.932	76	1069319	10.902
19) Methyl Iodide	(1)	7.154	142	715348	10.283
20) Acrolein	(1)	7.498	56	257581	11.145
21) Isopropanol	(1)	7.713	45	1001129	10.780
22) 3-Chloropropene	(1)	7.777	41	857207	12.615
23) Methylene Chloride	(1)	7.985	84	346801	11.969
24) Acetone	(1)	8.071	43	826397	10.732
25) trans-1,2-Dichloroethene	(1)	8.307	61	823480	10.789
26) Hexane	(1)	8.450	56	593737	9.989
27) Methyl t-Butyl Ether	(1)	8.501	73	1202578	10.059
28) tert-Butyl Alcohol	(1)	8.622	59	1374731	11.297
29) Acetonitrile	(1)	9.081	41	437413	9.254
30) Di-Isopropyl Ether	(1)	9.296	45	2003100	10.000
31) 1,1-Dichloroethane	(1)	9.632	63	995002	10.683
32) Acrylonitrile	(1)	9.747	53	522051	10.231
33) Ethyl Tert-Butyl Ether	(1)	10.055	59	1948813	10.207
34) Vinyl Acetate	(1)	10.105	43	1825502	11.960
35) cis-1,2-Dichloroethene	(1)	10.707	61	796522	10.802
36) 1,2-Dichloroethene (total)	(1)		61	1620002	21.591
37)*Bromochloromethane	(1)	11.108	130	259412	10.000
38) Cyclohexane	(1)	11.122	56	1074265	9.971

* = Compound is an internal standard.

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on 08/16/2018 at 19:26.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00372.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 18:46 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 16-Aug-2018 19:26 jbs01304

Sample Name: LCSF23 Lab Sample ID: LCSF23

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	825643	10.505
40) Ethyl Acetate	(1)	11.416	43	1283647	9.970
41) Methyl Acrylate	(1)	11.459	55	1161647	10.364
42) Carbon Tetrachloride	(1)	11.516	117	787308	10.148
43) Tetrahydrofuran	(1)	11.545	42	669354	10.457
44) 1,1,1-Trichloroethane	(1)	11.645	97	836260	10.068
45) 2-Butanone	(1)	11.803	43	1153300M	10.103
46) Isooctane	(2)	12.046	57	3141675	10.423
47) Heptane	(2)	12.197	71	483720	9.985
48) Benzene	(2)	12.333	78	1273604	10.500
49) Tert-Amyl Methyl Ether	(2)	12.490	73	1258405	10.405
50) 1,2-Dichloroethane	(2)	12.691	62	767149	10.890
51) Trichloroethene	(2)	13.350	130	463412	9.879
52)*1,4-Difluorobenzene	(2)	13.393	114	1045491	10.000
53) Dibromomethane	(2)	14.095	174	415714	10.668
54) Ethyl Acrylate	(2)	14.231	55	1578401	10.419
55) 1,2-Dichloropropane	(2)	14.274	63	648718	10.193
56) Bromodichloromethane	(2)	14.338	83	896637	10.472
57) Methyl Methacrylate	(2)	14.575	69	509407	10.638
58) 1,4-Dioxane	(2)	14.682	88	299360	10.172
59) cis-1,3-Dichloropropene	(2)	15.406	75	846063	10.716
60) Octane	(3)	15.434	43	1544589	9.779
61) Toluene	(3)	15.800	91	1477155	10.307
62) 4-Methyl-2-Pentanone	(2)	16.401	43	1546714	10.434
63) Tetrachloroethene	(3)	16.430	166	614433	9.971
64) trans-1,3-Dichloropropene	(3)	16.459	75	727279	10.311
65) 1,3-Dichloropropene (total)	(3)		75	1573342	21.027
66) Ethyl Methacrylate	(3)	16.674	69	886200	10.445
67) 1,1,2-Trichloroethane	(3)	16.731	97	530805	10.737
68) Dibromochloromethane	(3)	17.025	127	622038	10.458
69) 1,2-Dibromoethane	(3)	17.440	107	775491	10.363
70) 2-Hexanone	(3)	17.734	43	1478232	10.440
71)*Chlorobenzene-d5	(3)	18.228	117	1005971	10.000
72) Chlorobenzene	(3)	18.257	112	1104694	10.027
73) Ethylbenzene	(3)	18.271	91	2054799	10.138
74) 1,1,1,2-Tetrachloroethane	(3)	18.343	131	561730	10.114
75) m/p-Xylene	(3)	18.493	91	1585109	10.029
76) o-Xylene	(3)	19.181	91	1658004	10.317

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

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on 08/16/2018 at 19:26.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00372.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 18:46 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 16-Aug-2018 19:26 jbs01304

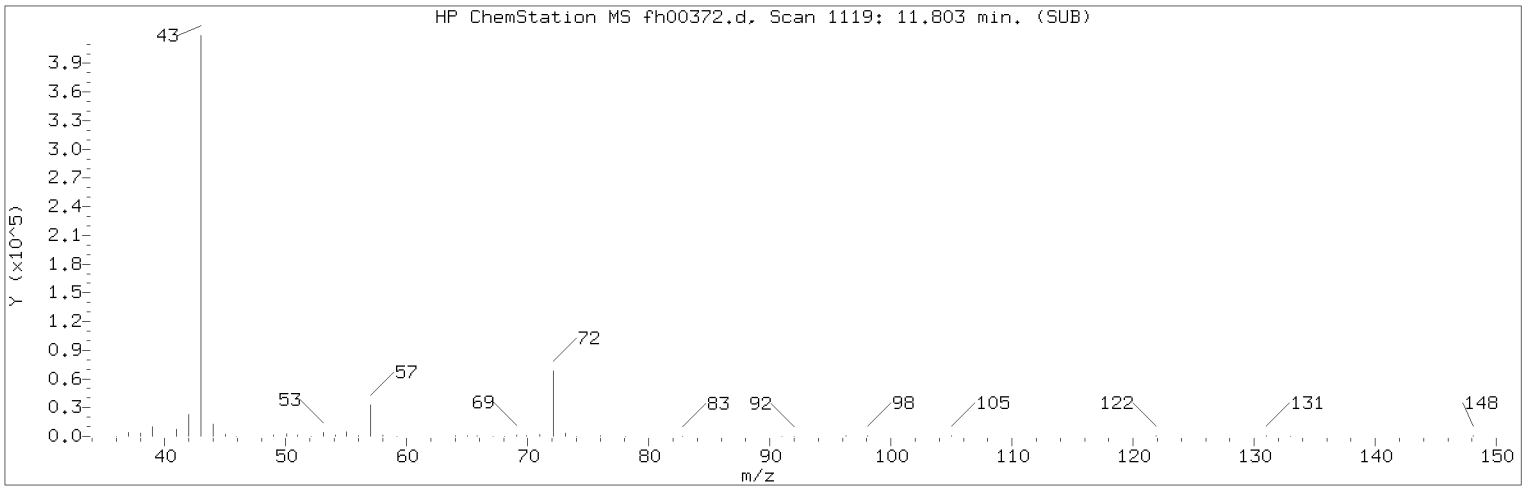
Sample Name: LCSF23 Lab Sample ID: LCSF23

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	3243113	20.346
78) Styrene	(3)	19.267	104	1173178	10.403
79) Bromoform	(3)	19.338	173	790878	10.167
80) Cumene	(3)	19.668	105	2148924	10.243
81) n-Propylbenzene	(3)	20.320	120	573188	10.138
82) Bromobenzene	(3)	20.327	156	608139	9.886
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	1243719	11.072
84) 4-Ethyltoluene	(3)	20.477	105	2117153M	9.966
85) 2-Chlorotoluene	(3)	20.599	126	491315	10.209
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	1783878	10.096
87) 1,2,3-Trichloropropane	(3)	20.671	110	347490	10.538
88) Alpha Methyl Styrene	(3)	21.007	118	867178	10.030
89) tert-Butylbenzene	(3)	21.122	119	1567524	9.685
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	1769907	10.158
91) sec-Butylbenzene	(3)	21.380	105	2592655	9.930
92) p-Isopropyltoluene	(3)	21.559	119	1984361	9.625
93) 1,3-Dichlorobenzene	(3)	21.716	146	1038858	9.636
94) 1,4-Dichlorobenzene	(3)	21.831	146	1054432	9.325
95) n-Butylbenzene	(3)	22.139	92	1320894	9.462
96) Benzyl Chloride	(3)	22.160	126	328105	10.016
97) Hexachloroethane	(3)	22.382	117	663130	10.175
98) 1,2-Dichlorobenzene	(3)	22.425	146	975515	9.530
99) 1,2-Dibromo-3-chloropropane	(3)	23.579	157	526026	9.630
100) Hexachlorobutadiene	(3)	24.546	225	541665	7.878
101) 1,2,4-Trichlorobenzene	(3)	24.639	180	652186	7.936
102) Naphthalene	(3)	25.226	128	1535212	7.872

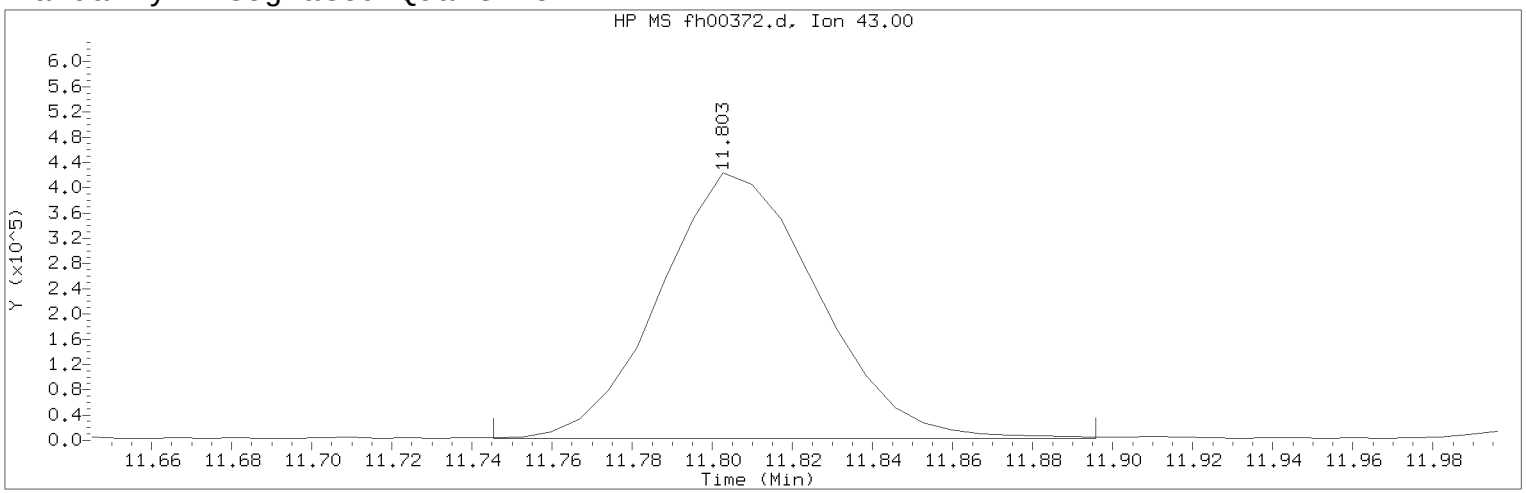
M = Compound was manually integrated.

Digitally signed by Jeffrey B. Smith
on 08/16/2018 at 19:26.
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug16.b/fh00372.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 18:46 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 16-Aug-2018 19:26 jbs01304

Sample Name: LCSF23 Lab Sample ID: LCSF23

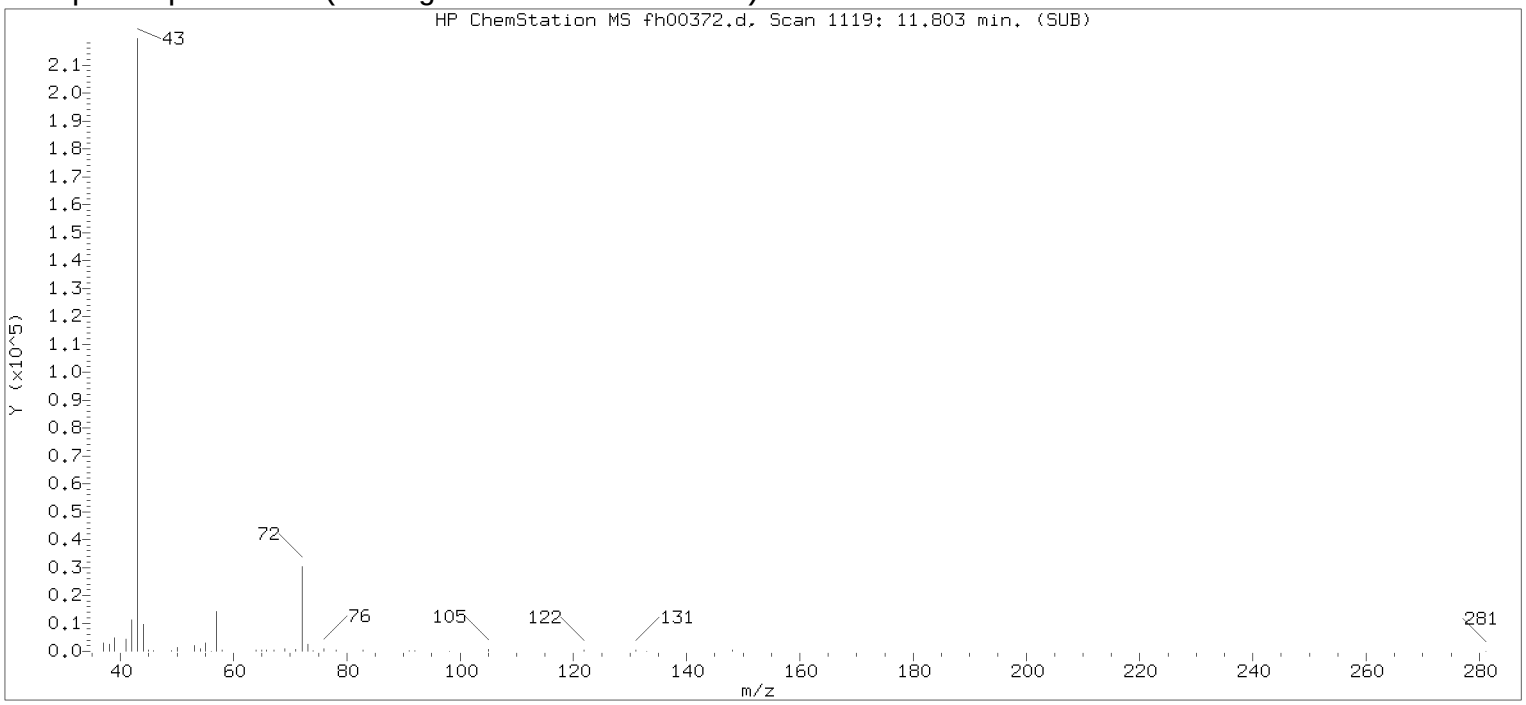
Compound Number : 45
Compound Name : 2-Butanone
Scan Number : 1119
Retention Time (minutes): 11.803
Quant Ion : 43.00
Area (flag) : 1153300M
Concentration (ppb(v)) : 10.1028
Integration start scan : 1110 Integration stop scan: 1131
Y at integration start : 2696 Y at integration end: 2696

Reason for manual integration: improper integration

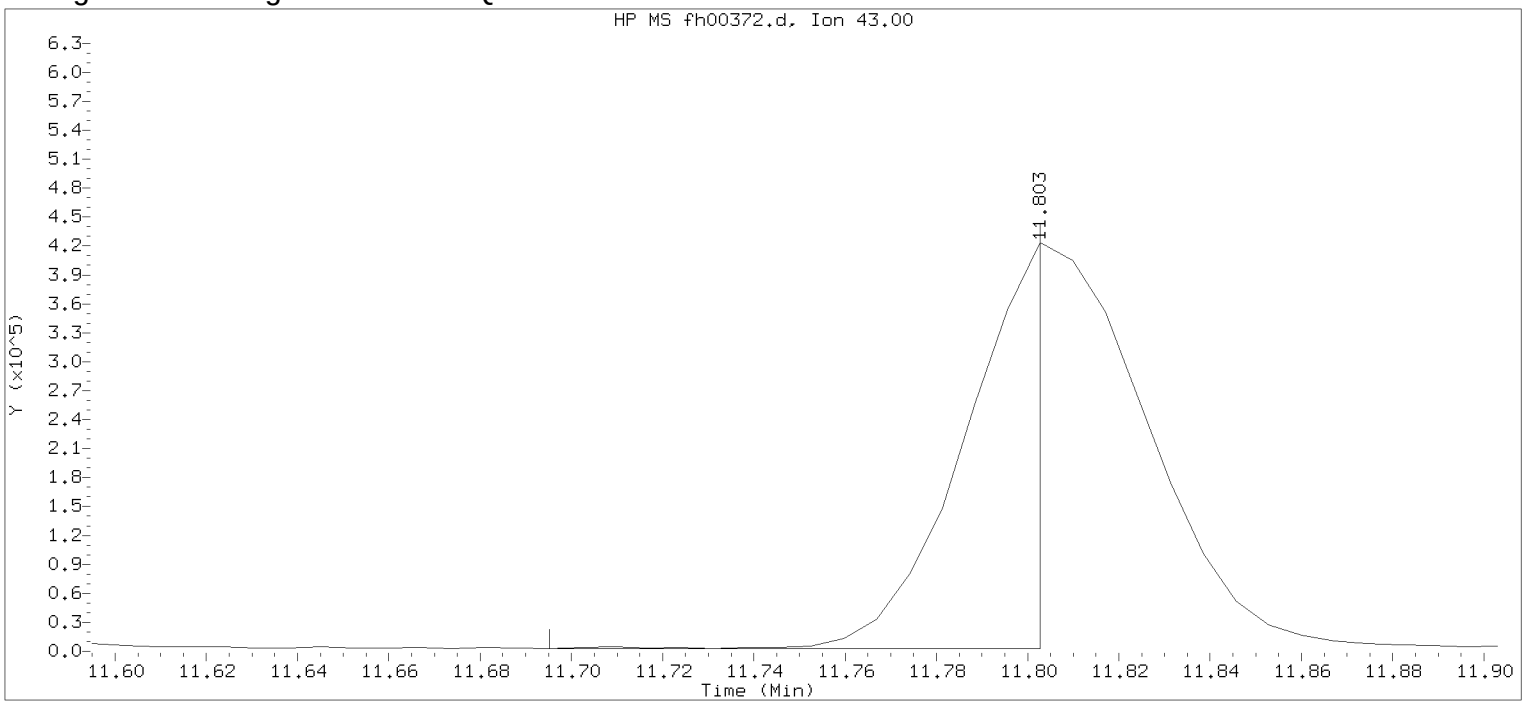
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 08/16/2018 at 19:26.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/21/2018 at 14:19.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug16.b/fh00372.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 18:46 Analyst ID: jeb07445

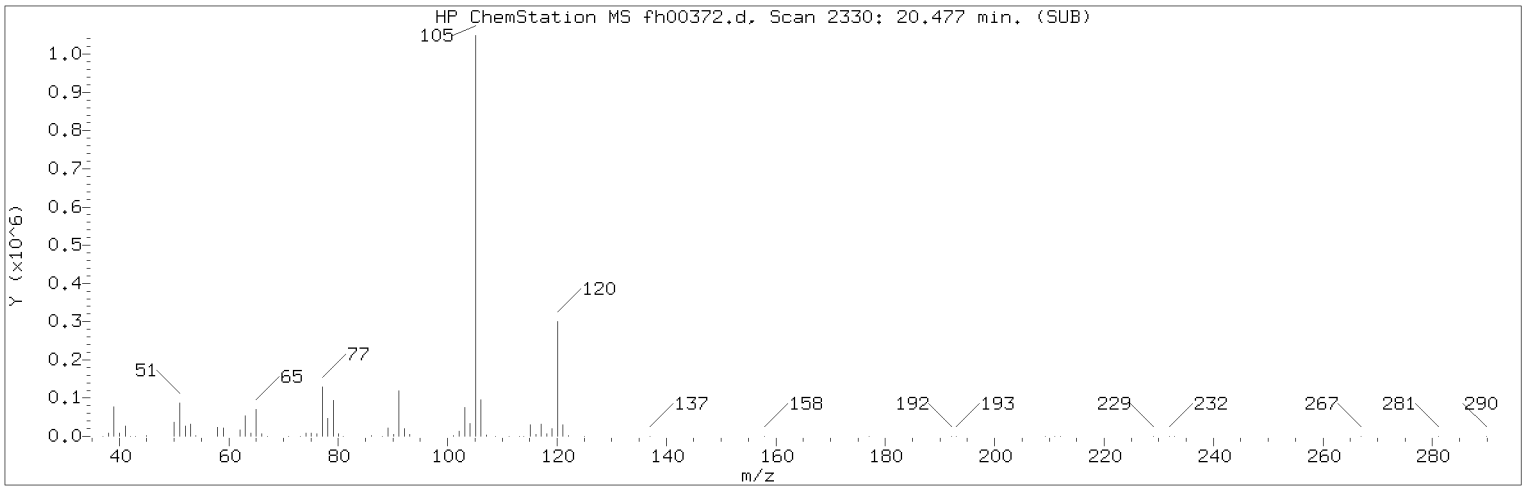
Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 16-Aug-2018 19:16 Unknown

Sample Name: LCSF23 Lab Sample ID: LCSF23

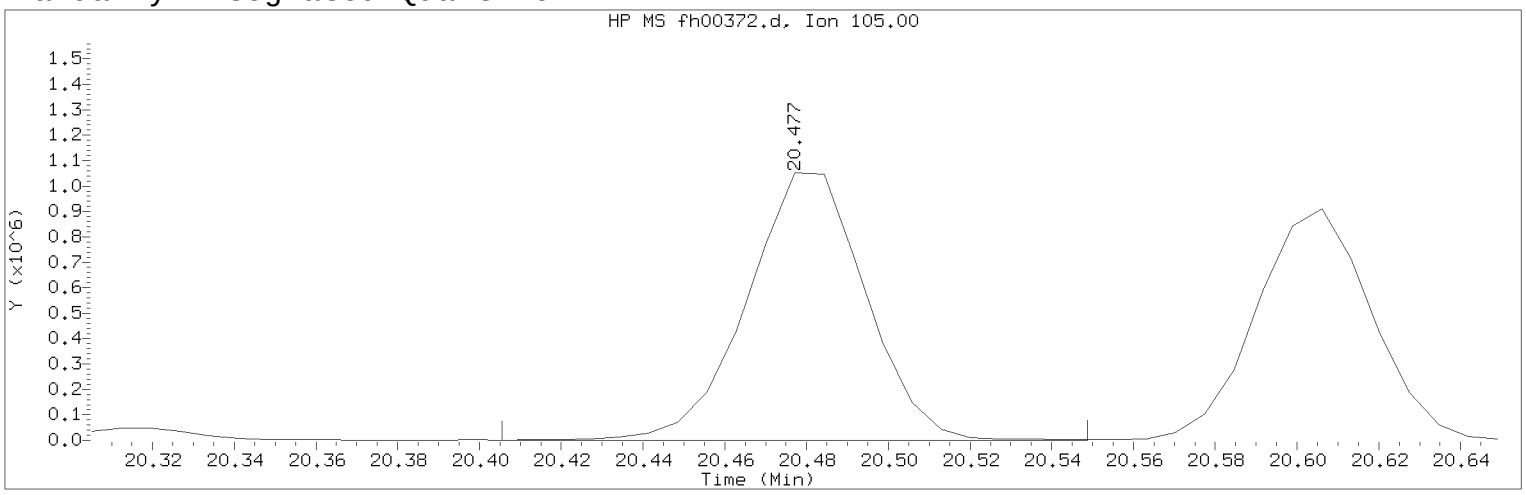
Compound Number : 45
Compound Name : 2-Butanone
Scan Number : 1119
Retention Time (minutes): 11.803
Quant Ion : 43.00
Area : 467838
Concentration (ppb(v)) : 4.0982
Integration start scan : 1103 Integration stop scan: 1118
Y at integration start : 2634 Y at integration end: 2634

Digitally signed by Jeffrey B. Smith on 08/16/2018 at 19:26.
Target 3.5 esignature user GLE02jbs01395

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug16.b/fh00372.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 18:46 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 16-Aug-2018 19:26 jbs01304

Sample Name: LCSF23 Lab Sample ID: LCSF23

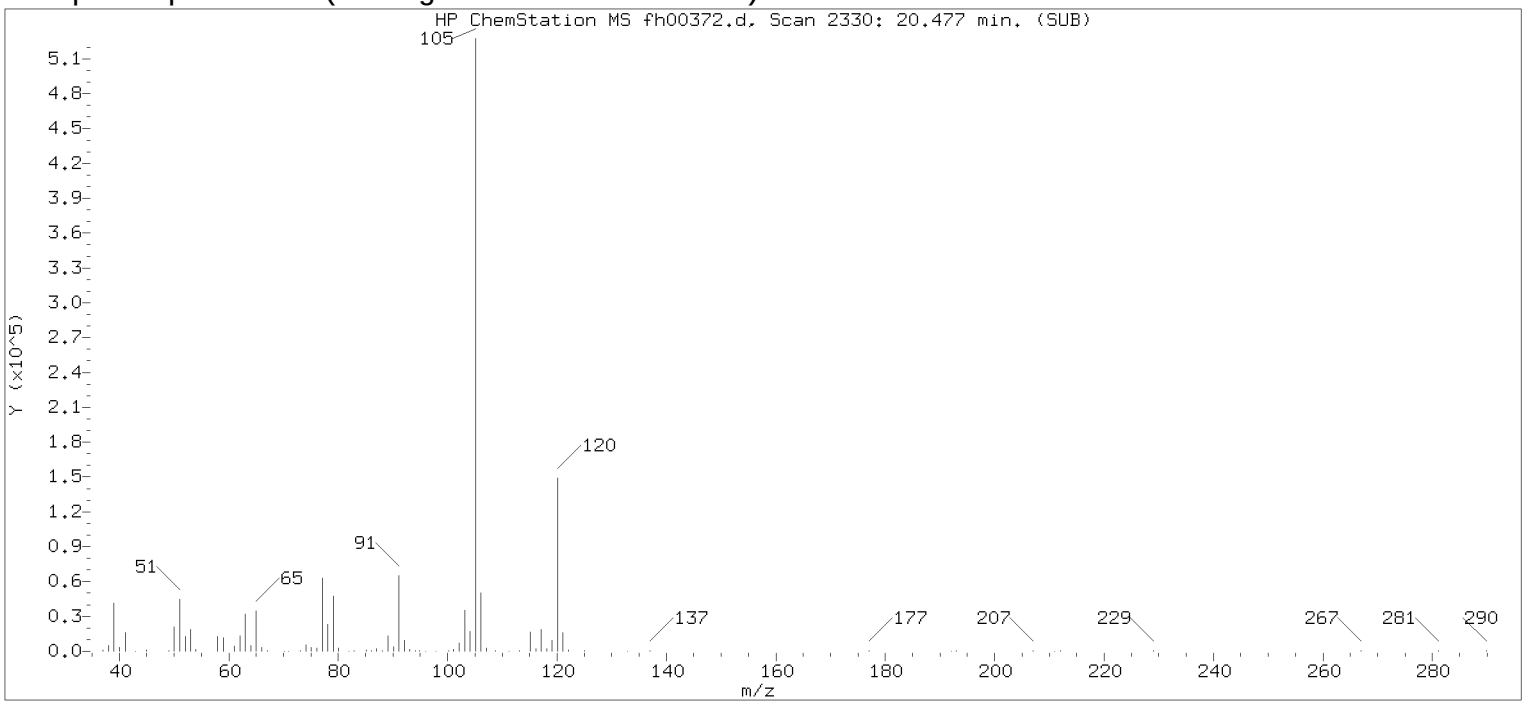
Compound Number : 84
Compound Name : 4-Ethyltoluene
Scan Number : 2330
Retention Time (minutes): 20.477
Quant Ion : 105.00
Area (flag) : 2117153M
Concentration (ppb(v)) : 9.9660
Integration start scan : 2319 Integration stop scan: 2339
Y at integration start : 493 Y at integration end: 493

Reason for manual integration: improper integration

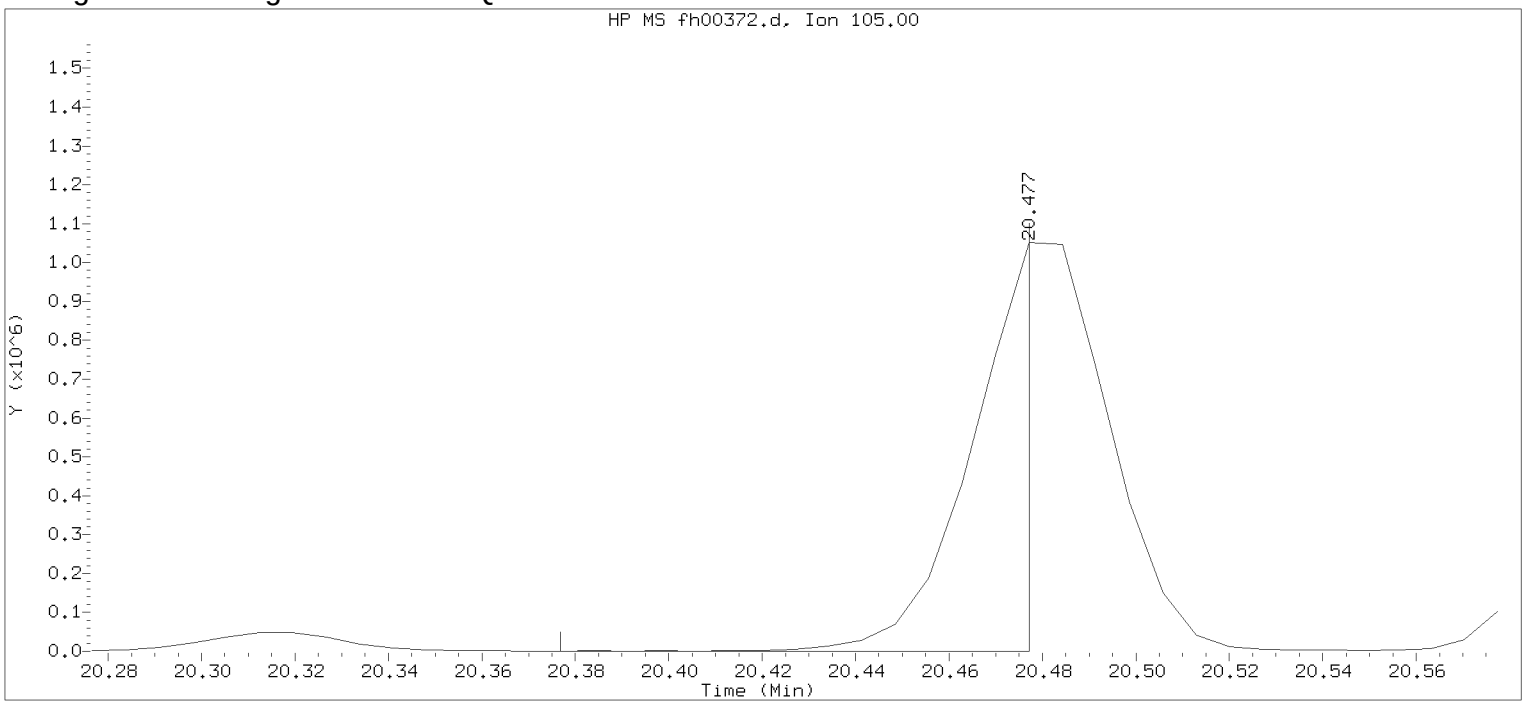
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 08/16/2018 at 19:26.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/21/2018 at 14:19.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



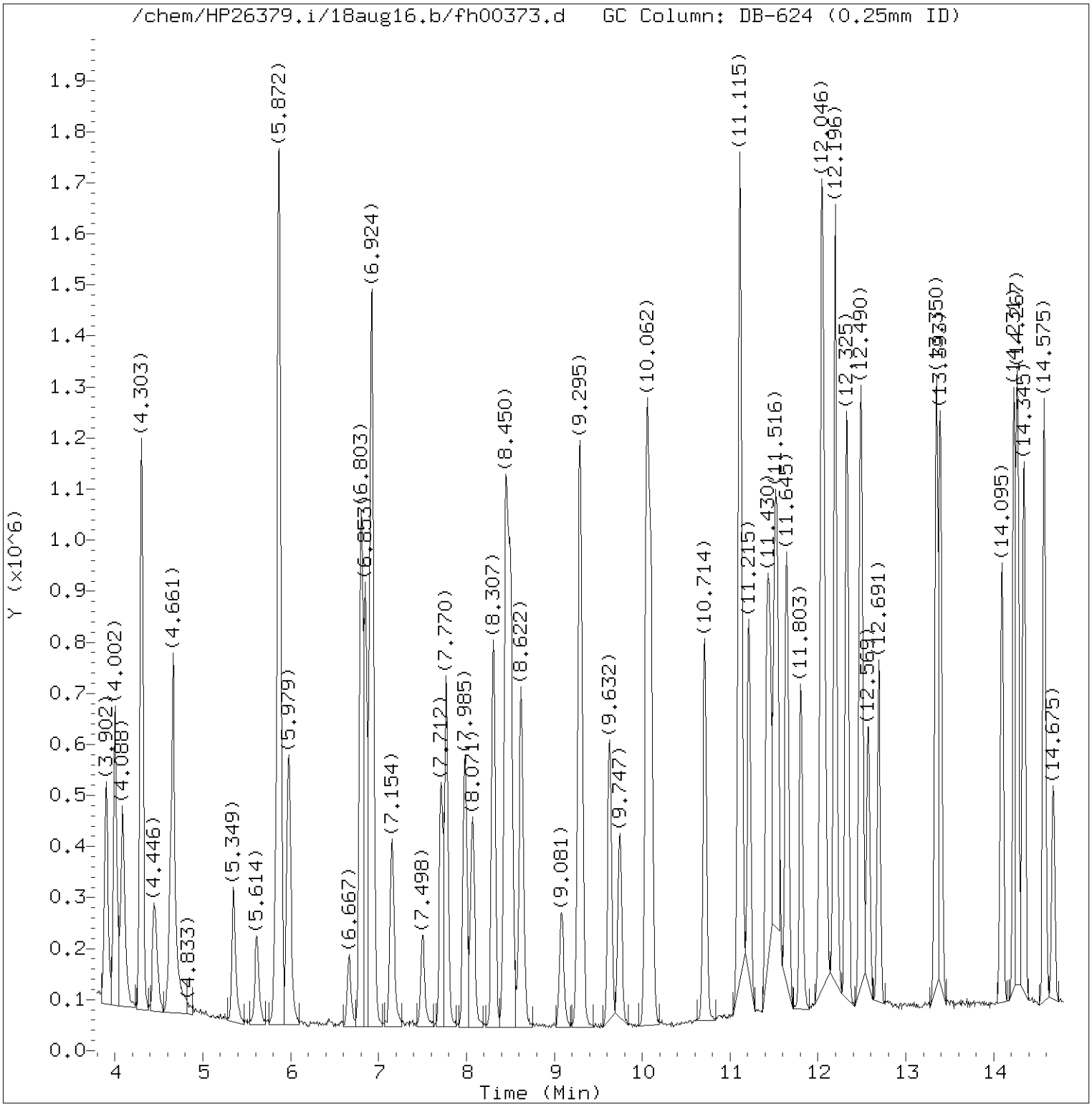
Data File: /chem/HP26379.i/18aug16.b/fh00372.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 18:46 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 16-Aug-2018 19:16 Unknown

Sample Name: LCSF23 Lab Sample ID: LCSF23

Compound Number : 84
Compound Name : 4-Ethyltoluene
Scan Number : 2330
Retention Time (minutes): 20.477
Quant Ion : 105.00
Area : 870930
Concentration (ppb(v)) : 4.0997
Integration start scan : 2315 Integration stop scan: 2329
Y at integration start : 602 Y at integration end: 602

Digitally signed by Jeffrey B. Smith on 08/16/2018 at 19:26.
Target 3.5 esignature user: LE02jbs01397



Total Ion Chromatogram (TIC)

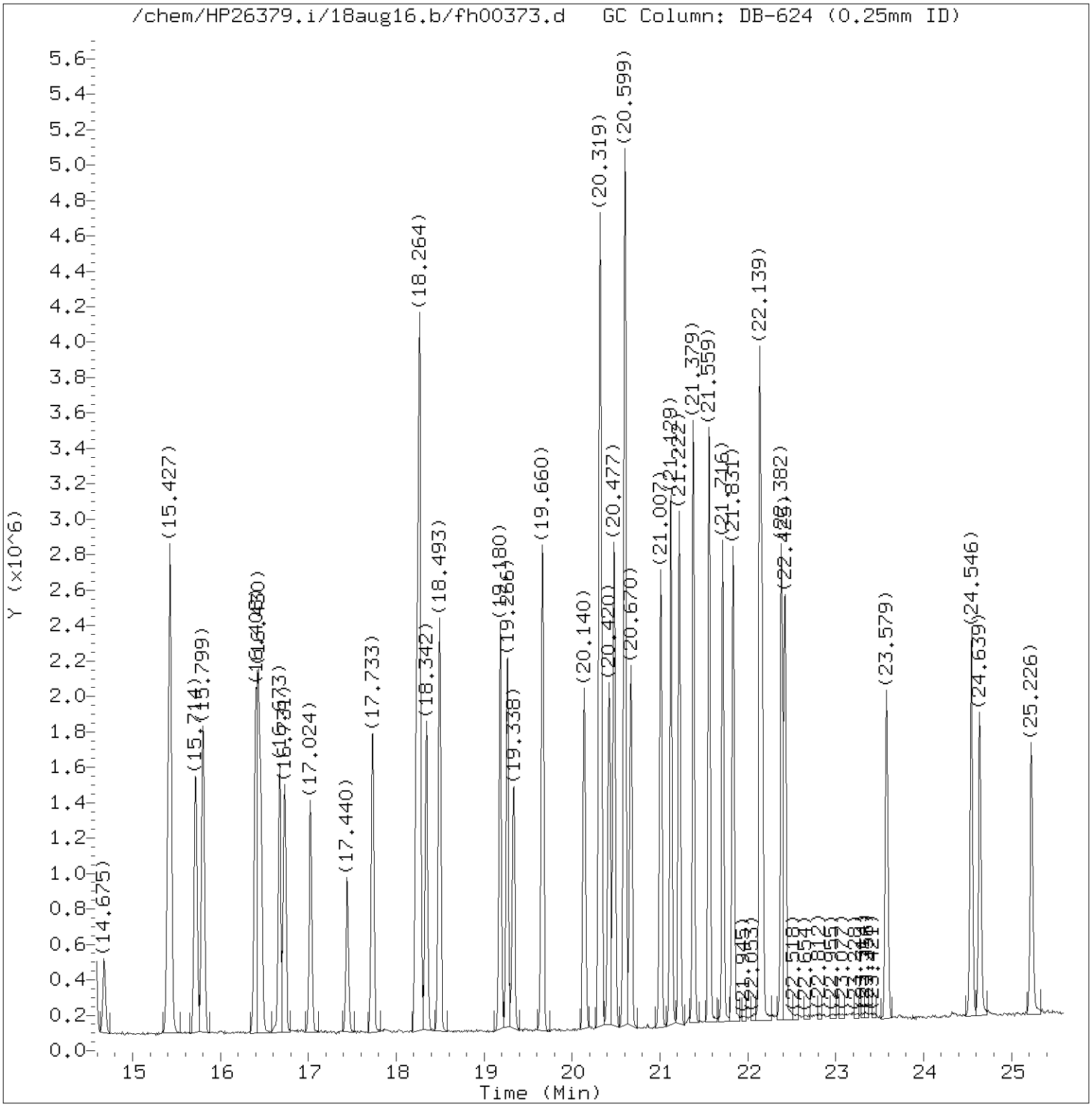
Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00373.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 19:17 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 17-Aug-2018 08:01 ads07818

Sample Name: LCSDF23 Lab Sample ID: LCSDF23

Digitally signed by Alexander D. Sechrist
on 08/17/2018 at 08:01.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00373.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 19:17 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 17-Aug-2018 08:01 ads07818

Sample Name: LCSDF23 Lab Sample ID: LCSDF23

Digitally signed by Alexander D. Sechrist
on 08/17/2018 at 08:01.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00373.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 19:17 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 17-Aug-2018 08:01 ads07818

Sample Name: LCSDF23 Lab Sample ID: LCSDF23

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	418723	10.554
2) Dichlorodifluoromethane	(1)	4.002	85	956371	11.380
3) Chlorodifluoromethane	(1)	4.088	51	942482	11.204
4) Freon 114	(1)	4.303	85	959146	10.955
5) Chloromethane	(1)	4.446	50	507835	10.562
6) Vinyl Chloride	(1)	4.632	62	369121	11.164
7) 1,3-Butadiene	(1)	4.661	54	329674	9.983
8) Bromomethane	(1)	5.349	94	311027	11.491
9) Chloroethane	(1)	5.614	64	278121	11.525
10) Bromoethene	(1)	5.829	106	320835	11.132
11) Pentane	(1)	5.864	43	945325	10.007
12) Trichlorofluoromethane	(1)	5.872	101	898206	10.443
13) Dichlorofluoromethane	(1)	5.979	67	977075	12.028
14) Ethanol	(1)	6.667	45	210947	9.836
15) Freon123a	(1)	6.803	67	918498	12.009
16) 1,1-Dichloroethene	(1)	6.853	61	896386	11.354
17) Freon 113	(1)	6.910	103	487498	9.961
18) Carbon Disulfide	(1)	6.939	76	1068537	11.179
19) Methyl Iodide	(1)	7.154	142	712701	10.513
20) Acrolein	(1)	7.498	56	264772	11.756
21) Isopropanol	(1)	7.712	45	982820	10.860
22) 3-Chloropropene	(1)	7.777	41	838408M	12.661
23) Methylene Chloride	(1)	7.985	84	344763	12.210
24) Acetone	(1)	8.071	43	812824	10.832
25) trans-1,2-Dichloroethene	(1)	8.307	61	826863	11.117
26) Hexane	(1)	8.450	56	590604	10.196
27) Methyl t-Butyl Ether	(1)	8.500	73	1192317	10.234
28) tert-Butyl Alcohol	(1)	8.622	59	1350321	11.387
29) Acetonitrile	(1)	9.073	41	437804	9.505
30) Di-Isopropyl Ether	(1)	9.295	45	2012051	10.307
31) 1,1-Dichloroethane	(1)	9.632	63	989500	10.902
32) Acrylonitrile	(1)	9.747	53	513771	10.332
33) Ethyl Tert-Butyl Ether	(1)	10.055	59	1952540	10.494
34) Vinyl Acetate	(1)	10.105	43	1816857M	12.215
35) cis-1,2-Dichloroethene	(1)	10.714	61	776921	10.811
36) 1,2-Dichloroethene (total)	(1)		61	1603784	21.928
37)*Bromochloromethane	(1)	11.108	130	252799	10.000
38) Cyclohexane	(1)	11.115	56	1065159M	10.145

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

Digitally signed by Alexander D. Sechrist
on 08/17/2018 at 08:01.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00373.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 19:17 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 17-Aug-2018 08:01 ads07818

Sample Name: LCSDF23 Lab Sample ID: LCSDF23

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	833048	10.877
40) Ethyl Acetate	(1)	11.423	43	1285251	10.243
41) Methyl Acrylate	(1)	11.459	55	1147420	10.505
42) Carbon Tetrachloride	(1)	11.509	117	775749	10.261
43) Tetrahydrofuran	(1)	11.545	42	667076	10.694
44) 1,1,1-Trichloroethane	(1)	11.645	97	823336	10.172
45) 2-Butanone	(1)	11.803	43	1182475	10.629
46) Isooctane	(2)	12.046	57	3131779	10.300
47) Heptane	(2)	12.196	71	476687	9.754
48) Benzene	(2)	12.333	78	1262208	10.315
49) Tert-Amyl Methyl Ether	(2)	12.490	73	1256129	10.296
50) 1,2-Dichloroethane	(2)	12.691	62	759967	10.694
51) Trichloroethene	(2)	13.350	130	454858	9.613
52)*1,4-Difluorobenzene	(2)	13.393	114	1054649	10.000
53) Dibromomethane	(2)	14.095	174	407955	10.378
54) Ethyl Acrylate	(2)	14.231	55	1561049	10.215
55) 1,2-Dichloropropane	(2)	14.267	63	669309	10.426
56) Bromodichloromethane	(2)	14.345	83	885359	10.250
57) Methyl Methacrylate	(2)	14.575	69	501203	10.376
58) 1,4-Dioxane	(2)	14.675	88	294891	9.933
59) cis-1,3-Dichloropropene	(2)	15.406	75	829136	10.410
60) Octane	(3)	15.427	43	1542298	9.852
61) Toluene	(3)	15.799	91	1487019	10.469
62) 4-Methyl-2-Pentanone	(2)	16.401	43	1539106	10.293
63) Tetrachloroethene	(3)	16.430	166	608305	9.960
64) trans-1,3-Dichloropropene	(3)	16.458	75	724018	10.357
65) 1,3-Dichloropropene (total)	(3)		75	1553154	20.767
66) Ethyl Methacrylate	(3)	16.673	69	879396	10.458
67) 1,1,2-Trichloroethane	(3)	16.731	97	516068	10.532
68) Dibromochloromethane	(3)	17.024	127	619797	10.514
69) 1,2-Dibromoethane	(3)	17.440	107	770308	10.387
70) 2-Hexanone	(3)	17.726	43	1446889	10.310
71)*Chlorobenzene-d5	(3)	18.228	117	997012	10.000
72) Chlorobenzene	(3)	18.256	112	1094535	10.024
73) Ethylbenzene	(3)	18.271	91	2022763	10.069
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	558317	10.143
75) m/p-Xylene	(3)	18.493	91	1568479	10.013
76) o-Xylene	(3)	19.180	91	1609308	10.104

* = Compound is an internal standard.

Digitally signed by Alexander D. Sechrist
on 08/17/2018 at 08:01.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug16.b/fh00373.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 19:17 Analyst ID: jeb07445

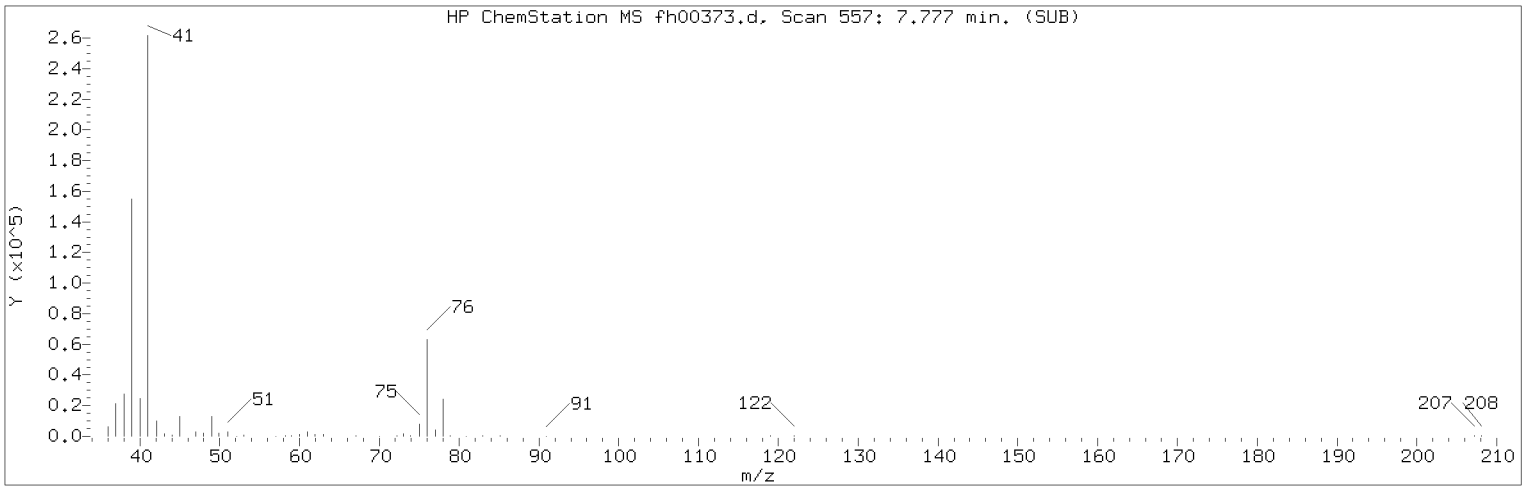
Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 17-Aug-2018 08:01 ads07818

Sample Name: LCSDF23 Lab Sample ID: LCSDF23

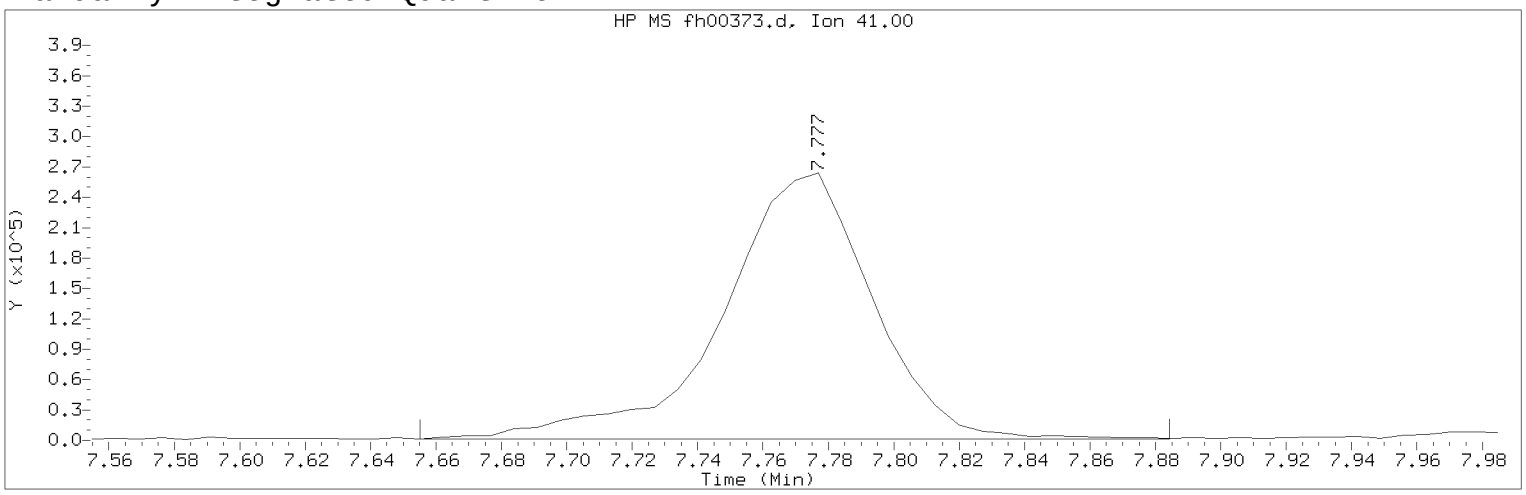
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	3177787	20.117
78) Styrene	(3)	19.266	104	1159259	10.372
79) Bromoform	(3)	19.338	173	782363	10.148
80) Cumene	(3)	19.660	105	2123725	10.214
81) n-Propylbenzene	(3)	20.312	120	545264	9.731
82) Bromobenzene	(3)	20.327	156	608307	9.978
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	1239552	11.134
84) 4-Ethyltoluene	(3)	20.477	105	2097637	9.963
85) 2-Chlorotoluene	(3)	20.599	126	478101	10.024
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	1780905	10.170
87) 1,2,3-Trichloropropane	(3)	20.670	110	334136	10.224
88) Alpha Methyl Styrene	(3)	21.007	118	864580	10.090
89) tert-Butylbenzene	(3)	21.129	119	1563727	9.748
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	1744331	10.101
91) sec-Butylbenzene	(3)	21.379	105	2552310	9.863
92) p-Isopropyltoluene	(3)	21.559	119	1948816	9.537
93) 1,3-Dichlorobenzene	(3)	21.716	146	1032679	9.665
94) 1,4-Dichlorobenzene	(3)	21.831	146	1038188	9.264
95) n-Butylbenzene	(3)	22.139	92	1329354	9.608
96) Benzyl Chloride	(3)	22.160	126	317742	9.786
97) Hexachloroethane	(3)	22.382	117	654403	10.131
98) 1,2-Dichlorobenzene	(3)	22.425	146	965964	9.521
99) 1,2-Dibromo-3-chloropropane	(3)	23.579	157	515383	9.520
100) Hexachlorobutadiene	(3)	24.546	225	544791	7.994
101) 1,2,4-Trichlorobenzene	(3)	24.639	180	654972	8.042
102) Naphthalene	(3)	25.226	128	1537450	7.954

Digitally signed by Alexander D. Sechrist
on 08/17/2018 at 08:01.
Target 3.5 esignature user ID: ads07818

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug16.b/fh00373.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 19:17 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 17-Aug-2018 08:01 ads07818

Sample Name: LCSDF23 Lab Sample ID: LCSDF23

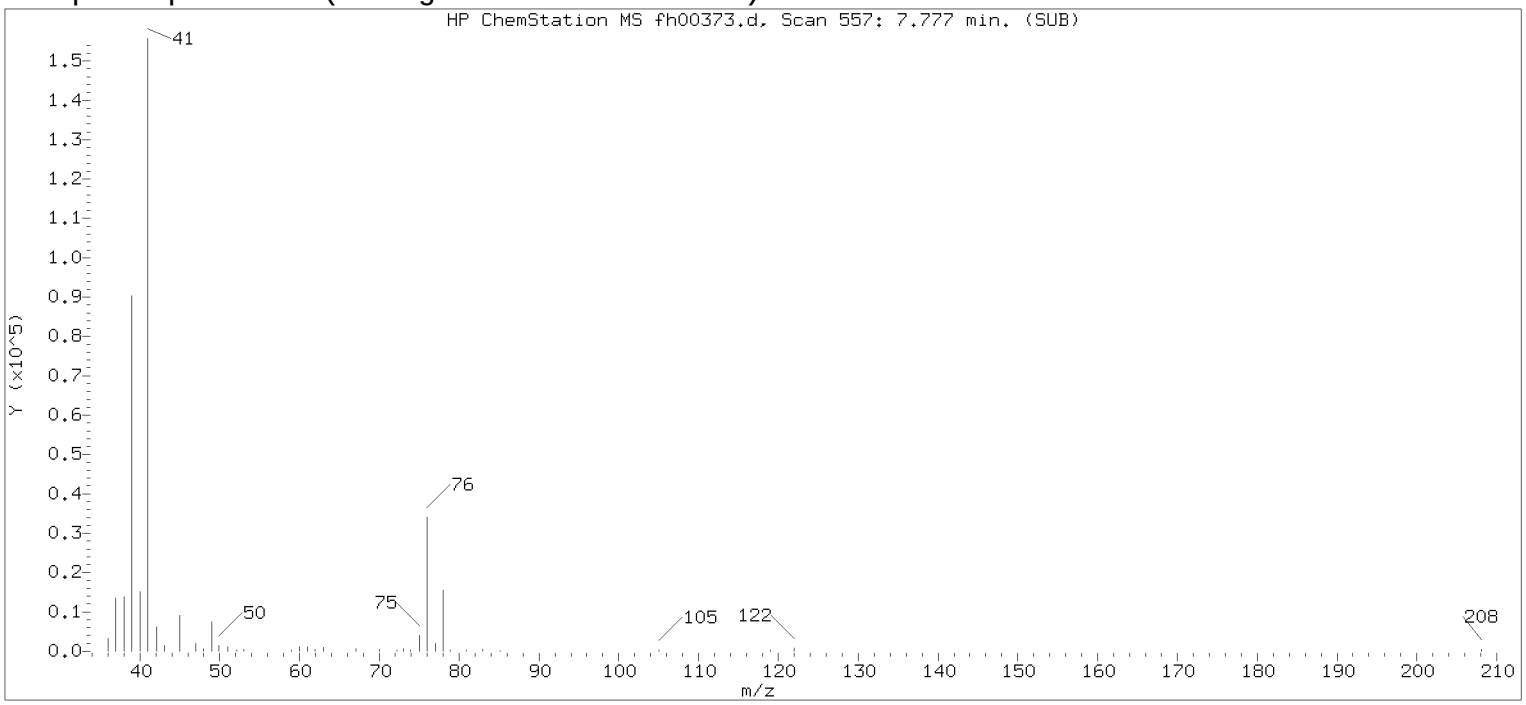
Compound Number : 22
Compound Name : 3-Chloropropene
Scan Number : 557
Retention Time (minutes): 7.777
Quant Ion : 41.00
Area (flag) : 838408M
Concentration (ppb(v)) : 12.6611
Integration start scan : 539 Integration stop scan: 571
Y at integration start : 1243 Y at integration end: 1243

Reason for manual integration: improper integration

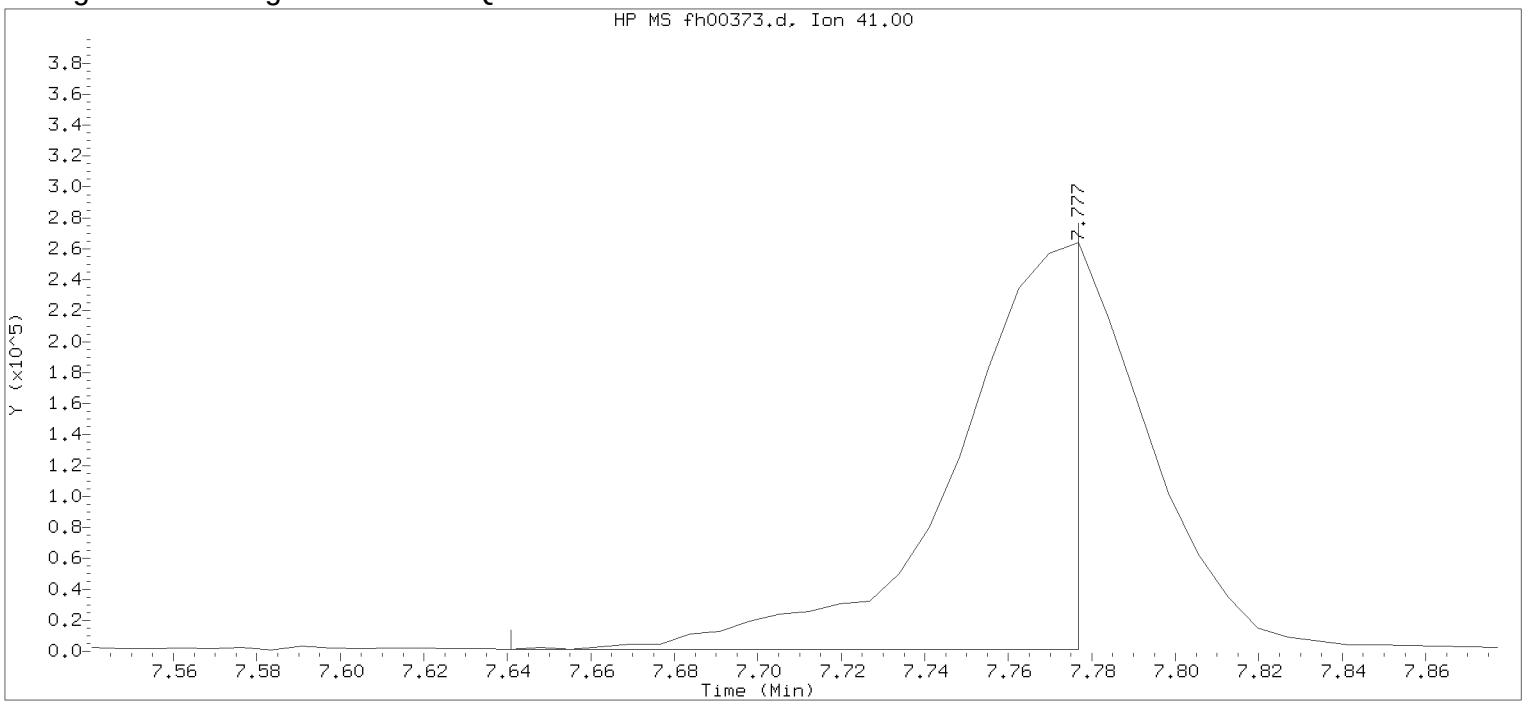
Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 08/17/2018 at 08:01.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/21/2018 at 14:19.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug16.b/fh00373.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 19:17 Analyst ID: jeb07445

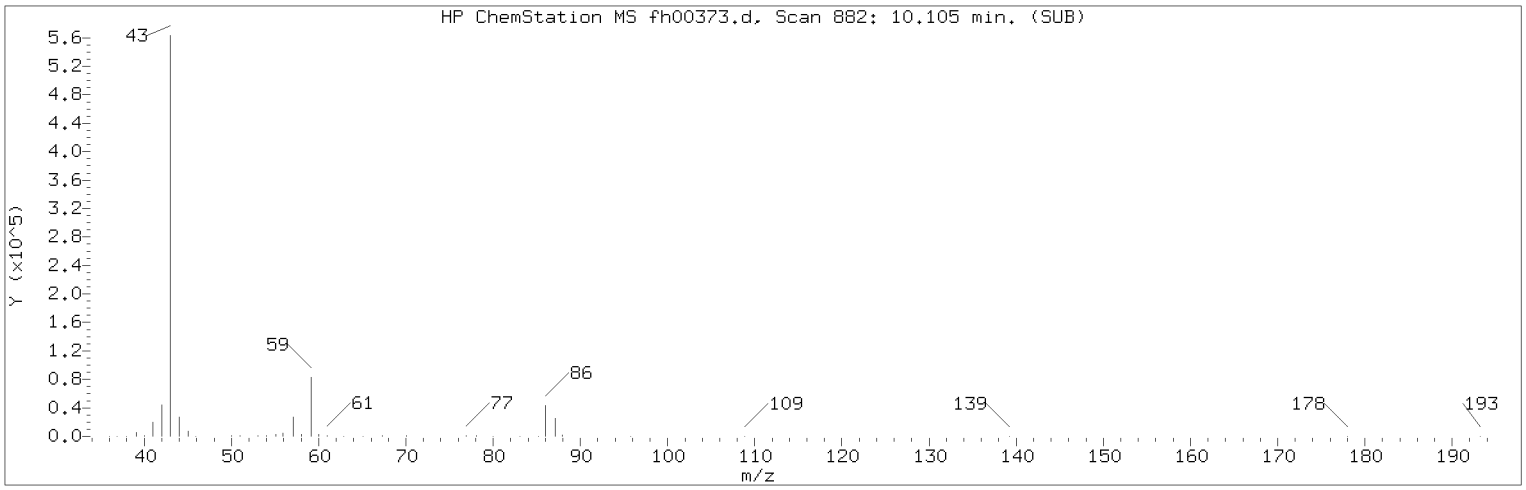
Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 16-Aug-2018 19:47 Unknown

Sample Name: LCSDF23 Lab Sample ID: LCSDF23

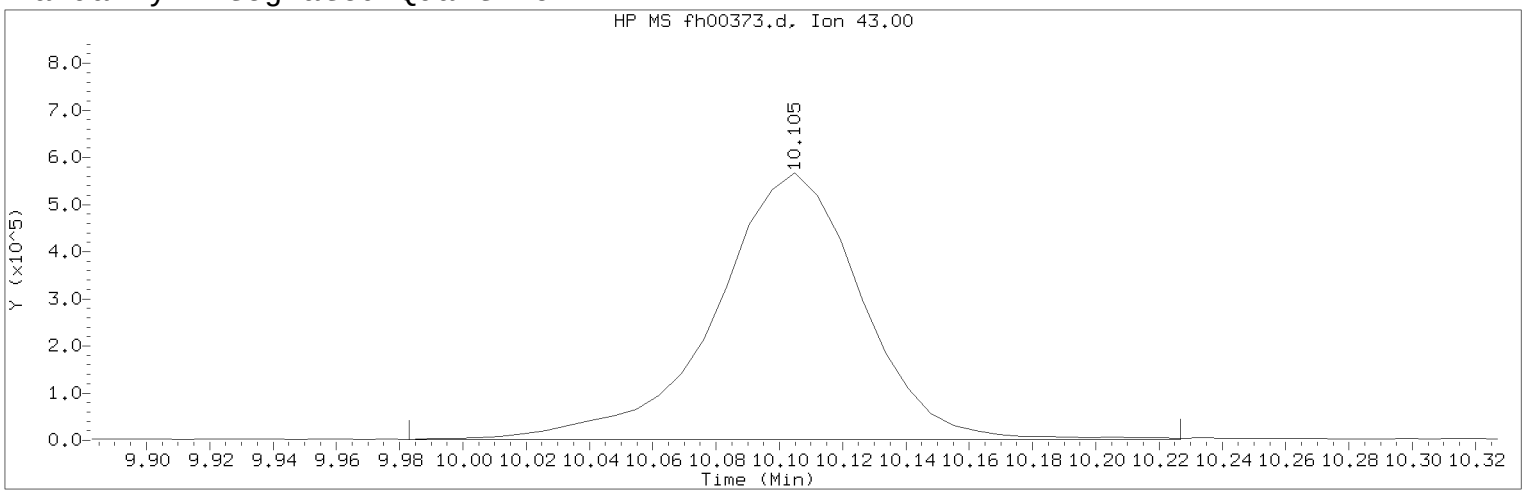
Compound Number : 22
Compound Name : 3-Chloropropene
Scan Number : 557
Retention Time (minutes): 7.777
Quant Ion : 41.00
Area : 520434
Concentration (ppb(v)) : 7.8592
Integration start scan : 537 Integration stop scan: 556
Y at integration start : 1319 Y at integration end: 1319

Digitally signed by Alexander D. Sechrist on 08/17/2018 at 08:01.
Target 3.5 esignature user ID: 2a07804

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug16.b/fh00373.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 19:17 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 17-Aug-2018 08:01 ads07818

Sample Name: LCSDF23 Lab Sample ID: LCSDF23

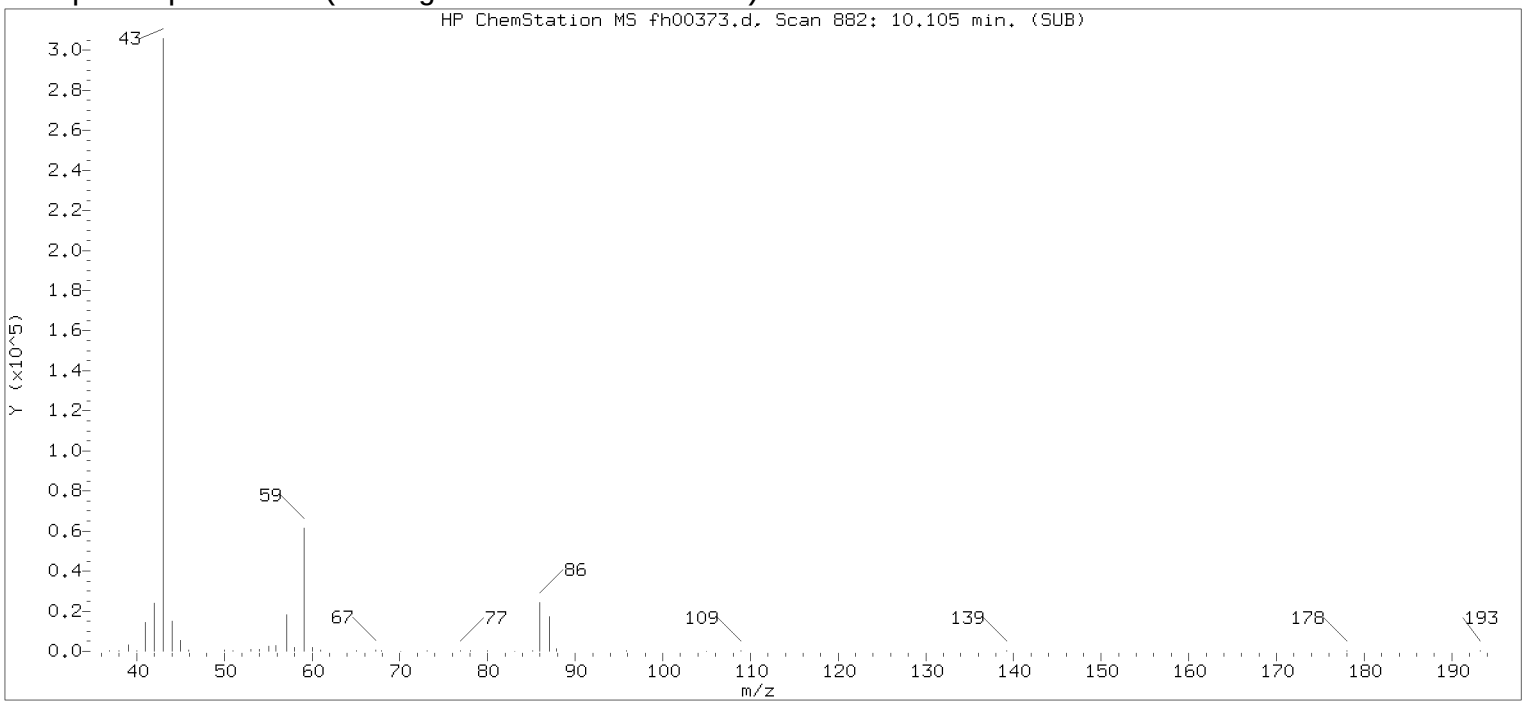
Compound Number : 34
Compound Name : Vinyl Acetate
Scan Number : 882
Retention Time (minutes): 10.105
Quant Ion : 43.00
Area (flag) : 1816857M
Concentration (ppb(v)) : 12.2151
Integration start scan : 864 Integration stop scan: 898
Y at integration start : 1914 Y at integration end: 1914

Reason for manual integration: improper integration

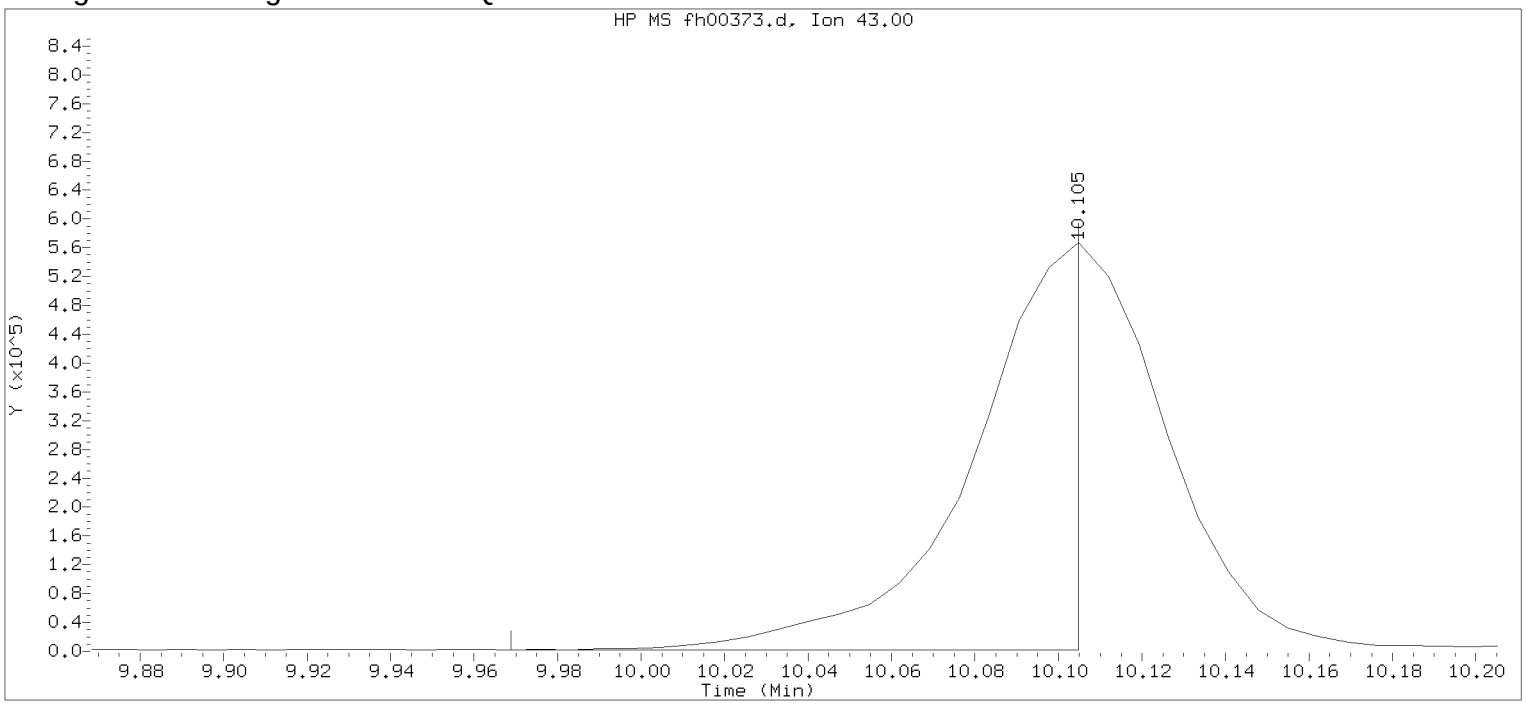
Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 08/17/2018 at 08:01.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/21/2018 at 14:19.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug16.b/fh00373.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 19:17 Analyst ID: jeb07445

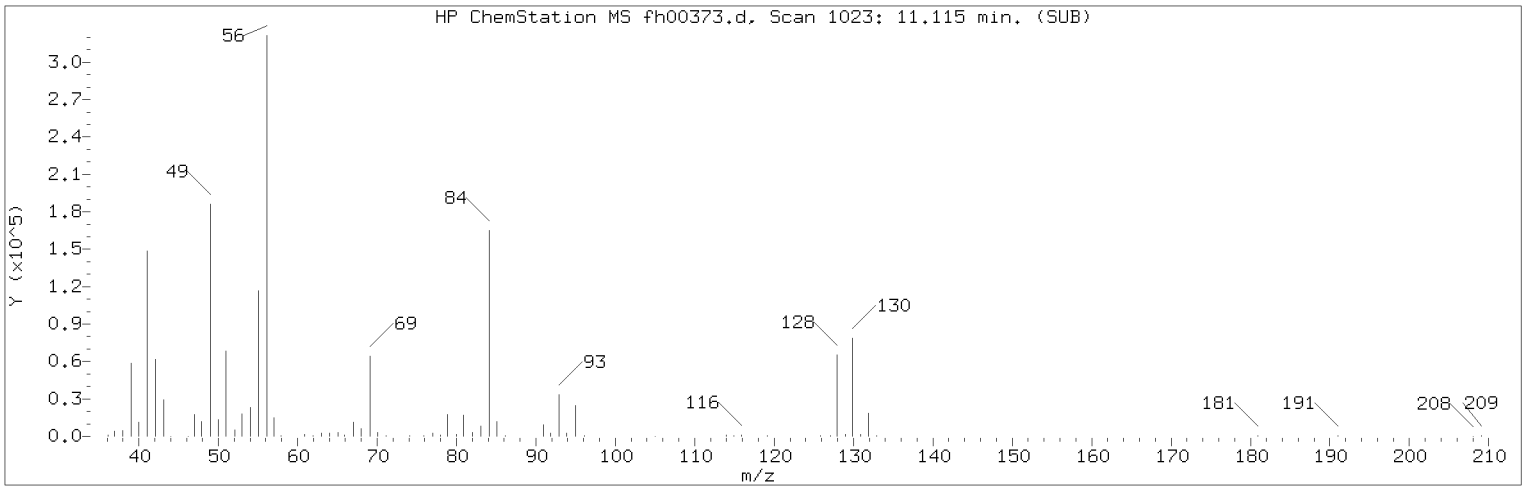
Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 16-Aug-2018 19:47 Unknown

Sample Name: LCSDF23 Lab Sample ID: LCSDF23

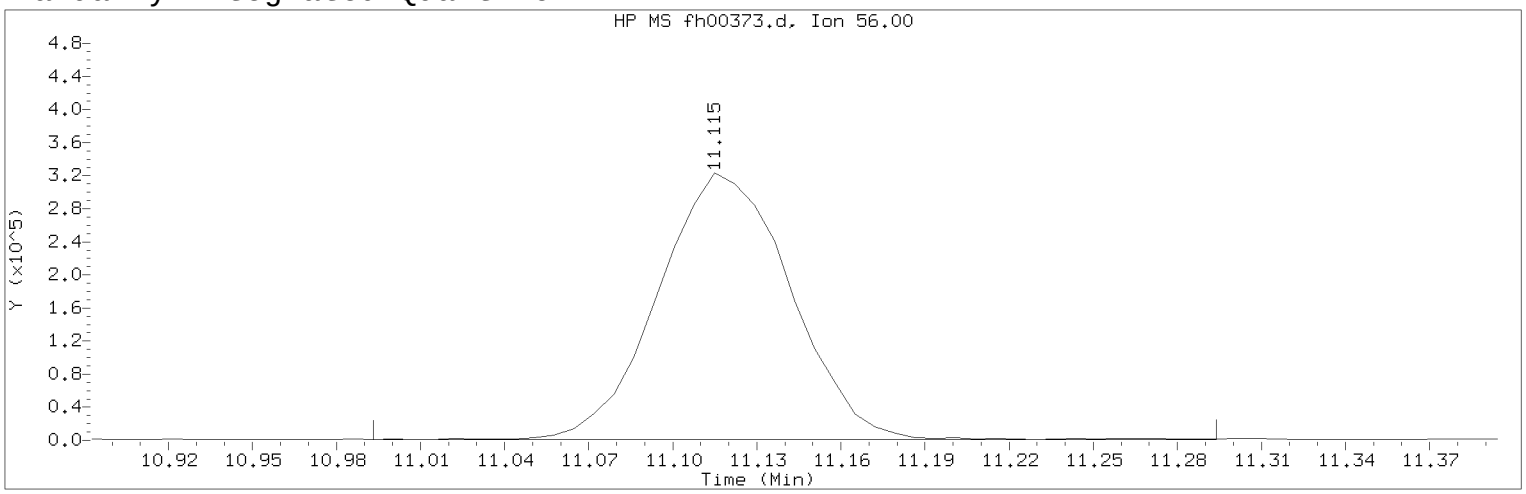
Compound Number : 34
Compound Name : Vinyl Acetate
Scan Number : 882
Retention Time (minutes): 10.105
Quant Ion : 43.00
Area : 973708
Concentration (ppb(v)) : 6.5464
Integration start scan : 862 Integration stop scan: 881
Y at integration start : 1921 Y at integration end: 1921

Digitally signed by Alexander D. Sechrist on 08/17/2018 at 08:01.
Target 3.5 esignature user ID: 2a07808

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug16.b/fh00373.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 19:17 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 17-Aug-2018 08:01 ads07818

Sample Name: LCSDF23 Lab Sample ID: LCSDF23

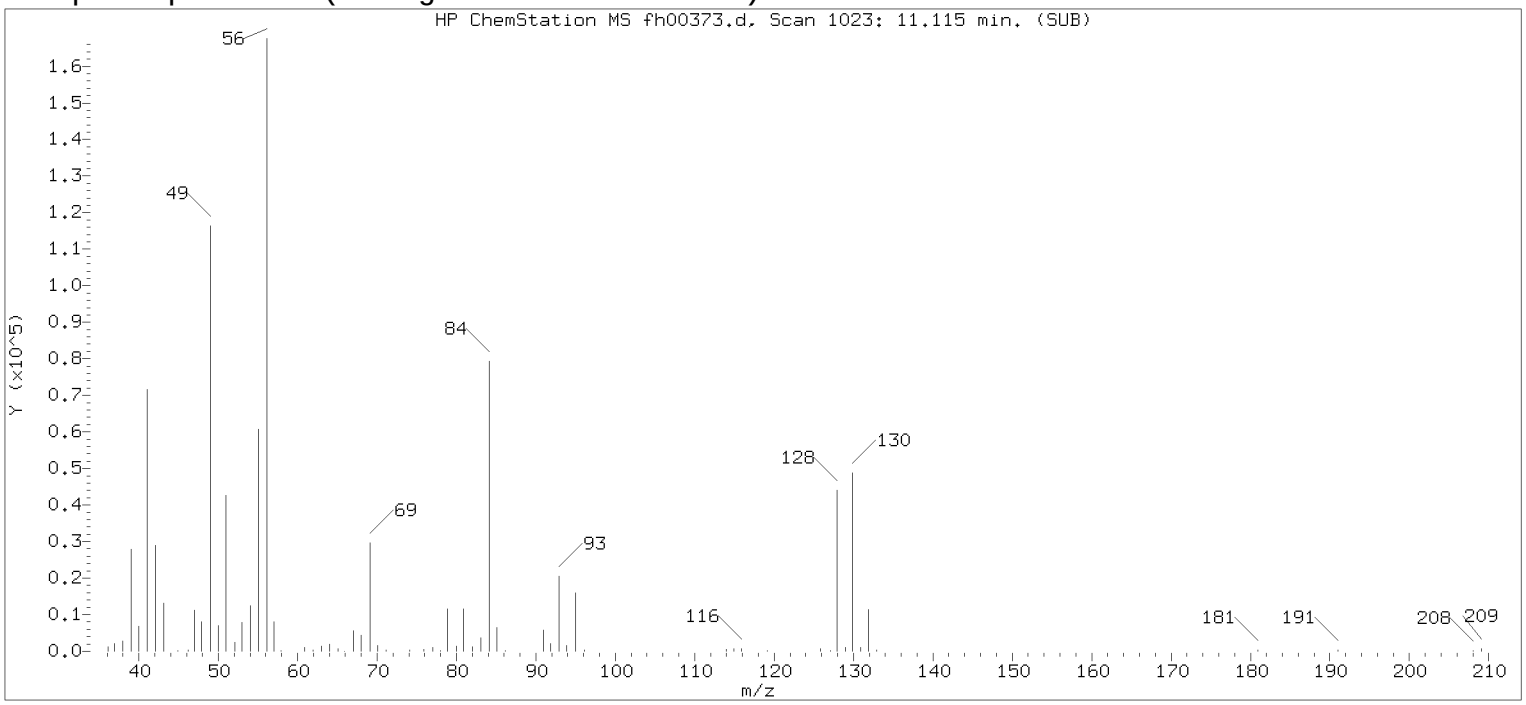
Compound Number : 38
Compound Name : Cyclohexane
Scan Number : 1023
Retention Time (minutes): 11.115
Quant Ion : 56.00
Area (flag) : 1065159M
Concentration (ppb(v)) : 10.1449
Integration start scan : 1005 Integration stop scan: 1047
Y at integration start : 602 Y at integration end: 602

Reason for manual integration: improper integration

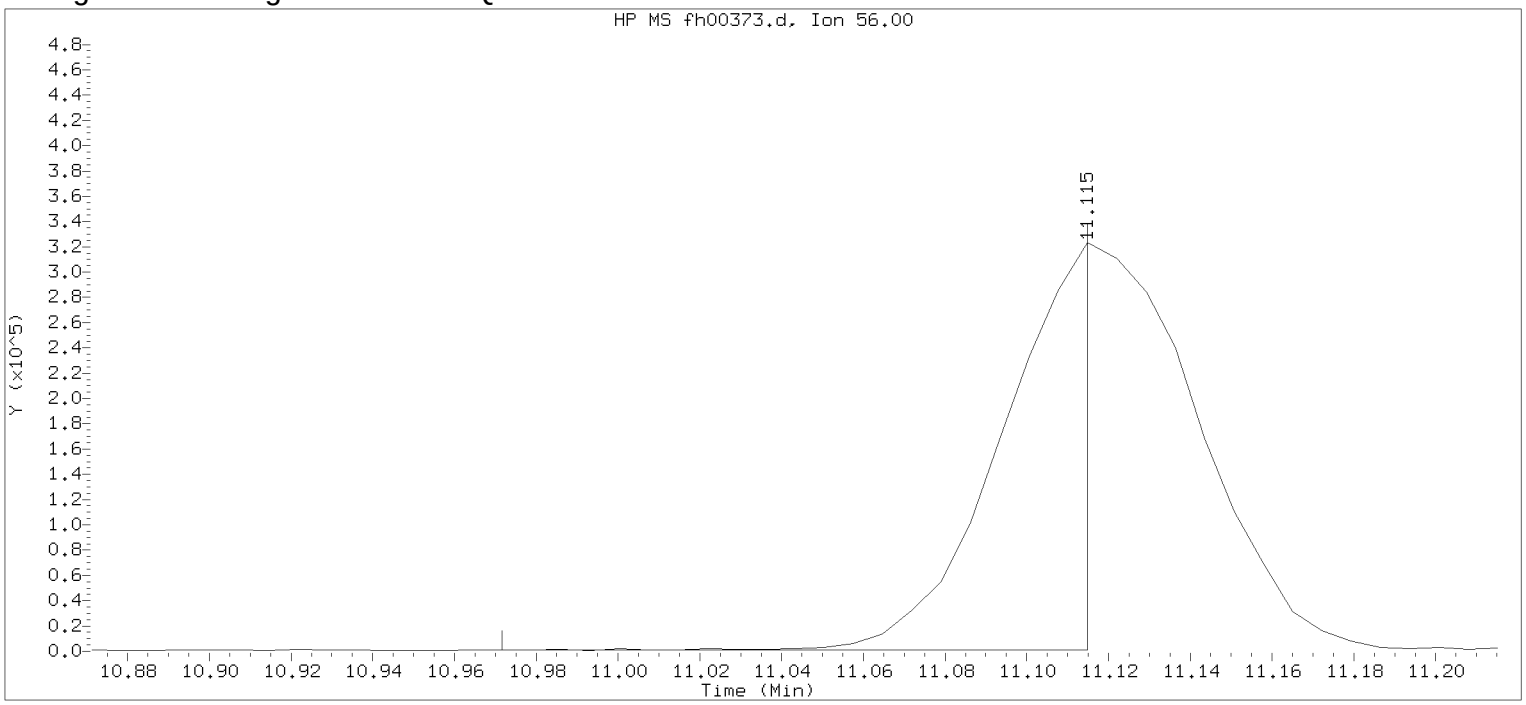
Analyst responsible for change: Digitally signed by Alexander D. Sechrist on 08/17/2018 at 08:01.
Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/21/2018 at 14:19.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug16.b/fh00373.d Instrument ID: HP26379.i
Injection date and time: 16-AUG-2018 19:17 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug16.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 16-Aug-2018 19:47 Unknown

Sample Name: LCSDF23 Lab Sample ID: LCSDF23

Compound Number : 38
Compound Name : Cyclohexane
Scan Number : 1023
Retention Time (minutes): 11.115
Quant Ion : 56.00
Area : 455068
Concentration (ppb(v)) : 4.3342
Integration start scan : 1002 Integration stop scan: 1022
Y at integration start : 776 Y at integration end: 776

Digitally signed by Alexander D. Sechrist on 08/17/2018 at 08:01.
Target 3.5 esignature user ID: 2a07808

Lancaster Laboratories
Volatiles in Air
Runlog for Agilent GC/MS System HP26379 **HP #06**

Data Directory Path is - D:\data\18aug20\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
jeb07445	FH00450.D	50NGBFB	08/20/2018	12:43		
jeb07445	FH00451.D	VSTD010	08/20/2018	13:30		
jeb07445	FH00452.D	VBLKF26	08/20/2018	14:19	F1823230AA	
jeb07445	FH00453.D	fc1	08/20/2018	14:49	F1823230AA	
jeb07445	FH00454.D	LCSF26	08/20/2018	15:38	F1823230AA	
jeb07445	FH00455.D	LCSDF26	08/20/2018	16:08	F1823230AA	
jeb07445	FH00456.D	9749216DL	08/20/2018	16:51	F1823230AA	
jeb07445	FH00457.D	9749217DL	08/20/2018	17:22	F1823230AA	
jeb07445	FH00458.D	fc2	08/20/2018	17:52	F1823230AA	
jeb07445	FH00459.D	fc3	08/20/2018	18:23	F1823230AA	
jeb07445	FH00460.D	9749184DL	08/20/2018	20:31	F1823230AA	
jeb07445	FH00461.D	9749190	08/20/2018	21:01	F1823230AA	100
jeb07445	FH00462.D	9749211	08/20/2018	21:32	F1823230AA	100
jeb07445	FH00463.D	9749211	08/20/2018	22:03	F1823230AA	100
jeb07445	FH00464.D	9749212	08/20/2018	22:33	F1823230AA	100
jeb07445	FH00465.D	9749218	08/20/2018	23:04	F1823230AA	
jeb07445	FH00466.D	9749219	08/20/2018	23:35	F1823230AA	
jeb07445	FH00467.D	9749220	08/21/2018	00:06	F1823230AA	
jeb07445	FH00468.D	9749220DL	08/21/2018	00:36	F1823230AA	
jeb07445	FH00469.D	9751089DL	08/21/2018	01:07	F1823230AA	100
jeb07445	FH00470.D	VBLKF26	08/21/2018	01:38	F1823230AA	
jeb07445	FH00471.D	cc1176	08/21/2018	02:09	F1823230AA	
jeb07445	FH00472.D	9749218DL	08/21/2018	08:39	F1823230AA	

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKF26
Canister ID:	N/A	Lab File ID:	fh00452.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	08/20/2018
Injection Volume:	200 cc	Analyzed Time:	14:19
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
115-07-1	Propene	0.50	U
75-71-8	Dichlorodifluoromethane	0.20	U
75-45-6	Chlorodifluoromethane	0.20	U
76-14-2	Freon 114	0.20	U
74-87-3	Chloromethane	0.20	U
75-01-4	Vinyl Chloride	0.20	U
106-99-0	1,3-Butadiene	0.40	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.20	U
593-60-2	Bromoethene	0.40	U
75-43-4	Dichlorofluoromethane	0.20	U
75-69-4	Trichlorofluoromethane	0.20	U
109-66-0	Pentane	0.50	U
64-17-5	Ethanol	0.50	U
107-02-8	Acrolein	1.0	U
75-35-4	1,1-Dichloroethene	0.20	U
76-13-1	Freon 113	0.50	U
67-64-1	Acetone	0.50	U
74-88-4	Methyl Iodide	0.20	U
75-15-0	Carbon Disulfide	1.0	U
67-63-0	Isopropanol	0.50	U
75-05-8	Acetonitrile	0.50	U
107-05-1	3-Chloropropene	0.20	U
75-09-2	Methylene Chloride	0.20	U

Abbreviations:
U = The compound is less than the limit being reported.
B = The compound was found in blank with a result greater than the limit being reported.
E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKF26
Canister ID:	N/A	Lab File ID:	fh00452.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	08/20/2018
Injection Volume:	200 cc	Analyzed Time:	14:19
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-65-0	tert-Butyl Alcohol	0.50	U
107-13-1	Acrylonitrile	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.20	U
1634-04-4	Methyl t-Butyl Ether	0.20	U
110-54-3	Hexane	0.20	U
75-34-3	1,1-Dichloroethane	0.20	U
108-05-4	Vinyl Acetate	1.0	U
108-20-3	Di-Isopropyl Ether	0.20	U
637-92-3	Ethyl Tert-Butyl Ether	0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	U
540-59-0	1,2-Dichloroethene (total)	0.20	U
78-93-3	2-Butanone	0.50	U
141-78-6	Ethyl Acetate	0.50	U
96-33-3	Methyl Acrylate	0.20	U
109-99-9	Tetrahydrofuran	0.50	U
67-66-3	Chloroform	0.20	U
71-55-6	1,1,1-Trichloroethane	0.20	U
110-82-7	Cyclohexane	0.20	U
56-23-5	Carbon Tetrachloride	0.20	U
71-43-2	Benzene	0.20	U
107-06-2	1,2-Dichloroethane	0.20	U
540-84-1	Isooctane	0.20	U
994-05-8	Tert-Amyl Methyl Ether	0.20	U
142-82-5	Heptane	0.50	U

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKF26
Canister ID:	N/A	Lab File ID:	fh00452.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	08/20/2018
Injection Volume:	200 cc	Analyzed Time:	14:19
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
79-01-6	Trichloroethene	0.20	U
140-88-5	Ethyl Acrylate	0.20	U
78-87-5	1,2-Dichloropropane	0.20	U
74-95-3	Dibromomethane	0.20	U
123-91-1	1,4-Dioxane	0.50	U
80-62-6	Methyl Methacrylate	0.20	U
75-27-4	Bromodichloromethane	0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	U
108-10-1	4-Methyl-2-Pentanone	0.50	U
108-88-3	Toluene	0.20	U
111-65-9	Octane	0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	U
542-75-6	1,3-Dichloropropene (total)	0.20	U
97-63-2	Ethyl Methacrylate	0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	U
127-18-4	Tetrachloroethene	0.20	U
591-78-6	2-Hexanone	0.50	U
124-48-1	Dibromochloromethane	0.20	U
106-93-4	1,2-Dibromoethane	0.20	U
108-90-7	Chlorobenzene	0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	U
100-41-4	Ethylbenzene	0.20	U
179601-23-1	m/p-Xylene	0.20	U
95-47-6	o-Xylene	0.20	U

Abbreviations:
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E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKF26
Canister ID:	N/A	Lab File ID:	fh00452.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	08/20/2018
Injection Volume:	200 cc	Analyzed Time:	14:19
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
1330-20-7	Xylene (total)	0.20	U
100-42-5	Styrene	0.20	U
75-25-2	Bromoform	0.20	U
98-82-8	Cumene	0.20	U
108-86-1	Bromobenzene	0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	U
96-18-4	1,2,3-Trichloropropane	0.20	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.20	U
622-96-8	4-Ethyltoluene	0.20	U
108-67-8	1,3,5-Trimethylbenzene	0.20	U
98-83-9	Alpha Methyl Styrene	0.20	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.20	U
135-98-8	sec-Butylbenzene	0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	U
99-87-6	p-Isopropyltoluene	0.20	U
100-44-7	Benzyl Chloride	0.50	U
95-50-1	1,2-Dichlorobenzene	0.20	U
104-51-8	n-Butylbenzene	0.20	U
67-72-1	Hexachloroethane	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

Abbreviations:
U = The compound is less than the limit being reported.
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E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 01
VOLATILE ORGANICS IN AIR
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKF26
Canister ID:	N/A	Lab File ID:	fh00452.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	200 cc	Analyzed Date:	08/20/2018
Injection Volume:	200 cc	Analyzed Time:	14:19
Instrument ID:	26379	Dilution Factor:	1

Concentration Units: ppb(v) Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
87-68-3	Hexachlorobutadiene	0.40	U
91-20-3	Naphthalene	0.40	U

Abbreviations:
U = The compound is less than the limit being reported.
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E = The compound exceeded the calibration limit.
D = Analysis of diluted sample.
J = The result is between the MDL and LOQ.

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 LCS File ID: fh00454.d LCSD File ID: fh00455.d

Batch: F1823230AA LCS Injected: 08/20/2018 LCSD Injected: 08/20/2018

Method: EPA TO-15 LCS Client ID: LCSF26 LCSD Client ID: LCSDF26

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	10.00	10.68	10.15	107	102	78-126	5	25	YES
Dichlorodifluoromethane	10.00	11.43	11.40	114	114	74-133	0	25	YES
Chlorodifluoromethane	10.00	11.90	11.65	119	117	70-138	2	25	YES
Freon 114	10.00	11.27	10.96	113	110	66-126	3	25	YES
Chloromethane	10.00	10.10	9.99	101	100	65-140	1	25	YES
Vinyl Chloride	10.00	12.21	11.60	122	116	75-130	5	25	YES
1,3-Butadiene	10.00	11.61	10.47	116	105	72-122	10	25	YES
Bromomethane	10.00	11.93	11.52	119	115	71-133	4	25	YES
Chloroethane	10.00	11.92	11.87	119	119	76-129	0	25	YES
Dichlorofluoromethane	10.00	12.49	12.10	125	121	75-137	3	25	YES
Trichlorofluoromethane	10.00	10.32	10.03	103	100	73-132	3	25	YES
Pentane	10.00	9.81	9.64	98	96	69-125	2	25	YES
Acrolein	10.00	10.77	10.27	108	103	54-132	5	25	YES
1,1-Dichloroethene	10.00	11.33	11.32	113	113	70-129	0	25	YES
Freon 113	10.00	9.82	9.70	98	97	66-119	1	25	YES
Acetone	10.00	11.04	10.96	110	110	71-136	1	25	YES
Methyl Iodide	10.00	8.83	9.14	88	91	72-127	3	25	YES
Carbon Disulfide	10.00	11.17	10.91	112	109	72-128	2	25	YES
Acetonitrile	10.00	9.54	9.42	95	94	56-136	1	25	YES
3-Chloropropene	10.00	12.29	12.42	123	124	67-141	1	25	YES
Methylene Chloride	10.00	12.28	12.46	123	125	69-128	1	25	YES
Acrylonitrile	10.00	9.80	9.88	98	99	68-135	1	25	YES
trans-1,2-Dichloroethene	10.00	11.00	10.96	110	110	77-128	0	25	YES
Methyl t-Butyl Ether	10.00	9.17	9.20	92	92	71-119	0	25	YES
Hexane	10.00	9.88	9.89	99	99	70-118	0	25	YES
1,1-Dichloroethane	10.00	10.92	10.88	109	109	74-129	0	25	YES
Vinyl Acetate	10.00	11.47	11.65	115	117	75-161	2	25	YES
cis-1,2-Dichloroethene	10.00	10.63	10.74	106	107	76-126	1	25	YES
2-Butanone	10.00	10.31	10.38	103	104	75-126	1	25	YES
Ethyl Acetate	10.00	9.95	9.74	99	97	73-124	2	25	YES
Methyl Acrylate	10.00	10.04	9.81	100	98	75-125	2	25	YES
Chloroform	10.00	10.77	10.64	108	106	75-127	1	25	YES
1,1,1-Trichloroethane	10.00	9.77	9.29	98	93	74-122	5	25	YES
Carbon Tetrachloride	10.00	9.64	9.39	96	94	72-127	3	25	YES
Benzene	10.00	10.90	10.91	109	109	76-123	0	25	YES
1,2-Dichloroethane	10.00	11.61	11.67	116	117	72-138	1	25	YES

COMMENTS:
Applies to Sample(s): 9751089

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 LCS File ID: fh00454.d LCSD File ID: fh00455.d

Batch: F1823230AA LCS Injected: 08/20/2018 LCSD Injected: 08/20/2018

Method: EPA TO-15 LCS Client ID: LCSF26 LCSD Client ID: LCSDF26

Dilution Factor: 1

COMPOUND	SPIKE LEVEL	LCS CONC. (ppb(v))	LCSD CONC. (ppb(v))	LCS %REC	LCSD %REC	RANGE	%RPD	RPD MAX	IN SPEC
Isooctane	10.00	10.33	10.17	103	102	74-127	1	25	YES
Heptane	10.00	9.87	9.68	99	97	74-122	2	25	YES
Trichloroethene	10.00	10.13	9.99	101	100	76-118	1	25	YES
Ethyl Acrylate	10.00	9.92	9.71	99	97	71-126	2	25	YES
1,2-Dichloropropane	10.00	11.07	10.81	111	108	75-127	2	25	YES
Dibromomethane	10.00	10.60	10.70	106	107	76-124	1	25	YES
1,4-Dioxane	10.00	9.71	10.38	97	104	76-124	7	25	YES
Methyl Methacrylate	10.00	10.02	9.93	100	99	73-117	1	25	YES
Bromodichloromethane	10.00	10.35	10.41	104	104	75-134	1	25	YES
cis-1,3-Dichloropropene	10.00	10.21	10.01	102	100	51-120	2	25	YES
4-Methyl-2-Pentanone	10.00	10.20	9.97	102	100	79-131	2	25	YES
Toluene	10.00	10.47	10.43	105	104	78-119	0	25	YES
Octane	10.00	9.61	9.72	96	97	73-122	1	25	YES
trans-1,3-Dichloropropene	10.00	10.26	10.04	103	100	76-131	2	25	YES
Ethyl Methacrylate	10.00	9.98	9.68	100	97	69-137	3	25	YES
1,1,2-Trichloroethane	10.00	11.08	11.22	111	112	76-127	1	25	YES
Tetrachloroethene	10.00	10.60	10.62	106	106	68-123	0	25	YES
2-Hexanone	10.00	10.25	10.08	103	101	74-134	2	25	YES
Dibromochloromethane	10.00	10.48	10.27	105	103	74-131	2	25	YES
1,2-Dibromoethane	10.00	10.50	10.46	105	105	73-121	0	25	YES
Chlorobenzene	10.00	10.27	10.33	103	103	76-117	1	25	YES
1,1,1,2-Tetrachloroethane	10.00	10.16	10.02	102	100	73-137	1	25	YES
Ethylbenzene	10.00	9.81	10.06	98	101	77-117	3	25	YES
m/p-Xylene	10.00	9.37	9.76	94	98	78-119	4	25	YES
o-Xylene	10.00	9.53	9.52	95	95	78-121	0	25	YES
Styrene	10.00	9.78	9.63	98	96	77-143	1	25	YES
Bromoform	10.00	9.54	9.27	95	93	58-144	3	25	YES
Cumene	10.00	9.62	9.94	96	99	80-133	3	25	YES
Bromobenzene	10.00	10.03	10.10	100	101	74-118	1	25	YES
1,1,2,2-Tetrachloroethane	10.00	11.09	11.19	111	112	72-133	1	25	YES
1,2,3-Trichloropropane	10.00	10.31	10.68	103	107	71-127	3	25	YES
4-Ethyltoluene	10.00	9.32	9.78	93	98	73-130	5	25	YES
1,3,5-Trimethylbenzene	10.00	9.51	9.84	95	98	72-130	3	25	YES
Alpha Methyl Styrene	10.00	9.08	8.92	91	89	71-138	2	25	YES
1,2,4-Trimethylbenzene	10.00	9.38	9.92	94	99	70-138	6	25	YES
1,3-Dichlorobenzene	10.00	9.39	9.79	94	98	75-129	4	25	YES

COMMENTS:
Applies to Sample(s): 9751089

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 26379 LCS File ID: fh00454.d LCSD File ID: fh00455.d

Batch: F1823230AA LCS Injected: 08/20/2018 LCSD Injected: 08/20/2018

Method: EPA TO-15 LCS Client ID: LCSF26 LCSD Client ID: LCSDF26

Dilution Factor: 1

COMPOUND	SPIKE LEVEL	LCS CONC. (ppb(v))	LCSD CONC. (ppb(v))	LCS %REC	LCSD %REC	RANGE	%RPD	RPD MAX	IN SPEC
1,4-Dichlorobenzene	10.00	9.07	9.49	91	95	74-123	5	25	YES

COMMENTS:
Applies to Sample(s): 9751089

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FORM 04
VOLATILE ORGANICS IN AIR
METHOD BLANK SUMMARY

SDG No.:

Lab Sample ID: VBLKF26 Analyzed Date: 08/20/2018

Lab File ID: fh00452.d Analyzed Time: 14:19

Instrument ID: 26379

THIS BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS AND LCSD:

LAB SAMPLE ID	LAB FILE ID	CANISTER ID	DATE ANALYZED	TIME ANALYZED
LCSF26	fh00454.d	N/A	08/20/2018	15:38
LCSDF26	fh00455.d	N/A	08/20/2018	16:08
9749216DL	fh00456.d	1009	08/20/2018	16:51
9749217DL	fh00457.d	1041	08/20/2018	17:22
9749184DL	fh00460.d	1313	08/20/2018	20:31
9749190	fh00461.d	1006	08/20/2018	21:01
9749211	fh00462.d	1328	08/20/2018	21:32
9749211	fh00463.d	1328	08/20/2018	22:03
9749212	fh00464.d	1332	08/20/2018	22:33
9749218	fh00465.d	1099	08/20/2018	23:04
9749219	fh00466.d	1162	08/20/2018	23:35
9749220	fh00467.d	1308	08/21/2018	00:06
9751089DL	fh00469.d	N/A	08/21/2018	01:07
cc1176	fh00471.d	1176	08/21/2018	02:09
9749218DL	fh00472.d	1099	08/21/2018	08:39

COMMENTS:

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

SDG No.:

Lab File ID: fh00450.d

BFB Injection Date: 08/20/2018

Instrument ID: 26379

BFB Injection Time: 12:43

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0% - 40.0% of mass 95	30.02
75	30.0% - 66.0% of mass 95	48.79
95	Base peak, 100% relative abundance	100.00
96	5.0% - 9.0% of mass 95	6.65
173	< 2.0% of mass 174	0.54 (0.82)
174	> 50.0% of mass 95	65.59
175	4.0% - 9.0% of mass 174	4.96 (7.56)
176	93.0% - 101.0% of mass 174	64.84 (98.86)
177	5.0% - 9.0% of mass 176	4.30 (6.64)

THIS CHECK APPLIES TO THE FOLLOWING:

LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD010	fh00451.d	08/20/2018	13:30
VBLKF26	fh00452.d	08/20/2018	14:19
LCSF26	fh00454.d	08/20/2018	15:38
LCSDF26	fh00455.d	08/20/2018	16:08
9749216DL	fh00456.d	08/20/2018	16:51
9749217DL	fh00457.d	08/20/2018	17:22
9749184DL	fh00460.d	08/20/2018	20:31
9749190	fh00461.d	08/20/2018	21:01
9749211	fh00462.d	08/20/2018	21:32
9749211	fh00463.d	08/20/2018	22:03
9749212	fh00464.d	08/20/2018	22:33
9749218	fh00465.d	08/20/2018	23:04
9749219	fh00466.d	08/20/2018	23:35
9749220	fh00467.d	08/21/2018	00:06
9751089DL	fh00469.d	08/21/2018	01:07
cc1176	fh00471.d	08/21/2018	02:09
9749218DL	fh00472.d	08/21/2018	08:39

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: fh00451.d

Calibration Date: 08/20/2018

Instrument ID: 26379

Calibration Time: 13:30

Init. Calib. Date(s): 08/16/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
Propene	1.569	1.586	10.108	10	1
Dichlorodifluoromethane	3.324	3.681	11.073	10	11
Chlorodifluoromethane	3.327	3.568	10.722	10	7
Freon 114	3.463	3.764	10.867	10	9
Chloromethane	1.902	1.887	9.920	10	-1
Vinyl Chloride	1.308	1.445	11.047	10	10
1,3-Butadiene	1.306	1.385	10.600	10	6
Bromomethane	1.071	1.225	11.439	10	14
Chloroethane	0.955	1.043	10.926	10	9
Bromoethene	1.140	1.184	10.382	10	4
Dichlorofluoromethane	3.213	3.651	11.361	10	14
Trichlorofluoromethane	3.402	3.378	9.929	10	-1
Pentane	3.737	3.670	9.821	10	-2
Ethanol	0.848	0.803	9.467	10	-5
Freon123a	3.026	3.116	11.430	11.1	3
Acrolein	0.891	0.874	9.813	10	-2
1,1-Dichloroethene	3.123	3.400	10.887	10	9
Freon 113	1.936	1.874	9.681	10	-3
Acetone	2.968	3.151	10.615	10	6
Methyl Iodide	2.682	2.352	8.773	10	-12
Carbon Disulfide	3.781	4.235	11.200	10	12
Isopropanol	3.580	3.417	9.545	10	-5
Acetonitrile	1.822	1.861	10.215	10	2
3-Chloropropene	2.619	2.644	11.203	11.1	1
Methylene Chloride	1.117	1.212	12.043	11.1	8
tert-Butyl Alcohol	4.691	4.237	10.025	11.1	-10
Acrylonitrile	1.967	1.916	9.742	10	-3
trans-1,2-Dichloroethene	2.942	3.107	10.560	10	6
Methyl t-Butyl Ether	4.609	4.164	9.036	10	-10
Hexane	2.291	2.173	9.484	10	-5
1,1-Dichloroethane	3.590	3.812	10.617	10	6
Vinyl Acetate	5.884	5.867	11.168	11.2	0
Di-Isopropyl Ether	7.722	7.187	9.307	10	-7
Ethyl Tert-Butyl Ether	7.360	6.923	9.406	10	-6
cis-1,2-Dichloroethene	2.843	2.951	10.381	10	4
2-Butanone	4.401	4.359	9.905	10	-1
Ethyl Acetate	4.963	4.862	9.795	10	-2
Methyl Acrylate	4.321	4.123	9.542	10	-5
Tetrahydrofuran	2.467	2.363	9.576	10	-4

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: fh00451.d

Calibration Date: 08/20/2018

Instrument ID: 26379

Calibration Time: 13:30

Init. Calib. Date(s): 08/16/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
Chloroform	3.030	3.140	10.363	10	4
1,1,1-Trichloroethane	3.202	2.995	9.353	10	-6
Cyclohexane	4.153	3.724	8.966	10	-10
Carbon Tetrachloride	2.991	2.724	9.107	10	-9
Benzene	1.160	1.225	10.563	10	6
1,2-Dichloroethane	0.674	0.735	10.913	10	9
Isooctane	2.883	2.882	9.997	10	0
Tert-Amyl Methyl Ether	1.157	1.127	9.739	10	-3
Heptane	0.463	0.459	9.914	10	-1
Trichloroethene	0.449	0.453	10.106	10	1
Ethyl Acrylate	1.449	1.341	9.257	10	-7
1,2-Dichloropropane	0.609	0.633	10.401	10	4
Dibromomethane	0.373	0.380	10.197	10	2
1,4-Dioxane	0.281	0.279	9.908	10	-1
Methyl Methacrylate	0.458	0.441	9.620	10	-4
Bromodichloromethane	0.819	0.823	10.055	10	1
cis-1,3-Dichloropropene	0.755	0.758	10.037	10	0
4-Methyl-2-Pentanone	1.418	1.303	9.187	10	-8
Toluene	1.425	1.435	10.074	10	1
Octane	1.570	1.457	9.282	10	-7
trans-1,3-Dichloropropene	0.701	0.687	9.796	10	-2
Ethyl Methacrylate	0.843	0.787	9.336	10	-7
1,1,2-Trichloroethane	0.491	0.519	10.568	10	6
Tetrachloroethene	0.613	0.639	10.434	10	4
2-Hexanone	1.408	1.328	9.434	10	-6
Dibromochloromethane	0.591	0.574	9.705	10	-3
1,2-Dibromoethane	0.744	0.759	10.206	10	2
Chlorobenzene	1.095	1.123	10.250	10	3
1,1,1,2-Tetrachloroethane	0.552	0.529	9.578	10	-4
Ethylbenzene	2.015	1.926	9.561	10	-4
m/p-Xylene	1.571	1.452	9.243	10	-8
o-Xylene	1.598	1.491	9.336	10	-7
Styrene	1.121	1.002	8.941	10	-11
Bromoform	0.773	0.689	8.913	10	-11
Cumene	2.085	1.938	9.295	10	-7
Bromobenzene	0.612	0.584	9.544	10	-5
1,1,2,2-Tetrachloroethane	1.117	1.109	9.931	10	-1
1,2,3-Trichloropropane	0.328	0.319	9.741	10	-3
n-Propylbenzene	0.562	0.541	9.628	10	-4

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

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FORM 07
VOLATILE ORGANICS IN AIR
CONTINUING CALIBRATION CHECK

SDG No.:

Lab File ID: fh00451.d

Calibration Date: 08/20/2018

Instrument ID: 26379

Calibration Time: 13:30

Init. Calib. Date(s): 08/16/2018

COMPOUND	$\overline{RRF}$	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
2-Chlorotoluene	0.478	0.459	9.586	10	-4
4-Ethyltoluene	2.112	1.987	9.411	10	-6
1,3,5-Trimethylbenzene	1.756	1.670	9.506	10	-5
Alpha Methyl Styrene	0.859	0.745	8.668	10	-13
tert-Butylbenzene	1.609	1.476	9.175	10	-8
1,2,4-Trimethylbenzene	1.732	1.636	9.444	10	-6
sec-Butylbenzene	2.595	2.410	9.286	10	-7
1,3-Dichlorobenzene	1.072	1.029	9.597	10	-4
1,4-Dichlorobenzene	1.124	1.046	9.303	10	-7
p-Isopropyltoluene	2.049	1.867	9.108	10	-9
Benzyl Chloride	0.326	0.276	8.473	10	-15
1,2-Dichlorobenzene	1.018	0.964	9.478	10	-5
n-Butylbenzene	1.388	1.277	9.198	10	-8
Hexachloroethane	0.648	0.551	8.501	10	-15
1,2-Dibromo-3-chloropropane	0.543	0.469	8.631	10	-14
1,2,4-Trichlorobenzene	0.817	0.713	8.723	10	-13
Hexachlorobutadiene	0.684	0.587	8.592	10	-14
Naphthalene	1.939	1.621	8.360	10	-16

* Maximum %DRIFT = 30%.
# Average RRF for all compounds must be greater than 0.010.

Continuing Calibration
Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP26379.i/18aug16.b/fh00362.d
/chem/HP26379.i/18aug16.b/fh00363.d
/chem/HP26379.i/18aug16.b/fh00364.d
/chem/HP26379.i/18aug16.b/fh00365.d
/chem/HP26379.i/18aug16.b/fh00366.d
/chem/HP26379.i/18aug16.b/fh00367.d

** ICAL Area and RT are the average from the above standards.

Current Continuing Calibration Standard:

/chem/HP26379.i/18aug20.b/fh00451.d

Area Summary

File ID:

Internal Standard Name	fh00451.d	ICAL Area	Low Limit	High Limit	In Spec
Bromochloromethane	262375	258484	155090	361878	Yes
1,4-Difluorobenzene	1022930	1054552	632731	1476373	Yes
Chlorobenzene-d5	956347	1007400	604440	1410360	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

RT Summary

File ID:

Internal Standard Name	fh00451.d	ICAL RT	In Spec
Bromochloromethane	11.101	11.103	Yes
1,4-Difluorobenzene	13.393	13.394	Yes
Chlorobenzene-d5	18.235	18.230	Yes

A "No" indicates the retention time is greater than 30 seconds from the RT of the referenced ICAL average.

Comments:_____

_____

Page 1 of 1

Report generated on 08/20/2018 at 14:01

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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: 08/20/2018

Lab File ID: fh00451.d Analyzed Time: 13:30

Instrument ID: 26379

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	R.T.	Area	R.T.	Area	R.T.
24 HOUR STANDARD	262375	11.10	1022930	13.39	956347	18.23
UPPER LIMIT	367325	11.43	1432102	13.72	1338886	18.56
LOWER LIMIT	157425	10.77	613758	13.06	573808	17.90
LAB SAMPLE ID						
VBLKF26	262177	11.09	1025028	13.39	923569	18.23
LCSF26	239705	11.10	929620	13.39	869451	18.23
LCSDF26	241723	11.11	941106	13.40	887767	18.24
9749216DL	243350	11.10	935091	13.39	846927	18.23
9749217DL	243351	11.11	958927	13.40	868748	18.23
9749184DL	230372	11.09	908781	13.39	814129	18.23
9749190	222797	11.12	907502	13.39	849448	18.23
9749211	228953	11.11	866328	13.39	809363	18.23
9749211	236151	11.11	884185	13.39	845313	18.23
9749212	220364	11.11	871325	13.39	803570	18.23
9749218	202361	11.12	872662	13.40	810462	18.23
9749219	212229	11.12	946980	13.40	898693	18.23
9749220	207200	11.11	879199	13.40	838091	18.23
9751089DL	207686	11.11	832185	13.39	763026	18.23
cc1176	218508	11.11	763379	13.40	750612	18.23
9749218DL	223178	11.11	865103	13.39	798715	18.23

* = 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.

Data File: /chem/HP26379.i/18aug20.b/fh00450.d

Date : 20-AUG-2018 12:43

Client ID: BFB

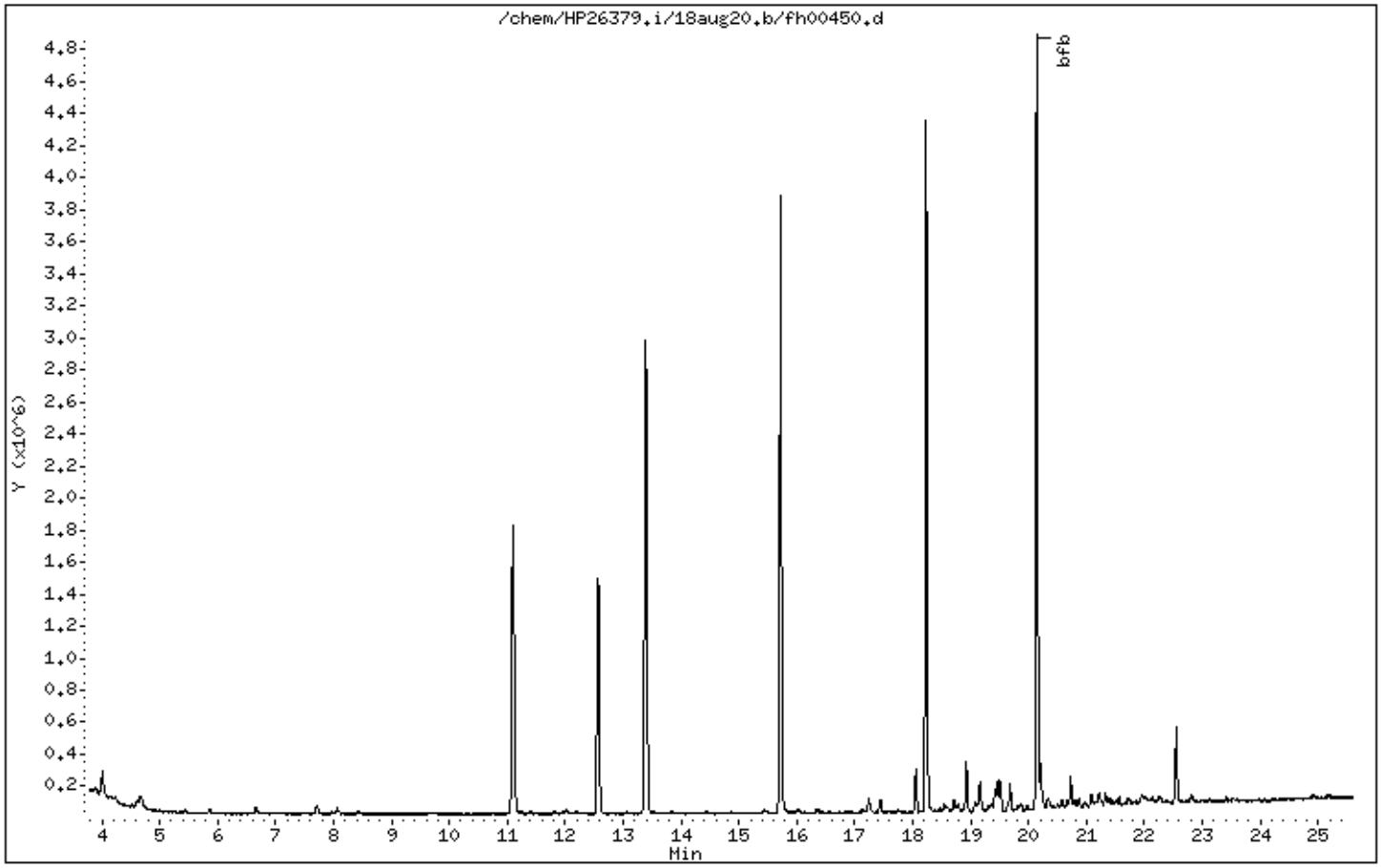
Instrument: HP26379.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25



Digitally signed by Jacob E. Bailey on 08/20/2018 at 17:26.
Target 3.5 esignature user ID: jeb07445

Data File: /chem/HP26379.i/18aug20.b/fh00450.d

Date : 20-AUG-2018 12:43

Client ID: BFB

Instrument: HP26379.i

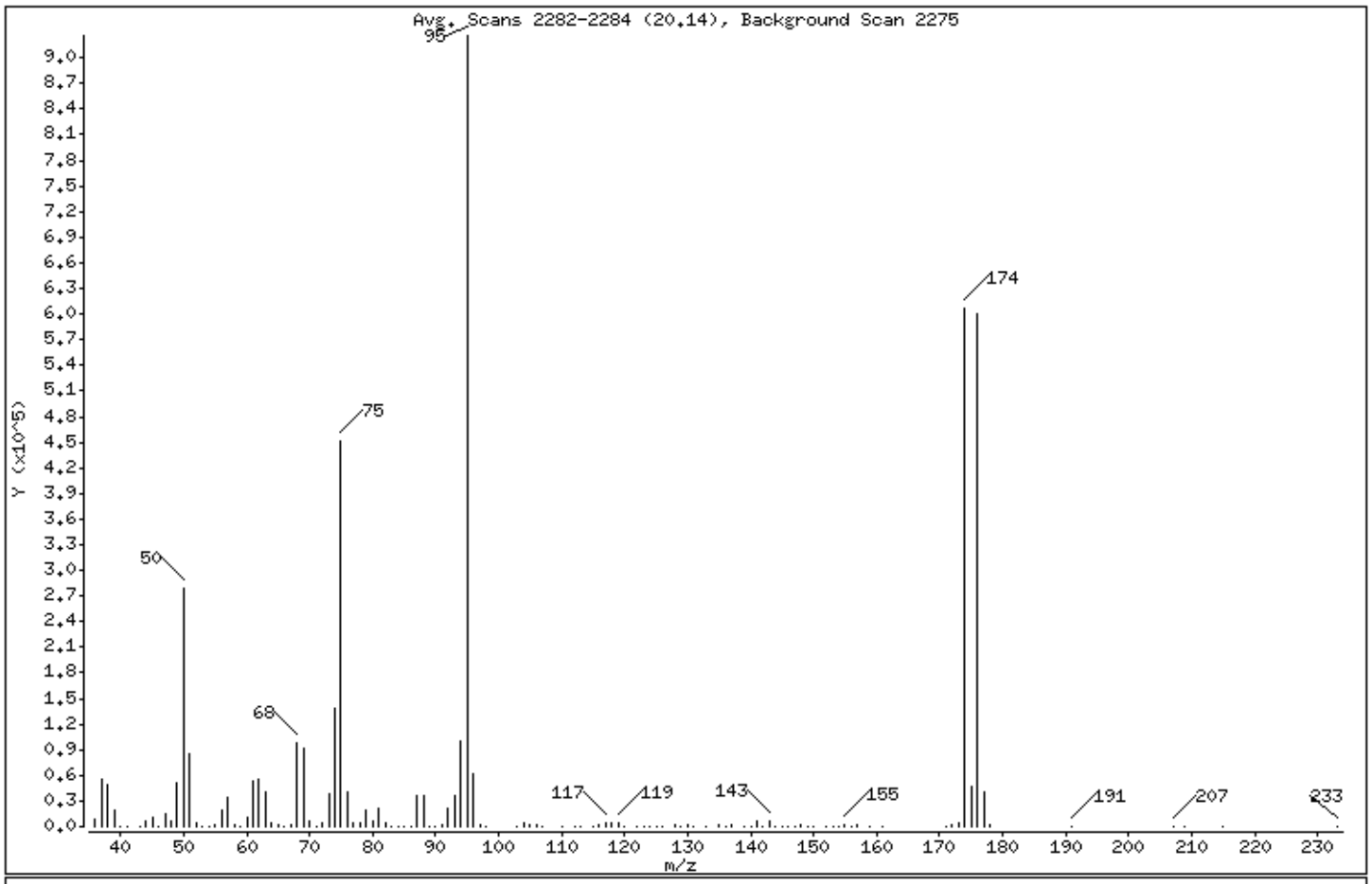
Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	30.02
75	30.00 - 66.00% of mass 95	48.79
96	5.00 - 9.00% of mass 95	6.65
173	Less than 2.00% of mass 174	0.54 (0.82)
174	50.00 - 120.00% of mass 95	65.59
175	4.00 - 9.00% of mass 174	4.96 (7.56)
176	93.00 - 101.00% of mass 174	64.84 (98.86)
177	5.00 - 9.00% of mass 176	4.30 (6.64)

Digitally signed by Jacob E. Bailey on 08/20/2018 at 17:26.
Target 3.5 esignature user ID: jeb07445

Data File: /chem/HP26379.i/18aug20.b/fh00450.d

Date : 20-AUG-2018 12:43

Client ID: BFB

Instrument: HP26379.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

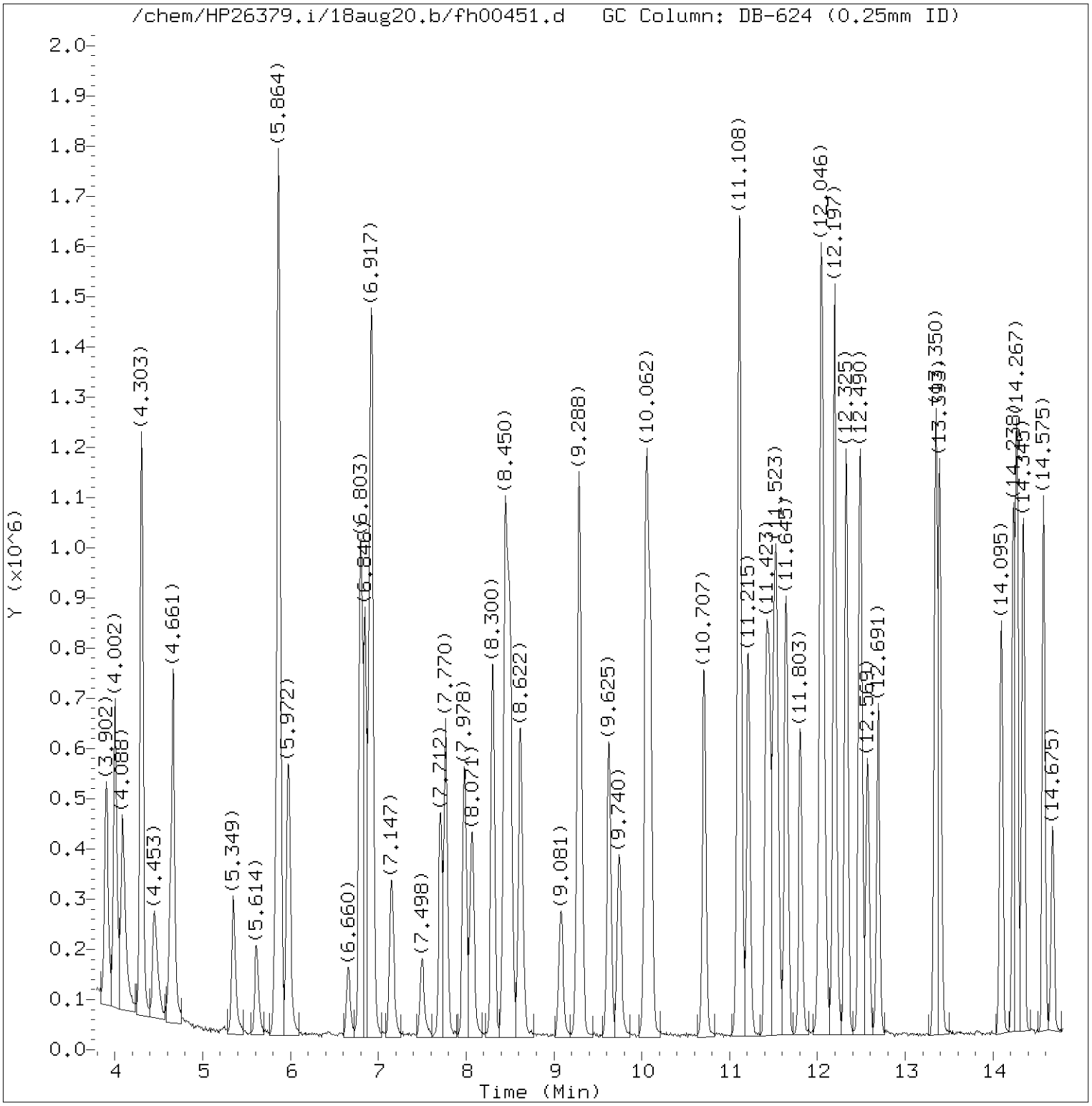
Column phase: DB-624

Column diameter: 0.25

Data File: fh00450.d
Spectrum: Avg. Scans 2282-2284 (20.14), Background Scan 2275
Location of Maximum: 95.00
Number of points: 122

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	9005	68.00	97944	103.00	619	143.00	6988
37.00	55376	69.00	92520	104.00	3341	144.00	276
38.00	48088	70.00	5753	105.00	1364	145.00	798
39.00	19952	71.00	195	106.00	3140	146.00	704
40.00	5	72.00	4390	107.00	798	147.00	152
41.00	132	73.00	37360	110.00	331	148.00	1868
43.00	165	74.00	138816	112.00	658	149.00	487
44.00	5448	75.00	451840	113.00	596	150.00	777
45.00	10778	76.00	39832	115.00	905	152.00	265
46.00	822	77.00	4545	116.00	2322	153.00	957
47.00	15737	78.00	4363	117.00	5212	154.00	443
48.00	7042	79.00	18984	118.00	3337	155.00	2124
49.00	50416	80.00	6007	119.00	3657	156.00	105
50.00	278016	81.00	20336	120.00	242	157.00	1199
51.00	86192	82.00	3829	122.00	109	159.00	912
52.00	3895	83.00	169	123.00	176	161.00	655
53.00	682	84.00	226	124.00	464	171.00	112
54.00	253	85.00	115	125.00	101	172.00	2325
55.00	2035	86.00	716	126.00	114	173.00	5002
56.00	18176	87.00	35616	128.00	2184	174.00	607360
57.00	34568	88.00	37144	129.00	1036	175.00	45944
58.00	1693	89.00	373	130.00	2894	176.00	600448
59.00	583	90.00	115	131.00	1039	177.00	39856
60.00	10324	91.00	3088	133.00	101	178.00	1147
61.00	54040	92.00	22024	135.00	1318	191.00	102
62.00	55328	93.00	36064	136.00	103	207.00	462
63.00	39888	94.00	99712	137.00	1304	209.00	129
64.00	4619	95.00	926016	139.00	305	215.00	165
65.00	1993	96.00	61544	140.00	113	233.00	589
66.00	361	97.00	2201	141.00	6834		
67.00	1991	98.00	291	142.00	853		

Digitally signed by Jacob E. Bailey on 08/20/2018 at 17:26.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

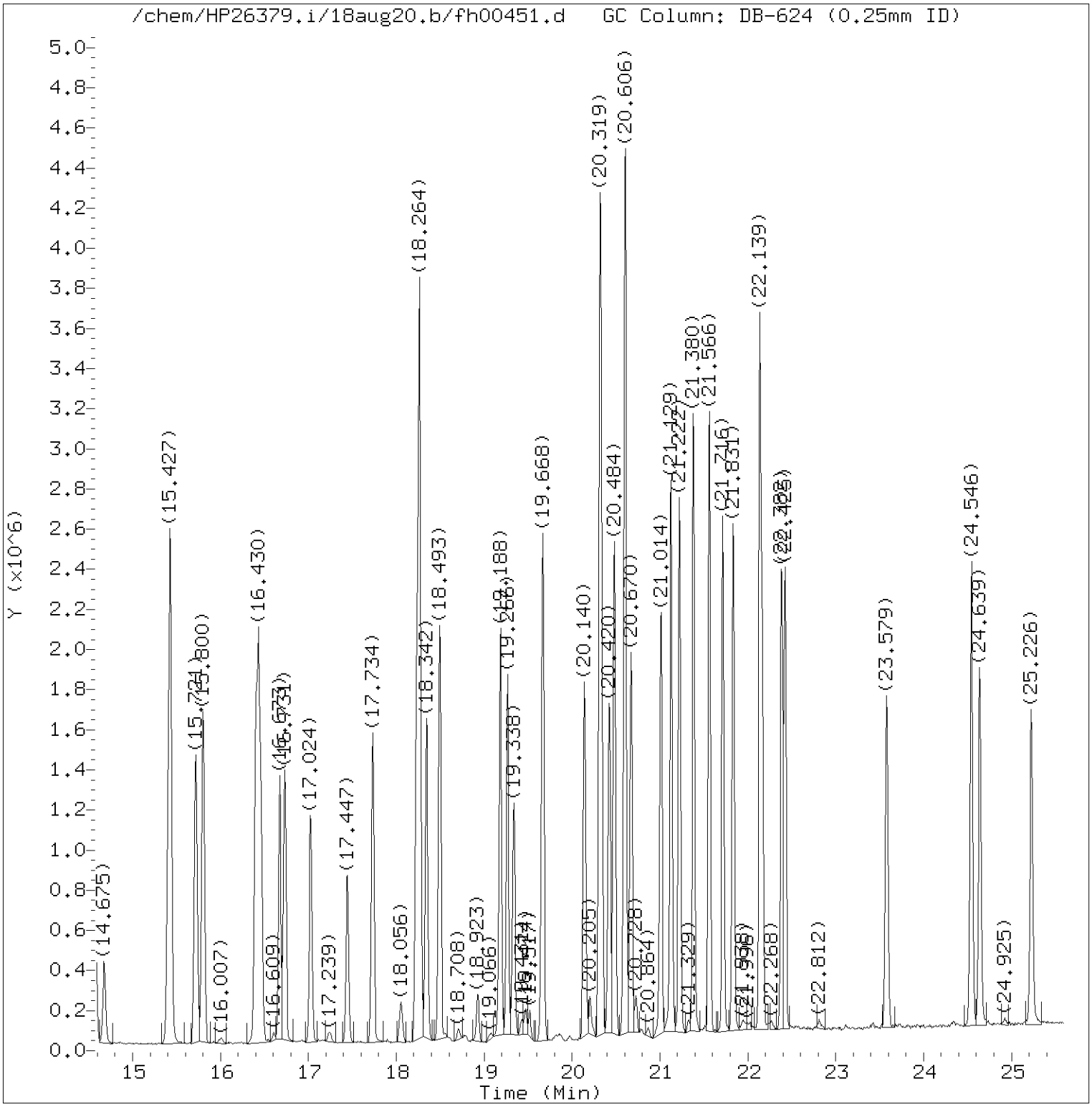
Target Revision 3.5

Data File: /chem/HP26379.i/18aug20.b/fh00451.d Instrument ID: HP26379.i
Injection date and time: 20-AUG-2018 13:30 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 20-AUG-2018 14:03
Date, time and analyst ID of latest file update: 20-Aug-2018 14:03 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 08/20/2018 at 17:25.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug20.b/fh00451.d Instrument ID: HP26379.i
Injection date and time: 20-AUG-2018 13:30 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 20-AUG-2018 14:03
Date, time and analyst ID of latest file update: 20-Aug-2018 14:03 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 08/20/2018 at 17:25.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug20.b/fh00451.d Instrument ID: HP26379.i
Injection date and time: 20-AUG-2018 13:30 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 20-AUG-2018 14:03
Date, time and analyst ID of latest file update: 20-Aug-2018 14:03 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	416223	10.108
2) Dichlorodifluoromethane	(1)	4.002	85	965792	11.073
3) Chlorodifluoromethane	(1)	4.088	51	936096	10.722
4) Freon 114	(1)	4.303	85	987546	10.867
5) Chloromethane	(1)	4.453	50	495037	9.920
6) Vinyl Chloride	(1)	4.640	62	379070	11.047
7) 1,3-Butadiene	(1)	4.668	54	363327	10.600
8) Bromomethane	(1)	5.349	94	321349	11.439
9) Chloroethane	(1)	5.614	64	273661	10.926
10) Bromoethene	(1)	5.829	106	310563	10.382
11) Pentane	(1)	5.864	43	962899	9.821
12) Trichlorofluoromethane	(1)	5.872	101	886362	9.929
13) Dichlorofluoromethane	(1)	5.972	67	957852	11.361
14) Ethanol	(1)	6.652	45	210704	9.467
15) Freon123a	(1)	6.803	67	907365	11.430
16) 1,1-Dichloroethene	(1)	6.846	61	892125	10.887
17) Freon 113	(1)	6.910	103	491748	9.681
18) Carbon Disulfide	(1)	6.932	76	1111029	11.200
19) Methyl Iodide	(1)	7.147	142	617231	8.773
20) Acrolein	(1)	7.505	56	229382	9.813
21) Isopropanol	(1)	7.705	45	896531	9.545
22) 3-Chloropropene	(1)	7.770	41	769954M	11.203
23) Methylene Chloride	(1)	7.978	84	352928	12.043
24) Acetone	(1)	8.063	43	826692	10.615
25) trans-1,2-Dichloroethene	(1)	8.300	61	815207	10.560
26) Hexane	(1)	8.450	56	570177	9.484
27) Methyl t-Butyl Ether	(1)	8.500	73	1092616	9.036
28) tert-Butyl Alcohol	(1)	8.622	59	1233837	10.025
29) Acetonitrile	(1)	9.081	41	488362	10.215
30) Di-Isopropyl Ether	(1)	9.288	45	1885658	9.307
31) 1,1-Dichloroethane	(1)	9.625	63	1000119	10.617
32) Acrylonitrile	(1)	9.740	53	502764	9.742
33) Ethyl Tert-Butyl Ether	(1)	10.055	59	1816334	9.406
34) Vinyl Acetate	(1)	10.098	43	1724082	11.168
35) cis-1,2-Dichloroethene	(1)	10.714	61	774254	10.381
36) 1,2-Dichloroethene (total)	(1)		61	1589461	20.941
37)*Bromochloromethane	(1)	11.101	130	262375	10.000
38) Cyclohexane	(1)	11.122	56	977023	8.966

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

Digitally signed by Jacob E. Bailey
on 08/20/2018 at 17:25.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug20.b/fh00451.d Instrument ID: HP26379.i
Injection date and time: 20-AUG-2018 13:30 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 20-AUG-2018 14:03
Date, time and analyst ID of latest file update: 20-Aug-2018 14:03 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	823807	10.363
40) Ethyl Acetate	(1)	11.416	43	1275573	9.795
41) Methyl Acrylate	(1)	11.452	55	1081797	9.542
42) Carbon Tetrachloride	(1)	11.509	117	714624	9.107
43) Tetrahydrofuran	(1)	11.545	42	619948	9.576
44) 1,1,1-Trichloroethane	(1)	11.645	97	785692	9.353
45) 2-Butanone	(1)	11.803	43	1143644	9.905
46) Isooctane	(2)	12.046	57	2948105	9.997
47) Heptane	(2)	12.189	71	469956	9.914
48) Benzene	(2)	12.325	78	1253575	10.563
49) Tert-Amyl Methyl Ether	(2)	12.490	73	1152381	9.739
50) 1,2-Dichloroethane	(2)	12.691	62	752194	10.913
51) Trichloroethene	(2)	13.350	130	463817	10.106
52)*1,4-Difluorobenzene	(2)	13.393	114	1022930	10.000
53) Dibromomethane	(2)	14.095	174	388777	10.197
54) Ethyl Acrylate	(2)	14.231	55	1372000	9.257
55) 1,2-Dichloropropane	(2)	14.274	63	647664	10.401
56) Bromodichloromethane	(2)	14.345	83	842323	10.055
57) Methyl Methacrylate	(2)	14.575	69	450714	9.620
58) 1,4-Dioxane	(2)	14.682	88	285292	9.908
59) cis-1,3-Dichloropropene	(2)	15.406	75	775348	10.037
60) Octane	(3)	15.434	43	1393875	9.282
61) Toluene	(3)	15.800	91	1372536	10.074
62) 4-Methyl-2-Pentanone	(2)	16.401	43	1332456M	9.187
63) Tetrachloroethene	(3)	16.430	166	611225	10.434
64) trans-1,3-Dichloropropene	(3)	16.459	75	656902	9.796
65) 1,3-Dichloropropene (total)	(3)		75	1432250	20.081
66) Ethyl Methacrylate	(3)	16.673	69	752994	9.336
67) 1,1,2-Trichloroethane	(3)	16.738	97	496681	10.568
68) Dibromochloromethane	(3)	17.024	127	548758	9.705
69) 1,2-Dibromoethane	(3)	17.447	107	726049	10.206
70) 2-Hexanone	(3)	17.734	43	1269938	9.434
71)*Chlorobenzene-d5	(3)	18.235	117	956347	10.000
72) Chlorobenzene	(3)	18.256	112	1073634	10.250
73) Ethylbenzene	(3)	18.271	91	1842292	9.561
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	505732	9.578
75) m/p-Xylene	(3)	18.493	91	1388790M	9.243
76) o-Xylene	(3)	19.188	91	1426330	9.336

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

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on 08/20/2018 at 17:25.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug20.b/fh00451.d Instrument ID: HP26379.i
Injection date and time: 20-AUG-2018 13:30 Analyst ID: jeb07445

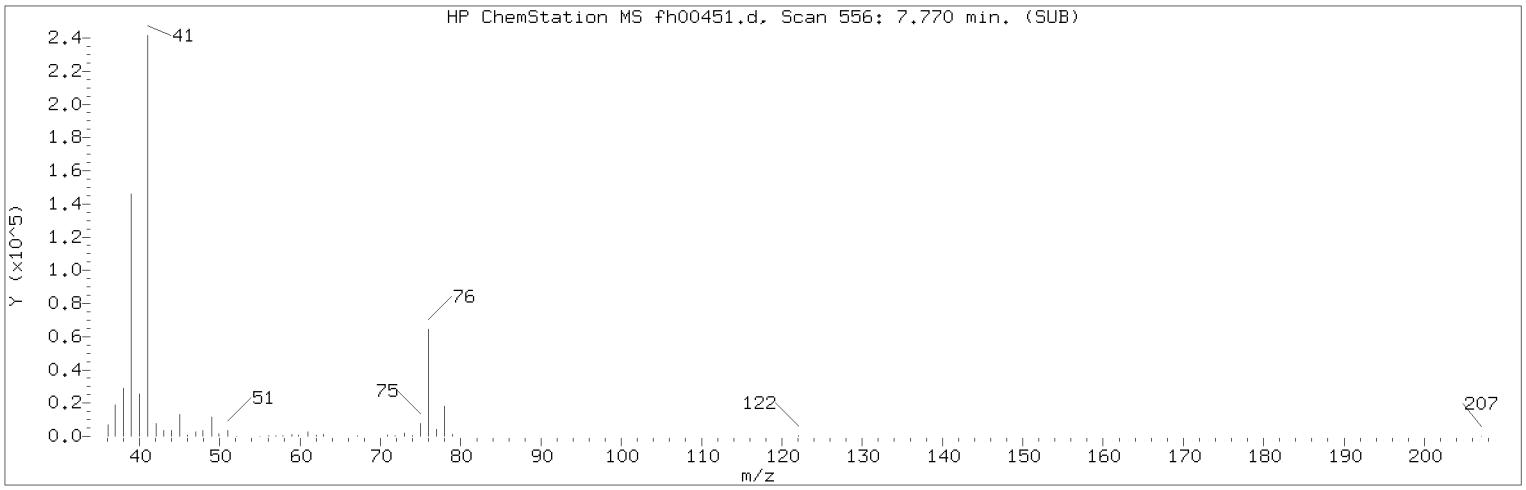
Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 20-AUG-2018 14:03
Date, time and analyst ID of latest file update: 20-Aug-2018 14:03 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

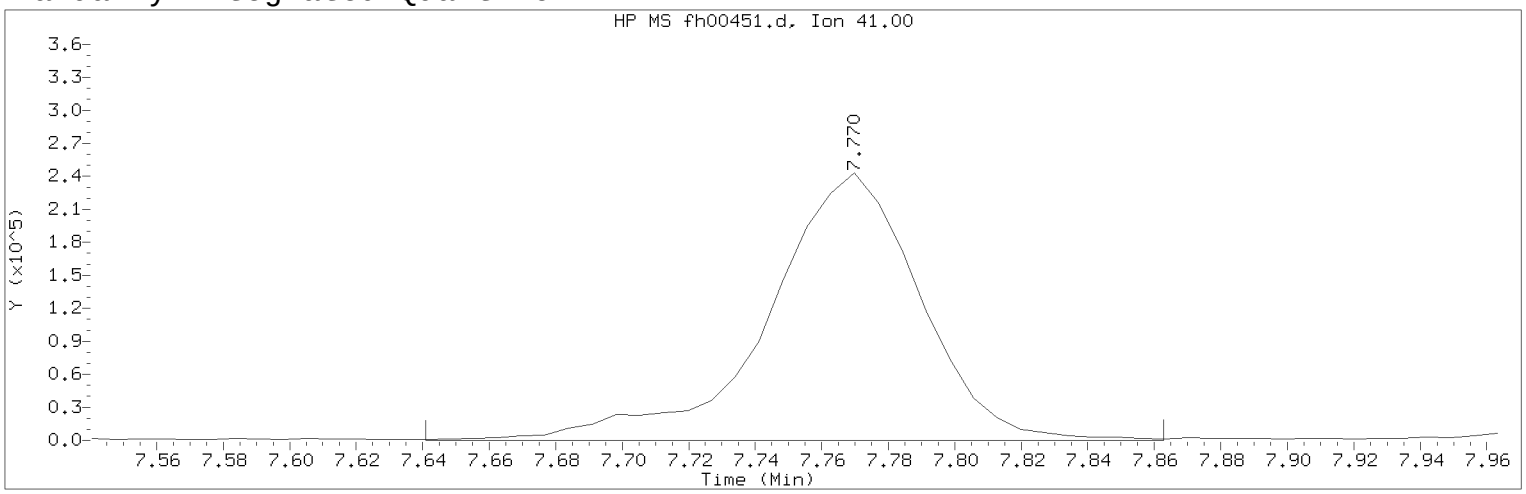
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	2815120	18.579
78) Styrene	(3)	19.266	104	958540	8.941
79) Bromoform	(3)	19.338	173	659142	8.913
80) Cumene	(3)	19.668	105	1853730	9.295
81) n-Propylbenzene	(3)	20.319	120	517525	9.628
82) Bromobenzene	(3)	20.334	156	558125	9.544
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	1060565	9.931
84) 4-Ethyltoluene	(3)	20.484	105	1900699	9.411
85) 2-Chlorotoluene	(3)	20.599	126	438601	9.586
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	1596850	9.506
87) 1,2,3-Trichloropropane	(3)	20.670	110	305348	9.741
88) Alpha Methyl Styrene	(3)	21.014	118	712431	8.668
89) tert-Butylbenzene	(3)	21.129	119	1411708	9.175
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	1564449	9.444
91) sec-Butylbenzene	(3)	21.380	105	2305043	9.286
92) p-Isopropyltoluene	(3)	21.566	119	1785115	9.108
93) 1,3-Dichlorobenzene	(3)	21.716	146	983619	9.597
94) 1,4-Dichlorobenzene	(3)	21.838	146	1000095	9.303
95) n-Butylbenzene	(3)	22.139	92	1220784	9.198
96) Benzyl Chloride	(3)	22.167	126	263891	8.473
97) Hexachloroethane	(3)	22.382	117	526687	8.501
98) 1,2-Dichlorobenzene	(3)	22.425	146	922393	9.478
99) 1,2-Dibromo-3-chloropropane	(3)	23.579	157	448167	8.631
100) Hexachlorobutadiene	(3)	24.546	225	561650	8.592
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	681446	8.723
102) Naphthalene	(3)	25.226	128	1549923	8.360

Digitally signed by Jacob E. Bailey
on 08/20/2018 at 17:25.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



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Injection date and time: 20-AUG-2018 13:30 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 20-AUG-2018 14:03
Date, time and analyst ID of latest file update: 20-Aug-2018 14:03 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

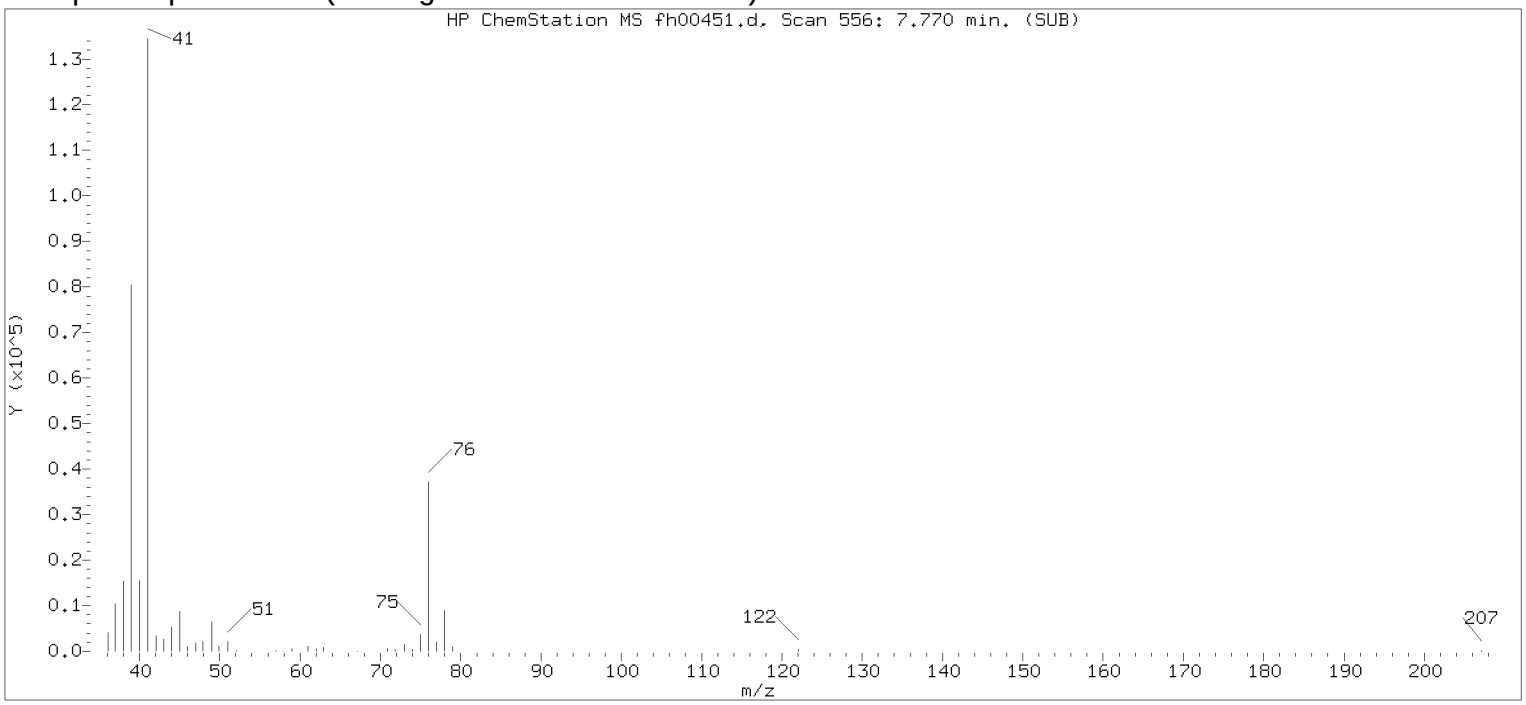
Compound Number : 22
Compound Name : 3-Chloropropene
Scan Number : 556
Retention Time (minutes): 7.770
Quant Ion : 41.00
Area (flag) : 769954M
Concentration (ppb(v)) : 11.2030
Integration start scan : 537 Integration stop scan: 568
Y at integration start : 267 Y at integration end: 267

Reason for manual integration: improper integration

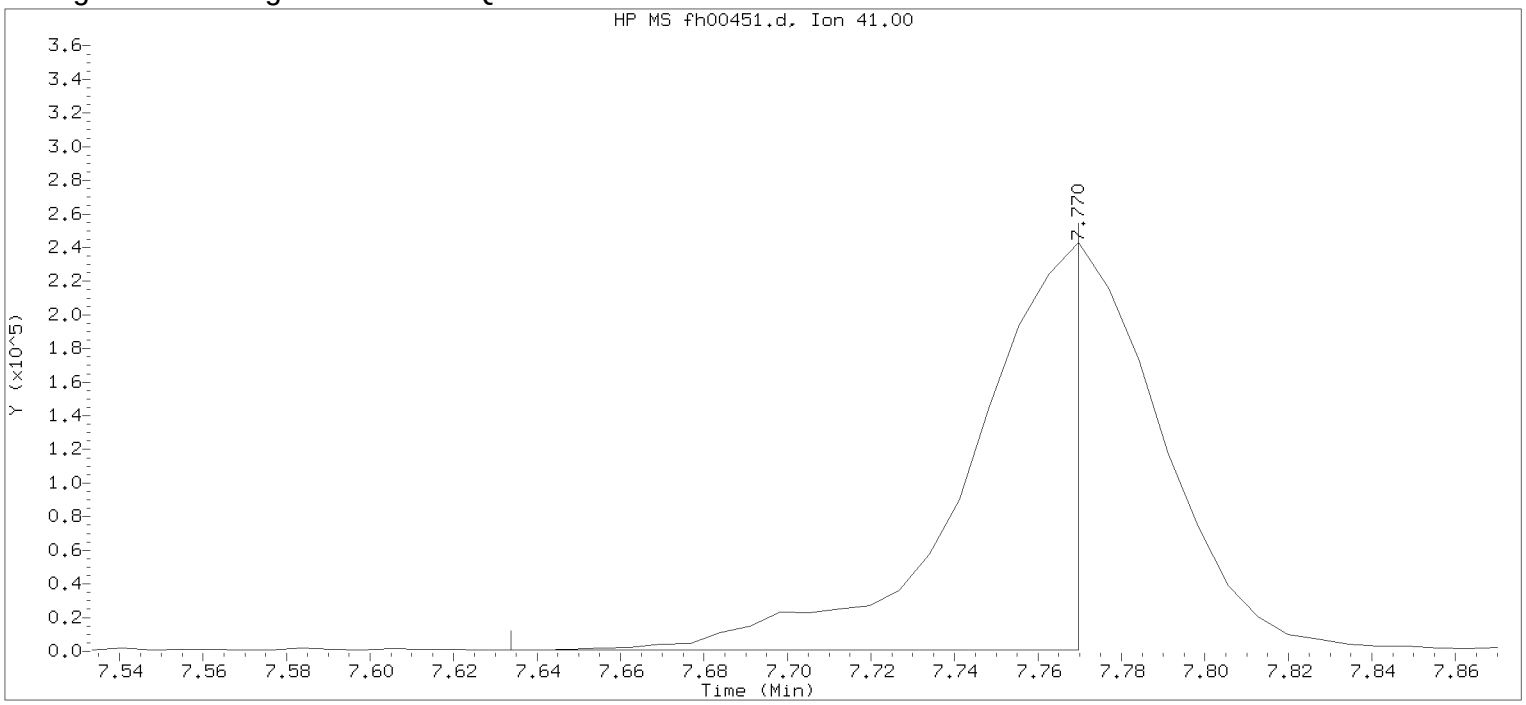
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/20/2018 at 17:25.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/21/2018 at 16:32.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug20.b/fh00451.d Instrument ID: HP26379.i
Injection date and time: 20-AUG-2018 13:30 Analyst ID: jeb07445

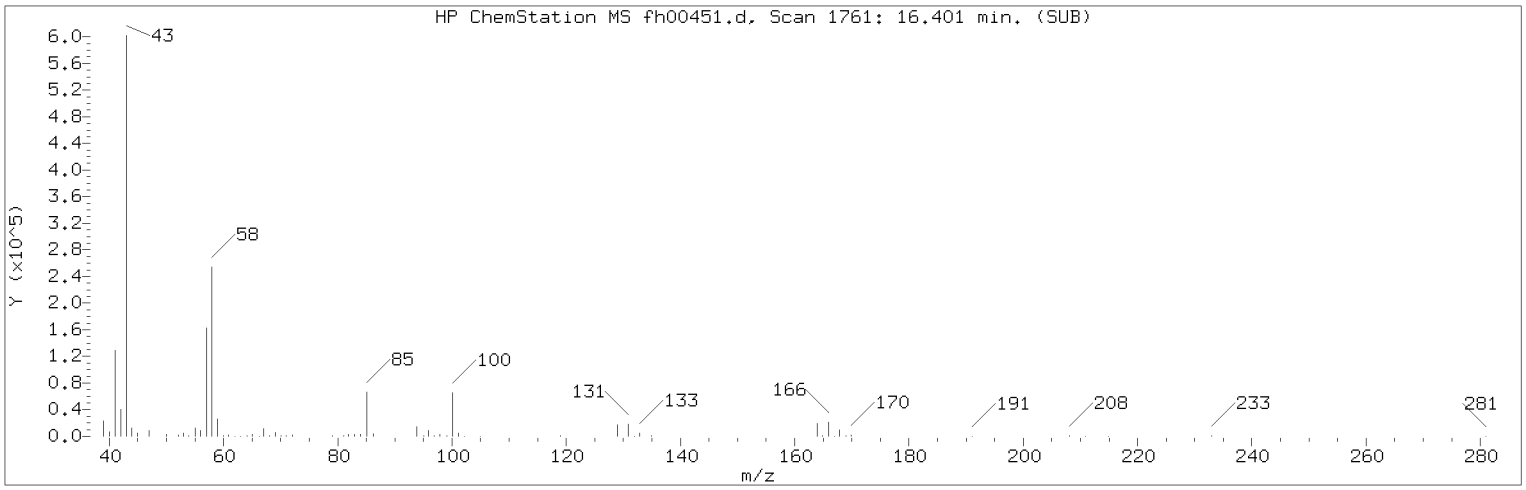
Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 20-Aug-2018 14:00 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

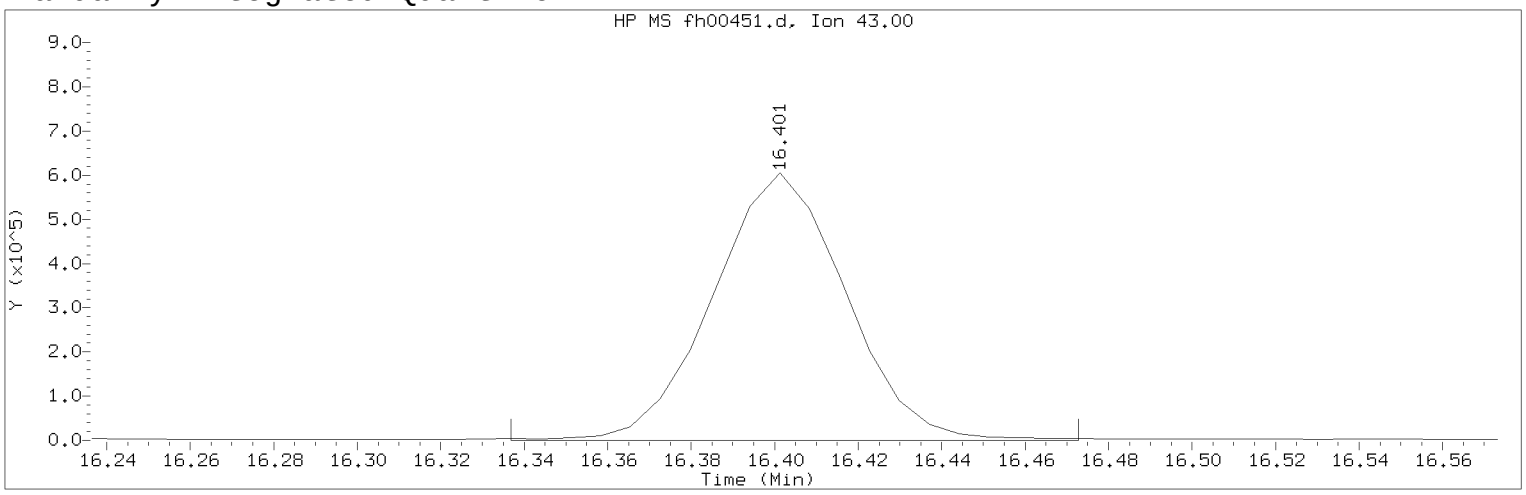
Compound Number : 22
Compound Name : 3-Chloropropene
Scan Number : 556
Retention Time (minutes): 7.770
Quant Ion : 41.00
Area : 427887
Concentration (ppb(v)) : 6.2258
Integration start scan : 536 Integration stop scan: 555
Y at integration start : 647 Y at integration end: 647

Digitally signed by Jacob E. Bailey on 08/20/2018 at 17:25.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug20.b/fh00451.d Instrument ID: HP26379.i
Injection date and time: 20-AUG-2018 13:30 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 20-AUG-2018 14:03
Date, time and analyst ID of latest file update: 20-Aug-2018 14:03 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

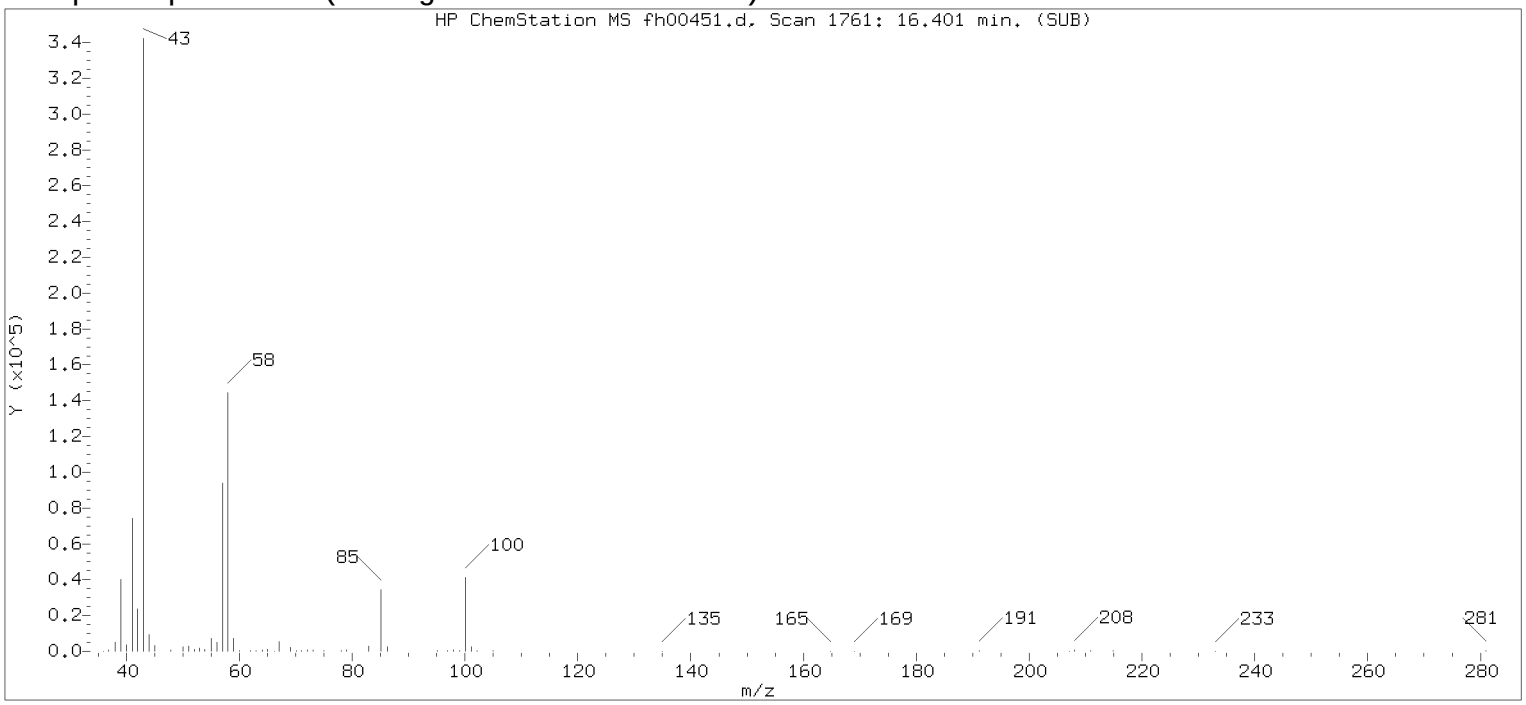
Compound Number : 62
Compound Name : 4-Methyl-2-Pentanone
Scan Number : 1761
Retention Time (minutes): 16.401
Quant Ion : 43.00
Area (flag) : 1332456M
Concentration (ppb(v)) : 9.1871
Integration start scan : 1751 Integration stop scan: 1770
Y at integration start : 720 Y at integration end: 720

Reason for manual integration: improper integration

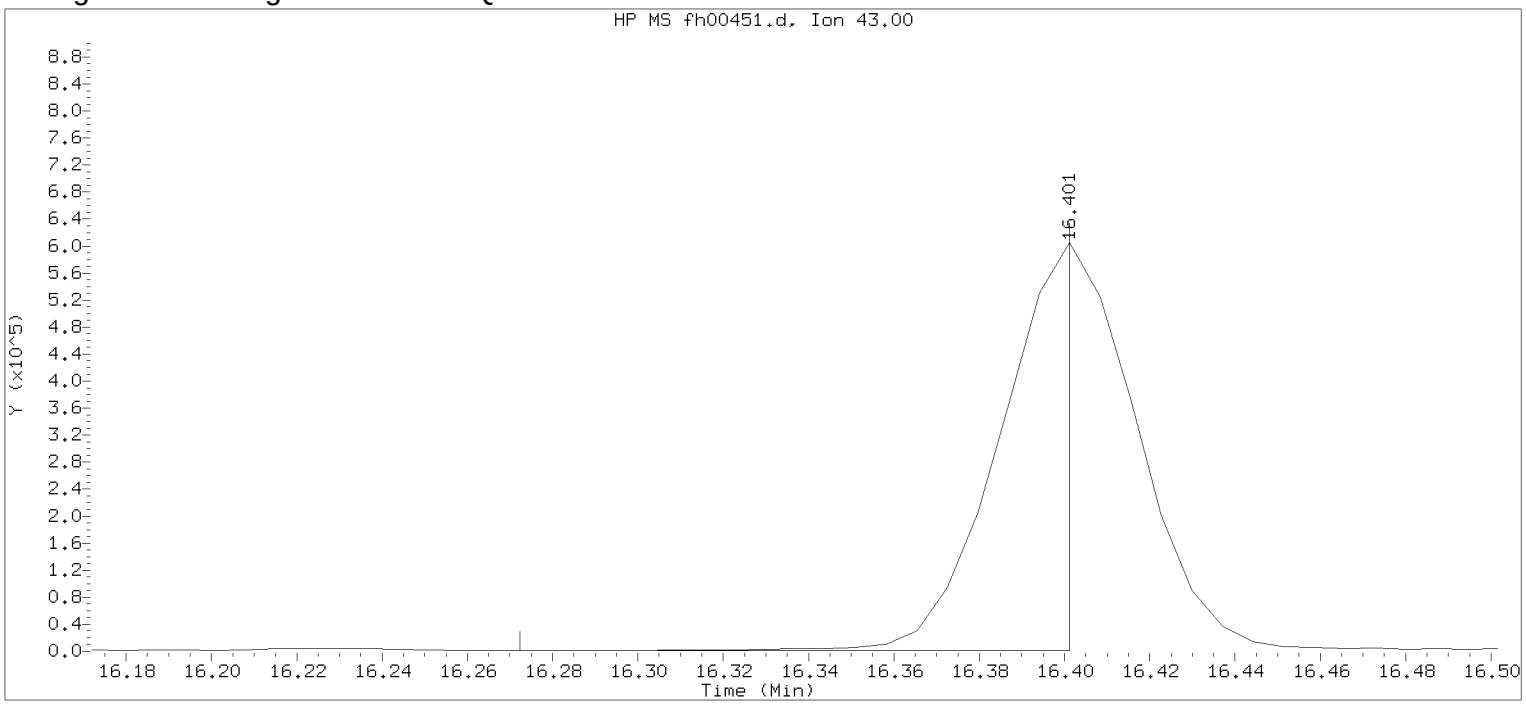
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/20/2018 at 17:25.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/21/2018 at 16:32.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug20.b/fh00451.d Instrument ID: HP26379.i
Injection date and time: 20-AUG-2018 13:30 Analyst ID: jeb07445

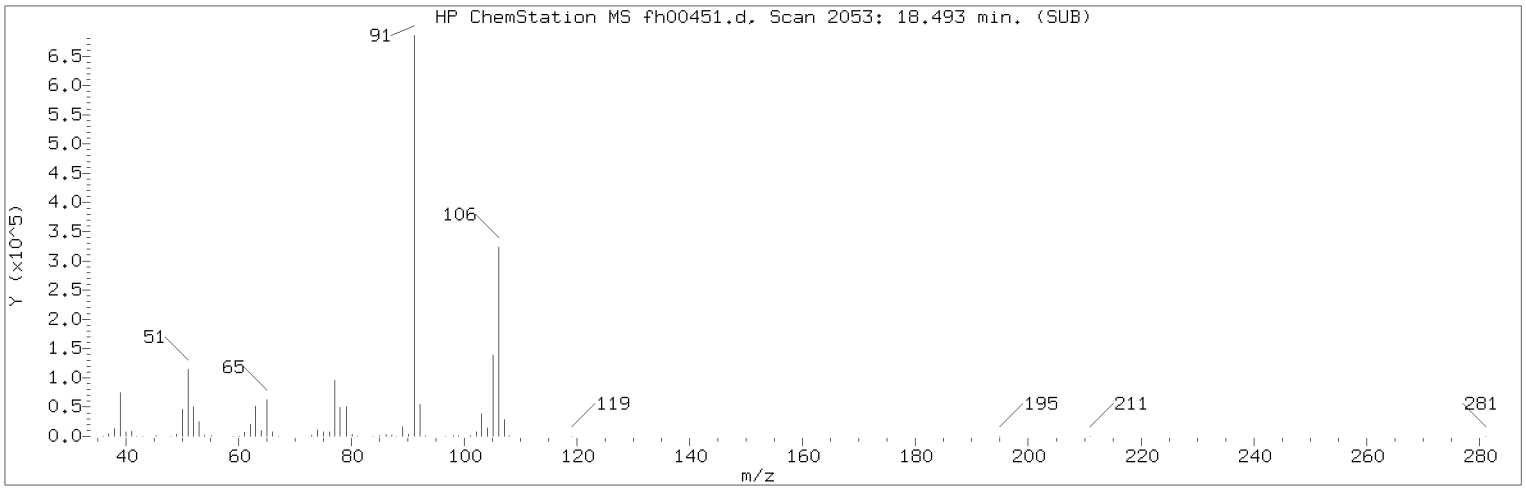
Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 20-Aug-2018 14:00 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

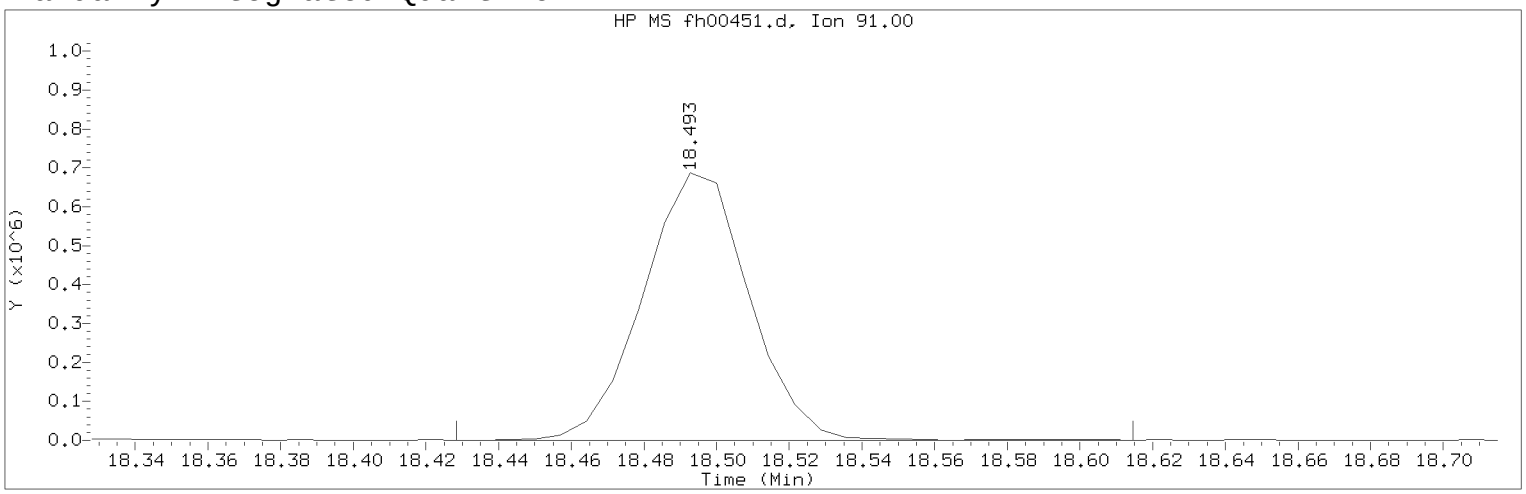
Compound Number : 62
Compound Name : 4-Methyl-2-Pentanone
Scan Number : 1761
Retention Time (minutes): 16.401
Quant Ion : 43.00
Area : 666545
Concentration (ppb(v)) : 4.5957
Integration start scan : 1742 Integration stop scan: 1760
Y at integration start : 758 Y at integration end: 758

Digitally signed by Jacob E. Bailey on 08/20/2018 at 17:25.
Target 3.5 esignature user=JEB07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug20.b/fh00451.d Instrument ID: HP26379.i
Injection date and time: 20-AUG-2018 13:30 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 20-AUG-2018 14:03
Date, time and analyst ID of latest file update: 20-Aug-2018 14:03 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

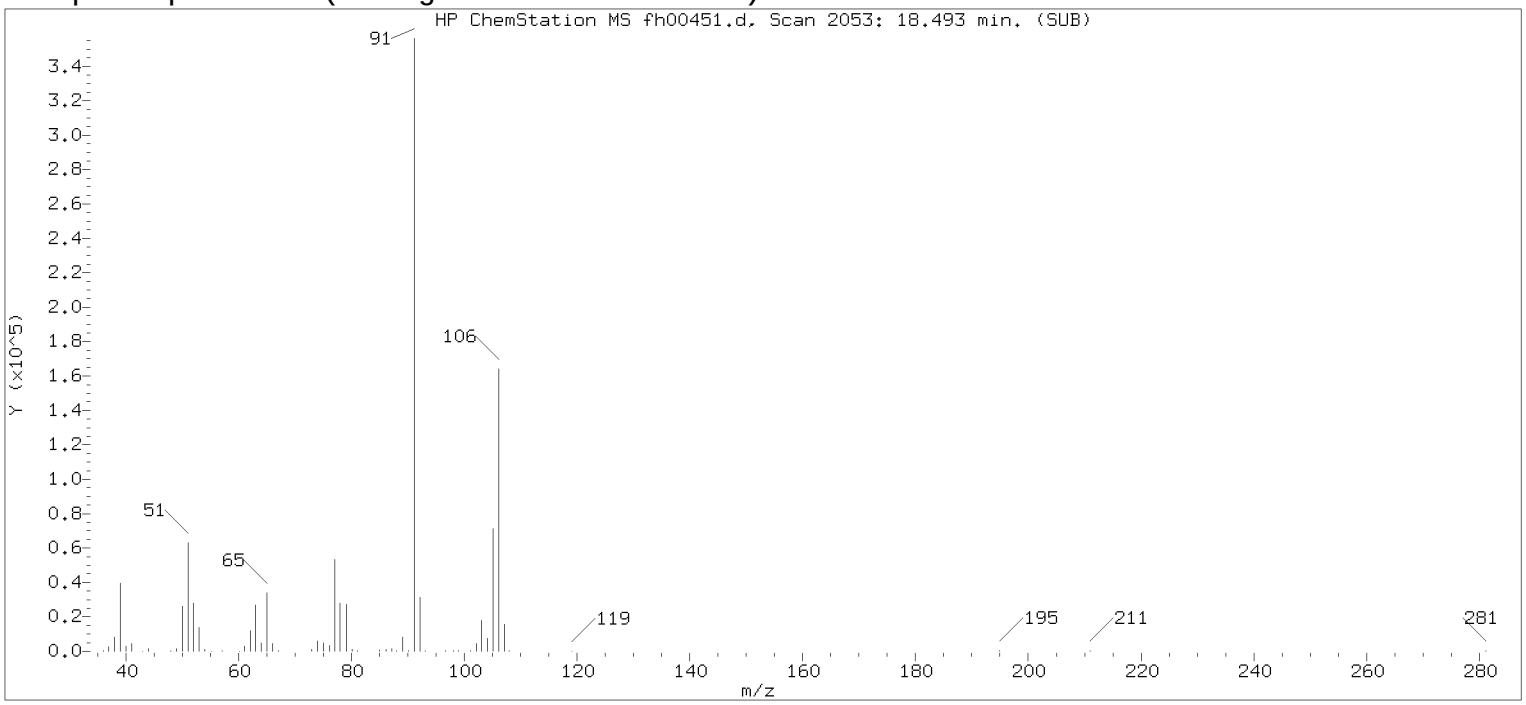
Compound Number : 75
Compound Name : m/p-Xylene
Scan Number : 2053
Retention Time (minutes): 18.493
Quant Ion : 91.00
Area (flag) : 1388790M
Concentration (ppb(v)) : 9.2429
Integration start scan : 2043 Integration stop scan: 2069
Y at integration start : 672 Y at integration end: 526

Reason for manual integration: improper integration

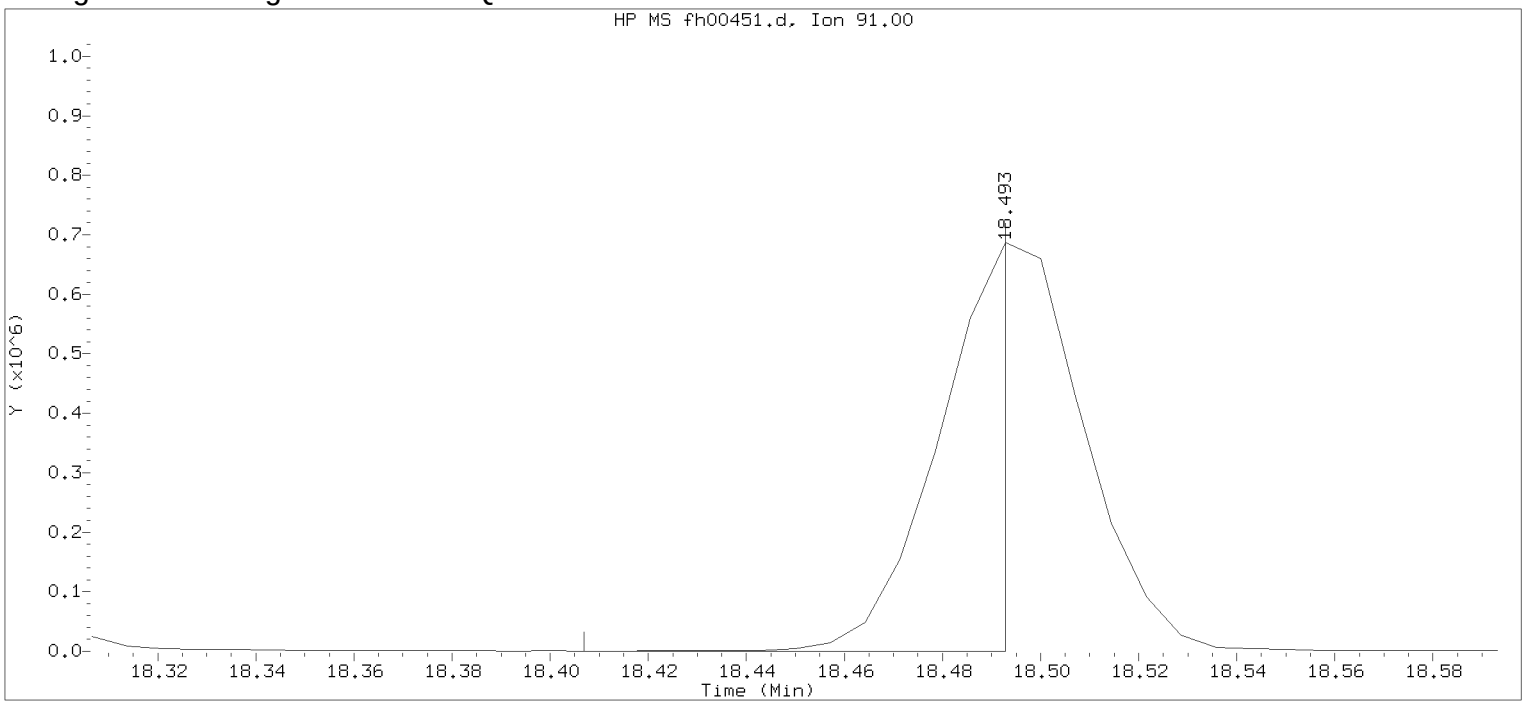
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/20/2018 at 17:25.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/21/2018 at 16:32.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug20.b/fh00451.d Instrument ID: HP26379.i
Injection date and time: 20-AUG-2018 13:30 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 16-AUG-2018 18:54
Date, time and analyst ID of latest file update: 20-Aug-2018 14:00 Unknown

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 75
Compound Name : m/p-Xylene
Scan Number : 2053
Retention Time (minutes): 18.493
Quant Ion : 91.00
Area : 626825
Concentration (ppb(v)) : 4.1717
Integration start scan : 2040 Integration stop scan: 2052
Y at integration start : 336 Y at integration end: 336

Digitally signed by Jacob E. Bailey on 08/20/2018 at 17:25.
Target 3.5 esignature user ID: jeb07445

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

VBLKF26

Data file: /chem/HP26379.i/18aug20.b/fh00452.d Injection date and time: **20-AUG-2018 14:19**
Data file Sample Info. Line: VBLKF26;200;F1823230AA;VBLKF26;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1823230AA**
Date, time and analyst ID of latest file update: 20-Aug-2018 17:26 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug20.b/fh00452.d**

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 20-AUG-2018 14:03
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug20.b/fh00451.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.093(0.007)	1020	130	262177 (0)	10.00		157425 - 367325
52) 1,4-Difluorobenzene	13.386(0.007)	1340	114	1025028 (0)	10.00		613758 - 1432102
71) Chlorobenzene-d5	18.228(0.007)	2016	117	923569 (-3)	10.00		573809 - 1338885

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)			Not Detected					0.5	1
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)			Not Detected					0.2	1
7) 1,3-Butadiene	(1)			Not Detected					0.4	2
8) Bromomethane	(1)			Not Detected					0.5	1
9) Chloroethane	(1)			Not Detected					0.2	1
10) Bromoethene	(1)			Not Detected					0.4	2
13) Dichlorofluoromethane	(1)			Not Detected					0.2	1
12) Trichlorofluoromethane	(1)			Not Detected					0.2	1
11) Pentane	(1)			Not Detected					0.5	1
14) Ethanol	(1)			Not Detected					0.5	2
15) Freon123a	(1)			Not Detected					0.2	1
20) Acrolein	(1)			Not Detected					1	2
16) 1,1-Dichloroethene	(1)			Not Detected					0.2	1
17) Freon 113	(1)			Not Detected					0.5	2
24) Acetone	(1)			Not Detected					0.5	2
19) Methyl Iodide	(1)			Not Detected					0.2	1
18) Carbon Disulfide	(1)			Not Detected					1	1
21) Isopropanol	(1)			Not Detected					0.5	2
29) Acetonitrile	(1)			Not Detected					0.5	2
22) 3-Chloropropene	(1)			Not Detected					0.2	1
23) Methylene Chloride	(1)			Not Detected					0.2	1
28) tert-Butyl Alcohol	(1)			Not Detected					0.5	1
32) Acrylonitrile	(1)			Not Detected					0.5	2
25) trans-1,2-Dichloroethene	(1)			Not Detected					0.2	1
27) Methyl t-Butyl Ether	(1)			Not Detected					0.2	1
26) Hexane	(1)			Not Detected					0.2	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.2	1
34) Vinyl Acetate	(1)			Not Detected					1	1
30) Di-Isopropyl Ether	(1)			Not Detected					0.2	1
33) Ethyl Tert-Butyl Ether	(1)			Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.2	1
36) 1,2-Dichloroethene (total)	(1)			Not Detected					0.2	1
45) 2-Butanone	(1)			Not Detected					0.5	2
40) Ethyl Acetate	(1)			Not Detected					0.5	1
41) Methyl Acrylate	(1)			Not Detected					0.2	1
43) Tetrahydrofuran	(1)			Not Detected					0.5	1
39) Chloroform	(1)			Not Detected					0.2	1
44) 1,1,1-Trichloroethane	(1)			Not Detected					0.2	1
38) Cyclohexane	(1)			Not Detected					0.2	1

Digitally signed by Jacob E. Bailey on 08/20/2018 at 17:27. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18aug20.b/fh00452.d Injection date and time: **20-AUG-2018 14:19**
Data file Sample Info. Line: VBLKF26;200;F1823230AA;VBLKF26;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1823230AA**
Date, time and analyst ID of latest file update: 20-Aug-2018 17:26 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug20.b/fh00452.d**

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 20-AUG-2018 14:03
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug20.b/fh00451.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
42) Carbon Tetrachloride	(1)			Not Detected					0.2	1
48) Benzene	(2)			Not Detected					0.2	1
50) 1,2-Dichloroethane	(2)			Not Detected					0.2	1
46) Isooctane	(2)			Not Detected					0.2	1
49) Tert-Amyl Methyl Ether	(2)			Not Detected					0.2	1
47) Heptane	(2)			Not Detected					0.5	1
51) Trichloroethene	(2)			Not Detected					0.2	1
54) Ethyl Acrylate	(2)			Not Detected					0.2	1
55) 1,2-Dichloropropane	(2)			Not Detected					0.2	1
53) Dibromomethane	(2)			Not Detected					0.2	1
58) 1,4-Dioxane	(2)			Not Detected					0.5	1
57) Methyl Methacrylate	(2)			Not Detected					0.2	1
56) Bromodichloromethane	(2)			Not Detected					0.2	1
59) cis-1,3-Dichloropropene	(2)			Not Detected					0.2	1
62) 4-Methyl-2-Pentanone	(2)			Not Detected					0.5	2
61) Toluene	(3)			Not Detected					0.2	1
60) Octane	(3)			Not Detected					0.2	1
64) trans-1,3-Dichloropropene	(3)			Not Detected					0.2	1
65) 1,3-Dichloropropene (total)	(3)			Not Detected					0.2	1
66) Ethyl Methacrylate	(3)			Not Detected					0.2	1
67) 1,1,2-Trichloroethane	(3)			Not Detected					0.2	1
63) Tetrachloroethene	(3)			Not Detected					0.2	1
70) 2-Hexanone	(3)			Not Detected					0.5	2
68) Dibromochloromethane	(3)			Not Detected					0.2	1
69) 1,2-Dibromoethane	(3)			Not Detected					0.2	1
72) Chlorobenzene	(3)			Not Detected					0.2	1
74) 1,1,1,2-Tetrachloroethane	(3)			Not Detected					0.2	1
73) Ethylbenzene	(3)			Not Detected					0.2	1
75) m/p-Xylene	(3)			Not Detected					0.2	1
76) o-Xylene	(3)			Not Detected					0.2	1
77) Xylene (total)	(3)			Not Detected					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
82) Bromobenzene	(3)			Not Detected					0.2	1
83) 1,1,2,2-Tetrachloroethane	(3)			Not Detected					0.2	1
87) 1,2,3-Trichloropropane	(3)			Not Detected					0.2	1
81) n-Propylbenzene	(3)			Not Detected					0.5	1
85) 2-Chlorotoluene	(3)			Not Detected					0.2	1
84) 4-Ethyltoluene	(3)			Not Detected					0.2	1
86) 1,3,5-Trimethylbenzene	(3)			Not Detected					0.2	1
88) Alpha Methyl Styrene	(3)			Not Detected					0.2	1
89) tert-Butylbenzene	(3)			Not Detected					0.5	1
90) 1,2,4-Trimethylbenzene	(3)			Not Detected					0.2	1
91) sec-Butylbenzene	(3)			Not Detected					0.2	1
93) 1,3-Dichlorobenzene	(3)			Not Detected					0.2	1
94) 1,4-Dichlorobenzene	(3)			Not Detected					0.2	1
92) p-Isopropyltoluene	(3)			Not Detected					0.2	1
96) Benzyl Chloride	(3)			Not Detected					0.5	1
98) 1,2-Dichlorobenzene	(3)			Not Detected					0.2	1
95) n-Butylbenzene	(3)			Not Detected					0.2	1
97) Hexachloroethane	(3)			Not Detected					0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)			Not Detected					0.2	1
101) 1,2,4-Trichlorobenzene	(3)			Not Detected					0.5	2

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Data file: /chem/HP26379.i/18aug20.b/fh00452.d Injection date and time: **20-AUG-2018 14:19**
Data file Sample Info. Line: VBLKF26;200;F1823230AA;VBLKF26;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1823230AA**
Date, time and analyst ID of latest file update: 20-Aug-2018 17:26 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug20.b/fh00452.d**

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 20-AUG-2018 14:03
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug20.b/fh00451.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
100) Hexachlorobutadiene	(3)				Not Detected					0.4	2
102) Naphthalene	(3)				Not Detected					0.4	1

Total number of targets = 99

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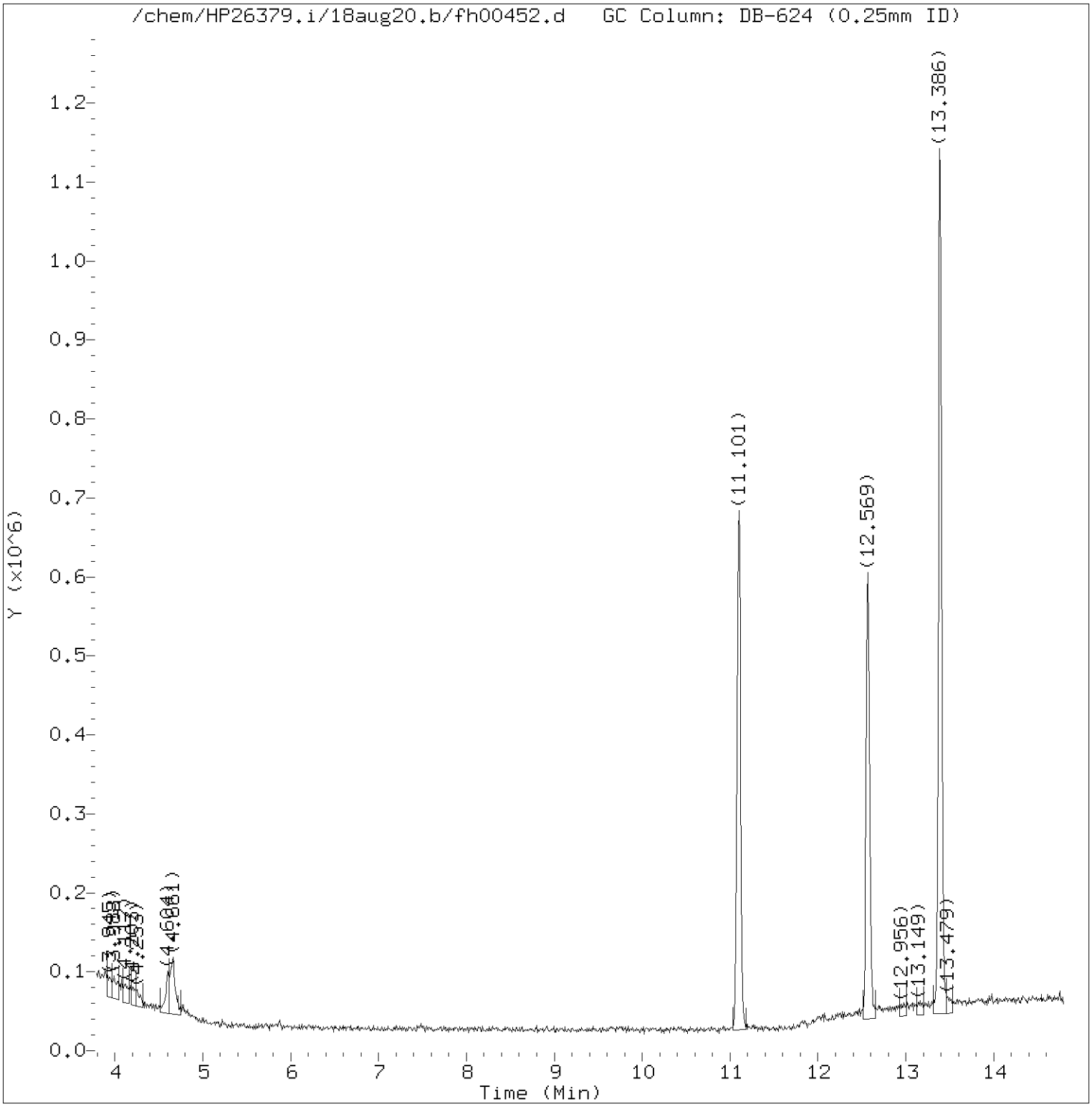
Secondary review performed and digitally signed by Jeffrey B. Smith on 08/21/2018 at 16:32. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

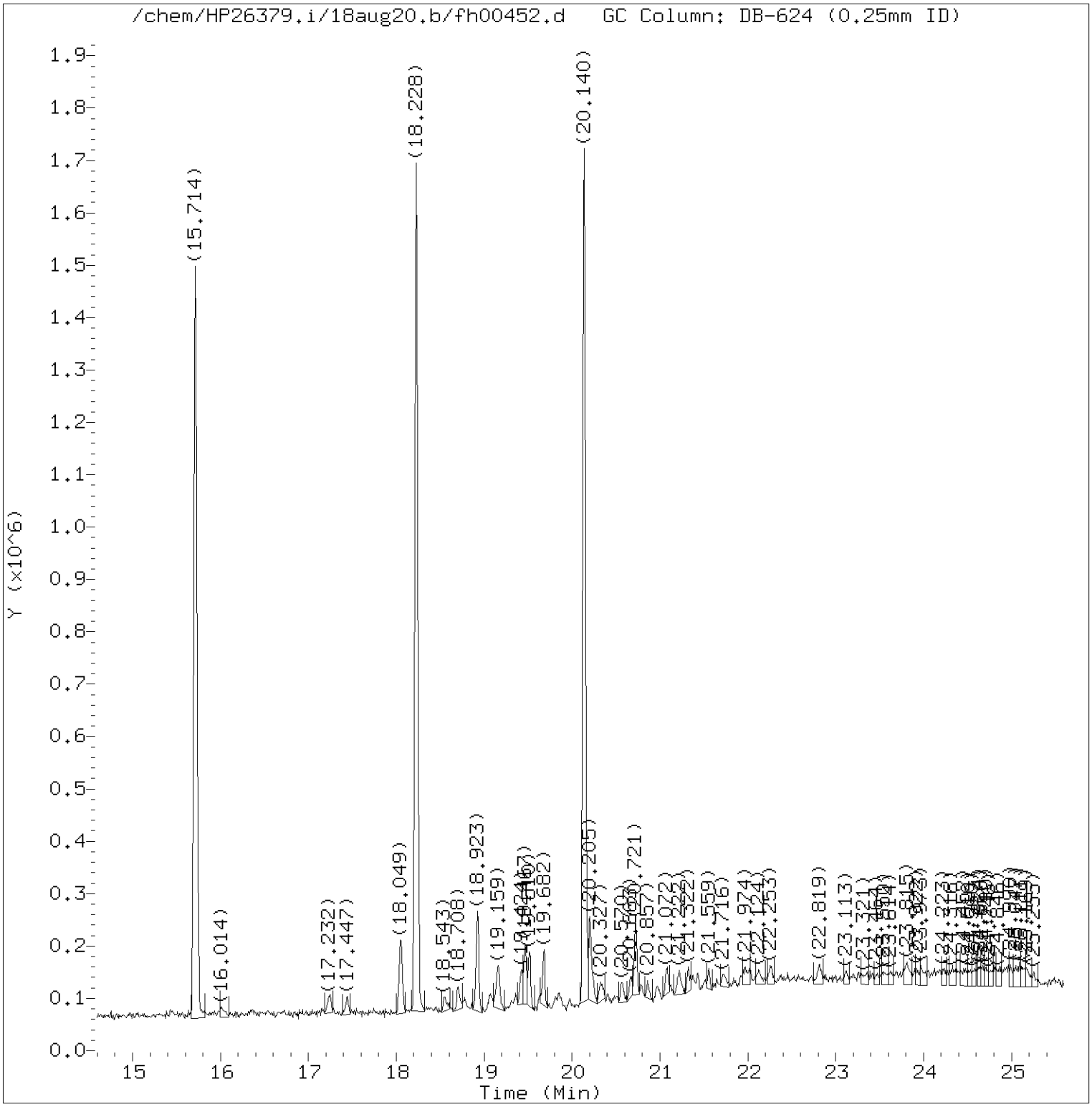
Target Revision 3.5

Data File: /chem/HP26379.i/18aug20.b/fh00452.d Instrument ID: HP26379.i
Injection date and time: 20-AUG-2018 14:19 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 20-AUG-2018 14:03
Date, time and analyst ID of latest file update: 20-Aug-2018 17:26 jeb07445

Sample Name: VBLKF26 Lab Sample ID: VBLKF26

Digitally signed by Jacob E. Bailey
on 08/20/2018 at 17:27.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug20.b/fh00452.d Instrument ID: HP26379.i
Injection date and time: 20-AUG-2018 14:19 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 20-AUG-2018 14:03
Date, time and analyst ID of latest file update: 20-Aug-2018 17:26 jeb07445

Sample Name: VBLKF26 Lab Sample ID: VBLKF26

Digitally signed by Jacob E. Bailey
on 08/20/2018 at 17:27.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug20.b/fh00452.d Instrument ID: HP26379.i
Injection date and time: 20-AUG-2018 14:19 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 20-AUG-2018 14:03
Date, time and analyst ID of latest file update: 20-Aug-2018 17:26 jeb07445

Sample Name: VBLKF26 Lab Sample ID: VBLKF26

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
37)*Bromochloromethane	(1)	11.093	130	262177	10.000
52)*1,4-Difluorobenzene	(2)	13.386	114	1025028	10.000
71)*Chlorobenzene-d5	(3)	18.228	117	923569	10.000

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 08/20/2018 at 17:27.
Target 3.5 esignature user ID: jeb07445

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

LCSF26

Data file: /chem/HP26379.i/18aug20.b/fh00454.d Injection date and time: **20-AUG-2018 15:38**
Data file Sample Info. Line: LCSF26;200;F1823230AA;LCSF26;0;0;LCS; Instrument ID: **HP26379.i** Batch: **F1823230AA**
Date, time and analyst ID of latest file update: 20-Aug-2018 17:26 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug20.b/fh00452.d**

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 20-AUG-2018 14:03
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug20.b/fh00451.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.101(0.000)	1021	130	239705 (-9)	10.00		157425 - 367325
52) 1,4-Difluorobenzene	13.393(0.000)	1341	114	929620 (-9)	10.00		613758 - 1432102
71) Chlorobenzene-d5	18.228(0.007)	2016	117	869451 (-9)	10.00		573809 - 1338885

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)	3.909(-0.000)	41	401743	10.679	10.68			0.5	1
2) Dichlorodifluoromethane	(1)	4.009(-0.000)	85	911106	11.434	11.43			0.2	1
3) Chlorodifluoromethane	(1)	4.102(-0.001)	51	948792	11.896	11.90			0.2	1
4) Freon 114	(1)	4.310(-0.000)	85	935552	11.269	11.27			0.2	1
5) Chloromethane	(1)	4.460(-0.000)	50	460325M	10.097	10.10			0.2	1
6) Vinyl Chloride	(1)	4.640(-0.000)	62	382631	12.205	12.21			0.2	1
7) 1,3-Butadiene	(1)	4.675(-0.000)	54	363584	11.611	11.61			0.4	2
8) Bromomethane	(1)	5.356(-0.000)	94	306282	11.934	11.93			0.5	1
9) Chloroethane	(1)	5.621(-0.000)	64	272774	11.920	11.92			0.2	1
10) Bromoethene	(1)	5.850(-0.001)	106	300917	11.011	11.01			0.4	2
13) Dichlorofluoromethane	(1)	5.979(-0.000)	67	962073	12.491	12.49			0.2	1
12) Trichlorofluoromethane	(1)	5.879(-0.000)	101	841729	10.321	10.32			0.2	1
11) Pentane	(1)	5.872(-0.000)	43	878967	9.813	9.81			0.5	1
14) Ethanol	(1)	6.660(-0.000)	45	182244	8.962	8.96			0.5	2
15) Freon123a	(1)	6.810(-0.000)	67	923202	12.730	12.73			0.2	1
20) Acrolein	(1)	7.505(-0.000)	56	230022	10.771	10.77			1	2
16) 1,1-Dichloroethene	(1)	6.853(-0.000)	61	848300	11.332	11.33			0.2	1
17) Freon 113	(1)	6.917(-0.000)	103	455751	9.821	9.82			0.5	2
24) Acetone	(1)	8.078(-0.001)	43	785578	11.041	11.04			0.5	2
19) Methyl Iodide	(1)	7.154(-0.000)	142	567530	8.829	8.83			0.2	1
18) Carbon Disulfide	(1)	6.939(-0.000)	76	1012256	11.169	11.17			1	1
21) Isopropanol	(1)	7.712(-0.000)	45	855041	9.964	9.96			0.5	2
29) Acetonitrile	(1)	9.081(0.000)	41	416577	9.538	9.54			0.5	2
22) 3-Chloropropene	(1)	7.777(-0.000)	41	771415	12.286	12.29			0.2	1
23) Methylene Chloride	(1)	7.992(-0.001)	84	328767	12.280	12.28			0.2	1
28) tert-Butyl Alcohol	(1)	8.622(0.000)	59	1193526	10.614	10.61			0.5	1
32) Acrylonitrile	(1)	9.747(-0.000)	53	461937	9.797	9.80			0.5	2
25) trans-1,2-Dichloroethene	(1)	8.307(-0.000)	61	776143	11.005	11.00			0.2	1
27) Methyl t-Butyl Ether	(1)	8.500(-0.000)	73	1012522	9.165	9.17			0.2	1
26) Hexane	(1)	8.450(0.000)	56	542507	9.877	9.88			0.2	1
31) 1,1-Dichloroethane	(1)	9.632(-0.000)	63	939566	10.917	10.92			0.2	1
34) Vinyl Acetate	(1)	10.105(-0.000)	43	1617510	11.469	11.47			1	1
30) Di-Isopropyl Ether	(1)	9.296(-0.000)	45	1778117	9.607	9.61			0.2	1
33) Ethyl Tert-Butyl Ether	(1)	10.055(0.000)	59	1713834	9.714	9.71			0.2	1
35) cis-1,2-Dichloroethene	(1)	10.707(0.000)	61	723994	10.625	10.63			0.2	1
36) 1,2-Dichloroethene (total)	(1)		61	1500137	21.630	21.63			0.2	1
45) 2-Butanone	(1)	11.803(0.000)	43	1087277	10.307	10.31			0.5	2
40) Ethyl Acetate	(1)	11.416(0.000)	43	1183537	9.948	9.95			0.5	1
41) Methyl Acrylate	(1)	11.452(0.000)	55	1039825	10.040	10.04			0.2	1
43) Tetrahydrofuran	(1)	11.545(0.000)	42	587257	9.929	9.93			0.5	1
39) Chloroform	(1)	11.215(0.000)	83	781851	10.766	10.77			0.2	1
44) 1,1,1-Trichloroethane	(1)	11.645(0.000)	97	749890	9.771	9.77			0.2	1
38) Cyclohexane	(1)	11.115(0.000)	56	918510	9.226	9.23			0.2	1

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey on 08/20/2018 at 17:27. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18aug20.b/fh00454.d Injection date and time: **20-AUG-2018 15:38**
Data file Sample Info. Line: LCSF26;200;F1823230AA;LCSF26;0;0;LCS; Instrument ID: **HP26379.i** Batch: **F1823230AA**
Date, time and analyst ID of latest file update: 20-Aug-2018 17:26 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug20.b/fh00452.d**

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 20-AUG-2018 14:03
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug20.b/fh00451.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
42) Carbon Tetrachloride	(1)	11.509(0.000)	117	691022	9.639	9.64			0.2	1
48) Benzene	(2)	12.326(-0.000)	78	1175578	10.900	10.90			0.2	1
50) 1,2-Dichloroethane	(2)	12.691(-0.000)	62	727163	11.609	11.61			0.2	1
46) Isooctane	(2)	12.046(-0.000)	57	2767367	10.326	10.33			0.2	1
49) Tert-Amyl Methyl Ether	(2)	12.490(-0.000)	73	1080446	10.048	10.05			0.2	1
47) Heptane	(2)	12.196(-0.000)	71	425208	9.871	9.87			0.5	1
51) Trichloroethene	(2)	13.343(0.000)	130	422523	10.130	10.13			0.2	1
54) Ethyl Acrylate	(2)	14.224(0.000)	55	1336007	9.918	9.92			0.2	1
55) 1,2-Dichloropropane	(2)	14.267(0.000)	63	626461	11.071	11.07			0.2	1
53) Dibromomethane	(2)	14.095(-0.000)	174	367139	10.596	10.60			0.2	1
58) 1,4-Dioxane	(2)	14.675(0.000)	88	254092	9.710	9.71			0.5	1
57) Methyl Methacrylate	(2)	14.575(0.000)	69	426726	10.022	10.02			0.2	1
56) Bromodichloromethane	(2)	14.338(0.000)	83	788341	10.355	10.35			0.2	1
59) cis-1,3-Dichloropropene	(2)	15.406(0.000)	75	716722	10.209	10.21			0.2	1
62) 4-Methyl-2-Pentanone	(2)	16.394(0.000)	43	1343965	10.197	10.20			0.5	2
61) Toluene	(3)	15.800(-0.000)	91	1297487	10.475	10.47			0.2	1
60) Octane	(3)	15.427(0.000)	43	1311846	9.609	9.61			0.2	1
64) trans-1,3-Dichloropropene	(3)	16.459(-0.000)	75	625606	10.262	10.26			0.2	1
65) 1,3-Dichloropropene (total)	(3)		75	1342328	20.471	20.47			0.2	1
66) Ethyl Methacrylate	(3)	16.666(0.000)	69	731567	9.977	9.98			0.2	1
67) 1,1,2-Trichloroethane	(3)	16.731(0.000)	97	473469	11.081	11.08			0.2	1
63) Tetrachloroethene	(3)	16.430(-0.000)	166	564516	10.599	10.60			0.2	1
70) 2-Hexanone	(3)	17.726(0.000)	43	1254867	10.254	10.25			0.5	2
68) Dibromochloromethane	(3)	17.024(-0.000)	127	538955	10.484	10.48			0.2	1
69) 1,2-Dibromoethane	(3)	17.440(0.000)	107	679095	10.500	10.50			0.2	1
72) Chlorobenzene	(3)	18.256(-0.000)	112	978160	10.272	10.27			0.2	1
74) 1,1,1,2-Tetrachloroethane	(3)	18.342(-0.000)	131	487627	10.158	10.16			0.2	1
73) Ethylbenzene	(3)	18.264(-0.000)	91	1717830	9.806	9.81			0.2	1
75) m/p-Xylene	(3)	18.493(-0.000)	91	1280650	9.375	9.37			0.2	1
76) o-Xylene	(3)	19.180(-0.000)	91	1323849	9.531	9.53			0.2	1
77) Xylene (total)	(3)		91	2604499	18.906	18.91			0.2	1
78) Styrene	(3)	19.259(-0.000)	104	953191	9.780	9.78			0.2	1
79) Bromoform	(3)	19.331(-0.000)	173	641380	9.540	9.54			0.2	1
80) Cumene	(3)	19.660(-0.000)	105	1743602	9.616	9.62			0.2	1
82) Bromobenzene	(3)	20.327(-0.000)	156	533321	10.031	10.03			0.2	1
83) 1,1,2,2-Tetrachloroethane	(3)	20.420(-0.000)	83	1076832	11.091	11.09			0.2	1
87) 1,2,3-Trichloropropane	(3)	20.670(-0.000)	110	293947	10.314	10.31			0.2	1
81) n-Propylbenzene	(3)	20.312(-0.000)	120	464318	9.502	9.50			0.5	1
85) 2-Chlorotoluene	(3)	20.599(-0.000)	126	420081	10.099	10.10			0.2	1
84) 4-Ethyltoluene	(3)	20.477(-0.000)	105	1711155	9.320	9.32			0.2	1
86) 1,3,5-Trimethylbenzene	(3)	20.606(-0.000)	105	1452827	9.513	9.51			0.2	1
88) Alpha Methyl Styrene	(3)	21.007(-0.000)	118	678817	9.084	9.08			0.2	1
89) tert-Butylbenzene	(3)	21.122(-0.000)	119	1252678	8.955	8.95			0.5	1
90) 1,2,4-Trimethylbenzene	(3)	21.222(-0.000)	105	1413275	9.384	9.38			0.2	1
91) sec-Butylbenzene	(3)	21.380(-0.000)	105	2080506	9.219	9.22			0.2	1
93) 1,3-Dichlorobenzene	(3)	21.716(-0.000)	146	875251	9.393	9.39			0.2	1
94) 1,4-Dichlorobenzene	(3)	21.831(-0.000)	146	886032	9.066	9.07			0.2	1
92) p-Isopropyltoluene	(3)	21.559(-0.000)	119	1606396	9.015	9.01			0.2	1
96) Benzyl Chloride	(3)	22.160(-0.000)	126	243961	8.616	8.62			0.5	1
98) 1,2-Dichlorobenzene	(3)	22.418(-0.000)	146	797576	9.015	9.01			0.2	1
95) n-Butylbenzene	(3)	22.139(-0.000)	92	1042452	8.640	8.64			0.2	1
97) Hexachloroethane	(3)	22.382(-0.000)	117	506655	8.995	8.99			0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)	23.579(-0.000)	157	415845	8.809	8.81			0.2	1
101) 1,2,4-Trichlorobenzene	(3)	24.639(-0.000)	180	522616	7.358	7.36			0.5	2

Digitally signed by Jacob E. Bailey on 08/20/2018 at 17:27. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18aug20.b/fh00454.d Injection date and time: **20-AUG-2018 15:38**
Data file Sample Info. Line: LCSF26;200;F1823230AA;LCSF26;0;0;LCS; Instrument ID: **HP26379.i** Batch: **F1823230AA**
Date, time and analyst ID of latest file update: 20-Aug-2018 17:26 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug20.b/fh00452.d**

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 20-AUG-2018 14:03
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug20.b/fh00451.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
100) Hexachlorobutadiene	(3)	24.546(-0.000)	225	427902	7.200	7.20			0.4	2
102) Naphthalene	(3)	25.226(-0.000)	128	1184559	7.028	7.03			0.4	1

Total number of targets = 99

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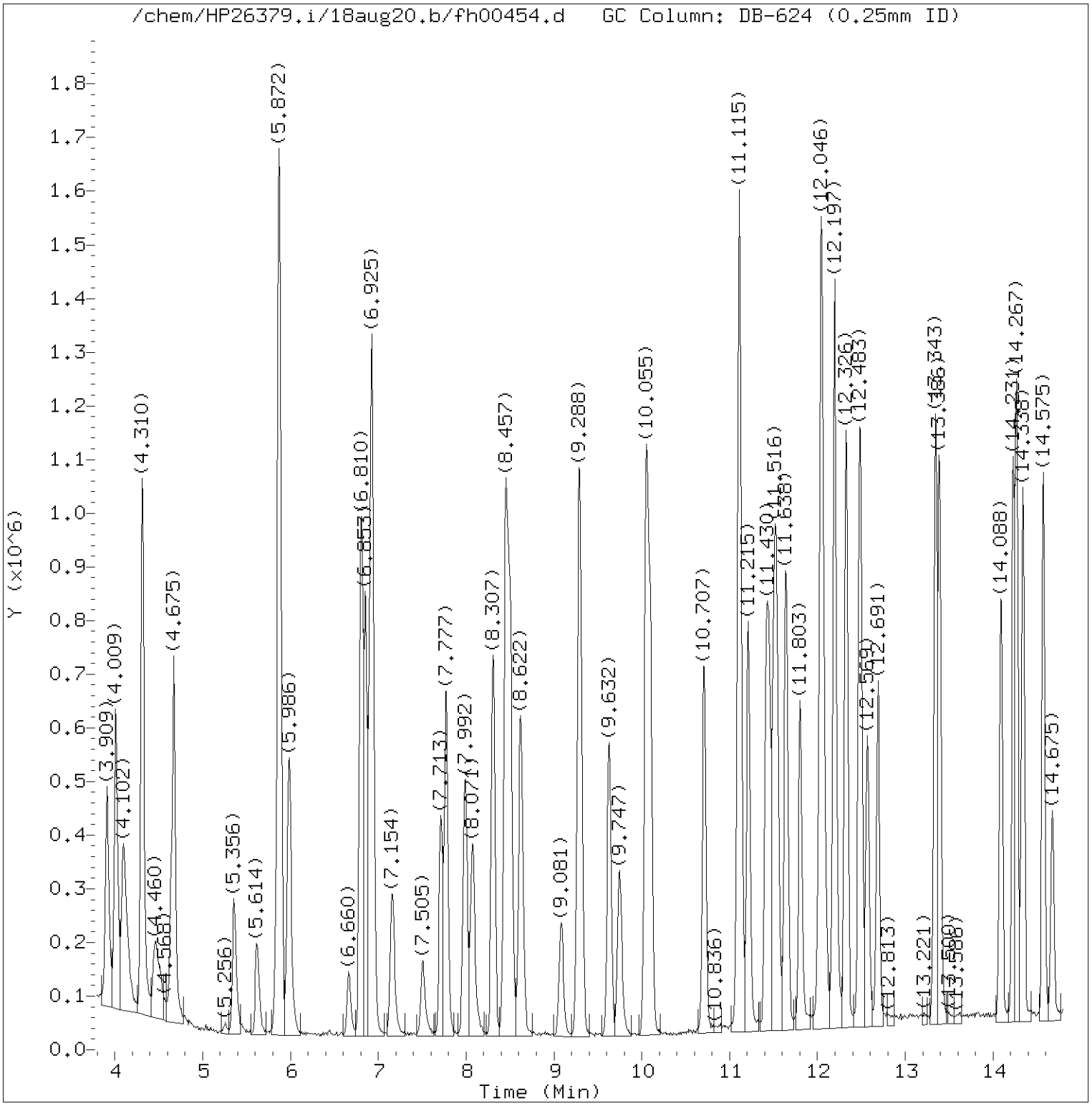
Secondary review performed and digitally signed by Jeffrey B. Smith on 08/21/2018 at 16:32. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

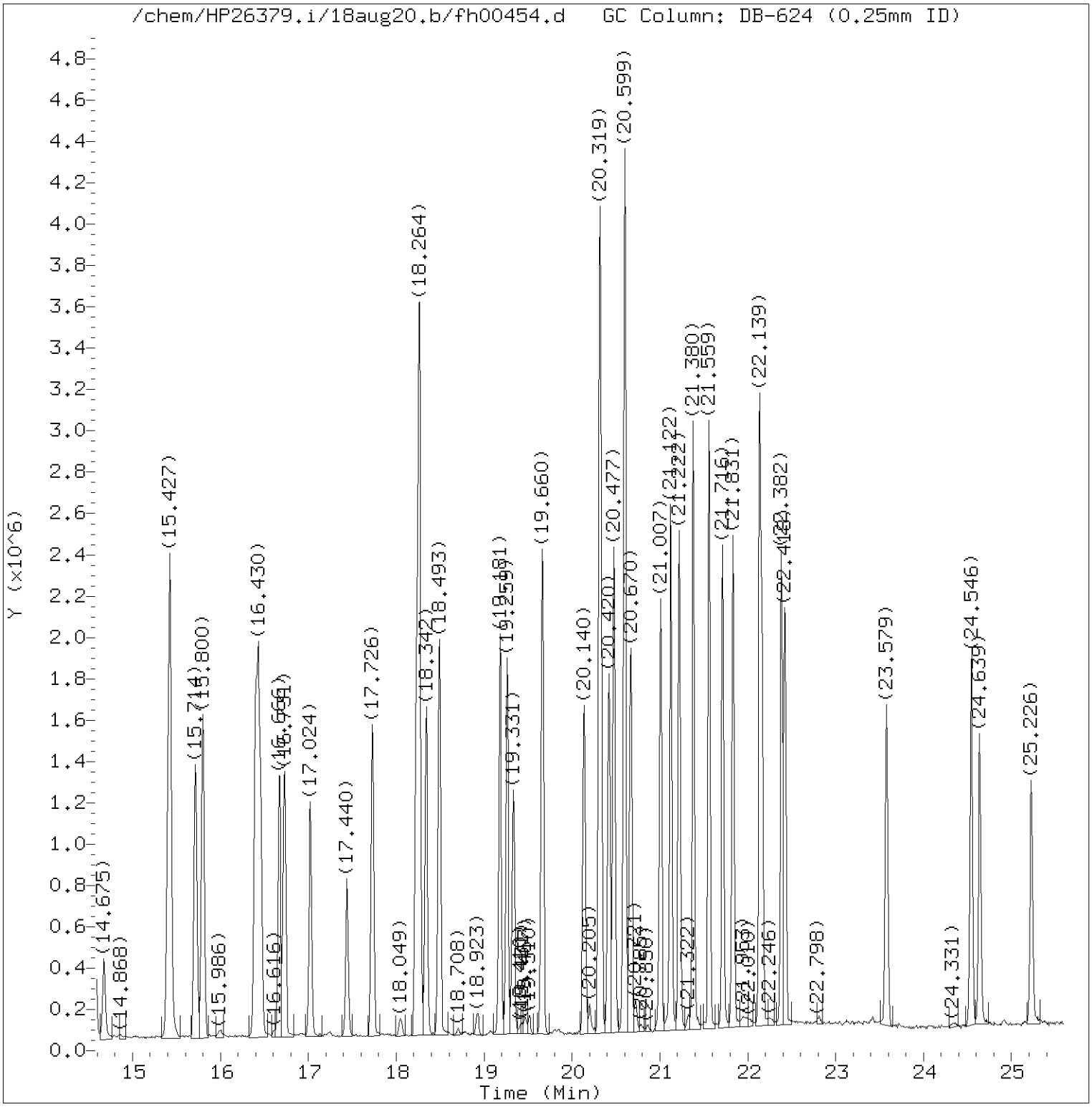
Target Revision 3.5

Data File: /chem/HP26379.i/18aug20.b/fh00454.d Instrument ID: HP26379.i
Injection date and time: 20-AUG-2018 15:38 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 20-AUG-2018 14:03
Date, time and analyst ID of latest file update: 20-Aug-2018 17:26 jeb07445

Sample Name: LCSF26 Lab Sample ID: LCSF26

Digitally signed by Jacob E. Bailey
on 08/20/2018 at 17:27.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug20.b/fh00454.d Instrument ID: HP26379.i
Injection date and time: 20-AUG-2018 15:38 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 20-AUG-2018 14:03
Date, time and analyst ID of latest file update: 20-Aug-2018 17:26 jeb07445

Sample Name: LCSF26 Lab Sample ID: LCSF26

Digitally signed by Jacob E. Bailey
on 08/20/2018 at 17:27.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug20.b/fh00454.d Instrument ID: HP26379.i
Injection date and time: 20-AUG-2018 15:38 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 20-AUG-2018 14:03
Date, time and analyst ID of latest file update: 20-Aug-2018 17:26 jeb07445

Sample Name: LCSF26 Lab Sample ID: LCSF26

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.909	41	401743	10.679
2) Dichlorodifluoromethane	(1)	4.009	85	911106	11.434
3) Chlorodifluoromethane	(1)	4.102	51	948792	11.896
4) Freon 114	(1)	4.310	85	935552	11.269
5) Chloromethane	(1)	4.460	50	460325M	10.097
6) Vinyl Chloride	(1)	4.640	62	382631	12.205
7) 1,3-Butadiene	(1)	4.675	54	363584	11.611
8) Bromomethane	(1)	5.356	94	306282	11.934
9) Chloroethane	(1)	5.621	64	272774	11.920
10) Bromoethene	(1)	5.850	106	300917	11.011
11) Pentane	(1)	5.872	43	878967	9.813
12) Trichlorofluoromethane	(1)	5.879	101	841729	10.321
13) Dichlorofluoromethane	(1)	5.979	67	962073	12.491
14) Ethanol	(1)	6.660	45	182244	8.962
15) Freon123a	(1)	6.810	67	923202	12.730
16) 1,1-Dichloroethene	(1)	6.853	61	848300	11.332
17) Freon 113	(1)	6.917	103	455751	9.821
18) Carbon Disulfide	(1)	6.939	76	1012256	11.169
19) Methyl Iodide	(1)	7.154	142	567530	8.829
20) Acrolein	(1)	7.505	56	230022	10.771
21) Isopropanol	(1)	7.713	45	855041	9.964
22) 3-Chloropropene	(1)	7.777	41	771415	12.286
23) Methylene Chloride	(1)	7.992	84	328767	12.280
24) Acetone	(1)	8.078	43	785578	11.041
25) trans-1,2-Dichloroethene	(1)	8.307	61	776143	11.005
26) Hexane	(1)	8.450	56	542507	9.877
27) Methyl t-Butyl Ether	(1)	8.500	73	1012522	9.165
28) tert-Butyl Alcohol	(1)	8.622	59	1193526	10.614
29) Acetonitrile	(1)	9.081	41	416577	9.538
30) Di-Isopropyl Ether	(1)	9.296	45	1778117	9.607
31) 1,1-Dichloroethane	(1)	9.632	63	939566	10.917
32) Acrylonitrile	(1)	9.747	53	461937	9.797
33) Ethyl Tert-Butyl Ether	(1)	10.055	59	1713834	9.714
34) Vinyl Acetate	(1)	10.105	43	1617510	11.469
35) cis-1,2-Dichloroethene	(1)	10.707	61	723994	10.625
36) 1,2-Dichloroethene (total)	(1)		61	1500137	21.630
37)*Bromochloromethane	(1)	11.101	130	239705	10.000
38) Cyclohexane	(1)	11.115	56	918510	9.226

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

Digitally signed by Jacob E. Bailey
on 08/20/2018 at 17:27.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug20.b/fh00454.d Instrument ID: HP26379.i
Injection date and time: 20-AUG-2018 15:38 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 20-AUG-2018 14:03
Date, time and analyst ID of latest file update: 20-Aug-2018 17:26 jeb07445

Sample Name: LCSF26 Lab Sample ID: LCSF26

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.215	83	781851	10.766
40) Ethyl Acetate	(1)	11.416	43	1183537	9.948
41) Methyl Acrylate	(1)	11.452	55	1039825	10.040
42) Carbon Tetrachloride	(1)	11.509	117	691022	9.639
43) Tetrahydrofuran	(1)	11.545	42	587257	9.929
44) 1,1,1-Trichloroethane	(1)	11.645	97	749890	9.771
45) 2-Butanone	(1)	11.803	43	1087277	10.307
46) Isooctane	(2)	12.046	57	2767367	10.326
47) Heptane	(2)	12.197	71	425208	9.871
48) Benzene	(2)	12.326	78	1175578	10.900
49) Tert-Amyl Methyl Ether	(2)	12.490	73	1080446	10.048
50) 1,2-Dichloroethane	(2)	12.691	62	727163	11.609
51) Trichloroethene	(2)	13.343	130	422523	10.130
52)*1,4-Difluorobenzene	(2)	13.393	114	929620	10.000
53) Dibromomethane	(2)	14.095	174	367139	10.596
54) Ethyl Acrylate	(2)	14.224	55	1336007	9.918
55) 1,2-Dichloropropane	(2)	14.267	63	626461	11.071
56) Bromodichloromethane	(2)	14.338	83	788341	10.355
57) Methyl Methacrylate	(2)	14.575	69	426726	10.022
58) 1,4-Dioxane	(2)	14.675	88	254092	9.710
59) cis-1,3-Dichloropropene	(2)	15.406	75	716722	10.209
60) Octane	(3)	15.427	43	1311846	9.609
61) Toluene	(3)	15.800	91	1297487	10.475
62) 4-Methyl-2-Pentanone	(2)	16.394	43	1343965	10.197
63) Tetrachloroethene	(3)	16.430	166	564516	10.599
64) trans-1,3-Dichloropropene	(3)	16.459	75	625606	10.262
66) Ethyl Methacrylate	(3)	16.666	69	731567	9.977
65) 1,3-Dichloropropene (total)	(3)		75	1342328	20.471
67) 1,1,2-Trichloroethane	(3)	16.731	97	473469	11.081
68) Dibromochloromethane	(3)	17.024	127	538955	10.484
69) 1,2-Dibromoethane	(3)	17.440	107	679095	10.500
70) 2-Hexanone	(3)	17.726	43	1254867	10.254
71)*Chlorobenzene-d5	(3)	18.228	117	869451	10.000
72) Chlorobenzene	(3)	18.257	112	978160	10.272
73) Ethylbenzene	(3)	18.264	91	1717830	9.806
74) 1,1,1,2-Tetrachloroethane	(3)	18.342	131	487627	10.158
75) m/p-Xylene	(3)	18.493	91	1280650	9.375
76) o-Xylene	(3)	19.181	91	1323849	9.531

* = Compound is an internal standard.

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on 08/20/2018 at 17:27.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug20.b/fh00454.d Instrument ID: HP26379.i
Injection date and time: 20-AUG-2018 15:38 Analyst ID: jeb07445

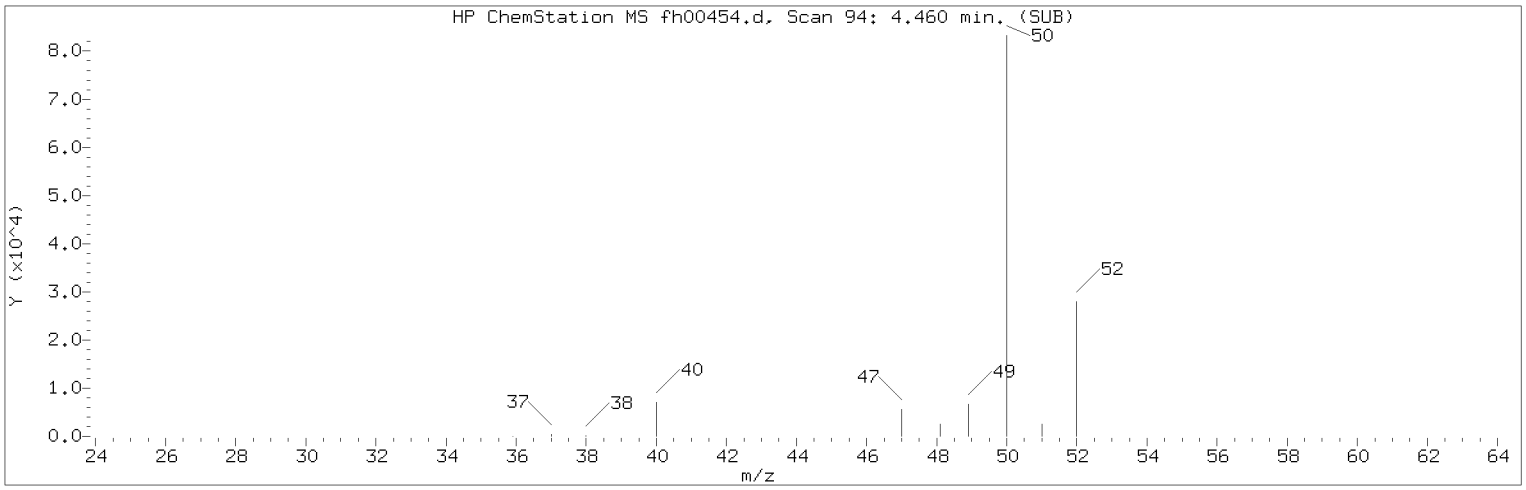
Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 20-AUG-2018 14:03
Date, time and analyst ID of latest file update: 20-Aug-2018 17:26 jeb07445

Sample Name: LCSF26 Lab Sample ID: LCSF26

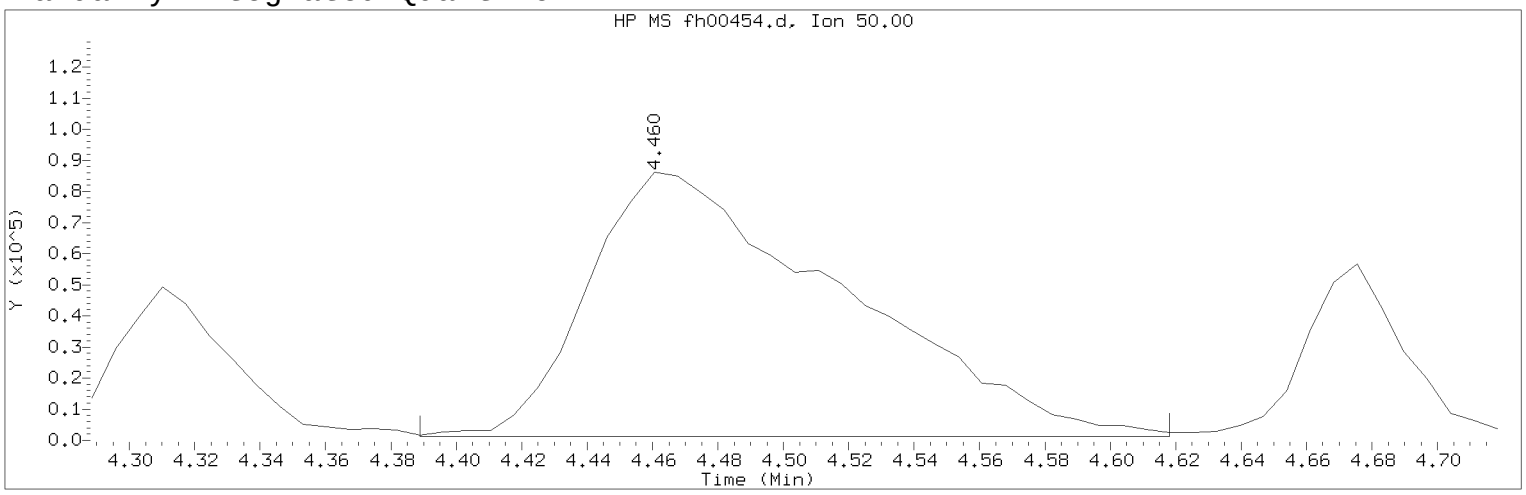
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	2604499	18.906
78) Styrene	(3)	19.259	104	953191	9.780
79) Bromoform	(3)	19.331	173	641380	9.540
80) Cumene	(3)	19.660	105	1743602	9.616
81) n-Propylbenzene	(3)	20.312	120	464318	9.502
82) Bromobenzene	(3)	20.327	156	533321	10.031
83) 1,1,2,2-Tetrachloroethane	(3)	20.420	83	1076832	11.091
84) 4-Ethyltoluene	(3)	20.477	105	1711155	9.320
85) 2-Chlorotoluene	(3)	20.599	126	420081	10.099
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	1452827	9.513
87) 1,2,3-Trichloropropane	(3)	20.670	110	293947	10.314
88) Alpha Methyl Styrene	(3)	21.007	118	678817	9.084
89) tert-Butylbenzene	(3)	21.122	119	1252678	8.955
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	1413275	9.384
91) sec-Butylbenzene	(3)	21.380	105	2080506	9.219
92) p-Isopropyltoluene	(3)	21.559	119	1606396	9.015
93) 1,3-Dichlorobenzene	(3)	21.716	146	875251	9.393
94) 1,4-Dichlorobenzene	(3)	21.831	146	886032	9.066
95) n-Butylbenzene	(3)	22.139	92	1042452	8.640
96) Benzyl Chloride	(3)	22.160	126	243961	8.616
97) Hexachloroethane	(3)	22.382	117	506655	8.995
98) 1,2-Dichlorobenzene	(3)	22.418	146	797576	9.015
99) 1,2-Dibromo-3-chloropropane	(3)	23.579	157	415845	8.809
100) Hexachlorobutadiene	(3)	24.546	225	427902	7.200
101) 1,2,4-Trichlorobenzene	(3)	24.639	180	522616	7.358
102) Naphthalene	(3)	25.226	128	1184559	7.028

Digitally signed by Jacob E. Bailey
on 08/20/2018 at 17:27.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug20.b/fh00454.d Instrument ID: HP26379.i
Injection date and time: 20-AUG-2018 15:38 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 20-AUG-2018 14:03
Date, time and analyst ID of latest file update: 20-Aug-2018 17:26 jeb07445

Sample Name: LCSF26 Lab Sample ID: LCSF26

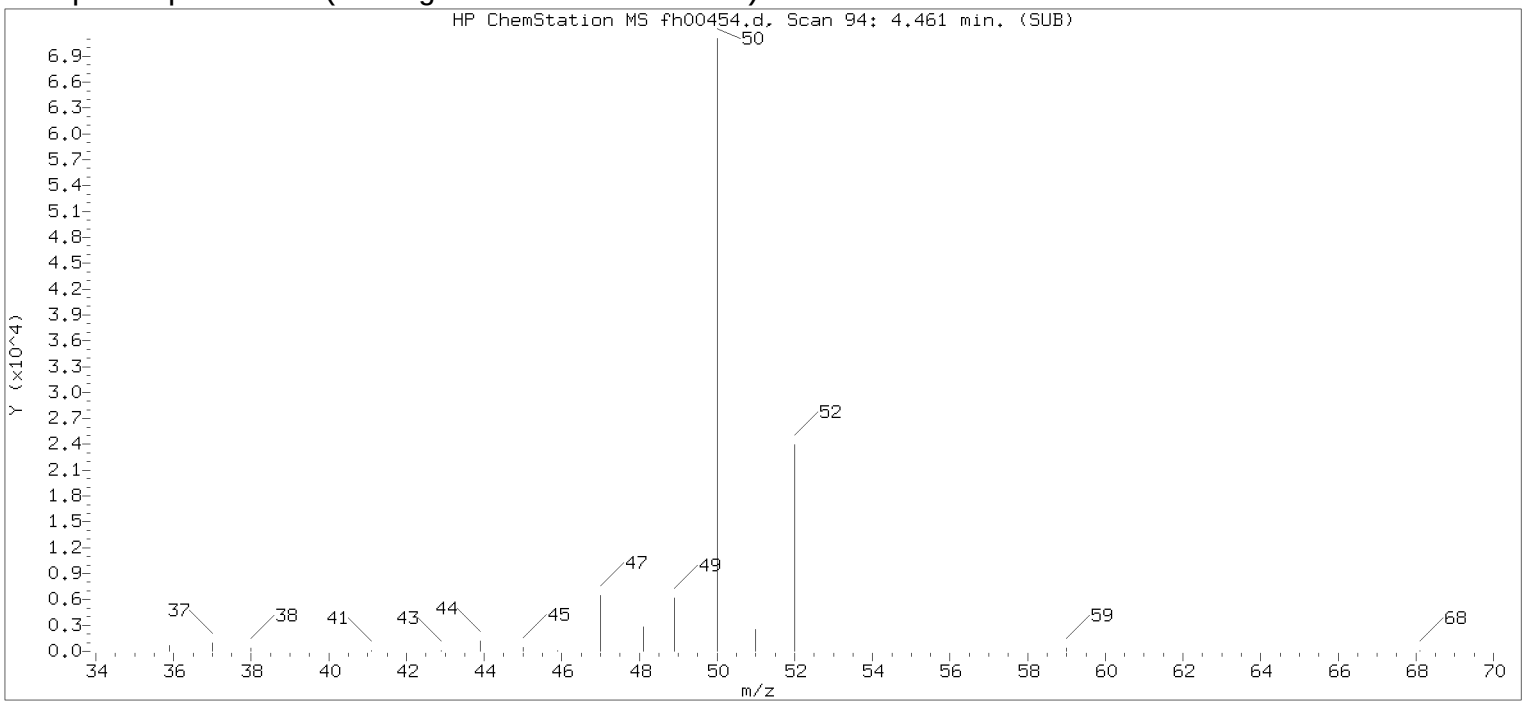
Compound Number : 5
Compound Name : Chloromethane
Scan Number : 94
Retention Time (minutes): 4.460
Quant Ion : 50.00
Area (flag) : 460325M
Concentration (ppb(v)) : 10.0973
Integration start scan : 83 Integration stop scan: 115
Y at integration start : 1307 Y at integration end: 1307

Reason for manual integration: improper integration

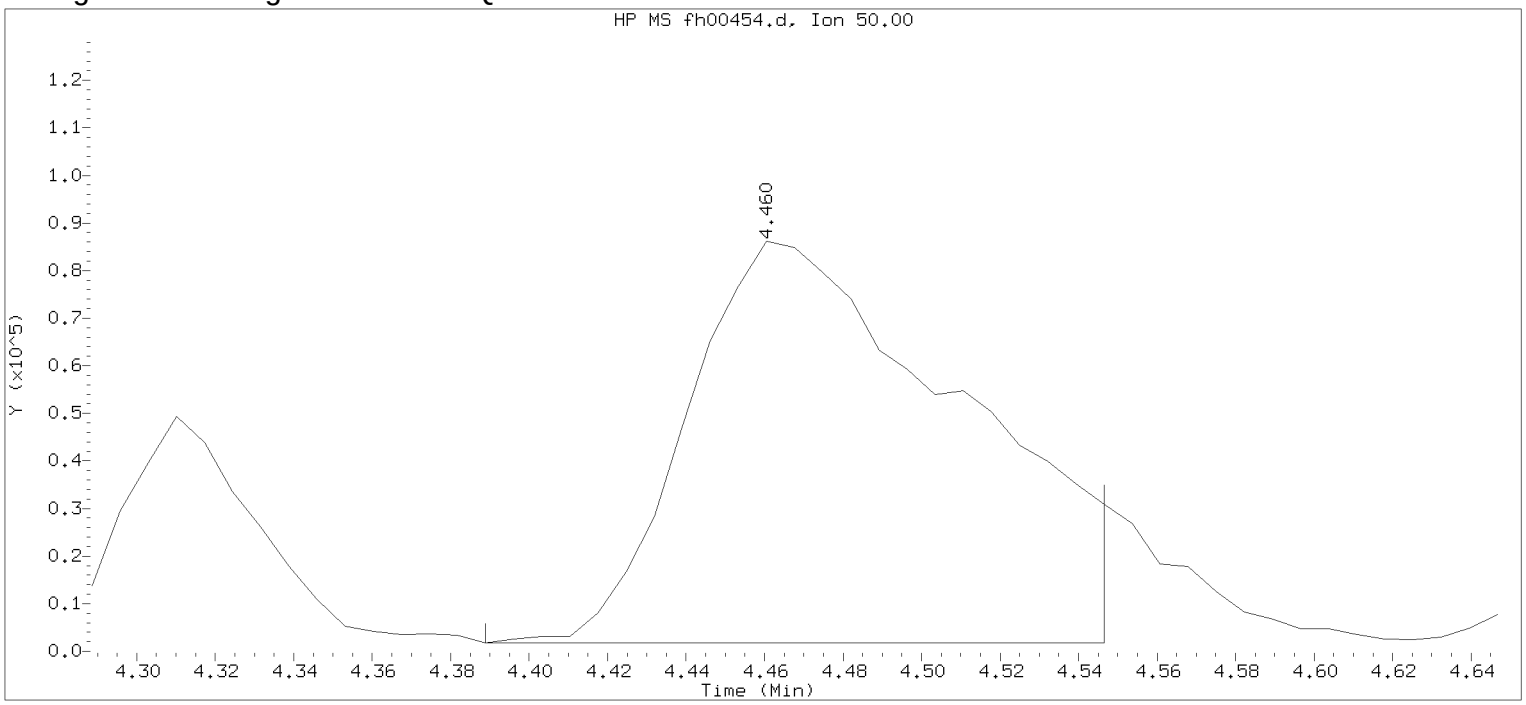
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/20/2018 at 17:27.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/21/2018 at 16:32.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug20.b/fh00454.d Instrument ID: HP26379.i
Injection date and time: 20-AUG-2018 15:38 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 20-AUG-2018 14:03
Date, time and analyst ID of latest file update: 20-Aug-2018 16:07 Unknown

Sample Name: LCSF26 Lab Sample ID: LCSF26

Compound Number : 5
Compound Name : Chloromethane
Scan Number : 94
Retention Time (minutes): 4.460
Quant Ion : 50.00
Area : 410344
Concentration (ppb(v)) : 9.0009
Integration start scan : 83 Integration stop scan: 105
Y at integration start : 1686 Y at integration end: 1686

Digitally signed by Jacob E. Bailey on 08/20/2018 at 17:27.
Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18aug20.b/fh00455.d Injection date and time: **20-AUG-2018 16:08**
Data file Sample Info. Line: LCSDF26;200;F1823230AA;LCSDF26;0;0;LCSD; Instrument ID: **HP26379.i** Batch: **F1823230AA**
Date, time and analyst ID of latest file update: 21-Aug-2018 13:54 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug20.b/fh00452.d**

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 21-AUG-2018 13:12
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug20.b/fh00451.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.108(-0.007)	1022	130	241723 (-8)	10.00		157425 - 367325
52) 1,4-Difluorobenzene	13.400(-0.007)	1342	114	941106 (-8)	10.00		613758 - 1432102
71) Chlorobenzene-d5	18.235(0.000)	2017	117	887767 (-7)	10.00		573809 - 1338885

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)	3.902(0.000)	41	385146	10.153	10.15			0.5	1
2) Dichlorodifluoromethane	(1)	4.002(0.000)	85	915684	11.395	11.40			0.2	1
3) Chlorodifluoromethane	(1)	4.095(-0.000)	51	937233	11.653	11.65			0.2	1
4) Freon 114	(1)	4.303(0.000)	85	917874	10.964	10.96			0.2	1
5) Chloromethane	(1)	4.460(-0.000)	50	459248M	9.990	9.99			0.2	1
6) Vinyl Chloride	(1)	4.640(0.000)	62	366798	11.602	11.60			0.2	1
7) 1,3-Butadiene	(1)	4.668(0.000)	54	330578	10.469	10.47			0.4	2
8) Bromomethane	(1)	5.356(-0.000)	94	298101	11.518	11.52			0.5	1
9) Chloroethane	(1)	5.621(-0.000)	64	273876	11.869	11.87			0.2	1
10) Bromoethene	(1)	5.843(-0.000)	106	294231	10.677	10.68			0.4	2
13) Dichlorofluoromethane	(1)	5.979(-0.000)	67	940180	12.104	12.10			0.2	1
12) Trichlorofluoromethane	(1)	5.879(-0.000)	101	824753	10.029	10.03			0.2	1
11) Pentane	(1)	5.864(0.000)	43	870666	9.639	9.64			0.5	1
14) Ethanol	(1)	6.660(-0.000)	45	192887	9.406	9.41			0.5	2
15) Freon123a	(1)	6.810(-0.000)	67	912534	12.478	12.48			0.2	1
20) Acrolein	(1)	7.505(0.000)	56	221245	10.274	10.27			1	2
16) 1,1-Dichloroethene	(1)	6.853(-0.000)	61	854269	11.316	11.32			0.2	1
17) Freon 113	(1)	6.917(-0.000)	103	453864	9.699	9.70			0.5	2
24) Acetone	(1)	8.078(-0.000)	43	786179	10.957	10.96			0.5	2
19) Methyl Iodide	(1)	7.161(-0.000)	142	592225	9.136	9.14			0.2	1
18) Carbon Disulfide	(1)	6.939(-0.000)	76	996652	10.905	10.91			1	1
21) Isopropanol	(1)	7.712(-0.000)	45	873715	10.096	10.10			0.5	2
29) Acetonitrile	(1)	9.081(0.000)	41	414677	9.415	9.42			0.5	2
22) 3-Chloropropene	(1)	7.770(0.000)	41	786259	12.418	12.42			0.2	1
23) Methylene Chloride	(1)	7.985(-0.000)	84	336283	12.456	12.46			0.2	1
28) tert-Butyl Alcohol	(1)	8.629(-0.000)	59	1209905	10.670	10.67			0.5	1
32) Acrylonitrile	(1)	9.754(-0.000)	53	469673	9.878	9.88			0.5	2
25) trans-1,2-Dichloroethene	(1)	8.307(-0.000)	61	779710	10.963	10.96			0.2	1
27) Methyl t-Butyl Ether	(1)	8.508(-0.000)	73	1024629	9.197	9.20			0.2	1
26) Hexane	(1)	8.457(-0.000)	56	547901	9.892	9.89			0.2	1
31) 1,1-Dichloroethane	(1)	9.632(-0.000)	63	944441	10.882	10.88			0.2	1
34) Vinyl Acetate	(1)	10.112(-0.000)	43	1657286	11.653	11.65			1	1
30) Di-Isopropyl Ether	(1)	9.296(-0.000)	45	1792160	9.602	9.60			0.2	1
33) Ethyl Tert-Butyl Ether	(1)	10.062(-0.000)	59	1709593	9.609	9.61			0.2	1
35) cis-1,2-Dichloroethene	(1)	10.714(0.000)	61	738184	10.743	10.74			0.2	1
36) 1,2-Dichloroethene (total)	(1)		61	1517894	21.706	21.71			0.2	1
45) 2-Butanone	(1)	11.810(0.000)	43	1104572	10.384	10.38			0.5	2
40) Ethyl Acetate	(1)	11.423(0.000)	43	1168400	9.739	9.74			0.5	1
41) Methyl Acrylate	(1)	11.459(0.000)	55	1024316	9.807	9.81			0.2	1
43) Tetrahydrofuran	(1)	11.552(0.000)	42	602324	10.098	10.10			0.5	1
39) Chloroform	(1)	11.222(0.000)	83	779530	10.644	10.64			0.2	1
44) 1,1,1-Trichloroethane	(1)	11.652(0.000)	97	718656	9.286	9.29			0.2	1
38) Cyclohexane	(1)	11.129(0.000)	56	922995	9.194	9.19			0.2	1

M = Compound was manually integrated.

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18aug20.b/fh00455.d Injection date and time: **20-AUG-2018 16:08**
Data file Sample Info. Line: LCSDF26;200;F1823230AA;LCSDF26;0;0;LCSD; Instrument ID: **HP26379.i** Batch: **F1823230AA**
Date, time and analyst ID of latest file update: 21-Aug-2018 13:54 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug20.b/fh00452.d**

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 21-AUG-2018 13:12
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug20.b/fh00451.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
42) Carbon Tetrachloride	(1)	11.516(0.000)	117	678940	9.392	9.39			0.2	1
48) Benzene	(2)	12.333(-0.000)	78	1191339	10.911	10.91			0.2	1
50) 1,2-Dichloroethane	(2)	12.698(-0.000)	62	740231	11.673	11.67			0.2	1
46) Isooctane	(2)	12.053(-0.000)	57	2760288	10.174	10.17			0.2	1
49) Tert-Amyl Methyl Ether	(2)	12.490(0.000)	73	1086838	9.984	9.98			0.2	1
47) Heptane	(2)	12.204(-0.000)	71	422284	9.683	9.68			0.5	1
51) Trichloroethene	(2)	13.350(0.000)	130	421881	9.991	9.99			0.2	1
54) Ethyl Acrylate	(2)	14.238(0.000)	55	1324223	9.711	9.71			0.2	1
55) 1,2-Dichloropropane	(2)	14.274(0.000)	63	619229	10.809	10.81			0.2	1
53) Dibromomethane	(2)	14.102(0.000)	174	375456	10.704	10.70			0.2	1
58) 1,4-Dioxane	(2)	14.682(0.000)	88	275067	10.383	10.38			0.5	1
57) Methyl Methacrylate	(2)	14.582(0.000)	69	428066	9.931	9.93			0.2	1
56) Bromodichloromethane	(2)	14.345(0.000)	83	802205	10.408	10.41			0.2	1
59) cis-1,3-Dichloropropene	(2)	15.413(0.000)	75	711467	10.011	10.01			0.2	1
62) 4-Methyl-2-Pentanone	(2)	16.408(0.000)	43	1330682	9.973	9.97			0.5	2
61) Toluene	(3)	15.807(-0.000)	91	1319499	10.433	10.43			0.2	1
60) Octane	(3)	15.434(-0.000)	43	1355112	9.721	9.72			0.2	1
64) trans-1,3-Dichloropropene	(3)	16.466(-0.000)	75	624898	10.039	10.04			0.2	1
65) 1,3-Dichloropropene (total)	(3)		75	1336365	20.050	20.05			0.2	1
66) Ethyl Methacrylate	(3)	16.673(-0.000)	69	724481	9.676	9.68			0.2	1
67) 1,1,2-Trichloroethane	(3)	16.738(-0.000)	97	489395	11.217	11.22			0.2	1
63) Tetrachloroethene	(3)	16.437(-0.000)	166	577324	10.616	10.62			0.2	1
70) 2-Hexanone	(3)	17.734(-0.000)	43	1259534	10.080	10.08			0.5	2
68) Dibromochloromethane	(3)	17.032(-0.000)	127	539297	10.274	10.27			0.2	1
69) 1,2-Dibromoethane	(3)	17.447(-0.000)	107	690452	10.455	10.46			0.2	1
72) Chlorobenzene	(3)	18.264(-0.000)	112	1004142	10.327	10.33			0.2	1
74) 1,1,1,2-Tetrachloroethane	(3)	18.350(-0.000)	131	491123	10.020	10.02			0.2	1
73) Ethylbenzene	(3)	18.271(-0.000)	91	1798648	10.055	10.06			0.2	1
75) m/p-Xylene	(3)	18.500(-0.000)	91	1361017	9.758	9.76			0.2	1
76) o-Xylene	(3)	19.188(0.000)	91	1349761	9.517	9.52			0.2	1
77) Xylene (total)	(3)		91	2710778	19.275	19.27			0.2	1
78) Styrene	(3)	19.266(-0.000)	104	958813	9.635	9.63			0.2	1
79) Bromoform	(3)	19.338(-0.000)	173	636416	9.270	9.27			0.2	1
80) Cumene	(3)	19.668(-0.000)	105	1839955	9.938	9.94			0.2	1
82) Bromobenzene	(3)	20.334(0.000)	156	548517	10.104	10.10			0.2	1
83) 1,1,2,2-Tetrachloroethane	(3)	20.427(-0.000)	83	1109096	11.188	11.19			0.2	1
87) 1,2,3-Trichloropropane	(3)	20.670(0.000)	110	310723	10.678	10.68			0.2	1
81) n-Propylbenzene	(3)	20.319(-0.000)	120	492387	9.868	9.87			0.5	1
85) 2-Chlorotoluene	(3)	20.599(0.000)	126	442589	10.421	10.42			0.2	1
84) 4-Ethyltoluene	(3)	20.484(-0.000)	105	1832608	9.775	9.78			0.2	1
86) 1,3,5-Trimethylbenzene	(3)	20.606(-0.000)	105	1534794	9.843	9.84			0.2	1
88) Alpha Methyl Styrene	(3)	21.014(-0.000)	118	680873	8.924	8.92			0.2	1
89) tert-Butylbenzene	(3)	21.129(0.000)	119	1352209	9.467	9.47			0.5	1
90) 1,2,4-Trimethylbenzene	(3)	21.222(0.000)	105	1524956	9.917	9.92			0.2	1
91) sec-Butylbenzene	(3)	21.387(-0.000)	105	2228708	9.672	9.67			0.2	1
93) 1,3-Dichlorobenzene	(3)	21.716(0.000)	146	931543	9.791	9.79			0.2	1
94) 1,4-Dichlorobenzene	(3)	21.838(-0.000)	146	947353	9.493	9.49			0.2	1
92) p-Isopropyltoluene	(3)	21.566(-0.000)	119	1698301	9.334	9.33			0.2	1
96) Benzyl Chloride	(3)	22.168(-0.000)	126	248203	8.585	8.59			0.5	1
98) 1,2-Dichlorobenzene	(3)	22.425(-0.000)	146	884505	9.791	9.79			0.2	1
95) n-Butylbenzene	(3)	22.139(-0.000)	92	1120868	9.098	9.10			0.2	1
97) Hexachloroethane	(3)	22.390(-0.000)	117	517267	8.994	8.99			0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)	23.579(-0.000)	157	439481	9.117	9.12			0.2	1
101) 1,2,4-Trichlorobenzene	(3)	24.646(0.000)	180	565807	7.802	7.80			0.5	2

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Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18aug20.b/fh00455.d Injection date and time: **20-AUG-2018 16:08**
Data file Sample Info. Line: LCSDF26;200;F1823230AA;LCSDF26;0;0;LCSD; Instrument ID: **HP26379.i** Batch: **F1823230AA**
Date, time and analyst ID of latest file update: 21-Aug-2018 13:54 jeb07445

Blank Data file reference: **/chem/HP26379.i/18aug20.b/fh00452.d**

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 21-AUG-2018 13:12
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug20.b/fh00451.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
100) Hexachlorobutadiene	(3)	24.546(0.000)	225	464348	7.653	7.65			0.4	2
102) Naphthalene	(3)	25.226(-0.000)	128	1292052	7.507	7.51			0.4	1

Total number of targets = 99

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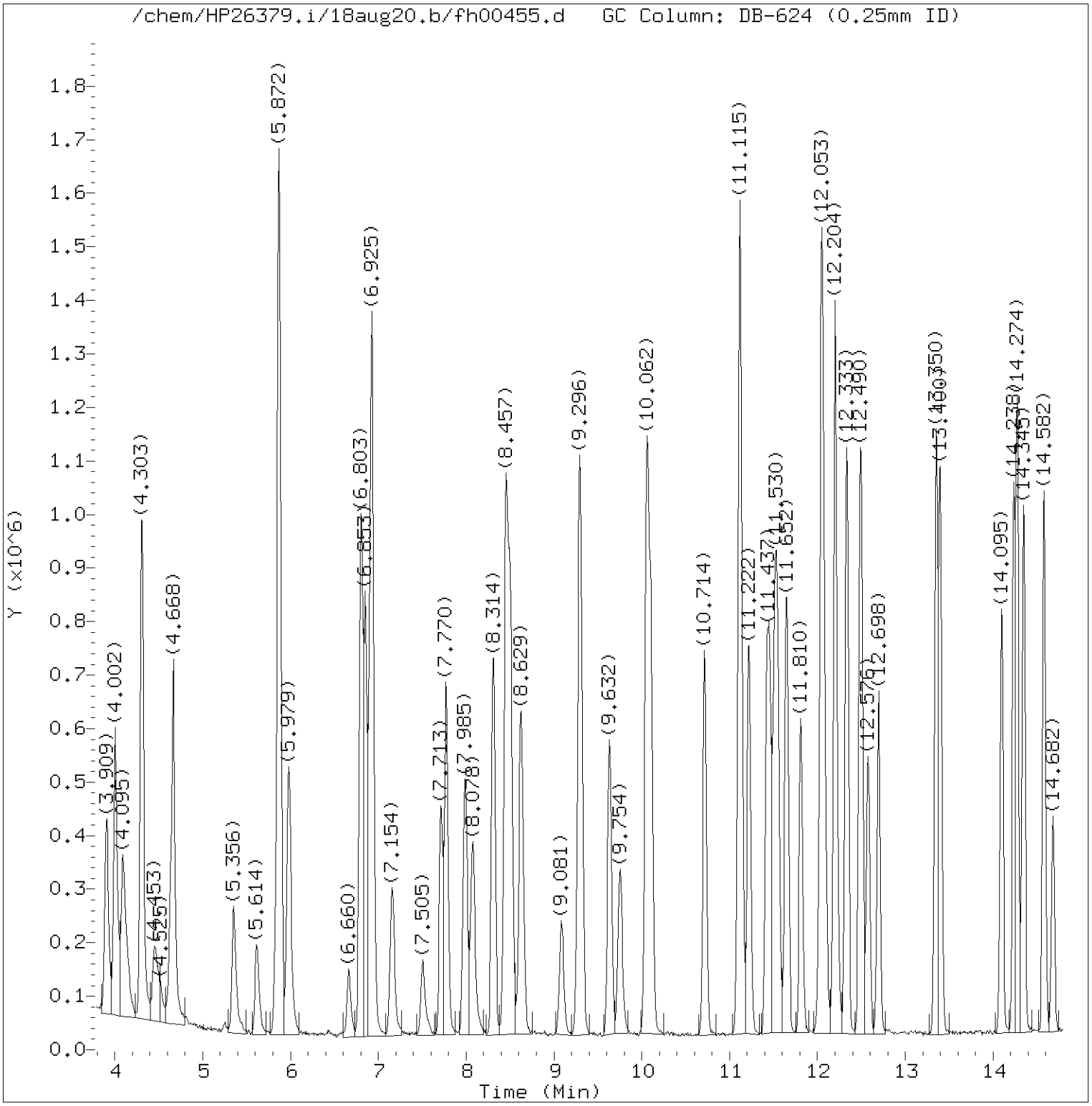
Secondary review performed and digitally signed by Jeffrey B. Smith on 08/21/2018 at 16:32. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

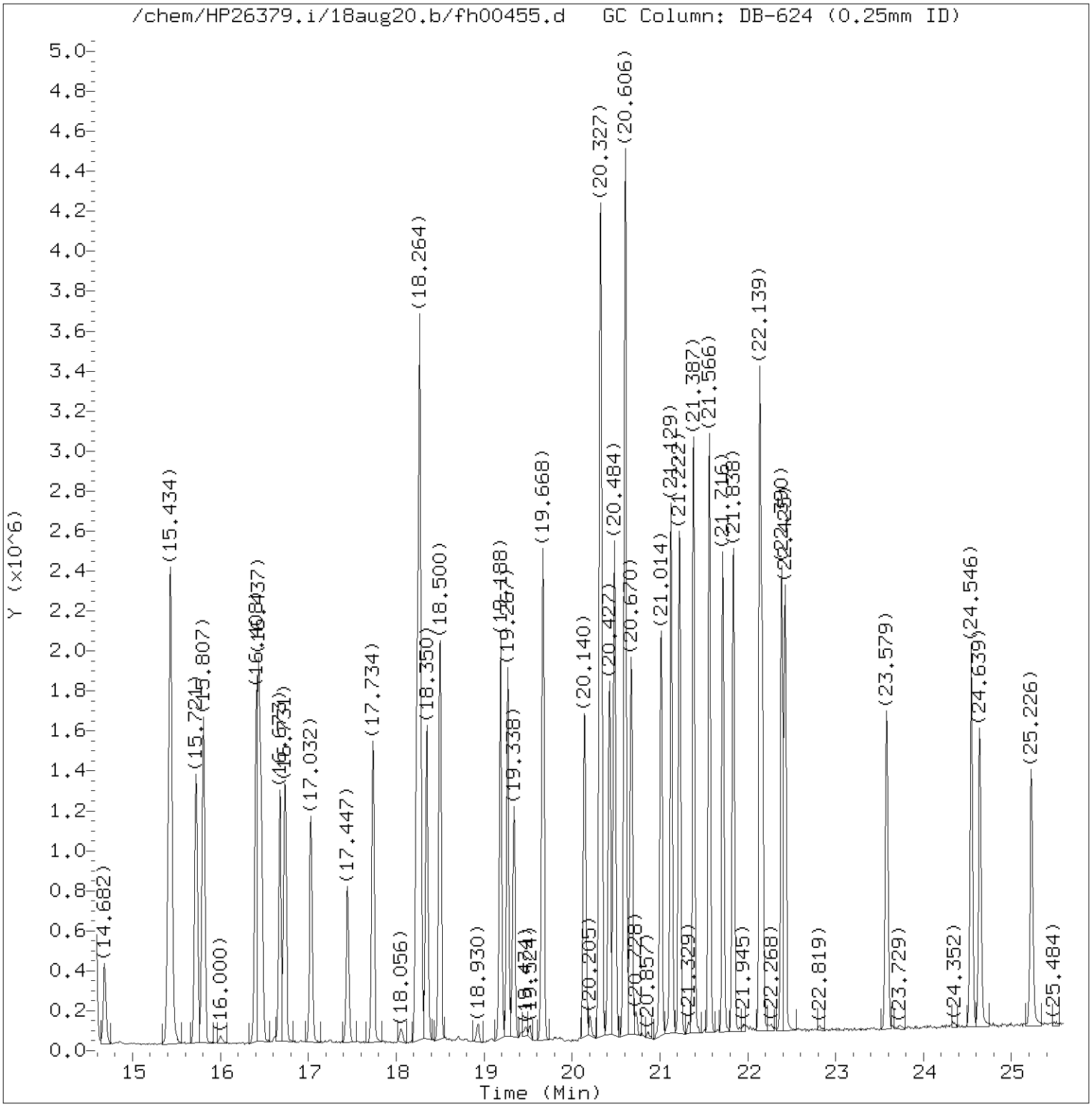
Target Revision 3.5

Data File: /chem/HP26379.i/18aug20.b/fh00455.d Instrument ID: HP26379.i
Injection date and time: 20-AUG-2018 16:08 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 21-AUG-2018 13:12
Date, time and analyst ID of latest file update: 21-Aug-2018 13:54 jeb07445

Sample Name: LCSDF26 Lab Sample ID: LCSDF26

Digitally signed by Jacob E. Bailey
on 08/21/2018 at 13:54.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug20.b/fh00455.d Instrument ID: HP26379.i
Injection date and time: 20-AUG-2018 16:08 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 21-AUG-2018 13:12
Date, time and analyst ID of latest file update: 21-Aug-2018 13:54 jeb07445

Sample Name: LCSDF26 Lab Sample ID: LCSDF26

Digitally signed by Jacob E. Bailey
on 08/21/2018 at 13:54.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug20.b/fh00455.d Instrument ID: HP26379.i
Injection date and time: 20-AUG-2018 16:08 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 21-AUG-2018 13:12
Date, time and analyst ID of latest file update: 21-Aug-2018 13:54 jeb07445

Sample Name: LCSDF26 Lab Sample ID: LCSDF26

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	3.902	41	385146	10.153
2) Dichlorodifluoromethane	(1)	4.002	85	915684	11.395
3) Chlorodifluoromethane	(1)	4.095	51	937233	11.653
4) Freon 114	(1)	4.303	85	917874	10.964
5) Chloromethane	(1)	4.460	50	459248M	9.990
6) Vinyl Chloride	(1)	4.640	62	366798	11.602
7) 1,3-Butadiene	(1)	4.668	54	330578	10.469
8) Bromomethane	(1)	5.356	94	298101	11.518
9) Chloroethane	(1)	5.621	64	273876	11.869
10) Bromoethene	(1)	5.843	106	294231	10.677
11) Pentane	(1)	5.864	43	870666	9.639
12) Trichlorofluoromethane	(1)	5.879	101	824753	10.029
13) Dichlorofluoromethane	(1)	5.979	67	940180	12.104
14) Ethanol	(1)	6.660	45	192887	9.406
15) Freon123a	(1)	6.810	67	912534	12.478
16) 1,1-Dichloroethene	(1)	6.853	61	854269	11.316
17) Freon 113	(1)	6.917	103	453864	9.699
18) Carbon Disulfide	(1)	6.939	76	996652	10.905
19) Methyl Iodide	(1)	7.161	142	592225	9.136
20) Acrolein	(1)	7.505	56	221245	10.274
21) Isopropanol	(1)	7.713	45	873715	10.096
22) 3-Chloropropene	(1)	7.770	41	786259	12.418
23) Methylene Chloride	(1)	7.985	84	336283	12.456
24) Acetone	(1)	8.078	43	786179	10.957
25) trans-1,2-Dichloroethene	(1)	8.307	61	779710	10.963
26) Hexane	(1)	8.457	56	547901	9.892
27) Methyl t-Butyl Ether	(1)	8.508	73	1024629	9.197
28) tert-Butyl Alcohol	(1)	8.629	59	1209905	10.670
29) Acetonitrile	(1)	9.081	41	414677	9.415
30) Di-Isopropyl Ether	(1)	9.296	45	1792160	9.602
31) 1,1-Dichloroethane	(1)	9.632	63	944441	10.882
32) Acrylonitrile	(1)	9.754	53	469673	9.878
33) Ethyl Tert-Butyl Ether	(1)	10.062	59	1709593	9.609
34) Vinyl Acetate	(1)	10.112	43	1657286	11.653
35) cis-1,2-Dichloroethene	(1)	10.714	61	738184	10.743
36) 1,2-Dichloroethene (total)	(1)		61	1517894	21.706
37)*Bromochloromethane	(1)	11.108	130	241723	10.000
38) Cyclohexane	(1)	11.129	56	922995	9.194

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

Digitally signed by Jacob E. Bailey
on 08/21/2018 at 13:54.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug20.b/fh00455.d Instrument ID: HP26379.i
Injection date and time: 20-AUG-2018 16:08 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 21-AUG-2018 13:12
Date, time and analyst ID of latest file update: 21-Aug-2018 13:54 jeb07445

Sample Name: LCSDF26 Lab Sample ID: LCSDF26

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Chloroform	(1)	11.222	83	779530	10.644
40) Ethyl Acetate	(1)	11.423	43	1168400	9.739
41) Methyl Acrylate	(1)	11.459	55	1024316	9.807
42) Carbon Tetrachloride	(1)	11.516	117	678940	9.392
43) Tetrahydrofuran	(1)	11.552	42	602324	10.098
44) 1,1,1-Trichloroethane	(1)	11.652	97	718656	9.286
45) 2-Butanone	(1)	11.810	43	1104572	10.384
46) Isooctane	(2)	12.053	57	2760288	10.174
47) Heptane	(2)	12.204	71	422284	9.683
48) Benzene	(2)	12.333	78	1191339	10.911
49) Tert-Amyl Methyl Ether	(2)	12.490	73	1086838	9.984
50) 1,2-Dichloroethane	(2)	12.698	62	740231	11.673
51) Trichloroethene	(2)	13.350	130	421881	9.991
52)*1,4-Difluorobenzene	(2)	13.400	114	941106	10.000
53) Dibromomethane	(2)	14.102	174	375456	10.704
54) Ethyl Acrylate	(2)	14.238	55	1324223	9.711
55) 1,2-Dichloropropane	(2)	14.274	63	619229	10.809
56) Bromodichloromethane	(2)	14.345	83	802205	10.408
57) Methyl Methacrylate	(2)	14.582	69	428066	9.931
58) 1,4-Dioxane	(2)	14.682	88	275067	10.383
59) cis-1,3-Dichloropropene	(2)	15.413	75	711467	10.011
60) Octane	(3)	15.434	43	1355112	9.721
61) Toluene	(3)	15.807	91	1319499	10.433
62) 4-Methyl-2-Pentanone	(2)	16.408	43	1330682	9.973
63) Tetrachloroethene	(3)	16.437	166	577324	10.616
64) trans-1,3-Dichloropropene	(3)	16.466	75	624898	10.039
65) 1,3-Dichloropropene (total)	(3)		75	1336365	20.050
66) Ethyl Methacrylate	(3)	16.673	69	724481	9.676
67) 1,1,2-Trichloroethane	(3)	16.738	97	489395	11.217
68) Dibromochloromethane	(3)	17.032	127	539297	10.274
69) 1,2-Dibromoethane	(3)	17.447	107	690452	10.455
70) 2-Hexanone	(3)	17.734	43	1259534	10.080
71)*Chlorobenzene-d5	(3)	18.235	117	887767	10.000
72) Chlorobenzene	(3)	18.264	112	1004142	10.327
73) Ethylbenzene	(3)	18.271	91	1798648	10.055
74) 1,1,1,2-Tetrachloroethane	(3)	18.350	131	491123	10.020
75) m/p-Xylene	(3)	18.500	91	1361017	9.758
76) o-Xylene	(3)	19.188	91	1349761	9.517

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 08/21/2018 at 13:54.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug20.b/fh00455.d Instrument ID: HP26379.i
Injection date and time: 20-AUG-2018 16:08 Analyst ID: jeb07445

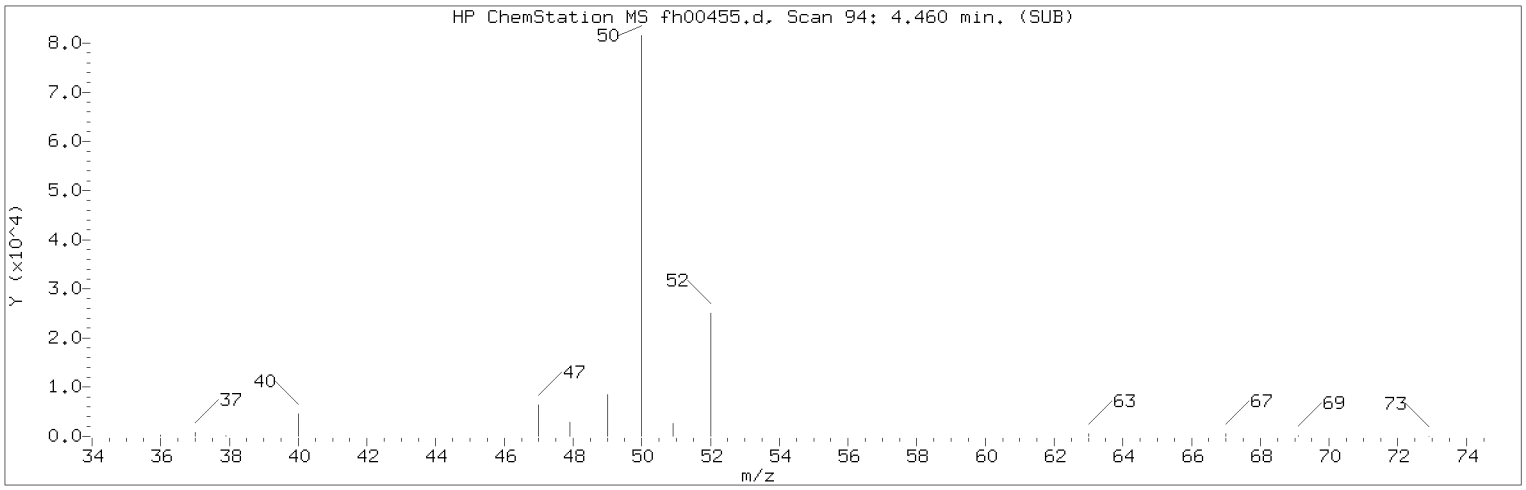
Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 21-AUG-2018 13:12
Date, time and analyst ID of latest file update: 21-Aug-2018 13:54 jeb07445

Sample Name: LCSDF26 Lab Sample ID: LCSDF26

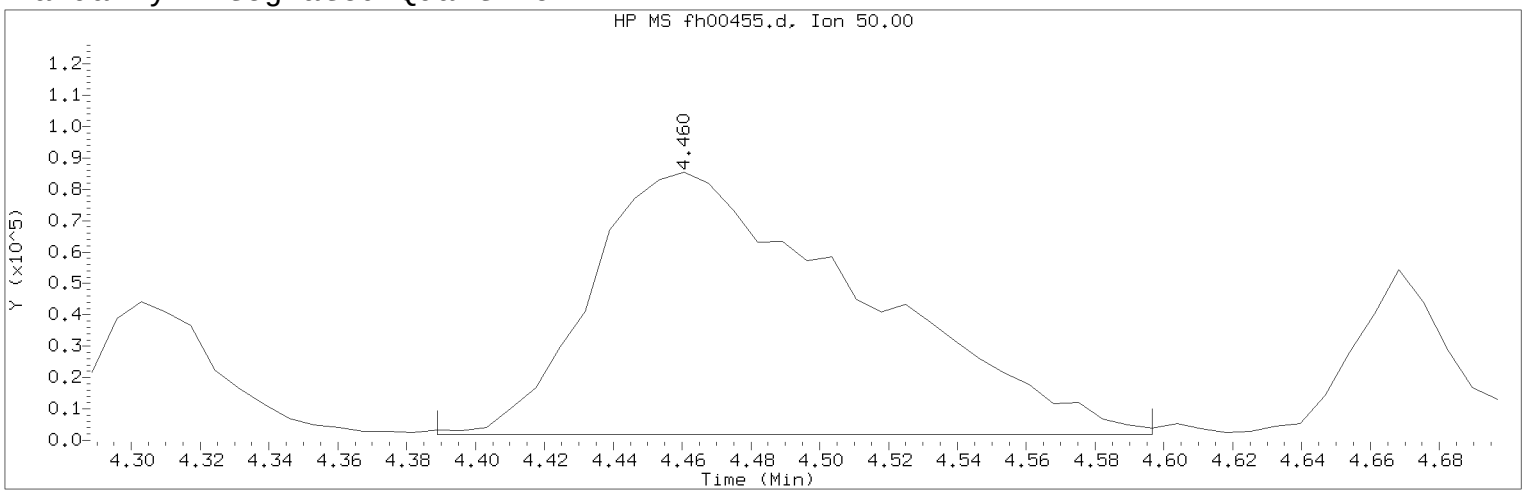
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
77) Xylene (total)	(3)		91	2710778	19.275
78) Styrene	(3)	19.267	104	958813	9.635
79) Bromoform	(3)	19.338	173	636416	9.270
80) Cumene	(3)	19.668	105	1839955	9.938
81) n-Propylbenzene	(3)	20.319	120	492387	9.868
82) Bromobenzene	(3)	20.334	156	548517	10.104
83) 1,1,2,2-Tetrachloroethane	(3)	20.427	83	1109096	11.188
84) 4-Ethyltoluene	(3)	20.484	105	1832608	9.775
85) 2-Chlorotoluene	(3)	20.599	126	442589	10.421
86) 1,3,5-Trimethylbenzene	(3)	20.606	105	1534794	9.843
87) 1,2,3-Trichloropropane	(3)	20.670	110	310723	10.678
88) Alpha Methyl Styrene	(3)	21.014	118	680873	8.924
89) tert-Butylbenzene	(3)	21.129	119	1352209	9.467
90) 1,2,4-Trimethylbenzene	(3)	21.222	105	1524956	9.917
91) sec-Butylbenzene	(3)	21.387	105	2228708	9.672
92) p-Isopropyltoluene	(3)	21.566	119	1698301	9.334
93) 1,3-Dichlorobenzene	(3)	21.716	146	931543	9.791
94) 1,4-Dichlorobenzene	(3)	21.838	146	947353	9.493
95) n-Butylbenzene	(3)	22.139	92	1120868	9.098
96) Benzyl Chloride	(3)	22.168	126	248203	8.585
97) Hexachloroethane	(3)	22.390	117	517267	8.994
98) 1,2-Dichlorobenzene	(3)	22.425	146	884505	9.791
99) 1,2-Dibromo-3-chloropropane	(3)	23.579	157	439481	9.117
100) Hexachlorobutadiene	(3)	24.546	225	464348	7.653
101) 1,2,4-Trichlorobenzene	(3)	24.646	180	565807	7.802
102) Naphthalene	(3)	25.226	128	1292052	7.507

Digitally signed by Jacob E. Bailey
on 08/21/2018 at 13:54.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP26379.i/18aug20.b/fh00455.d Instrument ID: HP26379.i
Injection date and time: 20-AUG-2018 16:08 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 21-AUG-2018 13:12
Date, time and analyst ID of latest file update: 21-Aug-2018 13:54 jeb07445

Sample Name: LCSDF26 Lab Sample ID: LCSDF26

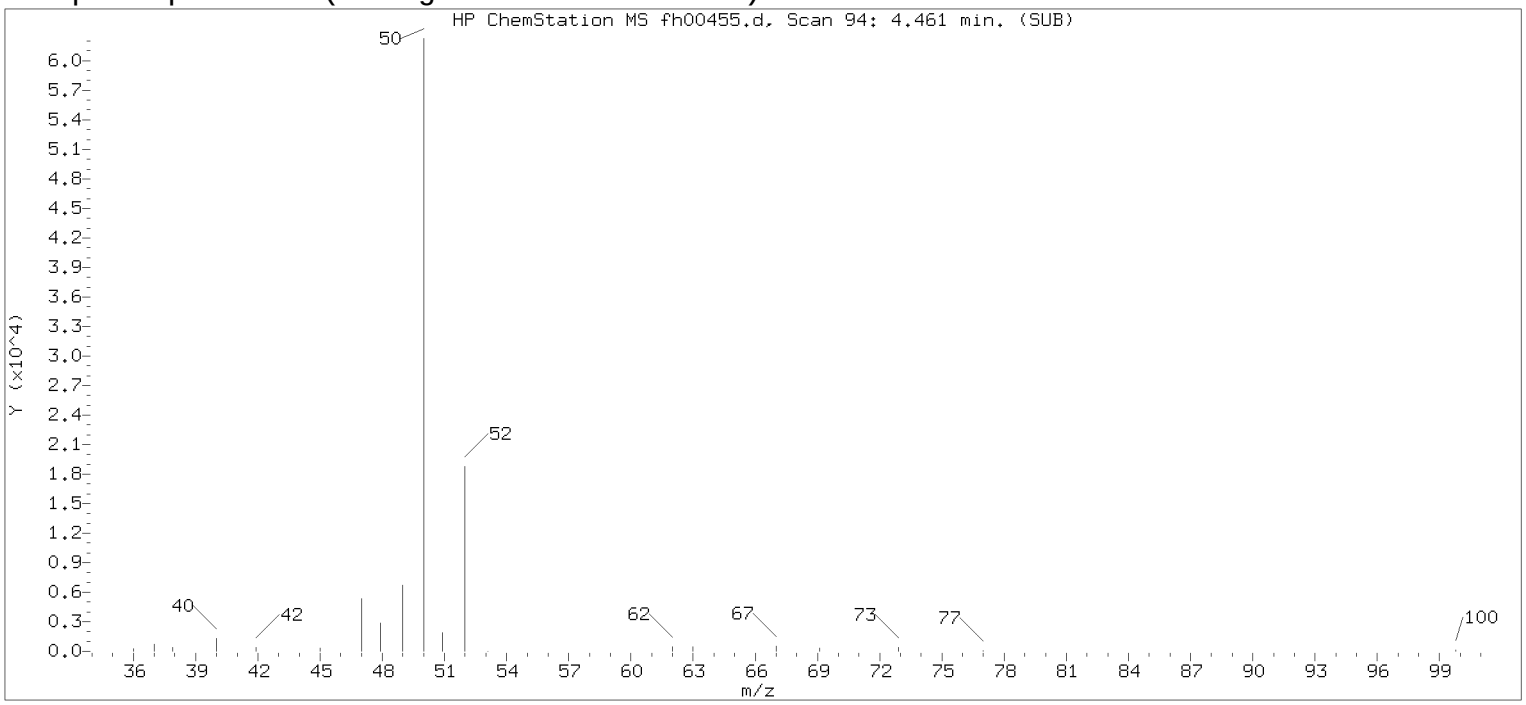
Compound Number : 5
Compound Name : Chloromethane
Scan Number : 94
Retention Time (minutes): 4.460
Quant Ion : 50.00
Area (flag) : 459248M
Concentration (ppb(v)) : 9.9896
Integration start scan : 83 Integration stop scan: 112
Y at integration start : 1768 Y at integration end: 1768

Reason for manual integration: improper integration

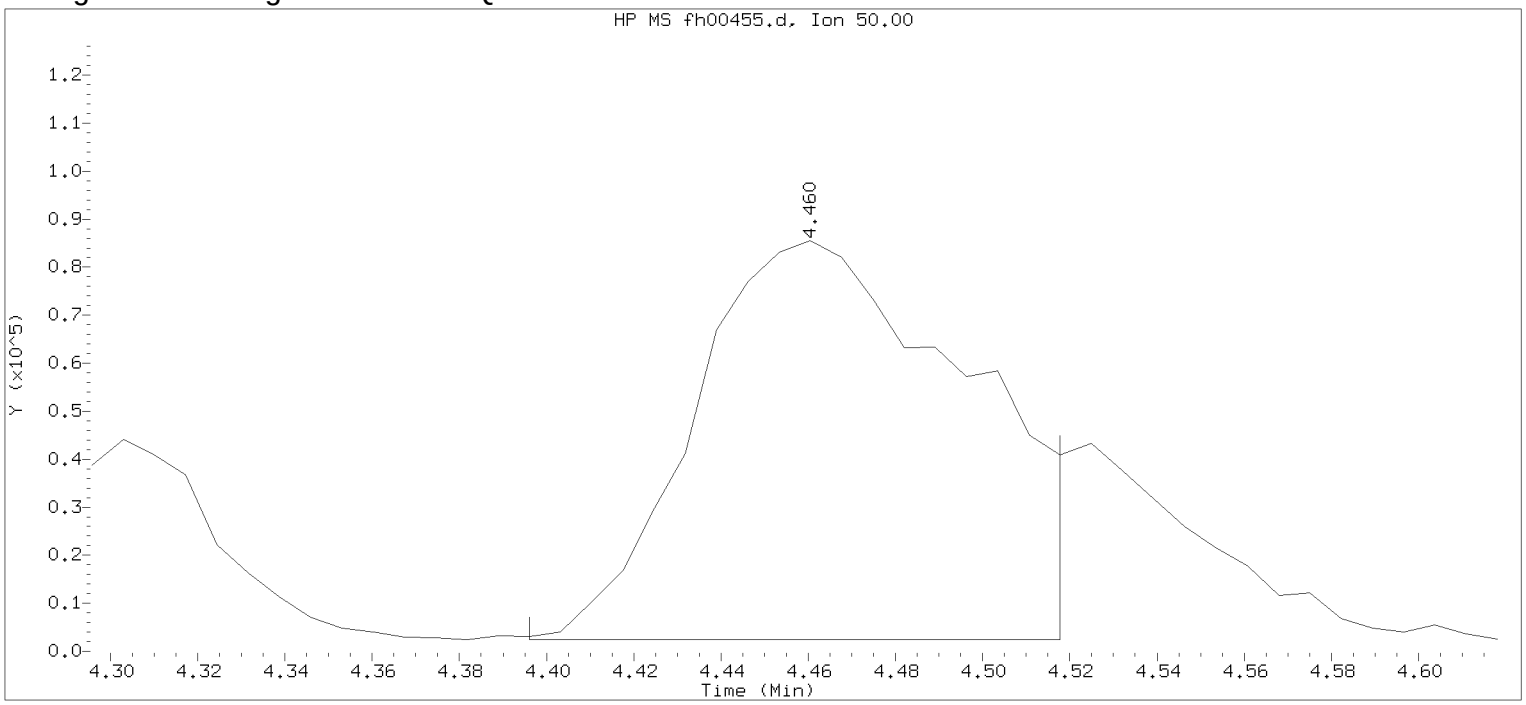
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 08/21/2018 at 13:54.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/21/2018 at 16:32.
PARALLAX ID: jbs01304

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP26379.i/18aug20.b/fh00455.d Instrument ID: HP26379.i
Injection date and time: 20-AUG-2018 16:08 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 20-AUG-2018 14:03
Date, time and analyst ID of latest file update: 20-Aug-2018 16:38 Unknown

Sample Name: LCSDF26 Lab Sample ID: LCSDF26

Compound Number : 5
Compound Name : Chloromethane
Scan Number : 94
Retention Time (minutes): 4.460
Quant Ion : 50.00
Area : 360267
Concentration (ppb(v)) : 7.8365
Integration start scan : 84 Integration stop scan: 101
Y at integration start : 2421 Y at integration end: 2421

Digitally signed by Jacob E. Bailey on 08/21/2018 at 13:54.
Target 3.5 esignature user ID: jeb07445

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

Data file: /chem/HP26379.i/18aug20.b/fh00471.d Injection date and time: **21-AUG-2018 02:09**
Data file Sample Info. Line: cc1176;200;F1823230AA;cc1176;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1823230AA**
Date, time and analyst ID of latest file update: 21-Aug-2018 08:26 ads07818

Blank Data file reference: **/chem/HP26379.i/18aug20.b/fh00452.d**

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 20-AUG-2018 14:03
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug20.b/fh00451.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
37) Bromochloromethane	11.115(-0.014)	1023	130	218508 (-17)	10.00		157425 - 367325
52) 1,4-Difluorobenzene	13.400(-0.007)	1342	114	763379 (-25)	10.00		613758 - 1432102
71) Chlorobenzene-d5	18.235(0.000)	2017	117	750612 (-22)	10.00		573809 - 1338885

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Propene	(1)			Not Detected					0.5	1
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)			Not Detected					0.2	1
7) 1,3-Butadiene	(1)			Not Detected					0.4	2
8) Bromomethane	(1)			Not Detected					0.5	1
9) Chloroethane	(1)			Not Detected					0.2	1
10) Bromoethene	(1)			Not Detected					0.4	2
13) Dichlorofluoromethane	(1)			Not Detected					0.2	1
12) Trichlorofluoromethane	(1)			Not Detected					0.2	1
11) Pentane	(1)			Not Detected					0.5	1
14) Ethanol	(1)			Not Detected					0.5	2
15) Freon123a	(1)			Not Detected					0.2	1
20) Acrolein	(1)			Not Detected					1	2
16) 1,1-Dichloroethene	(1)			Not Detected					0.2	1
17) Freon 113	(1)			Not Detected					0.5	2
24) Acetone	(1)			Not Detected					0.5	2
19) Methyl Iodide	(1)			Not Detected					0.2	1
18) Carbon Disulfide	(1)			Not Detected					1	1
21) Isopropanol	(1)			Not Detected					0.5	2
29) Acetonitrile	(1)			Not Detected					0.5	2
22) 3-Chloropropene	(1)			Not Detected					0.2	1
23) Methylene Chloride	(1)			Not Detected					0.2	1
28) tert-Butyl Alcohol	(1)			Not Detected					0.5	1
32) Acrylonitrile	(1)			Not Detected					0.5	2
25) trans-1,2-Dichloroethene	(1)			Not Detected					0.2	1
27) Methyl t-Butyl Ether	(1)			Not Detected					0.2	1
26) Hexane	(1)			Not Detected					0.2	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.2	1
34) Vinyl Acetate	(1)			Not Detected					1	1
30) Di-Isopropyl Ether	(1)			Not Detected					0.2	1
33) Ethyl Tert-Butyl Ether	(1)			Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)			Not Detected					0.2	1
36) 1,2-Dichloroethene (total)	(1)			Not Detected					0.2	1
45) 2-Butanone	(1)			Not Detected					0.5	2
40) Ethyl Acetate	(1)			Not Detected					0.5	1
41) Methyl Acrylate	(1)			Not Detected					0.2	1
43) Tetrahydrofuran	(1)			Not Detected					0.5	1
39) Chloroform	(1)			Not Detected					0.2	1
44) 1,1,1-Trichloroethane	(1)			Not Detected					0.2	1
38) Cyclohexane	(1)			Not Detected					0.2	1

Digitally signed by Alexander D. Sechrist on 08/21/2018 at 09:01. Target 3.5 esignature user ID: ads07818

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18aug20.b/fh00471.d Injection date and time: **21-AUG-2018 02:09**
Data file Sample Info. Line: cc1176;200;F1823230AA;cc1176;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1823230AA**
Date, time and analyst ID of latest file update: 21-Aug-2018 08:26 ads07818

Blank Data file reference: **/chem/HP26379.i/18aug20.b/fh00452.d**

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 20-AUG-2018 14:03
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug20.b/fh00451.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): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
42) Carbon Tetrachloride	(1)				Not Detected					0.2	1
48) Benzene	(2)				Not Detected					0.2	1
50) 1,2-Dichloroethane	(2)				Not Detected					0.2	1
46) Isooctane	(2)				Not Detected					0.2	1
49) Tert-Amyl Methyl Ether	(2)				Not Detected					0.2	1
47) Heptane	(2)				Not Detected					0.5	1
51) Trichloroethene	(2)				Not Detected					0.2	1
54) Ethyl Acrylate	(2)				Not Detected					0.2	1
55) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
53) Dibromomethane	(2)				Not Detected					0.2	1
58) 1,4-Dioxane	(2)				Not Detected					0.5	1
57) Methyl Methacrylate	(2)				Not Detected					0.2	1
56) Bromodichloromethane	(2)				Not Detected					0.2	1
59) cis-1,3-Dichloropropene	(2)				Not Detected					0.2	1
62) 4-Methyl-2-Pentanone	(2)				Not Detected					0.5	2
61) Toluene	(3)				Not Detected					0.2	1
60) Octane	(3)				Not Detected					0.2	1
64) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
65) 1,3-Dichloropropene (total)	(3)				Not Detected					0.2	1
66) Ethyl Methacrylate	(3)				Not Detected					0.2	1
67) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
63) Tetrachloroethene	(3)				Not Detected					0.2	1
70) 2-Hexanone	(3)				Not Detected					0.5	2
68) Dibromochloromethane	(3)				Not Detected					0.2	1
69) 1,2-Dibromoethane	(3)				Not Detected					0.2	1
72) Chlorobenzene	(3)				Not Detected					0.2	1
74) 1,1,1,2-Tetrachloroethane	(3)				Not Detected					0.2	1
73) Ethylbenzene	(3)				Not Detected					0.2	1
75) m/p-Xylene	(3)				Not Detected					0.2	1
76) o-Xylene	(3)				Not Detected					0.2	1
77) Xylene (total)	(3)				Not Detected					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
82) Bromobenzene	(3)				Not Detected					0.2	1
83) 1,1,2,2-Tetrachloroethane	(3)				Not Detected					0.2	1
87) 1,2,3-Trichloropropane	(3)				Not Detected					0.2	1
81) n-Propylbenzene	(3)				Not Detected					0.5	1
85) 2-Chlorotoluene	(3)				Not Detected					0.2	1
84) 4-Ethyltoluene	(3)				Not Detected					0.2	1
86) 1,3,5-Trimethylbenzene	(3)				Not Detected					0.2	1
88) Alpha Methyl Styrene	(3)				Not Detected					0.2	1
89) tert-Butylbenzene	(3)				Not Detected					0.5	1
90) 1,2,4-Trimethylbenzene	(3)				Not Detected					0.2	1
91) sec-Butylbenzene	(3)				Not Detected					0.2	1
93) 1,3-Dichlorobenzene	(3)				Not Detected					0.2	1
94) 1,4-Dichlorobenzene	(3)				Not Detected					0.2	1
92) p-Isopropyltoluene	(3)				Not Detected					0.2	1
96) Benzyl Chloride	(3)				Not Detected					0.5	1
98) 1,2-Dichlorobenzene	(3)				Not Detected					0.2	1
95) n-Butylbenzene	(3)				Not Detected					0.2	1
97) Hexachloroethane	(3)				Not Detected					0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)				Not Detected					0.2	1
101) 1,2,4-Trichlorobenzene	(3)				Not Detected					0.5	2

Digitally signed by Alexander D. Sechrist on 08/21/2018 at 09:01. Target 3.5 esignature user ID: ads07818

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP26379.i/18aug20.b/fh00471.d Injection date and time: **21-AUG-2018 02:09**
Data file Sample Info. Line: cc1176;200;F1823230AA;cc1176;0;0;BLANK; Instrument ID: **HP26379.i** Batch: **F1823230AA**
Date, time and analyst ID of latest file update: 21-Aug-2018 08:26 ads07818

Blank Data file reference: **/chem/HP26379.i/18aug20.b/fh00452.d**

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: **all**
Calibration date and time (Last Method Edit): 20-AUG-2018 14:03
Mid Level Daily Calibration Standard Reference: **/chem/HP26379.i/18aug20.b/fh00451.d**

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

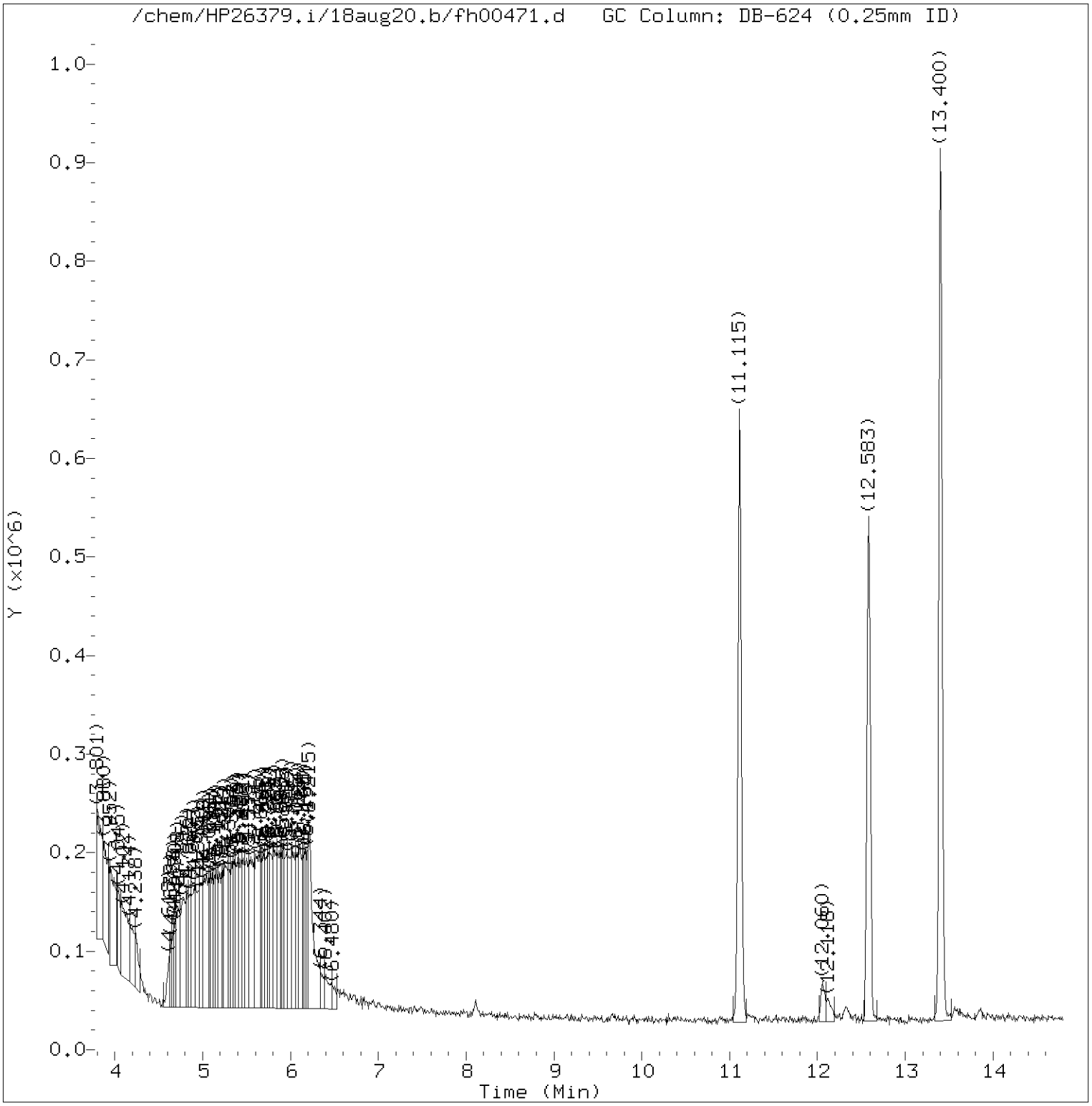
Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 200 cc Actual injection Volume (IVa): 200 cc

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
100) Hexachlorobutadiene	(3)				Not Detected					0.4	2
102) Naphthalene	(3)				Not Detected					0.4	1

Total number of targets = 99

Digitally signed by Alexander D. Sechrist on 08/21/2018 at 09:01. Target 3.5 esignature user ID: ads07818

Secondary review performed and digitally signed by Jeffrey B. Smith on 08/21/2018 at 16:40. PARALLAX ID: jbs01304



Total Ion Chromatogram (TIC)

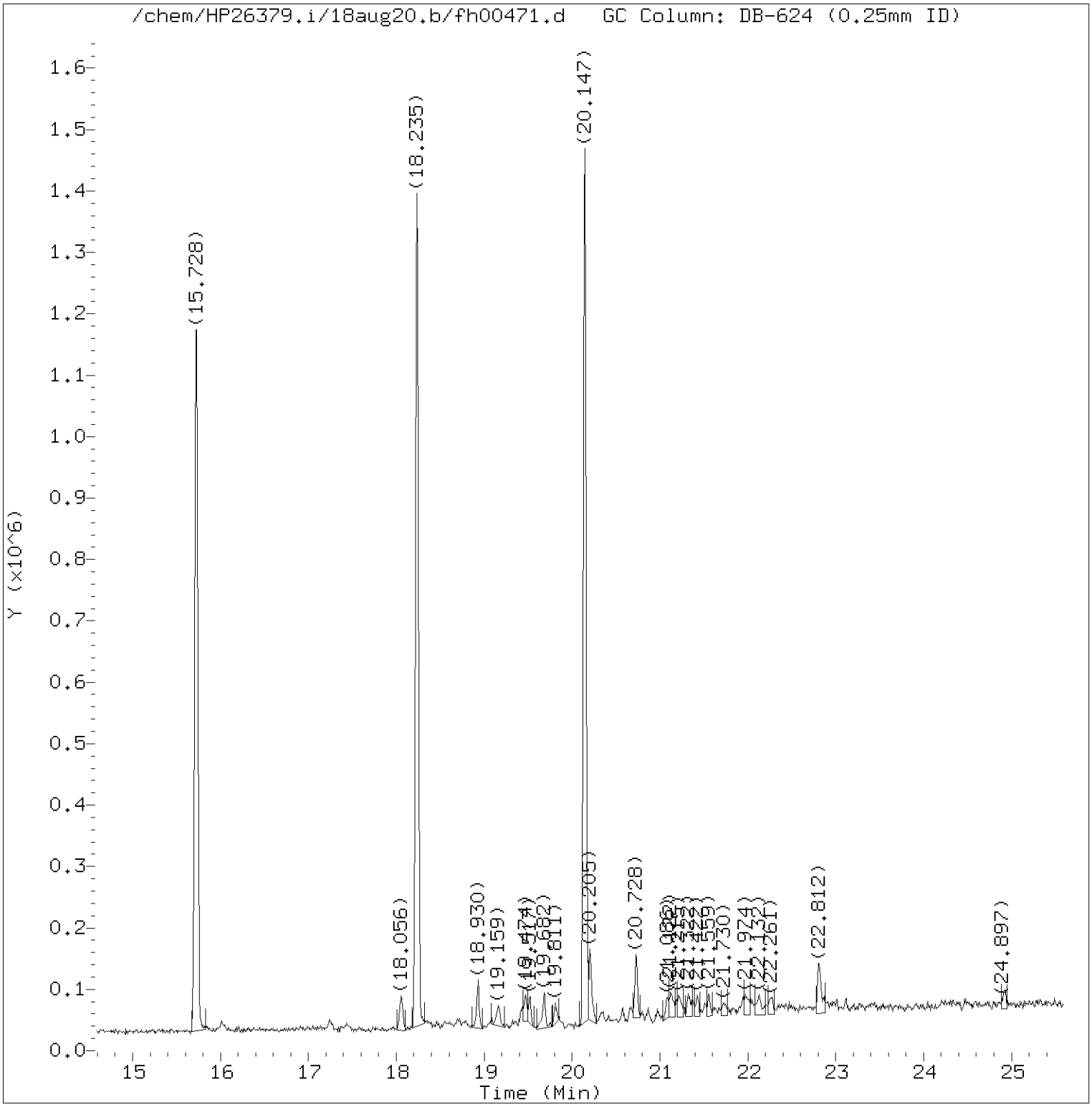
Target Revision 3.5

Data File: /chem/HP26379.i/18aug20.b/fh00471.d Instrument ID: HP26379.i
Injection date and time: 21-AUG-2018 02:09 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 20-AUG-2018 14:03
Date, time and analyst ID of latest file update: 21-Aug-2018 08:26 ads07818

Sample Name: cc1176 Lab Sample ID: cc1176

Digitally signed by Alexander D. Sechrist
on 08/21/2018 at 09:01.
Target 3.5 esignature user ID: ads07818



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP26379.i/18aug20.b/fh00471.d Instrument ID: HP26379.i
Injection date and time: 21-AUG-2018 02:09 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 20-AUG-2018 14:03
Date, time and analyst ID of latest file update: 21-Aug-2018 08:26 ads07818

Sample Name: cc1176 Lab Sample ID: cc1176

Digitally signed by Alexander D. Sechrist
on 08/21/2018 at 09:01.
Target 3.5 esignature user ID: ads07818

Quant Report

Target Revision 3.5

Data File: /chem/HP26379.i/18aug20.b/fh00471.d Instrument ID: HP26379.i
Injection date and time: 21-AUG-2018 02:09 Analyst ID: jeb07445

Method used: /chem/HP26379.i/18aug20.b/to-15.m Sublist used: all
Calibration date and time: 20-AUG-2018 14:03
Date, time and analyst ID of latest file update: 21-Aug-2018 08:26 ads07818

Sample Name: cc1176 Lab Sample ID: cc1176

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
37)*Bromochloromethane	(1)	11.115	130	218508	10.000
52)*1,4-Difluorobenzene	(2)	13.400	114	763379	10.000
71)*Chlorobenzene-d5	(3)	18.235	117	750612	10.000

* = Compound is an internal standard.

Digitally signed by Alexander D. Sechrist
on 08/21/2018 at 09:01.
Target 3.5 esignature user ID: ads07818

Appendix D: Data Usability Summary Reports

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ENVIRONMENTAL
ASSESSMENT &
REMEDIATIONS

To: Ian Hofmann
Environmental Assessment &
Remediations
225 Atlantic Avenue
Patchogue, NY 11772

From: Tracey Evans

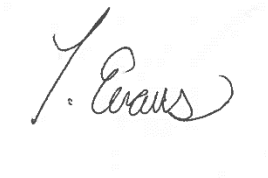
Data: 10/17/2018

Subject: NYSDEC Site No. 130053B, Pall Corporation, 30-36 Sea Cliff Avenue, Glen Cove - Data Usability Summary Report

The Following Items Are Being Transmitted:
Data Packages

Originals	Copies	Description of Materials	Electronic/ Hard Copy
1		GLE01_NYSDEC_B_18OCT_Ny_CatB_Package_Mini_Final Report.pdf	Electronic
1		GLE01-1979096B_EquNysdec.xls	Electronic

Signature:



Tracey Evans
Chemist
evans@enviro-asmnt.com
Environmental Assessment & Remediations
225 Atlantic Avenue
Patchogue, New York 11772
631-447-6400 ext.146

Pall Corporation Data Usability Summary Report for August 18 24-hr Air Sample Collections

Client: Environmental Assessment & Remediations, Patchogue, New York
Laboratory: Eurofins (NY Cert. #10670)
Site: DEC-Glencove30-36 (Site# 130053B)

Group Number: 1979096				**Method Evaluation**	
Lab ID	**Field ID**	**Collection Date**	**Matrix**	**TO-15**	**EPA 18 mod. / EPA 25 mod.**
9766344	GCCDC-Office-IA	8/18-19/2018	Air	x	x
9766345	GCCDC-Class1_IA	8/18-19/2018	Air	x	x
976636	GCCDC-Class5_IA	8/18-19/2018	Air	x	x
9766347	GCCDC-CLass6_IA	8/18-19/2018	Air	x	x
9766348	GCCDC-Class7_IA	8/18-19/2018	Air	x	x
9766349	GCCDC-Class10C_IA	8/18-19/2018	Air	x	x
9766350	GCCDC-Class10A_IA	8/18-19/2018	Air	x	x
9766351	GCCDC-Class6_CS	8/18-19/2018	Air	x	x
9766352	GCCDC-Class10B_CS	8/18-19/2018	Air	x	x
9766353	GCCDC-ClassX_IA	8/18-19/2018	Air	x	x
9766354	GCCDC-Entry_OD	8/18-19/2018	Air	x	x

Samples were analyzed under (depends on testing):

- USEPA Region 2 *Analysis of Volatile Organic Compounds in Air Contained in Canisters by Method TO-15*, SOP HW-31, Revised 6 (June 2014)

- USEPA Contract Laboratory Program National Functional Guidance for Super Organic Methods Data Review, EPA 540-R-2017-002 (January 2017)

Criteria for Data Usability Summary Report

Completeness:
A complete data package is one that has all relevant and related material packaged for distribution to its client in accordance to the Analytical Service Protocol (ASP) Category B Deliverables guidelines.

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Compliant:
A compliant data package is one that is determined to have all work that pertains to the production of the laboratory data in a manner that is consistent with the Quality Assurance Program Plan.

Overall Usability Issues
Data validation was completed in accordance to the New York State Department of Environmental Conservation Analytical Service Protocol (NYSDEC ASP) Category B Data Deliverable requirements and reviewer's professional judgment.
This analytical report complies to the following points:

1. Holding Time and Analysis Time
2. Sample Analysis and Quality Control.

- There was no rejection of data.

In conclusion, the data reviewed in this report is usable and valid as it passes all stated criterion for compliance for methods TO-15 and EPA 18 modified/ EPA 25 modified.

Data Completeness

- A complete Category B data package under the NYSDEC ASP has been reported.

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Data Validation Acronyms

AA	Atomic Absorption, Flame Technique
BHC	Hexachlorocylcohexane
BFB	Bromofluorobenzene (Tune check analyte)
CCC	Continuing Calibration Check
CCV	Continuing Calibration Verification
CRDL	Contract Required Detection Limit
CRQL	Contract Required Quantitation Limit
CVAA	Atomic Absorption, Cold Vapor
DCAA	2,4-Dichlorophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine (Tune check analyte)
DL	Detection Limit
ECD	Electron Capture Detector
FAA	Atomic Absorption, Furnace Technique
FID	Flame Ionization Detector
FNP	1-Fluoronapthalene
GC	Gas Chromatography
GC/MS	Gas Chromatography/ Mass Spectrometry
GPC	Gel Permeation Chromatography
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma – Atomic Emission Spectrometer
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit
ICAL	Initial Calibration Curve
IS	Internal Standard
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LCS/LCSD	Laboratory Control Sample/ Laboratory Control Sample Duplicate
MB	Method Blank
MS	Matrix Spike
BNAMS11	Method of Standard Additions
MSD	Matrix Spike Duplicate
MS/MSD	Matrix Spike/ Matrix Spike Duplicate

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Data Validation Acronyms

ND	Non-detected or Not Detected
PID	Photo Ionization Detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
PQL	Practical Quantitation Limit
QA	Quality Assurance
QA/QC	Quality Assurance/ Quality Control
QC	Quality Control
RF	Response Factor
RPD	Relative Percent Difference
RL	Reporting Limit
RRF	Relative Response Factor
RT	Retention Time
RRT	Relative Retention Time
SDG	Sample Delivery Group
SMC	System Monitoring Compounds/ Surrogates
SPCC	Sample Performance Check Compound
TCX	Tetrachloro-m-xylene
%D	Percent Drift
%R	Percent Recovery
%RSD	Percent Relative Standard Deviation

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Data Validation Qualifiers

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.

Note:

1. These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

2. The EDDs are assigned these data validation qualifiers and refer to the valid value list supplied by the specific agency or informational data system.

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Client: Environmental Assessment & Remediations, Patchogue, New York
L**aboratory:** Eurofins (NY Cert. #10670)
Site: DEC-Glencove30-36 (Site# 130053B)

Method Review : TO-15

Group Number: 1979096

Lab ID	Field ID	Collection Date	Matrix
9766344	GCCDC-Office-IA	8/18-19/2018	Air
9766345	GCCDC-Class1_IA	8/18-19/2018	Air
976636	GCCDC-Class5_IA	8/18-19/2018	Air
9766347	GCCDC-CLass6_IA	8/18-19/2018	Air
9766348	GCCDC-Class7_IA	8/18-19/2018	Air
9766349	GCCDC-Class10C_IA	8/18-19/2018	Air
9766350	GCCDC-Class10A_IA	8/18-19/2018	Air
9766351	GCCDC-Class6_CS	8/18-19/2018	Air
9766352	GCCDC-Class10B_CS	8/18-19/2018	Air
9766353	GCCDC-ClassX_IA	8/18-19/2018	Air
9766354	GCCDC-Entry_OD	8/18-19/2018	Air

Reviewer Summary :
Samples were handled and analyzed properly under EPA's National Functional Guideline for Organic Compounds and SOP NO. HW-31. All data is within category B criterion and usable.

Client: Environmental Assessment & Remediations, Patchogue, New York
Laboratory: Eurofins (NY Cert. #10670)
Site: DEC-Glencove30-36 (Site# 130053B)
Group Number: 1979096

TO-15

Criteria	Y	N	NA	Comment
A. Sample Integrity and Preservation				
Were samples within technical hold time and extraction period?	x			
Canster Cleaning results provided?	x			
B. GC/MS Instrument Performance Check				
Were BFB performance results with in criteria?	x			
Were all samples analyzed within the 12 hour time period	x			
B. Initial Calibration				
Was a 5 point calibration conducted?	x			
RSD% within acceptable criterion?	x			
Was curve fit used for evaluation? If yes did the I.C. meet the curve fit acceptability of ≥0.990 ?	x			
Was the Initial Calibration Verification (ICV) done after the I.C?Was rention time within bounds?	x			
C. Continuing Calibration				
Was analyte drift within accetable QC?	x			
Was it done every 12 hours after Initial Calibration to verify it?	x			
Were Drift % and (RRF) within acceptable criteria?	x			
D. Laboratory Blanks				
Was a lab blank associated with each sample of SDG?	x			
Was blank analyzed every 20 samples?	x			

Criteria	Y	N	NA	Comment
Were contamination found, if so qualification may be necessary?		x		
Were method detection limits definined?	x			
E. Field Blanks/Trip Blank				
Was a field blanks associated with each sample of SDG?			x	
Were target compounds detected in it?			x	
F. Laboratory control sample				
Was LCS analysis for this SDG?	x			
Was LCS analysis per analysis batch?	x			
Was LCS (R%) within QC Limits?	x			
G. Interal Standards				
Were Surrogates percent recovery (%R) within QC limits?	x			
Were rentention times of anyltes less than 20 sec diffrence between samples?	x			
K. Compound quantitation				
Were correct internal standards, quantitation ions and RRF used in quantitate compounds?	x			
Were compound quantitates and RLs adjusted to reflect sample dilutions ?	x			
L. Target Compound Identification				
Did the spectrum meet EPA "Functional Guidelines"?	x			
Were chromatograms peaks verified and accounted?	x			
I. Field Duplicate				
Were field duplicates identified in this SGD?	x			Pair GCCDC-Class7_IA and GCCDC-ClassX_IA are well within QC bounds of comparison. Lab duplicate run with sample 9766349 fell within RPD bounds.
Were target compounds detected in it?	x			

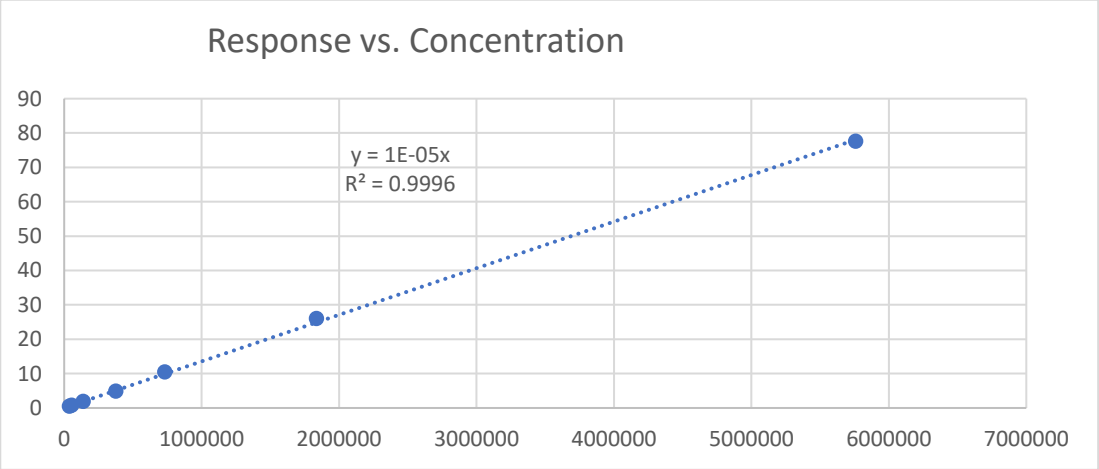
Criteria	Y	N	NA	Comment
N. Overall assessment of data				
Was Overall assessment of data found to be acceptable?	x			

Comments: All results were within Cat. B criterion and usable.

Calculation Spot Check

Instrument	26379	
ICV	Date :8/24/2017	18:30
Compound	Propane	

Level	RFF	Response vs. Concentration	
RFF 1	1.375	731392	10.525
RFF 2	1.709	375762	4.922
RFF 5	1.750	138042	1.948
RFF 10	1.805	54111	0.828
RFF 25	1.751	1835730	26.087
RFF 70	1.902	5758721	77.605
average	1.715	37872	0.534
RSD	10.468		



Client: Environmental Assessment & Remediations, Patchogue, New York
L**aboratory:** Eurofins (NY Cert. #10670)

Method Review :EPA 18 mod/EPA 25 mod Method

Group Number: 1979096

Lab ID	Field ID	Collection Date	Matrix
9766344	GCCDC-Office-IA	8/18-19/2018	Air
9766345	GCCDC-Class1_IA	8/18-19/2018	Air
976636	GCCDC-Class5_IA	8/18-19/2018	Air
9766347	GCCDC-CLass6_IA	8/18-19/2018	Air
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9766351	GCCDC-Class6_CS	8/18-19/2018	Air
9766352	GCCDC-Class10B_CS	8/18-19/2018	Air
9766353	GCCDC-ClassX_IA	8/18-19/2018	Air
9766354	GCCDC-Entry_OD	8/18-19/2018	Air

Reviewer Summary :
Samples were handled and analyzed properly. Blind duplicate samples GCCDC-Class7_IA and GCCDC-ClassX_IA compared will in analyte detection. All data is within category B criterion and usable.

Blind Duplicate Comparison

	Original Sample	Blind Duplicate	Relative Percent Difference
Well	GCCDC-Class7_IA	GCCDC-ClassX_IA	
Methane	15	14	4.88%

Reviewer comment: Blind duplicate pair GCCDC-Class7_IA and GCCDC-ClassX_IA are well within QC bounds of comparison.

Client: Environmental Assessment & Remediations, Patchogue, New York
Laboratory: Eurofins (NY Cert. #10670)
Site: DEC-Glencove30-36 (Site# 130053B)
Group Number: 1979096

Volatile in Air EPA 18 mod./ EPA 25 mod.

Criteria	Y	N	NA	Comment
A. Sample Integrity and Preservation				
Were samples within technical hold time and extraction period?	x			
B. Initial Calibration				
Was a 5 point calibration conducted?	x			
RSD% within acceptable criterion?	x			
Was curve fit used for evaluation? If yes did the I.C. meet the curve fit acceptability of ≥0.990 ?	x			
Was the Initial Calibration Verification (ICV) done after the I.C? Was retention time within bounds?	x			
C. Continuing Calibration				
Was it done every 12 hours after Initial Calibration to verify it?			x	All samples were run within a 12 hour window.
Were Drift % and (RRF) within acceptable criteria?			x	
D. Laboratory Blanks				
Was a lab blank associated with each sample of SDG?	x			
Was blank analyzed every 20 samples?	x			
Were contamination found, if so qualification may be necessary?		x		
Were method detection limits defined?	x			
E. Compound quantitation				
Were compound quantitates and RLs adjusted to reflect sample dilutions and dry weights to continuous calibration?	x			

Criteria	Y	N	NA	Comment
Were recover studies shown to be within 70 to 130 limits.	x			
F. Target Compound Identification				
Were chromatograms peaks verified and accounted?	x			
G. Field Duplicate				
Were field duplicates identified in this SGD?	x			Pair GCCDC-Class7_IA and GCCDC-ClassX_IA are well within QC bounds of comparison.
Were target compounds detected in it?	x			
H. Overall assessment of data				
Was Overall assessment of data found to be acceptable?	x			

Comments: All results were within Cat. B criterion and usable.

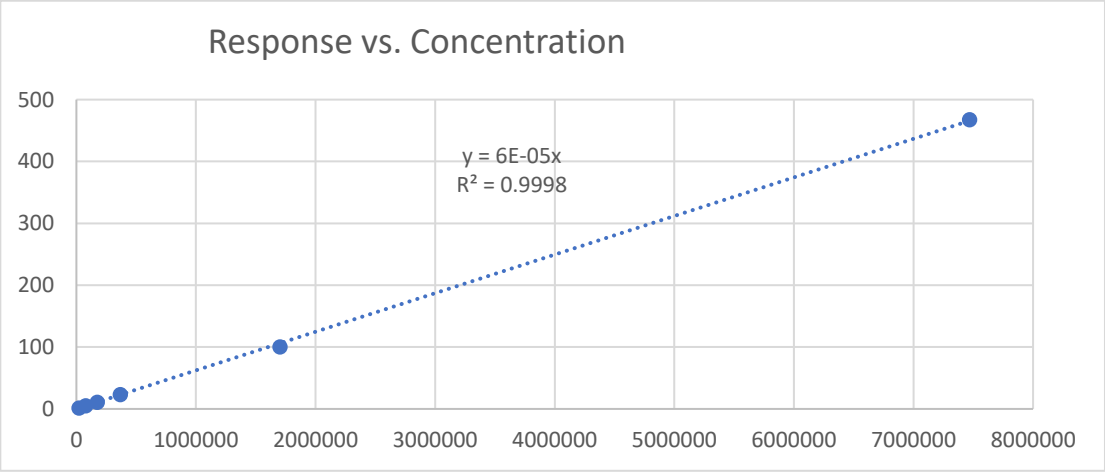
Calculation Spot Check

Instrument 58309

ICV Date :09/14/2017 14:49

Compound Methane

Level	RF	Response vs. Concentration	
RF 1	-	1702495	100
RF 5	15808	368243	23.193
RF 10	17423	174226	10.628
RF 25	14730	79038	4.865
R100	17025	21184	1.304
R500	14936	7468109	467.218
average	15984.4		
RSD	7.6		



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ENVIRONMENTAL
ASSESSMENT &
REMEDIATIONS

To: Ian Hofmann
Environmental Assessment & Remediations
225 Atlantic Avenue
Patchogue, NY 11772

From: Tracey Evans

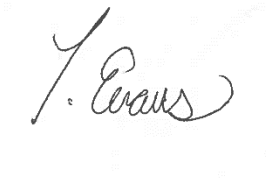
Data: 10/17/2018

Subject: NYSDEC Site No. 130053B, Pall Corporation, 30-36 Sea Cliff Avenue, Glen Cove - Data Usability Summary Report

The Following Items Are Being Transmitted:
Data Packages

Originals	Copies	Description of Materials	Electronic/ Hard Copy
1		GLE02_NYSDEC_B_18OCT_Ny_CatB_Package_Mini_Final Report.pdf	Electronic
1		GLE02-1983294B_EquNysdec.xls	Electronic

Signature:



Tracey Evans
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Environmental Assessment & Remediations
225 Atlantic Avenue
Patchogue, New York 11772
631-447-6400 ext.146

Pall Corporation Data Usability Summary Report for August 30 24-hr Air Sample Collections

Client: Environmental Assessment & Remediations, Patchogue, New York
Laboratory: Eurofins (NY Cert. #10670)
Site: DEC-Glencove30-36 (Site# 130053B)

Group Number: 1983294

Lab ID	Field ID	Collection Date	Matrix	TO-15	EPA 18 mod. / EPA 25 mod.	ASTM D1946
9785623	GCBC_SS	8/30-31/2018	Air	x	x	x
9785624	GCBC_IA	8/30-31/2018	Air	x	x	
9785625	GCBC_OA	8/30-31/2018	Air	x	x	

Samples were analyzed under (depends on testing):

- USEPA Region 2 *Analysis of Volatile Organic Compounds in Air Contained in Canisters by Method TO-15*, SOP HW-31, Revised 6 (June 2014)

- USEPA Contract Laboratory Program National Functional Guidance for Super Organic Methods Data Review, EPA 540-R-2017-002 (January 2017)

Criteria for Data Usability Summary Report

Completeness:
A complete data package is one that has all relevant and related material packaged for distribution to its client in accordance to the Analytical Service Protocol (ASP) Category B Deliverables guidelines.

Compliant:
A compliant data package is one that is determined to have all work that pertains to the production of the laboratory data in a manner that is consistent with the Quality Assurance Program Plan.

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Overall Usability Issues

Data validation was completed in accordance to the New York State Department of Environmental Conservation Analytical Service Protocol (NYSDEC ASP) Category B Data Deliverable requirements and reviewer's professional judgment.

This analytical report complies to the following points:

1. Holding Time and Analysis Time
2. Sample Analysis and Quality Control.

- There was no rejection of data.

In conclusion, the data reviewed in this report is usable and valid as it passes all stated criterion for compliance for methods TO-15, EPA 18 modified/ EPA 25 modified and ASTM D1949.

Data Completeness

- A complete Category B data package under the NYSDEC ASP has been reported.

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Data Validation Acronyms

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BNAMS11	Method of Standard Additions
MSD	Matrix Spike Duplicate
MS/MSD	Matrix Spike/ Matrix Spike Duplicate

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Data Validation Acronyms

ND	Non-detected or Not Detected
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QA/QC	Quality Assurance/ Quality Control
QC	Quality Control
RF	Response Factor
RPD	Relative Percent Difference
RL	Reporting Limit
RRF	Relative Response Factor
RT	Retention Time
RRT	Relative Retention Time
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SPCC	Sample Performance Check Compound
TCX	Tetrachloro-m-xylene
%D	Percent Drift
%R	Percent Recovery
%RSD	Percent Relative Standard Deviation

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Data Validation Qualifiers

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.

Note:

1. These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

2. The EDDs are assigned these data validation qualifiers and refer to the valid value list supplied by the specific agency or informational data system.

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Client: Environmental Assessment & Remediations, Patchogue, New York
L**aboratory:** Eurofins (NY Cert. #10670)
Site: DEC-Glencove30-36 (Site# 130053B)

Method Review TO-15

Group Number: 1983294

Lab ID	Field ID	Collection Date	Matrix
9785623	GCBC_SS	8/18-19/2018	Air
9785624	GCBC_IA	8/18-19/2018	Air
9785625	GCBC_OA	8/18-19/2018	Air

Reviewer Summary :
Samples were handled and analyzed properly under EPA's National Functional Guideline for Organic Compounds and SOP NO. HW-31. All data is within category B criterion and usable.

Client: Environmental Assessment & Remediations, Patchogue, New York
Laboratory: Eurofins (NY Cert. #10670)
Site: DEC-Glencove30-36 (Site# 130053B)
Group Number: 1983294

TO-15

Criteria	Y	N	NA	Comment
A. Sample Integrity and Preservation				
Were samples within technical hold time and extraction period?	x			
Canister Cleaning results provided?	x			
B. GC/MS Instrument Performance Check				
Were BFB performance results with in criteria?	x			
Were all samples analyzed within the 12 hour time period	x			
C. Initial Calibration				
Was a 5 point calibration conducted?	x			
RSD% within acceptable criterion?	x			
Was curve fit used for evaluation? If yes did the I.C. meet the curve fit acceptability of ≥0.990 ?	x			
Was the Initial Calibration Verification (ICV) done after the I.C? Was retention time within bounds?	x			
D. Continuing Calibration				
Was it done every 12 hours after Initial Calibration to verify it?	x			
Were Drift % and (RRF) within acceptable criteria?	x			
E. Laboratory Blanks				
Was a lab blank associated with each sample of SDG?	x			
Was blank analyzed every 20 samples?	x			

Criteria	Y	N	NA	Comment
Were contamination found, if so qualification may be necessary?		x		
Were method detection limits defined?				
F. Field Blanks/Trip Blank				
Was a field blanks associated with each sample of SDG?			x	
Were target compounds detected in it?			x	
G. Laboratory control sample				
Was LCS analysis for this SDG?	x			
Was LCS analysis per analysis batch?	x			
Was LCS (R%) within QC Limits?	x			
H. Internal Standards				
Were Surrogates percent recovery (%R) within QC limits?	x x			
Were retention times of analytes less than 20 sec difference between samples?	x			
I. Compound quantitation				
Were correct internal standards, quantitation ions and RRF used in quantitate compounds?	x			
Were compound quantitates and RLs adjusted to reflect sample dilutions and dry weights to continuous calibration?	x			
J. Target Compound Identification				
Did the spectrum meet EPA "Functional Guidelines"?	x			
Were chromatograms peaks verified and accounted?	x			
K. Field Duplicate				
Were field duplicates identified in this SGD?			x	Lab duplicate ran with sample 9785623 fell well within the RPD of bounds.
Were target compounds detected in it?			x	

Criteria	Y	N	NA	Comment
L. Overall assessment of data				
Was Overall assessment of data found to be acceptable?	x			

Comments: All results were within Cat. B criterion and usable.

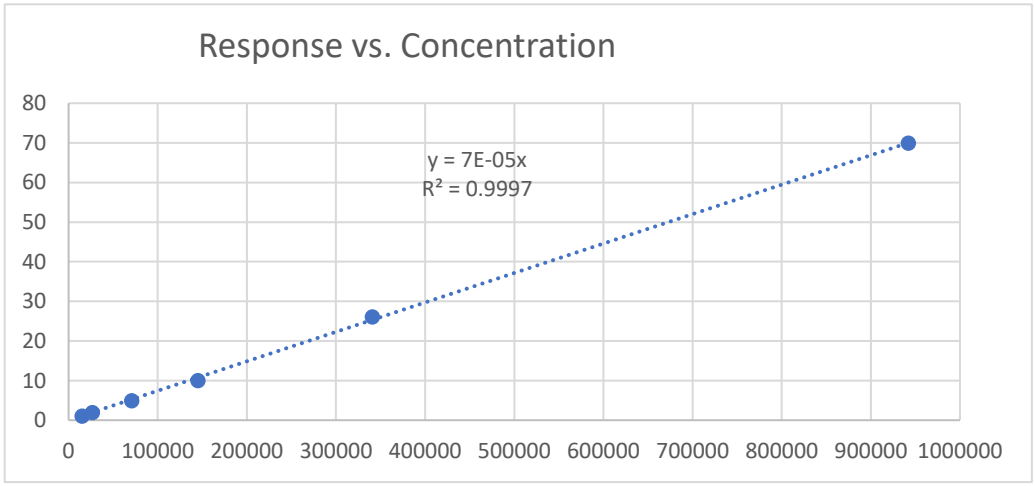
Calculation Spot Check

Instrument 22820

ICV Date :9/05/2017 13:43

Compound Propane

Level	RFF		Response vs. Concentration
RFF 1	0.470	144980	10.002
RFF 2	0.415	70700	4.936
RFF 5	0.434	26478	1.887
RFF 10	0.440	15006	1.058
RFF 25	0.463	340892	26.034
RFF 70	0.444	941968	69.88
average	0.444	139632	10.479
RSD	4.494		



Client: Environmental Assessment & Remediations, Patchogue, New York
L**aboratory:** Eurofins (NY Cert. #10670)
Site: DEC-Glencove30-36 (Site# 130053B)

Method Review :EPA 18 mod./EPA 25 mod. And ASTM D1946

Group Number: 1983294

Lab ID	Field ID	Collection Date	Matrix
9785623	GCBC_SS	8/18-19/2018	Air
9785624	GCBC_IA	8/18-19/2018	Air
9785625	GCBC_OA	8/18-19/2018	Air

Reviewer Summary :
Samples were handled and analyzed properly. All data is within category B criterion and usable.

Client: Environmental Assessment & Remediations, Patchogue, New York
Laboratory: Eurofins (NY Cert. #10670)
Site: DEC-Glencove30-36 (Site# 130053B)
Group Number: 1983294

EPA 18 mod./ EPA 25 mod. and ASTM D1946

Criteria	Y	N	NA	Comment
A. Sample Integrity and Preservation				
Were samples within technical hold time and extraction period?	x			
B. Initial Calibration				
Was a 5 point calibration conducted?	x			
RSD% within acceptable criterion?	x			
Was curve fit used for evaluation? If yes did the I.C. meet the curve fit acceptability of ≥0.990 ?	x			
Was the Initial Calibration Verification (ICV) done after the I.C? Was retention time within bounds?	x			
C. Continuing Calibration				
Was it done every 12 hours after Initial Calibration to verify it?	x			
Were Drift % and (RRF) within acceptable criteria?	x			
D. Laboratory Blanks				
Was a lab blank associated with each sample of SDG?	x			
Was blank analyzed every 20 samples?	x			
Were contamination found, if so qualification may be necessary?		x		
Were method detection limits defined?	x			
E. Compound quantitation				
Were compound quantitates and RLs adjusted to reflect sample dilutions and dry weights to continuous calibration?	x			

Criteria	Y	N	NA	Comment
Were recover studies shown to be within 70 to 130 limits.	x			
F. Target Compound Identification				
Were chromatograms peaks verified and accounted?	x			
G. Field Duplicate				
Were field duplicates identified in this SGD?			x	
Were target compounds detected in it?			x	
H. Overall assessment of data				
Was Overall assessment of data found to be acceptable?	x			

Comments: All results were within Cat. B criterion and usable.

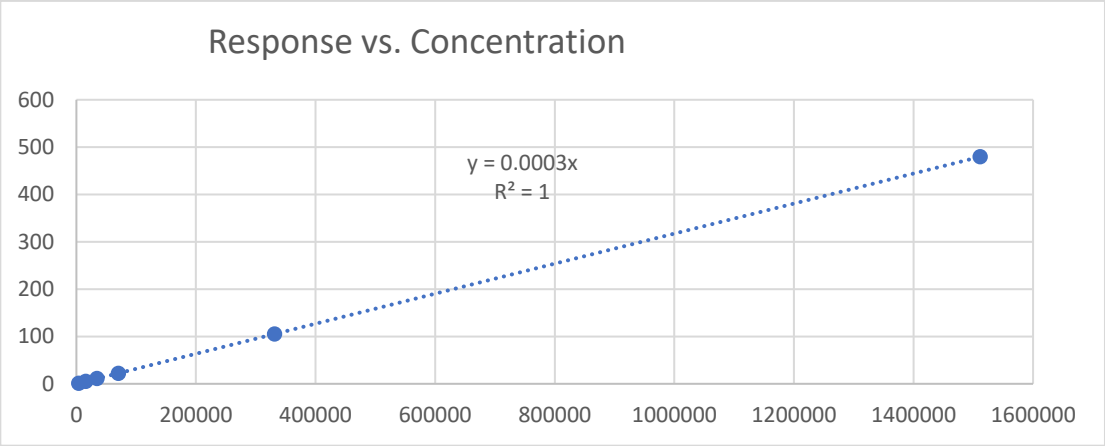
Calculation Spot Check

Instrument 58309

ICV Date :09/17/2018 14:47

Compound Methane

Level	RF	Response vs. Concentration	
RF 1	-	15837	5.025
RF 5	3167	4068	1.291
RF 10	3451	70137	22.253
RF 25	2805	331275	105.107
R100	3313	1511303	479.507
R500	3023	34507	10.948
average	3151.8		
RSD	8.8		



Helium Check

Level	RF	Response vs. Concentration	
1	-	5372120	979199
2	15808	2990271	545177.3
3	17423	462261.8	84258.47
4	14730	252656.2	46052.75
5	17025	45952.7	8375.996
6	14936	26739.1	4873.859
average	15984.4		
RSD	7.6